

# **A FINANCIAL DUE-DILIGENCE MODEL TO ASSESS MERGER AND ACQUISITION VIABILITY**

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## **Abstract**

Mergers and acquisitions (M & A) are a big part of the corporate finance world. Everyday investment bankers arrange M & A transactions, which bring separate companies together to form larger ones. The key principle behind buying a company is to create shareholder value over and above that of the sum of the two companies. Two companies together are more valuable than two separate companies; at least that's the reasoning behind M & A. Before an M & A transaction, companies usually require some kind of evaluation of the company that is to be acquired. This evaluation is then used to determine whether the transaction should take place, and what the target price should be for the acquiring company. The most commonly known method used to do such an evaluation is known as a due diligence. The due diligence process can be a long drawn out process, which can be extremely disruptive to an organisation. Due diligences can take several months to complete in a complex organization. The issue surrounding the due diligence process is that it is not a standardized procedure and each organization or specialist carries out the due diligence process differently, when considering a merger and acquisition. The problem is that there is no one structure, format or model which can make the necessary information available to the decision-makers of the acquiring company without going through the complete due diligence process. If a financial due diligence model was available, which could give pertinent information to decision-makers, huge due diligence costs could be saved. Therefore the main study objective of this dissertation is to determine the value of a financial due diligence before an M & A, and whether a financial due diligence model would be beneficial to decision-makers of manufacturing companies. The study will lead to the development of a financial due diligence model that can be used by South African manufacturing organisations for M & A. A combination of the theoretical techniques, literature review data and the empirical study data will be used to determine what should be included in a financial due diligence model, which can be used by decision-makers to determine whether or not to pursue the merger and acquisition.

## **DEDICATION**

To my loving wife, Jane, who has supported and encouraged me during my MBA studies, and my children who have missed valuable time with their father.

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## **LIST OF ABBREVIATIONS**

AML	Anti-money laundering legislation
BEE	Black economic empowerment
BMW	Bavaria Motor Works
CEO	Chief Executive Officer
DCF	Discounted cash flow
EBIT	Earnings before interest and tax
EBITDA	Earnings before interest, tax, depreciation and amortisation
EPS	Earnings per share
EV	Enterprise value
FD	Financial Director
FM	Financial Manager
GM	General Manager
IP	Intellectual property
IT	Information technology
KMO	Kaiser-Meyer-Olkin
LGI	Lagarde Investigation Consultants cc
M & A	Merger and Acquisition
MD	Managing Director
NAV	Net asset value
OFAC	Office of Foreign Assets Control
P/E	Price earnings ratio
PEPs	Politically Exposed Persons
Q	Question
RMA	Risk Management Association
SEB	Securities and exchange board
SEIFSA	Steel and Engineering Industries Federation of South Africa
SOX	Sarbanes Oxley
SVA	Shareholder value analysis
U.S.	United States
WACC	Weighted average cost of capital

# Chapter 1

## INTRODUCTION

### 1.1 Purpose of study

The purpose of the research is to determine the value of the financial due diligence process before a merger and acquisition (M & A), and whether a financial due diligence model would be beneficial to decision-makers of manufacturing companies. Reasons for M & A and the motivation for the introduction of the financial due diligence process will be analysed. If a financial due diligence model is beneficial to decision-makers, then the research would further determine what the most important calculated variables are, and what issues should be addressed in such a model. The research analysis will look at the criteria used by decision-makers during M & A. As all decision-makers have different criteria the common factors will be extracted and identified. Once it is identified what should be included in such a model, decision-makers could decide whether to develop this model for use in M & A activities.

### 1.2 Background

The due diligence process can be a long drawn out process, which can be extremely disruptive to an organization. Due diligences can take several months to complete in a complex organization. The due diligence audit procedure typically covers statutory, financial, employees, business understanding, strategies and objectives of the company, operations, markets and general. Each of these subjects is further broken down during the due-diligence process, but for the purpose of this study the financial part of the process will be analysed.

A typical financial audit during a due diligence must satisfy the following questions/issues:

- whether or not the assets of the company will be bought;
- if so the items to be purchased, such as; shares, debtors, fixed assets,

bank balances. These items will need to be verified for value at take over date;

- if the above assets are to be bought, then audited accounts are to be prepared at the take over date; and
- understand how the business will continue to operate after take over.

The procedure to satisfy the above questions/issues will involve among other:

- Obtain copies for preferable audited / if not un-audited financial statements for the past three years.
- Obtain a copy of recent management accounts.
- Obtain a debtors age analysis listing.
- Obtain a list of creditors and review the composition thereof.
- Obtain an inventory list.
- Obtain a list of all other investments.
- Obtain a fixed asset register.
- Obtain a list of all long term liabilities and financial arrangements.
- Obtain a copy of the most recent bank reconciliation.
- Perform analytical procedures on revenue over the last three years.
- Analyse the trend of purchases (expenses) in relation to sales.
- Understand the possible tax implications of the acquisition.
- Obtain copies of the operating and capital budgets and forecasts for the next three years.
- Obtain a list of current compensation levels of key personnel.
- Understanding the business and industry.
- Understanding the company strategy and objectives.
- Understanding the operations, inventory and suppliers.

The issue surrounding the financial due diligence process is that it is not a standardized procedure and each organization or specialist carries out the financial due diligence process differently, when considering an M & A. The following extracts taken from articles on the due diligence process reinforces the

statement.

Richard Ferguson of Taxperts (2004: 1) explains that the due diligence process is an intense examination of a target business for an M & A by a prospective buyer. The due diligence is a fact finding device to assist in determining whether to buy the business at all, how much to pay for the business and how to structure the acquisition. Ferguson (2004: 1) writes that the principle purpose of the due diligence is to verify assertions made by the seller and to identify caveats that may not be disclosed to the buyer. The buyer determines through the due diligence process that the business being bought contains all the assets and liabilities that have been paid for. In the same article, Ferguson (2004: 1) writes that according to a recent survey undertaken it was revealed that 70% of M & A's have failed to add shareholder value. A proper due diligence could reduce this high failure rate.

In an article by Wade Anderson (2006: 1) for Bank Bonds South Africa, the importance of having checklists when carrying out a due diligence is discussed. Large emphasis is placed on the human interaction during the due diligence process. It is felt that all too often this aspect is neglected, yet the success or failure of the merger is heavily dependent on this very factor. Examining due diligence checklists for every conceivable commercial activity is a necessity for those thinking of acquiring and merging businesses. The due diligence checklists are not confined to one particular area within a company.

Marc Knez (2003: 1) at Sibson Consulting writes about a Smart due diligence, *"Beating the Odds in Mergers & Acquisitions"*. In the late 1990's companies used the motto "when in doubt, buy" which lead to some high profile acquisition failures and study after study continues to find that acquisitions are as likely to fail as are to succeed in terms of shareholders value. The bottom line is that acquisitions are extremely risky. In most circumstances, the entire purchase price is paid before the take over date exposing the companies shareholders to considerable downside risk if the companies' management is not able to generate the value required to support the purchase price. This reality shouts out for a

comprehensive risk analysis prior to making the acquisition decision. Such analysis ranges from culture audits aimed at determining whether there is sufficient fit between the organizational cultures of the two companies, to more rigorous financial analyses aimed at quantifying the potential financial synergies underlying the acquisition. Unfortunately, the acquisition process does not always lend itself to these types of analyses. Between the confidential nature of the interactions and scarcity of time, the acquirer's attention seems to be confined to financial due diligence and some high-level strategy considerations. It doesn't help that the primary advisors in this context, the investment bankers, have little incentive to slow the process down by advising clients to conduct a more comprehensive risk analysis. Knez (2003: 1) feels that given the limited information gathered and analyses is why so many acquisitions turn out to be disappointments.

Knez (2003: 1) comes up with a smarter due diligence which revolves around acquirers asking the following question relatively early in the deal process, "*Given the prevailing logic of the acquisition, what are the significant risks to the success of the acquisition?*" A due diligence process that answers this question is smart in that decision-makers are leveraging the information and knowledge to which one has access. Moreover, by answering this question the acquirer can determine whether a more comprehensive due diligence is warranted.

Knez's (2003: 1) smarter due diligence process includes four steps, namely:

- clarify the acquisition logic;
- identify high impact operating activities;
- identify integration risk factors, such as behavioral and turnover ; and
- performing integration risk assessment (risk analysis to assess the degree to which the identified risk factors are sufficiently severe to warrant a more comprehensive due diligence exercise).

In an article by Jim Smith (2006: 1) for Bank Bonds South Africa, the most important aspect of the due diligence in an M & A is the process of evaluating the

history (productive, financial and ethical) of a company so that one is certain of its nature. This may include extensive research and analysis that would require a sufficient amount of time and care. Level of customer approval, productivity, public relations, environmental issues, suppliers and employee satisfaction may all be important factors involved in due diligence.

Doing such research will ensure that a company becomes involved with a business that is not only successful currently but will continue to be in the future. Knowing the background of a company based on due diligence results, will prevent partnerships with companies involved in illegal activities or those with large debt. Due diligence can also prevent the consequences associated with a conflict of interest.

Lagarde Investigation Consultants cc (LGI) specialise in the due diligence process and LGI's (2005: 1) view is that no business venture can be taken lightly. LGI benchmark the industry when doing due diligences. The feeling is that with current technology available, con artists and fraudsters fabricate information on a venture being sold so that it appears more lucrative than it is. It is therefore imperative that acquirers are in a position of informed strength when carrying out negotiations. It should be born in mind that every seller has certain information which preferable should be kept undisclosed.

Geoff Stroebel (2006: 1) from Pam Golding Properties writes that the purchase of a business, and trying to raise finance, can be extremely frustrating, and is something that has caused many prospective and potentially dynamic business ventures to fail.

Stroebel (2006: 1) cautions: *"Bank managers tend to be major stumbling blocks in the process of raising finance. What helps is security in the way of equity in a fixed property, realisable assets in the business, proven history of profitability, a sound business plan (cash-flow forecasts) and the expertise of the new proprietor"*.

Valuation of a going concern is definitely not an exact science, and one needs to rely on a number of factors such as net profits, asset values, return on investment, earnings potential, payback term and comparative analysis. Despite all of this, the reality is that the true value is what one perceives the business to be worth. As Stroebel (2006: 1), says *“One must also consciously compare the difference between value and price”*.

Does it really matter what one pays for a business if it will give a reasonable way of life, a decent stash in the bank every month and an acceptable return on your investment? *“Profit is definitely not the determining element of calculating the price, but all the elements of shares levels, turnover, gross and net profits, creditors and debtors and cost of sales form the integral part of sound value”*.

The due-diligence process forms an important part of negotiations, and in reality is an in-depth fact-finding mission to determine if all the facts and figures as disclosed by the seller are indeed truthful and correct. The word *“audit”* is probably a more familiar term used to describe this process, and this requires a serious intention by the prospective buyer to pursue the purchase of the business, backed up by an undertaking of complete confidentiality.

These mentioned articles have been taken over a broad spectrum of the South African market and one can see that each author has a different view of what is important in the due diligence process.

Ferguson's (2004: 1) focus is on the due diligence being a fact finding device to assist in determining whether to buy the business at all, how much to pay for the business and how to structure the acquisition. Anderson (2006: 1) places large emphasis on the human interaction and checklists during the due diligence process. Knez (2003: 1) comes up with a smarter due diligence which revolves around acquirers asking the question about the significant risks to the success of the acquisition. Smith's (2006: 1) feeling is that the most important aspect of the due diligence in an M & A is the process of evaluating the history of the company.

LGI (2005: 1) consultants feel that there are con artists and fraudsters who fabricate information on a venture being sold so that it appears more lucrative than it is. It is therefore imperative that acquirers are in a position of informed strength when carrying out negotiations. Stroebel's (2006: 1) view is that the due diligence process forms an important part of negotiations, and in reality is an in-depth fact-finding mission to determine if all the facts and figures as disclosed by the seller are indeed truthful and correct.

None of the authors are incorrect and all of the aspects are important. The problem is that to follow the processes mentioned above is time consuming and expensive. The fact of the matter is that an acquisition or merger must add or create value for the existing organization. The problem is that it does not help to look at the human resources, operations, assets and liabilities, of the new company if one is not sure that the merger and acquisition will add or create value. Stroebel's (2006: 1) view on the due-diligence process touches on some of the most important aspects such as; negotiating tool, fact finding mission, determining whether the facts and figures are true or false.

The problem is that there is no one structure, format or model which can make the necessary information available to the decision-makers of the acquiring company without going through the complete due diligence process. If a financial due diligence model was available, which could give pertinent information to decision-makers, huge due diligent costs could be saved.

### **1.3 Problem statement**

It is not clear whether the financial due diligence process contributes to the creation of value for an organisation, or whether it is just a process that has been accepted by industry to justify the acquisition or merger of an organization.

#### **1.3.1 Main study objective**

Determine the value of a financial due diligence before an M & A, and whether a financial due diligence model would be beneficial to decision-makers of

manufacturing companies.

### **1.3.2 Sub objectives:**

- To analyse and identify the main reason for M & A.
- To establish the importance of the financial due diligence during the M & A process.
- To establish what information a financial due diligence model needs to make available to the decision-makers in order for it to be beneficial during the M & A process.
- To establish the level of satisfaction within companies that have embarked on financial due diligence process.

## **1.4 Research methodology**

The research will start with a literature review of the different methods used during the due diligence processes. The literature review will incorporate South African and International literature, as different countries apply different methods when carrying out a due diligence. The study must lead to the development of a financial due diligence model that can be used by South African manufacturing organisations for M & A. The literature review will include articles on the financial viability of M & A, as well as the financial methods used to determine whether the M & A should occur.

The second phase of the study is an empirical research of what is required by decision-makers to improve M & A decisions. For the empirical research a questionnaire will be sent to various organizational chief executive officers, managing directors, general managers, financial managers and investors. The collected data will be used to identify what should be included in a financial due diligence model. The empirical research will be used to test the theoretical research by means of a questionnaire that will be sent to local and abroad organisations for their input. The reason for using abroad organisation and managers is that the information required from the empirical research must be used to formulate the financial due diligence model for decision-makers. Decision-

makers throughout the world use certain key indicators to determine whether or not the M & A should occur, so the more diverse the input data, the greater the chance of developing a model that covers the most important aspects.

A combination of the theoretical techniques, literature review data and the empirical study data will be used to determine what should be included in a financial due diligence model, which can be used by decision-makers to determine whether or not to pursue the M & A.

## **1.5 Scope of the study**

The theoretical and empirical part of the study will focus on world wide manufacturing sector to ensure the scope of this study is not too wide. This will ensure that one does not drift away from the international requirements, and if international companies do what to invest in South Africa they will be able to use the model when carrying out a due diligence.

Secondly, this financial due diligence model would primarily be suitable for organisations in the manufacturing sector with around five hundred employees and with a turnover of more or less seven hundred and fifty million rand. However, respondents whose organizations have more than five hundred employees and whose turnover is more than seven hundred and fifty million rand will not be excluded, but these respondents will be clearly identified in the research so that it would be understood if any inference is to occur.

The main reason for targeting companies of this size is because companies of this size do not always have the infrastructure or employed specialists to carry out an extensive financial due diligence. As explained the financial due diligence model is designed to give decision-makers a quick understanding whether or not to pursue the M & A. Exceptionally larger organisations or institutions would have set standards for acquisitions or mergers and therefore would most probably not use this type of process.

## 1.6 Limitations of the study

The study will concentrate on obtaining information and data from larger organisations and financial due diligence specialists worldwide. This information will then be used to determine what should be included in a financial due diligence model. This financial due diligence model should be able to assist small, medium and large South African organisations in the M & A process. The research:

- will utilise some perceptions to test the issues that are facing organisations within the manufacturing sector when considering an acquisition or merger;
- not only includes respondents who have had actual experience of the due diligence process, but also perceptions of respondents who have not yet had any experience with the due diligence process;
- specifically defines the outcomes for success, which need to be identically replicated if measures of success in future research are to be compared to the results obtained in this study; and
- will limit itself to organisations within the formal economy and will not include consideration of any companies that form part of the informal economy.

In addition, further limitations may be due to possible research biases, namely:

- the biased selection of respondents, as supplier and affiliated organisations will be asked to select respondents whom the organisations feel would be appropriate subjects for the type of research to be conducted;
- the subjective assessment of the success of the various respondent organisations that have conducted a due diligence; and
- the biased nature of the responses to questions, because respondents may not have wanted to comment on, or may have wanted to disguise, sensitive issues, although the assurance was provided that every attempt would be made in order to ensure their anonymity.

## 1.7 Report structure

The report is structured as follows:

**Chapter Two** provides an outline of the literature relevant to the research. It includes a historical review of the due diligence process in South Africa; guide lines from international organisations, and considers the macroeconomic consequences of this process. The heart of this chapter is focused on developing the statements that will be used in the questionnaire, which represent the issues that potentially face organisations who want to acquire or merge with another organisation.

**Chapter Three** describes the research methodology and techniques applied to address the research objectives. The chapter details the sample, data collection, research objectives and the types of statistical analyses used.

**Chapter Four** describes the analysis performed according to the prescribed methodology. The ordinal scale conversions, research questions and propositions are answered and interpreted. The results are evaluated with special reference to the literature review, and certain conclusions are reached.

**Chapter Five** concludes the research by discussing the research achievements and application, as well as by making recommendations for future research.

## **Chapter 2**

### **MERGERS AND ACQUISITIONS**

#### **2.1 Introduction**

This chapter reviews the literature relevant to this research. It starts with a macroeconomic overview, looking at the rationale and factors that are the precursors to the M & A process. It proceeds to analyse the current situation in South Africa, and the perception of organisations that have been through, or are busy with M & A. It also offers guidelines from International companies and agents who have carried out M & A. Primary objectives of the due diligence process and the principles to help executives create shareholder value are also highlighted. Coverage of literature in this section will serve as the primary foundation for development of the questionnaire. A series of research questions are derived at the end of each literature review section.

#### **2.2 Macro-economic overview of Mergers and Acquisitions**

##### **2.2.1 Mergers and Acquisitions: Introduction**

Investopedia.com (2006: 1) explains how M & A and corporate restructuring are a big part of the corporate finance world. Everyday investment bankers arrange M & A transactions, which bring separate companies together to form larger ones. When big companies are not being created from smaller ones, corporate finance deals do the reverse and break up companies through spin-offs, carve-outs or tracking shares.

Not surprisingly, these actions often make the news. Deals can be worth hundreds of millions, or even billions, of rand. The deals can dictate the fortunes of the companies involved for years to come. For a Chief Executive Officer (CEO), leading an M & A can represent the highlight of a whole career, and it is no wonder one hears about so many of these transactions happening all the time. When a newspaper's business section is opened, the odds are good that at least

one headline will announce some kind of M & A transaction.

M & A deals grab headlines, but what does this all mean to investors? The answer to this question, regarding the forces that drive companies to buy or merge with others, or to split-off or sell parts of the business, will be discussed in this chapter. One will also be aware of the tax consequences for companies and for investors.

### **2.2.2 Mergers and Acquisitions: Definition**

According to Investopedia.com (2006: 2), who is a Forbes media company, the key principle behind buying a company is to create shareholder value over and above that of the sum of the two companies. Two companies together are more valuable than two separate companies; at least that's the reasoning behind M & A. The idea is that when two companies merge, certain synergies develop where  $1 + 1 = 3$ ; for instance the new company does not require two Managing Directors or two Financial Directors and so on.

This rationale is particularly alluring to companies when times are tough. Strong companies will act to buy other companies to create a more competitive, cost-efficient company. The companies will come together hoping to gain a greater market share or to achieve greater efficiency. Because of these potential benefits, target companies will often agree to be purchased when the company knows it cannot survive alone.

Although often uttered in the same breath and used as though it is synonymous, the terms merger and acquisition mean slightly different things.

When one company takes over another and clearly establishes the primary company as the new owner, the purchase is called an acquisition. From a legal point of view, the target company ceases to exist, the buyer "swallows" the business and the buyer's shares continue to be traded.

In the pure sense of the term, a merger happens when two companies, often of about the same size, agree to go forward as a single new company rather than remain separately owned and operated. This kind of action is more precisely referred to as a "merger of equals." Both companies' shares are surrendered and new company shares are issued in its place. For example, both Daimler-Benz and Chrysler ceased to exist when the two companies merged, and a new company, DaimlerChrysler, was created.

In practice, however, actual mergers of equals don't happen very often. Usually, one company will buy another and, as part of the deal's terms, simply allow the acquired company to proclaim that the action is a merger of equals, even if it's technically an acquisition. Being bought out often carries negative connotations, therefore, by describing the deal as a merger, deal makers and top managers try to make the takeover more palatable.

An acquisition deal will also be called a merger when both Chief Executive Officers' (CEO), with board approval, agree that joining together is in the best interest of both of the companies. When the deal is unfriendly, that is when the target company does not want to be purchased; it is always regarded as an acquisition.

Whether a purchase is considered a merger or an acquisition really depends on whether the purchase is friendly or hostile and how it is announced. In other words, the real difference lies in how the purchase is communicated to and received by the target company's board of directors, employees and shareholders.

Synergy is the magic force that allows for enhanced cost efficiencies of the new business. Synergy takes the form of revenue enhancement and cost savings. By merging, the companies hope to benefit from:

- Staff reductions - as every employee knows, mergers tend to mean job losses. Consider all the money saved from reducing the number of staff

members from accounting, marketing and other departments. Job cuts will also include the former CEO, who typically leaves with a compensation package.

- Economies of scale - size matters, whether its purchasing stationery or a new corporate information technology (IT) system, a bigger company placing the orders can save more on costs. Mergers also translate into improved purchasing power to buy equipment or office supplies, when placing larger orders companies have a greater ability to negotiate prices with the suppliers.
- Acquiring new technology - To stay competitive, companies need to stay on top of technological developments and the business applications. By buying a smaller company with unique technologies, a large company can maintain or develop a competitive edge.
- Improved market reach and industry visibility - Companies buy companies to reach new markets and grow revenues and earnings. A merge may expand two companies' marketing and distribution, giving new sales opportunities. A merger can also improve a company's standing in the investment community: bigger companies often have an easier time raising capital than smaller ones.

Achieving synergy is easier said than done; it is not automatically realized once two companies merge. Sure, there ought to be economies of scale when two businesses are combined, but sometimes a merger does just the opposite. In many cases, one and one add up to less than two.

Sadly, synergy opportunities may exist only in the minds of the corporate leaders and the deal makers. Where there is no value to be created, the CEO and investment bankers; who have much to gain from a successful M & A deal, will try to create an image of enhanced value. The market, however, eventually sees through this and penalizes the company by assigning it a discounted share price.

From the perspective of business structures, there is a whole host of different

mergers. Here are a few types, distinguished by the relationship between the two companies that are merging:

- Horizontal merger - Two companies that are in direct competition and share the same product lines and markets.
- Vertical merger - A customer and supplier company. Think of a cone supplier merging with an ice cream maker.
- Market-extension merger - Two companies that sell the same products in different markets.
- Product-extension merger - Two companies selling different but related products in the same market.
- Conglomeration - Two companies that have no common business areas.

There are two types of mergers that are distinguished by how the merger is financed. Each has certain implications for the companies involved and for investors:

- Purchase Mergers - As the name suggests, this kind of merger occurs when one company purchases another. The purchase is made with cash or through the issue of some kind of debt instrument and the sale of the companies is taxable. Acquiring companies often prefer this type of merger because it can provide tax benefits. Acquired assets can be written-up to the actual purchase price, and the difference between the book value and the purchase price of the assets can depreciate annually, reducing taxes payable by the acquiring company.
- Consolidation Mergers - With this merger, a brand new company is formed and both companies are bought and combined under the new entity. The tax terms are the same as those of a purchase merger.

As can be seen, an acquisition may be only slightly different from a merger. In fact, it may be different in name only. Like mergers, acquisitions are actions through which companies seek economies of scale, efficiencies and enhanced market visibility. Unlike all mergers, all acquisitions involve one company purchasing another - there is no exchange of shares or consolidation as a new

company. Acquisitions are often congenial, and all parties feel satisfied with the deal. Other times, acquisitions are more hostile.

In an acquisition, as in some of the merger deals as discussed above, a company can buy another company with cash, shares or a combination of the two. Another possibility, which is common in smaller deals, is for one company to acquire all the assets of another company. Company "X" buys all of Company "Y's" assets for cash, which means that Company "Y" will have only cash (and debt, if they had debt before). Of course, Company "Y" becomes merely a shell and will eventually liquidate or enter another area of business.

Another type of acquisition is a reverse merger, a deal that enables a private company to get publicly-listed in a relatively short time period. A reverse merger occurs when a private company that has strong prospects and is eager to raise financing buys a publicly-listed shell company, usually one with no business and limited assets. The private company reverse merges into the public company, and together they become an entirely new public corporation with tradable shares.

The following *research question* is thus tabled:

- **Research Question 1:** Regardless of the category or structure, do all mergers and acquisitions have one common goal and is this goal to create shareholder value? Is it meant to create synergy that makes the value of the combined companies greater than the sum of the two parts? Is the success of an M & A dependent on whether this synergy is achieved?
- **Research Question 2:** Will strong companies act to buy other companies to create a more competitive and cost-efficient company? Will the companies come together hoping to gain a greater market share or to achieve greater efficiency? Because of these potential benefits, do target companies often agree to be purchased when the company knows it cannot survive alone?

### **2.2.3 Mergers and Acquisitions: Valuation Matters**

Investopedia.com (2006: 5) explains how investors in a company, that are aiming to take over another, must determine whether the purchase would be beneficial or not. In order to do so, the investors must ask how much the company being acquired is really worth. Naturally, both sides of an M & A deal will have different ideas about the worth of a target company: its seller will tend to value the company at; as high of a price as possible, while the buyer will try to get the lowest price possible.

There are, however, many legitimate ways to value companies. The most common method is to look at comparable companies in an industry, but deal makers employ a variety of other methods and tools when assessing a target company including:

- Comparative Ratios - The following are two examples of the many comparative metrics on which acquiring companies may base its offer:
  - price-earnings ratio (P/E Ratio) - With the use of this ratio, an acquiring company makes an offer that is a multiple of the earnings of the target company. Looking at the P/E for all the shares within the same industry group will give the acquiring company good guidance for what the target's P/E multiple should be; and
  - enterprise-value to sales ratio (EV/Sales) - With this ratio, the acquiring company makes an offer as a multiple of the revenues, again, while being aware of the price to sales ratio of other companies in the industry.
- Replacement cost - In a few cases, acquisitions are based on the cost of replacing the target company. For simplicity's sake, suppose the value of a company is simply the sum of all its equipment and staffing costs. The acquiring company can literally order the target to sell at that price, or it will create a competitor for the same cost. Naturally, it takes a long time to assemble good management, acquire property and get the right equipment. This method of establishing a price certainly wouldn't make much sense in a service industry where the key assets, people and ideas,

are hard to value and develop.

- Discounted Cash Flow (DCF) - A key valuation tool in M & A, discounted cash flow analysis determines a company's current value according to its estimated future cash flows. Forecasted free cash flows (net income + depreciation/amortization - capital expenditures - change in working capital) are discounted to a present value using the company's weighted average cost of capital (WACC). Admittedly, DCF is tricky to get right, but few tools can rival this valuation method.
- Premium for potential success - Acquiring companies nearly always pay a substantial premium on the shares market value of the companies bought. The justification for doing so nearly always boils down to the notion of synergy; a merger benefits shareholders when a company's post-merger share price increases by the value of potential synergy. Let's face it; it would be highly unlikely for rational owners to sell if there was no benefit in selling. That means buyers would need to pay a premium in the hope to acquire a company, regardless of what pre-merger valuation determines. For sellers, that premium represents the company's future prospects. For buyers, the premium represents part of the post-merger synergy that is expected to be achieved. According to Investopedia.com (2006: 7), the following equation offers a good way to think about synergy and how to determine whether a deal makes sense. The equation solves for the minimum required synergy:

$$\frac{\text{Pre - merger value of both companies + synergy}}{\text{Post - merger number of shares}} = \text{Pre - merger shares price}$$

In other words, the success of a merger is measured by whether the value of the buyer is enhanced by the action. However, the practical constraints of mergers often prevent the expected benefits from being fully achieved. Alas, the synergy promised by deal makers might just fall short.

It's hard for investors to know when a deal is worthwhile, writes Investopedia.com (2006: 7). The burden of proof should fall on the acquiring company. To find

mergers that have a chance of success, investors should start by looking for some of these simple criteria:

- A reasonable purchase price - A premium of, say, 10% above the market price seems within the bounds of level-headedness. A premium of 50%, on the other hand, requires synergy of stellar proportions for the deal to make sense. Stay away from companies that participate in such contests.
- Cash transactions - Companies that pay in cash tend to be more careful when calculating bids and valuations come closer to target. When shares is used as the currency for acquisition, discipline can go by the wayside.
- Sensible appetite – An acquiring company should be targeting a company that is smaller and in businesses that the acquiring company knows intimately. Synergy is hard to create from companies in disparate business areas. Sadly, companies have a bad habit of biting off more than the company can chew in mergers.

Mergers are awfully hard to get right, so investors should look for acquiring companies with a healthy grasp of reality.

The following *research question* is thus tabled:

- **Research Question 3:** There are many legitimate ways to value companies. The most common method is to look at comparable companies in an industry, but deal makers employ a variety of other methods and tools when assessing a target company, what are the most common methods and tools to assess a target company? What comparative ratios are important? What do deal makers understand about replacement cost? How important is discounted cash flow? What is the premium for potential success?
- **Research Question 4:** It's hard for investors to know when a deal is worthwhile. The burden of proof should fall on the acquiring company. To find mergers that have a chance of success, what criteria should investors start by looking for? What is a reasonable purchase price? How important is a cash transaction, or are there better types of transactions? What is a

*"Sensible appetite" in a merger?*

## **2.2.4 Mergers and Acquisitions: Doing the Deal**

According to Investopedia (2006: 7), when the Chief Executive Officer (CEO) and top managers of a company decide to pursue an M & A, the management will start with a tender offer. The process typically begins with the acquiring company carefully and discreetly buying up shares in the target company, or building a position. Once the acquiring company starts to purchase shares in the open market, it is restricted to buying 5% of the total outstanding shares before it must file with the Securities and Exchange Board (SEB). In the filing, the company must formally declare how many shares it owns and whether it intends to buy the company or keep the shares purely as an investment.

Working with financial advisors and investment bankers, the acquiring company will arrive at an overall price that it's willing to pay for its target in cash, shares or both. The tender offer is then frequently advertised in the business press, stating the offer price and the deadline by which the shareholders in the target company must accept (or reject) it.

Once the tender offer has been made, the target company can do one of several things:

- **Accept the Terms of the Offer** - If the target companies top managers and shareholders are happy with the terms of the transaction, the management will go ahead with the deal.
- **Attempt to Negotiate** - The tender offer price may not be high enough for the target company's shareholders to accept, or the specific terms of the deal may not be attractive. In a merger, there may be much at stake for the management of the target company, such as jobs. If the management is not satisfied with the terms laid out in the tender offer, the target's management may try to work out more agreeable terms, for instance a nice, big compensation package.

Not surprisingly, highly sought-after target companies that are the object of several bidders will have greater latitude for negotiation. Furthermore, managers have more negotiating power if they can show that the management is crucial to the merger's future success.

Finally, once the target company agrees to the tender offer and regulatory requirements are met, the merger deal will be executed by means of some transaction. In a merger in which one company buys another, the acquiring company will pay for the target company's shares with cash, shares or both.

A cash-for-shares transaction is fairly straightforward: target company shareholders receive a cash payment for each share purchased. This transaction is treated as a taxable sale of the shares of the target company. If the transaction is made with shares instead of cash, then it's not taxable. There is simply an exchange of share certificates. The desire to steer clear of the tax man explains why so many M & A deals are carried out as shares-for-shares transactions.

When a company is purchased with shares, new shares from the acquiring company's shares are issued directly to the target company's shareholders, or the new shares are sent to a broker who manages it for target company shareholders. The shareholders of the target company are only taxed when they sell the new shares.

When the deal is closed, investors usually receive a new shares in its portfolio, the acquiring company's expanded shares. Sometimes investors will get new shares identifying a new corporate entity that is created by the M & A deal.

The following **research question** is thus tabled:

- **Research Question 5:** When the Chief Executive Officer and top managers of a company decide to pursue an M & A, is the starting point a tender offer? How is the tender offer calculated? Does the process typically

begin with the acquiring company carefully and discreetly buying up shares in the target company?

### **2.2.5 Mergers and Acquisitions: Why it can fail**

It's no secret that plenty of mergers don't work. Those who advocate mergers will argue that the merger will cut costs or boost revenues by more than enough to justify the price premium. It sounds so simple: just combine computer systems, merge a few departments, use sheer size to force down the price of supplies and the merged giant should be more profitable than its parts. In theory,  $1+1 = 3$  sounds great, but in practice, things can go awry.

According to Investopedia.com (2006: 13), historical trends show that roughly two thirds of big mergers will disappoint, which means the company will lose value on the shares market. The motivations that drive mergers can be flawed and efficiencies from economies of scale may prove elusive. In many cases, the problems associated with trying to make merged companies work are all too concrete.

For starters, a booming shares market encourages mergers, which can spell trouble. Deals done with highly rated shares as currency are easy and cheap, but the strategic thinking behind it may be easy and cheap too. Also, mergers are often attempted to imitate: somebody else has done a big merger, which prompts other top executives to follow suit.

A merger may often have more to do with glory-seeking than business strategy. The executive ego, which is boosted by buying the competition, is a major force in M & A, especially when combined with the influences from the bankers, lawyers and other assorted advisers who can earn big fees from clients engaged in mergers. There is a perception that most CEO's get to the top because it is an urge to be the biggest and the best, and many top executives get a big bonus for merger deals, no matter what happens to the share price later.

On the other side of the coin, mergers can be driven by generalized fear. Globalization, the arrival of new technological developments or a fast-changing economic landscape that makes the outlook uncertain are all factors that can create a strong incentive for defensive mergers. Sometimes the management team thinks it has no alternative than to acquire a rival before being acquired. The idea is that only big players will survive a more competitive world.

Coping with a merger can make top managers spread time too thinly and neglect the core business, spelling doom. Too often, potential difficulties seem trivial to managers caught up in the thrill of the big deal.

The chances for success are further hampered if the corporate cultures of the companies are very different. When a company is acquired, the decision is typically based on product or market synergies, but cultural differences are often ignored. It's a mistake to assume that personnel issues are easily overcome. For example, employees at a target company might be accustomed to easy access to top management, flexible work schedules or even a relaxed dress code. These aspects of a working environment may not seem significant, but if new management removes it, the result can be resentment and shrinking productivity.

More insight into the failure of mergers is found in the highly acclaimed study from McKinsey (2001: 1), a global consultancy. The study concludes that companies often focus too intently on cutting costs following mergers, while revenues, and ultimately, profits, suffer. Merging companies can focus on integration and cost-cutting so much that the day-to-day business is neglected, thereby prompting nervous customers to flee. This loss of revenue momentum is one reason so many mergers fail to create value for shareholders.

However, not all mergers fail. Size and global reach can be advantageous, and strong managers can often squeeze greater efficiency out of badly run rivals. Nevertheless, the promises made by deal makers demand the careful scrutiny of investors. It is believed that the success of mergers depends on how realistic the

deal makers are and how well these deal makers can integrate two companies while maintaining day-to-day operations.

## 2.2.6 Mergers and Acquisitions: Conclusion

One size doesn't fit all. Investopedia.com (2006: 14) writes that many companies find that the best way to get ahead is to expand ownership boundaries through mergers and acquisitions. For others, separating the public ownership of a subsidiary or business segment offers more advantages. At least in theory, mergers create synergies and economies of scale, expanding operations and cutting costs. Investors can take comfort in the idea that a merger will deliver enhanced market power.

By contrast, de-merged companies often enjoy improved operating performance thanks to redesigned management incentives. Additional capital can fund growth organically or through acquisition. Meanwhile, investors benefit from the improved information flow from de-merged companies.

M & A comes in all shapes and sizes, and investors need to consider the complex issues involved in M & A. The most beneficial form of equity structure involves a complete analysis of the costs and benefits associated with the deals.

It is however important to note that mergers can fail for many reasons including a lack of management foresight, the inability to overcome practical challenges and loss of revenue momentum from a neglect of day-to-day operations.

The following *research question* is thus tabled:

- **Research Question 6:** Do companies find that the best way to get ahead is to expand ownership boundaries through mergers and acquisitions? Can investors take comfort in the idea that a merger will deliver enhanced market power?

## **2.3 South African guidelines and perceptions**

### **2.3.1 Value creation; M & A, the South African perspective**

The due diligence process is a well know process used by organisations starting with a M & A. Most organisations develop a tailor made due diligence process for the needs of that specific organisation. M & A are solely for value creation, but this is not always the case.

Mergers are not easy or quick, but the economies of scale created can make the process worth while. *"There will always be a lot of costs initially in a merger,"* says financial director Yolanda van Esch (2006: 6). These are mainly related to the due diligence process, designing a new logo and establishing a new brand through marketing and communication. *"But we know the merger will open new doors and opportunities soon. We are hoping to reap the benefits within twelve months,"* says Van Esch (2006: 6). In terms of getting employees on board and accepting the merger, a bottom-up approach was developed to ensure change happened from the bottom and was not imposed, says Indwe Chief Executive Officer, Giel Muller (2006: 6). The merger involves combining black economic empowerment (BEE) groups Prestasi, Thebe Risk Services both companies' having diverse histories. Thebe Risk Services is the product of Hosken and Thebe Investment Corp; and Prestasi was bought by Pamodzi Investment Holdings. Indwe CEO Giel Muller (2006: 6) says the merger provides an *"opportunity to repeat the South Africa miracle at a micro level". "Our objective is to be a business that is accessible to all sectors of the South African population."*

Muller (2006: 6) says the group will follow three phases to bed down the merger: The retention of the best skills and client base; integration of the information technology systems to realise cost savings out of the merger; and investment in world-class technology and skills. Muller (2006: 8) says the merger has brought together two client bases, so any overlap is slight, and if the company is to increase its present 2,5% market share, it will need more skills not fewer.

The following *research question* is thus tabled:

- **Research Question 7:** Will there be initial high costs in a merger, and what are these costs? Are these costs mainly related to the financial due diligence process? Will a merger open new doors and opportunities? Will there be benefits within the first twelve months? How important is it to get employees on board and to accept the merger? How important is the retention of skills and client base; integration of the information technology systems to realise cost savings out of the merger; and investment in world-class technology and skills?

### **2.3.2 Importance of due diligence and intended outcomes for South Africa**

Finance Week magazine (2004: 49) comments on the importance of due diligence in the success of mergers and acquisitions in South Africa. A due diligence is the examination of a potential target for a corporate finance transaction undertaken by the buyer and the seller; risks facing the purchaser and his financiers; use of due diligence to identify key risk areas; major issues that need to be understood early on in the process.

According to the Finance Week magazine, lack of in-depth due diligence is a major reason why M & A fail. Companies can either undertake due diligence in a perfunctory way, or use the process strategically to improve the chance of success. A thorough due diligence exercise can afford a company a negotiating advantage, help inform its valuation of the particular deal, and assist in building the relationship with the target company.

There is generally a high level of uncertainty in deal making which makes mergers and acquisitions risky endeavours. This has been exacerbated in recent times by financial scandals such as Enron and Parmalat. In South Africa, with so many BEE deals starting to come through, there is an added dimension and necessity, both on the part of the principal and on the part of the target, for

thorough due diligence. Due diligence is the examination of a potential target for a corporate finance transaction usually undertaken by the buyer, but which can also be undertaken by the seller, according to expert, Luis Gillman (2004: 49). Gillman (2004: 49) says corporate South Africa still has reservations about BEE in equity transactions. This was illustrated by a recent filing by SASOL in its 2003 annual report of risk factors which stated: 'The Liquid Fuels Charter requires us to ensure that historically disadvantaged South Africans hold at least 25% equity ownership of our liquid fuels business by the year 2010. Sasol cannot assure that this participation will take place through transactions occurring at fair market terms.' This poses the question: Does a BEE equity transaction add shareholder value? This can be determined using Shareholder Value Analysis (SVA). Simply put, SVA is a process of determining whether value will be added by a specific strategic decision, notes Gillman (2004: 49). The addition or destruction of SVA = the price paid for the entity - benefits obtained from the transaction. If the answer to the equation is positive for the buyer, SVA will be added; if it is negative for the buyer, SVA will be destroyed. It has been proven that companies which undertake a thorough SVA assessment are more likely to add shareholder value. Although many BEE transactions take place at a discount, this will not lead to shareholder value destruction if benefits exceed the discount.

Sanjay Soni (2004: 49), Director of Corporate Finance Transaction Support with Ernst & Young (2004: 49), says clients generally use due-diligence as a tool to identify key risk areas, to support the investment decision, to assist in identifying price and other warranties, and to help with the overall transaction structure. Risks facing the purchaser and his financiers include political and country risk; the accuracy of historical financial information; the continuity of people, suppliers and customers; the ownership/title of assets; the value attached to the assets and unknown liabilities. Soni (2004: 49) says clients want issues that could become potential deal breakers flagged early on in the process. Clients are also looking for a tailored approach, focus around key issues and ultimately, real value-add from the advisers. Depending on the nature of the deal, the due diligence review usually encompasses an audit of financial, legal, information technology, human

resources, commercial, technical and environmental aspects of the business. Craig Lyons (2004: 49), Chief Executive Officer of Mvelaphanda Strategic Investments, says the due diligence process only commences once a comprehensive internal investment evaluation has taken place. *"We usually ask our due diligence practitioners not only to confirm the risks and rewards apparent in a company, but also to find some opportunities for us. This brings about a new dynamism to the due diligence process,"* says Lyons (2004: 49). Major issues that need to be understood early on in the process include unrecorded liabilities; over/understated results; accounting treatment and change of year ends; asset values; forecasts; information technology; management roles and responsibilities and transformation policies; legal contracts and connected parties. Critical risk-reward determinants include quality of management, forecast growth in earnings, management of working capital and labour relations. *"We need to understand exactly where the business is, and what the pressure points are,"* says Lyons (2004: 49).

The following **research questions** are thus tabled:

- **Research Question 8:** Is the lack of in-depth due diligence a major reason why mergers and acquisitions fail, or is it that meaningful information is not always collected? All though a thorough due diligence exercise is important to afford a company a negotiating advantage. However, would it not be more cost effective to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A?
- **Research Question 9:** What is understood by Shareholder Value Analysis (SVA)? How is SVA determined? How important is SVA? Will SVA determine whether value will be added by a specific strategic decision?
- **Research Question 10:** Do risks facing the purchaser and financiers include; political and country risk; the accuracy of historical financial information; the continuity of people, suppliers and customers; the ownership/title of assets; the value attached to the assets and unknown liabilities? Which of these risks carry the highest priority?
- **Research Question 11:** Depending on the nature of the deal, the due

diligence review usually encompasses an audit of financial, legal, information technology, human resources, commercial, technical and environmental aspects of the business, which one of these reviews is the most important?

### **2.3.3 Examining a companies financial records**

Finweek magazine (2006: 48) provides information on how to examine a company's financial records in making the investment decision. Business records are the only way to test whether a company's management team is performing well. These figures are the outcome of various accounting decisions that management have taken, and auditors have audited. Analyses of these records are essential in order to determine which companies are more financially healthy and are likely to survive bad conditions.

The Finweek article (2006: 48) discusses a phrase called "The Numbers Game" which according to Finweek magazine (2006: 48) is the most arduous part of the bottom-up analysis. Novice investors should remember that though it's helpful to know how to calculate certain ratios, most of these are freely available in either the financial press (such as Finweek's share price page) or on the Online Share Trading from the Standard website ([www.secudties.co.za](http://www.secudties.co.za)), which has the published annual reports. There are two parts to the investigation: pulling apart the company's own published financials (in the annual report or the abbreviated interim and final earnings announcements) and then using various calculated ratios to help make the investment decision. Ultimately, the financials are the only way to test whether a company's management team is doing a good job or not. However, investors should remember that the numbers are the outcome of various accounting decisions that management have taken and auditors have audited. New accounting standards have improved financial disclosure almost unrecognisably over the last ten years and there is more to come. One can stress test the quality of accounting decisions by examining the cash flow statement in as much detail as the income statement and balance sheet. Accounting decisions can influence earnings, but not the cash in the bank. There are four reasons to

buy shares in companies that are financially healthy:

- companies in good financial shape are more likely to survive the bad times as they have the resources to stay afloat;
- financially sound companies have the firepower to buy assets (ranging from equipment to other companies) that will strengthen the companies' position;
- financially healthy companies can continue marketing to ensure continued success; and
- most importantly, shareholders will benefit from good financial performance, which should translate into share price appreciation.

Below is a shortlist of some of the numbers that investors should look at. Time and experience will help to condense the list to the numbers and ratios that give the most information for the least amount of effort. However, investors should, at a minimum, always look at the following: growth trends in sales and earnings, operating margins, cash flow and return on equity. Remember that a company's financial situation is constantly changing, and diligent investors continue to review its numbers for as long as it is held in the share portfolio. It is also important to analyse the drivers of earnings growth. Investors should discount once-off (or exceptional) items that are not related to operations, such as property revaluation or profit on disposal of an asset. These line items do not reflect the company's true profit potential.

Basic numbers to look at are: Accounts payable days; Accounts receivable days; Acid test ratio; Book value (or NAV); Capital expenditure; Cash flow; Current assets; Current liabilities; Current ratio; Debt; Debt structure; Debt equity ratio; Depreciation; Dividend; Dividend cover; Earnings; Earnings before interest and tax; Depreciation and amortisation (EBITDA); Earnings per share; Gross margin; Interest cover; Market share; Net profit margin; Operating margin; Price/Book ratio; Price/Earnings ratio; Price/Sales ratio; Research & development expenditure; Return on equity; Return on assets; Revenue

The second part of the in-depth investigation of the numbers is the calculation of various valuation ratios, such as the price: earnings multiple (P/E multiple) or price: book. In simple terms, those companies with the lowest valuation ratios are, all other things being equal, the cheapest shares in a particular share universe.

The following *research question* is thus tabled:

- **Research Question 12:** What are the most important calculated variables that will help make an investment decision, and how important are these ratios for the decision-makers? Which numbers and ratios give the most information for the least amount of effort? Should investors, at a minimum, always look at the growth trends in sales, earnings, operating margins, cash flow and return on equity, and why?

## **2.4 International guidelines and perceptions of M & A**

### **2.4.1 How to manage the due diligence process**

Lloyd Bunyan (2006: 44) offers advice to accountants on how to manage the due-diligence process. Bunyan (2006: 44) cites several reasons for making a business acquisition including an opportunity to open distribution channels in untapped markets.

According to Bunyan (2006: 44) there are two primary objectives on which to stay focused:

- identifying and confirming the strategic rationale for the deal; and
- identifying and confirming the value of the deal.

Bunyan (2006: 44) states that there are many and varied good reasons for making a business acquisition. It may be an opportunity to open distribution channels in previously untapped markets, an opportunity for vertical integration or an opportunity to build scale in an existing operation. Whatever the reason, it is important that it is clearly understood so that the validity of the assumptions

underlying the perceived benefits can be appropriately tested. At this point, only high-level value indicators are identified. The valuation of those benefits occurs at the next stage, discussed below. However, it is important that the governing body (usually the board of directors) is aware of the deal and its value drivers and has signed off on proceeding to the next level of investigation. At this point, there is usually some model of the target's business value prepared which will support the value of the offer made to the vendor. This is likely to involve a projection of future sustainable earnings, synergistic benefits and the consideration of any integration or separation costs. Therefore a key part of the financial due-diligence exercise is providing input to or testing existing assumptions made in the model.

Key questions usually addressed are:

- what are the underlying historical earnings of the business;
- how robust is the historical information presented;
- have all historical transactions with related parties been recorded at an arm's length rate;
- what is the profile of projected growth and is that profile supported by historical growth;
- what is the view on the current year turn-over and the achievability of next year's budget;
- what potential cost savings and other synergies exist;
- how does projected EBITDA convert to cash and what is the level of working capital injection needed on acquisition; and
- have all costs associated with integrating the business and separating it from its existing owner been identified?

The extent of work required to address these and other questions will depend on the nature and size of any particular transaction and the extent to which relevant information is available. Answering these questions will require the input of a multi-faceted team involving legal, information technology, commercial /

operational and environmental due diligence experts. Most governing bodies or financiers also require the input of an independent financial advisor to assess the robustness and completeness of the financial conclusions reached.

The following *research question* is thus tabled:

- **Research Question 13:** Would one agree that there are two primary objectives on which to stay focused during the due diligence process? Would these two objectives be to identify and confirm the strategic rationale for the deal; and to identify and confirm the value of the deal?
- **Research Question 14:** Is it beneficial to prepare some kind of a model of the target businesses value, which will support the value of the offer made to the vendor? What should this model incorporate? Is the model likely to involve a projection of future sustainable earnings, synergistic benefits and the consideration of any integration or separation costs? Is a key part of the financial due diligence exercise to provide input to or test existing assumptions made in the model? What key questions need to be addressed in the model?

#### **2.4.2 Primary objective of the financial due diligence**

Pat O'Reilly (2005: 38-39) focuses on the concept of financial due diligence. According to O'Reilly (2005: 38-39) the primary objective of financial due-diligence is to confirm the reliability of the information, which will be used in making an investment decision. Any changes in these primary assumptions may have a significant impact on the pricing or may even question whether you should proceed with the transaction at all. Time spent performing a financial due diligence is rarely wasted and at worst, will provide useful additional information about the potential M & A candidate. According to O'Reilly, a number of issues, which often arise from financial due diligence should be carefully considered when reaching a final go / no-go decision on a transaction.

Audited financial statements are prepared only to comply with statutory and tax requirements or for a general purpose use rather than for your specific

transaction. To understand the reality behind the reported numbers and the true quality of earnings, an in-depth review of the business and detailed management accounts must be performed. Adjustments need to be made to reflect the business being acquired as it currently stands. Common adjustments include stripping out the impact of one-off events, lost customers, discontinued products, changes in cost structure and accounting errors.

Traditionally one may have valued a business by looking at cash flows and maintainable earnings however; there may also be a need to evaluate non-financial information such as the quality of risk management, the quality of management, corporate governance and the social and environmental performance of the company.

The forecast may be prepared on a high level basis with oversimplified assumptions and no clear plans as to how the forecast will be achieved. Assumptions may be internally inconsistent and difficult to reconcile to historical results. Overall the forecast prepared is often limited in its usefulness and normally would not be relied upon, particularly in forecasting earnings based valuation model.

Frequently, write offs for aged debtors, obsolete shares, idle assets and inappropriately capitalised costs need to be made. As part of the deal negotiations, it should be made clear which assets are to be included in the transfer and agreement reached over the valuation of these key assets.

With an increasing trend of revenue audits, there is a risk that pursuit by the relevant tax authorities could result in substantial hidden liabilities, penalties and exposures. In some cases the quantum of the exposure combined with the risk of crystallisation may result in deal breaker issues. One may seek protection by obtaining warranties or indemnities against future potential tax issues.

The lack of high quality timely information does mean that an additional

investment in a new system may be needed to obtain the quality of information needed to properly monitor the investment performance. Such changes do not happen overnight and there may be a need for agreement early on as to what can be reasonably achieved and timetable which local management commits to. Further more one should ensure that the right personnel are locked in for an appropriate period of time.

Failing to look past the issues to take a balanced view by weighing the risks against the up side potential is a common problem. Upside potential could range anywhere from synergies and an optimal financing structure to identifying opportunities such as access to new markets or a new management team. The upside potential and downside risks of a deal should always be viewed together rather than in isolation.

Failure to plan and structure transactions in the most tax efficient manner diminishes or destroys anticipated increases in shareholder value and can lead to tax leakage and loss in management and staff incentives. It may also result in opportunities for optimising the new group's tax position being missed and delayed integration. Effective tax planning is the key component in delivering value as quickly as possible.

In all cases, the primary objective of financial due diligence is to confirm the reliability of the information provided. To put it simply, is one buying what one thinks is being bought? Any change in these preliminary assumptions may have a significant impact on the pricing, or may even question whether to proceed at all. Financial due diligence can help identify the target companies' future potential tax issues, revenue streams, financial potential, maintainable earnings, future cash flows, operational issues, controls and any potential synergies arising from the deal. In a world where directors are continually being asked to defend the decisions months, even years after the fact, due diligence helps reduce the risk of making poor or uninformed decisions.

The following **research question** is thus tabled:

- **Research Question 15:** Is it important that during the deal negotiations, that it be clear which assets are to be included in the transfer and should agreement be reached over the valuation of these key assets at this stage? Should one seek protection by obtaining warranties or indemnities against future potential tax issues? Should the right staff be locked in for an appropriate period of time?
- **Research Question 16:** Will failure to plan and structure transactions in the most tax efficient manner diminishes or destroys anticipated increases in shareholder value and can it lead to tax leakage and loss in management and staff incentives?

### **2.4.3 Financial due diligence on manufacturing plants**

Judy Cohen (2006: 1-3) focuses on the need for buyers of assets in the United States (U.S) automotive industry to perform thorough financial due diligence on targeted plants.

Financial due diligence on manufacturing plants are key; the \$439 billion U.S. automotive industry has monopolized the restructuring headlines of late and would-be buyers of assets in the sector need to perform thorough financial due diligence on a targeted plant. Often this is not done, commented Ron Harbour, president of Harbour Consulting Inc. (2006: 1-3), in an interview with M & A report. *"When it comes to the world of mergers and acquisitions,"* said Harbour (2006: 1-3), *"We typically get called in by a financial company or a supplier, who say, 'We're thinking of buying this company, could you do the manufacturing piece of the due diligence?'"* Harbour (2006: 1-3) provides consulting and valuation services to manufacturers, largely those in the automotive sector.

Harbour (2006: 1-3) noted that, *"One of the reasons a lot of the manufacturers in the U.S. aren't very successful is that manufacturing is kind of a necessary evil to them". "Everything is about the product and engineering and manufacturing becomes this long-lost cousin. So when a due diligence is completed it is not*

*seen as very important. However, this can be critical to the succeeding or failing".* For instance, Harbour (2006: 1-3) said, when a U.S. based, tier-one automotive supplier with facilities both in North America and Europe was sold, the process raised interesting due diligence issues. *"What we found was the North America plant, which had been managed by one group, was in pitiful shape. Everything from labour issues to lack of capital investment, no good discipline, so quality was very inconsistent,"* Harbour (2006: 1-3) said, declining to name the companies. The company however found the European plants that had been *"enounced by a different group of managers were some of the leanest, best-run plants that we had seen because they had some ex- Japanese managers and things like that,"* Harbour said. *"Some of them were Eastern European facilities but very well run and of course the lower wage rates just made it even better."* About the outcome, Harbour (2006: 1-3) said the buyer went ahead and made the acquisition, but the data was important for it to be able to come up with the proper value because, certainly on the North American side, there was so much work that had to be done, not only the investment in the plants but finding capable people to turn it around. There was a cost there that they didn't anticipate originally. But the deal gave the acquirer the chance to crossbreed the Europeans and North Americans.

The following **research question** is thus tabled:

- **Research Question 17:** How critical is the manufacturing process due diligence to the success of the M & A? Is it all about the product and engineering and is manufacturing seen as the long-lost cousin?
- **Research Question 18:** Do consulting and valuation service companies add value to the due diligence process? Will it pay to have these companies carry out the due diligence process for an M & A?

#### **2.4.4 Principles to help executives create shareholder value.**

Alfred Rappaport (2006: 66-77) offers ten basic principles to help executives create lasting shareholder value. Principle three of the ten principles, is about

making acquisitions that maximise expected value, even at the expense of lowering near-term earnings.

Companies typically create most of the value through day-to-day operations, but a major acquisition can create or destroy value faster than any other corporate activity. With record levels of cash and relatively low debt levels, companies increasingly use mergers and acquisitions to improve the competitive positions. Companies and the investment bankers usually consider price/earnings multiples for comparable acquisitions and the immediate impact of earnings per share (EPS) to assess the attractiveness of a deal. The view is that EPS accretion is good news and its dilution as bad news. When it comes to exchange-of-shares mergers, a narrow focus on EPS poses an additional problem on top of the normal shortcomings of earnings. Whenever the acquiring company's price/earnings multiple is greater than the selling company's multiple, EPS rises. The inverse is also true. If the acquiring company's multiple is lower than the selling company's multiple, earnings per share decline. In neither case does EPS tell one anything about the deal's long-term potential to add value.

Sound decisions about merger and acquisition deals are based on the prospects for creating value, not on the immediate EPS impact, and this is the foundation for the third principle of value creation. Management needs to identify clearly where, when, and how it can accomplish real performance gains by estimating the present value of the resulting incremental cash flows and then subtracting the acquisition premium.

The following *research question* is thus tabled:

- **Research Question 19:** Do companies increasingly use mergers and acquisitions to improve the companies competitive positions, and does the company consider price/earnings multiples for comparable acquisitions and the immediate impact of earnings per share (EPS) to assess the attractiveness of a deal?

- **Research Question 20:** Are sound decisions about merger and acquisition deals based on the prospects for creating value, and not on the immediate EPS impact? Does management need to identify where, when, and how it can accomplish real performance gains by estimating the present value of the resulting incremental cash flows and then subtracting the acquisition premium?

#### **2.4.5 Due diligence research through information technology**

Due diligence research is one of the most critical aspects of the process and Marydee Ojala (2006: 44-46) discusses the importance of an information technology professional in this process.

Ojala (2006: 44-46) mentions that an increase in merger and acquisition activity coupled with evolving government legislation in many countries, has given due diligence research new weight and increased its scope. Ironically, as the requirements for doing due diligence grow in importance and prominence, the contributions of information professionals may be undervalued. Since much of the information that governments now require companies to keep stems from internal sources (information the company has collected from and about its customers), management has turned to information technology departments to help with compliance. The information technology departments have been more interested in enterprise search to help meet information storage and retrieval needs than in acquiring or merging that data with external information. External information enters the picture in response to government regulations regarding money laundering, corporate fraud, and combating terrorism. Government information on Politically Exposed Persons (PEPs) originates, in the U.S., with the Treasury Department's office of Foreign Assets Control (OFAC), with input from other countries' governments. Several companies found compliance with Sarbanes Oxley (SOX), the USA Patriot Act, and anti-money laundering legislation (AML) a business opportunity. On the other hand, some information departments have

used compliance requirements to tout the skills and knowledge about information sources and databases, thus raising the visibility and demonstrating alignment with the overall goals of the employers.

Ojala (2006: 44-46) writes that a due diligence has always been a critical part of merger and acquisition transactions. Company 'A' buying Company 'B' wants to make absolutely sure that there are no problems with the potential acquisition. It's what happens between getting engaged and the actual wedding ceremony, so to speak. The traditional due diligence focuses on corporate financials, do the numbers check out? Is the company correctly valued? Are the assets overstated? Are the liabilities understated? Is there debt lurking someplace off the books? More recently, the concern has been about actual, outright fraud.

Due diligence of this type is the arena of lawyers and accountants. Those doing the due diligence are likely to know more about the internal financial situation of the target company than government regulatory bodies. What an information professional can do to supplement the due diligence review is to supply recent news on the company and background on the industry. It's important for due diligence that an exhaustive search be done. "*1 hat*" means not restricting yourself to databases on Dialog, Factiva, and Lexis-Nexis (although these should be first on your list), but also Web news services such as Google News, Yahoo! News, and Topix.net. The trade press should also be included. Due diligence is an area for which duplication is not a problem. There are instances when the amount of information gathered is as important as unique news items. In M & A, the due diligence size can trump quality. Background on the industry should concentrate on what might happen in the future rather than what happened in the past. Where is the industry going and how might that affect future profitability?

When the merger and acquisition transaction involves small businesses, or even large companies that are not traded on any shares exchange, the financial reports given to the potential acquirer by the target company are harder to judge in terms of the veracity. Comparing reported numbers with industry norms is one

methodology. The Risk Management Association (RMA) Annual Statement Studies, published by the RMA ([www.rmahq.org](http://www.rmahq.org)), now comes as two separate entities. The main title is shared, but the subtitles are different. One is Financial Ratio Benchmarks; the other, Probabilities and Cash Flow Measures.

The following **research question** is thus tabled:

- **Research Question 21:** How important is it to have an information professional supplementing the due-diligence review and what would be expected from the information professional? Is it important to have the information professional supply recent news on the company and background on the industry?

#### **2.4.6 Importance of intellectual property**

Simon Rowell (2006: 68-69) highlights the importance of the intellectual property (IP) due diligence process. According to Rowell (2006: 68-69) the company must be very careful to ensure that it performs this process in order to avoid making mistakes in the course of merger and acquisition transactions. While the concept of conducting an investigation into the material aspects of a commercial transaction is not new, such due diligence investigations often focus on the tangible assets and ignore or give insufficient weight to the intangible assets. However, the most valuable part of a business is often those intangible assets, in particular intellectual property (IP). Getting IP due-diligence right is critical to the success of many transactions and getting it wrong can have dire consequences for both client and advisor.

A high-profile example of due diligence failure was the 1998 purchase of the legendary Rolls-Royce automobile company. Volkswagen and Bavaria Motor Works (BMW) were in a bidding war to purchase the company and, ultimately, Volkswagen posted the winning bid of nearly US\$800 million, acquiring almost everything necessary to make a Rolls-Royce automobile; the plant, machinery and designs. Unfortunately Volkswagen overlooked arguably the most valuable part of the business, the right to the Rolls-Royce trade mark. After the deal

closed, Volkswagen could make a luxury car that looked like a Rolls-Royce, but could not call it a Rolls-Royce. Another company (producing Rolls-Royce airplane engines) owned the Rolls-Royce mark and had licensed the mark to the Rolls-Royce automobile company under a licence that terminated in the event that the automobile company was sold. Soon after, BMW acquired the rights to use the Rolls-Royce trade mark on automobiles for significantly less than Volkswagen had paid for the tangible assets. The story highlights the need for a prospective purchaser or licensee (“the purchaser”) to conduct adequate due diligence prior to completing a transaction for the transfer or license of intellectual property rights.

Chartered Accountants (or lawyers) who do not live and breathe intellectual property on a daily basis need to take great care when advising on the merits and value of any transaction having a significant intellectual property component. The first step in the IP due diligence process is planning. What is the overall objective? What do you need to know? What are the key areas of risk? Are there aspects of the transaction that are less important than others? The answers to these questions will depend to a great extent on the IP strategy of both the vendor and purchaser. It is essential to have a sound understanding of the IP strategy of each organisation to get the maximum benefit from the due diligence process. Understanding the purchaser’s strategy is important. The use to which the acquired IP will be put will affect issues such as freedom to operate, the required breadth of any patent claims, and such like. For example, is the IP being acquired simply to shut down a competitive product or will it form the core IP for a diversification growth strategy?

One of the easiest mistakes for chartered accountants and lawyers to make in conducting IP due diligence is to assume that the IP actually covers the products being sold by the vendor, or the aspect of the product that the purchaser considers to be a source of competitive advantage. A patent may contain a number of claims, but the breadth of those claims may be restricted to a few narrow embodiments of the product. This may permit competitors to offer a

competing product, although not the particular protected embodiments. Clearly this is something the purchaser will want to know. It can be a very dangerous and costly mistake to assume that simply because a product is patented, the purchaser must have the right to sell the product without infringing the rights of others.

The value of IP due diligence process depends significantly on the initial planning, the investigator's understanding of the IP strategy of both the purchaser and vendor, and the investigator's experience in dealing with the peculiarities of each type of intellectual property.

The following **research question** is thus tabled:

- **Research Question 22:** How important is the intellectual property (IP) due-diligence process? Is the intellectual property process often omitted during the due-diligence process? Are there consequences if the intellectual property process is not carried out? What are these consequences?

## Chapter 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

A detailed literature review covering the macro-economic overview of M & A, the South African and International guidelines and perceptions of the M & A process all helped to form the theoretical basis of this study. The information gathered from the literature review assisted in the compilation of the questionnaire that will be used to measure the perceptions of the respondents with regard to the identification of issues that are important for the implementation of M & A initiatives within the manufacturing sector. The questionnaire will also simultaneously identify the current status of these issues in the organisation.

The results of the questionnaire were analysed statistically in order to evaluate the general details of each respondent and the feasibility of propositions, as well as to answer research questions identified in the literature review. Figure 3.1 outlines the methodology to be followed.

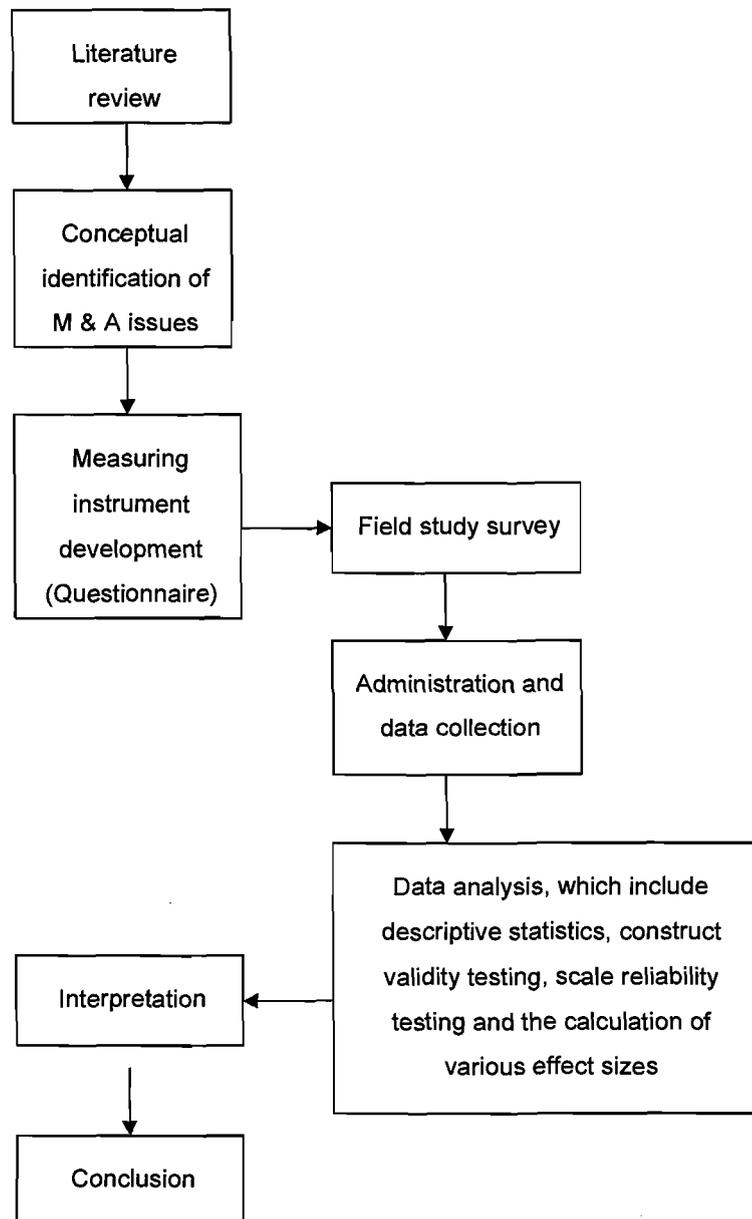
#### 3.2 Research objectives

The objective of this research is to determine the value of a financial due diligence during an M & A, and whether a financial due diligence model would be beneficial to decision-makers of manufacturing companies. If a financial due diligence model is beneficial to decision-makers, then the research would further determine what the most important calculated variables are, and what issues should be addressed in such a model. The analyses will look at how these calculated variables and issues are interpreted across different levels of decision-makers. It will also look at the reasons for M & A and the motivation for the introduction of the financial due diligence process within these companies. The level of satisfaction within companies that have embarked on a financial due diligence process will also be analysed.

The specific objectives of this research are to:

- establish the conditions regarded as important for the successful implementation of the due diligence process within the manufacturing sector;
- discover how well the due diligence process in the manufacturing sector currently score against the issues considered to be important;
- ascertain how the due diligence process is interpreted across the spectrum of decision-makers in the manufacturing sector;
- analyse the possible motivators for the undertaking of a due diligence and to discover which of these motivators drive the implementation thereof;
- gauge the level of satisfaction within the manufacturing sector with regard to the implementation of the due diligence process;
- validate perceptions regarding the mindset of decision-makers in the manufacturing sector regarding the implementation of the due diligence process; and
- determine from the data collected, if a financial due diligence model could be developed, to assist decision-makers on deciding whether a M & A should go ahead.

**Figure 3.1: Methodological approach**



### **3.3 Population and sample details**

The population researched comprises small, medium and large enterprises, both locally and internationally, that are operating in the manufacturing sector.

The sample was drawn from the supplier, customer and affiliate lists supplied by employers, and the author's network of contacts in the Sturrock and Robson and

Pandrol groups. These contacts were further more asked to forward the questionnaire to persons they knew in the manufacturing industry for them to respond. The sampling plan was not random, and therefore only effect sizes (see Section 3.6.2) will be used and not standard statistical hypothesis testing (which require random samples). The questionnaire was converted into electronic format and distributed via e-mail to the relevant respondents. The questionnaire was also submitted to SEIFSA for them to include on their database. Respondents needed to enter their responses online at <http://vovici.com/wsb.dll/s/14452g2bfe0>.

The respondents were expected to be chief executive officers (CEO's), general managers, managing directors, financial managers or, in the absence of a formal hierarchy, the person charged with making the strategic decisions in the organisation. Those organisations that did not meet the qualifying criteria were eliminated from the sample. The qualifying questions were asked early on in the questionnaire to ensure the population was from the manufacturing sector and not any other sector. Hence, the target population was senior managers and directors of manufacturing organisations.

The SEIFSA electronic database comprises 3 500 companies. However after filtering for manufacturers, the number of companies was substantially reduced. Nevertheless, the database is large and presented an excellent opportunity for obtaining a high response rate, which allowed for validation of the research. For this research, a minimum sample size of 25 was targeted.

### **3.4 Data collection**

Data collection was conducted primarily by means of a literature review and questionnaire, although the opinions of industry experts were used to tailor the research to some extent.

#### **3.4.1 Literature review**

The main objective at this stage is to create a theoretical base for the compilation of the survey questionnaire.

### **3.4.2 Questionnaire survey**

A copy of the questionnaire is attached as Appendix 1.

### **3.4.3 Questionnaire structure**

**Qualification questions** (Questions 1–5). These questions were designed to determine whether respondents formed part of the target population. If they fell outside the predefined parameters for the manufacturing industry, they were eliminated from the research. Questions 1 and 2 determined whether the respondent were manufacturers, while Questions 3 to 5 were used to determine whether the respondent and the respondent's organisation were correctly targeted, as per the definition outlined earlier in the research.

**Categorisation questions** (Questions 6–7). These questions were designed to classify respondents' organisations across the spectrum of international or local ownership. The information obtained in this way was then used to do a comparative analysis to see how perceptions differ across these categories of decision-makers.

**Testing external validity of the research** (Questions 8–9). These questions were used to authenticate the importance of the research, as well as to confirm the importance of the due diligence during the M & A process in the manufacturing industry.

**Investigative questions** (Questions 10–16). These questions were designed to identify the organisation's current understanding of why M & A happen and also to discover what the rationale for carrying out a due diligence before an M & A transaction.

**Questions relating to the M & A strategy** (Questions 17– 30). These questions tested the perceptions of the decision-makers in the manufacturing industry regarding the best strategy to adopt while pursuing an M & A.

**Questions relating to the due diligence process** (Questions 31– 42). These questions tested the perceptions of the decision-makers in the manufacturing industry regarding the necessity of the due diligence process and the importance of the financial part of the due diligence.

**Questions relating to the financial due diligence process** (Questions 43– 45). These questions tested the perceptions of the decision-makers in the manufacturing industry regarding how important a financial due diligence is and what the most important elements are in the financial due diligence process.

**Questions relating to the level of satisfaction achieved** (Question 46). This question tested how satisfied respondents were with the implementation of a due diligence during an M & A.

**Questions required individuals to give their input and experience related to the financial due diligence process** (Questions 47– 52). Some questions allowed for the respondents to add additional comments and thoughts. These were used to validate the research and to see whether additional issues of importance were raised that were omitted from the questionnaire and not identified in the literature review.

## **3.5 Measuring instruments**

### **3.5.1 Validity**

A confirmatory factor analysis is used to validate the constructs formed. The three constructs are:

- Companies position with regards to due diligence and M & A (Questions: 8 to 13);
- M & A strategy (Questions: 17 to 30); and
- Due diligence strategy (Questions: 31 to 42).

According to Johnson & Wichern (1992: 396), if variables can be grouped by their correlations, that is all variables within a particular group which are highly

correlated amongst themselves but have a relatively small correlations with variables in a different group, then each group of variables represent a single underlying construct or factor. The factor analysis is based on the correlation matrix, and a varimax rotation was performed to improve interpretation. The method of Kaiser is used to determine the number of factors extracted, in this case all the factors with even values greater than 1 were extracted. In addition, the Kaiser-Meyer-Olkin (1970: 401-415) (KMO) measure of sampling adequacy is used. Kaiser (1974: 31-36) recommends the following interpretation concerning the sample size based on the KMO measure; values below 0.5 are unacceptable, values between 0.5 and 0.7 are moderate, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great, and values above 0.9 are superb.

A section at the end of the questions was added to provide respondents with the opportunity to identify additional issues that they found important to the successful implementation of a due diligence in the M & A process. In addition, the assistance of industry experts was utilised to tailor the questionnaire before distribution. Generally, this method is seen as adding validity to the measuring instrument (Morgan 1988).

### **3.5.2 Reliability**

In addition, the reliability of the scale of each construct is also tested. According to Field (2005:666), another way to look at reliability is to say that two people, who are the same in terms of the construct being measured, should get the same score. The Cronbach-alpha measure is utilised for this purpose. Kline (1999: 7-16) mentions that a value above 0.7 is good. However, after consultation with the statistical department at North West University, a value above 0.5 is also considered acceptable, since this value has a high correlation effect size (Ellis & Steyn, 2003: 52).

Personal construct psychology is a constructivist system of psychology developed by George Kelly and expounded in his two-volume work: *Principles of Personal Construct Psychology* (New York: Norton, 1955). The questionnaire was

constructed by applying these principles and techniques, as well as by means of the literature survey and the customisation of issues according to the input provided by Industry experts (De Vellis, 1991). A four-point Likert scale was chosen to measure respondent agreement with the statements provided. A four-point scale was judged to be the optimal trade-off between brevity and reliability, by decreasing the scale respondents are unable to take a neutral stance, and this would then increase the chance of achieving the research objectives (De Vellis, 1991).

## 3.6 Data analysis

### 3.6.1 Data types

The data collected from the questionnaire contains the following data types:

- Qualification Questions (Q1–Q5) *Nominal/Ordinal*
- Categorisation Questions (Q6–Q7) *Nominal/Ordinal*
- Testing External Validity of the Research (Q8–Q9) *Ordinal*
- Investigative Questions (Q10–Q16) *Nominal/Ordinal*
- Questions relating to the M & A strategy (Q17–Q30) *Ordinal*
- Questions relating to the due diligence process (Q31–Q42) *Ordinal*
- Questions relating to the financial due diligence process (Q43–Q45) *Nominal*
- Questions relating to the level of satisfaction achieved (Q46) *Ordinal*
- Questions required individuals to give their input and experience related to the financial due diligence process (Q47– Q52) *Ordinal*

### 3.6.2 Statistical data analysis

The following descriptive statistics are included:

- The mean and the median value (calculated from frequency data) as a measure of central location; and
- The standard deviation as a measure of spread.

The formula used to calculate the median value from frequency data is:

$$me = p_{50} = k_l + \frac{(k_u - k_l) \left( \frac{50n}{100} - F_{k_l} \right)}{f_{p_{50}}},$$

where  $k_l$  = lower bound of the interval containing  $p_{50}$ ,  $k_u$  = upper bound of the interval containing  $p_{50}$ ,  $F_{k_l}$  = cumulative frequency smaller than  $k_l$  and  $f_{p_{50}}$  = frequency of the interval containing  $p_{50}$ .

The following effect sizes were also calculated and interpreted:

- The Cohen's d value was used to calculate the effect size for the difference between means. This value is given by:  $d = \frac{|\bar{x}_1 - \bar{x}_2|}{s_{\max}}$ , where  $\bar{x}_1$  and  $\bar{x}_2$  represent the mean values of the groups to be compared, and  $s_{\max}$  the maximum standard deviation (Ellis & Steyn, 2003: 51-53). Cohen (1988: 20-27) gives the following guidelines for the interpretation of the effect size:
  - Small effect,  $d = 0.2$ ;
  - Medium effect,  $d = 0.5$ ; and
  - Large effect,  $d = 0.8$ .
- The effect size used for the relationship in a contingency table is given by  $w = \sqrt{\frac{\chi^2}{n}}$ . Cohen (1988: 20-27) gives the following guidelines for the interpretation of the effect size:
  - Small effect,  $w = 0.1$ ;
  - Medium effect,  $w = 0.3$ ; and
  - Large effect:  $w = 0.5$ .

Graphical representation will be presented in the form of box plots.

Questions 1 to 7 were used to determine whether respondents formed part of the population, as well as to determine the category of ownership of each respondent. Such categorisation was necessary so that a comparative statistical analysis could be performed on the data.

Questions 8 to 13 were included to add an element of external validity to the research and to justify why such a study should, indeed, take place. A simple descriptive parametric analysis was used for presenting the results.

Questions 14, 15 and 16 were aimed at identifying the current understanding of what the rationale is for carrying out a due-diligence before a M & A transaction. The nominal responses were analysed using simple descriptive statistics.

Questions 43, 44 and 45 were aimed at identifying the priorities companies give to different aspects of the due-diligence process. The nominal responses were analysed using simple descriptive statistics.

### **3.6.3 Research questions**

The following research questions were derived from the literature to assist with the meeting of the objectives set. A description of which of the above statistical techniques were used is also outlined.

#### **RESEARCH QUESTIONS**

**Research Question 1:** Regardless of the category or structure, do all M & A have one common goal and is this goal to create shareholder value? Is it meant to create synergy that makes the value of the combined companies greater than the sum of the two parts? Is the success of an M & A dependent on whether this synergy is achieved?

Q17, Q18 and Q19 were used to answer research question 1.

**Research Question 2:** Will strong companies act to buy other companies to create a more competitive, cost-efficient company? Will the companies come together hoping to gain a greater market share or to achieve greater efficiency?  
Q20, Q21 and Q22 were used to answer research question 2.

**Research Question 3:** What are most common methods and tools to assess the value of a target company? What comparative ratios are important? How important is discounted cash flow? What is the premium for potential success?  
Q47, Q50 and Q45 were used to answer research question 3.

**Research Question 4:** To find mergers that have a chance of success, what criteria should investors start by looking for? What is a reasonable purchase price? How important is a cash transaction, or are there better types of transactions?  
Q48, Q49 and Q50 were used to answer research question 4.

**Research Question 5:** When the Chief Executive Officer and top managers of a company decide to pursue an M & A, is the starting point a tender offer? How is the tender offer calculated?  
Q23 was used to answer research question 5.

**Research Question 6:** Do companies find that the best way to get ahead is to expand ownership boundaries through M & A?  
Q24 was used to answer research question 6.

**Research Question 7:** Are initial high costs in an M & A mainly related to the due diligence process?  
Q25 was used to answer research question 7.

**Research Question 8:** Is the lack of in-depth due diligence a major reason why mergers and acquisitions fail, or is it that meaningful information is not always collected? All though a thorough due diligence exercise is important to afford a

company a negotiating advantage and help inform its valuation of the particular deal, but would it not be more cost effective to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A?

Q32 and Q33 were used to answer research question 8.

**Research Question 9:** How is Shareholder Value Analysis (SVA) determined? How important is SVA? Will SVA determine whether value will be added by a specific strategic decision?

Q26 was used to answer research question 9.

**Research Question 10:** Which of the following risks facing the purchaser and financiers carry the highest priority; political and country risk; the accuracy of historical financial information; the continuity of people, suppliers and customers; the ownership/title of assets; the value attached to the assets and unknown liabilities?

Q43 was used to answer research question 10.

**Research Question 11:** Depending on the nature of the deal, the due diligence review usually encompasses an audit of financial, legal, information technology, human resources, commercial, technical and environmental aspects of the business, which one of these reviews is the most important?

Q44 was used to answer research question 11.

**Research Question 12:** What are the most important calculated variables that will help make an investment decision, and how important are these ratios for the decision-makers? Which numbers and ratios give the most information for the least amount of effort? Should investors, at a minimum, always look at the growth trends in sales, earnings, operating margins, cash flow and return on equity, and why?

Q30 Q45 and Q48 were used to answer research question 12.

**Research Question 13:** Would one agree that there are two primary objectives on which to stay focused during the due diligence process? Would these two objectives be to identify and confirm the strategic rationale for the deal; and to identify and confirm the value of the deal?

Q31 was used to answer research question 13.

**Research Question 14:** Is it beneficial to prepare some kind of a model of the target businesses value, which will support the value of the offer made to the vendor? What should this model incorporate? Is the model likely to involve a projection of future sustainable earnings, synergistic benefits and the consideration of any integration or separation costs? Is a key part of the financial due diligence exercise to provide input to or test existing assumptions made in the model? What key questions need to be addressed in the model?

Q33, Q34, Q35, Q51 and Q52 were used to answer research question 14.

**Research Question 15:** Is it important that during the deal negotiations, that it be clear which assets are to be included in the transfer and should agreement be reached over the valuation of these key assets at this stage?

Q36 was used to answer research question 15.

**Research Question 16:** Will failure to plan and structure transactions in the most tax efficient manner diminish or destroys anticipated increases in shareholder value.

Q37 was used to answer research question 16.

**Research Question 17:** How critical is the manufacturing process due diligence to the success of the M & A? Is it all about the product and engineering and is manufacturing seen as the long-lost cousin?

Q38 was used to answer research question 17.

**Research Question 18:** Do consulting and valuation service companies add value to the due diligence process? Will it pay to have these companies carry out

the due diligence process for a M & A?

Q39 and Q40 were used to answer research question 18.

**Research Question 19:** Do companies consider price/earnings multiples for comparable acquisitions and the immediate impact of earnings per share (EPS) to assess the attractiveness of a deal?

Q27 was used to answer research question 19.

**Research Question 20:** Are sound decisions about M & A deals based on the prospects for creating value, and not on the immediate EPS impact? Does management need to identify where, when, and how it can accomplish real performance gains by estimating the present value of the resulting incremental cash flows and then subtracting the acquisition premium?

Q28 and Q29 were used to answer research question 20.

**Research Question 21:** How important is it to have an information professional supplementing the due diligence review and what would be expected from the information professional? Is it important to have the information professional supply recent news on the company and background on the industry?

Q41 was used to answer research question 21.

**Research Question 22:** How important is the intellectual property (IP) due diligence process? Are there consequences if the intellectual property process is not carried out? What are these consequences?

Q42 was used to answer research question 22.

## Chapter 4

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the results and describes the analysis that was performed. The interpretation of the results and the answering of research questions are also covered in this chapter in order to facilitate reading of the report.

Chapter 4 discusses the results of the research in terms of:

- The sample details and responses; and
- Research validity.

The associated analysis required to answer the research questions are then discussed. The order in which the research questions are analysed follows the same order as the questionnaire structure:

- Investigative data analysis;
- M & A strategy data analysis;
- Financial due diligence process data analysis;
- Levels of satisfaction; and
- Open ended questions.

#### 4.2 Sample details and responses

The total number of valid questionnaires returned is reflected in Table 4.1 below. The process consisted of a five-stage elimination process, whereby respondent's responses to Question 1 through to Question 5 were used to filter questionnaires. To recap, the research population comprises small, medium and large enterprises, both locally and internationally, that are operating in the manufacturing sector. A total of 27 questionnaires were returned; however, after filtering, the number of valid questionnaires that represented the research population was reduced to 23.

**Table 4.1: Total number of respondents in relation to the number of valid respondents**

	Number of Respondents Involved in Manufacturing	Number of Respondents who are CEO's, MD's, GM's, Directors, Fin Managers	Number of Respondents company's with more than 500 employees	Number of Respondents company's who's turnover exceeds R750m
Y	23	24	8	9
N	4	3	19	18
<b>TOTAL</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>

The profile of the intended respondents was identified as being that of individuals who are charged with making the strategic decisions in an organisation. The respondents were expected to be chief executive officers, managing directors, general managers, directors or financial managers. Table 4.2 reflects the respondent profile of the 23 valid questionnaires, which was obtained by analysing the answers, obtained in Question 3 of the survey. The respondents' responsibilities clearly matched the intended profile. This can be attributed to the fact that questionnaires were addressed to specific individuals within organisations.

**Table 4.2: Profile of respondents**

Position Held in Company	Number of Respondents	Percentage of Total
CEO, MD, Directors	10	43%
GM, FM	11	48%
Other	2	9%
<b>TOTAL</b>	<b>23</b>	<b>100%</b>

The research will analyse responses across the local and international spectrum and will also compare the different sizes of businesses. In order to facilitate the making of this comparison, Q4 to Q7 were included in the survey. The profile of the respondents with regards to location is shown in Tables 4.3 and 4.4 shows the size of the organisations the respondents operate in.

**Table 4.3: Profile of respondents in terms of location**

Local		Position held in company			Total
		CEO/MD/Director	GM/FM	Other	
Yes	Count	7	13	3	23
	Expected count	9.4	11.1	2.6	23
	% within local	30%	57%	13%	100%
No	Count	4	0	0	4
	Expected count	1.6	1.9	4	4
	% within local	100%	0%	0%	100%
Total	Count	11	13	3	27
	Expected count	11	13	3	27
	% within local	41%	48%	11%	100%

The effect size used for the relationship in a contingency table (see Section 3.6.2) calculated for the cross tabulation in Table 4.3 yields  $w = 0.503$ , which corresponds to a large effect. This means, that there is a dependency between the position the person who responded holds in his/her company, and whether he/she is based locally or abroad. Care should however be taken not to read too much into this dependency, since very few respondents (only four; of whom all were CEO's, MD's or Directors) were respondents from abroad. This probably caused the dependence. More information (data) is required to confirm the result that the position of the respondents depends on whether the person is based locally or abroad.

**Table 4.4: Profile of respondents in terms of size of organisation**

<b>Number of full time employees</b>	<b>Number of Respondents</b>	<b>Percentage of Total</b>
0-20	0	0%
21-50	2	9%
51-100	5	22%
101-500	9	39%
>500	7	30%
<b>TOTAL</b>	<b>23</b>	<b>100%</b>

<b>Company's annual turnover (R Millions)</b>	<b>Number of Respondents</b>	<b>Percentage of Total</b>
0-10	0	0%
10-50	5	22%
50-250	4	17%
250-750	6	26%
>750	8	35%
<b>TOTAL</b>	<b>23</b>	<b>100%</b>

The median values are 300 and 458.3, for the number of full time employees and annual turnover respectively. Note that no spread measure (quartile deviation) is calculated due to calculation difficulties caused by the open upper bounds.

Although 83% of respondents were found to be local respondents and only 17% were found to be respondents from abroad, such a finding was felt not to detract from the overall validity of the research.

### **4.3 Construct validity and reliability**

For the 23 valid data points, the Kaiser-Meyer-Olkin (1970: 401-415) measure of sample adequacy is summarized in the Table 4.5.

**Table 4.5: Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy**

<b>Construct</b>	<b>KMO</b>
<b>1. Companies position with regards to due diligence and M &amp; A</b>	<b>0.549</b>
<b>2. M &amp; A strategy</b>	<b>0.331</b>
<b>3. Due diligence strategy</b>	<b>Correlation matrix is not positively definite, therefore cannot calculate the measure</b>

Based on the results shown in Table 4.5, it is clear that for the amount of variables measured per construct, an unacceptable amount of respondents were observed to perform a confirmatory factor analysis (see Section 3.5.1). Hence, the output of such an analysis could vary drastically. The only way to rectify this situation is to increase the sample size. Therefore, the assumption was made that the constructs are indeed valid based on the literary considerations (see Section 3.5.1). Table 4.6 contains Cronbach alpha values used to test scale reliability.

**Table 4.6: Cronbach's Alpha measure of scale reliability**

<b>Construct</b>	<b>Cronbach's Alpha</b>
<b>1. Companies position with regards to due diligence and M &amp; A</b>	<b>0.641</b>
<b>2. M &amp; A strategy</b>	<b>0.730</b>
<b>3. Due diligence strategy</b>	<b>0.751</b>

Table 4.6 shows that the scale for all the constructs are indeed reliable as discussed in Section 3.5.1. Questions Q11 and Q23 were negative in terms of the construct and were transformed by subtracting the response value from 5.

Now that validity (based on the literature) and reliability (based on Cronbach's alpha) are established an average value for each construct can be calculated for each respondent. Subsequently these values will be analysed. The underlying scale of the questions summarized in the constructs were from 1 to 4 where 1 represents 'definitely not' and 4 represents 'definitely yes'.

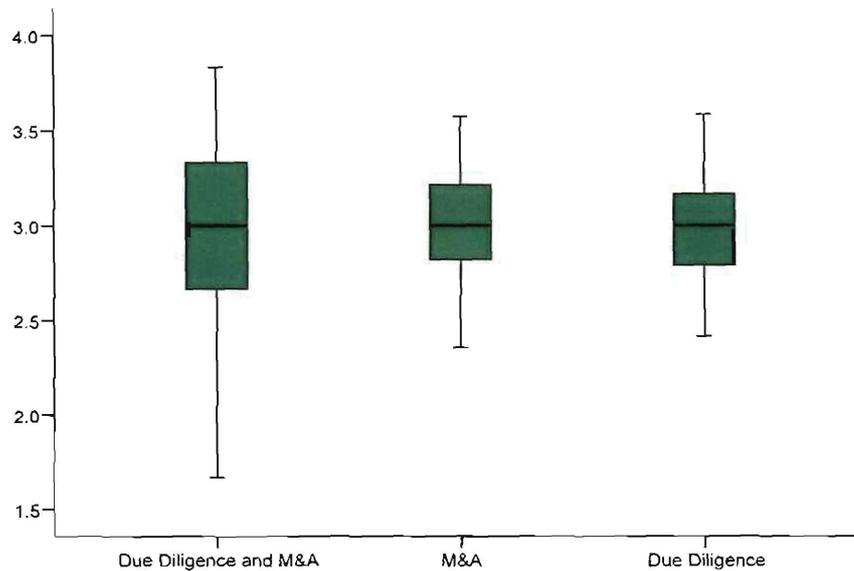
The constructs are summarized in Table 4.7 in terms of location (mean) and spread measure (standard deviation).

**Table 4.7: Location / spread summary of the constructs**

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Due diligence and M &amp; A</b>	<b>23</b>	<b>2.96</b>	<b>.53</b>
<b>M &amp; A</b>	<b>23</b>	<b>2.99</b>	<b>.29</b>
<b>Due diligence</b>	<b>23</b>	<b>3.00</b>	<b>.32</b>
<b>Valid N (list wise)</b>	<b>23</b>		

Figure 4.1 gives a visual representation of the distribution of the constructs by means of box-plots. Note that the horizontal line in the box represents the median, whilst spread is captured in the length of the box and whiskers.

**Figure 4.1: Box plot representation of the constructs**



In Figure 4.1, there is no difference in the median response to the constructs. The median values are all approximately 3 which is a “yes” response. Note that there is a larger spread in the response for the “Due diligence and M & A” construct. The above box-plot only represents a summary of all the questions in the different constructs, the individual questions in the constructs will be analysed later on.

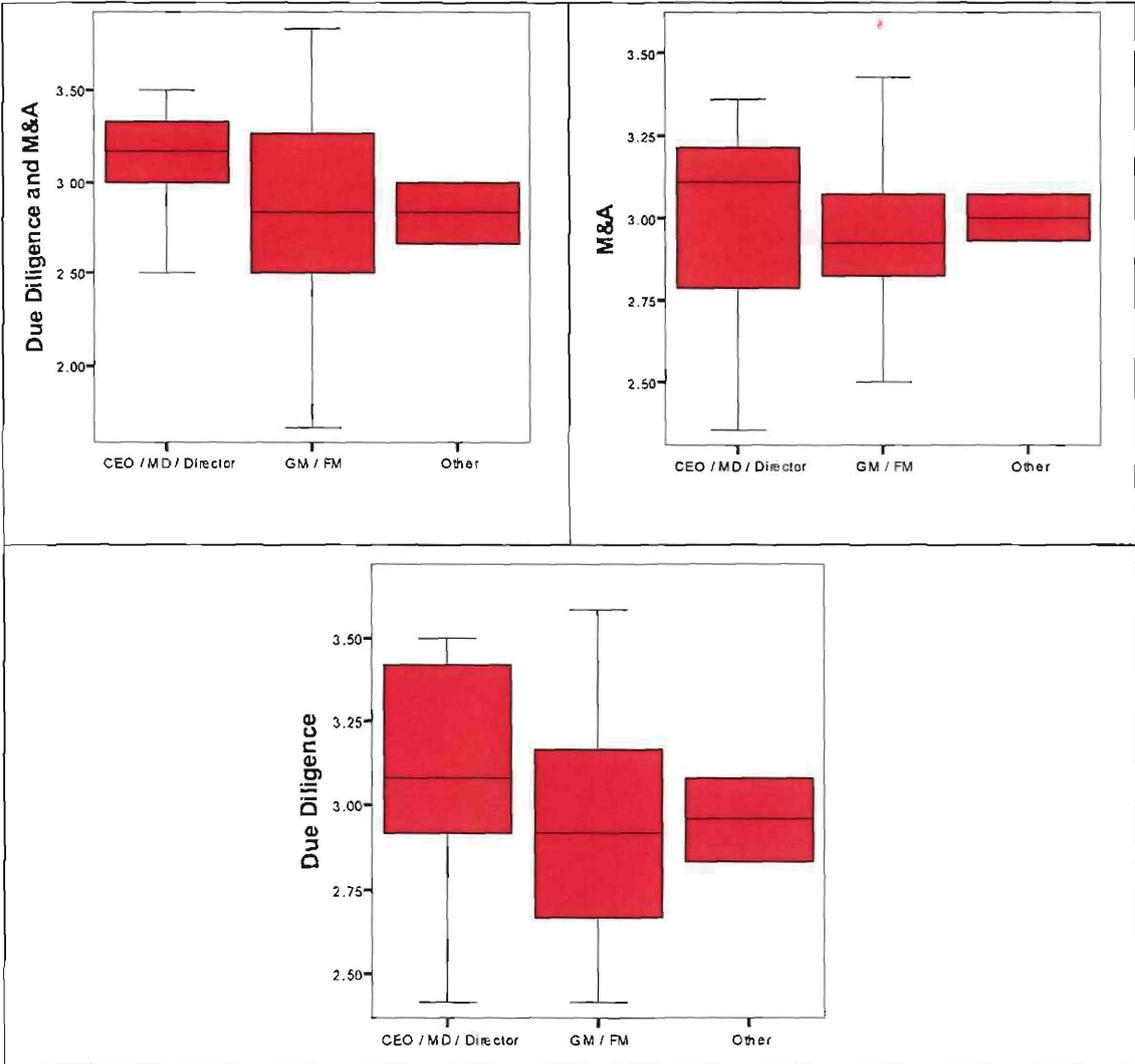
A comparison of the different view points of respondents in various managerial positions with respect to the constructs is presented. The presentation will be in the form of effect sizes (see Section 3.6.2) and comparative box-plots. The effect sizes are given in Table 4.8.

**Table 4.8: Effect sizes for a comparison of different positions held in the company**

<b>CONSTRUCTS</b>	<b>Cohen d</b>
<b>CEO / MD / D Versus GM/FM</b>	
Due diligence and M & A	0.42
M & A	0.11
Due diligence	0.48
<b>CEO / MD / D Versus Other</b>	
Due diligence and M & A	0.83
M & A	0.02
Due diligence	0.42
<b>GM / FM Versus Other</b>	
Due diligence and M & A	0.00
M & A	0.09
Due diligence	0.10

Table 4.8 shows that there is a medium effect in the way CEO / MD / Directors view the constructs, "Due diligence and M & A", as well as the construct, "Due diligence", when compared to GM/FM. However, a large effect (different views) is observed between CEO / MD / Directors and Other positions for the construct, "Due diligence and M & A". These effect sizes are calculated based on mean values, a median value comparison is presented in Figure 4.2.

**Figure 4.2: Box plot representation of the constructs for different managerial positions**



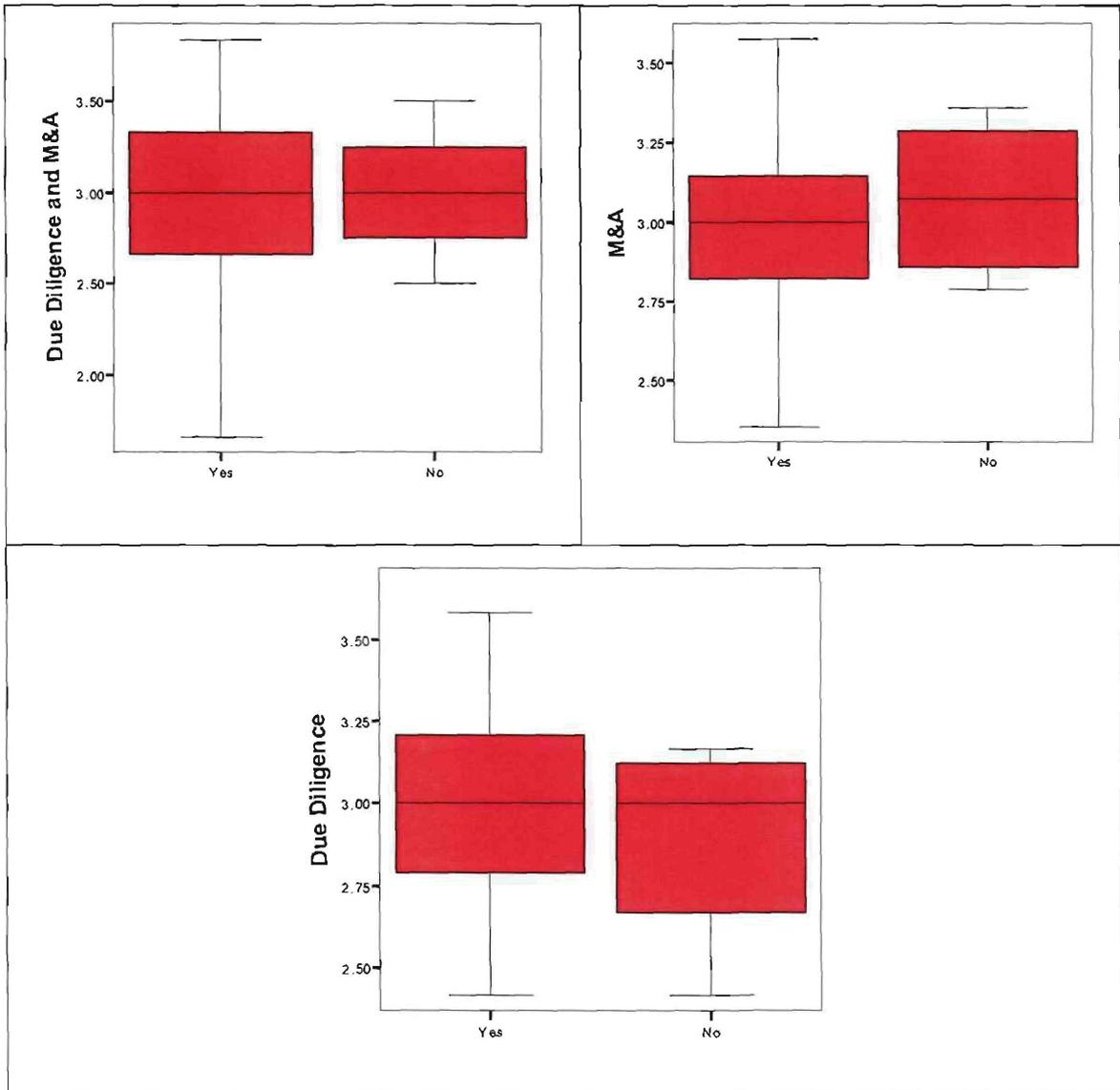
A comparison of the different view points of locally and abroad based respondents is presented. The presentation will be in the form of effect sizes (see Section 3.6.2) and comparative box plots. The effect sizes is given in Table 4.9

**Table 4.9: Effect sizes for a comparison of different positions held in the company**

<b>CONSTRUCTS (LOCAL / GLOBAL)</b>	<b>Cohen d</b>
<b>YES Versus NO</b>	
<b>Due diligence and M &amp; A</b>	<b>0.10</b>
<b>M &amp; A</b>	<b>0.33</b>
<b>Due diligence</b>	<b>0.38</b>

This shows that there is really no difference in the way local and people from abroad responded to the questions forming the constructs. However one should note that the amount of respondents abroad, in manufacturing is extremely low and more data should be gathered to confirm this result. This is however not in the scope of this project. A visual comparison is given in Figure 4.3 where “Yes” means locally based, and “No” means based abroad.

**Figure 4.3: Box plot representation of the constructs for local and abroad respondents.**



To further test validity, respondents were asked to rate their agreement with statements relating to the importance of due-diligence and M & A in their industry, and the level to which their companies were currently affected by M & A. Q8 to Q13 in the survey served this purpose. Simple descriptive statistics is used to evaluate the answers furnished by the respondents. Table 4.10 shows the

percentage of responses to Q8 – Q13, where 1 represents 'definitely not' and 4 represents 'definitely yes'.

**Table 4.10: Companies position with regards to due-diligence and M & A**

Statement	1	2	3	4	% rating >2
Q8. My company was affected by M & A.	32%	5%	36%	27%	63%
Q9. A due diligence must be performed before any M & A takes place.	9%	0%	13%	78%	91%
Q10. An M & A will be advantageous to my company.	9%	22%	60%	9%	69%
Q11. M & A only benefits shareholders and top executives.	13%	56%	22%	9%	31%
Q12. My company fears a loss of control as a result of an M & A.	9%	55%	31%	5%	36%
Q13. My company feels a due diligence must be carried out before considering M & A.	5%	0%	17%	78%	95%

The research appears to be valid, as 63% of the companies rated 3 or higher on the question indicating the level to which they are currently affected by M & A. More significantly, only 9% of respondents indicated that a due diligence must 'definitely not' be performed before an M & A takes place. 95% of respondents feel that their company requires a due diligence to be carried out before considering an M & A.

## 4.4 Investigative data analysis

Q14, Q15 and Q16 were aimed at identifying the current status of the due diligence process within the respondent organisations, how long it had been since they had implemented the due diligence process, and where the pressure to implement the due diligence process was coming from. Table 4.11 shows the percentage of responses to Q14 – Q16, were the respondents where required to chose one answer that best suited their companies position with regard to the questions asked (Refer to Q14 – Q16 in Appendix 1: Questionnaire, A1).

**Table 4.11: Current status of the due diligence process in the various organisations**

Statement	1	2	3	4	% rating >2
Q14. Indicate your company's current position on the due diligence process.	68%	4%	9%	19%	28%
Q15. If your company has implemented the due diligence process, for how many years has this been the norm?	9%	36%	23%	18%	41%
Q16. Indicate where pressure to perform due diligence is primarily coming from.	0%	91%	0%	9%	9%

Table 4.11 indicates the following:

With question 14; 68% of the respondents said that there companies perform the due-diligence process and only 28% of the respondents said that their company has not performed a due diligence and is not considering to do so.

With question 15; 36% of the respondents said that their companies only implemented the due diligence process over the past 5 years, indicating it is a

fairly new inception in a large percentage of the companies.

With question 16; 91 % of respondents indicated that the pressure to perform the due diligence process came from their shareholders. This is an overwhelming response indicating that government, target companies or socio economic responsibility plays an extremely small part of the reason to perform a due diligence.

## 4.5 M & A strategy data analysis

Q17 to Q30 were aimed at identifying the goals, synergies and reasons why companies consider M & A. The analysis was done by looking at responses from both abroad and local respondents in the different levels of the organisations. Table 4.12 shows the percentage of responses to Q17 – Q30, where 1 represents 'definitely not' and 4 represents 'definitely yes'.

**Table 4.12: M & A strategy**

Statement	1	2	3	4	% rating >2
Q17. The common goal of an M & A is to create shareholder value.	0%	13%	65%	22%	87%
Q18. M & A is meant to create synergy that makes the value of the combined companies greater than the sum of the two parts.	0%	0%	57%	43%	100%
Q19. The success of an M & A is dependent on whether this synergy is achievable.	0%	22%	48%	30%	78%
Q20. Strong companies will act to buy other companies to create more competitive, cost effective companies.	0%	14%	63%	23%	86%
Q21. Companies come together hoping to gain a greater market share.	0%	18%	56%	26%	82%

Q22. Companies come together hoping to achieve greater efficiency.	0%	22%	52%	26%	78%
Q23. When the CEO decides to pursue an M & A the starting point is a tender offer.	18%	63%	14%	5%	19%
Q24. Companies find that the best way to get ahead is to expand ownership boundaries through M & A.	0%	59%	36%	5%	41%
Q25. Initial high cost in M & A is related to the due diligence process.	13%	39%	39%	9%	48%
Q26. Shareholder value analysis (SVA) determines whether value will be added by a specific strategic decision, for instance an M & A.	0%	17%	74%	9%	83%
Q27. Companies consider price/earnings multiples to assess the attractiveness of an M & A deal	0%	0%	87%	13%	100%
Q28. Sound decisions about M & A deals are based on the prospects for creating value, and not on the immediate earnings per share impact	0%	17%	70%	13%	83%
Q29. Management need to identify real performance gains by estimating the present value of incremental cash flows and then subtracting the acquisition premium.	0%	13%	78%	9%	87%
Q30. Investors should always look at the growth trends of the company being acquired.	4%	4%	57%	35%	92%

The questions in table 4.12 were designed to determine the reasons for M & A. Most respondents either agreed or strongly agreed that M & A are there to create shareholder value and synergy between the companies. Of the respondents, 100% agreed that the value of the combined companies should be greater than the sum of the two parts.

When respondents were asked if CEO's start the M & A process by making a tender offer, only 19% of respondents agreed with this statement. This indicates that a due diligence type process is essential in an M & A. This statement is further supported by question 13 in table 4.5 where 95% of respondents feel that a due diligence must be carried out before considering M & A.

Of the respondents, 48% feel that initial high cost in M & A is related to the due diligence process. This percentage could decrease even further if due diligence costs could be reduced; supporting the idea of a time saving financial due diligence model as the starting point of the due diligence process.

Majority of respondents agreed or strongly agreed that; SAV determines whether value would be added (Q26; 83%), price/earnings multiples assess the attractiveness of an M & A deal (Q27; 100%), M & A deals are based on the prospects for creating value, and not on the immediate earnings per share impact (Q28; 83%), real performance gains are estimated by taking the present value of incremental cash flows and then subtracting the acquisition premium. (Q29; 87%), and investors should always look at the growth trends of the company being acquired (Q30; 92%).

## **4.6 Due diligence process data analysis**

Q31 to Q42 were aimed at identifying the current status of the due diligence process within the respondent organisations, how long it had been since they had implemented the due diligence process, and where the pressure to implement the due diligence process was coming from. Table 4.13 shows the percentage of responses to Q31 – Q42, where 1 represents 'definitely not' and 4 represents 'definitely yes'.

**Table 4.13: Due diligence strategy**

Statement	1	2	3	4	% rating >2
Q31. The primary objectives to stay focused on during the due diligence process would be to identify and confirm the strategic rational and confirm the value of the deal.	0%	0%	65%	35%	100%
Q32. The lack of in depth due diligence is the major reason why M & A fails	0%	35%	22%	43%	65%
Q33. It would be more cost effective to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A.	0%	18%	64%	18%	82%
Q34. This model would be beneficial to prepare some kind of target business value, which would support the value of the offer made to the vendor.	0%	18%	64%	18%	82%
Q35. A key part of the financial due diligence exercise would be to provide input to test existing assumptions made in a model.	0%	13%	69%	18%	87%
Q36. It is important that during the due diligence process it is clear which assets are to be included in the M & A transaction.	0%	5%	34%	61%	95%
Q37. Failure to plan and structure transactions in the most tax efficient manner would diminish anticipated increases in shareholder value.	0%	0%	56%	44%	100%
Q38. The manufacturing process due diligence is critical to the success of M & A	0%	23%	68%	9%	77%
Q39. Consulting and valuation service companies add value to the due diligence process	9%	56%	30%	5%	35%

<b>Q40. It would pay to have a consulting company carry out the due diligence process for an M &amp; A.</b>	<b>13%</b>	<b>56%</b>	<b>26%</b>	<b>5%</b>	<b>31%</b>
<b>Q41. It is important to have an information professional supplementing the due diligence process.</b>	<b>5%</b>	<b>26%</b>	<b>64%</b>	<b>5%</b>	<b>69%</b>
<b>Q42. It is important to investigate the intellectual property in the due diligence process.</b>	<b>0%</b>	<b>5%</b>	<b>47%</b>	<b>48%</b>	<b>95%</b>

In table 4.13 it can be seen that 65% of respondents indicated that the lack of in depth due diligence is the major reason why M & A fails. Further more, 82% of respondents indicated that a financial due diligence model would be beneficial.

Of the respondents, 95% to 100% found that it was important to; plan and structure a transactions in the most tax efficient manner, that during the due diligence process it is clear which assets are to be included in the M & A transaction, and also to investigate the intellectual property during the due diligence process.

Of the respondents, 77% indicated that the manufacturing process due diligence is critical to the success of an M & A.

Only 31% to 35% of the respondents indicated that a consultant added value and it would pay to have such a consultant as part of the due diligence process. However, 69% of respondents found it necessary to have an information professional as part of the due diligence team.

The second part of the due diligence portion of the questionnaire went around determining:

- risk facing the purchaser and financiers;
- which element of the due diligence audit was the most important; and

- the top ten most important variable calculations.

### **Risk facing purchasers and financiers**

The respondents had five choices to choose from namely; political and country risk, accuracy of historical financial information, continuity of people, suppliers and customers, ownership/title of assets, value attached to the assets and unknown liabilities.

Majority of the respondents chose only two of the given statements as their highest risk. Of the respondents, 65% chose continuity of people, suppliers and customers, and 30% of the respondents chose the accuracy of historical financial information as the highest risk when considering an M & A.

### **Which element of the due-diligence audit was the most important?**

The respondents had six elements to choose from namely; financial, legal, information technology, human resources, commercial, technical and environmental. Of the respondents, 48% chose the financial element of the due diligence audit as the most important. This was followed by 30% of the respondents choosing commercial, 9% legal and 13% human resources. This means that the majority of respondents thought the financial part of the due diligence audit was the most important and this bodes well for the implementation of a financial due diligence model.

### **The top ten most important variable calculations**

Table 4.14 shows the percentage of responses to Q45 of the questionnaire. Respondents were given twenty nine calculation variables and were asked to list the top ten most important calculated variables, which the respondent thought would help investment decisions.

**Table 4.14: Twenty nine calculated variables**

<b>Calculated variable</b>	<b>% of respondents who selected this calculated variable</b>
Accounts payable days	23%
Accounts receivable days	32%
Acid test ratio	27%
Book value (or NAV)	41%
Capital expenditure	27%
Cash flow	95%
Current assets	23%
Current liabilities	23%
Current ratio	32%
Debt	23%
Debt structure	27%
Debt equity ratio	50%
Depreciation	14%
Dividend	9%
Earnings	9%
Earnings before interest and tax	55%
Depreciation and amortisation(EBITDA)	36%
Earnings per share	32%
Gross margin	64%
Interest cover	14%
Market share	64%
Net profit margin	32%
Operating margin	59%
Price/Book ratio	0%
Price/Earnings ratio	41%
Price/Sales ratio	5%
Return on equity	68%
Return on assets	45%
Revenue	45%

From table 4.14 it is clear which of the 29 calculated variables are the most important. Therefore if any financial due diligence model was to be designed it would need to include the following calculated variables (ranked from highest to lowest %):

- cash flow;
- return on equity;
- market share;
- gross margin;
- operating margin;
- earnings before interest and tax;
- debt equity ratio;
- revenue;
- return on assets; and
- price/Earnings ratio.

#### **4.7 Satisfaction levels**

Question 46 gauged the level of satisfaction of respondents who had performed a due diligence. It is important to measure this satisfaction level because this will indicate to decision-makers whether or not to modify policies by adding the due-diligence process. Companies who are satisfied with due diligences in their organisations are more likely to continue in this way and even improve and optimise the process. Companies who do not perform due diligences could be convinced to do so as a result of the success encountered by the ones who do.

Of the 23 valid responses, 13% respondents declined to comment, 5% indicated excellent, 50% indicated good and 32% indicated fair, and there were no respondents that indicated poor.

Thus across the entire range of respondents they were significantly satisfied with the performance of a due diligence in the M & A process. These high levels of satisfaction is a positive indication for policy makers, and it is recommended that

companies who perform due diligences continue with this practice, and those who do not, should consider doing so. The introduction of a financial due diligence model, which would help with the financial part of the audit, should make decision-makers even more positive about the due diligence process.

## **4.8 Open-ended questions**

Six open-ended questions were asked in the questionnaire. Question 47 asked respondents what were the most common methods and tools to value a target company. Most respondents commented that the due-diligence process and the calculation of ratio such as, discounted cash flow, P/E, EBITDA, NAV, asset value where very important.

Question 48 asked respondents what criteria investors should look for to ensure M & A succeeds. Most respondents commented that potential future growth and synergies where very important. Strategic fit, long term profitability and the value it would add were also mentioned.

Question 49 asked respondents what a reasonable purchase price would be. Most respondents indicated the use of either the P/E or EBIT ratio to estimate a purchase price. The P/E ratio was estimated at 5 to 7 times and the EBIT at 3 to 4 times. Some respondents indicated that a payback of 5 times earnings and others indicated 7 to 10 years profit.

Question 50 asked respondents how important cash transaction are, or if there where better types of transactions. Most respondents commented that a cash transaction is not that important as it may have an influence on cash flow. Respondents feel that it would be better to finance the transaction through a bank.

Question 51 asked respondents if they where developing a financial due diligence model for a due diligence process, what top five items would they include in the model. Most respondents indicated that the top five items would be:

- p/e ratio;

- cash flows;
- EBIT;
- net asset value; and
- working capital.

Question 52 asked respondents what key questions need to be addressed in the financial due diligence model. Most respondents commented that future income needs to be considered, sustainability, growth potential, how financially strong the company is, what added value could be achieved, reliability of the information, competitive advantage and the seller's expectation.

Of all the 23 surveys, no additional issues were raised, highlighting that the literature review had been comprehensive in covering all the issues considered important for the successful implementation of the due diligence process.

## **4.9 Summary of research findings**

**Research Question 1:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that M & A are there to create shareholder value and synergy between the companies. They also agreed that the value of the combined companies should be greater than the sum of the two parts. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 2:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that strong companies act to buy other companies to create more competitive, cost-efficient companies. The respondents also believe the companies come together hoping to gain a greater market share or to achieve greater efficiency. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 3:** The research has shown that when respondents within the manufacturing sector were asked what the most common methods and tools to

value a target company are, they believed that the financial due diligence process and the calculation of ratio such as, discounted cash flow, P/E, EBITDA, NAV, asset value where very important.

When respondents where asked how important a cash transaction is or if there where better types of transactions than a cash transaction, they believed that a cash transaction is not important as it may have an influence on cash flow. Respondents feel that it would be better to finance the transaction through a bank. When respondents where asked which calculated variables where the most important, and would assist investment decision, the majority of the respondents chose:

- cash flow;
- return on equity;
- market share;
- gross margin;
- operating margin;
- earnings before interest and tax;
- debt equity ratio;
- revenue;
- return on assets; and
- price/earnings ratio

**Research Question 4:** The research has shown that when respondents within the manufacturing sector where asked, what criteria investors should start by looking for to ensure M & A have a chance of success, most respondents believed that potential future growth, synergies, strategic fit, long term profitability and the value it would add were very important.

When respondents where asked what is a reasonable purchase price for a company was, most respondents indicated the use of either the P/E or EBIT ratio to estimate a purchase price. The P/E ratio was estimated at 5 to 7 times and the EBIT at 3 to 4 times. Some respondents indicated that a payback of 5 times

earnings, while others indicated 7 to 10 years profit.

**Research Question 5:** The research has conclusively shown that respondents within the manufacturing sector strongly believe when the Chief Executive Officer and top managers of a company decide to pursue an M & A, the starting point is not a tender offer. This disagreement therefore indicates that a financial due-diligence type process is essential in an M & A. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 6:** The research has shown that respondents within the manufacturing sector believe companies do not find that the best way to get ahead is to expand ownership boundaries through M & A.

**Research Question 7:** The research has shown that respondents within the manufacturing sector do not believe that the due diligence process adds unnecessary high costs to mergers and acquisitions.

**Research Question 8:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that the lack of in-depth due diligence is a major reason why mergers and acquisitions fail. The respondents also strongly believed that it would be beneficial to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 9:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that shareholder value analysis (SVA) determines whether value will be added by a specific strategic decision, for instance an M & A. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 10:** The research has shown that respondents within the manufacturing sector believed that only two of the given statements have high risk. Majority of the respondents chose continuity of people, suppliers and customers, and the balance of the respondents chose the accuracy of historical financial information as the highest risk when considering an M & A.

**Research Question 11:** The research has shown that when the respondents within the manufacturing sector were asked which of the six elements, namely; financial, legal, information technology, human resources, commercial, technical and environmental, in a due diligence was the most important, majority of the respondents chose the financial element as being the most important.

**Research Question 12:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that investors should, at a minimum, always look at the growth trends in sales, earnings, operating margins, cash flow and return on equity. The balance of this research question was answered in previous questions. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 13:** The research has conclusively shown that respondents within the manufacturing sector strongly agree that there are two primary objectives on which to stay focused during the due diligence process; one is to identify and confirm the strategic rationale for the deal; and the other is to identify and confirm the value of the deal. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 14:** The research has conclusively shown that respondents within the manufacturing sector strongly believe it would be more cost effective to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A. It was agreed that this model would be beneficial to prepare some kind of target business value, which would support the value of the offer made to the vendor. Further more the respondents believed a

key part of the financial due diligence exercise would be to provide input to test existing assumptions made in a model.

When asking the respondents what they thought should be incorporate in this model, they indicated that at least the following five variable calculations should be included, they where namely:

- p/e ratio;
- cash flows;
- EBIT;
- net asset value; and
- working capital.

The respondents where asked what key questions need to be addresses in the model. Most respondents commented that future income needs to be considered, sustainability, growth potential, how financially strong the company is, what added value could be achieved, reliability of the information, competitive advantage and the seller's expectation.

The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 15:** The research has conclusively shown that respondents within the manufacturing sector strongly believe it is important that during the deal negotiations, that it be clear which assets are to be included in the transfer and agreement be reached over the valuation of these key assets at this stage. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 16:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that failure to plan and structure transactions in the most tax efficient manner diminish or destroys anticipated increases in shareholder value. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 17:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that the manufacturing process due diligence is critical to the success of an M & A. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 18:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that consulting and valuation service companies do not add value to the due diligence process and that it would not pay to have these companies carry out the due diligence process for an M & A. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 19:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that companies should consider price/earnings multiples for comparable acquisitions and the immediate impact of earnings per share (EPS) to assess the attractiveness of a deal. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 20:** The research has conclusively shown that respondents within the manufacturing sector strongly believe that decisions about M & A deals are based on the prospects for creating value, and not on the immediate EPS impact. The respondents agree that management needs to identify where, when, and how it can accomplish real performance gains by estimating the present value of the resulting incremental cash flows and then subtracting the acquisition premium. The findings were significant across all the spectra of decision-makers, whether local or international.

**Research Question 21:** The research has shown that respondents within the manufacturing sector believe it is important to have an information professional supplementing the due diligence review.

**Research Question 22:** The research has conclusively shown that respondents within the manufacturing sector strongly believe the intellectual property (IP) due diligence process is important and that there could be consequences if the intellectual property process is not carried out. The findings were significant across all the spectra of decision-makers, whether local or international.

## **Chapter 5**

### **CONCLUSION**

#### **5.1 Introduction**

This chapter will conclude the research by discussing the research achievements and application, as well as making recommendations for future research.

The four previous chapters set out the need for the research, reviewed the relevant literature, described the research methodology, introduced the research findings and discussed them. This chapter will attempt to conclude the research by discussing the research achievements and application, as well as making recommendations for future research.

#### **5.2 Research achievements**

The objective of this research is to determine the value of a due diligence during an M & A, and whether a due diligence financial due diligence model would be beneficial to decision-makers of manufacturing companies. If a financial due diligence model is beneficial to decision-makers, then the research would further determine what the most important calculated variables are, and what issues should be addressed in such a model. The analyses will look at how these calculated variables and issues are interpreted across different levels of decision-makers. It will also look at the reasons for M & A and the motivation for the introduction of the financial due diligence process within these companies. The level of satisfaction within companies that have embarked on the due diligence process will also be analysed.

This objective was met and five important issues and eight significantly important issues were identified. These are:

### **Important issues**

- Respondents agreed that M & A are there to create shareholder value and synergy between the companies.
- Respondents agreed that the most common method and tools to value a target company is the due diligence process and the calculation of ratios.
- Respondents did not agree that the due diligence process adds unnecessary high costs to mergers and acquisitions.
- Respondents agreed that there are two primary objectives on which to stay focused during the due diligence process; one is to identify and confirm the strategic rationale for the deal; and the other is to identify and confirm the value of the deal.
- Respondents were significantly satisfied with the performance of a due diligence in the M & A process.

### **Significantly important issues**

- Respondents agreed that the manufacturing process due diligence is critical to the success of an M & A.
- Respondents agreed that it would be beneficial to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A.
- Respondents agreed that this model would be beneficial when preparing some kind of target business value, which would support the value of the offer made to the vendor.
- Respondents agreed that a key part of the financial due diligence exercise would be to provide input to test existing assumptions made in a model.
- Respondents agreed that the following key questions need to be addresses in the model; future income, sustainability, growth potential, how financially strong the company is, what added value could be achieved, reliability of the information, competitive advantage and the seller's expectation.
- When respondents where asked which calculated variables where the most

important, and which would assist investment decision the most; majority of the respondents chose:

- cash flow;
  - return on equity;
  - market share;
  - gross margin;
  - operating margin;
  - earnings before interest and tax;
  - debt equity ratio;
  - revenue;
  - return on assets; and
  - price/earnings ratio.
- Respondents agreed that investors should, at a minimum, always look at the growth trends in sales, earnings, operating margins, cash flow and return on equity.
  - Respondents agreed that companies should consider price/earnings multiples for comparable acquisitions, and the immediate impact of earnings per share (EPS), to assess the attractiveness of a deal.

Further objectives that were achieved are:

- the primary reason for M & A is to create shareholder value and synergy between companies, however respondents also feel that strong companies act to buy other companies to create more competitive, cost-efficient companies. The respondents also believe the companies come together hoping to gain a greater market share, or to achieve greater efficiency;
- the majority of respondents feel the criteria investors should start by looking for to ensure M & A have a chance of success; is the potential future growth, synergies, strategic fit, long term profitability and the value it would add;.
- the majority of respondents feel that shareholder value analysis (SVA) determines whether value will be added by a specific strategic decision, for instance an M & A;

- the majority of respondents feel that the financial analysis is the most important aspect in a due-diligence audit; and
- the majority of respondents feel that consulting and valuation service companies do not add value to the due-diligence process and that it would not pay to have these companies perform the due-diligence process for an M & A.

The research has confirmed the importance of the financial due diligence process in an M & A. The need for a financial due diligence model to assist decision-makers was also validated. The information decision-makers need to obtain from this model, can now be determined through what respondents have indicated in the research.

### 5.3 Research application

This research could prove useful to the following interest groups:

- ***Executives and Financial managers who are planning M & A:*** These persons should acquaint themselves with the issues which were identified as being important, and significantly important in the research. They should take special note of the benefits of a financial due diligence model, which could be used up front to determine whether or not to pursue the M & A.
- ***M & A Consultants:*** Consultants can find the research findings useful by directing them towards more effective due diligence methods. As most respondents thought it unnecessary to employ consultants to carry out the due diligence, the information made available from the research findings could allow consultants to redefine their customer approach.
- ***Academics:*** The findings could assist those seeking to integrate studies on the implementation of the due diligence process in M & A, and those who are looking to investigate other industry segments.

- **Policy Makers:** The research has identified the importance of the due diligence process before an M & A. It has also identified important issues and calculations that would be valuable in the decision making process. Policy makers should take note and look at reforming policies to incorporate some of these calculations and issues. Issues identified as not being important, should also be reviewed by policy makers.

## 5.4 Recommendations for future research

Further research in this field would definitely be beneficial, as it could provide valuable assistance to companies wishing to carry out the due diligence process, especially because M & A activities are becoming more prevalent, and the cost of companies are increasing all the time. The more accurate and relevant information the due diligence can provide, the greater the chance of the M & A succeeding.

The following areas for further research have been identified:

- This research has focused on the manufacturing sector of the economy, other sectors of the economy should be explored and views from financiers should be obtained and included.
- This research was not meant to include “super groups” or extremely large organisations, so it could be beneficial to explore the views of these types of organisation regarding the due diligence process.
- The research has identified the importance of a due diligence financial due diligence model. This model has however not been developed, and if developed, it could prove to be a useful tool in the due diligence process. It is therefore recommended that the model be developed and tested to prove its importance and benefits.
- Currently there is no correlation between the due diligence process and the success of M & A. Research could be done to determine whether there is a higher percentage of M & A success when a due diligence is carried out.

## References

- Anderson, W. 2006. Are you properly executing due diligence in your business activities. *Rambaza Article Library*. [Online] Available: <http://www.rambaza.co.za/Article/Are-You-Properly-Executing-Due-diligence-In-Your-Business-Activities-/12300>. (October 2006). Accessed on 19 February 2007.
- Bekier, M.M., Bogardus, A.J. & Oldham, T. 2001. Why mergers fail. *The McKinsey Quarterly*. [Online] Available: <http://www.mckinseyquarterly.com/articlepage.aspx?ar=1113&l2=5&l3=4>. (November 2001). Accessed on 24 February 2007.
- Bunyan, L. 2006. Focusing your due diligence. *Chartered Accountants Journal*, 85(4), 44 – 44.
- Cohen, J. 1988. *Statistical power analysis for the behavioural sciences*. 2nd ed. New York: Academic Press, 20 – 27 & 216 – 227.
- DeVellis, R.F. 1991. *Scale Development: Theory and Applications*. 4th ed. California: Sage Publications.
- Ellis, S.M. & Steyn, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values), *Management Dynamics*, 12(4), 51-53.
- Ferguson, R. 2004. Due Diligence Audits. *Taxperts*. [Online] Available: <http://www.bizland.co.za/articles/buy/duediligence.htm>. (June 2004). Accessed on 18 February 2007.
- Field, A. 2005. *Discovering Statistics Using SPSS*. Sage Publications, 619 – 680.
- Finweek. 2006. *Investigating the numbers*, 24 August, 48 – 48.

Gillman, L. 2004. Due Diligence: A Financial & Strategic Approach. *Finweek*, 17 May, 49 – 49.

Janssen, C. & Wagner, C. 2006. Mergers and Acquisitions. *Investopedia*, a *Forbes Media Company*. [Online] Available:  
<http://www.investopedia.com/university/mergers/default.asp>. (January 2006).  
Accessed on 24 February 2007.

Johnson, R.A. & Wichern, D.W. 1998. *Applied Multivariate Statistical Analysis*, 4th ed. Prentice-Hall International, Inc, 565p.

Kaiser, H.F. 1970. A second-generation little jiffy. *Psychometrika*, 35, 401-415.

Kaiser, H.F. 1974. An index of factorial simplicity. *Psychometrika*, 39, 31-36.

Kelly, G.A. 1955. *The Psychology of Personal Constructs*. Vols. 1 and 2. New York: Norton.

Kline, P. 1999. *The handbook of psychological testing*. 2nd ed. London: Routledge, 7-16.

Knez, M. 2003. Smarter due diligence process. Sibson Consulting. [Online] Available:  
[http://www.sibson.com/publications/perspectives/Volume\\_11\\_Issue\\_3/e\\_article000187011.cfm](http://www.sibson.com/publications/perspectives/Volume_11_Issue_3/e_article000187011.cfm). (September 2003). Accessed on 18 February 2007.

Lagarde Investigation Consultants. 2005. Due Diligences. LGI Consultants. [Online] Available:  
[http://www.lagarde.co.za/due\\_diligence.htm](http://www.lagarde.co.za/due_diligence.htm). (June 2005). Accessed on 18 February 2007.

Morgan, D.L. 1988. *Focus Groups as Qualitative Research*. 2nd ed. California: Sage Publications.

Ojala, M. 2006. Due Diligence Research. *North - West University library*. [Online] Available:

<http://www.puk.ac.za:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=19824388&loginpage=Login.asp&site=ehost-live>>Due Diligence Research.</A>. (March/April 2006). Accessed on 18 February 2007.

O'Reilly, P. 2005. Financial Due Diligence: A review of key issues. *Accountancy Ireland*, 37(6), 38 – 39.

Rappaport, A. 2006. Principles to help executives create lasting shareholder value. *Harvard Business Review*, 84(9), 66 – 77.

Rowell, S. 2006. Dangerous mistakes you can make during IP due diligence. *Chartered Accountants Journal*, 85(4), 68 – 69.

Smith, J. 2006. The ABC's of Due Diligence. *Bank Bonds South Africa*. [Online] Available:

<http://www.bankbonds.co.za/article/Article/The-ABC-s-of-Due-diligence/17906>. (June 2006). Accessed on 18 February 2007.

Stroebel, G. 2006. Buying a Business. *Pam Golding Properties*. [Online] Available:

[http://www.pamgolding.co.za/pamgoldingpubs/research\\_article.aspx?id=63](http://www.pamgolding.co.za/pamgoldingpubs/research_article.aspx?id=63). (March 2006). Accessed on 18 February 2007.

Van Esch, Y. & Muller, G. 2006. No ordinary merger. *Financial mail: Corporate report*, 13 October, 6 – 6.

## APPENDIX 1: QUESTIONNAIRE

Please complete the following biographical details: *(tick the appropriate box)*

1. Is your company involved in Manufacturing?

Yes  No

2. What kind of manufacturing does your company do?

Steel products

Plastic products

Rubber products

FMCG products

Other

3. As the person completing the questionnaire what position do you hold in the company?

Chief Executive Officer

Managing Director

Director

General Manager

Financial Manager

Other

4. How many full time employees does your company employ?

0 - 20	21 - 50	51 - 100	101 - 500	> 500
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5. What is your company's annual turnover? (R Millions)

0 - 10	10 - 50	50 - 250	250 - 750	> 750
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6. Is your company situated in South Africa?

Yes  No

7. If not, where does your company operate from?

UK

Europe

America

Australia

Asia

Africa

Other

**Please indicate your company's position with regard to the statements below by marking the appropriate box:**

8. My company was affected by a merger and acquisition.

Definitely Not			Definitely Yes
1	2	3	4

9. You feel a due diligence must be performed before any merger and acquisition takes place.

Definitely Not			Definitely Yes
1	2	3	4

10. A merger and acquisition will be advantageous to my company.

Definitely Not			Definitely Yes
1	2	3	4

11. M & A only benefits shareholders and top executives.

Definitely Not			Definitely Yes
1	2	3	4

12. My company fears a loss of control as a result of an M & A.

Definitely Not			Definitely Yes
1	2	3	4

13. My company feels a due diligence must be carried out before considering M & A.

Definitely Not			Definitely Yes
1	2	3	4

**Please indicate your company's current position by marking the appropriate box:**

14. Indicate your company's current position on the due diligence process.

• My company performs the due diligence process

• My company is in the process of performing a due diligence

- My company has not performed a due diligence, however ***is*** considering doing so
- My company has not performed a due diligence, and is ***not*** considering doing so

15. If your company has implemented the due diligence process, for how many years has this been the norm.

0 – 1 year	1 – 5 year	5 – 10 year	Since the inception of the company
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16. Indicate where pressure to perform due diligence is primarily coming from.

- The target company requires that I perform a due diligence
- My shareholders/company require me to perform a due diligence
- The government requires me to perform a due diligence
- It is a socio-economic responsibility to perform a due diligence

**Please indicate the degree to which your company agrees with the following statements, with regards to mergers and acquisitions**

17. The common goal of an M & A is to create shareholder value.

Definitely Not			Definitely Yes
1	2	3	4

18. M & A is meant to create synergy that makes the value of the combined companies greater than the sum of the two parts.

Definitely Not			Definitely Yes
1	2	3	4

19. The success of an M & A is dependent on whether this synergy is achievable.

Definitely Not			Definitely Yes
1	2	3	4

20. Strong companies will act to buy other companies to create more competitive, cost effective companies.

Definitely Not			Definitely Yes
1	2	3	4

21. Companies come together hoping to gain a greater market share

Definitely Not			Definitely Yes
1	2	3	4

22. Companies come together hoping to achieve greater efficiency.

Definitely Not			Definitely Yes
1	2	3	4

23. When the CEO decides to pursue an M & A the starting point is a tender offer.

Definitely Not			Definitely Yes
1	2	3	4

24. Companies find that the best way to get ahead is to expand ownership boundaries through M & A.

Definitely Not			Definitely Yes
1	2	3	4

25. Initial high cost in M & A is related to the due diligence process.

Definitely Not			Definitely Yes
1	2	3	4

26. Shareholder value analysis (SVA) determines whether value will be added by a specific strategic decision, for instance an M & A.

Definitely Not			Definitely Yes
1	2	3	4

27. Companies consider price/earnings multiples to assess the attractiveness of an M & A deal?

Definitely Not			Definitely Yes
1	2	3	4

28. Sound decisions about M & A deals are based on the prospects for creating value, and not on the immediate earnings per share impact.

Definitely Not			Definitely Yes
1	2	3	4

29. Management need to identify real performance gains by estimating the present value of incremental cash flows and then subtracting the acquisition premium.

Definitely Not			Definitely Yes
1	2	3	4

30. Investors should always look at the growth trends of the company being acquired.

Definitely Not			Definitely Yes
1	2	3	4

**Please indicate the degree to which your company agrees with the following statements, with regards to the due diligence process.**

31. The primary objectives to stay focused on during the due diligence process would be to identify and confirm the strategic rational and confirm the value of the deal.

Definitely Not			Definitely Yes
1	2	3	4

32. The lack of in depth due diligence is the major reason why M & A fails.

Definitely Not			Definitely Yes
1	2	3	4

33. It would be more cost effective to have a financial due diligence model that could be used up front to indicate whether it is worth pursuing the M & A.

Definitely Not			Definitely Yes
1	2	3	4

34. This model would be beneficial to prepare some kind of target business value, which would support the value of the offer made to the vendor.

Definitely Not			Definitely Yes
1	2	3	4

35. A key part of the financial due diligence exercise would be to provide input to test existing assumptions made in a model.

Definitely Not			Definitely Yes
1	2	3	4

36. It is important that during the due diligence process it is clear which assets are to be included in the M & A transaction.

Definitely Not			Definitely Yes
1	2	3	4

37. Failure to plan and structure transactions in the most tax efficient manner would diminish anticipated increases in shareholder value.

Definitely Not			Definitely Yes
1	2	3	4

38. The manufacturing process due diligence is critical to the success of an M & A.

Definitely Not			Definitely Yes
1	2	3	4

39. Consulting and valuation service companies add value to the due diligence process.

Definitely Not			Definitely Yes
1	2	3	4

40. It would pay to have a consulting company carry out the due diligence process for an M & A.

Definitely Not			Definitely Yes
1	2	3	4

41. It is important to have an information professional supplementing the due diligence process.

Definitely Not			Definitely Yes
1	2	3	4

42. It is important to investigate the intellectual property in the due diligence process.

Definitely Not			Definitely Yes
1	2	3	4

**Please indicate the degree to which your company would priorities the following questions.**

43. Which of the following risks facing the purchaser and financiers carry the highest priority:

- a. political and country risk
- b. the accuracy of historical financial information
- c. the continuity of people, suppliers and customers
- d. the ownership/title of assets

e. the value attached to the assets and unknown liabilities

44. The due diligence review usually encompasses an audit of financial, legal, information technology, human resources, commercial, technical and environmental aspects of the business, which one of these reviews is the most important:

- financial
- legal
- information technology
- human resources
- commercial
- technical and environmental

45. Which of the following are the most important calculated variables that will help make an investment decision (**only mark your top 10**)

- a. Accounts payable days
- b. Accounts receivable days
- c. Acid test ratio
- d. Book value (or NAV)
- e. Capital expenditure
- f. Cash flow
- g. Current assets
- h. Current liabilities
- i. Current ratio
- j. Debt
- k. Debt structure

- l. Debt equity ratio
- m. Depreciation
- n. Dividend
- o. Earnings
- p. Earnings before interest and tax
- q. Depreciation and amortisation (EBITDA)
- r. Earnings per share
- s. Gross margin
- t. Interest cover
- u. Market share
- v. Net profit margin
- w. Operating margin
- x. Price/Book ratio
- y. Price/Earnings ratio
- z. Price/Sales ratio
- aa. Return on equity
- bb. Return on assets
- cc. Revenue

46. If you have performed a due diligence what level of satisfaction have you obtained?

Definitely Not Satisfied			Definitely Satisfied
1	2	3	4

**Please briefly answer the following questions relating to the due diligence process:**

47. In your view, what are the most common methods and tools to value a target company?

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48. To find M & A that have a chance of success, what criteria would you say investors should start looking for?

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49. What do you think is a reasonable purchase price?

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50. For you, how important is a cash transaction, or are there better types of transactions?

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51. If you were developing a financial due diligence model for the due diligence process, what are the top five items you would incorporate in the model?

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52. What key questions need to be addressed in the model?

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***THANK YOU FOR TAKING TIME TO COMPLETE THE QUESTIONNAIRE***

*Please Fax to 011 392 5179 or email to [ianv@sturrocksa.co.za](mailto:ianv@sturrocksa.co.za)*