Mergers and acquisitions performance within South African chemical industry: Pursuit of improved financial performance and economies of scale

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ABSTRACT

Mergers and acquisitions (M&A) are used globally by companies to improve shareholders' wealth, financial performance, and obtain economies of scale. This study aimed to examine the role of M&A on the performance of companies within the South Africa chemical industry. The study adopted a survey-based methodology to measure performance post-merger. The sample size of the study was 102 individuals, and data was gathered using an expert sampling technique via an online self-administered questionnaire. The data was analyzed using SPSS version 25. The results demonstrate that both financial performance and economies of scale are statistically significant predictors of the role of M&A on performance post-merger. The study contributes to the body of knowledge by exploiting a multidimensional nature of performance, as survey-based methodology uses both financial and non-financial parameters. It is, therefore, important for managers to understand that M&A within the South African chemical industry; are done to achieve financial performance.

INTRODUCTION

Mergers and acquisitions (M&A) is a process where two or more companies combine their assets and liabilities to form one company (Agarwal and Mittal, 2014). The process of M&A results in merged entities ceasing to exist, as well as losing their identities. They are part of corporate restructuring tools that are used by companies globally to grow inorganically. Haeruddin (2017) adds that M&A is used to achieve a competitive advantage, profitability, and growth. Jindal (2015) corroborates that M&A aid

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companies gain market share, market dominance, and improve margins. The widely stated objectives of M&A are to increase shareholders' wealth through increased financial performance (Ahmed and Ahmed, 2014; de Villiers, 2016; Thothela, 2016), and increase the synergy of merged entities through economies of scale (de Villiers, 2016 cited DePhampilis, 2008). It is against this background, that measuring the performance of merged companies has gained attention. Measuring the performance of merged entities is done to determine if the merger, indeed resulted in increased financial performance, and synergy gain (Weber, Tarba, and Oberg, 2014). On measuring the performance of merged entities, Agarwal and Mittal (2014) note that there are contradicting empirical findings, on the role of M&A on the performance of merged companies. Findings by (Abbas, Hunjra, Saeed, Ul-Hassan, and Ijaz, 2014; Ashfaq, Usman, Hanif, and Yousaf, 2014; Polemisa, and Karlis, 2016) revealed that M&A failed to achieve desired outcomes. The contrary findings to these are those by (Akenga and Olang, 2017; Oghuvwu and Omoye, 2016), who demonstrated that M&A improved the performance of the firms post-merger. This paradox around the performance of merged entities has increased the interest of scholars in studying the role of M&A on companies' performance. Weber et al. (2014) opine that the paradox around measuring the performance of M&A is based on the fact that, it is impossible to measure M&A performance using one parameter, as performance is a multifaceted variable. The methodologies used to measure performance tend to influence the outcomes of M&A. These methodologies are event-based, accounting-based, economic value-added, case study approach, data envelopment analysis, residual income approach, survey or questionnaire-based, methodologies (Malik, Anuar, Khan, and Khan, 2014). The methodologies that are commonly used in South Africa are accounting-based (Ntuli, 2017); data envelop analysis (Wanke, 2017); and event-based methodology (Nkiwane and Chipeta, 2019; Mushidzhi, 2004: 17, Smit, 2007). Nkiwane and Chipeta (2019) used a sample constituted of not only deals from South Africa but included the entire African continent.

The objective of this study was to examine the role of M&A on the financial performance, and attainment of economies of scale, of companies within the chemical industry in South Africa. Unlike the previous studies conducted in South Africa, which evaluated the performance of mixed industries (Wimberley and Negash, 2004; Viljoen, 2013), this study focused on the chemical industry. Ntuli (2017); Wanke, Maredza, and Gupta (2017) measured performance within the banking industry, using account-based measured. Osae, Fauconnier, and Webber-Youngman (2011) also measured performance using accounting-based measures on the mining industry. This study used a survey-based methodology to solicit views of Executives on the performance of merged entities. Collecting data from Executives was done due to their divergent objectives on M&A decisions. These differing objectives are either to achieve synergy (Wadhwa and Syamala, 2015) or drive empire building (Motis, 2007). This study contributes to the body of knowledge by exploiting the multidimensional nature of performance, as survey-based methodology uses both financial and non-financial parameters to measure performance. Secondly, given

the fact that Management is the one who is a driver of performance, they can easily understand the role mergers have played on the performance of merged entities (Bititci, Mendibil, Nudurupati, Turner, and Garengo, 2004). Thirdly, the study contributes to the body of knowledge by using a sample from the same industry, thereby the following observation by (Wang and Moini, 2012). Wang and Moini (2012) observed that amongst other elements to carefully consider when assessing the performance of M&A, is the sample where the assessment is being measured. The study further contributes to the body of knowledge by adding the context of the South African chemical industry. As far as the author is aware, such a study has never been conducted for the South African chemical industry. The rest of the article is structured as follows; firstly, the theory selected for the study is discussed, followed by highlighting the process of measuring performance. The hypothesis and methodology followed in the study are also discussed. Finally, the results of the study are discussed, and the conclusion, managerial implications, as well as the likely future research, are given.

LITERATURE REVIEW

M&A: Empirical findings

Nkiwane and Chipeta (2019) used event-based methodology to measure the performance of cross-border acquisitions (CBA), targeting African countries across all industries. Their study revealed an underperformance by CBA targeting African entities. In addition, the study demonstrated that acquirers from developing economies outperformed those from developed economies. Ntuli (2017) used a case-study methodology to evaluate a post-merger performance of the Amalgamated Bank of South Africa (ABSA) after being acquired by Barclays Bank Plc (Barclays). Performance was measured using accounting-based measures, with information obtained from audited financial statements for the period 2004 to 2015. The findings revealed that ABSA's financial performance and share price, improved post-acquisition by Barclays (Ntuli, 2017). Joash and Njangiru (2015) studied the performance of banks that embarked on M&A in Kenya between 2000 and 2014. They determined the role of M&A on shareholders' value and financial performance. The study used a sample of 14 banks and the data was collected using a questionnaire with open and closed-ended questions. The results of the study demonstrated that M&A in Kenya increased shareholders' value and profitability. Mahesh and Prasad (2012) measured the financial performance of Indian airline companies that merged between 2007 and 2008. The study used accounting-based measures to measure profitability, leverage, liquidity, and capital market. The results of the study revealed that there was no improvement in the performance of companies post-merger or acquisition. Papadakis and Thanos (2010) used accounting-based measures, cumulative abnormal returns, and subjective assessments of managers, to measure performance on a sample of 50 domestic merged entities in Greece. On average, the results revealed a failure rate of between 50% to 60%.

M&A: Theoretical framework of the study

Efficiency theory was used as the theoretical anchor of this study. The foundation of this theory is that entities operating within the same industry produce similar operating efficiencies. Efficiency theory purports that M&A is done to accomplish synergy gains and to increase operating performance (Wadhwa and Syamala, 2015). Wolfe, Stressman, and Manfredo, (2011) document that, efficiency is achieved when an acquirer makes use of specialized skills of target management, eliminate sluggish resources, and share expensive technology, between acquirer and target. Wolfe et al. (2011) further allude that efficiency gains occur when the merging entities promote products that are complementary to both merging companies. The promotion of the complementary products by the merging entities reduces transaction costs, and re-allocation of existing expenses. Trautwein (1990) stated that companies divest their portfolios by investing in unrelated businesses thereby increasing efficiencies due to experienced synergy. Based on the principle of efficiency, AECI is a South African conglomerate that holds companies in sectors like manufacturing, and chemical distribution, as a way to mitigate financial risk (AECI, 2017). Sehleanu (2015) documents that operational, financial, and managerial, synergies are attainable through efficiency. Financial synergy is achieved by reducing the cost of capital, resulting from increasing company size, and occurs when merging unrelated companies (Wadhwa and Syamala, 2015). In addition, financial synergy is derived from a reduced level of risks, better debt capacity, and tax benefits, emanating from combining two companies. Polyarus, Severgina, and Borzenkova (2013) state that operational synergy is achieved by combining operations of merged entities, resulting in the newly formed company offering additional new products or services. Wadhwa and Syamala (2015) measured operating performance using return on assets, return on equity, and cash flow. The results of their study did not demonstrate any significant changes in operating performance pre and post-merger. On the same token, results by (Devos, Kadapakkam, and Krishnamurthy, 2009) demonstrated that from 10.03% of synergy gained from the merged entities, 8.3% was as a result of operating performance. Trautwein (1990) posited that managerial synergy is achieved when the managerial expertise of the acquirer is superior to those of the target. Sehleanu (2015) further adds that managerial synergy is achieved by transferring the acquirer's performing management to the less-performing target. It, therefore, means that the target entity will be better managed and controlled by the acquirer's leadership.

Measuring the performance of mergers and acquisitions

The importance of measuring the performance of M&A cannot be overstated as management needs to identify if the decision to go for a merger indeed brought any value to the company. Schoenberg (2006) reported that executives believe that only 44-56% of the acquisitions they did were successful. Weber et al. (2014) further document that research is done in the field of M&A, shows that 50% of M&A have failed. In addition, Weber et al. (2014) claim that research further reveals that 83% of companies that embark on M&A did not achieve the expected goals of a merger. The measuring performance of M&A is

largely influenced by methodologies used in the process. Wang (2012) opined that it is critical when assessing the performance of mergers, to take greater care in selecting a methodology. Malik et el. (2014) identify these methodologies as; event-based, accounting-based, economic value added (EVA), case study approach, data envelopment analysis (DEA), residual income approach, and survey-based methodologies. The studies in South Africa as a developing economy, have used predominantly methodologies that are used in developed economies. These methodologies are case study (Ntuli, 2017); data envelop analysis (Wanke et al., 2017); and event study methodology (Mushidzhi, 2004; Osae et al., 2011; Smit, 2007). This study adopted a survey-based methodology, to capture the multidimensional facet of performance by measuring the views of the Executives (Papadakis and Thanos, 2010). The survey-based methodology makes use of questions based on both financial and non-financial performance parameters and it accounts for multiple motives of M&A. In addition, it is suitable on occasions where objective measures like financial or accounting measures are difficult to obtain.

Hypothesis development

According to Ahmed and Ahmed (2014); Yanan, Hamza, and Basit (2016), financial performance is determined by measuring profitability, liquidity, sales growth, and capital market. Yanan et al. (2016) contend that improved profitability is the primary objective of M&A. Abbas et al. (2014) used profitability, liquidity, efficiency, and leverage ratio, to measure the financial performance of banks in Pakistan and the results revealed no improvement in the financial performance post-merger. On contrary, Yanan et al. (2016) confirmed that M&A increased the profitability and market share post-merger. In addition, Ntuli (2017) further revealed that financial performance in the form of profitability increased post-merger. The foregoing discussion leads to the formulation of the hypothesis below.

H_1: M&A has a positive impact on financial performance.

Mahesh and Prasad (2012) mention that M&A is driven by the desire to achieve economies of scale. These economies of scale are described by Pycraft (2010) as a process where the company reduces its operating costs, as it becomes bigger. Firms achieve economies of scale by reducing fixed costs through the elimination of redundant departments, and operations. Economies of scale are achieved through horizontal mergers, as economies of scale enable companies to reduce redundancy; from personnel, office, space, accounting, and other administrative costs. They can be as a result of reduced cost of buying, which is due to increased bargaining power in dealing with suppliers. Mahabubur (2015) found that, merged entities experienced economies of scale via selling costs, general costs, and administrative costs. The foregoing discussion leads to the formulation of the below hypothesis.

H_2: M&A has a positive impact on economies of scale.

RESEARCH METHODOLOGY

Sample population and sampling frame

The population size of the study was 120 individual Executives and Senior Managers in the form of President, Chief Executive Officers (CEO), Managing Directors (MD), and Directors. The sample size was 102 Executives and Senior Managers, with a sampling frame consisting of all the transactions that took place in South Africa between the years 2006 and 2016. The transactions must have been approved by the Competition Commission of South Africa (CompComSA). Lastly, the merged companies must have operations within the Republic of South Africa. Pandey and Pandey (2015), mention that the sampling unit represents small parts of the population, and for this study, the sampling unit was individual Executives and Senior Managers.

Data collection and instruments used

The data of companies that went through M&A in South Africa were obtained from the CompComSA website, and it was gathered using the non-probability sampling method through purposive or expert sampling technique. Etikan, Musa, and Alkassim (2016) note that purposive sampling permits the use of subject matter experts that are knowledgeable on the subject under investigation to participate in the research survey. The cross-sectional data was gathered via an online self-administered questionnaire, made of closed-ended questions. The questionnaire was based on a five-point Likert scale and the questionnaire was divided into two sections. Likert scale items were affixed 1 = strongly disagree and 5 = strongly agree.

Measures

Measures are major items that their relationship is being measured or observed in research. For this study measures were; role of M&A on performance, financial performance, and economies of scale. The desired role of M&A differs from Manager to Manager. The most cited role of M&A is to improve financial performance, improve non-financial performance, and increase synergy. Synergy can result in increased economies of scale. Financial performance measures how the company has increased its profits, return on assets, return on investment post-merger (Bhardwaj and Bisht, 2016). Motis (2007) described economies of scale as an outcome of two companies combining their assets to take advantage of reduced costs due to an increase in product scale. Financial performance was measured with eight items, economies of scale with five items, and role of M&A with four items.

Data analysis

The data from the questionnaire was audited, cleaned, and summarised into a Microsoft Excel spreadsheet. The data was then transferred into SPSS version 25 for further analysis. It was then evaluated for internal consistency and reliability. The descriptive statistics were calculated to present the Likert scale data of all the measures. After measuring the reliability of the measurement scales, the researcher further computed the overall mean scores of the measures. To prepare for hypotheses testing, multiple regression analysis was determined to measure the extent to which the two independent

variables predict the dependent variable. Multiple regressions were conducted after ensuring that all assumptions associated with this practice were met.

RESULTS

Demographic profile of respondents

Table 1 demonstrates demographic information of the 56 respondents in terms of gender, age, contribution in M&A decision, position held within the company, years working within the company, qualification, and lastly, ethnicity. The results in Table 1 reveal that three-quarters of the respondents were males. The results demonstrate that 28.6% of the respondents were of ages between 41- 45 years old. It is evident from Table 1, that 73.8% of the respondents did have a contribution to the M&A decision. The results also reveal that 50% of the participants were managers. The results further show that 32.1% of the respondents have been with the company for duration of six to ten years. It is further demonstrated by the results that 60.7% of the respondents have a post-graduate qualification, 33.9% have a Master's degree, 25% have an Honours degree, and 1.8% have Ph.D. Lastly, 37.5% of the respondents were Africans, 33.9% were White, and 21.4% were Indians.

TABLE 1: DEMOGRAPHIC PROFILE OF RESPONDENTS

Description	Frequency	Percentage
Gender		
Female	14	25
Male	42	75
Age		
25 -30	1	1.8
31-35	1	1.8
36-40	10	17.9
41-45	16	28.6
46-50	14	25.0
51-55	8	14.3
56 and above	6	10.7
Part of the M&A decision		
Yes	41	73.8
No	15	26.8
Position		
Managing Director	3	5.4
Chief Operations Officer	3	5.4
Director	11	19.6
Executive Manager	11	19.6
Manager	28	50.0
Years with the company		
0-5	12	21.4
6-10	18	32.1
11-15	17	30.4
16 and above	9	16.1
Highest qualification		
No formal qualification	1	1.8
Matric	5	8.9
Diploma	6	10.7
Degree	10	17.9
Honors degree	14	25.0
Master's degree	19	33.9
PhD	1	1.8
Ethnicity		
African	21	37.5
Asian	1	1.8
Coloured	2	3.6
Indian	12	21.4

White		19	33.9
Prefer not to say		1	1.8

Exploratory factor analyses

Before performing exploratory factor analyses (EFA), the fitness of data was assessed using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity (Pallant, 2016). The accepted range for KMO is from 0 to 1, with 0.5 being a cut-off point. Values closer to 1 indicate close correlation patterns (Tabachnick and Fidell, 2014). Bartlett's test of sphericity is considered significant at $p \leq 0.005$ (Pallant, 2016). The KMO value for this study was 0.722, signifying the factorability of the factor matrix. Bartlett's test of sphericity was significant at (p=.000), which is less than 0.001. The results of both KMO and Bartlett's test of sphericity indicate that the data from this study is fit as a candidate for factor analysis as there is enough correlation. EFA was conducted to establish the construct validity of the study. The constructs were extracted using principal axis factoring (PAF), as PAF allows the dormant variables that cause the clear variables to co-vary. PAF permits for discrimination between the shared and unique variance (Pallant, 2016). The "rotation of factors is a process by which the solution is made more interpretable without changing its underlying mathematical properties" (Tabachnick and Fidell, 2014:662). Varimax rotation technique was selected as it permits the researcher to reduce the number of variables that had high loadings on more than one factor. As illustrated in Table 2, the first construct was composed of 8 items. Three items were initially meant to measure non-financial performance, but this factor was dropped as only two items loaded on it. Dropping factor was done following the recommendation that the number of items on each factor to be retained should be at least three (Tabachnick and Fidell, 2016).

TABLE 2: ROTATED FACTOR MATRIX

Item	Facto 1 Financial performance	Factor 2 Economies of scale	Factor 3 Role of M&A
FP 2.5	0.914		
NFP 3.1	0.911		
NFP 3.2	0.849		
FP 2.1	0.793		
FP 2.4	0.788		
FP 2.2	0.786		
Syn1.10	0.773		
FP 2.3	0.647		
Syn 1.4		0.822	
Syn 1.5		0.812	
Syn 1.2		0.764	
Syn 1.6		0.661	
Syn 1.3		0.620	
role 5.2			0.912
RoleMA 5.3			0.711
role 5.1			0.674
Cronbach's Alpha	0.741	0.647	0.681
Average variance extracted (AVE)	0,659	0,548	0,597

The second factor had 10 items, which intended to measure synergy and was renamed to economies of scale, based on the recommendation that the factor must be named using the first two high loading items (Hair, Black, Babin, and Anderson, 2014). Items on factor three were initially four, but one item was dropped as it loaded below the recommended cut-off point of 0.5 (Tabachnick and Fidell, 2016).

Reliability of constructs and validity

Assessment of internal consistency and reliability of the factors presented in Table 2, was done using Cronbach's alpha. Cronbach's alpha is interpreted based on the values achieved, with higher values demonstrating the acceptability of the results (Pallant, 2016). Values below 0.6 indicate poor internal consistency and reliability, with a value between 0.6 and 0.7, indicating fairness of reliability. Good values are between 0.7 and 0.8, whilst excellent reliability is achieved when the values are between 0.8 and 0.95. For this study, Cronbach's alpha values of all the factors were above 0.60 which demonstrates acceptable internal consistency and reliability (Wiid and Diggines, 2013). The validity of the instrument was measured using discriminant validity and convergent validity. According to Tabachnick and Fidell (2014), discriminant validity indicates the extent to which scores of the instrument are unrelated. Hair et al. (2014) opine that the best tool to assess discriminant validity is average variance extracted (AVE). Acceptable AVE values are those that are greater than 0.50, with values above 0.8 being considered very well (Tabachnick and Fidell, 2014). As demonstrated in Table 2, all the values for this study are acceptable as they are between 0.50 and 0.65. Convergent validity was evaluated by determining correlation amongst the items of the factors of the instrument. Creswell (2014) states that convergent validity looks at whether each measure in a scale is highly and positively correlated with other measures of the same construct. As demonstrated by the factor loadings in Table 2, all factors were above 0.5, thereby indicating a high correlation between the items of the constructs.

Measuring multiple regression

Multiple regressions explore the extent to which independent variables predict a dependent variable (Tabachnick and Fidell, 2014). For this study, multiple regressions predicted how well financial performance, and economies of scale, predicts the role of M&A on the performance of companies within the chemical industry in South Africa. Pallant (2016), documents that there are assumptions that must be met before performing multiple regression. The assumptions are of normality, linearity, outliers, and homoscedasticity revealed no violations in the data. Multiple regression results demonstrate that the model explains 66.4% of the variance in the role of M&A on the performance of companies within the chemical industry in South Africa. The high percentage validates that these variables are amongst the main variables that are predictors of the variance on the role of M&A on performance post-merger. The independent variables examined in this study yielded a coefficient of determination R^2 of 0.664 and adjusted R^2 of 0.655 clarifying the predictive capability of the regression model. Both variables; financial performance, and economies of scale, are statistically significant predictors of the role of M&A on

performance post-merger. ANOVA was performed to examine the statistical significance of results and the significant fit of the regression model (Tabachnick and Fidell, 2014). The results reveal that ANOVA is statistically significant as the p-value is smaller than 0.001 (Pallant, 2016). The standardized regression coefficients of the predictor variables of the regression model are shown in Table 3. The Beta values demonstrate the importance of each predictor in the regression model. As demonstrated in Table 3, financial performance has the strongest unique contribution (Beta = 0.543), with economies of scale showing a little less (Beta = 0.371).

TABLE 3: PREDICTORS IMPACT TOWARDS ROLE OF M&A

Model	Standardized Coefficients	t	p-value
	Beta		
(Constant)		2.282	0.025
Financial performance	0.543	6.684	0.000
Economies of scale	0.371	4.571	0.000

Pallant (2016) documents that when two or more independent variables are highly correlated, the data present the existence of multicollinearity and can compromise the multiple regression effects. Multicollinearity is assessed by calculating variable inflation factor index (VIF) and tolerance values. According to Pallant (2016), acceptable values of tolerance values are values not smaller than 0.10 and values not greater than 10 for VIF. For this study, multicollinearity was not a problem in the multiple-regression model, as VIF values were less than 2 and tolerance values were above 0.6.

Hypothesis testing

The study initially endeavored to test three hypotheses on the relationship between the role of M&A on the performance of companies within the chemical industry in South Africa towards three predictors. After EFA was conducted, one variable was dropped with one reviewed. The revised hypotheses are presented in Table 4. It is demonstrated in Table 4, that both revised variables have supported hypotheses, with financial performance (Beta = 0.543; p<0.000) and economies of scale (Beta = 0.371; p<0.000). It can be concluded that both economies of scale and financial performance, have an impact on the role of M&A on the performance of companies within the chemical industry in South Africa.

Table 4: The hypothesis results of tested variables

Alternative hypothesis	Results
H1: Economies of scale have a positive impact on the role of M&A on the performance of companies within the chemical industry in South Africa.	H_1 supported
H2: Financial performance has a positive impact on the role of M&A on the performance of companies within the chemical industry in South Africa.	H_2 supported

DISCUSSION AND MANAGERIAL IMPLICATIONS

The main findings of the study demonstrate that financial performance, and economies of scale, is central to the role of M&A on the performance of companies within the chemical industry in South Africa. The

findings reveal that financial performance is the most desired role in M&A, by Managers in the South African chemical industry. The results indicate the need by Executives and Practitioners, before embarking on M&A, to understand that within the chemical industry in South Africa, the main objective is to achieve economies of scale and improve shareholders' value through increased financial performance. Financial performance appeared to be the most essential predictor of the role of M&A on the performance of companies post-merger. Based on the results of this study, financial performance can be achieved through increased sales growth, increased market share, increased market power, and increased customers. According to Rahman and Lambkin (2015), sales growth demonstrates that the company has increased its customer base, added new lines, and new products. In the case of M&A, it may be that the merger has resulted in an increased customer base, resulting in the addition of new lines, and new products. Sales growth further impacts positively on the profitability of the organization. The results agree with the widely available literature on M&A, which claims that increased financial performance is one of the motives behind M&A. Such studies are those by Ogada, Njunguna, and Achoki (2016), whose findings demonstrated that banks in Kenya experienced financial performance through the synergy. Contrary to the above-mentioned findings, are findings by Ashfaq et al. (2014); Gupta and Banerjee, (2017); which revealed that M&A deteriorated the absolute financial performance? In the same token, Abbas et al. (2014) reported that M&A did not improve financial performance post-merger. It is worth mentioning that, these contradictory results are based on different methodologies which apply different parameters to measure financial performance. The findings of this study do not represent a strong contribution of the achievement of economies of scale on the role of M&A on the performance of companies post-merger. It is worth remembering that economies of scale can be achieved by reducing redundancy in auditing services, accounting services, personnel, managerial efficiencies, and office space. They are one of the widely stated objectives of companies going for M&A (Abbas et el. 2014; M. Ahmed and Ahmed, 2014). It may be that in the case of the South African chemical industry, the emphasis is more on increasing financial performance than obtaining economies of scale. Secondly, it may be the reason why economies of scale were not achieved is M&A transactions were from unrelated mergers, which is contrary to what (Wadhwa and Syamala, 2015) believe, that related mergers are undertaken to achieve economies of scale, thereby resulting in the reduction of material cost.

CONCLUSION AND RECOMMENDATION

Mergers and acquisitions are still the most preferred strategic tool to increase financial performance and achieve economies of scale. It is demonstrated by this study, that M&A in developing countries like South Africa, play the same role in increasing financial performance and achieving economies of scale as in developed economies. Increased financial performance is achieved post-merger, as the merged entity can increase sales, increase its customer-based, and add new product lines. Different methodologies are

used to measure the performance of M&A; hence it is essential to both scholars as well as practitioners to indicate the methodology used to measure performance when reporting the results.

LIMITATIONS AND FUTURE RESEARCH

The first limitation of the study is that a non-probability sampling technique was used to collect data; hence the study cannot be generalized to all M&A that took place within the South African chemical industry. The survey-based methodology presents a limitation due to staff turnover, as the majority of executives usually leave the company within a period of one to two years post-merger. The departure of the executives is higher on executives of the target compared to the executives of the acquirer (Salama, 2015 citing Schweiger and Very, 2003). Weber et al. (2014) further corroborate that Senior Managers tend to leave the target firm within the first year of the acquisition. Some of the transactions were initiated by companies out of the Republic of South Africa, and the view of the study is only from South African-based executives. Future samples can be done to include views of the executives that are not based in South Africa. The sample size of the study presents a limitation, a small sample size limits the robustness of the results. Few constructs were used in this study, creating the assumption that motives for M&A transactions in the sample were more or less driven by similar objectives which might not be the case. Future research could expand performance constructs, to cover more dimensions of performance.

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