MERGERS AND ACQUISITIONS: A BUSINESS STRATEGY FOR GROWTH AND CONSOLIDATION: A CASE STUDY OF EMB

Craig Jordaan
Graduate of Regent Business School, Durban, South Africa
A. Mentasti
Academic and External Supervisor Attached to the Regent Business School, Durban, South Africa
Anis Mahomed Karodia (PhD)
Professor, Senior Academic and Researcher, Regent Business School, Durban, South Africa

ABSTRACT

Since the 2008 global financial crisis, building and construction industries across the globe have struggled to realise any substantial form of recovery with subdued activity forecast by most economists (Lembo, 2013). In this environment, EMB, a predominantly building company is looking towards a merger and acquisition opportunity to realise sustained revenue streams and growth through the acquisition of a construction company predominantly involved in civil engineering disciplines. The objective is to increase their participation in the construction industry, from their current expertise and involvement in large commercial type building, to the inclusion of civil construction works, such as roads and large scale concrete works. The study assessed mergers and acquisitions as an appropriate strategy for growth and consolidation within the South African construction industry and found a particular target company to have the potential to meet all the merger and acquisition requirements pertaining to EMB.

Key Words: Mergers; Acquisition; Business Strategy; Growth; Consolidation; Financial Crisis; Construction Industry

Introduction

Elias Mechanicos Building and Civil Engineering Contractors (EMB) is a building contractor located in Kwa-Zulu Natal and operating throughout the country and other African countries such as Mozambique and the Democratic Republic of the Congo (DRC). The company is involved in many aspects of the construction industry including acquisitions of certain suppliers. In recent years, since the 2008 global financial crisis, construction firms have had to adapt to highly competitive market conditions with an oversupply of competing firms and a decline in projects going to market.

It is in this environment that EMB seeks to increase its market share in the construction industry by acquiring new expertise in areas where it currently has little or no market involvement. This study seeks to investigate the merits such an opportunity and its potential for value creation and risk diversification through acquiring a certain target company.

LITERATURE REVIEW

Introduction

A literature review comprises of an examination of scholarly information and research-based information pertaining to certain topic (Dawidowicz, 2010:6). This chapter presents existing literature which has been used and is relevant to the study. The principal of Mergers and Acquisitions (M&A) are explained including the reasons for and their limitations in achieving certain objectives. The strategic aspects of mergers and acquisitions are also examined in the context of the current state of the construction industry. Valuations of target companies in mergers and acquisitions are also examined providing a starting point for which to determine the merits in EMB pursuing the target company.

Mergers and Acquisitions

Mergers and Acquisitions is a general term which refers to major strategic initiatives undertaken by many organisations in which two companies are combined to achieve strategic and business objectives.

The terms mergers and acquisitions are usually used together as though they where synonyms yet traditionally they hold different meanings. According to Thompson, Strickland and Gamble (2010) a merger is mostly seen as a combining of equals which is transferred to a new company (new-co) or takes a new name, where as an acquisition is a combination in which one company purchases or absorbs another. The blurring of difference between the two terms is often seen as a result of their economic outcomes being similar.

McCure (2013) states that the real difference between the two terms in contemporary business understanding describes whether the transaction is friendly or hostile, and how it is announced. The emphasis is on how the transaction is communicated to and received by the target company's board of directors, shareholders and employees.

In this study, the composite term `Mergers and Acquisitions' will be used to denote the friendly purchase or rescue and amalgamation of the target company by EMB.

Types of Mergers and Acquisitions

For strategic business explanations, M&A are often categorised depending on whether the merging firms are in the same or different industries and on their positions in the corporate value chain.

Vertical mergers occur between firms that operate at different stages of the production or value chain and categories consist of backward integration or forward integration. DePamphili (2012:21) provides the following explanations; in backward (or upstream) integration the firm acquires a supplier and in forward (or downstream) integration a distributing operation is acquired.

Horizontal mergers occur between two firms in the same industry. These are commonly found in mature industries experiencing little growth or even market shrinkage, as firm consolidate in order to sustain certain levels of efficiency and competitiveness.

Conglomerate mergers occur between companies in unrelated businesses and the strategic reason is mostly for growth with a diversified risk portfolio.

EMB would pursue a horizontal type merger as it seeks to acquire a target company within the same industry, that has related yet different expertise and qualifications in order for EMB to expand its market participation

Corporate Strategy and Strategic Analysis

A company's strategy consists of the competitive moves and business approaches that are employed to grow the business, attract and retain customers, compete successfully, and achieve target levels of organisational performance (Thomson, Strickland and Gamble: 2010:6). Strategy may be regarded as the answer to 'how' a company is going to achieve its business objectives and is primarily focused on competitive advantage. Strategic management provides direction to an organisation at a high level, such as whether or not to pursue an acquisition, it also seeks more detail as to the objectives that need to be realised from the acquisition.

Schack (2009) describes strategic analysis as the non-financial value-drivers that effect future growth and profit potentials. Accounting data, such as annual financial reports, show a historic view of financial performance, this would be the only information required to determine future cash streams in a static economic environment. However, Johnson and Schutte (2012) suggest that for a more accurate and dynamic model one must supplement historic performance with an analysis of non-financial drivers in order to determine plausible future scenarios. This involves the macro environment as well as the immediate competitive market environment.

Mergers and Acquisitions as a Strategy for Growth and Consolidation

Howes (1986) attribute the main strategic advantage for M&A to being the speed at which growth can be achieved with access to new customers or market segments. It is also stated by Bragg (2011) that the most likely reason given for M&A's as a strategic option is that of achieving growth sooner than it could be realised through internal or organic growth.

The strategic options for achieving growth may be broadly chosen between restructuring activities such as M&A or internal mechanisms through organic growth which, according to Morag (2011), is generally slower and mostly limited to the growth rates of the field. Thus, in a shrinking market EMB will be better off considering the option of M&A

According to Carrillo (2001), construction companies have used M&A's to accelerate growth, reduce the effects of the construction cycle, enter into new markets, as well as spread risk. It is common in mature industries or markets experiencing little growth, such as the current post 2008 construction environment that companies seek to remain efficient and profitable through means of consolidation. This is the result of a fiercely competitive environment where total capacity becomes larger than demand (DePamphilis, 2012).

In his in-depth study into M&A in the construction industry Carrillo (2001), described the strategic advantage of M&A as providing a solution to cope with the changes within the global construction environment. He describes this advantage in M&A as being realised by organisations seeking to undertake a wider range of construction services. This strategic objective remains as relevant post the global financial crises of 2008 as it was in 2001. EMB must consider M&A as a strategic option for the company's growth plans and as a strategy for sustainability in a shrinking market.

Value Creation through Mergers and Acquisitions

The underlying objective in pursuing M&A, being to create value, may be achieved through various means which when realised are referred to as synergy benefits. explained by Johnson and Schutte (2012) place these in the following four categories: revenue enhancement, operational synergies and cost savings, financial synergies and growth synergies.

Revenue Enhancement:

In combining organisations the larger entity created may be able to leverage its combined market resources and capabilities leading to greater market share and increased revenue.

Further revenue may be created by providing a new offering which bundles both entities expertise and offerings, such as a building company seeking to provide a turnkey project on construction activities that involve other disciplines (Sudarsanam, 2007).

When a combined organisation is able to create lower input costs it may create an absolute value advantage over competitors which could force them out of the market or to lose certain market share (Lipczynski, Wilson and Goddard, 2009).

Operational Synergies and Cost Savings:

Many cost saving opportunities may arise when combining firms through identifying commonalities and reducing duplication. A common example is that of research and development as well as many administrative and financial functions that may lead to lowering overheads and other costs that ultimately provide increased profitability. Facilities management opportunities may include economies of scale and economies of scope as well as spreading fixed costs over increased production outputs.

Financial Synergies:

According to Koller (2009) companies create value by investing capital they raise from investors in order to generate future cash flows at rates of return which exceed the cost of capital. Financial synergy may be achieved through M&A by realising lower costs of capital which leads to increased company value (Johnson and Schutte, 2012). This may be achieved through increased borrowing capacity and leverage as well as internal financing opportunities.

When companies whose cash flows are not well correlated are combined the opportunity for internal financing becomes greater. This is evident in the construction industry where building works allow for high upfront turnovers but low profit margins, and civil engineering works have far greater margins yet require careful cash flow management through lower turnovers and late payment periods in relation to works completed. Together the two disciplines are able to realise financial synergies through internal financing.

New Growth Opportunities

Firms may also have opportunities to obtain sales for each other through involvement with each other's clients and as preferred suppliers or distributors. DePamphilis (2012) refers to these as cross selling opportunities and access to new distribution channels. EMB would be able to utilise its existing cross border clients to create a geographic expansion for the target company.

It is important to understand the synergy benefits of a merger when working out a value to an acquisition as these are not to be included in the intrinsic value but ultimately constitute the negotiation range.

Valuation Methods

Although expressed through different terminology, the three most significant approaches for valuations of companies are the following: Asset Valuations, Discounted Cash Flow Methods and Market Valuations (De Lange, 2013). The asset valuation method adds the value of the company's assets and subtracts its liabilities. The discounted cash flow method forecasts future cash flows of an asset, and discounts them at a given rate in order to derive at the asset‘s present value. Market valuation methods look at recent sales of similar businesses and use the likes of earnings multiples for comparative analysis (Common Wealth Bank of Australia, 2013).

De Lange (2013) of the South African Institute of Charted Accountants and currently a company valuation practitioner and lecturer determines real company values in the M&A process by assessing the three elements above to determine a holistic picture which enables a valuation to be determined:

- Net Asset Value (NAV): The NAV for the target company will be assessed as of the 30th of August 2013 to provide a snap shot, using an income statement approach, of the company and its financial position with particular significance being the recoverable value of tangible assets under a fire sale.
- Discounted Cash Flow (DCF): The DCF will be analysed as described below using the target company's current contracts and expected contracts as a comparison for the intrinsic value and the synergy added value required for setting the negotiation range.
- Market valuation and earnings multiples : The Price to Earnings multiple (PE) based on the target companies 2013 AFS earnings will be compared to current market activity in both the Johannesburg Stock Exchange (JSE) and global emerging markets within the construction industry. Values for market comparisons will be derived mostly from Sharenet (for South African Companies) and Aswath Damodaran from the Stern School of Business at New York University, as is common practice (De Lange :2013).

The Discounted Cash Flow (DCF) method determines the basis for De Lange's value determination with the Net Asset Value (NAV) adding to the DCF. The Price to earnings ratio functions more as a check on consistency in the DCF method cash flow forecast. Finally comparative company sales are considered only where close similarities may be found and this is viewed only as addition information.

Ward (2013) states the most practical methods of company valuation in her working experience are Asset-based approaches (NAV), earning value approaches (DCF) and market value approaches (comparative company).

According to Nassala and Rottenburg (2011), valuation methods come down to equivalent cash flows, where all methods seek to determine the value of an asset which is essentially equal to the present value of the cash flows that it will generate in the future. This methodology can be used to value single projects, investments and also whole companies. Benninga and Sarig (1997) further state that the most important aspects relating to the present value of cash flows is the timing of the cash flow and the level of risk.

The DCF model is selected as the primary corporate valuation model in this study.
The capital asset pricing model (CAPM) is chosen to estimate the cost of equity for the company which forms part of the weighted average cost of capital (WACC) in determining the overall discount

rate required for the DCF. The net asset value of target company will also be assessed as well as certain accounting multiples to create more complete picture of the value of target company.

Price to Earnings Ratio (P/E)

The P/E ratio is assessed as a complimentary measure to create a more holistic view to the valuation than that of the DCF alone, for this purpose an income statement approach is used. The current price of comparable shares and the target companies latest reported earnings will be used with the following approach.

1. Normalised Earnings:
$$\begin{aligned}&Last\ Years\ Earnings\ Before\ Tax\\&\pm adjustmaents\ for\ abnormal\ items/trends\\&\pm inflation\ adjustmaents\\&- Tax\ at\ normalised\ rate\\&= Normalised\ Earnings\end{aligned}$$

2. P/E ratio:
$$\begin{aligned}&Market\ P{:}E\ ratio\\&\pm adjustmaents\ for\ size, risk\ profile, growth\ prospects, liquidity,\\&\qquad nature\ of\ the\ firms\ assets\ and\ growth\ prospects.\end{aligned}$$

3. Entity Value:
$$= Normalised\ Earnings\ \times P{:}E\ ratio$$

Discounted Cash Flow (DCF) Valuation Method

In order to complete the DCF valuation the following components need to be determined:

1. Free Cash Flow (FCF)

   FCF is defined by as the cash generated that by a firm's operations that are free, or net, of the cash necessary for reinvestment in new non-current assets and additional working capital. (Firer, Ross, Westerfield, and Jordan: 2008)

   As current contract information on the target company is available to EMB the cash flows in the DCF will be calculated according to the actual contract schedules and then checked against the Annual Financial Statements (AFS).

   The FCF will be determined as follows with historic values taken from the 2010 to 2013 AFS. In the calculations for the target company EBITDA after tax refers to the sum of the first two lines below.

   EBIT x (1-Tax rate)
   + Depreciation & Amortization
   - Changes in Working Capital
   - Capital expenditure
   = Free Cash Flow

2. The Capital Asset Pricing Method (CAPM)

The CAPM identifies the relationship between risk and return and is used to calculate the cost of equity required in determining the company's overall WACC. It is calculated as follows:

$$R_E = R_f + \beta_E(E(R_M) - R_f)$$

Where

- R_f = *Risk-free rate*: This will be taken as the average rate between the South African government bonds R186 and R209 available from the rand merchant bank online (www.rmb.co.za)

- *E (R_M) – R_f = Market risk premium*: R_M is the market risk which is the expected performance of the market within which the companies are based, such as the JSE. According to De Lange (2013) and Beech(2013) the long term market return for the JSE is taken as 14% for RSA company valuation purposes and is expected to 14.75% over the next five years according to Damodaran (2013).

  β = Systematic risk of asset : The beta factor is the measure of a share's volatility in terms of market risk. The Market Beta for construction companies listed on the JSE is retrieved from Reuters and Bloomberg with validation and values from global emerging markets within the same industry taken from Damodaran (2013).
  The beta factor of the market as a whole is taken to be 1. This means: Results for shares which are greater than 1: imply a greater degree of volatility. Results which are less than 1: imply a lower degree of volatility. It should then be possible to predict what will happen to the return on a share if there is a change in the market return (Firer, Ross, Westerfield, and Jordan: 2008)

3. Weighted Average Cost of Capital (WACC)
   WACC is used to discount the free cash flow in the DCF method. It is the rate of return that investors expect from investing in a given company instead of companies with similar risk. (Brealey & Myers et al, 2007). WACC uses an average of the cost of equity and cost of debt. Where equity may include different costs for funds raised through preference shares and ordinary shares. The formula is as follows:

$$WACC = \left(\frac{E}{V}\right) \times Re + \left(\frac{D}{V}\right) \times Rd \times (1 - Tc)$$

   Where:
   - Tc is the company tax rate
   - E is the market value of the firm's equity
   - D is the market value of the firms Debt
   - V = E+ D (E/V is the portion of the firms financing that is equity and D/V the portion that is Debt)
   - Re is calculated as above using the CAPM
   - Rd is taking from the firms existing rates of borrowing.

The target company's debt and equity are taken from its structure as of 30 August 2013. Shareholder volumes are know and the cost determined through CAPM above with debt through borrowings from financing institutions also know with costs being the interest rate currently charged to the target company.

In accordance with De Lange (2013), the following steps have been used to complete the DCF using the WACC above to discount the free cash flows.

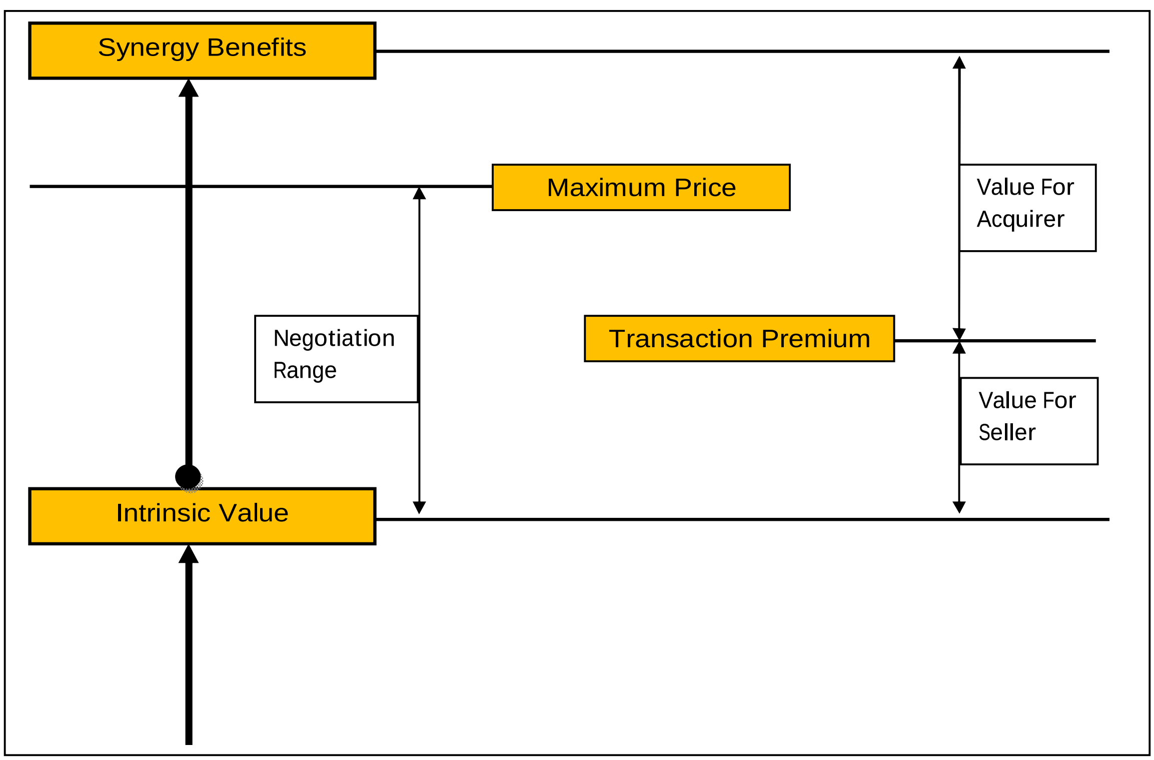
- FCF has been forecast for a period that is deemed to produce reasonably accurate estimates which amounted to 19months according to current and expected contracts in DCF1.
- Anticipated growth in the FCF after the forecast period above has been approached in DCF2 through a more market and income statement focused model in DCF2.
- Determining the WACC based on the required rate of return (Re) and debt structure as described above.
- Applying the WACC as the discount rate for the DCF.
- The WACC is then applied, with the assumed sustainable growth estimate to be equivalent to long term GDP growth of 2.1%, to calculate and then discount the terminal value of FCF after the forecast period.

The DCF method is the preferred method of valuation practitioners as it focuses most directly on cash flows which provide the most realistic measure of company value. (Beech, 2013; and De Lange, 2013). The DCF method also adds value in that the analyst must perform the exercise of identifying a company's value drivers and M&A synergies as well as examining its growth and risk (Damodaran, 2010). The DCF method is generally taken as the best method for company valuations provided that the company is profitable. (Russell, 2007).

The limitations of the DCF method include its large dependency on WACC and the assumptions pertaining to the free cash flow forecast as well as continued growth. Nassaka and Rottenburg (2011) draw attention to the fact that small changes in these results in large value differences and that this method is open to manipulation from factors including the interpretation and determining of the company's future cash flows and discount rates. As with other valuation methods the DCF must be used with a certain amount of caution.

Deal Considerations and the Negotiation Range

Figure 2.1: The Negotiation Range



Source: SAICA (2013:113)

The synergy benefits in the figure 2 above represent the maximum synergy value that can be realised when combining the two companies. Intrinsic value is the value of the target company that represents the current operation as an independent entity prior to any merger taking place.

The maximum price may never exceed the synergy benefit value as this would require overpaying the seller and not being able to realise a positive return on the investment. The negotiation range therefore falls below the synergy benefits and above the intrinsic value. The transaction premium equates to the value created for the seller through the transaction.

As part of the complete valuation process a due diligence would need to carry out on the target company, the valuator must then take the findings of the due diligence into account and revalue the intrinsic and synergy benefits accordingly.

The fundamentals of creating a deal, according to DePamphilis (2012), are about satisfying as many of the primary objectives of the parties involved while whilst determining how risk will be shared between them. The most common deal structure closing deliberations are around the following items:

- Purchase price
- Risk sharing
- Using a combination of stock and cash as payment
- Having the seller finance a portion of the purchase price, by putting in amounts for reasons such as working capital, and having a buyback option on shares issued in lieu of these amounts.
- Having a certain amount or percentage of the purchase price contingent on realising certain future events which mitigate risk, such as profit warrantees.

DePamphilis (2012) lists details that must be accounted for in planning a deal structure:

- *The Acquisition Vehicle*: The legal entity to acquire or merge with the target company, such as forming and registering a new company.
- *Form, amount and timing of payment*: choices include; cash or Debt, Shares, Real property, Earn-out/ contingent payout.
- *Form of Acquisition*: What is acquired, how ownership is conveyed?
- The post closing organisation: The entity managing the business post closing of the transaction.
- *Legal form of the selling Entity*: Options such as (Pty) Ltd or other entity registrations.
- *Accounting Considerations*: Earnings impact on contingent payment agreements, goodwill impairment and valuation date.
- *Tax Considerations*: Impact on seller shareholders, impact on new-co shareholders and avoiding over (double/triple) taxation.

The size and structure of the target company renders this process as relatively simple in comparison to that involving multiple parties in large transactions. However in all transactions plans will be amended and reworked as approvals must be obtained and sources of financing and forms of payment secured. This process takes place as negotiations begin and at this stage the acquiring firm must have clear strategic directive on how to align the potential transaction or when to walk away.

RESEARCH METHODOLOGY

The method used for this case study was through qualitative interviews (open-ended and descriptive) and the collection of financial records and contract information. The interviews gained primary data as to the strategic aspects of the merger and acquisition opportunity. This included the objectives of EMB and additional value through analysing potential synergy effects. Analysis of the financial and contract information allowed for an accurate forecast on the target companies future cash flows and historic performance. These enabled valuations to be made that will assist in answering the research questions and putting values to the negotiation range.

The Research Methodology and Strategy

Research methodology sets out and justifies techniques used for collecting, analysing and interpreting data. The choice of method depends on the type of data being sought from whom and under what circumstance (Bernard, 2000). In selecting a method constraints of time and resources have also been considered.

The research consists of both qualitative and quantitative research types. Quantitative research is focused at the financial data surrounding the proposed M&A opportunity whilst strategic input from senior managers falls under the qualitative classification.

To answer the problem statement, this project consists of two methodologies; interviews, and a case study. The goal is to understand and determine the likely success given a specific opportunity for an acquisition, through strategic management viewpoints as well as financial history and forecasts. The research population is confined to the EMB group's senior management and the sample includes all senior management with strategic knowledge and input with EMB group.

As mergers and acquisitions are based on the decision making of a company by its senior managers, a case study method is most applicable on this event. The case study is necessary in assessing the performance of the Target Company and acquirer and determining the value of Target Company to the acquirer. One concern of the case study method is that it gives limited basis for scientific generalization (Yin, 2009:15). This factor is minimised as the objectives pertain to a specific company problem and not entire populations and generalising theory is only applied to the methods of evaluation and not drawn from conclusions of the outcomes.

Target Population and Sample

The target population is the senior management team at EMB group which consists of eight individuals. The selected sample consists of five individuals who constitute the senior management team with strategic input. They are all highly skilled and competent with over 10 years experience in their fields of expertise; they have been selected as the sample to provide data pertaining to their specific areas of knowledge and expertise.

The sample consists of the following: General Manager, Commercial Manager, Financial Officer, Business Process Manager and the Estimating and Procurement

Limitations of the Research

To examine if the success of the potential transaction in creating value an extensive empiric study of the performance of the acquiring and acquired company over time is a possibility. However such a study would have fallen outside of the time constraints and available resources confined to this project and hence, the research focus is limited to assessing whether or not EMB should pursue the full M&A process which includes, amongst other resource demands, the likes of costly due diligence exercises, significant staff involvement and immense legal fees. Another limitation is the open ended qualitative type structure to the questions, this does allow for subjectivity in interpretation and in quantifying responses statistical evidence.

RESULTS, DISCUSSION AND INTERPRETATION OF FINDINGS

This section reports on the results of the study by assessing and ordering the data to form meaningful information that is required to answer the research questions. The responses from the interviews are grouped and relevant information extracted and ordered to explain the reasons for EMB pursuing M&A's. The case study data is assessed in order to determine the potential ability of the target company meeting EMB's M&A criteria.

The strategic need for restructuring EMB through acquiring a civil engineering company is the directive of the managing director, commercial manager and the business process manager; this was expressed through the interviews as follows:

- EMB needs to participate in all areas of construction activity as specified in the Nation Development Plan. These include new areas of expertise such as roads and major civil works (including large scale concrete works)
- EMB must cross borders to other African countries to take advantage of growth and greater margins which include civil works.
- EMB needs a strategic objective to survive the current industry and market conditions. The strategy needs to consider the slow economic recovery of the next three years and the areas in which government is going to spend its budget concerning construction.
- Qualifying EMB for civil engineering works or seeking a merger or acquisition with an existing firm is one area for greater market share. The other area of focus is to seek work outside of South Africa; this strategic move is currently underway with successful results and may too be better utilised through addition construction disciplines.

EMB's Merger and Acquisition Objectives

EMB's group financial officer, business process manager, commercial manager and general manager have contributed to identifying the following objectives which they desire to achieve through the acquired civil construction company through the means in the method column. Not all of the objectives below where identified by every participant however the participants agree on all the items and no items conflicting objectives where provided. This resulted in participants contributing additional items to those provided individually.

- Fast track market entry and know-how
- Participate in domestic governments explicit plans for future spend directed towards civil engineering sector infrastructure.
- Acquire secured contracts to increase revenue.

- Acquire civil engineering company qualifications such as CIDB CE 9 in order to tender at this level.
- Realise civil engineering opportunities in other African countries.
- To diversify from building in the ensuing period of slow local economic recovery
- To be prepared for eventual increased growth due to large demand backlogs in infrastructure**.**
- Take advantage of the opportunities to acquire distressed local companies whilst many firms struggle with the local market conditions.
- To acquire a target company with little transaction capital by seeking an opportunity amongst the many firms current in financial distress.

The target company is to be assessed according to its ability to enable the objectives to be met should a merger and acquisition transpire. The target company has all the qualifications and know how in civil engineering construction identified above which would allow for fast track market entry as required. The target company is currently experiencing financial pressure due to its related entities and may be purchased at a discounted rate as proposed to EMB. By acquiring the target company EMB may utilise its new skills in other African countries as well as areas of expected government demand.

The objectives above provide the preliminary qualification requirements for the target company, the financial assessment through the case study may precede given that the objectives required by EMB are able to be fulfilled through a merger and acquisition with the target company.

Table 4.1 Value Drivers

Value Driver	Benefits	Method
1. EMB Group Diversification	Being prepared to participate in the anticipated government spends on infrastructure. Lower market risk for EMB group during a time of slow economic recovery.	Ensure compliance with government tendering requirements and support from domestic suppliers and subcontractors.
2. Acquire Existing Secured Contracts	Increased Profits Secured revenue	Return profits on existing contracts where achievable and contain and cancel contracts that are not profitable or have been breached due to non payment.
3. Acquire New Market Share	Become established in the civil industry whilst competing firms are struggling to exist.	Complete existing projects and tender for new work.
4. CIDB Rating	Participate in government private work in the category of 9 CE	Tender for work within South Africa
5. Acquire key	Civil construction know-how in	To use civil engineering

personnel	mining, ports, roads and concrete works.	component in Mozambique, DRC and other potential African markets
6. Financial Synergies	Complementary cash flow effects	Utilising inter subsidiary loan accounts between building and civil companies.
7. Operational Synergies	Management, systems and asset capacities better utilised. Cross sales by utilising each other as subcontractors for areas of speciality in awarded contracts.	Merging management functions and asset usage where possible. Apply a broadened industry network to new contract opportunities.

Interview Synopsis

The results of table 3.2 in the previous chapter show an average score of 4.4. This on a scale of one to five, with five representing the closest level of agreement that the interviewees have with the strategic objectives identified above and there alignment with what the target company is able to offer. The average total of 4.4 therefore indicates a strong alignment of EMB's objectives amongst all respondents which is closely represented throughout the three main categories describing the objectives above as reasons for a merger and acquisition, a civil engineering company's specific objective requirements and the transactions value objectives.

Potential Synergy Benefits

The Financial Officer and Business Process Manager have identified the following synergy benefits that may be realised from the proposed target company; these have been grouped according to expense reduction and revenue drivers. The revenue drivers added project cash flows to the DCF model from work which EMB group is able to subcontract out in 2014 to a civil contractor. The revenue synergies also reflect in the DCF model and allow for reduced overhead costs of 35%. Both categories of synergy benefits increase the company value as shown in synergy benefits value above the intrinsic value.

Table 4.2 Expense Reduction

Benefit	Method
1. Economies of scale and Procurement efficiency	Fewer supplies, larger volumes, negotiate better prices.
2. Spreading Overheads	Merged office operations, Shared assets etc.
3. Eliminating functional overlap	Redundant position elimination – focus on the target

	company management.
4. Organisational realignment	Increase output per employee, reduce management layers

Table 4.3 Revenue Synergies

Benefit	Method
5. International market entry	Opportunities through EMB in Mozambique + DRC for concrete works.
6. Working capital management	Cash flow compensations between building and civil contracts Business cycle smoothing effects.
7. Aggressive contract management for the target company	Cancelling all loss making contracts where possible.
8. Opportunity Identification	New areas for growth through utilisation of the combined business networks and sub contracted work.

Operational assessment of the target company
The target company is able to meet all the criteria provided by EMB's senior strategic managers shown in section 4.2.2. Above should synergy benefits be realised and a transaction price agreed which is within EMB's negotiation range.

- The target company has clients outside of EMB's clientele network and geographic region, being concentrated mostly in Gauteng and having the ability to operate with EMB in neighbouring countries.
- The target company has the ability to add to EMB group the necessary skills diversification through large concrete works and roads and other infrastructure expertise.
- The target company has secured contracts for works in disciplines other than EMB's area of expertise such as contracts with the SANRAIL Sasol and various municipalities regarding roads, infrastructure and water treatment works.
- Due to other subsidiaries within the same group the target is in financial distress as cross suretyships and loans have been made to certain poor performing entities within its group of companies. Thus creating an opportunity to acquire the target company for a largely discounted price should a due diligence show it to be able to meet its cash flow requirements?
- The target company has CIBD CE 9 rating which is the highest rating on the Construction Industry Development Board allowing the target company to tender for all government work.
- An acquisition of the target company will ensure immediate access to all the objectives above as opposed to EMB generically developing these qualifications over many years.

Valuation of the target company

Through the assessment of the annual financial statements, management accounts, and current contract information, a valuation is determined through the following methods described in detail in chapter 2 of this study: Asset Valuations, Discounted Cash Flow Methods and Market Valuations.

Asset Valuation:

The target company's net asset value (NAV) as of the latest management accounts, being August 2013, is R 51, 95 million.

The asset liquidation value for the same point in time is estimated to be in the region of R 13, 65 million.

Discounted Cash Flow:

DCF Intrinsic Value: The target company DCF excluding synergy benefits and including only currently awarded contracts is R 9, 455 million. The DCF excluding synergy benefits with a normalised business and market operating forecast showed a value of R 9,149 million. The average of the two perspectives equalling R 9, 302 million. This value provides the floor for which negations may be started and worked upwards.

DCF Synergy Benefits: The target company DCF including synergy benefits of cost savings and revenue generation though additional secured contracts produced the value of R 48, 847 million. The similar DCF with a normalised business and market operating forecast showed a value of R 38,158 million. The average of the two perspectives equalling R 43, 543 million. This value provides the absolute ceiling for which a price may be determined.

Market Valuations (PE multiple):

Using the normalised earnings of the latest annual financial statement, being March 2013, the Price to Earnings are compared to similar companies bearing similar risk in the same markets with the following results:

Comparative company's average PE ratio is 15.85 producing a target company value of R39, 045 million. A PE of 15.85 seems to be high as the JSE average is 13.2 and the industry Beta close to 1.0 should produce a more realistic value of R 32, 532 million

As the target company is a subsidiary of the listed entity and will not be bought over the open market a further discount may expected which according to South African market norm (SAICA) means most private sales fall in the range of between PE 5 to PE 8 this would further reduce the market related intrinsic value of the target company to between R 12, 323 million and R19, 727million.

The Negotiation Range

Intrinsic Value

From the results above the target company's intrinsic value should roughly equal the fire sale value as the DCF value falls below this on expected FCF from current contracts. Thus the intrinsic value should start from R 13, 65 million. This value is supported through the minimum discounted PE multiple value of R 12, 323m.

Maximum Price

The synergy benefit value from the DCF is R 43, 543 million and represent the maximum price for which a net zero return may be expected. This value may be checked against the NAV of R 51, 95 million and the maximum market comparison value of R 39, 045 million. A maximum transaction price of R 33 million would represent a transaction price that is acceptable to the purchaser considering risk and effort.

Synergy Benefits

The synergy benefits value is R43, 543 million. The potential value added through synergies is the maximum price less the intrinsic value, which is in the region of R 29, 493. This is the maximum value that may be created for the target company by merging with EMB.

Transaction Premium

The transaction premium is estimated according the price that EMB's management would expect to settle at. This estimated price amounts to roughly R30 million showing a transaction premium for EMB of R 43, 543 million less the R30 million which equals R13, 543 million which it should be able to realise through continued operations. The target company will receive an amount of R 30 less R 13, 65 realising a transaction value of R16, 45 million.

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This section offers a précis to the findings of the study where realisations of the research objectives are discussed. Linkages between the literature review and the findings are identified and recommendations made to EMB on the M&A opportunity. Areas of future research relating to the study are also discussed within this chapter.

The Objectives of the Study

1 To determine whether the target company meets the criteria that EMB seeks in acquiring a civil engineering contracting firm prior to conducting a full and costly due diligence process.
2 Determining a value range within which EMB may negotiate the price with the sellers.
3 To make a recommendation on whether or not EMB should pursue the full process necessary in preparing for the acquisition of the target company.

Findings from the Study

Key findings from the literature review

- South African construction companies have yet to see the end to difficult economic and market conditions and should strategise accordingly.
- Mergers and Acquisitions provide a strategic option for construction firms to diversify and reduce risk as well as acquire contracts and further expertise within the broader industry.
- The M&A process are costly and disruptive to staff within the pursuing organisation and hence an initial investigation is useful in order to avoid the unnecessary loss of the acquisition being declined at final stages.
- Two valuations of the target firm must be conducted, the first according to the target companies intrinsic value and the second according to a value that includes the effects of synergy when combining the two firms.
- The three most common types of company valuation are the discounted cash flow method, the asset valuation method and the market comparative method (also known as the multiples method).
- Of these three methods the DCF method is deemed the most accurate with all three methods being conducted in order to create a more holistic view of the company concerned.

- Synergy benefits need to be identified and a negotiation range must be established with a determination of the intrinsic and synergy benefit values.
- Understanding the potential strategic, operation and synergy objectives identified for the target company provides a realistic view on the value that may be achieved in pursuing the acquisition of a potential target company.

Findings from the primary data and case study

EMB seeks to achieve the following through the merger and acquisition of a civil engineering contractor:

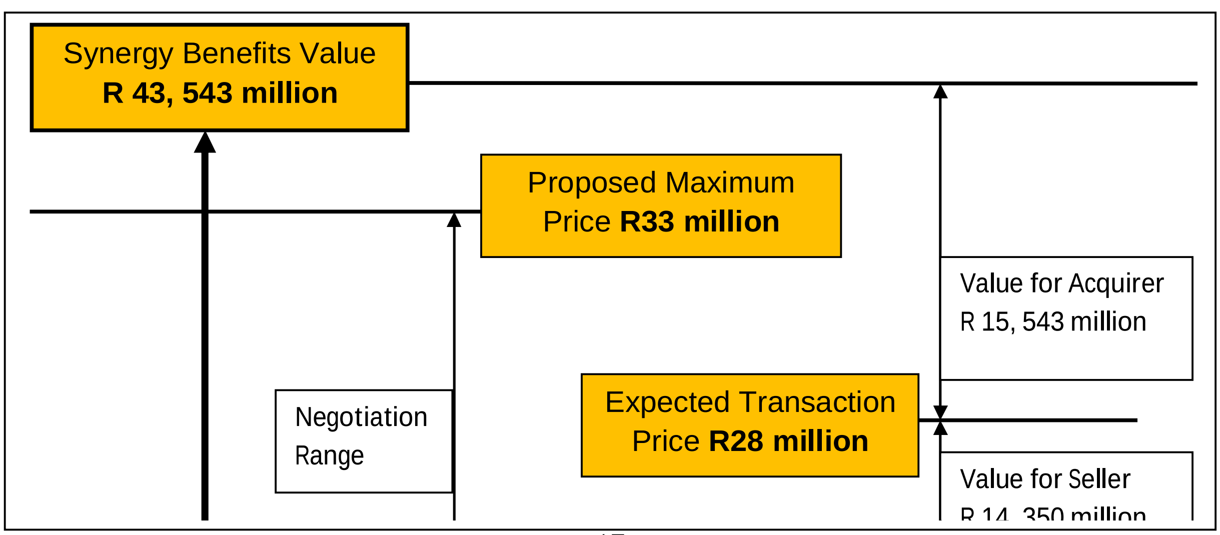
- To diversify from building in the ensuing period of slow local economic recovery by acquiring new market share within the greater construction industry.
- Obtain existing awarded contracts.
- Obtain a CE 9 Construction Industry Development Board (CIDB) rating
- Acquire key personnel and expertise in the disciplines of roadwork's and civil engineering structures.
- Achieve both financial and operational synergies from the merger.
- To be prepared for eventual increased growth and future opportunities due to large demand backlogs in civil engineering projects both locally and in other African countries.
- Take advantage of the opportunities to acquire distressed local companies whilst many firms struggle with the local market conditions and thus achieve the acquisition at a reduced transaction price.

The target company ticks all the required boxes that have been set out by EMB's strategic managers in achieving all M&A objectives:

- The target company has the required civil engineering qualifications and experience with suitably competent staff.
- It has a CIDB CE 9 rating.
- It has sufficient secured contracts with road building and civil engineering infrastructure.
- There are many areas where synergy benefits may be identified.
- The negotiation range shows potential for an excellent value proposition.

DCF methods described in chapter two where used to calculate the values in Figure 5.1 below, this shows a price range that should be acceptable to both the seller and the buyer as calculated in accordance with the valuations.

Figure 5.1: Proposed Acceptable Transaction Values



Adapted from: SAICA (2013:113)

- The synergy benefits value of R 43, 543 million will return a NPV of zero.
- A maximum price of R 33 million is assumed to make the project worthwhile to EMB.
- The negotiation range is between this maximum price of R33 million and the intrinsic value of R13, 65 million.
- Provided that an agreeable payment structure may be established it is estimated that the transaction price of R 28 million may be reached thereby providing fair value to the seller and the buyer.

Conclusions from the study

- EMB is sure of their strategic objectives in pursuit of an M&A opportunity.
- The target company shows the potential to meet all of EMB's M&A objectives.
- The target appears to provide an opportunity for EMB to realise synergy benefits and offers fair value for negotiation.
- The target company shows the ability to produce real value for EMB in terms of its past and future forecast financial performance.

Recommendations

EMB should continue with the merger and acquisition process in pursuit of the target company, based on the evidence above the risk of not being able to conclude an agreeable transaction is low. The next step in the M&A process is for EMB to contact the target company and request signing of a non disclosure agreement (NDA) allowing EMB full access to the target company's information. Once this is done EMB should ask for exclusivity in compiling a transaction agreement subject to a full due diligence process.

Areas for Future Research

Examining the success of the potential transaction in creating value as case in study for mergers and acquisitions within the South African construction context would require an extensive empiric study of the performance of the acquiring and acquired companies over a relatively long period of time. This is a possible progression in the area of study; however such a study would require large scope and availability of resources. Even confining the study to examining the level of success of the particular transaction pending for EMB would provide meaningful insight into mergers and acquisitions within the South African construction industry.

Conclusion

The research questions formulated for this study have been answered through the primary findings and the case study. The study concluded that the construction industry is dynamic and sensitive to economic cycles. Construction firms should have strategies in place to mitigate against the effects of economic downturn. Mergers and acquisitions are one such strategic option when a firm seeks to consolidate operations, secure and increase revenue within the construction industry. This may be achieved through acquiring secured contracts and expertise that enable growth into unutilised disciplines within the broader industry. The results of the case study, which is an initial analysis of the target company, show that the target company has the potential to meet all the requirements necessary to fulfil such objectives. EMB should proceed with the merger and acquisition processes of the predominantly civil engineering company as the initial objectives for a favourable transaction have been met.

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