Firm's Characteristics and Cash Holdings: Evidence from Nigeria, South Africa and Kenya

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Abstract: **The study examined the relationship between firm's characteristics and cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya. Out of 35, 23 and 15 listed consumer and industrial goods firms in Nigeria, South Africa and Kenya respectively, we sampled fifty-two (33 for Nigeria, 12 for South Africa and 7 for Kenya) firms for a period of 8 years (from 2011-2018). The main type of data used in this study is secondary in nature; sourced from the financial statements of the selected firms via Nigerian Stock Exchange (NSE), Johannesburg Stock Exchange (JSE), and Nairobi *Securities Exchange (NSE)*. This study applied ex-post facto research design. The data collected were analyzed using Pearson product-moment correlation matrix. The results revealed that in South Africa, firm size (FSIZE) was statistically significant at 5% with its t-value as 2.083134 and p-value as 0.0400; while in both Nigeria and Kenya, it was statistically insignificant at 5% with its t-values as -1.000160 and-1.900007 and p-values as 0.3182 and 0.0631 respectively. In Kenya, leverage (LEVG) was statistically significant at 5% with its t-value as 3.850902 and p-value as 0.0003; while in both Nigeria and South Africa, it was statistically insignificant at 5% with its t-values as 0.985502 and -0.584775 and p-values as 0.3253 and 0.5601 respectively. In Nigeria and Kenya, profitability (PROF) was statistically significant at 5% with its t-values as 5.889308 and 4.249736 and p-values as 0.0000 and 0.0001 respectively; while in South Africa, it was statistically insignificant at 5% with its t-value as 0.435708 and p-value as 0.6641. Finally, dividend policy (DIVP) was statistically insignificant at 5% in Nigeria, South Africa and Kenya with its t-values as -1.098510, 1.691096 and 1.234615 and p-values as 0.2730, 0.0942 and 0.2226 respectively. In view of the discoveries of our investigation, a financial specialist can sensibly reason that an organization with high leverage ought to like to hold more money. The higher leverage recommends higher office costs; this may be because of the potential size of riches move from obligation holder to investors. Thus, insightful supervisors will need to abstain from holding over the top money saves as this would pull in examination from the capital markets.**

Key words: **cash holdings, firm size, leverage, profitability, dividend policy.**

I. INTRODUCTION

1.1 Background to the Study

The point on money property has pulled in extreme discussion in the budgetary administration zone. The fundamental inquiry consistently raised is; the reason firms hold money? What elements decide a company's ideal money holding? Pandey (2006) was of the supposition that firm ought to keep up ideal money holding; however how to decide the ideal money holding is a significant worry for the monetary supervisor all around, Nigeria comprehensive. Endeavours have been on to recognize what are the determinants of money holding remembering the company's qualities, for example, size, development openings, leverages, gainfulness, income, profit pay-out, debt claim and payable among others (Nnubia, Ofor & Emeka-Nwokeji, 2017).

In corporate account writing, exact investigations about the corporate money property have involved a focal spot (Ogundipe, Ogundipe & Ajao, 2012). The dynamic of money possessions is an essential worry in the organization's administration. This is firmly related with the organizations' everyday tasks, ventures, the practices of financing and profit instalments and different exercises (Nnubia, et al. 2017). Lacking money forces firms to renounce gainful investment ventures or to help strangely significant expenses of financing. Ogundipe et al, (2012) call attention to that holding deficient money prompts firms to surrender ventures with positive NPV (Net Present Value) or to look for unusually costly wellsprings of fund with help of anomalous significant expenses of financing. The thought process in holding money is to stay away from outside financing. Therefore, when held profit are lacking to fund new ventures, firms utilize their money holding and afterward issue new obligation lastly when they escape their obligation adjusting limit they will give protections. All things considered, the money level would simply be the aftereffect of the financing and speculation choices, and thusly obligation and money are seen as inverse side of a similar coin (Saddour, 2006; Dittmar, Mahrt-smith & Servaes, 2003).

Fame and Jensen (1983) broadcast that administrators are hazard disinclined and are not completely expanded and in this manner increasingly dug in chiefs hold surplus money to maintain a strategic distance from advertise discipline. Ferreira and Vilela (2004) is of the sentiment that money lessens the strain to perform well and permits administrators to put resources into venture that best suit their own advantages however may not be in the investors' wellbeing. Money gives liquidity and assumes noteworthy job in activity of firms. It is most critical piece of an association's advantages. Associations have upgrade to keep a money to meet commitments, certain the activities and hold the valuable venture openings (Wai & Zhu, 2013). Along these lines, cash management policies have become critical research region in

the corporate fund concentrates as of late. Be that as it may, for venture and working capital needs firm should deal with the successful liquidity position.

1.2 Statement of the Problem

Researchers of budgetary administration for as far back as two decades in different examinations have both hypothetically and experimentally explored the determinants of corporate money holding; the outcomes have instead of resolve the issue stay conflicting and with blended results. Starting exploration by Kim, Mauer and Sherman (1998), Opler, Pinkowitz, Stulz and Williamson (1999), Ferreira and Vilela (2004), Guney, Ozkan and Ozkan (2007), D'mello, Krishnaswami and Larkin (2008), Bates, Kahle and Stulz (2009), Bigelli and Sanchez-Vidal (2010), Kim, Kim and Woods (2011), Maximilian (2015) concentrated on the money property by firms in the U.S. and other created nations. These investigations give blended outcomes to both created and developing business sector nations on various key issues including the determinants of money possessions, regardless of whether an ideal degree of money property exists, the impacts of money property on working execution, and how office issues may influence a company's motivating forces to hold or go through money.

In Nigeria, Ogundipe, Salawu and Ogundipe (2012) uncovered huge negative connection between money possessions and firm size, net working capital and profit for resources and positive relationship with development openings, leverage, inventories, account receivables and monetary pain. They likewise locate no noteworthy connection between money property and income. Monye-Emina and Enofe (2015) looking at the effect of corporate administration qualities on firm money holding in Nigerian banks, found that board size, board autonomy negatively affected money holding, while institutional proprietorship positively affected money holding.

Taking a superficial survey, this examination noticed that the couple of studies completed in Nigeria, for example, Ogundipe et al. (2012) and Monye-Emina and Enofe (2015) didn't catch the money proportion as intermediary for the money possessions and profit approach as an intermediary for the association's attributes. In this way, this investigation will extend the extension (factors) utilized by Ogundipe et al. (2012) by presenting one (1) new factors (dividend policy) to change the model of Ogundipe et al. (2012); and furthermore to discover how the new acquainted factors relates with/influence the money holding of recorded firms in Nigeria. The specialist likewise test a few factors utilized by Ogundipe et al. (2012) to determine if the discoveries of this examination differs with that of Ogundipe et al. (2012). The time of appraisal will be additionally reached out from 2010 of crafted by Ogundipe et al. (2012) to 2018 by the analyst beginning from 2011 to inspect the connection between firm attributes and money property of cited purchaser merchandise organizations in Africa.

1.3 Objectives of the Study

The main objective of this study is to ascertain the relationship between firm's characteristics and cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya. Thus, the specific objectives of this study are to:

i. determine the relationship between firm size and cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.
ii. ascertain the relationship between leverage and cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.
iii. find the relationship between profitability and cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.
iv. examine the relationship between dividend policy and cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.

1.4 Research Hypotheses

The study is guided by the following hypotheses:

i. Firm size does not have any significant relationship with cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.
ii. Leverage does not have any significant relationship with cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.
iii. Profitability does not significantly relate with cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.
iv. Dividend policy does not have any significant relationship with cash holdings of listed consumer and industrial goods firms in Nigeria, South Africa and Kenya.

II. REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Corporate Cash Holdings

There's an old articulation in the realm of business "cash is king". This articulation is at times utilized in organizations examinations or venture portfolios. Damodaran (2001) characterizes money that is claimed by the organization as working money which comprises of money close by and speculation without premium or with enthusiasm underneath the market rate. Money tucked neatly away additionally groups as money and money equal parts as long as it gives rates underneath the hazard free rate.

Money for the most part comes in physical structure, paper or coins that can be utilized for trading products, obligation or administrations. In an organization, money is by and large put away as spared bank stores. Gill and Shah (2012) characterized money holding as promptly accessible for speculation use and money that is fit to be circulated to

financial specialists. For the most part, on the asset report, money and money proportionate comprise of money close by, ledger, attractive protections, stores and other. Ogundipe et al (2012) saw Cash holding as money or money equal that can be effectively changed over into money. As indicated by them, money holding will remember money for hand and bank, transient interest in currency advertise instrument, for example, treasury bills.

Money property is usually characterized as money and attractive protections or money counterparts (Opler, Pinkowitz, Stulz & Williamson, 1999). As indicated by them money reciprocals are present resources, which can be changed over in an exceptionally present moment and are accordingly described by a high level of liquidity. They incorporate for example, US treasury charges, declarations of stores, investors' acknowledgments and further currency showcase instruments. Those protections have a generally safe, low-return benefit (Ferriera & Vilela 2004; Ozkan & Ozkan, 2004; Opler et al, (1999).

2.1.1.1 Cash Ratio

The money proportion is the proportion of an organization's complete money and money reciprocals to its present liabilities. The measurement computes an organization's capacity to reimburse its momentary obligation; this data is helpful to loan bosses when choosing how much obligation, assuming any, they would reach out to the asking party. The money proportion is commonly a progressively preservationist take a gander at an organization's capacity to cover its liabilities than numerous other liquidity proportions in light of the fact that different resources, including records of sales, are kept separate from the condition (Investopedia, 2016). The money proportion is most generally utilized as a proportion of organization's liquidity. The measurement figures an organization's capacity to pay current liabilities utilizing just money and money reciprocals close by. On the off chance that the organization is compelled to pay every single current risk quickly, this measurement demonstrates the organization's capacity to do as such without selling or exchange different resources (Investopedia, 2016).

The money proportion is progressively helpful when it is contrasted and industry midpoints and contender midpoints, or when taking a gander at changes in a similar organization's money proportion after some time. A money proportion lower than 1 does once in a while show that an organization is in danger of having monetary trouble. In any case, a low money proportion may likewise be a pointer of an organization's particular methodology to have low money saves. Certain enterprises will in general work with higher current liabilities and lower money holds, thus money proportions across businesses may not be demonstrative of difficulty. Likewise, a higher money proportion doesn't really mirror an organization's solid execution. High money proportions may show that an organization is wasteful in the usage of money or not expanding the potential advantage of minimal effort credits. It might likewise recommend that an organization is stressed over future productivity and is aggregating a defensive capital pad.

2.1.1.2 Firm Size

Firm Size is characteristic log of all out resource. Exchange off hypothesis of income recommend negative connection between income and firm size and other two speculations for example hierarchy hypothesis and free income hypothesis predicts a positive connection between income and firm size. Fauikender and Wang (2006) watched a negative connection; they found that money holding and economies of scale have negative connection. Pinkowitz and Williamson (2001) and Bates et al. (2009) watched a negative connection between income and firm size for US firms; all outcomes are supporting exchange off view. Ozkan and Ozkan (2004) watched a positive connection between money holding and firm size. Opler et al (2009) likewise found a positive connection between firm size and money holding. Ferreira and Vilela (2004) found that little firms hold more money.

Firm size is a significant determinant of money property, yet the normal relationship is questionable (Drobetz & Grüninger 2007; Niskanen & Niskanen 2007). Firm size might be identified with potential organization issues, examiner inclusion, and observing by the market for corporate control. Since there are generous fixed expenses of getting outside financing just as economies of scale in real money the executives, both develop and bigger organizations are relied upon to get financing in a simpler and less expensive manner (Dittmar, Mahrt-Smith & Servaes 2003). Likewise, Almeida, Campello and Weisbach (2004) and Faulkender and Wang (2006) contend that huge firms have simpler access to capital markets comparative with little firms; thus they face less money related imperatives. Additionally, on the grounds that enormous organizations will in general be increasingly differentiated (Rajan & Zingales 1995), raising money by selling non-centre resources in times of budgetary trouble ought to be simpler for these organizations (Lang, Poulsen & Stulz 1995). What's more, huge and progressively expanded firms are inclined to less chapter 11 related expenses, and thus less inclined to store money saves (Al-Najjar & Belghitar 2011).

2.1.1.3 Leverage

Leverage is characterized as the proportion of absolute liabilities to add up to resource in money writing and experimental examinations of various writers leverage is clarified as an intermediary of association's obligation giving capacity. With the exception of hierarchy hypothesis every single other hypothesis i.e., exchange off and income hypothesis foresee negative connection between money holding and leverage. Ozkan and Ozkan (2004) in their observational examinations watched a negative connection between money holding and leverage. In spite of the fact that it is regular observation that organizations with high leverage like to hold more money. According to Ferreira and Vilela

(2004) obligation is in direct connection with held gaining for example it will develop with development in held income and fall with decrease in held profit, which is pushing a negative connection between money holding and leverage however he couldn't give any proof for this contention .Opler et al. (1999) likewise found an opposite connection between interior assets and leverage since firms a large portion of the occasions want to have over the top money to address financing issue than giving value which is costly because of the explanation of antagonistic determination.

In accordance with the progressive system of financing suspicion, the hierarchy hypothesis places that when the degree of speculation surpasses the degree of held profit, the measure of money held declines and the measure of obligation increments, as needs be (Ferreira & Vilela, 2004). In this manner, from hierarchy viewpoint the connection among leverage and money possessions would likewise be negative. The office viewpoint accentuates the observing job of obligation. In an exceptionally turned firm, administrators are taught by obligation pledges and necessities that are forced on them by their loan bosses. Consequently, directors would have less optional control over the work of assets. Interestingly, supervisors in firms with a low measure of leverage have a more prominent breathing space in dynamic since they are less liable to checking and in this way their optional force is bigger. In this manner, it is normal that less turned firms hold more money (Ferreira & Vilela, 2004; Opler et al. 1999; Maximilian, 2015).

2.1.1.4 Profitability

Productivity is characterized as a pay created in the business which is determined by taking away the costs from the income (Nnubia & Ofoegbu, 2019; Aliet, 2012). The creator went on by showing that the word benefit gets from "benefit" signified by the Greek letter "n". This is characterized as the distinction between the absolute income of a business and the complete expense of a business.

There is proof that higher money property is fundamentally connected with higher productivity (Nnubia, Ofor, & Emeka-Nwokeji, 2017; Alaba, 2013; Lu & Tsaic, 2010). The higher the benefit, the higher the money holds by firms. Nguyen (2005) researched the theory that money adjusts have a prudent thought process and serve to alleviate the unpredictability of working income. Utilizing an example of 9,168 firm-year perceptions from Tokyo Stock Exchange for the time of 1992 to 2003, through relapse investigation, he found that money holding increments with its productivity development. Megginson and Wei (2010) considered the determinants of money property and the estimation of money in China's offer issue privatized firms from 1993 to 2007. Through relapse examination, they additionally found that progressively productive firms hold more money.

2.1.1.5 Dividend Policy

A profit is a circulation of a part of an organization's income, chose by the top managerial staff, to a class of its investors. It very well may be given as money instalments, as portions of stock, or other property. The Economic Times eludes profit as a prize, money or something else that an organization provides for its investors. Ozkan and Ozkan (2004) and Ferreira and Vilela (2004) found a negative connection between profit instalments and money property, it implies profit paying firm can hold less money, since they can raise subsidize for any preparatory or value-based rationale by simply cutting their profit. On the off chance that a firm isn't delivering profit, at that point it has two choices; first it can counsel capital market for gathering pledges or can raise the degree of money holding by giving greater value (Opler et al., 1999).

Ferreira and Vilela (2004) propose that organizations that deliver profits can raise assets at low expenses by diminishing profit instalments. On the inverse, firms that don't deliver profits would need to go to the capital market to raise reserves. Thus, it is normal that profit instalments impact money possessions. Notwithstanding, this view remains conversely with some observational proof. Brav, Graham, Harvey and Michaely (2005) examine the profit payout strategy of firms in the 21st century. The creators met money related administrators of 384 firms and discovered that those officials would prefer to choose to pass on positive NPV ventures than making profit cuts. The finding can be credited to the inconvenient impact, declarations about profit cuts have on the offer cost of an organization (Han & Qui, 2007).

2.2 Theoretical Framework

2.2.1 The Trade-Off Theory

The trade-off hypothesis originally emerged to decide the best choice that is taken by the firm with regards to their decision of capital structures. Exchange off hypothesis began from recommendation by Modigliani and Miller (1963). They contended that when a company's corporate annual duty can make an advantage for obligation and it will fill in as shield income from charges. On this hypothesis, a firm will pick how much obligation account and how much value subsidizing they need to use by adjusting the expenses and advantages. Since the company's target work is straight, there is no expense from the counterbalancing cost of obligation, which proposes that organizations pick all obligations financing (Modigliani & Miller, 1963). Notwithstanding, the equivalent with obligation, money holding is fundamental to the firm and has a few expenses and advantages. Miller and Orr (1966) on their association's cash request model contended that there are economies of scale in real money the board which will prompt huge firms holding less money than little firms.

The chief advantage of holding money is that it furnishes firms with a wellbeing cradle that will permit them to abstain from making costs by raising outside assets or keeping them from being compelled to sell their current resources (Levasseur, 1979). Charges that brought about for acquiring

assets through getting are not identified with the size of the advance, which demonstrates that the expense for obtaining is a fixed sum (Peterson & Rajan, 2003). Thus, the charges that originate from the getting itself are increasingly costly for little firms contrasted with enormous firms. Therefore, little firms are compelled to turn their subsidizing utilizing insider financing, acknowledge the greater expenses of subsidizing or take shorter-term financing options (Berger & Udell, 1998). In other research, Bates (1971) found that little firms, contrasted with huge ones, would in general be increasingly self-financing, have lower liquidity, once in a while issue stock, have less use and depend more on bank financing.

2.2.2 The Financial Hierarchy

The budgetary chain of importance is otherwise called hierarchy hypothesis. This hypothesis was first evolved by Donaldson (1961), and afterward reached out by Myers and Majluf (1984). As per Myers and Majluf (1984), data asymmetries among chiefs and investors make outer financing expensive. This hypothesis declares that to limit awry data costs and other financing costs, firms should fund ventures first withheld income, at that point with safe obligation and dangerous obligation, lastly with value (Myers & Majluf, 1984). This hypothesis proposes that organizations don't have target money levels, however money is utilized as cushion between held profit and venture needs. Along these lines, the intention in holding money is to maintain a strategic distance from outer financing.

In a hierarchy world, obligation normally develops when the speculation level of the firm surpasses the held profit and fall when venture is not exactly held income (Ferreira & Vilela, 2004). Firms that have an elevated level of influence are bound to fail (Kaplan & Stein, 1993). They additionally find that if a firm has a significant level of obligation, the probability of failing is likewise expanding. A firm can likewise keep up money related adaptability through having unused obligation opening (low leverage) and having huge money saves, which proposes a negative connection among leverage and money holding (Nenu & Vintilă, 2017).

Hierarchy hypothesis additionally predicts that as a result of enhancement, bigger firms will have greater security in their money and lower the likelihood of monetary pain (Rajan & Zingales, 1995). For huge firms, the expense to give value or obligation some of the time esteemed as unimportant. Opler et al (1999) contended that enormous firms are apparently increasingly fruitful and ought to have more money contrasted with a little firm.

2.2.3. The Agency Theory

Each business has different sides of relationship, the head, and the specialist. For the most part, the chief is the person who has the capital. Notwithstanding, some of the time the chief is too occupied to even think about being legitimately associated with the everyday business, and accordingly an outsider is recruited to execute business activity. Specialist and chief here and there have an alternate view with respect to how the organization ought to be worked. The organization relationship characterized as one in which (at least one) chief draws in the operators to play out some help for their sake which includes the appointment of some dynamic position to the specialist (Jensen & Meckling, 1976).

Issues emerge when operators act to satisfy personal circumstance instead of the wellbeing of the principals. These contentions among head and operator identify with the company's degree of money possessions. One reason for supervisors to hold the abundance of money is on the grounds that administrators are hazard opposed (Fama & French, 1998). This abundance of money will make supervisors ready to make an awful venture which capital market would not fund. Office hypothesis predicts that self-intrigued administrators are bound to have more elevated level of money holding in the present to increase self-advantage as opposed to hold them for future speculation (Jensen & Meckling, 1976)

With respect to money property, the organization hypothesis incorporates two speculations: a) the free income theory; b) the hazard decrease theory.

2.2.3.1. Free income theory

The free income theory of Jensen (1986) objects to the presence of a target money level. Per Harford (1999), corporate money property is seen as free incomes, since they can be utilized to serve the board's own advantages to the detriment of the investors. The free income theory, hence, imagines that supervisors are progressively disposed to load up money, as it builds the advantages under their influence. This, thus, manages them increasingly unhindered venture right. With a store of money, supervisors can generally effectively maintain a strategic distance from the capital markets and don't need to agree to their straightforwardness prerequisites in regards to potential speculations (Ferreira & Vilela, 2004). "Administrators' narrow minded practices can remember rich spending for lavish workplaces and unmerited mergers and acquisitions. Consequently, extreme money can make overinvestment issues, since they might be utilized to support negative NPV ventures" (Thanatawee, 2011). This statement concurs with the thought of Dittmar and Mahrt-Smith (2007) that investors attribute a substandard incentive to a negligible dollar of money holds, when there is a more prominent likelihood of organization clashes in a firm.

2.2.3.2. Risk reduction hypothesis

While the free income speculation has gotten some inclusion in the organization hypothesis writing, just a couple of specialists have concentrated on the hazard decrease theory, to be specific, Opler et al. (1999) and Tong (2006). The hazard decrease theory tends to the contention that may happen when the board and investors have various mentalities to chance. "Since corporate money property can be seen as hazard free speculations, a hazard unwilling and self-intrigued CEO can

allot all the more firm resources for corporate money possessions to diminish firm hazard to the detriment of surrendering some positive NPV however hazardous tasks, which isn't gainful to investors" (Tong, 2006). In his examination, Tong (2006) explores how the CEO's hazard motivating forces impact the degree of an association's money possessions, where the CEO's hazard motivator is estimated by "the affectability of the estimation of official investment opportunities to the instability of stock returns" (Tong, 2006). His discoveries were that organizations with lower official investment opportunities chance motivating forces were holding more money saves, affirming the speculation that chance opposed and greedy directors will channel organization advantages for money possessions with the impact of lessening firm hazard in a way that is adverse to the investors.

2.2.4 Summary of the Theories

The framework based on trade-off theory, pecking order theory and agency theory is presented in Figures 1 below.

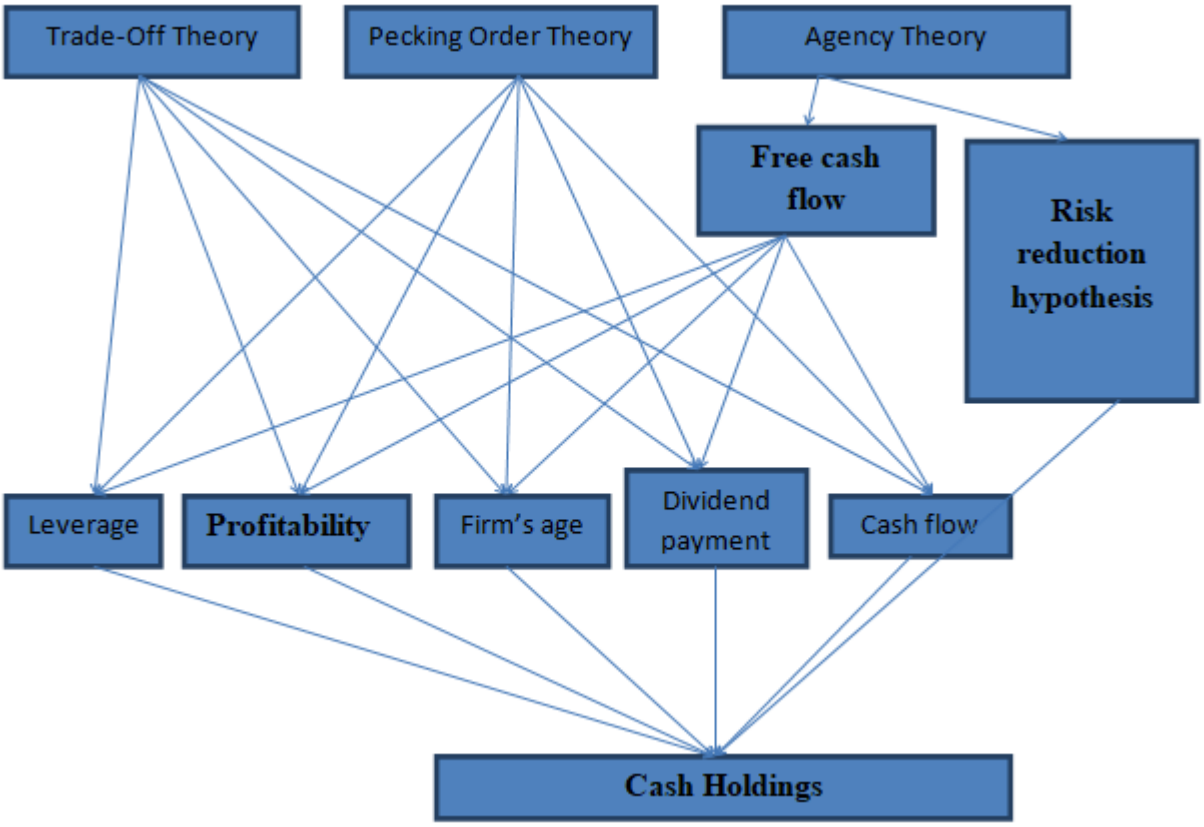

Figure 1: Framework based on Trade-off Theory, Pecking Order Theory and Agency Theory

Source: Researcher 2020

The review of cash holding theories revealed the relationships between the firm characteristics (determinants- firm size, leverage, profitability, cash flow, dividend payment) and cash holding to be as shown in table 1.

Table 1: theoretical predictions of the determinants of cash holdings

Variables	Trade-off theory	pecking order theory	free cash flow theory
Firm size	-	+	+
Leverage	+	-	-
Cash flow	+	+	n.a
Dividend payment	-	n.a.	n.a
Profitability	-	+	+

Source: Ferreira and Vilela (2004).

In table 1, the relationships of the variables with cash holdings are displayed. Here, "+" indicates that the explanatory variable is significantly positively related with the dependent variable "-" indicates a negative relationship and in cases in which the theories do not make any assumptions on the relation to cash holdings, the respective variables are denoted with "n.a".

2.3 Empirical Studies

This segment gives a broad observational investigation of the firm qualities and corporate money property at the firm level.

2.3.1 Firm size and cash holdings

Research shows that firm size may influence a company's money property with little firms holding more money since they are bound to confront obtaining imperatives (Whited, 1992; Fazzari & Petersen, 1993) and to stay away from the higher issuance costs they bring about when raising outer assets (Barclay & Smith, 1996). Ali and Yousaf (2013) discoveries of their investigation are steady with the expectations of the exchange off hypothesis, hierarchy hypothesis, and office cost hypothesis. The outcome gave solid proof that firm size altogether influences the money possessions choices of non-monetary firms and that are in similarity with the current writing on the determinants of corporate money property. Kariuki, Namusonge and Orwa (2015) look at the determinants of corporate money possessions of private assembling firms in Kenya, utilizing relapse examination, the investigation discoveries show that firm size emphatically decides corporate money holding.

The discoveries of Mesfin (2016) uncovered that firm size are factually noteworthy and emphatically influence the money holding of the assembling share organizations in Ethiopia. Ferreira and Vilela (2004) place that bigger firms for the most part have a higher level of investor scattering. Consequently, they contend that the improved optional force empowers administrators to apply a higher impact on firm and speculation arrangements, which prompts a more noteworthy measure of money. Here, one would expect a positive connection between firm size and money property. They found that little firms hold more money. Morais and Silva (2013) additionally uncovered that bigger organizations show lower money to resources proportion. Chireka and Fakoya (2017) discovered proof that firm size fundamentally impacts the money possessions levels of retail firms recorded on the Johannesburg Stock Exchange. This was in accordance with the discoveries of Tahir, Quddus, Kahnum and Usman (2015), Ali, Ullah and Ullah, (2016), Kengatharan (2017), Afza and Adnan (2007) and Zia-ul-Hannan and Asghar (2013), which uncovered that firm size had huge positive relationship with money holding in Pakistan. Ozkan and Ozkan (2004) watched a positive connection between money holding and firm size. At the end of the day, Kim et al (1998) and Pinkowitz and Williamson (2001) locate an unimportant negative relationship.

2.3.2 Leverage and Cash Holdings

Hardin III, Highfeild, Hill and Kelly (2009) researched the determinants of REIT money possessions utilizing an example of 1,1114 firm year perceptions for 194 value land venture trusts (REITS) from USA more than 1998 to 2006 period. Through common least square regression investigation, their outcomes uncovered that REIT money possessions are conversely identified with influence. Ozkan and Ozkan (2004) in their experimental examinations watched a negative connection between money holding and influence. However, it is normal observation that organizations with high influence want to hold more money. Opler et al. (1999) additionally found a backwards connection between interior assets and influence since firms the greater part of the occasions want to have inordinate money to address financing issue than giving value which is costly because of the explanation of antagonistic choice. Ferreira and Vilela (2004) inspected the determinants of corporate money property utilizing an example of 400 organizations in 12 Economic and Monetary Union (EMU) nations for the time of 1987-2000. The aftereffects of their examination uncovered that money property are adversely influenced by influence. Albeit a few scientists found a non-straight connection among influence and money possessions (for example Drobetz & Gruninger, 2007; Guney et al, 2007), Most on-going investigations have discovered that exceptionally influence firms will in general hold less money (Al-Najjar and Belghitar, 2011; Subramaniam et al, 2011; Uyar and Kuzey, 2014; Wasiuzzamam, 2014).

Morais and Silva (2013) broke down the determinants of money property for the convenience business in South European nations (Spain, Greece, Italy and Portugal) utilizing an example of 5964 firms during the period 2003-2011. A fixed-impacts board information model uncovered that higher utilized, where most obligation is present moment and that keep up better associations with budgetary foundations display lower money to resources proportions. Fernandes, Coelho and Peixinho (2017) explore the determinants of money property of traded on open market Portuguese firms. They find that influence is adversely associated with our example firms' money property. In inspecting the determinants of corporate money possessions levels of retail firms in South Africa. Chireka and Fakoya (2017) found that influence essentially impact the money property levels of retail firms recorded on the Johannesburg Stock Exchange. In Indonesia, Nasar (2016) locate that Indonesian firms will in general hold more money when they have higher influence. Hofmann (2006) likewise proposes that the primary corporate money property determinants in New Zealand are influence.

Tahir, Quddus, Kahnum and Usman (2015) utilizing information assembled from the State Bank of Pakistan over a time of 8 years (2008 to 2015) of 39 food organizations inspected the money holding determinants for settling on the choice in food industry of Pakistan. The observational aftereffects of the examination uncovered that Leverage has a critical negative impact on money holding. Maximilian (2015) additionally fined that influence has huge negative effect on money property. Kengatharan (2017) find critical negative effect of influence on money possessions in Sri Lanka producing organizations. Ali, Ullah and Ullah, (2016) likewise discover negative and critical connection among influence and money holding when examining the determinants of corporate money property of Textile Sector in

Pakistan. These discoveries were the equivalent with the negative relationship found by Khan and Tanveer (2016), Rizwan and Javed (2011), Afza and Adnan (2007) and Zia-ul-Hannan and Asghar (2013) over the influence and money possessions.

Saddour (2006) examined the determinants of corporate money possessions utilizing relapse examination by gathering information from 297 French organizations over a time of (1998-2002) in view of the exchange off hypothesis and the Pecking Order Theory. He found that French organizations increment their money level when their exercises are hazardous and the degrees of their income are high, and lessen it when they are exceptionally utilized. When exploring the determinants of money holding in non-budgetary firms of Germany across different enterprises. Ali and Yousaf (2013) found that influence fundamentally influence the money possessions choices of non-monetary firms; and that are in similarity with the current writing, for example, Kariuti et al. (2015) which infers that influence decide corporate money possessions among private assembling firms in Kenya. Borhanuddin and Ching (2011) show that there were critical negative connections between money property and influence with or without control factors in Malaysia. D'Mello, Krishnaswami and Larkin (2008) demonstrate that administrators allot higher money proportions to firms with low influence. At the end of the day, Mesfin (2016) found that influence is measurably inconsequential variable of money holding choice for Ethiopian assembling share organizations.

In Nigeria, Ogundipe, Ogundipe and Ajao (2012) explore the observational connection between money holding and firm qualities utilizing an example of 54 Nigerian firms recorded on Nigerian Stock Exchange for a time of 15 years (from 1995-2010). The outcomes shows that influence essentially influence the corporate money possessions in Nigeria. Likewise Ogundipe, Salawu and Ogundipe (2012) found that influence has critical positive relationship with money property.

2.3.3 Profitability and Cash Holdings

There is proof that higher money possessions are fundamentally connected with higher productivity (Nnubia & Ofoegbu, 2019; Alaba, 2013; Lu & Tsaic, 2010). The higher the benefit, the higher the money hold by firms. Nguyen (2005) researched the theory that money adjusts have a prudent thought process and serve to alleviate the instability of working profit. Utilizing an example of 9,168 firm-year perceptions from Tokyo Stock Exchange for the time of 1992 to 2003, through relapse investigation, he found that money holding increments with its benefit development. Megginson and Wei (2010) considered the determinants of money possessions and the estimation of money in China's offer issue privatized firms from 1993 to 2007. Through relapse investigation, they likewise found that increasingly beneficial firms hold more money.

Nnubia and Ofoegbu (2019) examined the effect of profitability on cash holdings of quoted consumer goods companies in Nigeria. Sample of 20 Nigerian consumer goods firms listed on Nigerian Stock Exchange for a period of 14 years (from 2004-2017) was selected. The main type of data used in this study is secondary; sourced from the Nigerian stock exchange fact book. This study applied ex post facto research design. The data collected were analysed using Ordinary Least Square Method. The results revealed that that return on assets positively influence consumer goods companies' cash holdings, whereas earnings per share were found to have an insignificant impact on the cash holdings of consumer goods companies in Nigeria. The study, therefore recommends among others that, the Nigerian consumer goods firms should develop a good strategy for earning high returns from their assets since this has positive significant effect on cash holdings.

Ali, Ullah and Ullah, (2016) look at the Determinants of Corporate Cash Holdings of Textile Sector in Pakistan. They recognize and measure the relationship of gainfulness and its impact on corporate money possessions. An example of 30 material firms of Pakistan recorded on Karachi Stock Exchange (KSE) was chosen for the investigation, for the explanation of looking at their relationship. Optional information for the period 2006-2013 was chosen for the examination. Difference Inflation Test (VIF) was utilized to check the issue of multi-collinearity. Different relapse models were utilized to direct the outcomes. Results determined by relapse model show consistency with the writing accessible. Gainfulness (ROA) shows a positive and noteworthy connection with money holding.

Mesfin (2016) examine the organizations' particular and macroeconomic factors of money possessions of assembling share organizations in Ethiopia over the period from 2009 to 2014 comprehensive. In doing as such, a numerous straight relapse model is utilized for 15 haphazardly chose fabricating share organizations of Ethiopia. The discoveries of the examination uncovered that productivity are factually irrelevant factors of money holding choice for Ethiopian assembling share organizations. Tehrani, Darabi and Izy (2014) utilizes board information for an example of 200 firms recorded in the Tehran Stock Exchange over the period from 2007 to 2012 to break down the connection between money possessions and turnover rate and exchanging likelihood. They likewise locate no noteworthy connection between exchanging gainfulness and company's propensity to amass money. These discoveries were not in accordance with the discoveries of Paskelian and Nguyen (2010), which manages the example of 1164 Chinese and Indian firms over a multi-year time range and Megginson and Wei (2010) that additionally manages test of Chinese privatized firm more than 1993-2007 found that progressively productive and high development firms hold more money.

In the exact examination directed in Nigeria by Ogundipe, Ogundipe and Ajao (2012), when researching the connection

between money holding and firm attributes, they saw that productivity fundamentally influence the corporate money property in Nigeria. This discoveries were in accordance with the discoveries of Ogundipe, Salawu and Ogundipe (2012), which manages the non-budgetary cited firms in Nigeria utilizing an example of 54 firms over a period 1995-2009, and found that money holding has negative relationship with gainfulness (return on resource).

2.3.4 Dividend Policy and Cash Holdings

Ferreira and Vilela (2004) found a negative connection between profit instalments strategy and money possessions. They were of the conclusion that more profit paying firms can hold less money, since they can raise finance for any prudent or value-based intention by simply cutting their profit. Opler et al. (1999) expressed that on the off chance that a firm isn't delivering profit, at that point it has two choices; first it can counsel capital market for gathering pledges or second, can raise the degree of money holding by giving greater value. Be that as it may, this view remains conversely with some exact proof. Brav, Graham, Harvey and Michaely (2005) explore the profit pay-out approach of firms in the 21st century. The creators met money related administrators of 384 firms and they discovered that those officials would prefer to choose to pass on positive NPV ventures than making profit cuts. The finding can be credited to the impeding impact, declarations about profit cuts have on the offer cost of an organization (Hiller et al., 2003). In addition, Brav et al. (2005) find that most of the talked with administrators (68%) would prefer to raise outside capital before cutting profits. Thus, the inborn inconsistencies of profit instalments lead to a vague assumption about the connection with money possessions.

Leading examination on the determinants of corporate money property level in US eatery industry utilizing a board informational index acquired from 125 traded on an open market US café firms somewhere in the range of 1997 and 2008, Kim, Kim and Woods (2011) found that café firms delivering more profits were appeared to hold less money. Drobetz and Grüninger (2006) research the determinants of an expansive example of Swiss non-budgetary firms' money possessions somewhere in the range of 1995 and 2004 and found that profit instalment approach are emphatically identified with money stores of Swiss non-monetary firms.

Manuel, David and Markus (2011) examined the connection between money property and corporate administration around the globe utilizing 1875 firms from 46 rising and created nations in 2007 with the assistance of relapse investigation and inferred that more money are with firms that have poor level administration. Such firms can benefit from money property on the off chance that they keep up profit pay-out proportions. Chireka and Fakoya (2017) inspected the connection between money possessions level and the recognized determinant factors. The creators discovered proof that profit instalments strategy fundamentally impacts the money property levels of retail firms recorded on the Johannesburg Stock Exchange.

In New Zealand, Hofmann (2006) researched the corporate money possessions determinants of non-budgetary organizations and found that the principle corporate money property determinants in New Zealand are profit instalments. Hofmann expressed that enormous profit instalments show lower money property. Nguyen (2005) found that money holding increments with profit pay-out proportion. Nasar (2016) examines the determinants of money possessions for 417 openly recorded firms of which stock was exchanged on the Indonesian Stock Exchange over the period 2010 to 2016, and locate that Indonesian firms will in general hold more money when they have higher influence and whether they deliver profit to their investors. Khan and Tanveer (2016) discovered direct connection between profit instalment arrangement and money possessions of Pakistan firms.

In Pakistan, Afza and Adnan (2007) utilized dataset for a time of 1998 - 2005 for the profit instalments to concentrate on deciding the corporate money property level of non-budgetary Pakistani organizations, across different ventures. Their outcomes propose negative connections between profits instalment approach and money property of non-budgetary firms in Pakistan. Saddour (2006) examined the determinants of corporate money possessions utilizing relapse examination by gathering information from 297 French organizations over a time of (1998-2002) in view of the exchange off hypothesis and the Pecking Order Theory. He found that the money level of develop organizations increment with the pay-out to their investors as profits or stock repurchases, and diminishes with their exchange credit and their costs on innovative work.

Chen, Chen, Schipper, Xu and Xue (2012) inspected the Sensitivity of Corporate Cash Holdings to Corporate Governance in China. They discovered that the change influences firms profit pay-out approaches in private firms than in state-claimed endeavours. In Japan, Sher (2014) finds that Japanese nonfinancial firms have amassed money to the detriment of speculation and profits. Basheer (2014) investigates the impact of corporate administration on administrative money holding choices. The examination is performed utilizing board information method for an example of 138 firms recorded on Karachi Stock Exchange during 2008-12. The investigation uncovered that profit has decidedly relationship with money property however the connections are unimportant.

III. METHODOLOGY

3.1 Research Design

The investigation utilized board information and depended on ex post facto explore plan. The number of inhabitants in the examination comprises of the 35 for Nigeria, 23 for South Africa and 15 for Kenya of consumer and industrial goods organizations cited in the Nigerian Stock Exchange (NSE), Johannesburg Stock Exchange (JSE), and Nairobi Securities

Exchange (NSE) respectively. The geological extent of the examination is restricted to the chose consumer and industrial goods organizations cited in the Nigerian Stock Exchange, Johannesburg Stock Exchange, and Nairobi Securities Exchange. Fifty-two (33 for Nigeria, 12 for South Africa and 7 for Kenya) organizations were purposively chosen dependent on accessibility of the necessary information. The organizations chose for Nigeria were Berger Paints Nig, Beta Glass Company, Cadbury Nig, Cap Plc, Cement Co. of North. Nig. Plc, Champion Breweries, Cutix Plc, Dangote Cement, Dangote Flour Mills, Dangote Sugar, DN Tyre & Rubber Plc, Flour Mills of Nigeria, Golden Guinea Brew. Plc, Greif Nigeria Plc, Guinness Nig, Honywell Flour Mill, International Breweries, Lafarge Cement Nig, Mcnichols Consolidated, Meyer Plc, Multi-Trex Integrated Foods Plc, Nascon Allied Industries Plc, Nestle Nig, Nigeria Breweries, Nigerian Enamelware, Nigerian Northen Flour Mill, Paints and Coatings Manufactures Plc, Portland Paint Nig, Premier Paints, Pz Cussons, Unilever Nig, Union Dicon Salt Plc, and Vitafoam Nig. While those of South Africa were Astral Foods, Avi ltd, British American Tobacco, Clicks Group, Crookes Brothers, Distell Group, Oceana Group, Pioneer Food Group, RCL Foods, Shoprite Holdings, the Spar Group and Tiger Brands. Those of Kenya were B.O.C Kenya, British American Tobacco Kenya, Carbacid Investments, East African Breweries, Eveready East Africa, Mumias Sugar Co., and Unga Group.

3.2 Technique for Data Analysis

The auxiliary information gathered was examined utilizing elucidating insights, connection and relapse investigation. The spellbinding measurements were utilized to assess the attributes of the information, for example, mean, greatest, least, and standard deviation and furthermore checks for typicality of the information. The connection examination was utilized to assess the connection between the factors and to check for multi-colinearity. The standard relapse investigation was utilized to assess the impact of the free factors on the reliant variable. It uncovers the level of impact the free factors has on the needy variable.

3.3 Model Specification & Operationalization of Dependent & Independent Variables

The researcher formulates the following models to guide the study:

Y = Dependent variable = Cash Holding

X = Independent variable = Determinants (firm's characteristics)

CASHR = f(FSIZE, LEVG, PROF, DIVP , μ) …… I

$CASHR_{it} = \beta_0 + \beta_1 FSIZEit + \beta_2 LEVG_{it} + \beta_3 PROF_{it} + \beta_4 DIVP_{it} + ų$ ……..…II

Where,

CASHR = Cash ratio

FSIZE = Firm size

LEVG = Leverage

PROF = Profitability

DIVP = Dividend policy

β_0 = Intercept

β_1, β_2, β_3, β_4 = Parameters

μ = Stochastic error term.

3.4 Measurement of Variables

Table 2: Variable measurements

Proxy	Measure
Dependent variable proxies	
CASHR	Cash and cash equivalents/total assets (Maximilian, 2015)
Independent variables proxies	
FSIZE	Natural logarithm of total assets (kariuki et al, 2015)
LEVG	Total Liabilities/total assets (Kariuki et al, 2015)
PROF	Profit after tax/total assets (Osuala et al., 2012)
DIVP	dividend paid out as per financial statement

Source: Researcher, 2020

IV. ANALYSIS/INTERPRETATION OF DATA

4.0 Introduction

The summary of the analysis result and its corresponding interpretations of the relationship between firm characteristics and cash holdings of listed consumer and industrial goods organizations in Nigeria, South Africa and Kenya are presented below.

4.1 Descriptive Statistics

Table 3: Descriptive Statistics: Nigerian Firms

VARIABLES	CASHR	FSIZE	LEVG	PROF	DIVP
Mean	6.344753	7.020076	58.64057	4.913650	47.35106
Median	6.420000	6.910000	57.16000	4.510000	30.23000
Maximum	93.98000	8.760000	150.2400	53.96000	3013.880
Minimum	-87.91000	5.400000	4.280000	-55.20000	-935.6300
Std. Dev.	20.54472	0.863894	20.52760	11.89338	219.4722
Skewness	-0.376316	0.165047	1.005980	-0.117974	10.08951
Kurtosis	7.114695	2.040534	5.841877	8.055436	135.9134
Jarque-Bera	191.7399	11.28201	132.8615	280.6770	198051.8
Probability	0.000000	0.003549	0.000000	0.000000	0.000000
Sum	1668.670	1846.280	15422.47	1292.290	12453.33
Sum Sq. Dev.	110586.4	195.5340	110402.2	37060.56	12620031
Observations	263	263	263	263	263

Source: Summary of descriptive statistics, e-view version 8.1

In Nigeria, table 3 above shows the mean (average) for each variable, their maximum values, minimum values, standard deviation of Nigerian firms. The result provides some insight into the nature of the selected Nigerian firms' data used for the study in Nigeria. Firstly, it was observed that over the period under review, the sampled Nigerian companies have positive average cash ratio (CASHR) of 6.344753 in the period of the study. The table also reveals that a positive average value of 7.020076 for firm size, 58.64057 for leverage, 4.913650 for profitability and 47.35106 for dividend pay-out for the selected Nigerian firms used in the study. These values mean that within the period under review, listed Nigerian firms meet up to 634% on the average. The maximum value of firm size is 8.760000 and its minimum value is 5.400000, maximum value for leverage is 150.2400 and its minimum value is 4.280000; maximum value for profitability is 53.96000 and its minimum value is -55.20000; and that of dividend pay-out is 3013.880, the minimum value is -935.6300. The large differences between the maximum and minimum value shows that the Nigerian firm's data used for the study are homogeneous.

Table 4: Descriptive Statistics: South African Firms

VARIABLES	CASHR	FSIZE	LEVG	PROF	DIVP
Mean	6.413125	7.026667	51.68708	11.72240	57.62198
Median	5.115000	7.055000	49.51000	9.945000	53.05000
Maximum	25.54000	8.170000	84.03000	131.4400	1324.480
Minimum	0.150000	5.780000	23.19000	-1.540000	-1043.900
Std. Dev.	4.815211	0.470616	15.65123	13.37237	174.5980
Skewness	1.464463	-0.464654	0.267066	7.567754	1.388601
Kurtosis	5.278224	3.353563	2.226894	68.40419	46.33910
Jarque-Bera	55.07565	3.954480	3.531960	18027.17	7543.961
Probability	0.000000	0.138451	0.171019	0.000000	0.000000
Sum	615.6600	674.5600	4961.960	1125.350	5531.710
Sum Sq. Dev.	2202.694	21.04053	23271.29	16987.92	2896023.
Observations	96	96	96	96	96

Source: Summary of descriptive statistics, e-view version 8.1

In South Africa, table 4 above shows the mean (average) for each variable, their maximum values, minimum values, standard deviation of South African Firms. The result provides some insight into the nature of the selected South African firms' data used for the study. Firstly, it was observed that over the period under review, the sampled South African companies have positive average cash ratio (CASHR) of 6.413125 in the period of the study. The table also reveals that a positive average value of 7.026667 for firm size, 51.68708 for leverage, 11.72240 for profitability and 57.62198 for dividend pay-out for the selected South African firms used in the study. These values mean that within the period under review, listed South African firms meet up to 641% on the average. The maximum value of firm size is 8.170000 and its minimum value is 5.780000, maximum value for leverage is 84.03000 and its minimum value is 23.19000; maximum value for profitability is 131.4400 and its minimum value is -1.540000; and that of dividend pay-out is 1324.480, the minimum value is -1043.900. The large differences between the maximum and minimum value shows that the South African firm's data used for the study are homogeneous.

Table 5: Descriptive Statistics: Kenyan Firms

VARIABLES	CASHR	FSIZE	LEVG	PROF	DIVP
Mean	8.881786	6.850179	49.20143	6.265893	52.89196
Median	7.640000	6.930000	42.85000	8.315000	49.70500
Maximum	100.2600	7.850000	245.3600	41.19000	257.8300
Minimum	-45.24000	5.760000	9.700000	-96.22000	-36.62000
Std. Dev.	21.60506	0.602104	36.52085	20.28121	51.52842
Skewness	0.911478	0.050026	2.935521	-2.341899	1.253481
Kurtosis	8.036987	1.821713	16.02035	12.97585	5.857280
Jarque-Bera	66.95360	3.262867	475.9970	283.3962	33.71413
Probability	0.000000	0.195649	0.000000	0.000000	0.000000
Sum	497.3800	383.6100	2755.280	350.8900	2961.950
Sum Sq. Dev.	25672.82	19.93910	73357.48	22623.02	146034.8
Observations	56	56	56	56	56

Source: Summary of descriptive statistics, e-view version 8.1

In Kenya, table 5 above shows the mean (average) for each variable, their maximum values, minimum values, standard deviation of Kenyan firms. The result provides some insight into the nature of the selected Kenyan firms' data used for the study in Kenya. Firstly, it was observed that over the period under review, the sampled Kenyan companies have positive average cash ratio (CASHR) of 8.881786 in the period of the study. The table also reveals that a positive average value of 6.850179 for firm size, 49.20143 for leverage, 6.265893 for profitability and 52.89196 for dividend pay-out for the selected Kenyan firms used in the study. These values mean that within the period under review, listed Kenyan firms meet up to 888% on the average. The maximum value of firm size is 7.850000 and its minimum value is 5.760000, maximum value for leverage is 245.3600 and its minimum value is 9.700000; maximum value for profitability is 41.19000 and its

minimum value is -96.22000; and that of dividend pay-out is 257.8300, the minimum value is -36.62000. The large differences between the maximum and minimum value shows that the Kenyan firm's data used for the study are homogeneous.

4.2 Correlation Analysis

Table 6: Pearson correlation analysis: Nigerian firms

VARIABLES	CASHR	FSIZE	LEVG	PROF	DIVP
CASHR	1.000000	0.059336	-0.037759	0.336328	-0.042558
FSIZE	0.059336	1.000000	-0.110899	0.342766	0.031053
LEVG	-0.037759	-0.110899	1.000000	-0.285649	-0.058343
PROF	0.336328	0.342766	-0.285649	1.000000	0.071391
DIVP	-0.042558	0.031053	-0.058343	0.071391	1.000000

Source: Summary of correlation analysis, e-view version 8.1

The correlation matrix is to check for multi-colinearity and to explore the association between each explanatory variable and the dependent variable. In Nigeria, the findings from the correlation matrix table (table 6 above) show that, cash ratio (CASHR) has a negative association with leverage (-0.037759) and dividend pay-out (-0.042558), and also has a positive association with firm size (0.059336) and profitability (0.336328). Firm size has a positive association with profitability (0.342766) and dividend pay-out (0.031053); and also has a negative association with leverage (-0.110899). Leverage has a negative association with profitability (-0.285649) and dividend pay-out (-0.058343). Profitability also has a positive association with dividend pay-out (0.071391).

Table 7: Pearson correlation analysis: South African firms

VARIABLES	CASHR	FSIZE	LEVG	PROF	DIVP
CASHR	1.000000	0.232141	0.056573	0.018849	0.201677
FSIZE	0.232141	1.000000	0.413976	-0.052554	0.168396
LEVG	0.056573	0.413976	1.000000	0.092444	0.123808
PROF	0.018849	-0.052554	0.092444	1.000000	-0.040850
DIVP	0.201677	0.168396	0.123808	-0.040850	1.000000

Source: Summary of correlation analysis, e-view version 8.1

The correlation matrix is to check for multi-colinearity and to explore the association between each explanatory variable and the dependent variable. In South Africa, the findings from the correlation matrix table (table 7 above) show that, cash ratio (CASHR) has a positive association with firm size (0.232141), leverage (0.056573), profitability (0.018849) and dividend pay-out (0.201677). Firm size has a negative association with profitability (-0.052554), and also has a positive association with leverage (0.413976) and dividend pay-out (0.168396). Leverage has a positive association with profitability (0.092444) and dividend pay-out (0.123808); while profitability has a negative association with dividend pay-out (-0.040850).

Table 8: Pearson correlation analysis: Kenyan firms

VARIABLES	CASHR	FSIZE	LEVG	PROF	DIVP
CASHR	1.000000	0.139740	0.067179	0.342548	0.320610
FSIZE	0.139740	1.000000	0.442228	0.065248	0.116496
LEVG	0.067179	0.442228	1.000000	-0.683519	-0.204078
PROF	0.342548	0.065248	-0.683519	1.000000	0.429884
DIVP	0.320610	0.116496	-0.204078	0.429884	1.000000

Source: Summary of correlation analysis, e-view version 8.1

The correlation matrix is to check for multi-colinearity and to explore the association between each explanatory variable and the dependent variable. In Kenya, the findings from the correlation matrix table (table 8 above) show that, cash ratio (CASHR) has a positive association with firm size (0.139740), leverage (0.067179), profitability (0.342548) and dividend pay-out (0.320610). Firm size has a positive association with leverage (0.442228), profitability (0.065248) and dividend pay-out (0.116496). Leverage has a negative association with profitability (-0.683519) and dividend pay-out (-0.204078); while profitability has a positive association with dividend pay-out (0.429884).

4.3 Regression Analysis

Table 9: Regression Analysis: Nigerian firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.24689	10.96211	0.934755	0.3508
FSIZE	-1.475220	1.474984	-1.000160	0.3182
LEVG	0.060013	0.060895	0.985502	0.3253
PROF	0.655210	0.111254	5.889308	0.0000
DIVP	-0.006011	0.005472	-1.098510	0.2730
R-squared	0.724358	Mean dependent var		6.344753
Adjusted R-squared	0.710782	S.D. dependent var		20.54472
S.E. of regression	19.37333	Akaike info criterion		8.784500
Sum squared resid	96834.08	Schwarz criterion		8.852412
Log likelihood	-1150.162	Hannan-Quinn criter.		8.811792
F-statistic	9.160233	Durbin-Watson stat		2.286302
Prob(F-statistic)	0.000001			

Source: Summary of regression analysis, e-view version 8.1

The R-squared which is the co-efficient of determination or measure of goodness of fit of the model, tests the explanatory power of the independent variables in any regression model. From our result in table 9 above, the R-squared (R^2) is 72% in the Model. This showed that our model displayed a good fit because the R^2 is closer to 100%, these explanatory variables can impact up to 72% out of the expected 100%, leaving the remaining 28% which would be accounted for by other variables outside the models as captured by the error term.

The F-statistics measures the overall significance of the explanatory parameters in the model, and it shows the appropriateness of the model used for the analysis while the probability value means that model is statistically significant and valid in explaining the outcome of the dependent variables. From table 9 above, the calculated value of the f-statistics is 9.160233 and its probabilities are 0.000001 which is less than 0.05. We therefore accept and state that there is a significance relationship between the variables. This means that the parameter estimates are statistically significant in explaining the relationship in the dependent variable.

The t-statistics helps in measuring the individuals' statistical significance of the parameters in the model from the result report. It is observed from table 9 above that only profitability (PROF) was statistically significant at 5% with its t-values as 5.889308 and p-value as 0.0000. This implies that it has contributed significantly to cash holding at the rate of 5% level of significant. The remaining variables such as firm size, leverage and dividend pay-out with its t-values as -1.000160, 0.985502 and -1.098510 respectively and p-value of 0.3182, 0.3253 and 0.2730 respectively were not statistically significant at 5%.

Our model is free from the problem of autocorrelation because the Durbin-Watson value is 2.286302 which is approximated as 2 (that means, the absence of autocorrelation in the model used for the analysis).

The a'priori criteria are determined by the existing accounting theory and states the signs and magnitude of the variables from the result. Profitability has positive sign and its t-value and p-value are 5.889308 and 0.0000. In the Model, this implies that increase in profitability will significantly increases the cash holdings of Nigerian firms by 589%. Leverage also has a positive sign with its t-value and p-value as 0.985502 and 0.3253. This implies that in the Model, an increase in leverage will increases the cash holdings of Nigerian firms by 99%. Though, the contribution is not statistically significant at 5% level. Firm size and dividend pay-out had negative sign and its t-values are -1.000160 and -1.098510 respectively while its p-values are 0.3182 and 0.2730 respectively. Therefore in the Model, this implies that decrease in firm size and dividend pay-out will lead to an insignificant decrease in the cash holdings of Nigerian firms by 100% and 110% respectively.

Table 10: Regression Analysis: South African firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.717729	7.508069	-1.294305	0.1988
FSIZE	2.377356	1.141240	2.083134	0.0400
LEVG	-0.020009	0.034217	-0.584775	0.5601
PROF	0.015885	0.036459	0.435708	0.6641
DIVP	0.004755	0.002812	1.691096	0.0942
R-squared	0.708586	Mean dependent var		6.413125
Adjusted R-squared	0.704567	S.D. dependent var		4.815211
S.E. of regression	4.703950	Akaike info criterion		5.985360
Sum squared resid	2013.571	Schwarz criterion		6.118920
Log likelihood	-282.2973	Hannan-Quinn criter.		6.039347
F-statistic	2.136786	Durbin-Watson stat		1.702772
Prob(F-statistic)	0.028577			

Source: Summary of regression analysis, e-view version 8.1

The R-squared which is the co-efficient of determination or measure of goodness of fit of the model, tests the explanatory power of the independent variables in any regression model. From our result in table 10 above, the R-squared (R^2) is 70% in the Model. This showed that our model displayed a good fit because the R^2 is closer to 100%, these explanatory variables can impact up to 70% out of the expected 100%, leaving the remaining 30% which would be accounted for by other variables outside the models as captured by the error term.

The F-statistics measures the overall significance of the explanatory parameters in the model, and it shows the appropriateness of the model used for the analysis while the probability value means that model is statistically significant and valid in explaining the outcome of the dependent variables. From table 10 above, the calculated value of the f-statistics is 2.136786 and its probabilities are 0.028577 which is less than 0.05. We therefore accept and state that there is a significance relationship between the variables. This means that the parameter estimates are statistically significant in explaining the relationship in the dependent variable.

The t-statistics helps in measuring the individuals' statistical significance of the parameters in the model from the result report. It is observed from table 10 above that only firm size (FSIZE) was statistically significant at 5% with its t-values as 2.083134 and p-value as 0.0400. This implies that it has contributed significantly to cash holding at the rate of 5% level of significant. The remaining variables such as leverage, profitability and dividend pay-out with its t-values as -0.584775, 0.435708 and 1.691096 respectively and p-value of

0.5601, 0.6641 and 0.0942 respectively were not statistically significant at 5%.

Our model is free from the problem of autocorrelation because the Durbin-Watson value is 1.702772 which is approximated as 2 (that means, the absence of autocorrelation in the model used for the analysis).

The a'priori criteria are determined by the existing accounting theory and states the signs and magnitude of the variables from the result. Firm size has positive sign and its t-value and p-value are 2.083134 and 0.0400. In the Model, this implies that increase in firm size will significantly increases the cash holdings of South African firms by 208%. Leverage has a negative sign with its t-value and p-value as -0.584775 and 0.5601. This implies that in the Model, a decrease in leverage will decreases the cash holdings of South African firms by 58%. Though, the contribution is not statistically significant at 5% level. Profitability and dividend pay-out had positive sign and its t-values are 0.435708 and 1.691096 respectively while its p-values are 0.6641 and 0.0942 respectively. Therefore in the Model, this implies that increase in profitability and dividend pay-out will lead to an insignificant increase in the cash holdings of South African firms by 44% and 169% respectively.

Table 11: Regression Analysis: Kenyan firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	47.34084	33.11958	1.429391	0.1590
FSIZE	-10.35121	5.447985	-1.900007	0.0631
LEVG	0.474987	0.123344	3.850902	0.0003
PROF	0.898354	0.211391	4.249736	0.0001
DIVP	0.065219	0.052825	1.234615	0.2226
R-squared	0.735237	Mean dependent var		8.881786
Adjusted R-squared	0.730157	S.D. dependent var		21.60506
S.E. of regression	18.05572	Akaike info criterion		8.709847
Sum squared resid	16626.46	Schwarz criterion		8.890682
Log likelihood	-238.8757	Hannan-Quinn criter.		8.779957
F-statistic	6.937202	Durbin-Watson stat		1.840912
Prob(F-statistic)	0.000154			

Source: Summary of regression analysis, e-view version 8.1

The R-squared which is the co-efficient of determination or measure of goodness of fit of the model, tests the explanatory power of the independent variables in any regression model. From our result in table 10 above, the R-squared (R^2) is 74% in the Model. This showed that our model displayed a good fit because the R^2 is closer to 100%, these explanatory variables can impact up to 74% out of the expected 100%, leaving the remaining 26% which would be accounted for by other variables outside the models as captured by the error term.

The F-statistics measures the overall significance of the explanatory parameters in the model, and it shows the appropriateness of the model used for the analysis while the probability value means that model is statistically significant and valid in explaining the outcome of the dependent variables. From table 10 above, the calculated value of the f-statistics is 6.937202 and its probabilities are 0.000154 which is less than 0.05. We therefore accept and state that there is a significance relationship between the variables. This means that the parameter estimates are statistically significant in explaining the relationship in the dependent variable.

The t-statistics helps in measuring the individuals' statistical significance of the parameters in the model from the result report. It is observed from table 10 above that only leverage and profitability were statistically significant at 5% with its t-values as 3.850902 and 4.249736 respectively and p-values as 0.0003 and 0.0001 respectively. This implies that they had contributed significantly to cash holding at the rate of 5% level of significant. The remaining variables such as firm size and dividend pay-out with its t-values as -1.900007 and 1.234615 respectively and p-values of 0.0631 and 0.2226 respectively were not statistically significant at 5%.

Our model is free from the problem of autocorrelation because the Durbin-Watson value is 1.840912 which is approximated as 2 (that means, the absence of autocorrelation in the model used for the analysis).

The a'priori criteria are determined by the existing accounting theory and states the signs and magnitude of the variables from the result. Leverage and profitability had positive sign and its t-values are 3.850902 and 4.249736 respectively and p-values as 0.0003 and 0.0001 respectively. In the Model, this implies that increasing leverage and profitability will significantly increases the cash holdings of Kenyan firms by 385% and 425% respectively. Firm size has a negative sign with its t-value and p-value as -1.900007 and 0.0631. This implies that in the Model, a decrease in firm size will decreases the cash holdings of Kenyan firms by 190%. Though, the contribution is not statistically significant at 5% level. Dividend pay-out had positive sign and its t-value is 1.234615 while its p-value is 0.2226. Therefore in the Model, this implies that increasing dividend pay-out will lead to an insignificant increase in the cash holdings of Kenyan firms by 123%.

Table 12: Regression Analysis: Comparative Analysis of Nigeria, South Africa and Kenya

Result	Nigerian firm regression	South African firm regression	Kenyan firm regression
	coefficient t-statistic p-value	coefficient t-statistic p-value	coefficient t-statistic p-value
FSIZE	-1.475220 (-1.000160) [0.3182]	2.377356 (2.083134) [0.0400]	-10.35121 (-1.900007) [0.0631]
LEVG	0.060013 (0.985502) [0.3253]	-0.020009 (-0.584775) [0.5601]	0.474987 (3.850902) [0.0003]
PROF	0.655210 (5.889308) [0.0000]	0.015885 (0.435708) [0.6641]	0.898354 (4.249736) [0.0001]
DIVP	-0.006011 (-1.098510) [0.2730]	0.004755 (1.691096) [0.0942]	0.065219 (1.234615) [0.2226]
R-squared	0.724358	0.708586	0.735237
Adjusted R-squared	0.710782	0.704567	0.730157
F-statistic	9.160233	2.136786	6.937202
Prob(F-statistic)	0.000001	0.028577	0.000154
Durbin-Watson stat	2.286302	1.702772	1.840912

Source: Comparative Analysis of the regression (2020)

The table above shows that comparative values of the relationship between firm characteristics and cash holdings of listed consumer and industrial goods organizations in Nigeria, South Africa and Kenya. From the result, the study observed that for Nigerian firms the R.sq is 0.724358 and R-sq(adj) is 0.710782, for South African firms the R.sq is 0.708586 and R-sq(adj) is 0.704567, while for Kenyan firms the R.sq is 0.735237 and R-sq(adj) is 0.730157. This value indicates that firm characteristics have more influence in Kenyan firms than in Nigerian and South African firms. Firm characteristics variables can explain about 74% of the variation in the cash holdings of Kenyan manufacturing firms, but can explain about 72% and 71% variation in the cash holdings of Nigerian and South African manufacturing firms. The probability of the f-statistics value for the Nigerian, South African and Kenyan firms indicate that the model used for the analysis was statistically significant at 5% levels for the Nigerian, South African and Kenyan manufacturing firms. The Durbin Watson values for the models reveal the absent of autocorrelation in the models used for the analysis.

V. DISCUSSION OF RESULT AND FINDINGS

For the explanatory variables, in South Africa, the first variable firm size (FSIZE) was statistically significant at 5% with its t-values as 2.083134 and p-value as 0.0400. This implies that it has contributed significantly to South African firms' cash holding at the rate of 5% level of significant. In both Nigeria and Kenya, firm size (FSIZE) was statistically insignificant at 5% with its t-values as -1.000160 and-1.900007 respectively and p-values as 0.3182 and 0.0631 respectively. This implies that it does not significantly contributed to Nigerian and Kenyan firms' cash holding at the rate of 5% level of significant. Though, firm size has positive relationship with cash holdings in Nigeria, South Africa and Kenya. This support the pecking order theory and free cash flow theory and was in variance with trade-off theory.

For the second variable leverage (LEVG); in Kenya, it was statistically significant at 5% with its t-value as 3.850902 and p-value as 0.0003. This implies that it has contributed significantly to Kenyan firms' cash holding at the rate of 5% level of significant. In both Nigeria and South Africa, leverage (LEVG) was statistically insignificant at 5% with its t-values as 0.985502 and -0.584775 respectively and p-values as 0.3253 and 0.5601 respectively. This implies that it contributed insignificantly to Nigerian and South African firms' cash holding at the rate of 5% level of significant. Though, leverage has positive relationship with cash holdings in both South Africa and Kenya. This support trade-off theory and was in variance with the pecking order theory and free cash flow theory. In Nigeria, leverage has negative relationship with cash holdings. This support the pecking order theory and free cash flow theory and was in variance with trade-off theory.

For the third variable profitability (PROF); in Nigeria and Kenya, it was statistically significant at 5% with its t-values as 5.889308 and 4.249736 respectively and p-values as 0.0000 and 0.0001 respectively. This implies that it has contributed significantly to both Nigerian and Kenyan firms' cash holding at the rate of 5% level of significant. In South Africa, profitability (PROF) was statistically insignificant at 5% with its t-value as 0.435708 and p-value as 0.6641. This implies that it contributed insignificantly to South African firms' cash holding at the rate of 5% level of significant. Though, profitability has positive relationship with cash holdings in Nigeria, South Africa and Kenya. This support the pecking order theory and free cash flow theory and was in variance with trade-off theory.

For the last variable dividend pay-out (DIVP); it was statistically insignificant at 5% in Nigeria, South Africa and Kenya with its t-values as -1.098510, 1.691096 and 1.234615 respectively and p-values as 0.2730, 0.0942 and 0.2226 respectively. This implies that it contributed insignificantly to the Nigerian, South African and Kenyan firms' cash holding at the rate of 5% level of significant. Though, dividend policy has positive relationship with cash holdings in both South Africa and Kenya. This was neither in support of trade-off theory and pecking order theory nor in free cash flow theory.

VI. CONCLUSION AND RECOMMENDATIONS

Corporate money property is a significant subject in accounting and finance and has pulled in immense discussion among scholastics. Be that as it may, the on-going conversation has not adequately tended to the money property conduct in developing economies. Hence, the point of this examination is to give new observational proof on the firm-explicit determinants of money possessions in a rising economy. A sum of four factors – firm size, leverage, productivity and profits strategy – were concentrated to find out whether they have noteworthy illustrative force on the money possessions levels of the organizations. Our discoveries show that productivity emphatically impact fabricating organizations' money possessions in Nigeria, South Africa and Kenya, though leverage apply a negative impact in Kenya, while firm size and profits approach were totally found to insignificantly affect the money property of assembling organizations in Nigeria and Kenya.

Our examination additionally has functional ramifications to most partners in the assembling firms. High corporate money properties are frequently connected with potential office struggle. The free income hypothesis explicitly contends that directors regularly see money property as free incomes and frequently misuse them for private advantages. A decent comprehension of the nexus between different firm-explicit components and the organization's money possessions, partners can pass educated decisions in regards to their preferred money adjusts of the organizations. In this manner, in view of the discoveries of our investigation, a financial specialist can sensibly reason that an organization with high leverage ought to like to hold more money. The higher leverage recommends higher office costs; this may be because of the potential size of riches move from obligation holder to investors. Thus, insightful supervisors will need to abstain from holding over the top money saves as this would pull in examination from the capital markets.

REFERENCES

[1] Afza, F. & Adnan, S.M. (2007). Determinants of Corporate Cash Holdings: A Cash Study of Pakistan. P*roceedings of Singapore Economics Review Conference* (SERC) 2007, August 01-04 Singapore: Singapore Economics Review and the University of Manchester (Brooks World Poverty Institute), 164-165.

[2] Alade, S.O. (2013). Determinants of Intangibles Assets Disclosure in Annual Report: Evidence from Nigerian Quoted Companies. *International Journal of Asian Social Science*, 3(5):1152-1165

[3] Ali, A. & Yousaf, S. (2013). Determinants of Cash Holding in German Market. *IOSR Journal of Business and Management*, 12 (6), 28 – 34.

[4] Ali S, Ullah M, & Ullah N (2016). Determinants of Corporate Cash Holdings "A Case of Textile Sector in Pakistan. *Int J Econ Manag Sci* 5(3), 1-10. doi:10.4172/2162-6359.1000334

[5] Aliet, N. (2012). Cash management and profitability of corporate firms. A case study: MTN Uganda Ltd. *Bachelor's degree* – Business Administration of bishop Stuart University.

[6] Almeida, H., Campello, M. & Weisbach, M. (2004). The cash flow sensitivity of cash. *Journal of finance*, 59 (4), 1777 -1804.

[7] Al-Najjar, B. (2013). The financial determinants of corporate cash holdings: evidence from some emerging markets. *International business review*, 22 (1), 2194 – 2240.

[8] Al-Najjar, B., & Belghitar, Y. (2011). Corporate cash holdings and dividend payments: Evidence from simultaneous analysis. *Managerial and Decision Economics*, 32(4), 231–241.

[9] Barclay, M.J. & Smith Jr. C.W. (1996). The Maturity Structure of Corporate Debt. *Journal of finance*, 50, 609-631

[10] Basher, M. F. (2014). Impact of Corporate Governance on Corporate Cash Holdings: An Empirical Study of Firms in Manufacturing Industry of Pakistan. *International Journal of Innovation and Applied Studies.* 7 (4), 1371-1383

[11] Bates, T., Kawe, K & Stalz, R. (2009). Why Do U.S. Firms Hold so Much More Cash than they Used to? *The journal of finance LXIV (5)*, other. www.cobohio-state.edu/fin/faculty/stulz

[12] Berger, & Udell. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 613-673.

[13] Bigelli, M & Sanchez-Vidal, J. (2010). Cash Holdings in Private Firms. *Journal of Banking and finance*, 36, 26-35.

[14] Borhanuddin, R. I. & Ching, P. W. (2011). Cash Holdings, Leverage, Ownership Concentration and Board Independence: Evidence from Malaysia. *Malaysian Accounting Review*, 10 (1), 63-88.

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

[16] Chen, Q., Chen, Z., Schipper, K., Xu, Y. & Xue, J. (2012). The Sensitivity of Corporate Cash Holdings to Corporate Governance. *(JEL G32, G34, G35)*, 1-45. Online publication

[17] Chireka, T. & Fakoya, M. B. (2017). The determinants of corporate cash holdings levels: evidence from selected South African retail firms. *Investment Management and Financial Innovations*, 14 (2), 7993. doi:10.21511/imfi. 14(2).2017.08

[18] Damodaran. (2001). *Corporate finance: theory and practice (2nd ed).* New York: Jon Wiley & Son Brealey, Myers, and Marcus.

[19] Dittamar, A; Mahrt-Smith, J & Servaes, H. (2003). International Corporate Governance and Corporate Cash Holdings. *Journal of Financial and quantitative Analysis*, 38 (1), 111-133.

[20] D'Mello R; Krishnaswami, S & Larkin, J. (2008). Determinants of Corporate Cash Holdings. Evidence from Spin-offs. *Journal of banking and finance*, 32, 1209-1220.

[21] Donaldson, C. (1961). *Corporate debt capacity: A study of corporate debt policy and determinants of corporate debt capacity*. Boston, division of research. Harvard university .

[22] Drobetz, W. & Gruninger, M. (2007). Corporate Cash Holdings: Evidence from Switzerland. *Financial Markets Portfolio management*, 21, 2930324.

[23] Drobetz, W. & Grüninger, M. C. (2006). Corporate cash holdings: Evidence from Switzerland, *WWZ Forschungsbericht*, No. 07/06, University of Basel, Center of Business and Economics (WWZ), Basel

[24] Fama, E., & K. French, (1998) Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* 33, 3-56.

[25] Fauikender, M. & Wang, R. (2006). Corporate financial policy and the value of cash. *Journal of finance* 61 (4), 1957-1990

[26] Fazzari, S. & Peterson, B. (1993). Working Capital and Fixed Investment: New Evidence on Financing Constraints. *RAND Journal of Economics*, 328-342

[27] Fernandes, F., Coelho, L. & Peixoto, R. (2017). Determinants of corporate cash holdings: Evidence from portuguese publicly traded firms. *Dos Algarves: A Multidisciplinary e-Journal*, 29, 102-118.

[28] Ferreira, M.A. & Villela, A.S (2004). Why do firms hold cash? Evidence from EMU countries. *European Financial Management*, 10, 295-319.

[29] Gill, A & Shah, C. (2012). Determinants of Corporate Cash Holdings: Evidence from Canada. *International Journal of Economics and Finance*, 13,43-57

[30] Guney, Y., Ozkan, A. & Ozkan, N. (2007). International evidence on the non-linear impact of leverage on corporate cash holdings. *Journal of multinational financial management*, 17 (1), 45-60.

[31] Han, S. & Qui, J. (2007). Corporate precautionary cash holdings. *Journal of Corporate Finance* 13, 43–57

[32] Hardin, 111, W.G , Highfeild, M.J; Hill, M.D. & Kelly G.W. (2009). The Determinants of REIT Cash Holdings. *Journal of Real Estate Finance and Economics*, 39 (1), 39-57; http://dx.doi.org/10/1007/511146-007-9103-1

[33] Hofmann, C. (2006). Why New Zealand Companies Hold Cash: An Empirical Analysis *Unpublished thesis.*

[34] Jensen, M.C.. (1986). Agency Costs of Free Cash Flow, Corporate Finance and takeovers. *American Economic Review*, 76 (2), 323-331

[35] Jensen M. C., & Meckling W. H. (1976) Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *J Financ Econ* 3:305–360

[36] Kariuki, S.N, Namusonge, G.S & Orwa, G.O. (2015). Determinants of Corporate Cash Holdings. Evidence from Private Manufacturing Firms in Kenya. *International Journal of Advanced Research in Management and Social Sciences,* 4 (4): 15-33.

[37] Kengatharan, L. (2017). Impact of Corporate Governance Practices on Firm's Cash Holdings in an Emerging Market: A Panel Data Analysis. *International Journal of Accounting and Financial Reporting*, 7(2), 210-224. http://ijafr.macrothink.org

[38] Khan, A. & Tanveer, S. (2016). The Impact of Corporate Governance on Cash Holdings: A Comparative Study of the Manufacturing and Service Industry. *Financial Studies* (3), 40-79.

[39] Kim, J. Kim, H & Woods, D (2011). Determinants of Corporate Cash-Holdings Levels: An Empirical Examination of the Restaurant Industry. *International Journal of Hospitality Management*, 30 (3), 568-574; http://dx.doi.org/10.1016/j.ijhm

[40] Kim, C.S; Mauer, D.C & Sherman, A.E. (1998). The Determinants of Corporate Liquidity: Theory and Evidence. *Journal of Finance and Quantitative Analysis,33,335-359*

[41] Lang, L., Poulsen, A., & Stulz, R., (1995). Asset sales, "rm performance, and the agency costs of managerial discretion. *Journal of Financial Economics* 37, 3}37.

[42] Levasseur, M. (1979) Gestion de trésorerie. Economica.

[43] Lu, Y.C & Tsaic, D.C. (2010) Discovering Important Factors of Intangible Firm Value by Association Rules. *The International Journal of Digital Accounting Research, 55-85.*

[44] Manuel, David & Markus (2011). *C*ash Holdings and Corporate Governance around the World. Online publication

[45] Maximilian, H. (2015). The Determinants of Cash Holdings: Evidence from German Listed Firms. *Online published master thesis*.

[46] Megginson, W.L. & Wei, Z. (2010). Determinants and Value of Cash Holdings: Evidence from China's Privatized Firms. *SSRN working paper series*, 1-37

[47] Mesfin, E. A. (2016). The Factors Affecting Cash Holding Decisions of Manufacturing Share Companies in Ethiopia. *International Journal of Advanced Research in Management and Social Sciences*, 5(3), 48-67.

[48] Miller, M. H & Orr D. (1966). A Model of the Demand for Money by Firms. *Quarterly journal of Economics*, 80, 413-435

[49] Modigliani F, & Miller MH (1963) Corporate Income Taxes and the Cost of Capital: A Correction. *Am Econ Rev* 53(3):433–443

[50] Monye-Emina, E.H. & Enofe, O. A. (2015). Corporate Governance Characteristics and Firm Cash Holding in Nigerian Banks. *UNIBEN Journal of Accounting*, 1 (1), 54 -66.

[51] Morais, F. & Silva, P. (2013). Determinants of cash holdings in the accommodation industry. *Tourism and Hospitality International Journal*, 1, 95-136.

[52] Myers, S. & Majluf N. (1984). Corporate Financing and Investment Decisions When Firms Have Information those Investors do not have. *Journal of Financial Economics*, 13, 187-221

[53] Nasar, K. (2016). Determinants of Corporate Cash Holding: Evidence from Indonesia. *Published Thesis*, 1-51.

[54] Nenu, E. A. & Vintilă, G. (2017). An Analysis Regarding Cash Holdings. Empirical Study on the Bucharest Stock Exchange Listed Firms. *Scientific Annals of Economics and Business* 64 (3), 289-306

[55] Niskanen, M., & Niskanen, J. (2007). Cash Holdings in SMEs; Evidence on Finnish data. *Working Paper*.

[56] Nnubia and Ofoegbu (2019)**.** Effect of Profitability on Cash Holdings of Quoted Consumer Goods Companies in Nigeria. *International Journal of Research and Innovation in Applied Science (IJRIAS), 4(9), 78-85.*

[57] Nnubia, I. C., Ofor, T. N. and Emeka-Nwokeji, N. A. (2017). Determinants of cash holdings of quoted companies in Nigeria. *Journal of Public Administration*, 2(1), 53-71.

[58] Ogundipe, O; Ogudipe, E & Ajao, K. (2012). Cash Holding and Firm Characteristics: Evidence from Nigerian Emerging Market. *Journal of Business, Economics & Finance*, 1 (2): 2146-7943

[59] Ogundipe, Salawu & Ogundipe (2012). The Determinants of Corporate Cash Holdings in Nigeria: Evidence from General Method of Moments (GMM). *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 6 (1), 152 – 158.

[60] Opler, T. pinkowitz, L, stulz R. & Williamson, R. (1999). The Determinants and Implications of Corporate Cash Holdings. *Journal of Financial Economics*, 52,3-46.

[61] Osuala, A.E; Ugwumba, C.E & Osuji, J.I. (2012). Financial Statement Content and Investment Decisions-A Study of Selected Firms. J*ORIND* 10 (2), 1596-8308

[62] Ozkan, A. & Ozkan, N (2004). Corporate Cash Holdings: An Empirical Investigation of UK Companies. *Journal of Banking &Finance*, 28,2013-2134

[63] Pandey, I.M (2006). *Financial Management*. New Delhivikas publishing house PVT LTD 9th Edition.

[64] Paskelian A & Nguyen, P. (2005). How Sensitive and Japanese Firms to Earnings Risk? Evidence from Cash Holdings, 1-41 (online) Available: http://www.musashi.jp/ortogo/seminar/sensitivity-earnings-riskNguyen.pdt.

[65] Peterson, M., & Rajan, R. (2003). Does distance still matter? The information revolution in small busness lending. *Journal of Finance*, 57, 2533–2570

[66] Pinkowitz, L. & William Son, R. (2001). Bank Power and Cash Holdings: Evidence from Japan: *Review of Financial Studies*, 14 (4), 1059-1082

[67] Rajan, R.G & Zingales, L. (1995). What do We Know About Capital Structure? Some Evidence from International Data. *Journal of Finance*, 50 (5), 1421-1460

[68] Sadour, K. (2006). The Determinants and the Value of Cash Holdings: Evidence from French Firms. *Cahier de research*, n 6-7

[69] Subramaniam V, Tang TT, Yue H, & Zhou X (2011) Firm Structure and Corporate Cash Holdings. *Journal of Corporate Finance* 17:759–773 available at: http://ssrn.com/abstract=1672692

[70] Tahir, S. H., Quddus, A., Kahnum, Z. & Usman, M. (2015). Determinants of Cash Holding Decision: Evidence from Food Industry of Pakista. *Innovation Management and Education Excellence Vision 2020: Regional Development to Global Economic Growth*, 3032-3039.

[71] Tehrani, R., Darabi, R. & Izy, S. (2014). The Relation between Stock Liquidity & Cash Holdings in Tehran Stock Exchange. *International Journal of Business and Social Science*, 5(2), 227-284.

[72] Thanatawee, Y. (2011). Lifecycle theory and free cash flow hypothesis: Evidence from dividend policy in Thailand. *International Journal of Financial Research*, 2(2), 52-60.

[73] Tong, Z. (2006). Risk Reduction as a CEO's Motive for Corporate Cash Holdings. *Published thesis*, University of Exeter. Retrieved from Retrieved from SSRN 1031087

[74] Uyar, A., & Kuzey, C. (2014). Determinants of corporate cash holdings: evidence from the emerging market of Turkey. *Applied Economics*, 46(9), 1035-1048.

[75] Wai, W. & Zhu, Y., (2013). The Effect of Corporate Governance on Cash Holdings: Evidence from Hong Kong (Doctoral dissertation, Hong Kong Baptist University Hong Kong).

[76] Wasiuzzaman, S. (2014). Analysis of corporate cash holdings of firms in Malaysia. *Journal of Asia Business Studies*, 8(2), 118-135.

[77] Whited, T. (1992). Debt, liquidity constraints and corporate investments: evidence from panel data. *Journal of finance*, 47 (4), 1425 -1460.

[78] Zia-ul-Hannan, R. & Asghar, N. (2013). Impact of Corporate Governance on Corporate Cash Holding: Evidence from non-Financial Firms in Pakistan. *IOSR Journal of Business and Management*, 8 (1), 122 – 125.