# Determinants of Method of Payment in Mergers and Acquisitions and their Agency Implications

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## DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the Research Project contains no material previously published or written by another person except where due reference is made in the Research Project itself.



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This Research Project has been submitted for examination with my approval as the Supervisor.

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acquirer of sustained control of the merged firm than stock issues since stock issues introduce new shareholders and reduce the concentration of control in the merged firm while cash transactions buy out the shareholders of the target. Studies suggest that when equity offers are likely to reduce the voting powers of existing shareholders, then the acquirer is more likely to opt for a cash transfer. Therefore, when companies have a concentrated ownership structure with a party holding moderate to majority control, then they are more likely to prefer a cash transaction (Martynova & Renneboog, 2009; Martin 1996). The structure of the companies' shareholding for example the presence of families as shareholders (Basu, Dimitrova, & Paeglis, 2009) has also been used to illustrate how the importance of control implications affect the method of payment used in M&As.

Information asymmetry is widely suggested to affect M&A payment methods. This theory suggests that both parties have private information that they wish to leverage for their gain. Meyers and Majluf (1984), Hansen (1987) and Fishman (1989) build theoretical models which suggest that acquirers prefer stock (cash) to finance the transaction when they have private information that makes them believe the market prices of their assets are overvalued (undervalued). Since the managers of the bidder act in the best interest of their shareholders, announcements of stock-financed (cash-financed) M&A are interpreted by the market as negative (positive) signals about the acquirer's stock. These models, however, do not provide the rationale for when non-listed firms use their stocks to finance M&As. Fishman (1989) also argues that bidders offer cash to the target when they have private information that suggests a high valuation for the target so that they can block competing bids.

Further, literature has attempted to determine whether the method of payment is associated with some difference in pot-merger market and operational performance. Studies such as Myers and Majluf(1984) and Fisher(2017) find that when stocks are used, the shares suffer more negative abnormal returns than when cash is used. Other studies such as Boateng and Bi (2013) find contradicting results. Their study, based in China, finds that acquisitions financed by stocks outperform those financed by cash in the pre-bid period but there is no significant difference between them post-acquisition. However, these models focus on short-term evolution of the returns (immediate market response to announcement of the method of payment). Additionally, Fischer (2017) reports two conflicting results from his comparative (by method of payment) analysis of the long-term performance of the merged firms since it suggests that the underperformance of stock-financed mergers is sustained in the long run while cash-financed merger price changes are reversed by the market in the long run. Linn & Switzer

(2001) show that cash transactions outperform stock transactions by comparing the relative operating performances of the cash and stock financed consolidated firms. Their study finds that the incremental operating performance of the firms formed through cash transactions is significantly higher and this translates to the relative stock prices and stock market returns.

Tax-related implication of the method of payment have also been suggested in literature. The main argument is that when transactions are financed using cash, the target's shareholders in some countries immediately bear a capital gains tax expense hence they prefer stock-financed transactions or require some premium charge for cash financed transactions to compensate them for this expense (Chevalier & Redor, 2008). From the acquirer's point of view, this premium (treated as goodwill in accounting) can decrease their accounting profits and thus provide some tax advantages for the company. Hence, provided the tax advantages from the amortization of goodwill outweigh the premium offered to the target, then they might prefer a cash transaction (Blackburn, Dark & Hanson, 1997). When stocks are used, the shareholders are not exposed to these tax issues. This has been challenged by studies like Suk and Sung (1997). They find no relationship between the premium required in the M&A transactions and the method of payment. On this matter, therefore, the literature is inconclusive.

Martynova and Renneboog (2009) argue that it is not important whether cash or stocks are used to finance the transaction but the source of the financing capital i.e. internal or external sources. They find that acquisitions financed by debt outperform those financed using internally generated funds and stock financed acquisitions in terms of market performance. These findings are reiterated by Fischer (2017) and Bharadwaj & Shivdasani (2003).

Most M&A studies have used datasets from the developed economies, but more studies are coming from the emerging economies. Market conditions differ between these economies hence the dynamics of M&As are expected to be disparate. Most M&As in frontier markets have been prompted by financial distress or new regulations rather than the strategic goals like obtaining more market share and absorption of complimentary service providers as witnessed in the developed economies (Akinbuli & Kelilume, 2013). These studies have provided an opportunity to show the effect of different legal environments on the performance of M&As. So far, there has been no consensus about the key factors affecting the success of these transactions and whether M&As are effective at all (Baranovskaya & Stemasova, 2020). However, the method of payment has a strong explanatory effect on the success of an M&A transaction both on common and market measures of performance. Onyema, Sibanda and Rao (2017) studied factors that affect payment methods and their impact on corporate performance

in cross-border transactions where the bidders are from emerging markets over the period from 2005 through 2015 and found that positive abnormal returns are associated with cash and mixed payments while stock financed transactions reap negative abnormal returns. Further, smaller firms prefer to pay cash while larger firms prefer to use stocks.

M&A activity in Africa has been increasing. Wilson and Vencatachellum (2016) state that the number of M&A deals doubled, and the total value of deals grew sevenfold between 2003 and 2008. Nkiwame and Chipeta (2019) study cross-border acquisitions (CBAs) involving African targets. Their sample, drawn from M&A deals in Africa from 1994 to 2014, contains 379 deals paid in cash, 50 in stocks and 74 involving a mix of the two. Most of the acquirers in this sample are from the developed and emerging markets outside Africa. These numbers suggest that more African company owners are willing to sacrifice some control of their firms during CBAs. However, this has not been empirically proven in the study. This is an interesting hypothesis especially because most of the companies in the sample are not listed (486 out of the 503 companies). Non-listed companies are usually younger than the listed ones and have fewer shareholders (more concentrated control) than the listed companies. Going by the findings of Martynova and Renneboog (2009), we would expect, then, that more target shareholders would prefer to be paid in stocks so that they can retain some control of their firms. At a glance, this African sample suggests the opposite. Given the increasing M&A activity in Africa and the inherent differences between the African market and the more-intensively researched developed and emerging markets such as less strict regulations and more significant information asymmetry due to less information disclosure in Africa, this study seeks to identify the factors that affect the choice of the method of payment used in these transactions and their effect on the resulting consolidated firms' performance.

### 1.2 Problem Statement

Mergers and acquisitions are mutual agreements between the acquirer and the target. Both companies seek improvement of shareholder value and M&A is seen as a strategic move to achieve this. The transaction should transfer value to shareholders of both parties. According to Gill (2015), the combined entity post-merger should have more value than the sum of the value of the entities prior to the transaction.

Immediately the transaction is executed, there is a change in the capital structure of both the acquirer and the target which is expected not to deteriorate the financial position of either company and provide a platform for them to take off and achieve even better financial positions. The effect is different depending on the mode of payment that is used (Li, 2018;

Meyers & Majluf, 1984). Also, the information asymmetry between the management of the entities involved may lead to subjective valuations hence a "market for lemons".

The African market exposes investors to higher risk factors especially because of the lower level of publicly available information compared to the more developed markets. Africa is a much younger M&A market, and its structure is significantly different. African companies operate in a unique socio-cultural, economic, legal, and political background. For example, M&A tax laws are well defined in widely studied countries like the UK and the US while in most African countries they are ambiguous (Odongo, 2017). This means participants in M&As in Africa are exposed to a higher level of information asymmetry and less legal protection than in the more developed markets which, then, can potentially affect the outcomes of negotiations about the consideration for the transaction. In light of this, this study tests previously suggested factors affecting the final decision in the African context.

### 1.3 Research Objectives

The main objective is to test the previously suggested hypotheses of the determinants of the method of payment in M&As in the African context and, thus, establish:

1. The factors that determine whether a merger will be paid up in cash or stocks.

2. The extent to which the method of payment is used to solve agency problems in mergers and acquisitions.

### 1.4 Research Questions

Based on the problem statement, the research seeks to answer the following questions:

1. What factors affect the choice of the method of payment to be used in M&As in Africa?

2. Whether the method of payment in M&As I used to solve agency problems in the transaction?

### 1.5 Scope of the Study

The study will involve mergers and acquisitions that involve targets from Africa regardless of where the acquirer is domiciled. The deals should have occurred after the financial crisis when regulation of financial markets became more stringent (Miele & Elisa, 2011). The acquirer should be listed to allow easy access to financial statements. The study will test previously suggested hypotheses for the choice of payment methods such as information asymmetry, corporate control and pecking order theory.

### 1.6 Significance of the Study

This study is expected to be useful to industry regulators like competition authorities, tax collection agencies and capital market regulators as it will provide some insight for deeper scrutiny of proposed mergers and acquisitions to ensure both parties in the transaction obtain a fair value by mitigating effects of information asymmetry. It could inform future regulation with respect to M&A practices in Kenya and Africa. Investment bankers and other transactional advisors could benefit from this study. They provide advisory services to acquirers and targets in Africa, and this study and others like it will enable them to understand and anticipate their clients' ideal M&A structure on a deeper level. Also, shareholders and managers of companies that anticipate M&As involving their companies will obtain a different perspective of the thought process of their prospective counterparties as they determine the method of payment to use and the implications of the chosen method on their companies' operations and market performance. Finally, I hope this study inspires future academic studies about M&As in Africa.

# CHAPTER 2: LITERATURE REVIEW

Many studies have been carried out since the 1970s to develop a deep understanding of mergers and acquisitions. The means of payment has been among the major subjects of scrutiny. Among these studies, there are those that critique the effect of a chosen method of payment on the merged firm and the relevant shareholders' wealth and those that explain the rationale behind the choice of a given method of payment (Chevalier & Redor, 2008).

## 2.1 Theoretical Foundations

### 2.1.1 Signalling and Information Asymmetry Theories

Information asymmetry theories are widely used to explain the choice of consideration in M&As and the subsequent effects of the selected choice, especially on the share price of the acquirer. Myers and Majluf (1984) propose this theory and Hansen (1987), Fishman (1989) *et cetera* build upon it.

Myers and Majluf (1984) model mergers as a strategy that companies with limited financial slack to engage in profitable projects take to gain the financial slack that is needed. They assume away the other motives of M&As. Hence, the merger is only profitable if the deficiency in financial slack of one entity is cleared by the other's surplus. Potential acquirers do not know the true value of the target at the point that they decide to get into a merger, but the managers of the target do. A firm that has insufficient financial slack to undertake a project decides to merge with a cash-rich firm for a given merger price to be paid up in cash or stocks. If the offer is rejected, then the cash-ridden firm has to forego the project. However, the cash-poor firm can raise more capital by issuing stocks directly to investors at the existing market price which is always higher than the proposed merger price. In this model, therefore, the decision to sell shares always bears negative information and drives the market price down. Cash offers, however, do not portray any negative information about the combined value of the merged firm as long as the transaction is not a product of collusion with the either firm's management. Feito-Ruiz et. al. (2015) state that target management may accept overvalued stocks because either they expect to leave the merged firm in the near future or they are compensated by the acquirer's shareholders for accepting the stocks by being retained in the merged firms or by being paid bonuses. Additionally, this study suggests that the market can obtain insight to private information by observing the source of the initiative to engage in a merger. When the management of the target seem eager to sell (acquisitions by cash) then outsiders may assume that it has less value than the market predicts.

Fishman (1989) notes that a key difference between cash and stock offers is that the value of the stocks post acquisition depends on the profitability of the transaction while the value of

cash does not. Additionally, none of the parties involved in M&As has any private information about the value of cash thus cash offers do not incentivise targets to make efficient accept/reject decisions. He builds a model where a given target has multiple potential acquirers, each with their independent price which indicates a given signal about the target, and bidders follow a pre-emptive system. These suggested compensations by the acquirors are also signals to the target about each bidder. The target only accepts a bid if, based on all the information it has (including private information) the compensation is at least equal to its value. The implication of this model is that target management is more likely to reject securities offers as compared to cash offers and an initial cash offer is more likely to attract additional bidders leading to more returns for the target and less for the acquirer since more bidders push the acquisition price higher. This model supports the common proposition that cash acquisitions are positive signals about the valuation of the target as opposed to stock offers. Unfortunately, Fishman does not suggest empirical methods to test his theory.

### 2.1.2 Free Cashflow Theory

Jensen (1986) states that mergers are one way that managers can spend cash instead of paying dividends to shareholders. This theory predicts that acquirers exhibit good performance prior to the transaction hence have enough free cashflow for the transaction. Targets either perform poorly prior to the acquisition or have a lot of free cash flow that management prefers not to distribute as dividends. The latter are frequently targeted in hostile takeovers (Miyienda, 2015). It predicts that cash and debt financed acquisitions outperform stock acquisitions which are indicators of growth opportunities and insufficient free cashflow.

## 2.2 Empirical Studies on the Information Asymmetry Theories

Most studies agree that cash acquisitions outperform stock acquisitions, especially in the developed markets (Baranovskaya & Stemasova, 2020; Linn & Switzer, 2001; Faccio & Masulis, 2005; Faccio, McConnell, & Stolin, 2006). This is in line with the predictions of the theory proposed by Myers and Majluf (1984). However, studies such as Yang, Guariglia, & Guo (2017), Georgen & Renneboog (2004) and Moeller, Schlingemann & Stulz (2005) differ. Yang et. al. (2017) use a sample containing all the mergers that occurred in the Chinese market from 1988 to 2015 and panel data methodologies to study the impact of liquidity of firms in M&A decisions, choice of method of payment and post-merger performance. They find that more acquirers are liquid, use cash when they have higher growth potential, especially if they are financially constrained and cash acquisitions underperform stock acquisitions both in the short- and long-term scenarios. A traditional short window impact model showcases the superiority of stock deals in the short term in this study. For the long-run results, they carry out

an analysis of the operating performance of the firms involved and conclude that stock-financed consolidated firms outperform the cash financed firms. Moeller, Schlingemann, & Stulz (2005) and Georgen & Renneboog (2004) make similar findings using their samples drawn from the US and Europe respectively.

While most studies focus on information asymmetry between the target and acquirer, some studies have considered information asymmetry among potential acquirers (bidders) in the acquisition process and its implications to the valuation of the target. It is common in the developed markets for one acquisition to attract more than one acquirer so that the transaction resembles an auction (Fishman, 1989). Dione et. al. (2015) compare the premium paid by acquirers who previously held at least 5% stake in the target (block holders) and those that did not hold any stake previously. They find that block holders pay significantly less premiums (around 70% less) than other bidders in acquisitions and conjencture that they leverage on their superior information (given their close proximity to the target pre-transaction) to push acquisition prices down. These findings are consistent with the theory of pre-emptive bidding by Fishman (1989). Intuitively, this implies that other types of acquirers usually pay too much because they lack access to this information.

**2.3 Financial Constraints**

At the most basic level, acquirers with more cash and other liquid assets are more likely to use cash than those with less such assets because using their own cash exposes them to less market frictions than using stocks. When the internally generated funds are inadequate to finance the deal, they seek external sources (Martynova & Renneboog, 2009). The use of external sources of capital exposes firms to market imperfections such as transaction costs, tax regulations, agency problems and information asymmetry hence firms are expected to make sure they are unable to meet their financial obligation in the deal before they seek external funding. Alshwer et. al. (2011) define financially constrained firms based on their dividend pay-out ratio, credit rating and size of balance sheet. They find that financially constrained firms are more likely to finance acquisitions with stocks. However, these firms are also found to have significant cash holdings. They also find a significant negative relationship between the constrained acquirers' Tobin's Q (an indicator of growth prospects) and the probability that they use cash to finance the acquisition while for the unconstrained firms, the relationship is insignificant. They propose an opportunity cost of cash hypothesis to explain this phenomenon. That is, the high stock valuation of the firms is a signal of significant growth opportunities that they have in the future

which involve investing their cash in positive NPV projects. Hence, at the time of the acquisition, they would rather save the cash for such growth opportunities and use stocks instead. Karampatsas et. al. (2014) find a positive relationship between the credit rating of an acquirer and the probability that they use cash to finance their acquisition. The higher credit quality is taken to be an indicator of less financial constraints. This implies that the level of access to public debt markets affects a bidder's choice to use cash.

Mayer and Walker (1996) define financial constraint using slack variables - free cashflow, leverage and liquidity. By this definition, a company with low levels of free cashflow and liquidity and high leverage is less likely to use cash to finance an acquisition since it can neither borrow at favourable rates nor use internal funds. They investigate whether these variables, both in the acquirer and the target, have an effect on the choice of payment method since it is possibe that the target's unused borrowing capacity can be used post-merger to meet debt obligations taken up pre-merger. Of all these, only the free cashflow of the acquirer is found to have significant positive relationship with the probability of using cash. However, they find a positive relationship between growth opportunities of the acquiring firm and the propensity to use stocks, a conclusion similar to Alshwer et. al. (2011).

In addition to the explanations provided above, Faccio & Masulis (2005) conclude, from a financial constraint perspective, that the higher the value of the deal, the more likely it will be financed using stocks. In their sample, on average, stock only deals are valued at more than seventeen times the average value of cash deals . Deals involving some combination of cash and stock are also about five times the value of cash only deals on average. They also find that the relative size of the target to the acquirer significantly reduces the chance that cash will be used to finance the acquisition.

### 2.4 The Effect of the Source of Funding

Fisher (2017) and Martynova & Renneboog (2009) highlight a major limitation in the existing literature. They suggest that the classification of M&As into cash and stock acquisitions is an oversimplification and focus their study on the source of finances for the transaction. For instance, cash for an acquisition may be raised through an equity issue but the transaction would be considered a cash acquisition in previous literature. Among other things, cost of capital implications (explained by the pecking order theory) and regulatory restricitons (for example regulations about leverage of firms (Khoo et. al. 2015)) of financing methods also come into play. Martynova and Renneboog (2009) conclude that the means of payment decicion (cash or stock) and the source of financing decision (internal or external sources) are different and

driven by different factors; pecking order preferences and corporate governance structures affect the cost of external capital while the payment decision depends on strategic preference of either method, the presence of large shareholders in the acquirer's list (since they would like to retain control of the firm and therefore prefer cash buyouts) and the risk sharing preferences of the acquirer's shareholders (they prefer stocks when the acquisition is considered very risky so that they can share the risks with the target's shareholders). These papers, together with Bharadwaj & Shivdasani (2003) find a negative relationship between the shareprices of acquirers and both stock acquisitions and stock financed acquisitions. They also find debt financed acquisitions are the most superior since they signal that the acquirer has high expectations for post-merger earnings to repay the debt. They thus borrows funds from the market at a lower price, lowering cost of capital and improving company performance (see also Chen et. al., 2020). They suggest that debt financing may be a signal that the acquirer's shares are not overvalued and the transaction is profitable while the use of internally generated cash may signal managerial empire-building motives (i.e. managers organizing M&As to increase their own utility rather than their shareholders' value).

Studies from other markets such as Chen et. al. (2020) in China suggest different explanations for the source of M&A financing. Their study suggests that instead of the signalling theory and debt governance hypothesis suggested in studies from the American and European markets respectively, the Chinese market exhibits a functional fixation phenomenon whereby investors focus more on the impact of a chosen method of payment on the accounting profit of the company rather than the intrinsic value of the shares. It is based on a sample consisting of 450 M&As that occurred in the Chinese A-share market between 2009 and 2016. The model is a multiple regression where the independent variable is the source of M&A financing and the dependent variable is the long-term financial performance of the acquirer, proxied by popular indicators of profitability, solvency, operating ability, growth prospects, and shareholder wealth prospects. In the context of the Chinese market, equity financing has lower capital costs and higher accounting profit and is, thus, more preferred in M&As. The study suggests that this is the case because the Chinese markets are inefficient.

### 2.5 Shareholders' Profile

Literature has also suggested that the ownership structure of the firms involved pre and post-acquisition can affect the choice of payment method. Cash financed transactions retain the acquirer's ownership structure while stock financed transactions introduce a new shareholder(s) in the merged firm, hence diluting the current shareholders' control. While a

dilution in control may be unwelcome by many acquirers' shareholders, it comes with the sharing in the risks associated with the merged firm among the acquirer and target shareholders (Feito-Ruiz, Fernández, & Menéndez-Requejo, 2015). Various control dynamics have been considered in literature and how they affect the payment choice for example ownership concentration, family ownership and state ownership of the acquirer and/or the target. Each type of shareholder is unique in terms of their activity in the management of the business investment horizon and value for concentration of control of the firm. Hence, it is expected that during the M&A transactions, they should affect the aspects of the transaction including the method of payment.

### *2.5.1 Concentration of Shareholding*

Martin (1996) finds evidence that the threat of change of control is a significant factor considered by acquiring shareholders in determining the method of payment in M&As. He groups the companies in his sample by voting rights held by their management into some subjective ranges and finds out that cash paid M&As are most popular in the intermediate range where the managers are most likely to lose their controlling power when new block holders are introduced in the business through a stock merger. He suggests a non-linear relationship in this case since at the extreme levels, the managers either have too much or too little control to worry about losing it. In Faccio & Masulis (2005), where the focus is on the largest shareholder of the company, the conclusions about this issue are similar. It is in the intermediate control range that they find a significant preference for cash acquisitions. Chevalier & Redor (2008) suggest that in light of the widely accepted information assymetry hypothesis of Myers and Majluf (1984), companies with an investor holding a majority of stocks may be coerced to use cash to finance M&As so that they can avoid making significant losses in the stock market. Smaller firms are more likely to use cash to acquire targets while larger firms prefer to use stocks (Onyema, Rao, & Sibanda, 2017). This could be because of the more concentrated shareholding that is prevalent in smaller firms.

### *2.5.2 Presence of Family Shareholders*

Families, as investors, are usually long-term investors who concentrate high ownership rights to one person (usually the founder). Often, they also double as strategic-level managers in the company (Basu, Dimitrova, & Paeglis, 2009). Taking listed companies, the concentration of control within the family is usually more elaborate in newly listed companies before dilution through various market transactions. The method of payment in these mergers has a direct influence on the post-merger control by the family and should, therefore, inform how the structure of a company's ownership affects the choice of payment. Basu et. al. (2009) use a

sample of family-owned businesses that had an IPO in the 1993 to 2000 range and focus on the M&As that these companies took part in from the time of the IPO to the year 2014. Entrenched families that are interested in maintaining their level of ownership in the company are expected to avoid using stocks as this dilutes their control of the firm. Families that are interested in the good of the entire organization are expected to do what is best for the firm regardless of the effect of this choice on their level of control. This is likely to be the case when the family is a majority shareholder. The study does a comparative analysis of cumulative abnormal returns in stock-financed and cash financed acquisitions while also noting the amount of influence the family block holder has on the pre-merger acquirer. Further, the study regresses the method of payment used against the level of control the family block holder has on the firm pre-merger. The results suggest that families with low levels of ownership in the company (therefore entrenched) prefer to use cash in their acquisitions so that they can maintain the little level of control they have in the firm. On the other hand, families with high levels of control in the firm have a higher level of alignment of interests with minority shareholders and are hence less likely to use cash. Their concern is for the good of the company, not their ownership interests.

*2.5.3 State Ownership of Firms*

State-owned entities have access to more finance channels at lower prices than privately-owned firms (Chen et. al., 2020). Therefore, these entities are exposed to different risk-return dynamics from private firms. Governments own these entities for strategic reasons hence it is unlikely that they will use stocks to acquire other companies. In their study, Boateng & Bi (2013) find a positive and statistically significant relationship between state ownership and the choice to use cash as a method of payment in M&As thus supporting this hypothesis. They conduct this study using a sample drawn from the Chinese A-Share market of M&As that occurred between the year 1998 and 2007 and use a logistic regression to test the determinants of the observed method of payment for each M&A. These studies collectively prove that the structure of a company's shareholding affects the choice of payment method that is utilized in its M&As. However, this hypothesis has not been proven in the relatively young African market.

## 2.6 The Effect of Listing

When private firms are acquired using stocks, it is similar to private placements of equity and they usually lead to creation of block holders in the acquirer. In contrast, stock acquisitions of listed firms are similar to public equity offerings. Unlisted firms are more difficult to value than the listed ones since their information is more private (Feito-Ruiz, Fernández, & Menéndez-Requejo, 2015). Faccio et. al. (2006) carry out univariate tests on the cumulative abnormal returns of acquirers of listed and unlisted targets and compare them while controlling

for time and domiciliation of the acquirer. They find that acquisitions involving listed targets lead to significantly less cumulative abnormal returns for the acquirers than those involving non-listed targets. This calls attention to the efficiency of markets but that is not the subject of this paper. The difference in cumulative abnormal returns attributable to the listing status of the companies is found to be robust to the method of payment used in the transaction, size of the acquirer, Tobin's Q among other factors that have been suggested in previous literature. Also, contrary to what is suggested by Myers and Majluf (1984) and widely supported in literature, this study finds that acquisitions of unlisted targets using stocks leads to higher cumulative abnormal returns for the acquirer than cash-financed acquisitions (see also Chang (1998)). The study explains this phenomenon using the monitoring hypothesis, that is, when the non-listed targets gain a block holder, they gain value because of more efficient monitoring of the management. Chevalier & Redor (2008) suggest that since the owner of the private target has to be a shareholder in the merged firm if they accept stocks, their acceptance is a positive signal to the market as it communicates a positive outlook of the prospects of the acquirer. At the same time, with respect to acquisitions of listed targets, it agrees with Myers and Majluf (1984), suggesting that there is a complex method of payment effect as well as a listing effect of M&As on acquirers' performance post-acquisition. These studies, however, do not determine the fundamental economic factor responsible for the relative behaviour of acquisitions involving listed and non-listed targets.

### 2.7 Other Transaction Characteristics

#### *2.7.1 Attitude of the Transaction*

Martin (1996) finds a statistically significant positive relationship between the use of cash in M&As and hostile takeovers. This is through his binomial and multinomial logistic models where the dependent variable is the method of payment used and the independent variables are a set of previously suggested factors affecting the choice of method of payment in M&As. He explains this finding through an execution time hypothesis which suggests that a delay in the execution of a hostile takeover gives the managers of the target adequate time to strategise and counter the move, for example, using white horse strategy. As a result, since stock acquisitions require more approvals than cash acquisitions in some markets, they take longer to execute and are less likely to be used in hostile takeovers. His study is based on the American market where, at the time, cash acquisitions had to comply with the Williams Act while stock acquisitions had to comply with the Securities Act and this distinction made stock acquisitions require many more approvals than cash acquisitions and thus took a longer time being completed. Similar findings are present in Rossi and Volpin (2004), Ismail & Krause (2010) and Mayer and Walker

(1996). Martynova and Renneboog (2009) conflicting results over this matter. They use two logit models to investigate determinants of the financing decision and valuation effects of the financing decision. The first model shows no evidence of a relationship between the payment method and hostility of a transaction while second model shows that hostile takeovers are more likely to be financed using cash.

*2.7.2 Cross-Border M&As*

Cross-border acquisitions expose acquiring shareholders to a different legal environment and accounting standards than their home countries and may require extensive integration processes since the cultural backgrounds of the acquirer's and taget's employees may be different. The level of investor protection and overall risk in the market is thus likely to be different. As they are exposed to the risk of expropriation, the target shareholders in countries with a low level of investor protection are likely to prefer payment in cash (Rossi & Volpin, 2004). Payment by shares would make them minority shareholders in the consolidated firm hence exposing them to this risk. Rossi and Volpin (2004) also find that cross border acquisitions are generally more likely to be paid up in cash. Moreover, larger targets are more likely to be acquired using stocks. However, Dutta et. al. (2013) argue that cash payment would be detrimental to cross-border acquisitions since they are usually followed by an overhaul of the management and shareholers. Shareholders from within the target's country are important to the monitoring of the company's management since they probably have a deeper understanding of their local market. By investigating the evolution of the cumulative abnormal returns of the acquirers following the announcement of these transactions, they find that stock acquisitions outperform cash acquisitions in the short run but the reverse occurs in the long run. They argue that stock acquisitions help to alleviate the information assymetry in these acquisitions since existing shareholders from both companies are maintained post-acquisition. Additionally, the market is overly enthusiastic about stock financed cross border deals and overestimates synergy gains when they are announced but corrects for this overeaction as time goes by.

*2.7.3 Relevant Tax Considerations*

Another common hypothesis in literature is that taxation effects of the chosen method have an impact on the consideration decision. This is a complex factor since both methods have their own pros and cons. Cash acquisitions are usually immediately taxable and hence are likely to attract a higher premium than stock acquisitions (Blackburn et. al., 1997). However, when the value of the acquired assets is revised to market value for purposes of depreciating them, this premium may be cancelled out. Cash acquisitions thus constitute both a tax advantage to the acquirer and a tax burden to the acquired firm. The premium charged in these acquisitions is

also amortized as goodwill and artificially depresses the earnings of the merged company. The acquiring managers may, therefore, be reluctant to favour the cash deal. Especially when their compensation is heavily pegged on the profit values of the company. At the same time, this amortization has a tax advantage in some economies since it reduces the taxable income, hence tax payable, of the company. Stock acquisitions usually do not attract tax until the shares are sold to a third party at a later time. Most of the studies carried out in this topic have been in the more developed economies with clear M&A tax laws. Odongo (2017) notes that Kenya, like most other Afican economies does not have clear M&A tax laws. Hence, many M&As in this environment are completed without a proper understanding of the tax implications of the transaction

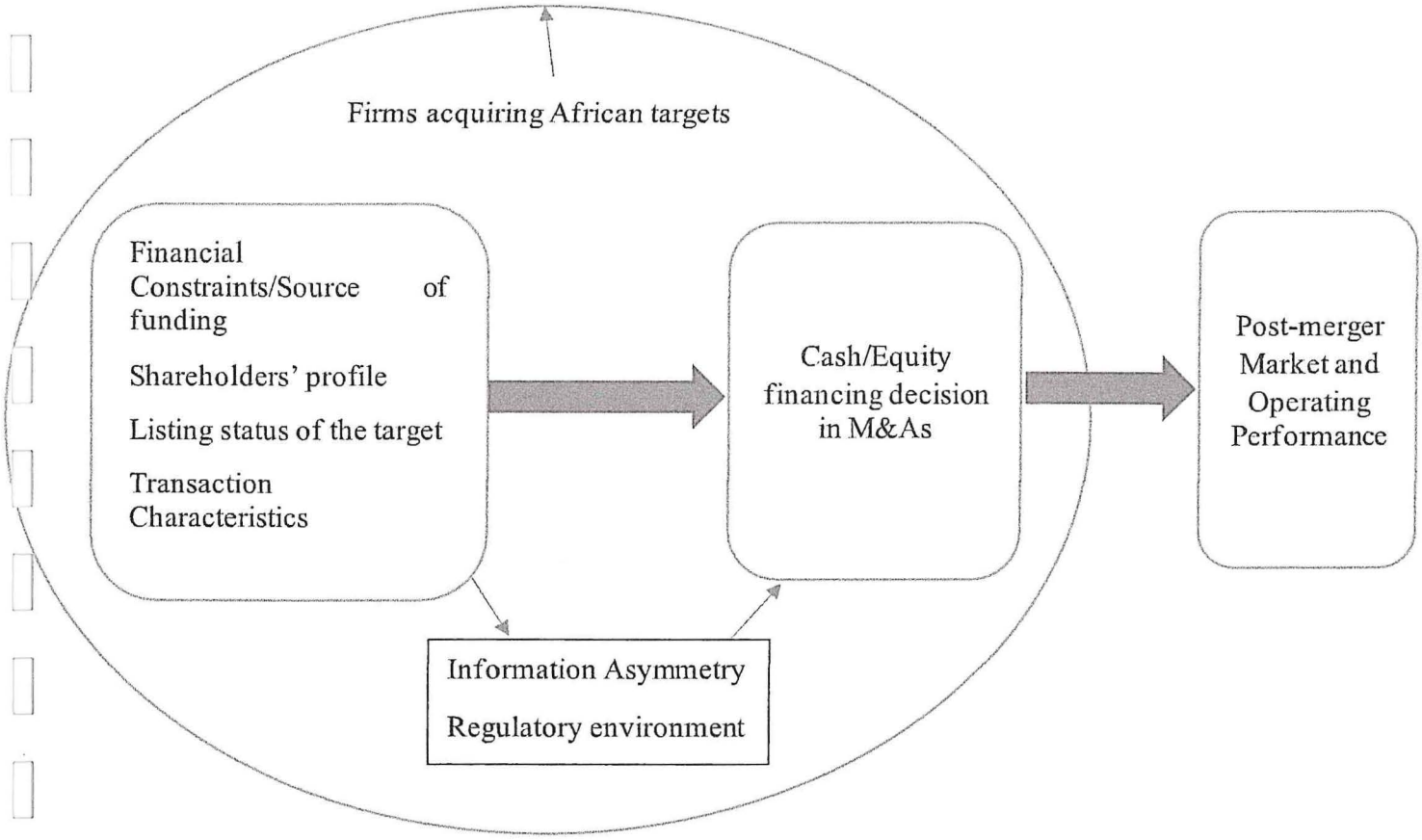
### 2.8 Effect of M&A Consideration on Operating Performance

Linn and Switzer (2001) investigate the effect of mergers and acquisitions on the post-merger operating performance of the consolidated firm and distinguish the relative incremental effect of the transaction based on the payment method used. They use pre-tax cashflow as the proxy for operating performance since it is unaffected by factors that would, otherwise, cause biased results because of various factors such as different accounting policies for goodwill. Overall, they conclude that M&As improve the operating performance of the merged firm but cash acquisition improve this to a higher extent. Perhaps this is an additional reason to the widely observed phenomenon where cash acquisitions lead to higher abnormal returns than stock acquisitions in the market ( Faccio et. al., 2006).

### 2.9 The Gap in Literature Identified

The determinants of payment methods and their effects in M&As have been studied in various markets but not the African market. This is despite the rise in the volume and value of M&A transactions in Africa (Nkiwame & Chipeta, 2019). A concentration of studies in the UK and the US limits our understanding of the choice of payment methods to the institutional factors present in these markets. The African M&A market provides a suitable ground for similar research, especially with respect to information asymmetry and governance variables that have been suggested in previous literature. The legal strucure in many African countries, for instance is different and less elaborate than in the developed markets and this has the potential to have a significant implication on the thought process of investors taking part in M&As in Africa since governance risk is likely to be higher in Africa (Odongo, 2017). This study will, thus, show whether these differences lead to significantly different conclusions about the determinants of the method of payment in Africa.

## 2.10 Conceptual Framework



# CHAPTER 3: METHODOLOGY

## 3.1 Research Design

This study employs a causal research design. It study quantitatively measures variables and translates previously suggested hypotheses of factors affecting the choice of payment method in M&As into the African context. The aim is to establish the existence of a causal relationship between the suggested variables affecting the method of payment in M&A and the choice that is realized. It analyses the suggested features of the firms that have engaged in M&As in Africa during the period of the study prior to the transaction and after. This is consistent with the objective of the study which is to determine the relationships between these features and the type of method of payment that is used in the transactions.

## 3.2 Population and Sampling

Going by the definition of a population by Mugenda and Mugenda (2003), this study's population is the announced M&A deals in Africa after the financial crisis (2009-2019). The initial sample consisted of all the 7964 announced deals available on the Zephyr database. They were filtered to retain the completed deals with full information publicly available, leaving a final sample of 39 deals.

## 3.3 Data Collection

This study relied on secondary sources of data to build a unique dataset of companies that have engaged in M&As in Africa after the financial crisis due to the introduction of stricter regulation of markets globally in this period following the crisis (Miele & Elisa, 2011).

Thomson Reuters' Security Data Company (SDC) is the most widely recommended source of data in M&A studies with more than 75% of the papers in the top 4 journals between the years 2000 and 2012 using this resource (Bollaert & Delanghe, 2015). It has the most complete and reliable M&A data from all over the world. Other similar resources that exist include Zephyr by Bureau van Dijk and Bloomberg.

Important variables about the transactions including the date of the transaction, names of the acquirer and target, method of payment, value of the deal, industry in which the acquirers and targets are, countries of domiciliation *et cetera* for transactions that took place from 2009 to 2019 were collected using Bloomberg and Zephyr databases. The sample is focused on M&As involving African targets regardless of the acquirers' home countries.

### 3.3.1 Definition and Measurement of Variables

From these sources of data, the following variables are formulated for the study:

To model sufficiency of cash for the transaction, this study uses the ratio of the firms' cash holding to the value of the transaction (RELCASH) according to their most recent financial statements at the time of the transaction, and the value of the transaction (VALUE). Additionally, the premium offered by the acquiror (BIDPREM) is used to represent their aggressiveness in pursuing the given target, similar to Martynova and Renneboog (2009)

To account for growth stage and prospects of the acquirer, this study follows the example of Martin (1996) and uses the average revenue growth over the three years prior to the transaction (GROWTHSALES), age of the acquiror (AQAGE) and age of the target (TGTAGE). This last variable accounts for the growth stage of the target.

To check the effects of the shareholding, the acquirer's initial shareholding in the target is used (INITIAL). This variable is indicative of the information asymmetry effects on the choice of method of payment and is as suggested by Jensen (1986) and Mayer & Walker (1996). The higher the initial shareholding, the lower the assumed information asymmetry between the acquiror and target. The study also uses an indicator variable for cross-border transactions (CROSSBORDER), acquiror listing status (AQLIST), target listing status (TGTLIST) and whether the acquiror and target are in the same industry (SIMILARIND).

For CROSSBORDER, the variable takes the value 1 when the acquiror and target are from different countries and 0 otherwise. The variable and this measurement criterion have been suggested in papers such as Nkiwame & Chipeta (2019) and Dutta, Saadi and Zhu (2013). Acquiror (target) listing status take the value 1 when the acquiror (target) is listed and zero otherwise. These have been suggested in studies such as Chang (1998) and Faccio, McConnell & Stolin (2006). When the relevant companies are in the same industries (measured using the SIC codes of the companies), the variable SIMILARIND takes the value 1, otherwise 0. This was suggested by Martin (1996). Using the World Bank's database on governance indicators, specifically the rating of the countries' regulatory quality, this study also proxies the regulatory environment of the transactions (REGULATION).

## 3.4 Data Analysis

In this study, the dependent variable is the type of payment method used in the transaction and it is either cash or stocks. It uses a logistic regression to test the suggested theories since the consideration used is treated as a qualitative factor of the transaction (Fisher, 2017). The logistic model is suitable for this analysis because the dependent variable is a binary variable

and they ignore normality, multicollinearity and homoskedasticity unlike other econometric models (Starkweather & Moske, 2011). They can also be used with continuous and categorical explanatory variables.

This model assumes that the bidder is faced by two mutually exclusive choices of payment methods given their respective features following the examples of Maryniok (2018), Linn & Switzer (2011) among others. The dependent variable takes the value 1 if the transaction is paid up in cash and 0 otherwise. This study utilizes Microsoft Excel for data collection and R and Stata software to analyse the data.

### 3.4.1 Model Specification

The study estimates the logit model below:

$$CASH = \beta_0 + \beta_1 VALUE + \beta_2 INITIAL + \beta_3 BIDPREM + \beta_4 CROSSBORDER + \beta_5 TGTAGE + \beta_6 AQAGE + \beta_7 TGTLIST + \beta_8 + \beta_9 REGULATION + \beta_{10} RELCASH + \beta_{11} GROWTHSALES + \beta_{12} SIMILARIND + \varepsilon$$

The slope coefficients estimate the impact of the given variables on the relative log-odds ratio where equity financing is the benchmark option (i.e., the dependent variable takes the value 0 when the transaction is equity-paid).

The assumption of this model is that the acquiror chooses to use cash in a transaction when the net present value of the cash transaction given the exogenous characteristics stated is greater than when stocks are used and that this net present value is a function of the stated characteristics of the transaction, target and acquiror.

## CHAPTER 4: DATA ANALYSIS RESULTS AND DISCUSSION

### 4.1 Introduction

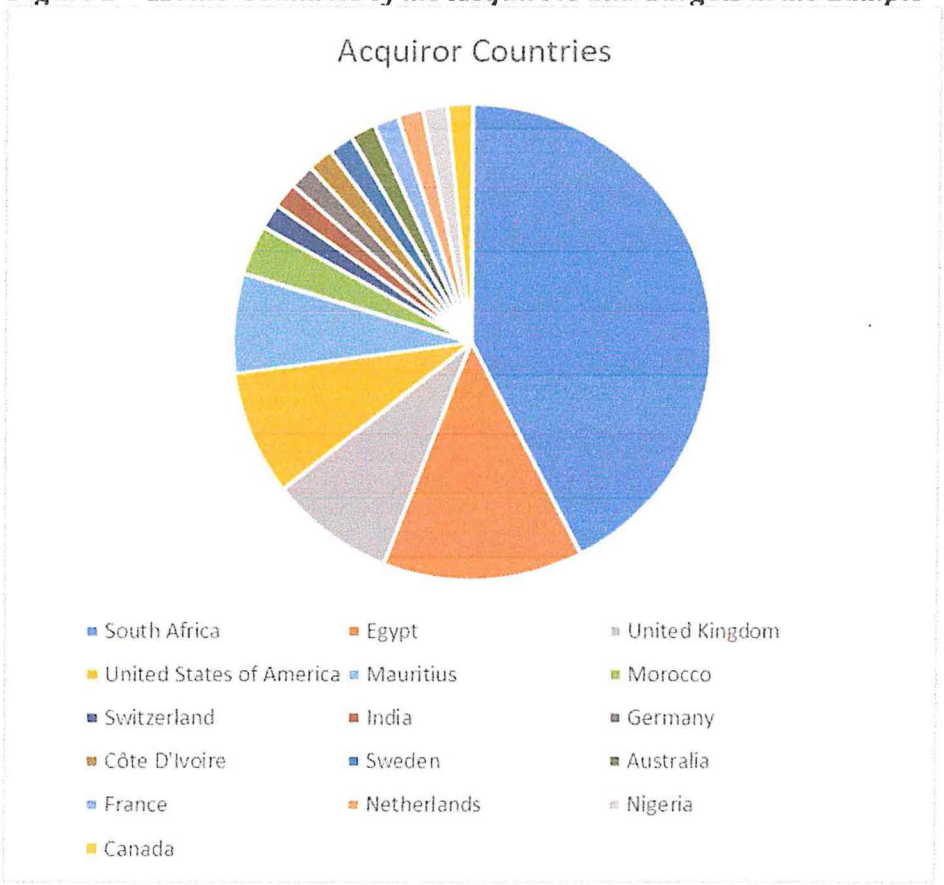
As stated in the methodology this study data analysis was performed to measure the determinants of payment methods in mergers and acquisition. The dependent variable in the model is method of payment (cash /equity). The researcher uses a total of 11 determinants, with the data analysed by STATA version 15. This is after carrying out the multicollinearity test that was the only diagnostic test performed as the study utilized logistic regression.

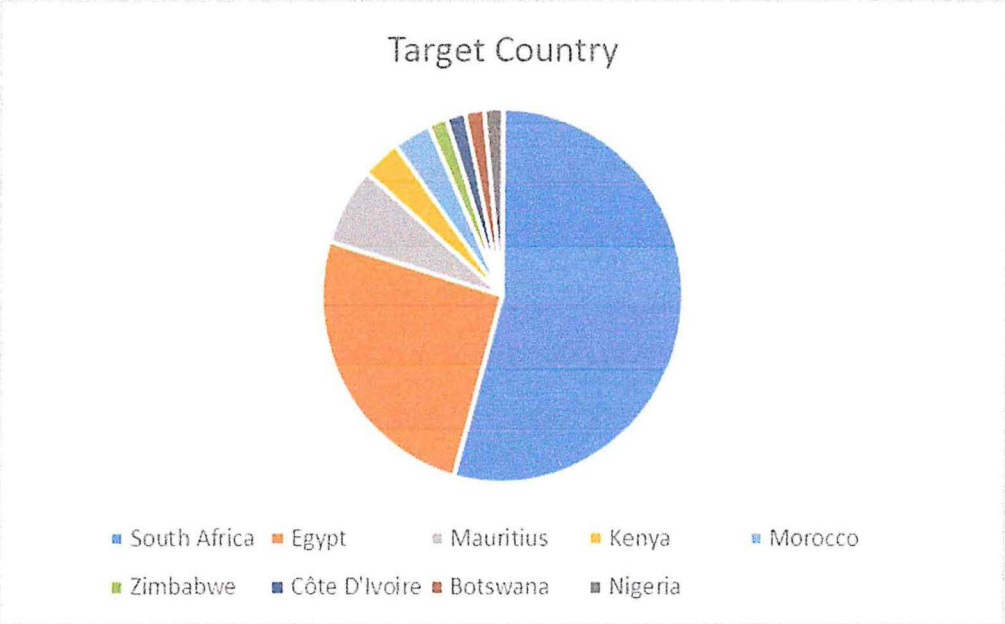
### 4.2 Descriptive Statistics

#### 4.2.1 Sample Characteristics and Descriptive Statistics

Figure 1 shows the target and acquirer countries of domiciliation, with a breakdown of the total number of deals for the countries.

***Figure 1 – Home Countries of the Acquirors and Targets in the Sample***






Majority of companies that are targeted for M&A in Africa are from South Africa and Egypt. The results also revealed that majority of companies acquiring other firms come from five countries namely: South Africa, Egypt, United Kingdom, United states of America and Mauritius. This suggests that both M&A activity in Africa is concentrated in a few countries.

### 4.2.2 Descriptive Statistics on Determinants of Payment Methods in Mergers and Acquisition

Table 1 provides a further analysis of the sample characteristics.

***Table 1: Descriptive Statistics on Determinants and Methods of Payments for Mergers and Acquisition in Africa***

| Variables | Min | Max | Mean | Std | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| Method of Payment | 0 | 1 | 0.644 | 0.482 | -0.601 | 1.362 |
| Initial Shareholding | 0 | 99.842 | 28.587 | 30.459 | 0.659 | 2.424 |
| Bid Premium | 99.999 | 180.616 | 9.835 | 43.381 | 0.84 | 8.182 |
| Crossborder | 0 | 1 | 0.305 | 0.464 | 0.846 | 1.716 |
| Age of Target (Years) | 6 | 110 | 35.152 | 23.784 | 0.978 | 3.581 |
| Age of Acquiror (Years) | 2 | 133 | 36.22 | 33.321 | 1.103 | 3.163 |
| Target Listed | 0 | 1 | 0.203 | 0.405 | 1.473 | 3.171 |
| Regulation | 1.895 | 81.73 | 51.565 | 19.974 | -0.718 | 2.327 |
| Relative Cash Flow | -30007341 | 16999.91 | -8073643 | 4987000 | -5.918 | 36.027 |
| Growth Sales | 0.853 | 7.415 | 0.742 | 1.355 | 3.719 | 18.6 |
| Similar Industries | 0 | 1 | 0.254 | 0.459 | 1.129 | 2.274 |
| Deal Value in thousand Euros | 31 | 9607170 | 293598.5 | 1277812 | 6.797 | 49.613 |

In Table 2 above, method of payment reported a mean score of 0.644. The sample is composed of 64.4% cash deals. Initial shareholding in target company by the acquiror ranges from 0 to

99.842 percent, averaging 28.587 with a standard deviation of 30.459. Most acquirors, therefore have a minority stake in the target pre-transaction. This, combined with the announced bid premium (average 180.616), are an indication of the relatively low information asymmetry between the acquirors and targets in the sample.

The cross-border variable has a mean of 0.305. This shows that most of the deals involve companies from the same countries – 30.5% of the deals are cross-border. The age of Target Company had a mean of 35 years, with a while age of acquirer Company had a mean of 36 years. This suggests that most of both target company and acquiror company are old and established firms in the market.

On average, the countries represented in the sample had a score of 51.565 in the World Bank's strength of regulation score. This indicates that most countries in data score strongly on World bank governance index. This can be explained by the fact that majority of target and acquiror companies' country's is limited to very few countries that are associated with strong governance performance like South Africa and Egypt (Odongo, 2017). Findings on relative cash flow revealed a mean score of -8073643 and standard deviation of 4987000. This reveals that most of the companies had a negative cash flow (spent more cash than they brought in) the year before the acquisition. On average, the companies in the sample experienced a 74% growth in their revenues over the three years prior to the acquisition. Adding this to the high average age of the acquirors, they are probably established market leaders in their respective industries.

The descriptive statistics on the Similar Industries variable shows that majority of acquiror companies belonged to the different industries from the target company as only 25% belong to the same industry. Finally, in regard to deal value in Euros, the average deal was found to be 293 million Euros.

### 4.3 Correlation Analysis

*Table 2 - Correlation Analysis on Determinants of Payment Methods in Mergers and Acquisition*

| Variable | Cash | Deal Value | Initial Stake | Bid Pre. Ann. Date | Cross Border | Age Target | Age Acquiror | Target Listed | Regulation | Relative cash flow | Growth in Sales | Similar Industries |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cash | 1.0000 | | | | | | | | | | | |
| Deal Value | -0.3042 | 1.0000 | | | | | | | | | | |
| Initial Stake | -0.0237 | -0.2074 | 1.0000 | | | | | | | | | |
| Bid Pre. Ann Date | -0.3033 | 0.0711 | 0.2157 | 1.0000 | | | | | | | | |
| Cross Border | 0.2115 | 0.2278 | 0.1379 | 0.1000 | 1.0000 | | | | | | | |
| Age Target | 0.1549 | 0.0375 | -0.1266 | -0.1282 | 0.4028 | 1.0000 | | | | | | |
| Age Acquiror | 0.1989 | -0.223 | -0.2038 | -0.0704 | 0.2979 | 0.5712 | 1.0000 | | | | | |
| Target Listed | -0.186 | -0.0885 | 0.3022 | 0.5481 | -0.0344 | 0.0142 | -0.044 | 1.0000 | | | | |
| Regulation | -0.1753 | 0.1176 | -0.0994 | 0.0733 | -0.4747 | -0.1539 | -0.0463 | -0.0337 | 1.0000 | | | |
| Relative cash flow | -0.137 | 0.0499 | 0.14 | 0.4252 | 0.1547 | -0.0129 | -0.0298 | 0.0723 | -0.0897 | 1.0000 | | |
| Growth in Sales | 0.0214 | -0.0663 | -0.0176 | 0.1684 | -0.3484 | -0.3274 | -0.3345 | 0.0736 | 0.1978 | 0.0656 | 1.0000 | |
| Similar Industries | -0.4196 | 0.343 | -0.174 | 0.4704 | 0.0657 | -0.181 | -0.1739 | 0.1612 | -0.0414 | 0.0966 | 0.1294 | 1.0000 |

According to the information on table 2 above, all of the independent variables have some correlation with the dependent variable but none of them is a strong correlation. This shows the potential of the independent variables having a collective explanatory effect on the method of payment but none of them being particularly strong on its own (Gujarati & Porter, 2009). Additionally, there are no strong correlations between the independent variables themselves hence the data does not suffer from multicollinearity.

### 4.4 Diagnostic Tests

Following the recommendations of Gujarati & Porter (2009), a multicollinearity test using variance inflation factors (VIF) is performed to ensure reliability and validity of the estimation coefficients. The cross-sectional nature of the data necessitated the use of at collin command in STATA to perform diagnostic tests. This is also in accordance with previous studies in the field such as Chen et. al. (2020).

*Table 3 - Multicollinearity Tests*

| Variable | VIF | Tolerance |
|---|---|---|
| Deal Value (Euros) | 1.69 | 0.59 |
| Initial Stake | 1.54 | 0.64 |
| Bid Premium Announced Date | 2.74 | 0.36 |
| Cross Border | 2.23 | 0.45 |
| Age of Target Years | 1.81 | 0.56 |
| Age of Acquiror | 2.06 | 0.49 |
| Target Listed | 1.76 | 0.57 |
| Regulation | 1.64 | 0.61 |
| Relative cash flow | 1.37 | 0.76 |
| Growth in Sales | 1.31 | 0.76 |
| Similar Industries | 1.77 | 0.57 |

According to the table 3 above, issues of multicollinearity are not exhibited in the data given all the VIF scores were less than 10. The highest VIF value for 2.74 for bid premium and the lowest VIF was growth in sales with a value of 1.31. The data is, thus, expected to produce reliable coefficients.

**4.5.1 Determinants of Methods of Payment in Mergers and Acquisitions in Africa**

To establish this, logistic regression was carried out to determine the factors affecting the methods of payments for mergers and acquisition in Africa, similarly to Martin (1996).

Table 4 below is a summary of the logit regression below:

$$CASH = \beta_0 + \beta_1 VALUE + \beta_2 INITIAL + \beta_3 BIDPREM + \beta_4 CROSSBORDER + \beta_5 TGTAGE + \beta_6 AQAGE + \beta_7 TGTLIST + \beta_8 + \beta_9 REGULATION + \beta_{10} RELCASH + \beta_{11} GROWTHSALES + \beta_{12} SIMILARIND + \varepsilon$$

***Table 4 – Results of Logit Regression***

| | | | |
|---|---|---|---|
| Logistic Regression | | Number of Observations | 39 |
| | | LR Chi$^2$(11) | 27.45 |
| | | Prob> chi$^2$ | 0.003 |
| Log likelihood = | -8.889 | Pseudo R$^2$ | 0.607 |

| Method of Payment | Coefficient | Std. Err | z | P>\|z\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| Deal Value (Euros) | 0.999 | 0.001 | -2.11 | 0.031 | 0.999 | 1.001 |
| Initial Stake | 0.928 | 0.037 | 2.04 | 0.039 | 0.858 | 1.004 |
| Bid Premium Announced Date | 0.961 | 0.050 | -0.76 | 0.446 | 0.866 | 1.065 |
| Cross Border | 8898.7 | 42268.05 | 1.98 | 0.049 | 0.805 | 9.83E+07 |
| Age of Target | 1.052 | 0.051 | 1.05 | 0.292 | 0.957 | 1.156 |
| Age of Acquiror | 0.953 | 0.038 | -1.18 | 0.237 | 0.882 | 1.034 |
| Target Listed | 5.241 | 12.595 | 0.69 | 0.491 | 0.047 | 582.389 |
| Regulation | 1.082 | 0.747 | 1.14 | 0.254 | 0.945 | 1.238 |
| Relative cash flow | 0.999 | 0.002 | -0.6 | 0.548 | 0.999 | 1.001 |
| Growth in Sales | 5.268 | 10.799 | 0.81 | 0.418 | 0.095 | 292.794 |
| Similar Industries | 0.031 | 0.122 | -0.88 | 0.378 | 0.001 | 70.308 |
| cons | 0.256 | 0.844 | -0.41 | 0.680 | 0.003 | 169.331 |

Before interpreting the results, it is important to check if the logistic regression fits the model in establishing the determinants of methods of payment in mergers and acquisition. To check on the model fit, Prob> chi2 is key in this and from the results it is evident that the p value associated with chi2 is less than 0.05 (p=0.003). This demonstrates that the logistic model is suitable in determining the factors affecting methods of payment in mergers and acquisition in Africa.

The results also show that the determinants model has a $R^2$ of 0.607 and this says that this model accounts for 60.7% percent of the total variance in methods of payment used in mergers and acquisition. This shows that the model factors have a strong explanatory effect on payment methods used in mergers and acquisition deals in Africa.

From the results, deal value, initial stake and cross border are seen to be the statistically significant determinants of methods of payment for mergers and acquisition in Africa as evidenced by p-values less than 5%. All three have positive coefficients, indicating that they increase the chance that a merger will be financed using cash.

### 4.5.2 Agency Issues and Method of Payment

Three variables in the model – initial stake, cross border, and similar industries intuitively represent how familiar the acquiror is with the target in terms of the business model, working environment, internal processes, etc. Hence, they are indicative of agency-related reasons for choosing the method of payment. Of the three, two (initial stake and cross border) are statistically significant determinants of the choice of method of payment. All three have a positive coefficient meaning they increase the probability of using cash to fund the acquisition.

# CHAPTER 5: CONCLUSION AND DISCUSSION

Mergers and acquisitions are key events in the growth of business firms. It is an alternative to organic growth, especially when pursuing rapid growth. Exercising this strategy at the right price and using the right assets is vital to its success.

## 5.1 Conclusions

In this study, the researcher analysed the determinants of payment methods in mergers and acquisition in Africa. These factors were broadly categorized into financial constraints, shareholder profile, listing status of targeted company, transaction characteristics and regulation. Regarding the determinants of payment method, the study documented a number of factors as key determinants. Broadly the study findings conclude that financial sources, shareholder's profile, and transaction characteristics, in particular deal value, initial stake and cross border transactions affect the choice of methods of payment for mergers and acquisition in Africa. Of interest is the realization that as the value of deal in Euros increases acquirer company may opt to increase the use of cash. This is in contrary to the findings by, among other studies, Ismail & Krause (2010) that revealed that as deal value approaches 5 million euros, most companies reduce cash transaction as the only mode of payment. Evidence gathered from the above analysis leads to the conclusion that within the African context, source of finance, shareholder profile and transaction characteristics are key determinants of payment methods in merger and acquisition. From these findings, firms seeking to participate in mergers and acquisition should pay attention to source of finance characteristics, shareholder profile and transaction characteristics.

On the issue of agency problems, all three variables that have been used to answer this question have been found to have a positive coefficient but the qualitative variable representing whether the acquiror and target are in the same industry is statistically insignificant. Since cash acquisitions mean a full transfer of the ownership of the target to the acquiror and involve buying out the existing shareholders of the target, they introduce a direct agency relationship between the target's management and the acquiror's existing shareholders while removing the existing target shareholders from the company. It allows the acquiror to have full control of the management as they can even overhaul the entire management board. The findings support the hypothesis from Rossi & Volpin (2004) who conjecture that by making cash acquisitions, shareholders of the acquirer are able to overhaul the target's management to protect their interests. The result was expected for the cross-border variable but not initial stake and similar industries. Cash transactions help foreign acquirors to deal with agency problems beforehand as explained above, but it would be expected that acquirors who already have some stake in the firm would have less incentive to buy out the other shareholders as a mechanism for solving the agency problem. Perhaps this is indicative of the target venture proving to be profitable to the existing shareholders hence they perform a cash buyout to secure all the future profits for themselves. Further research would be needed to investigate this further.

## 5.2 Recommendations

Given the findings of this study, it is recommended that industry regulators pay more attention to the method of payment in mergers and acquisitions before approving them, especially when the proposed method of payment is a cash transaction. It may be a signal of impending agency problems post-acquisition. Further, there is need to streamline rules and regulations that govern

the M&A process across African countries to solidify the confidence that cross-border acquirors have in the protection of their interests pre- during and post-transaction.

Shareholders should lobby for cash acquisitions when they project that agency problems will arise in the merged firm due to cultural differences with the existing management, geographical distance *et cetera* since it allows them to get more direct control of the target. While stock acquisitions may help to bear the financial burden of higher value deals, the findings of this study suggest that cash acquisitions are preferred, probably to enable the acquiror's shareholders to have more control of the merged firm and, thus, mitigate for any potential risks then.

The findings of this study should provide more insights for investment bankers and other transactional advisors on the nature of acquirors of African targets. They are less risk averse than their European and American counterparts as evidenced by the findings in other studies. This is showed, for example, by their willingness to use more cash for higher-value deals.

### 5.3 Limitations of the study

From a large initial sample of over 7,000 transactions, this study relied on only 39 for issues of completeness of data. There is a large data gap since even the 39 complete data points had some inconsistencies that had to be cleared before the analysis. The existing M&A databases should be updated with more reliable data. Further, more robust sampling techniques should be employed in future research to reduce the reliance on data about transactions from South Africa and Egypt.

The dichotomous classification of M&As to cash-financed and stock-financed transactions ignores other classifications of M&As like leveraged buy outs (LBOs) and M&As that are partially stock- and cash-financed. Future studies should make this consideration.

Additionally, alternative qualitative response regression models such as probit and tobit models can be tested on the same or similar datasets instead of the logit model used herein to further test the suitability of this model for the research questions.

### 5.4 Suggestions for Further Research

Future papers should build country- and region-specific (for example East African region) datasets to determine the local dynamics of the M&A landscape for more targeted policy recommendations. This will help to capture the effects of more granular environmental differences on the approach to M&As in the continent.

Secondly, more studies should be done on the effects of specific variables on the method of payment such as family ownership of the acquiror and/or target, acquisitions involving parastatals and other government-owned firms, effect of different tax regimes on the choice of method of payment etc. These will enable all parties interested in the market for corporate control to understand each of these variables more deeply and inform more specific policy recommendations, that is, in response to more specific items such as transaction-related tax problems.

Finally, further research should be carried out to establish the relationship (if any) between macroeconomic factors (such as GDP and employment rates) and M&A deal flow and method of payment since M&A has been proven to affect firms' post-acquisition performance in terms (Akinbuli & Kelilume, 2013) which can translate into the macroeconomic performance of a country especially in the more active M&A markets.

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