

Company-Specific Factors and Determination of Target Firms in Mergers and Acquisitions Deals: Experience from Emerging Markets

Emmanuel Okofo-Dartey¹

Abstract: This study investigates firm-specific variables that motivate acquirers to pursue target firms from the emerging markets in mergers and acquisitions transactions. Firms from the emerging markets continue to serve as targets instead of acquirers in acquisitions deals. However, this trend appears to be changing since some firms from the emerging markets are becoming more active in M & A deals as acquirers. Several factors may account for the interest various acquirers show in pursuing targets from the emerging markets. These factors could include the company-specific factors or variables of these targets. Using 154 firms gleaned from the Bloomberg database from 2007 to 2017 on ten (10) emerging market countries, the study employs the logistic regression technique to explore the likely firm-specific variables of emerging market targets that influence acquirer firms to be interested in emerging markets firms as targets in M&A transactions. We find that financial leverage, market-to-book ratio, and the ratio of cash and equivalent to total assets of the target firms are more likely to influence the acquirers' decisions to pursue these firms as targets. In contrast, total assets and sales growth of these targets are less likely to motivate acquirers to become interested in these firms as M&A targets. Finally, return on assets (showing profitability levels) does not influence the acquirers' decisions. Our findings have implications for regulation and policy development to support investment decisions of potential acquirers and other investors interested in emerging market firms.

Keywords: Target firms; Emerging markets; Company-specific variables; Logistic regression; Acquirer firms.

JEL Classification: C35; G3; G34

1. Introduction

Firms from the emerging markets continue to take advantage of mergers and acquisitions (M & As) as a business restructuring and expansion strategy to access

AUDOE, Vol. 17, No. 4/2021, pp. 58-74

¹ Department of Financial Intelligence, College of Accounting Sciences, University of South Africa, South Africa. Address: Preller St, Muckleneuk, Pretoria, 0002, South Africa, Corresponding author: emmanuelokofodartey@yahoo.com.

new markets to establish their presence and dominance in the international business environment. M&As contribute significantly to the efficient allocation of resources in an economy and forms an integral part of various mechanisms and strategies for businesses' growth in emerging markets, and are considered among important investment decisions firms make (Bhabra & Huang, 2013). For years, however, target firms in acquisition transactions globally have come from developing economies, while firms from the developed markets have traditionally served as acquirers. For instance, according to Chance (2015) and Reuters (2014), cross-border M&A transactions that occurred in the emerging economies saw an increase of more than 25% of which several of the acquirers initiating these deals were large multinational firms from Europe. The annual growing interest in Africa as a target region has also increased tremendously in the last two decades (Chance, 2015; Reuters, 2014).

There could be several company-specific motivating factors acquirers of emerging market target firms consider before they settle on suitable targets in M&A deals. One principle acquirers usually use is to create the profile of the target companies (Veselinova et al., 2011). The profile includes the desired characteristics that the target firm should possess to make it ideal for a merger or acquisition. These characteristics could include the type of activity of the target company, the target's size, its market position, number and structure of its employees, production range, the structure of assets and equity of the company, its level of profitability, indebtedness, liquidity, and many similar factors (Veselinova et al., 2011). Apart from these factors, most acquirers also consider the fact that, usually, a merger or a potential acquisition tend to be successful when a target firm is either: undervalued or has a higher fair market value; does not use its resources and capacities optimally; has complementary products or services with the potential buyer, or has poor management. Several of these emerging market firms that have been taking part in M&A deals mainly as targets may also possess some of the above stated defining characteristics that motivate acquirer firms to pursue them in M & As transactions.

However, to the best of our knowledge, there is no empirical study on key company-specific determinants/variables or characteristics of target firms from the emerging markets that influence acquirer firms to pursue them as targets in M&A transactions. This constitutes a significant gap in the M&A literature on emerging market firms, making a case for investigation, which this study attempts to explore. The findings of this study will contribute to the extant literature of M&As and help extend the frontiers of research on company-specific factors of target firms from the emerging markets that draw acquirers to pursue them in M&As deals. The study will also assist in addressing the paucity of empirical studies on the determinants of emerging market firms as targets in M&A transactions.

The rest of the paper has the following organization. Section 2 briefly reviews the relevant literature and formulates the hypotheses related to the potential company-specific variables of targets from the emerging markets considered necessary to influence acquirers to pursue these targets in M&A transactions. Section 3 describes the data and the definition of the variables. Section 4 presents the empirical results and their support to the hypotheses formulated. Finally, in Section 5, the conclusions and policy implications of the study are provided.

2. Literature Review

2.1. Characteristics of Target Firms in M & A transactions

Numerous studies have identified characteristics of target firms that acquirers consider before deciding to pursue these firms in M&A transactions (Roll, 1986; Ali & Gupta, 1999; Sudarsanam, Holl, & Salami, 1996; Abdul, Rahman, 2002). Below are some explanations of the characteristics of target firms in M&A transactions.

First, the relatedness of firms' businesses. This talks about where the acquiring and the target firms find themselves in the same industry with a high degree of connection in their main operations or activities. The relatedness of businesses allows the combined firms to enjoy benefits offered by economies of scale and scope, which enable them to increase their output and profit levels, market share, and subsequently reduce their production costs (Healy, Palepu & Ruback, 1992).

Second, operational and managerial synergies for the two merging firms are based on the target firm's past performance before the acquisition activity. Firms obtain managerial synergy if the management team of the target firm possesses superior knowledge in technology which could help improve the value of the bidding firm (Martin & McConnell, 1991; Matsusaka, 1993) while firms benefit from operational synergy also if the target firm is considered a related business (Sudarsanam et al., 1996).

Third, the presence of financial synergy between the two firms. Firms usually consider financial synergy a vital acquisition driver if the two firms' differences in debt levels are significant. The acquirer stands a chance of getting some tax shield as a result of the debt level differences, which eventually could help the combined firms' debt capacity to increase, reduce the cost of capital, and allocate capital resources better.

Fourth, the target's profitability level before the acquisition deal. Suppose the target firm's profit levels are less than what is considered average before the acquisition transaction. In that case, it means the acquiring firm's overriding interest is to introduce better managerial skills to transform the target firm. However, higher

profitability levels of the target indicate that the acquirer is likely to gain particular expertise, which would improve their earning base.

Fifth, weak corporate governance mechanisms and managerial inefficiencies (Jensen, 1988; Jensen and Ruback, 1983). Typically, target firms, especially those in developing economies, exhibit weak corporate governance mechanisms (such as CEO's board chairmanship position, board quality, and diversity). As such, managers are likely to use their influence to request unrealistic incentive packages after going through a successful M&A deal (Ntim et al., 2015).

Sixth, the growth potential of the target firm. Usually, a firm with growth potential but is deficient in cash is considered a good target for M&A transactions, similar to what the growth-resources imbalance hypothesis suggests. Firms with opposing views between their liquid financial resources and growth offer potential benefit acquiring firms.

Seventh, the liquidity position of the target firm. In taking over a firm with a more liquid stock (which we refer to as a "liquid firm"), the acquirer also takes over the underlying liquidity of its stock. High liquidity will likely appeal to a broader base of potential investors (Massa & Xu, 2013). By increasing the acquirer's liquidity, a liquid target will expand its shareholder base and, therefore, be more attractive to public acquirers than otherwise equal deals in which the illiquidity of the target's stock adversely affects the acquirer's stock liquidity. If stock liquidity is valued, a public acquirer should be willing to pay more for liquid target firms. That willingness should translate into a higher premium paid and a greater probability of the bid's success. In short, liquid targets can gain more from selling to the public than to private acquirers and thus prefer the former, holding all other characteristics constant. Liquidity differences between target and acquirer affect the liquidity of the combined firm. Acquiring a more liquid firm makes the stock of the acquirer more liquid. Liquidity affects the attractiveness of a specific target in comparison to a pool of otherwise identical targets. Public acquirers prefer more liquid targets. Among public firms, more liquid acquirers are more likely to buy more liquid targets. Liquidity is also associated with a higher probability of bid success. Public acquirers are 2.4% more likely to complete a transaction when the target firm's liquidity is one standard deviation higher (Massa & Xu, 2013).

2.2. Potential Company-Specific Factors Motivating Acquisition of Emerging Market Target Firms

2.2.1. Financial Leverage

Leverage is linked to M & As because these growth strategies are expensive and are sometimes financed from external sources because they may require additional resources beyond what firms generate from normal operations (Harrison, Hart &

Oler, 2014; Kumar, 1985). Harrison et al. (2014) examined the relationship between leverage for acquirers, targets, and post-acquisition performance and found that leverage hurts the post-acquisition performance of acquirers. They suggest that acquiring firms that are already highly geared usually experience negative performances. They concluded that M &As have a significant and persistent impact on acquirers' capital structure, causing a continuous increase in average debt-to-assets of acquirers in post-acquisition periods of up to five years. Firms that have high levels of debt could take advantage of acquisitions to improve on the value of their businesses by acquiring other target firms that are not highly geared but have unused debt capacity and at the same time have the potential for growth so that they can realize some amount of financial leverage and synergistic advantages for their businesses. Leverage is measured by the ratio of interest-bearing debt over assets.

Hypothesis 1. Company-specific factors such as financial leverage are important in determining an acquirer's likelihood to pursue an emerging market firm as a target in M&A deal.

2.2.2. Total Assets and Sales (Proxies for the Target Firms' Sizes).

Total assets refer to total resources from which the company can generate profit. Evidence from Klimek (2014) regarding the financial effects of M&As on acquirers in Poland shows that growth in firm size correlates negatively with operating performance. However, Moeller et al. (2004) identify that size of firms significantly affects profitability positively, according to the findings of Dickerson, Gibson, and Tsakalotos (1997). This study expects the sizes of target firms from the emerging market to influence acquirers to pursue them in M&A transactions. The firm's total assets are calculated as all short and long-term assets, as reported on the balance sheet. The target firms' sales growth was also used as a proxy for firm size because some of the targets are related to the product market. It is calculated as real annual growth in net sales (Fisman & Love, 2007). A prior study by Park and Jang (2011) used net sales as a measure of firm size in M & As and found that sales growth in firms that executed M & As was higher than firms that did not undertake M&As.

Hypothesis 2. Company-specific factors such as total assets and sales are essential in determining the likelihood of an acquirer pursuing a firm from an emerging market as a target in the M&A deal.

3. Return on Assets (ROAs)

Return on Assets **is** added as a measure for the performance of the targets in terms of their profitability levels. ROA is calculated as a net income ratio and total assets (Lee, Mauer & Xu, 2018). The expectation is that firms experiencing higher returns

on their assets will be in an excellent position to raise enough more in security markets since they provide prospects for good returns on the firms' investments such as M & M&As (Boubakri & Cosset, 1998). The ratio of returns on assets directly assesses the management's ability to use assets more efficiently through investment in mergers and acquisitions transactions. The study expects ROAs positions of targets from the emerging markets to influence acquirer firms to firm them in M&A transactions.

Hypothesis 3. Return on assets of emerging market target firms is vital in determining the likelihood of acquirers to pursue them as targets in M&A deals.

4. Market-to-Book Ratio

The firms' market-to-book ratio proxies for management quality and investment opportunities. This ratio divides the market value of the company by its book value. To calculate company market value, subtract the book value of equity from total assets, and add the equity market value. Prior studies suggest that, in most merger cases, the pre-merger target firm's book-to-market ratio is higher than its acquirer's (Pablo, 2009; Wu, 2017).

Hypothesis 4: the market-to-book ratio of emerging market target firms is vital in determining the likelihood of acquirers pursuing these firms as targets in M&A deals.

5. Cash and Equivalents over Total Assets Ratio

The ratio of cash and equivalents over total assets control for idle resources. Since cash remains the major means of payment for several acquisition transactions by firms from emerging economies, the target's financial position argument becomes even more relevant. According to the liquidity hypothesis, the possibility of firms becoming targets in acquisitions transactions increases as their liquidity positions also increase (Song & Walking, 1993).

This is possible since excess liquidity allows the acquirer to rely on the target firm's resources to finance the acquisition. In the presence of information asymmetries, liquid assets may provide companies with the needed protection against cost imperfections in the capital market. However, the availability of liquidity to firms can harm the firms' desire to achieve their objectives if the flexibility they have in using it is not well managed. According to Agrawal and Sensarma (2007), cash flow is one crucial parameter that motivates acquisition propensity positively. Kumar and Rajib (2007), after analyzing the capital structure of target and acquirer firms in India identify that, the possibility for firms whose liquidity positions are tight to become targets is high, and that large firms with unused debt capacity can rely on this

financial slack available to them and acquire other firms and subsequently create value for themselves.

Hypothesis 2. The ratio of cash and equivalents over the total assets of target firms from the emerging markets is essential in determining the likelihood of acquirers pursuing these firms as targets in M&A deals.

6. Data and Methodology

The present study investigates company-specific variables of target firms from the emerging markets that are likely to motivate acquirers to pursue these firms in M&A deals. Similar to Moya-Dávila et al. (2020), Kumar (2017), Nguyen et al. (2012), the present study uses logistic regression methodology for its analysis to investigate if any of the company-specific variables (independent variables) hypothesized above in section (2.2.2) are significant predictors that are likely to influence acquirer firms to be interested in emerging market firms as targets in M&A transactions. The dependent variable in the logistic model is a dummy variable, which is equal to one (1) if a firm was acquired as a target in M&A transactions and zero otherwise. Meador et al. (1996) used logistic regression analysis to examine the accounting, financial, and market variables to predict the M & A target companies and horizontal and vertical subsamples of merged companies from 1981 to 1985. Their model shows the most reliable predictive ability for horizontal acquisitions. Pasiouras and Gaganis (2007) also employ the logistic regression model to examine the financial characteristics of Asian banks from 1998 to 2004. They further indicate that high asset risky portfolios and high liquidity increase the probability of being involved in an acquisition. Brooks (2014) considers the logistic model a powerful technique and well suited than the OLS when a research study aims to establish the probability of an event occurring. Also, if the dependent variable is binary and takes not more than two values, an example can be one (1) if a firm was acquired in the M&A deal as target and zero (0) otherwise. Although Amemiya (1981) and Long (1997) point out that there is no difference between the logit and probit model because the regression coefficients, β can be adjusted to make the estimated logit and probit cumulative densities almost identical, however, in this study, we chose the logit over the probit model because the logit model is easy to interpret odd ratios.

This logistic regression model employed in this study is estimated using the maximum likelihood estimation technique specified below;

$$P_i = \frac{1}{1 + e^{-(\beta_1 + \beta_2 x_{2i} + \dots + \beta_k x_{ki} + u_i)}}$$

where P_i is the probability that $Y_i = 1$.

This technique estimates the likelihood that a certain observation with specific characteristics will find itself within one specific category. According to Kumar

ISSN: 2065-0175 ŒCONOMICA

(2017), logistic regression is a classification algorithm used to predict binary outcomes given under a set of independent variables. It predicts the probability of occurrence of an event by fitting data to a logit function. The fundamental equation of the logistic regression model is:

$$\log \left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x + \beta_2 x + \dots B_n X_n$$

Suppose p is the probability of a firm being acquired as a target in M&A transaction. In that case, 1-p will be the probability of a firm not acquired as a target in M&A transaction when only two events are associated with the model. $X_0 \ X_1, X_n$ are independent variables and $\beta_0, \beta_1, ..., \beta_n$ are the coefficient estimates.

6.1. Model Specification

In particular, this study, in line with Moya-Dávila and Rajagopal (2020) specifies the logistic regression model below in (Equation 1) to investigate the extent to which company-specific variables of emerging market firms influence the likelihood of acquirer firms to become interested in these firms as targets in M&A transactions.

$$DM\&A_{Target} = \beta_o + \beta_1 FINLEV_i + \beta_2 ROA_i + \beta_3 LTAS_i + \beta_4 LSALESGri + \beta_5 CASHi + \beta_6 MTBKi + \varepsilon i$$
(1)

Where; *DM&A*_{Target} is a dummy variable that takes the value of one (1) if a firm was acquired as a target in M&A deal and zero (0) otherwise. We regressed *DM&A*_{Target} on independent variables of the target firms such as their financial leverage (*FINLEV*), Returns on Assets (ROAs) which proxies for profitability, the natural logarithm of Total Assets (*LTAS*), and Sales Growth (*LSALESGr*) which proxy for sizes of the target firms, Cash and equivalents (*CASH*) control for the target firms' idle resources and the market-to-book ratio (*MTBK*) proxies for management quality and investment opportunities. A prior, the study expects a positive relationship between the various company-specific variables of the target firms and the likelihood of acquiring firms acquiring them as targets in M & As.

6.2. Data

The study uses a firm-level dataset of target firms from the emerging markets obtained from the Bloomberg Terminal from 2007 to 2017. The reason for choosing this period is that several emerging market countries experienced a substantial rise in M&A activities during this period due to the implementation of various regulatory and structural reforms. The dataset includes annual financial information on company-specific variables potential for consideration by acquirers of targets from the emerging markets. They include financial leverage, which is measured by the

ratio of interest-bearing debt over assets. Log of total assets and sales measuring the targets' sizes. Return on Assets proxy for profitability. ROA is operating income before depreciation divided by total assets. The target firms' market-to-book ratio, which proxies for management quality and investment opportunities. This ratio divides the market value of the company by its book value. To calculate company market value, subtract the book value of equity from total assets, and add the equity market value. Finally, the ratio of cash and equivalents over total assets control for idle resources.

Based on data availability, the following number of firms were picked from each of the ten (10) selected emerging market countries and included in the final sample: South Africa (6), Brazil (18), Russia (14), Malaysia (36), Argentina (8), Poland (16), China (12), India (18), Mexico (6), and Chile (20). To include a target firm in the sample, the firm must be listed on their respective stock exchanges. Our final sample, therefore, consists of 154 firms.

7. Results and Discussion

Table 1. Descriptive Statistics

	M&A	CASH	LTAS	FNN M	ITBK L	SALGR	ROAs
Mean	0.500	5.008	7.974	1.554	1.426	2.385	34.514
Maximum	1.000	12.088	15.288	11.178	8.957	6.883	2851.408
Minimum	0.000	0.374	0.964	-4.335	-6.770	-2.818	3 -29.425
Std.Dev.	0.502	2.726	2.877	1.993	1.756	1.531	254.120
Source: Author's Estimation, 2020, based on data collected.							

Notes: Table 1 shows basic descriptive statistics of the various potential company-specific variables likely to influence acquirers to pursue targets from the emerging markets.

Table 1 shows the summary statistics of variables, such as the number of observations, mean, maximum, minimum, and standard deviation. The average number of emerging market targets acquired as targets in M&As is 0.5%, while the minimum is (0.00) and maximum (1.00). This does not indicate a widespread acquisition of target firms from emerging markets. The percentage of the target firms' financial leverage (FNN) as a share of the company-specific variables that drive acquirers to be interested in these targets shows an average of 1.554 %, which is more than the average number of targets acquired. It also shows a vast disparity of a minimum of -4.335% and a maximum of 11.178%. The standard deviation is about 1.993%, suggesting that on average, the FNN of the target firms as a share of factors that motivate their acquisitions deviates from the mean by about 1.993%. The size of the target firms has been very wide-ranging from a minimum of (0.964) to a maximum of (15.288) with a mean of 7.974%. This implies that the targets are of

ISSN: 2065-0175 ŒCONOMICA

various sizes. The ROAs also give a picture that is not too encouraging as the minimum is around (-29.425%) and the maximum is 2851.408%, with a mean of 34.514%. Regarding cash and equivalents (CASH) of the firms, the difference between the maximum 10.526 and the minimum 0.503 is large, indicating disparity in liquidity positions of these targets. The market-to-book ratio, which proxies for management quality and investment opportunities, also has a minimum of -6.770 and a maximum of around 8.957 with a mean of about 1.426 %, suggesting that the quality of management of these target firms broadly appear to be low and generally show fewer investment prospects.

Table 2. Correlation Matrix

M&A CASH LTAS FNN MTBK LSALGR ROA VIF									
M&A	1.000								
CASH (0.066	1.000							1.722
LTAS (0.134	0.788	1.000					1.722	
FNN	0.234	-0.249	0.106	1.000					3.994
MTBK (0.141	-0.123	-0.015	0.452	1.000			3.990	
LSALGR -	-0.113	0.009	-0.084	-0.184	-0.081	1.000		1.007	
ROA -	-0.117	0.073	-0.196	-0.034	0.296	-0.076	1.000	1.008	
Source: Author's Estimation, 2020, based on data collected.									

Notes: Table 2 shows the correlation matrix of company-specific variables and their inter-relationship with one another. It also shows the variance inflation factor (VIF) values for the variables.

Table 2 presents the correlations between the company-specific variables of target firms from the emerging markets and their acquisitions in M&A deals. As is indicated, the correlation of the various variables with each other is broadly low, less than (50%) for most of them. The highest correlation is around (78%) existing between LTAS and CASH. All the other values are below 0.5, which proves the absence of multicollinearity among the independent variables. For a robustness check, we conducted the variance inflation factor (VIF). The results of the VIF test show that all variables are far from being correlated. Our estimation shows that the VIF of all variables is less than four (4), which is far from the threshold of ten (10) that is suggested by literature (Menard, 2002). These outcomes suggest that all variables used in this analysis do not suffer from multicollinearity. However, the table provides evidence of a negative correlation between ROAs on the one hand and LTAS, FNN, and LSALGR on another. The table also shows a negative relation between LSALGR and LTAS, FNN, and MTBK. As well, FNN and CASH also correlate negatively.

7.1. Firm-Specific Variables of Target Firms and M & A Transaction

The results of the study, as presented in Table 3, provide interesting and insightful details.

The marginal effect coefficient is positive and statistically significant for the targets' cash and equivalent over total assets ratio at 5%. This indicates that this company-specific variable that controls for idle resources of the target firms is more likely to be considered by acquirers of emerging market targets in their M&A decisions. This implies that several emerging market target firms have more idle resources, which could be advantageous to would-be acquirer firms if they succeed in their acquisition bid for such firms.

The study finds the marginal effect coefficient for total assets, which represents the target firms' sizes to be negative but statistically significant at 1%, suggesting that sizes of these firms are less likely to motivate acquirer firms to pursue these targets from the emerging markets in M&A deals. Similarly, the study finds the marginal effect for the sales coefficient (another proxy for targets' sizes) to be negative but statistically significant at 10%. This variable is also less likely to motivate acquirers to be interested in targets from the emerging markets in acquisition deals. This confirms the findings of Slama et al. (2012) that company size is negatively correlated to its likelihood to become a target in an M&A transaction. The possible explanation could be that, since prior studies such as Klimek (2014) suggest that the financial effect of M&As on growth in firm size correlate negatively with the operating performance of acquirer firms, potential acquirers would tend to pay little attention to the growth in target firms' sizes in their consideration of ideal M&A target to pursue in emerging markets. However, this result appears inconsistent with Ahuja and Katila's (2001) views that sizes of both acquirer and target firms matter in a merger or acquisition transaction and that transactions where both companies are of similar sizes tend to succeed. They maintain that when acquirer and target firms are similar in size, it becomes less stressful for them to identify the value of skills and knowledge to derive from taking over the target firm. It also becomes easier to integrate these same skills and apply them within the acquirer's business system.

For the target firms' market-to-book ratio, which describes management quality and investment opportunities of these firms, its marginal effect coefficient is positive but statistically significant at 10%, implying that this company-specific variable is more likely to be a determining factor to acquirer firms of emerging market targets in their decisions to execute M&A transactions. The statistical significance of 10% for this variable (market-to-book ratio) indicates that the management of emerging market target firms appears not to have a strong influence even though they have desirable characteristics for investment opportunities that could serve as a springboard to yield better results to the acquirers. This result broadly confirms the theoretical predictions

of the theory for the market for corporate control, which argues that the most efficient firms of an industry usually acquire their less efficient counterparts. According to this theory, a firm that is undervalued and has not attained its desire limit of performance because of inefficient management will be acquired by another firm's management team and replace inefficient managers.

Regarding financial leverage, its marginal effect coefficient is positive and statistically significant at 5%, meaning financial leverage levels of emerging market targets is an important company-specific factor that is more likely to influence the decision of acquirer firms of emerging market targets to be interested in these firms in their M&A pursuits. The possible explanation for this result could be that several of the acquirers of targets from the emerging markets may be highly geared firms and, therefore, in line with the leverage hypothesis, acquire other lowly geared targets with unused debt capacity to improve on their leverage levels to create value for themselves. This is consistent with the general hypothesis that mergers are attempts by firms to gain financial leverage because these acquirer firms usually pledge their assets as security for long-term debt. This result seems consistent with Kumar's (1985) proposition that making use of debt for investment such as M&As leads to more efficient use of firms' financial resources, which results in higher profitability than internal funding. This is because debt attracts interest and limits free cash flow, causing managers to use available free cash effectively and efficiently (Harrison et al., 2014; Sharma and Ho, 2002). The implication for managerial policy is that firms that have high levels of debt could take advantage of acquisitions to improve on the value of their businesses by acquiring other target firms that are not highly geared but have unused debt capacity and at the same time have the potential for growth so that they can realize some amount of financial leverage and synergistic advantages for their businesses.

Lastly, the study finds the marginal effect coefficient for ROAs to be negative but statistically insignificant, meaning that the ROAs (a proxy for profitability levels) of target firms from the emerging markets do not serve as a determining factor in influencing the decisions of acquirers of targets from the emerging markets.

Table 3. Logistic Marginal Effects Results on Whether Company-Specific Variables of Emerging Market Targets influence their Acquisition in M&A

Dependent Variable	DM&A _{Target}						
PANEL A							
Independent Variables:	Logistic Regression Coefficient	Marginal effect at mean	Std. Error	Z- statistics			
CASH	0.300***	0.117***	0.151	1.981			
LTAS	-2.64***	-0.103***	0.132	-1.998			
FNN	0.581***	0.227***	0.254	2.285			
MTBK	0.393**	0.153**	0.215	1.825			
LSALEE	-0.202**	-0.079**	0.112	-1.799			
ROA	-0.006	0.002	0.005	-1.085			
CASH	0.300***	0.117***	0.151	1.981			
PANEL B							
Diagnostic Tests H-L Statistic 8.3629 Prob. Chi-Sq (8) 0.3988 Andrew Statistic 9.6592 Prob. Chi-Sq (10) 0.4709 Test for Heteroscedasticity LM test 0.2263 = P value = 0.6342							

Source: Author's Estimation, 2020, based on data collected.

Notes: Table 3 shows logistic regression coefficients and their marginal effects on free cash flow and M & A transactions. *, ** and *** represent 10%, 5% and 1% significance respectively.

7.2. Diagnostic Tests

As revealed in Table 3, the study's diagnostic tests confirm that the model's overall fitness is good. This is evidenced by the large p-values of 0.3988 and 0.4709 respectively for the HL and the Andrew tests statistic, suggesting that the model is appropriately specified. In terms of validity, it meets the various requirements of the logistic regression model used in this study. The results for heteroskedasticity tests also support no presence of heteroskedasticity, as the p-value for this is roughly 0.6342, which gives little evidence against the null hypothesis of homoskedasticity.

7.3. Test of Endogeneity

The study also tested for the endogeneity problem since this problem, if present, could produce spurious results, which might lead to inappropriate conclusions about the significance of the variables (Ullah, Akhtar, and Zaefarian 2018). Therefore, we employed the instrumental variables models and the endogeneity test results, as presented in Table 4 below, which provides no evidence of endogeneity problems. This is indicated by the statistically significant P-value of the Wald test of exogeneity of 0.0277, which supports no presence of endogeneity.

Table 4. Logit Model with Endogenous Regressors

Logit model with endogenous regressors					Number of obs = 169 Wald chi2(7) = 123.12			
	Log likelihood	1 = -1963.1568			Prob > chi2 = 0.0000			
-		Coef. Std. Err. z		P>z	[95% Conf. Interval]			
	WC	000064	8.58e-06	7.51	0.000	.000048	.000081	
	ROAs	000274	.000784	-0.35	0.727	001811	.001263	
	FIN	0000395	.000038	1.03	0.301	0000354	.000114	
	CASH	0720922	.048205	-1.50	0.135	1665727	.022388	
	PBK	000201	.000343	-0.59	0.558	0008723	.000471	
	LSALES	.034167	.082419	0.41	0.678	1273707	.195705	
	LTA	.064663	.288421	0.22	0.823	5006321	.629959	
	Con	.016387	.619429	0.03	0.979	1.197672	1.23045	
cor (e.	WC, e.MA)	921463	.109587			9952667	173548	
S	d(e.WC)	14201.72	772.759			12765.11	15800.02	
	Instrumented:	WC						
	Instruments:	ROA FI	N CASH PBK	LSALI	ES LTA C	F TQ		
	Wald test of ex	ogeneity	(corr = 0)	: chi2((1) = 4.85	Prob > ch	i2 = 0.0277	

8. Conclusion

This study sets out to contribute to the area of M & As in emerging markets by analyzing the effect of company-specific variables of emerging market target firms of influencing acquirers to pursue these firms in M&A transactions. The study also draws on the liquidity hypothesis, growth-resource imbalance hypothesis, asset undervaluation hypothesis, and neoclassical theory. The study employed the logistic regression technique for empirical estimation, and estimations were done through the maximum likelihood approach.

Based on the findings from this study, the conclusion is that company-specific variables of the emerging market target firms such as the financial leverage levels, the market-to-book ratio, which describes management quality and investment

opportunities as well as the ratio of cash and equivalents over total assets which controls for idle resources of these target firms are important factors that are more like to motivate acquirer firms to be interested in firms from this economic region of the world for M&A deals. However, variables such as the firms' total assets and sales denoting their sizes are less likely to influence acquirers on their decisions to pursue these target firms. The targets profitability levels, as indicated by their ROAs show that they are not an important company-specific variable that motivates the acquirers of these firms in their M&A pursuits.

As a policy implication, this study provides prospective investors in the M & M&A market evidence of company-specific variables of target firms from emerging markets that could serve as the likely determinants of M & M&A target candidates from emerging markets. This study is subject to several limitations that provide opportunities for future research. First, as an initial study investigating company-specific variables that motivate acquirers to pursue targets in M&A deals, we focus on M&As related to firms in ten emerging markets. It would also be interesting to investigate whether acquirers of emerging market targets gain value addition or become worse-off in their M&As pursuits. Second, due to the unavailability of data, the study concentrated only on public targets. A further study to include both public and private targets will be interesting when data becomes available to generalize results.

References

Agrawal, M., & Sensarma, R. (2007). Determinants of merger activity: evidence from India. *International Journal of Financial Services Management*.

Ahuja, G. & Katila, R. (2001). Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study. *Strategic Management Journal*, 22(3), pp. 197-220.

Ali, R., & Gupta, G. S. (1999). Motivation and outcome of Malaysian takeovers: An international perspective. *Vikalpa*, 24(3), pp. 41-49.

Amemiya, T. (1981). Qualitative response models: A survey. *Journal of economic literature*, 19(4), pp. 1483-1536.

Bhabra, H. S. & Huang, J. (2013). An empirical investigation of mergers and acquisitions by Chinese listed companies, 1997–2007. *Journal of Multinational Financial Management*, 23(3), pp. 186-207.

Boubakri, N., & Cosset, J. C. (1998). The financial and operating performance of newly privatized firms: Evidence from developing countries. *The Journal of Finance*, 53(3), pp. 1081-1110.

Brooks, C. (2014). Introductory econometrics for finance. Third Edition, Cambridge University Press.

Chance, C. (2015). *Our insights into M&A trends 2015. Global dynamics* http://globalmandatoolkit.cliffordchance.com/downloads/CC-M A-Trends-jan-2015.pdf.

Dickerson, A. P.; Gibson, H. D. & Tsakalotos, E. (1997). The impact of acquisitions on company performance: Evidence from a large panel of UK firms. Oxford Economic Papers, 49(3), pp. 344-361.

ISSN: 2065-0175 ŒCONOMICA

Fisman, R. & Love, I. (2007). Financial dependence and growth revisited. *Journal of the European Economic Association*, 5(2-3), pp. 470-479.

Harrison, J. S.; Hart, M. & Oler, D. K. (2014). Leverage and acquisition performance. *Review of Quantitative Finance and Accounting*, 43(3), pp. 571-603.

Healy, P. M.; Palepu, K. G. & Ruback, R. S. (1992). Does corporate performance improve after mergers? *Journal of Financial Economics*, 31(2), pp. 135-175.

Jensen, M. C. (1988). Takeovers: Their causes and consequences. *Journal of Economic Perspectives*, 2(1), pp. 21-48.

Klimek, A. (2014). Results of cross-border mergers and acquisitions by multinational corporations from emerging countries: the case of Poland. *Eastern European Economics*, 52(4), pp. 92-104.

Kumar, B. R. & Rajib, P. (2007). Characteristics of merging firms in India: An empirical examination. *Vikalpa*, 32(1), pp. 27-44.

Kumar, P. (1985). Growth of industrial corporation in India. New Delhi: Deep & Deep Publications, 27.

Kumar, U. D. (2017). Business Analytics the science of data-driven decision making.

Lee, K. H.; Mauer, D. C. & Xu, E. Q. (2018). Human capital relatedness and mergers and acquisitions. *Journal of Financial Economics*, 129(1), pp. 111-135.

Long, J. S. (1997). Regression models for categorical and limited dependent variables (Vol. 7). Advanced quantitative techniques in the social sciences.

Martin, K. J. & McConnell, J. J. (1991). Corporate performance, corporate takeovers, and management turnover. *The Journal of Finance*, 46(2), pp. 671-687.

Massa, M. & Xu, M. (2013). The value of (stock) liquidity in the M&A market. *Journal of Financial and Quantitative Analysis*, 48(5), pp. 1463-1497.

Matsusaka, J. G. (1993). Takeover motives during the conglomerate merger wave. *The RAND Journal of Economics*, pp. 357-379.

Meador, A. L.; Church, P. H. & Rayburn, L. G. (1996). Development of prediction models for horizontal and vertical mergers. *Journal of Financial and Strategic Decisions*, 9(1), pp. 11-23.

Menard, S. (2002). Applied logistic regression analysis (Vol. 106). Sage.

Moya-Dávila, F. A. & Rajagopal, A. (2020). Managing Microfinance Institutions: Analyzing How Relationships Influence Entrepreneurial Behavior. *Innovation, Technology, and Market Ecosystems*, pp. 85-107. Palgrave Macmillan, Cham.

Nguyen, H. T.; Yung, K. & Sun, Q. (2012). Motives for mergers and acquisitions: Ex-post market evidence from the US. *Journal of Business Finance & Accounting*, 39(9-10), pp. 1357-1375.

Ntim, C. G.; Lindop, S.; Osei, K. A. & Thomas, D. A. (2015). Executive compensation, corporate governance and corporate performance: A simultaneous equation approach. *Managerial and Decision Economics*, 36(2), pp. 67-96.

Pablo, E., (2009). Determinants of cross-border M&As in Latin America. *Journal of Business Research*, 62, pp. 861-867.

Park, K. & Jang, S. S. (2011). Mergers and acquisitions and firm growth: Investigating restaurant firms. International *Journal of Hospitality Management*, 30(1), pp. 141-149.

Pasiouras, F. & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance*, 21(2), pp. 222-237.

Rahman, R. A. (2002). Effects of Acquisition Characteristics on the Post-acquisition Performance of Malaysian Companies. *Asian Review of Accounting*.

Reuters (2014). *Mergers & Acquisitions Review*, Full Year 2014. Najdeno. share.thomsonreuters.com/general/PR/MA-4Q14-%28E%29.pdf.

Roll, R. (1986). The hubris hypothesis of corporate takeovers. Journal of business, pp. 197-216.

Ruback, R. S. & Jensen, M. C. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics*, 11, pp. 5-50.

Sharma, D. S. & Ho, J. (2002). The impact of acquisitions on operating performance: Some Australian evidence. *Journal of Business Finance & Accounting*, 29(1-2), pp. 155-200.

Slama, M. B.; Saidane, D. & Fedhila, H. (2012). How to identify targets in the M&A banking operations? Case of cross-border strategies in Europe by line of activity. *Review of Quantitative Finance and Accounting*, 38(2), pp. 209-240.

Song, M. H. & Walkling, R. A. (1993). The impact of managerial ownership on acquisition attempts and target shareholder wealth. *Journal of financial and quantitative analysis*, 28(4), pp. 439-457.

Sudarsanam, S.; Holl, P. & Salami, A. (1996). Shareholder wealth gains in mergers: effect of synergy and ownership structure. *Journal of Business Finance & Accounting*, 23(5-6), pp. 673-698.

Veselinova, E.; Gogova Samonikov, M.; Matlievska, M. & Sa jnoski, K. (November, 2011). Selecting and assessing a target firm for an international merger or acquisition. *Conference Proceedings, Economics and Management in the 21st Century-Solutions for Sustainability and Growth*, Vol. 3, pp. 479-563. DA Tsenov Academy of Economics-Svishtov.