UNIVERSITY OF KWAZULU-NATAL

UNBUNDLING OF LISTED COMPANIES: DOES IT UNLOCK SHAREHOLDER VALUE AND IMPROVE PERFORMANCE? (A CASE FOR ZIMBABWE)

Tambudzayi Furamera

Student No. 200297079

A Dissertation Presented To

The Graduate School of Business

In partial fulfilment of the requirements for the degree of

Master of Business Administration (MBA)

Supervisor: Dr J MacDonald

Co-Supervisor: Dr K.K Naidoo

December 2006

DECLARATION BY SUPERVISOR

I the undersigned hereby declare that I have supervised the research conducted by Tambudzayi Furamera (200297079) entitled 'Unbundling of listed companies: does it unlock shareholder value and improve performance? (A case for Zimbabwe)'. I am satisfied that the student has made an attempt to follow guidelines and in my opinion, the work is adequate enough to be examined.

Signature:

Date: 14. 08. 2007

DECLARATION OF AUTHENTICITY

I, Tambudzayi Furamera do hereby declare that this research is based on my own work and has not been previously submitted to an institution of higher learning for an academic qualification.

Signed:

T Furamera (200297079)

Date: 28 December 2006

ACKNOWLEDGEMENTS

The researcher would like to extend her sincere gratitude to the following:

Dr John MacDonald my supervisor, who worked tirelessly to ensure that my dissertation is completed within one month as he became my supervisor a month before the dissertation due date.

Tinashe Mawere, my husband for encouraging me to do this programme together with him. Though the programme was demanding we managed to work together on assignments as well as preparing for exams. I would also like to thank him for assisting me throughout the dissertation writing stage.

Joyce Furamera, my mother for looking after our newly born daughter Tadiwa, whilst I was finalising my dissertation and Tapiwa our son for words of encouragement through out the MBA programme.

I wish to extend as well, my heartfelt thanks to the financial executives of the companies studied as well as stockbrokers for objectively answering the questionnaires.

ABSTRACT

The problem addressed in this study is the lack of information relating to the viability of unbundling as a strategy for companies listed on the Zimbabwe Stock Exchange (ZSE). The study sought to determine whether the unbundling of listed companies on the ZSE has resulted in the maximisation of shareholder wealth and an improvement in the performance of the unbundled entities.

The sample consists of spin-offs undertaken by listed companies between January 2000 and December 2005. The starting and ending points for the sample period were dictated by data availability. No spin-offs were identified prior to January 2000. The sample frame is composed of seven listed companies that have unbundled and whose unbundled entities were subsequently listed on the Zimbabwe Stock Exchange. In total sixteen companies emerged from the seven companies that unbundled and all sixteen companies were studied. Returns of parent and spun-off companies were computed to determine if unbundling resulted in cumulative abnormal returns. The value uplift of resultant firms was compared with the industrial index to determine if unbundling resulted in overall value uplift in the companies that unbundled. Questionnaires were also administered on financial executives of the parent and spun-off companies as well as stockbrokers to establish their views on the outcome of unbundling.

The study finds that positive cumulative abnormal returns accrued as a result of unbundling and that value uplift in the resultant companies after unbundling is greater than the value uplift in the industrial index. The study also finds that significant drivers behind the decision to unbundle include the need to unlock shareholder value, focus on core competences and facilitation of future growth.

Conclusions drawn from the study are that unbundling unlocks shareholder value, leads to performance improvement, results in value uplift of the unbundled entities and that it results in the elimination of information asymmetry. The study

recommends that investors should position themselves in companies that have plans to unbundle as they tend to benefit significantly. It also concludes that unbundling is a viable strategy and consequently conglomerates that have experienced declines in performance as a result of diversification should unbundle.

TABLE OF CONTENTS

Declaration by Supervisor....i
Declaration by Student....ii
Acknowledgements....iii
Abstract....iv
Table of Contents....vi
List of Tables....ix

CHAPTER 1....1

INTRODUCTION....1

1.1 Introduction....1
1.2 Background and Context....2
1.3 Problem Statement....2
1.4 Research Objectives....3
1.4.1 Research Questions....3
1.5 Research Design....4
1.5.1 Literature Review....4
1.5.2 Sample and Sampling Technique....5
1.5.3 Data Collection....5
1.5.4 Questionnaire Design....6
1.5.5 Ethical Requirements....6
1.5.6 Data Analysis....7
1.6 Importance of Study....7
1.7 Organisation of Study....7
1.8 Conclusion....8

CHAPTER 2....9

LITERATURE REVIEW....9

2.1Introduction....9
2.2 Diversification and Unbundling Defined....10
2.3 Modes of Unbundling....13
2.4 Why Conglomerates Unbundle....15
2.4.1 A Reaction to an Error of Judgement by Management....16
2.4.2 Shareholder Wealth Maximisation....16
2.4.3 Elimination of Negative Synergies or Diseconomies of Scale....16
2.4.4 No Synergies between the Parent and the Subsidiary....17
2.4.5 Elimination of Managerial Diseconomies of Scale....18
2.4.6 Geographical Focus....18
2.4.7 Legal, Market and Strategy Origins....19
2.4.8 Mitigation of Information Asymmetry....20
2.4.9 Taxes....22

2.4.10 Non-Market Factors 22
2.5 Requirements for Successful Unbundling Process 24
2.6 Findings from Studies 24
2.7 An Overview of Some Companies that Unbundled 29
2.7.1 ICI Unbundling 30
2.7.2 Gencor's Unbundling 31
2.8 Advantages of Unbundling 31
2.9 Disadvantages of Unbundling 32
2.10 Unbundling in Zimbabwe 33
2.10.1 Mode of Unbundling in Zimbabwe 33
2.10.2 Media Report on Unbundling 33
2.10.3 Empirical Studies in Zimbabwe 35
2.10.4 Problems Associated with Unbundling in Zimbabwe 36
2.10.5 Research Questions 36
2.11 Conclusion 36
CHAPTER 3 38
RESEARCH METHODOLOGY 38
3.1 Introduction 38
3.2 Data Types 39
3.3 Research Design 39
3.3.1 Sample and Sampling Techniques 40
3.3.2 Market Based Measures 40
3.3.3 Accounting Based Measures 42
3.4 Ethical Requirements 44
3.5 Link between Questionnaire and the Research Questions 44
3.6 Data Analysis 44
3.7 Nature and Form of Results 45
3.8 Advantages and Disadvantages of the Methods Used 45
3.9 Conclusion 45
CHAPTER 4 47
DATA ANALYSIS AND RESULTS 47
4.1 Introduction 47
4.2 Data Analysed and the Results 47
4.2.1 Market Based Measure - Market Adjusted Return Model 47
4.2.2 Market Based Measures - Value Uplift 51
4.2.3 Questionnaire Analysis 56
4.3 Conclusion 64
CHAPTER 5 65
CONCLUSION AND RECOMMENDATIONS 65
5.1 Introduction 65
5.2 Conclusions 65
5.2.1 Unlocking of Shareholder Value 65

5.2.2 Performance Improvement 66
5.2.3 Value Uplift 66
5.2.4 Drivers to the Decision to Unbundle 67
5.2.5 Elimination of Information Asymmetries 67
5.3 Recommendations 68
5.4 Limitations of study 69
5.5 Directions for future research 69
5.5.1 Need for Process Studies 69
5.5.2 Need for Studies on Long-Term Effects 69
GLOSSARY OF TERMS 70
REFERENCES 72
APPENDICES 78

LIST OF TABLES

Table 2:1 Event studies analysing spin-off..26
Table 2:2 Sample of curve-outs..29
Table 3:1 Population and sample size...43
Table 4:1 Cumulative Abnormal Returns (CAR) - Parent company........................49
Table 4:2 Cumulative Abnormal Returns (CAR) - Spun-off company.....................50
Table 4:3 Analysis of correlations..52
Table 4:4 Descriptive statistics used for variance analysis...............................54
Table 4:5 Analysis of variance (ANOVA)...55
Table 4:6 Response rate...56
Table 4:7 Company category...56
Table 4:8 Significant unbundling drivers..57
Table 4:9 Extent of achieving unbundling drivers..57
Table 4:10 Relationship between unbundling and increase in shareholder value.......58
Table 4:11 Returns - 6 months before unbundling..58
Table 4:12 Returns on unbundling..59
Table 4:13 Returns after unbundling...59
Table 4:14 Impact of unbundling on year one turnover.......................................60
Table 4:15 Impact of unbundling on year two turnover.......................................61
Table 4:16 Impact of unbundling on year three turnover......................................61
Table 4:17 Impact of unbundling on operating margin...61
Table 4:18 Impact of unbundling on earnings per share.......................................62
Table 4:19 Impact of unbundling on inventory turnover.......................................62
Table 4:20 Impact of unbundling on total assets turnover....................................63
Table 4:21 Unbundling - a viable strategy or not..63
Table 4: 22 Improvement on shareholder returns...64
Table 4:23 Improvement in performance 64

CHAPTER 1

INTRODUCTION

1.1 Introduction

The ultimate justification of any unbundling policy is that it leads to an increase in shareholder wealth. After a period of acquisition activity, a company may find that it has bought several large groups of businesses; some related to its chosen core activities but some connected with non-core activities and in the process it has become over geared (Lynch, 2004). Devogelaer (2003) cites Markides (1992b, 1995) who finds that high levels of diversification result in inefficiencies that may lead to a decline in performance. The need to improve performance through focusing on core activities may lead to the unbundling of companies. Lynch (2004) further notes that in the United Kingdom, high interest rates in the late 1980s started the process of unbundling.

Several studies report positive shareholder returns for unbundled entities and their parent companies for up to three years following unbundling. Cusatis, Miles & Woolridge (1993), Daley, Mehrotra & Sivakumar (1997) and Desai & Jain (1998) among others find evidence of positive long run abnormal returns. The empirical literature currently available on the performance effect of unbundling is largely focused on firms outside Africa, for example firms in America and Europe. This is due to the longer history and higher frequency of unbundling in these continents. Though international studies report that unbundling is a viable option, it is not known whether unbundling of companies listed on the Zimbabwe Stock Exchange (ZSE) is a viable option as well. The findings of this study will be used to judge whether the unbundling exercise has achieved the intended objectives and is therefore a viable strategy.

1.2 Background and Context

In their study, Cusatis *et al.* (1983) indicate that both the unbundled entities and their parents offer significantly positive abnormal returns. In line with their indications, there has been an increase in the number of listed companies in Zimbabwe, which are unbundling with a view to unlocking shareholder value and improving performance. This study examines the aims and consequences of the unbundling activity of companies listed on the Zimbabwe Stock Exchange (ZSE). In Zimbabwe, unbundling is in the form of a spin-off and the term used is 'distribution in specie'. The restructuring involves a pro-rata distribution of shares of the newly formed corporate entity to shareholders of the original company. Shareholders become owners of two separate companies; the original company that is maintained and the spin-off entity (http://www.zse.co.zw). Unbundling in Zimbabwe was sparked off by the unbundling of the Mashonaland Holdings Group in 2000. Since then, a total of nine listed companies unbundled and seven of these had their unbundled entities subsequently listed on the ZSE (http://www.zse.co.zw).

1.3 Problem Statement

Several studies indicated that unbundling is a viable strategic decision. Davies *et al.* (1994) finds not only a one-third drop in the level of total diversification among Fortune 500 firms between 1980 and 1990, but also a more than forty percent decline in their level of unrelated diversification. Several studies report positive shareholder returns for unbundled entities and their parent companies. According to Brown, Kaur, Maugham & Rendall, (1995) constituent businesses of conglomerates are being split up because of the need to unlock shareholder value; as a means of raising funding for the unbundled entities as they can approach the market in their own right; there is no advantage in their remaining together (no synergy); greater motivation would be generated in the respective management teams if they have more autonomy and in order to concentrate investment in the core business. In their study, Cusatis *et al.* (1983) indicate that both the spin off and their parents offer significantly positive abnormal returns to shareholders.

As from 2001 some companies listed on the ZSE started unbundling. Their objectives were in line with indications from Cusatis *et al.* (1983) of achieving positive returns and the prospects of reaping the advantages highlighted by Brown *et al.* (1995). Studies have been conducted on unbundling in Zimbabwe by Nyandoro (2004), Senderayi (2004) and Gonde (2003), but these studies focused on the unbundling of companies that are not listed on the ZSE making it difficult to conclude that their findings apply to companies that have unbundled and are listed on the ZSE. It is presently unknown whether unbundling is a viable strategy for companies listed on the Zimbabwe Stock Exchange. The problem addressed in this study is the lack of information relating to the viability of unbundling as a strategy for companies listed on the Zimbabwe Stock Exchange.

1.4 Research Objectives

The primary objective of the study is to investigate the viability of unbundling as a strategy for companies listed on the Zimbabwe Stock Exchange. In order to achieve this objective it is necessary to attain a number of secondary objectives.

The secondary objectives of this research are

- To review the theoretical explanations for unbundling;
- To review the outcome of unbundling in other countries;
- To assess the effects of unbundling on listed companies which are unknown in Zimbabwe;
- To determine whether the unbundling of companies listed on the Zimbabwe Stock Exchange has resulted in the maximisation of shareholder wealth and an improvement in the performance of the unbundled entities.

1.4.1 Research Questions

This study seeks to answer the following questions:

1. What were the most significant drivers behind the decisions to unbundle?
2. Were the initially stated objectives of the unbundled companies achieved?
3. Is there a relationship between unbundling and an increase in share price?
4. Are positive shareholder returns experienced before, at the time of unbundling or after?
5. Did unbundling result in improved performance of the unbundled companies?
6. Is unbundling a viable strategy for companies listed on the ZSE?

1.5 Research Design

The research design used in this study is quantitative. Quantitative techniques in the form of market-based measures and accounting based measures were applied to measure the performance effects of unbundling. Data used to measure market performance was obtained from changes in stock market prices and data for measuring accounting performance was obtained through the use of a structured questionnaire.

1.5.1 Literature Review

Several studies have been conducted on unbundling. Harvard Business Review, Journals of Finance, recent research papers and Internet publications were reviewed to access information on previous research findings. The empirical literature currently available on the performance effects of unbundling is largely limited to the experience of United States firms. This is due to the longer history and the higher frequency of unbundling in United States as compared to Europe, Asia and Africa (Kirchmaier, 2003).

1.5.2 Sample and Sampling Technique

The sample consists of spin-offs undertaken by listed companies between January 2000 and December 2005. The starting and ending points for the sample period were dictated by data availability. No spin-offs were identified prior to January 2000. No spin offs after December 2005 were included in the sample because at the time of the analysis those spin-offs had less than one full year of post spin-off data on the ZSE.

The relevant population is composed of all the nine listed companies that have unbundled in Zimbabwe. The sample frame is composed of seven listed companies that have unbundled and whose unbundled entities were subsequently listed on the Zimbabwe Stock Exchange. Two companies were excluded, as they did not meet the requirements of the simple. Sixteen companies and their unbundled entities were studied because they were representative of the population of interest and met the specific needs of the research study. In total sixteen companies emerged from the seven listed companies and all sixteen companies were studied.

1.5.3 Data Collection

Data was collected from a secondary source, the Zimbabwe Stock Exchange (ZSE) in the form of share prices. Based on the market adjusted return model, the performance of the individual stock was compared to the performance of the industrial index. In addition, the value of shareholding before unbundling, and value of holding after unbundling and following the allocation of additional shares (value uplift) in the resultant companies was determined and compared to the value uplift of the industrial index on and after unbundling.

Another set of data was obtained through the use of a questionnaire. Questionnaires were hand-delivered, emailed or posted to financial executives of the parent, spin-off and stockbrokers. Questionnaires were used instead of interviews in order to minimise cost and avoid biased results, which may grow out of three types of error: sampling error, non-response error, and response error.

1.5.4 Questionnaire Design

The research involves the collection of data and the instrument used was in the form of a questionnaire, which consisted of four parts:

- Part 1 asked for permission to use responses for an academic research.
- Part 2 asked for the category into which the respondents' organisation fell and the drivers of unbundling and whether they were achieved.
- Part 3 dealt with closed ended questions that asked for opinion on the unbundling process.
- Part 4 dealt with open-ended questions requesting respondents to give reasons for the response given.

1.5.5 Ethical Requirements

Before administering the questionnaire, the questionnaire and Informed Consent Document were submitted to the Ethics Committee of the University for clearance. Permission to contact respondents was obtained from the Chief Executive Officers of the selected companies after explaining the benefits of the study. The benefits of the study and the respondents' rights were also communicated to the financial executives of the parent and spin-off, and stockbrokers who are the respondents. The respondents were requested to participate in the study through answering the questionnaire after securing their informed consent.

1.5.6 Data Analysis

The analysis was divided into three parts: the pre-unbundling, the execution and the time after the unbundling. The relative performance of the parent and the unbundled entities and the effect was analysed one year prior to unbundling and up to three years after execution date. Value uplift of the resultant companies was compared to the industrial index. The information gathered from questionnaires was classified and analysed using the SPSS Version-12 for Windows. The findings were presented in tables showing the position before and after unbundling. Once the data had been analysed, conclusions and recommendations were made based on the findings.

1.6 Importance of Study

It is imperative to conduct this research in order to:

- Gain an understanding of whether unbundling really maximises shareholder wealth.
- Help financial executives of the parent and spin off companies to judge whether the unbundling exercise in Zimbabwe has achieved the intended objectives.
- Determine the timing of investing in a company; before or after the unbundling process. This information will be of immense benefit to investment analysts, portfolio managers and the academic fraternity.
- To provide an agenda for future research in this field as no studies have been undertaken on the benefits or effects of unbundling on shareholder value and company performance of companies listed on the ZSE.

1.7 Organisation of Study

The study is organised under five chapters. Chapter Two discusses the literature review in relation to unbundling conducted for the study. Chapter Three discusses the research methodology and this covers the sampling design, research design, measurement instrument and ethical requirements. Chapter Four deals with the analysis of findings from the market behaviour analysis and the questionnaires. Conclusions and recommendations are covered in Chapter Five, which is also the last chapter of this research.

1.8 Conclusion

This chapter outlined the problem statement, study objectives, research questions and the importance of study. Seven conglomerates unbundled and the unbundled entities listed on the ZSE and all the unbundled entities were studied in order to establish the performance consequences of unbundling. Though studies have been conducted on unbundling in Zimbabwe by Nyandoro (2004), Senderayi (2004) and Gonde (2003), these studies focused on the unbundling of companies not listed on the ZSE making it difficult to conclude that their findings apply to companies that have unbundled and are listed on the ZSE. Market based measure as well as the questionnaire were used to gather information on the effects of unbundling. Information gathered was analysed using SPSS Vesrion-12 and conclusions drawn. The conclusions drawn will be used to determine the timing of investing in a company, before or after unbundling.

Chapter Two presents a review of literature on unbundling. In Chapter Two, unbundling is defined and modes of unbundling discussed. This is followed by the discussion of the reasons why conglomerates unbundled, findings from previous research studies. An overview of companies that unbundled is also given. Finally unbundling in Zimbabwe is discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

After a period of acquisition activity, a company may find that it has bought several large groups of businesses, some related to its chosen core activities but some connected with non-core activities. Devogelaer (2003) reports that, over time, rapid expansion of a company's product line destroys its competitive ability. He cites Markides (1992b, 1995) who finds that high levels of diversification result in inefficiencies in their operations, which may lead to declines in performance. Devogelaer (2003) observes that one of the drivers of refocusing is the need to focus on core competences. This follows the general belief that during the 1960s and the 1970s, managers may have acquired assets in business areas unrelated to the core business and competences of the firm in order to increase their personal wealth or their job security (Marris, 1964; Amihud and Lev, 1981). In his study Devogelaer (2003) cites the following studies which asserts that although diversification may provide gains for managers, firm value may be destroyed:

- because of lack of economies of scope or synergistic economies (resulting from failure to share or utilise jointly inputs by different parts of the company) between unrelated lines of business (Amihud and Lev, 1981);
- because of possible overpayment in acquisitions (Morck *et al.* ,1990); and
- through inefficient investment in, and cross- subsidisation of, the ongoing business of the firm (Bhide and Ofek, 1995).

According to Devogelaer (2003), the firm's choice of an optimal strategy depends on a set of firm-specific factors, for example, the firm's technological and organisational capabilities as well as a set of characteristics of the selection environment. If the competitive pressure in the selection environment becomes tougher, as is the case in the hyper-competitive environment, the firm ought to refocus to ensure survival. This hyper-competition or intense state of global competition forces holdings companies to concentrate on a few industries where they hold a clear global competitive advantage and abandon unprofitable side activities, often taken up in the portfolio during times when it was still fashionable to diversify. Lynch (2004) reports that the 1980s were a period of intense takeover activity in the United Kingdom, with many companies buying a variety of different groups and becoming over-geared in the process. High interest rates in the late 1980s started a process of unbundling. Ferreira (1997b) in his study cites Davis *et al.* (1994) who note that by the 1990s the conglomerate firm in the United States had become deinstitutionalised. They further report not only one third drop in the level of total diversification among Fortune 500 firms, but also a 44 percent decline in the level of unrelated diversification in the course of the 1980s. These results are supported by Markides 1993, (in Ferreira 1997b), who finds that at least 20 percent and as many as 50 percent of Fortune 500 firms refocused during the period 1981 to 1987. Changes in business rhetoric in the 1980s denounced the conglomerate form in favour of the lean, focused and networked firm (Davis *et al.*, 1994 in Ferreira, 1997b).

2.2 Diversification and Unbundling Defined

Ramanujam and Varadarajan 1989 (in Ferreira (1997c) define diversification as the entry of a firm or business unit into new lines of activity, either by the process of internal business development or acquisition, which entails changes in its administrative structure, systems and other management processes.

In *Diversification and divestiture* (2002) it was noted that over diversification occurs when the marginal cost of diversification, (which are information, control and coordination costs, increased shirking, inefficiencies) exceed the marginal benefits of diversification (which are usage of asset specific resources, market power advantages, tax benefits, reduction of agency problems) (Markides, 1995). While arguing that an optimal level of diversification does exist, studies by Makides (1992) and Hoskinson *et al.* (1994) cited in *Diversification and Divestiture* (2002) maintain that this level is firm specific, that is, it is contingent upon the size, environment, organisational strategy, uncertainty and technology of every company and is also a dynamic phenomenon - the level of optimum diversification will change over time. Three possible explanations of why over diversification happened in the first place are suggested.

i. from agency perspective the different interests of shareholder and managers will lead managers to pursue growth which will eventually lead to diversification.

ii. from the institutional perspective diversification could be pursued for legitimising reasons in periods when diversification is in vogue that is, is appreciated by the market.

iii. from the temporal dynamics perspective, previous optimal levels of diversification could be eroded by environmental and intra-firm changes. For example, the advent of information technologies has increased the span of managerial control, but the improved efficiency of financial markets has undermined the advantages of the corporation as a re-distributor of finance.

According to Markides (1995b) (in Ferreira, 1997b) it is now accepted in the strategy literature that there are benefits as well as cost associated with diversification and that the marginal diversification benefits tend to decrease as the firm diversifies further away from its core business.

Ferreira (1999) defines corporate unbundling as referring to the refocusing (or large scale reduction in diversification or scope) of a diversified corporation through multiple spin offs. Kang and Diltz (2000) assert that unbundling may occur voluntarily or involuntarily. Involuntary unbundling, ether in the form of spin-off or a sell off is usually ordered by government. Ferreira (1999) defines voluntary as referring to unbundling brought about through internal processes (including board of directors' governance) rather than as a result of a takeover or legal or regulatory requirements. Unbundling because of the possible threat of takeover bids is considered to be voluntary. Such unbundling will be considered to be successful if it manages to preserve the integrity of the spun-off businesses (that is they are not subsequently absorbed by another firm, but continue to compete successfully and independently) and if it increases shareholder wealth as compared to the *ex ante* position. According to Moschieri and Mair (2005), the terms divestiture and divestment are often used interchangeably to describe an unbundling operation. They argue that it is important to distinguish between divestiture or unbundling of business units and the divestment of physical assets in order to avoid confusion both at the level of theoretical constructs and at the level of empirical research. They further report that failure to distinguish between the two phenomena can bias the results of empirical studies.

Divestiture refers to an alteration of the firm's productive portfolio: a firm disposes of a division, a business unit, a product line or a subsidiary, offering it on the market (Rosenfeld, 1984). Hite and Owers (1983) add that divestiture entails the exchange of the productive or operative cash flows associated with the divested assets for cash, other operating assets, or securities of the acquire firm. Kang and Diltz (2000) note that divestiture may occur voluntarily or involuntarily. Involuntary divestitures are usually ordered by the government and voluntary divestitures are presumably the outcome of wealth maximisation behaviour on the part of managers acting in shareholder interests.

Divestment according to Moschieri and Mair (2005) is used to refer to the sale of parts of a company, be it physical assets or an entire business division, subsidiary or product line. They also cite in their study a definition by Capron *et al*, (2001) which describes divestment as the partial or complete sale or disposal of physical and organisational assets, shut down of facilities and workforce reduction. Nees 1978 (in Moschieri & Mair, 2005, 3) sees divestment as a series of independent steps over time and across the various levels of the organisation as a consequence of discontinuance of one of the firm's activities.

2.3 Modes of Unbundling

Unbundling includes sell-offs, spin-offs, spinouts, carve outs, split -offs, split-ups, leveraged buy-outs and management buy-outs. In each of the divesting modes, the parent undergoes an unbundling operation for different reasons and in search of different objectives and therefore maintains a relationship with the divested unit (Moschieri and Mair, 2005). The reasons and objectives are detailed below:

Spin off. According to Krisnaswami and Subramaniam (1999), there is neither a dilution of equity nor a transfer of ownership from the current shareholders. They further observe that spin-offs constitute a unique mode of divesting assets since they do not involve and cash transactions. Thus they cannot be motivated by a desire to generate cash to pay off debt, as is often the case with other modes of divestures. The spin off may be accomplished through a rights offering. Moschieri and Mair (2005) in their study cite John (1993) who notes that a spin off may be a method for the parent to reduce agency costs and create tax shields and Garvin (1983) who notes that it may be a method used to enter a new industry, while retaining a close relationship with the spun-off company.

Carve out/ partial spin off. Allen *et al.*, (1998) (in Moschieri & Mair, 2005) emphasise the fact that the parent undertakes a carve-out explicitly in order to raise funds in the capital markets: these funds can be retained within the firm or used to pay creditors or shareholders. Carve out divisions tend to be high value assets Powers (2001). Carve-outs are seen as temporary forms of restructuring and often after some time, the parent re-acquires the carved out division or divest it into another mode (Klein *et al.*, 1991; Slovan *et al.*, 1995) cited in Moschieri and Mair (2005).

Distributions in a **Split off** may be pro-rata or non pro-rata depending on whether all shareholders participate in the exchange. In addition, non-pro-rata split-offs may be a mandatory exchange pursuant to a majority vote by a particular class of shareholders or a voluntary exchange at the election of the individual shareholders through a tender offer from the parent company (Brealey & Meyers, 1996).

A **split-up** may involve transfer of property from a parent company to its existing or newly created subsidiary companies and then liquidation of the parent company through a distribution of the subsidiary companies' stock to the parent's shareholders in exchange for all its stock. As such, a split-up is a way to break up a company into two or more independent, separate companies (Brealey & Meyers, 1996).

A firm engages in a **sell-off** when it sells a division, business unit, product line or subsidiary to another firm in exchange for cash. The sold assets are absorbed by the acquiring firm and become part of it (Hearth and Zaima, 1984; Rosenfeld, 1984). Sell-offs occur when subsidiaries have poor operating performance, high leverage, are highly diversified, and operate in under-performing industries. When compared to their parents, the, sell-off divisions are low value assets and operate in industries different from the other parent industries (Powers, 2001). After the sell off, the parent has no connection with the divested unit (Moschieri & Mair, 2005).

A **leveraged buyout** (LBO) is a transaction in which a group of private investors uses debt financing to purchase a corporation or a corporate division. The principal characteristics of an LBO are high leverage, management ownership, active corporate governance and investor's loss of access to liquid public equity markets (Palepu, 1990).

Management buyouts (MBOs) are transactions in which managers, with the support of other investors, replace public stockholding of the parent company. MBOs are normally financed with large debt issues and the new stocks are normally held by incumbent managers and a small group of external investors. MBOs often continue to operate significant portions of the original assets (Seth *et al.*, 1993 in Moschieri and Mair, 2005).

Moschieri and Mair (2005), find that the decision to choose a sell-off or carve-out depends on three factors: the characteristics of a business unit (it is worth selling, it performs well, it is related to the parent's business, it is related to other parent industries); the characteristic of the parent (performance, leverage, need for cash, diversification); and the characteristics of the environment (pace of growth and performance of industry). Given a need for external finance the decision to chose a sell-off or carve out rests on whether the parent firm has something worthwhile to sell. Carve out divisions show a better operation performance than their parents and are significantly more profitable and faster growing than spin-off divisions which in turn are more profitable and faster growing than spin-off divisions, which in turn are more profitable and faster growing that sell-off divisions (Powers, 2001). The choice between MBO or sell-off or carve out depends on the prospective price.

Anslinger, Bonini & Patsalos-Fox (2000) note that each type of restructuring results in the formation of new equity owned by a fresh set of shareholders who demand a degree of accountability from the unbundled entity, which, unlike a subsidiary, cushioned within a larger corporation is accountable to a set of shareholders not to the parent company's senior management. The accountability created by restructuring often improves performance and investors also benefit from the greater visibility of the unbundled entities to analysts and the public. Even when a unit continues to be governed by it parent's board, as with a tracking stock, the existence of a separate set of shareholders means that the cash flow and profitability of the unit are distinct from those of its parent.

2.4 Why Conglomerates Unbundle

The goal of the firm, and therefore all managers and employees is to maximise the wealth of the owners for whom it is being operated. The wealth of corporate owners is measured by the share price, which in turn is based on the timing of returns (cash flows), their magnitude and their risk. When considering each financial decision alternative or possible actions in terms of its impact on the share price of the firm's stock, financial managers should accept only those actions that are expected to increase share price (Gitman, 1994). The following reasons why conglomerate unbundled were gathered from a review of related studies.

2.4.1 A Reaction to an Error of Judgement by Management

Moschieri and Mair (2005) cite previous work on strategy by Porter (1987) that portrayed unbundling as a reaction to an error of judgement by management at the time of the original acquisition or as a readjustment of the company's business focus in order to increase its economic value and competitive position. They also cite Hayes (1972) who following this line of thinking described divestures as the inverse of acquisition, suggesting that a firm will make up for an unsuccessful acquisition by simply reversing the purchase; that is disposing of the acquired business. McGahan *et al.* (2003b) (in Moschieri and Mair 2005) suggest that mergers and acquisitions are not the inverse of divestures but strategic alternatives.

2.4.2 Shareholder Wealth Maximisation

According to Ferreira (1997a), the factors that have driven the shift in corporate orientation include the need for shareholder wealth maximisation, performance related problems due to either inefficient internal governance mechanisms or to mistakes in strategy formulation (leading to over diversification), and new competitive demands.

2.4.3 Elimination of Negative Synergies or Diseconomies of Scale

Kirchmaier (2003) suggests that a de-merger is a sensible option if negative synergies or diseconomies of scale exist that can be eliminated by separating the firm into two or more independent entities. The possible explanations for such a value creation are:

Dismantling of conglomerates. Historically unbundling was used to dismantle conglomerates after it became apparent that the costs of running such organisation structures outweighed the benefits. The dismantling of conglomerates argument is widely based on the idea of removing inefficient organisational structures and hence the elimination of negative synergies.

Organisational improvements. From an organisational perspective, value can be created through the elimination of misfits in the strategic focus or organisational properties of the organisation. The reduction of the size of an organisation leads to an over proportional reduction in information loss within the hierarchy.

Capital market improvements. More focused units might improve access to the capital market or attract a new set of investors, thereby eliminating barriers to growth from a capital market perspective.

Corporate governance improvements. Value creation through improvements in the role and function of the head office, improvements in the structuring of managerial incentives and more effective market based governance mechanisms due to increased transparency.

Bondholder expropriation. Value redistribution from bondholders to shareholders through a reduction of quality of the collateral provided (Hite & Owers, 1983).

2.4.4 No Synergies between the Parent and the Subsidiary

Hite and Owers (1983) state that if there are no synergies between the parent and the subsidiary, the sum of the post-divesture cash flows would equal the combined cash flow had the two units remained as one. The value of two business units should be identical before and after unbundling, unless some positive or negative synergies exist that create or destroy value under a combined ownership structure. For example the synergies and mutual interdependence, on which ICI had always assumed that its success depended, existed almost entirely within each of the clusters but not across them (Owen & Harrison, 1995). Hite and Owers (1983), Schipper and Smith (1983), Daley *et al.*, (1997) and Desai and Jain (1999) argue that gains from spin-offs could arise from the improvement in focus and elimination of negative synergies between the parent and the subsidiary. Consistent with the focus argument Daley *et al* (1997) Desai and Jain (1999) document a significant improvement in operating performance in the year after the event, for spin-offs that separate divisions that operate in different industries. In a similar vein, Schipper and Smith (1983) find that over one third of their sample involves separation of dissimilar units. Hite and Owers (1983) classify firms based on the reasons given by the firm for the spin-off and find that the sub-sample where the motivation was improvement in focus, exhibits the largest abnormal returns in the period 50 days prior to the announcement to the completion date of the spin-off.

2.4.5 Elimination of Managerial Diseconomies of Scale

Diversification and Divestiture (2002) asserts that unbundling will cut off managerial diseconomies of scale, enable the managers to concentrate on core competences, thus making the business more efficient. He cites Hill and Hoskisson (1987) who view the managerial span of corporate control as a decreasing function of the information processing requirements, which affects realised economic gains. Unbundling frees managerial, administrative and financial resources to concentrate on strategic projects, it increases the firm-specific risk (compared to a diversified company which is considered to be less risky) thus aligning the company's actions with the interests of the shareholders according to the agency perspective and decreases transaction costs in the form of administrative and managerial burden. He also cites Baysinger and Hoskisson (1989) who find that highly diversified firms invest less in innovation than less diversified firms.

2.4.6 Geographical Focus

Veld and Merkoulova (2003) state that firstly, the reduced complexity of the firm may lower monitoring and coordinating costs. Secondly, the managers might have chosen to globally diversify in order to reduce their own risks even if it results in lower shareholder value. Third, the possibility of cross subsidisation of less efficient divisions is reduced.

2.4.7 Legal, Market and Strategy Origins

Moschieri and Mair (2005) propose the segmentation of unbundling into three different origins: legal, market and strategy origins. From a legal perspective, divestures can be categorised as either voluntary or involuntary (Montgomery *et al.* 1984) a company may voluntarily decide to divest part of its business for strategic, financial or organisational reasons. An involuntary divesture by contrast is normally a reaction to legal and/or regulatory difficulties (Hite & Owers, 1983; Montegomery *et al.* 1984; Vijh, 2002). An involuntary divestiture is a reaction to legal and /or regulatory limitations. For example in recent years, many public European companies we denationalised and had to involuntary divest part of their operations to comply with European Commission competition regulations Mair and Moschieri (2006).

Their second origin, the market perspective, Moschieri and Mair (2005) propose a distinction between defensive and aggressive reasons. In their study they cite Hopkin (1991) who tests the 'defensive response' explanation of the link between acquisition and divesture. He claims that acquisition can be a defensive reaction to weak or deteriorating industry conditions and competitive position, and that the attractiveness and concentration of the firm's home industry are positively related to unbundling decisions. Moschieri and Mair (2005) cite in their study, Duhaime and Bird (1987) who find that the reasons behind divesting decisions are aggressive for medium sized units and defensive for small and large units.

Their third origin, the strategic perspective suggests that firms decide to divest for either corrective or proactive reasons. Moschieri and Mair (2005) also cite various studies that contribute to their strategic perspective highlighted below.

- Corrective divestures are intended to make up for previous strategic mistakes (Hitt *et al.* 1996; Porter, 1987)
- to reduce over diversification (Hoskisson *et al.*, 1994; Markides, 1992a),
- to refocus on core businesses (Markides, 1992a; Seith *et al.*, 1993),

- to realign corporate strategy with the firm's identity (Mitchell, 1994; Zuckerman, 2000),
- to react to an industry-level competition (Aron, 1991),
- to eliminate negative synergies (Linn and Rozff, 1985; Miles and Rosenfeld, 1983; Rosenfeld, 1984) or
- to resolve organisational issues such as bad governance (Hoskisson *et al.*, 1994).

They further cite (Brown *et al.* 1999; Hitt *et al.* 1996) who assert that the purpose of proactive divestures is to restructure the company's asset portfolio by routinely redesigning, splitting, transferring or exiting businesses to adapt to changing market opportunities (Eisenhart *et al.* 1999; Sigelkow, 2002). This re-configuration process is aimed at

- designing a more efficient governance form (Seward *et al.*, 1996)
- improving performance and profitability (Fluck and Lynch, 1999; Haynes *et al.* , 2002; Mitchell, 1994; Woo *et al.*, 1992),
- obtaining new cash flows (Hitt *et al.*, 1996; Jensen, 1989),
- reducing high levels of debt (Allen and McConnell, 1998; Hitt *et al.*, 1996; Montgomery *et al.*, 1984) or tax payments (John, 1993; Schipper *et al.*, 1986; Woo *et al.*, 1992), or
- improving corporate innovativeness and entrepreneurship (Cassiman & Ueda, 2004; Garvin, 1983).

2.4.8 Mitigation of Information Asymmetry

Krisnaswami and Subramaniam (1999) find that practitioners and the popular press propose reduction in information asymmetry as a motivation for spin offs. For instance, they note that the CEOs of most firms involved in spin-offs claim that the spin-offs improve the firm's market value because investors are able to perceive value more clearly after the spin off. The CEOs argue that as separate entities, the consequences of a temporary decline in the performance of one entity does not spill over and adversely affect another. In their study they give an example of Robert Allen the Chairman of AT&T who while discussing the motivation behind their spin-off decision claimed that the market value of AT&T was buried. Investors could not understand the strategy of the combined firm, after the spin off AT&T would be the biggest pure play in telecommunication. Investors will clearly understand AT&T.

The information related argument for divestitures is formally developed in Nanda and Narayanan (1997) through a model of asymmetric information about the firm's value between the managers of the firm and the market. They assume that the market can observe the aggregate cash flows of the firm but not the individual divisional cash flows. This results in the mis-valuation of the firm's securities. The authors develop an equilibrium where, if a firm requires external capital to finance growth opportunities then an undervalued firm will resort to raising capital either through a divestiture or after a divestiture while an overvalued firm will resort to an equity issue without separating its divisions. In the context of spin-offs, since the divestiture does not generate cash inflows to the firm, undervalued firms requiring capital would first engage in a spin-off to attain fair market value for their shares and then issue equity to raise capital. Krisnaswami and Subramaniam (1999) report that a spin-off is followed by a detailed disclosure of all the individual profit and cost information of the separated divisions. After the spin-off the shares trade separately and are tracked by different analysts. These changes obviate the need for an estimation of important division-specific cost and profit information from consolidated financial statements. If poor performance by one division had adversely affected the value of other more efficient and profitable divisions, then a spin-off would eliminate the under valuation. Such correction of valuation would be especially important for the firms that in the near future expect to raise external capital to finance their growth opportunities.

On the other hand, according to Krisnaswami and Subramaniam (1999), an ordinary disclosure of this information by a combined firm without separating the divisions will not be credible because the firm can manipulate the shared costs, that are unobservable by the market, across divisions to maximise on the proceeds from the new security issue. A spin-off however separates the operations and the assets.

2.4.9 Taxes

In the United States some spin offs are taxable. Empirical research by Copeland *et al.* (1987) and Krisnaswami and Subramaniam (1999) shows that taxable spin offs are associated with lower positive abnormal returns than non-taxable spin-offs. Spin offs in European countries generally do not create tax problems because it is possible to defer tax payments.

2.4.10 Non-Market Factors

Anslinger *et al.* (2000) examines non-market factors that might signal a need to restructure which are outlined below.

A failure to attract highfliers. The best people might want to work only for businesses that dominate their preferred fields. This problem, which afflicts many conglomerates, can out-weigh the synergies that a diverse group of businesses may seem to offer.

Mismatched business models. Anslinger *et al.* (2000) cites an example in which after buying Unigraphics (a CAD/CAM software business) from McDonell Douglas in 1991, EDS realised that its new subsidiary was operating on the basis of a software business model different from its own. A few years later EDS carved out Unigraphics.

More efficient decision making. The headquarters people who make capital budgeting decisions depend on the often-inflated representations of division managers in a way that capital markets almost never do. By spinning off a division, a parent hands this problem to the market.

Cannot keep up with the Joneses. Senior management sometimes neglect business units or factions because they are not as efficient or value creating as their independent counterparts. These too can be good candidates for carve outs.

Subsidiary needs wings to grow. Because the health care information industry was consolidating, AMBAC, a financial-service firm saw that its subsidiary, HCIA would have to grow larger. AMBAC did not want to make any acquisitions itself, however, since the gap between its stock's multiple and that of the typical health care information provider made any such transaction highly dilutive. So it carved-out HCIA in the expectation that its stock would achieve a higher price–to-earnings ratio, making it a more powerful currency with which to finance the acquisition of another provider.

Incentives and team structure. Another reason for restructuring is the desire to motivate management, not only with new strategy, but also with equity-based incentives. When Case Corporation was carved out of Tenneco in June 1994, Tenneco gave Case's top management options representing 1.8 percent (worth $9.8 million) of Case's outstanding shares as part of the long-term incentive plan. By the end of 1996 the top five executives had pushed up the stock price so far that their compensation reached $70 million.

2.5 Requirements for Successful Unbundling Process

Anslinger *et al.* (2000) finds that separating a business from its parent can create a strategic conundrum so it is advisable for a subsidiary to define its strategic focus before a restructuring. To give Vastar space to grow, ARCO decided to focus its business units on international opportunities and let Vastar concentrate on the United States. Although the strategies of a parent and its former subsidiary may be separate, their activities may remain entangled. In cases where each party sells goods and services to the other, for example, pricing these transfers becomes the most critical issue in the relations between the two companies. Prices must be set at levels that are fair to each party and its shareholders. If the level of interaction is high because technologies, services and brands are shared, these agreements can become so complicated that there may be little value in separating.

2.6 Findings from Studies

The first empirical paper on unbundling was published by Miles and Rosefeld (1983), analysing announcement effects of 55 de-mergers/ spin-offs between 1963 and 1980. Analysing a time period ranging from 120 trading days before to 60 days after, the de-merger announcement, they found a statistically significant cumulative average adjusted return of 22%.

Schipper and Smith (1983) studied 93 voluntary de-merger announcements between 1963 and 1981. Using a market model (CAPM) they established a significant positive announcement effect of approximately +2.8% for a two-day announcement period. They also noted that most spun off subsidiaries (72 out of the 93 firms) were operating in dissimilar industries to the parent firm. For 18 out of the 93 transactions, regulatory pressure was the reported prime motive. The market rewarded those transactions with an average abnormal return of +5.07% compared with +2.29% for the remainder of the sample.

Hite and Owers (1983) studied the security price reactions of 123 voluntary de-mergers between 1963 and 1981 and established statistically significant positive cumulative abnormal returns of +7% for the period ranging from 50 days prior to the announcement through to the completion date. Of this +3.3% took place in the two-day period from day-1 to day 0.

Copeland, Lemgruber & Mayers (1987) extended the above research by comparing two different samples. The first sample with no post-selection bias included all firms that had announced a de-merger decision; the second sample suffering from a post selection bias only contained firms that both announced and executed the de-merger. Copeland *et al.* (1987) established that the two-day abnormal return for the fixed sample is +3.03% where as for the rebalanced sample it was +2.49%. In addition he established that about 11% of all firms never executed their announced de-mergers, a result that is roughly in line with the findings of the study done by Kirchmaier (2003). These results are based on a sample of de-merges that occurred between 1962 and 1983.

Cusatis *et al.* (1993) analysed the performance of a sample of 146 de-megers taking place between 1965 and 1988 and analysed a much longer time period ranging from six months to three years following the execution date of the de-merger. Announcement effects were excluded from the research. Their research indicates that both the spin-off and their parents offer significantly positive abnormal returns for up to three years beyond the spin-ff announcement date.

Table 2.1: Event Studies Analysing Spin-Offs

Author(s)	**Year**	**Sample Period**	**Sample Size**	**Investigation Period**	**Result**
Miles and Rosenfeld	1983	1963-1980	55	-10 to +10	+7.6%
Schipper and Smith	1983	1963-1981	93	-1.0	+2.8%
Hite and Owers	1983	1963-1981	123	-50 to 0 -1.0	+7.0% +3.3%
Copeland *et al.*	1987	1962-1983	73	-1.0	+2.5%
Cusatis *et al.*	1993	1965-1988	146	-1.0	+2.1%
Krisnaswami and Subramaniam	1999	1978-1993	118	-1.0	+3.2%

Adapted from Vroom and Frderikslust (1999: 1)

Krisnaswami and Subramaniam (1999), analyse the information hypothesis that a spin-off is value enhancing because it mitigates information asymmetry in the market about the profitability and operating efficiency of the different divisions of the firm, consistent with the premise of information hypothesis they find that firms that engage in spin offs, have higher levels of information asymmetry about their value than their industry and size matched counterparts. They also find that for firms that engage in spin-offs, all five measures of information asymmetry decrease substantially after the completion of the spin-off, which is consistent with the view that a spin-off mitigates information problems.

According to Krisnaswami and Subramaniam (1999) there are several testable implications of the information hypothesis. Firstly firms that engage in spin-offs should have higher levels of information asymmetry about their value compared to other firms. Secondly, in equilibrium since only undervalued firms engage in spin-offs (Nanda and Narayanan, 1997) the abnormal returns at the spin-off announcement should be positive. A third implication is that if information asymmetry results in under-valuation, then the wealth gains from a spin-off should be positively related to the level of information asymmetry about the firm. Further by devastating the divisions thorough a spin-off, the individual divisions operating costs and efficiency are revealed to the market. Thus the information hypothesis not only predicts a positive share price reaction, but also predicts that the level of information asymmetry will decrease for these firms after the completion of the spin-off. Also since firms with different divisions operating within the same industry are likely to have little negative synergies between divisions, when these firms undertake a spin-off it is expected that information asymmetry is a more important reason for the share holder gains from the spin-off.

Habib *et al.* (1997) also present an information-based explanation for spin-offs. They derive a model in which a firm can increase its value by spinning off a subsidiary. The spin off will lead to an increase in the number of shares that are traded on the market. This makes the price system more informative and hence leads to a decrease in information asymmetry. This decrease in information asymmetry will lead to and increase in the total value of the firm and its spun-off subsidiary.

Ovtchinnikov (2003) analyses the long run stock price performance on spin-off and their parents following spin-offs by employing a comprehensive sample of spin-offs that covers 36 years of data. Ovtchinnikov (2003) finds that for both subsidiary and parent companies, both mean and median excess returns are positive for almost every holding period and time interval considered. According to Ovtchinnikov (2003) the popular press drawing on earlier academic studies, has issued numerous recommendations to investors on how to beat the market by investing in spin-offs, (Sewer 1992, Michels & Neumeiner, 1994, Gutner, 1996, Hayes, 1887, Siwolop, 1997 and Sivy, 1996). Commentators urge investors to avoid purchasing spun off companies in the first six months following the initial listing date because of significant downside risk associated with many institutional clients rebalancing their portfolios immediately following the spin-offs. Contrary to this recommendation, Ovtchinnikov (2003), shows that excess returns for subsidiaries tend to the highest over the first 6 to 12 months following the event. Thus had an investor followed a strategy of buying and holding recently spun-off subsidiaries as recommended in the popular press, he would have missed much of the gains associated with investing in spin-offs.

Veld and Merkoulova (2003) in their study of announcement effects and long run performance for a sample of 156 European spin-offs announced between January 1987 and September 200, find that the announcement of completed spin-off is associated with a positive abnormal return of 2.66% over a three day window. They also find no relationship between the abnormal returns and the level of information asymmetry at the time of the spin off. In line with the efficient market hypothesis, they do not find any significant long run excess return in the period after the spin off. They conclude that the capital markets in Europe efficiently react to information contained in the spin-off announcements.

Thaler and Lamont (2001) studied a sample of equity carve outs in which the parent firm explicitly states its intention to immediately spin off its remaining ownership in the subsidiary. The sample contains 18 issues from April 1996 to August 2000. The sample consist of every carve-out of less than 20% of the subsidiary's shares in which the parent declared its intention to distribute the remaining shares. The study particularly concentrated on the stub value of the company, which is the value of subsidiary shares to be given to parent shareholders at the distribution date.

Table 2.2 Sample of Carve-outs

Issue Date	Parent	Subsidiary	Distributing Date	Stub
4.3.96	AT &T	Lucent Technologies	9.30.96	Positive
8.21.96	Tridex	Trans Act Technologies	3.31.97	Marginal
11.13.96	Santa Fe Energy Resources	Monterey Resources	7.25.97	Positive
3.6.97	Odetics	Atl Products	10.31.97	Marginal
8.12.98	Cincinnati Bell	Convergys	12.31.98	Positive
12.3.98	Creative Computers	UBID	6.7.99	Negative
2.4.99	General Motors	Delphi automotive Systems	5.28.99	Positive
8.10.99	Viacom	Blockbuster	Cancelled	Positive
11.17.99	Hewlett- Packard	Agilent Technologies	6.2.00	Positive
11.17.99	HNC Software	Retek	9.29.00	Negative
12.1.99	Daiseytek	PFSWeb	7.6.00	Negative
12.15.99	Metamor Worldwide	Expedior	Cancelled	Negative
3.1.00	3Com	Palm	7.27.00	Negative
4.3.00	Cabot Corporation	Cabot Microelectronics	9.29.00	Positive
6.26.00	Methode Electronics	Stratoos Lightwave	4.28.01	Negative
6.26.00	Deluxe	Efunds	12.11.00	Positive
7.10.00	Eaton	Axcelis Technologies	12.29.00	Positive
8.9.00	Sea Containers	Orient express Hotels		Marginal

(Source: Thaler and Lamont, 2001: 44)

The table indicates nine positive stubs and six negative stubs and three marginal cases. With the positive stub, it implies that the market has recognised the more that full value of the company's stock in the parent company, indicating value creation on the part of the original shareholder in the parent stock. This incidence of value creation occurred at least 50% of the time immediately after the initial public offering.

2.7 An Overview of Some Companies that Unbundled

Examples of corporate restructure include the unbundling of the British giant ICI in 1993 (Owen & Harrison, 1995) and Gencor in South Africa in 1993 (Gleason & Levin, 1999).

2.7.1 ICI Unbundling

Background

Owen and Harrison (1995) report in 1926 when four leading British companies came together with government encouragement to form Imperial Chemical Industries, the explicit goal was to counter the might of German's IG Farben and to establish a British-owned company in the front rank of the world chemical industry. They also report that that during 1980s ICI sought new sources of growth to offset the sluggish sales of its older products but in the end only increased the complexity of an already complicated and hard to manage portfolio of businesses. Changes in the market and technologies had overtaken the logic that held the component businesses together and bound them to the corporate parent. The parenting skills on which ICI's earlier success had been based were no longer appropriate. The stock price of the ICI, failed to reflect the value of many of its businesses, and a takeover threatened the company in 1991.

Reasons for unbundling

According to Owen and Harrison (1995) ICI's businesses could be grouped into two technological clusters. The synergies and mutual interdependence, on which ICI had always assumed that its success depended, existed almost entirely within each of the clusters but not across them. Each cluster faced different strategic priorities and required different technical capabilities and managerial skills. In trying to control and direct two such disparate sets of businesses, ICI was failing to help either. Each cluster of businesses needed its own style of parenting, which the existing organisation was not equipped to provide. In 1992, ICI spun off its pharmaceuticals, agrochemicals, and speciality chemicals into a second company called Zeneca.

Results of the unbundling process

Each of the two companies is a far better parent to its portion of the old ICI portfolio of businesses than the corporation had been to the whole

.

2.7.2 Gencor's Unbundling

Background

Gleason and Levin, 1999, in their report on Gencor's unbundling, highlight that Gencor was used to foster Afrikaner aspirations of ownership in mining.

Reasons for unbundling

In 1993, Gencor decided to concentrate on its mining core. That meant it would divest in favour of shareholders substantial holdings in a variety of industrial and natural resources investments. Among those were Sappi (38.6%), Engen (49.9%), Genbel (49.9%) and Malbak (49%). All of these businesses continue to be major entities.

Results of unbundling

In the space of five years, Gencor has gone from its role as a massive industrial and mining conglomerate to a narrower focus as a mining house with interest in gold and platinum and finally to an investment house.

2.8 Advantages of Unbundling

Fidelity Life Asset Management (2003) observes that one of the major trends that have been on offer is the unbundling of subsidiaries and their subsequent listing separately on the Zimbabwe Stock Exchange. The advantages of unbundling divisions and listing them separately include the following:

- Unlocking shareholders' values
- Enhance management of smaller units since normally as the organisation grows, managerial diseconomies of scale tend to curve in resulting in difficulty in managing the organisation as a whole.

- It provides an additional investment opportunity for the existing shareholders to participate on separately listed companies.
- As a result of management focus there will be improved efficiency and productivity on the unbundled division.
- Raising of capital would become easier and often less costly for each division.

Benza (2003), notes that:

- After unbundling the respective performance of both businesses will be more visible
- Unbundling also allows for a separation of investment decisions through flexible portfolio management.
- A clear-cut focus on individual businesses will help investors take exposure based on his or her understanding of the industry as well as risk appetite.
- Furthermore, unbundling increases performance pressure by individually highlighting the performance of the two businesses and applying capital market controls to each of them.

Owen and Harrison (1995) find that:

- The new structure aligns corporate objectives much more closely with those of the individual businesses.
- Unbundling separates distinct sets of problems or opportunities and assigns them to corporate parents more motivated to deal with them.

2.9 Disadvantages of Unbundling

Owen and Harrison (1995) also highlight a disadvantage arising from unbundling, that the separation of businesses that had been united for years involves transitional pain, as the separate businesses no longer have access to skill in the other businesses. They find that the links are at the margin of the business clusters and business managers can find replacements for their loss without difficulty or cost.

2.10 Unbundling in Zimbabwe

The international studies reviewed above indicate that unbundling is a viable strategic decision. Several studies report positive shareholder returns for unbundled entities and their parent companies. However, one could argue whether spin-offs really create value in the long run or whether results of studies in US and Europe were a consequence of chance. Fama (1998) argues that the performance in the US was more a consequence of chance. He argues that those studies finding significant long run returns receive more attention in the academic and popular literature because they are more interesting and nothing else. For this reason it is important to study unbundling outside the United States and Europe and hence the decision to focus on the unbundling of listed companies in Zimbabwe.

2.10.1 Mode of Unbundling in Zimbabwe

In Zimbabwe, unbundling is in the form of a spin-off and the term used is 'distribution in specie'. The restructuring involves a pro-rata distribution of shares of the newly formed corporate entity to shareholders of the original company. Shareholders become owners of two separate companies; the original company that is maintained and the spin-off entity (http://www.zse.co.zw). Unbundling in Zimbabwe was sparked off by the unbundling of the Delta Group in 2001. Since then, a total of nine listed companies unbundled and seven of these had their unbundled entities subsequently listed on the ZSE (http://www.zse.co.zw).

2.10.2 Media Report on Unbundling

Theory and empirical evidence from international studies lends support for the claim of increased corporate unbundling in Zimbabwe, that is, unlocking of shareholder value and improvement in performance. It is not known whether unbundling is a viable strategic decision for listed companies in Zimbabwe. Since 2001, when the unbundling process started in Zimbabwe, there has been an increase in media reports about unbundling of both listed and unlisted companies in Zimbabwe as highlighted in the reports cited below. Benza (2003, p B4) notes that, "In today's fiercely competitive global market landscape where factors such as business cycles, economics and investment requirements determine the fate of a business entity, companies the world over are coming up with various strategies to stay afloat. One such strategy is the separation of core and non-core activities as firms seek to concentrate more on what they can do best while peripheral business is either sold off or just separated from the main business. But the question still remains, does the unbundling increase shareholder value?" Benza (2003) further notes that proponents of the unbundling strategy in Zimbabwe say that the perception about total risk of an overall business does lead to lower valuation of the company's stock. In some cases a company despite having good peripheral businesses, could be accorded lower valuations on account of a negative sentiment on its mainline business by the market while ignoring the prospects of its non-core activities. In contrast it is said that a specific business focus leads to greater growth potential in future which will unlock shareholder value.

Staff Reporter (2002) reports the intention for Zimre to de-merge and list Fidelity Life separately. He cites market observers who said that the de-merger of Fidelity life was in line with plans by Zimre to restructure and operate as a holding company running life assurance and short-term insurance businesses separately. The Staff Reporter also notes that the de-merger will enhance shareholder value and the shareholders will be able to assess the contributions of the separately listed Fidelity life to Zimre. Benza (2003) reports that the indications on the ZSE so far suggest that the separation strategy has worked to the advantage of corporates in their drive to bring about focus in their operations. Initial response from the capital markets too have vindicated the fact that unbundling have the desired effect on the share prices of the entities going under this separation process.

Staff Reporter (2002) reports that after shedding off OK, Zimsun and Pelham's, Delta's core beverage business has grown tremendously as shown in the results for the six-month period to 30 September 2002. He further notes that after the de-merger, Delta's core operations in the beverages sector has produced a set of good results with a turnover growth of 210% and basic EPS went up 459%.

2.10.3 Empirical Studies in Zimbabwe

Studies have been conducted on unbundling in Zimbabwe by Nyandoro (2004), Senderayi (2004) and Gonde (2003). However these studies focused on the unbundling of companies not listed on the ZSE making it difficult to conclude that their findings apply to companies that have unbundled and are listed on the ZSE. This study seeks to determine whether the unbundling of companies listed on the Zimbabwe Stock Exchange has resulted in the maximisation of shareholder wealth and an improvement in the performance of the unbundled entities.

Nyandoro (2004) studies the operational effectiveness of a particular unbundled strategic business unit of a Parastatal company ZESA. His study focuses on the business effectiveness prior to unbundling and after. Effectiveness in his context being timeous execution of business plans and being able to satisfy stakeholders. He finds that unbundling has very little positive impact on processes. This was reflected by the low scores obtained by all indicators under study, where none scored above the average. He notes marginal benefits of unbundling on two aspects: the improvement in the accuracy of processing and the enhancement of business acumen company-wide. He further notes that the marginal benefits are not significant as the mean scores are below average.

Senderayi (2004) studies organisational change management in ZESA in the form of unbundling of Projects Business Unit has achieved the desired level of organisational effectiveness and efficiency. His study mainly focuses on the effects of change management rather than unbundling on organisational effectiveness and his findings are in line with the focus of his study.

2.10.4 Problems Associated with Unbundling in Zimbabwe

Though studies conducted in Zimbabwe for unlisted companies indicate that the unbundling did not bring about significant benefits, unbundling policy is being pursued as highlighted in the media. In his studies Nyandoro (2004) reports that unbundling is a useless exercise imposed selfishly by management and that unbundling is a foreign concept, which cannot work in Zimbabwe. Other concerns associated with unbundling relate to issues such as the treatment of operational costs, distribution of financial assets, transfer of debt obligation and loss of identity which if not addressed well will result in the failure of the unbundling process.

2.10.5 Research Questions

A number of questions have emerged from this literature review. This study seeks to answer the following questions and hopes to help investors better understand the process of unbundling and its benefits in Zimbabwe:

- What were the most significant drivers behind the decisions to unbundle in Zimbabwe?
- Were the initially stated objectives of the unbundled companies achieved?
- Is there a relationship between unbundling and an increase in share price?
- Are positive shareholder returns experienced before, at the time of unbundling or after?
- Did unbundling result in improved performance of the unbundled companies?
- Is unbundling a viable strategy for companies listed on the ZSE?

2.11 Conclusion

It is apparent that the trend in the United States and Europe is towards unbundling with a view to unlocking shareholder value. The studies reviewed demonstrate the ways in which value is achieved after unbundling. Several studies report positive shareholder returns for unbundled entities and their parent companies for up to three years following unbundling. Cusatis *et al*., (1993), Daley *et al*., (1997) and Desai and Jain, (1999) among others find evidence of positive long run abnormal returns.

Theory and empirical evidence lends support for the claim of increased corporate unbundling in Zimbabwe, that is, unlocking of shareholder value and improvement in performance. Since 2001, when the unbundling process started in Zimbabwe, there has been an increase in media reports about unbundling of both listed and unlisted companies in Zimbabwe. Studies have also been conducted on unbundling in Zimbabwe. However these studies focused on the unbundling of unlisted companies making it difficult to conclude that their findings apply to companies that have unbundled and are listed on the ZSE. This study seeks to determine whether unbundling is a viable strategy for companies listed on the ZSE. This will be achieved through answering critical research questions that emerged from the literature review.

Chapter Three presents the research methodology. The chapter discusses the data types, and quantitative research design. A discussion of the data collection methods, ethical requirements and the link between questionnaire, research questions and nature and form of results follows. The chapter ends with a discussion of the advantages and disadvantages of the quantitative techniques.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The study uses quantitative techniques to analyse the performance effects of unbundling. Quantitative techniques help to address the research objectives and answer the research questions developed in Chapter One. By employing this technique, the study seeks to come up with answers on what the most significant drivers behind the decisions to unbundle were, whether the initially stated objectives of the unbundled companies were achieved, to determine if there is a relationship between unbundling and an increase in share price and whether positive shareholder returns are experienced before, at the time of unbundling or after. The answers to these questions were used to determine whether unbundling is a viable strategy for companies listed on the ZSE.

Unbundling affects the performance of the unbundled entity and of the parent company. The total economic effect of unbundling is captured by changes in the stock market price of the company and by its operating profit. Analysis of economic performance of the divesting parent and the spin-off uses market-based measures and accounting based measures (Moschieri & Mair, 2005). This study involved the review of existing secondary data on listed companies that have unbundled. Data on the performance (share prices) of the parent company and the unbundled entities and a market index was obtained from the ZSE. Field research was also carried out to address most of the theoretical issues on the performance effects of unbundling in Zimbabwe.

This chapter is organised as follows; firstly the types of data used in the study are discussed. Secondly, the scaling techniques used are outlined. Thirdly, the chapter outlines the design and analytic techniques (that is, quantitative). The quantitative design outlines the methods for measuring the returns before, on unbundling and after unbundling. The design also outlines the data collection method, types of questions as well as the population and sample size. The chapter then outlines the ethical requirements. Lastly, the chapter then outlines how data will be analysed, the nature and form of results, the strengths and limitations of the methods used and a conclusion.

3.2 Data Types

This study involved the collection of quantitative data. The quantitative data used in this study comprises of the share prices obtained from the ZSE and data obtained through the questionnaire administered to the financial executives of the parent company and the spin-off and stockbrokers with most of the question responses classified using the Likert scale. The study uses the Likert Scale to evaluate statements about the subject under study. According to Dillon *et al.*, (1994), the Likert Scale consists of a number of evaluative statements concerning an attitude/object. Dillon *et al.,* 1994 note that an even number of favourable and unfavourable statements should be used as this reduces the likelihood of acquiescence bias (the tendency to agree or disagree with a set of questions), which is more likely if all of the statements are in the same direction. They further note that scale items selected should possess three qualities:

- they should capture all relevant aspects of the attitude/object,
- they should be unambiguous, and
- they should be sensitive enough to discriminate among respondents with respect to the attitude/object under investigation.

3.3 Research Design

The research design used in this study is quantitative. Quantitative techniques in the form of market based and accounting based measures were applied to measure the performance effects of unbundling.

3.3.1 Sample and Sampling Techniques

The sample consists of spin-offs undertaken between January 2000 and December 2005. The starting and ending points for the sample period were dictated by data availability. No spin-offs were identified prior to January 2000. No spin offs after December 2005 were included in the sample because at the time of the analysis those spin-offs have less than one full year of post spin-off data on the ZSE.

The relevant population is composed of all the nine listed companies that have unbundled in Zimbabwe. The sample frame is composed of seven listed companies that have unbundled and whose unbundled entities were subsequently listed on the ZSE. All seven companies and their unbundled entities were studied because they were presumably representative of the population of interest and met the specific needs of the research study. In total sixteen companies emerged from the seven listed companies and all sixteen companies were studied.

3.3.2 Market Based Measures

The performance effects of unbundling were determined through the use of a market adjusted return model and value uplift analysis.

3.3.2.1 Market Adjusted Return Model

Based on the market adjusted return model, the performance of the individual stock is compared to the performance of the overall market index hence daily abnormal returns ($A_{i,t}$) are calculated for each individual security i at time t as follows:

$$A_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the actual return of the security i on day t, and $R_{m,t}$ is the return on the market index on day t. in the second stage the abnormal returns are accumulated for each firm in the sample over the investigation period (CR_i) and then averaged across all firms in the sample. Cumulative average abnormal returns (CAR) are calculated as follows:

$$CAR = \frac{1}{N} \sum_{i=1}^{N} CR_i \qquad \text{where } CR_i = \sum_{t=0/1}^{T} A_{i,t}$$

N denotes the number of firms in the sample

CR_i= the cumulative abnormal return of firm i,

(Source: Kirchmaier 2003 p 8).

Cumulative abnormal returns (CR_i) are calculated starting at day 0. This calculation method is based on a buy and hold investment strategy to void the bias associated with portfolio rebalancing (Kirchmaier 2003). To ensure comparability of returns (share price movements) over the 3-year period in view of the hyper-inflationary economic situation in Zimbabwe where inflation reached levels of 585.8% for December 2005 (Central Statistical Office, 2006), all figures were discounted to December 2005 real dollars. This is in compliance with International Accounting Standard 29 (IAS 29) on accounting for hyper-inflationary economies. Guidelines provided by the Zimbabwe Institute of Chartered Accountants (ICAZ) were used to make the inflation adjustments. Discounting was done using the Consumer Price Index (CPI) figures obtained from the ICAZ website http:www.icaz.org.zw/CPI/cpi.htm. The '1995=100 Base at all items level' were used.

3.3.2.2 Value Uplift

The value of shareholding before unbundling, and value of holding after unbundling in the emerging companies was determined. This was compared to the value uplift of the market index on and after unbundling.

3.3.3 Accounting Based Measures

The performance effects of unbundling in Zimbabwe were also determined through the questionnaire.

3.3.3.1 Questionnaire

The mail survey was used for data collection. Data was obtained through the use of a questionnaire. Questionnaires were hand-delivered, emailed or posted to the respondents. Questionnaires were used instead of interviews in order to minimise cost and avoid biased results, which may grow out of three types of errors: sampling error, non-response error, and response error. Telephone calls were made to the financial executives of the parent and spin-off companies and stockbrokers, the intended respondents to request their permission to participate in the study and to advise that a questionnaire would be delivered, e-mailed or posted. This made it possible to obtain some of the respondents' names and thus personalise the cover letters accompanying the questionnaire. The preliminary telephone calls helped ensure a high response rate as some respondents opted to complete and return the questionnaire at the time of delivery. Personal delivery of questionnaires overcame the problem of inaccurate mailing lists. Where the intended respondent company had moved offices the new address was obtained. Self-addressed return envelopes were attached to the questionnaires to simplify questionnaire return. Follow-ups were made by telephone and email and this helped improve the response rate.

Mail surveys are less costly than interviews, especially in cases where the sample is geographically dispersed (postage is cheaper that physical visits). Another value in using the mail survey is that it made it possible to contact some of the executives who may otherwise have been inaccessible. The mail survey was used because it allows the respondent more time to collect facts, consults with work mates or fellow professionals in the field than is possible with personal interviews. The mail survey is more impersonal, thus provides more anonymity than the other communication modes.

However, the major weakness of the mail survey is non-response error (Dillon, Maffen & Firtle, 1994). Dillon *et al.*, 1994 also note that another limitation of the mail survey is that the information obtained may be limited because one cannot probe deeply into questions.

3.3.4 Types of Questions

Part 2 of the questionnaire asked respondents to specify the company they represented, parent, spun-off or stockbroker, the drivers behind the decision to unbundled and to what extent these were achieved. In Part 3, the questionnaire was made up of closed-ended questions. Part 4 was made up of open-ended questions to allow respondents to write elaborate answers. After obtaining ethical clearance from the University's Ethics Committee, a pilot survey was conducted to pre-test the questionnaire. No amendments were made.

3.3.5 Population and Sample Size

Questionnaires were administered to financial executives of the parent, spin-off and stockbrokers as shown in Table 3.1 below:

Table 3.1: Population and Sample Size

RESPONDENT CATEGORY	POPULATION	SAMPLE SIZE
Parent	7	7
Spin-Off	9	9
Stockbrokers	18	18
TOTAL	**34**	**34**

3.4 Ethical Requirements

An informed consent document and questionnaire were submitted to the Ethics Committee of the University for clearance. The informed consent document was used to obtained permission to contact respondents from the Chief Executive Officers of the selected companies after explaining the benefits of the study. The informed consent of the respondents was also obtained. The questionnaire itself contained a note to the respondents outlining the reasons and the benefits of the study. A clause was also included, emphasising that completion was voluntary and that responses would remain private and confidential and no one would be able to trace anyone's opinions back to them individually.

3.5 Link between Questionnaire and the Research Questions

In order to ensure that all the research questions developed in Chapter One are addressed, it is essential that there is a link between the research questions and the questionnaire. Questions two to four of the questionnaire address questions one to three of the research questions. Questions five to seven of the questionnaire seeks to address research question four while questions eight to eleven seek to provide answers to research questions five. Question twelve of the questionnaire seeks to answer research question six.

3.6 Data Analysis

The analysis was divided into three parts: the pre-unbundling, the execution and the time after the unbundling. The relative performance of the parent and the de-merged entities was analysed one year prior to unbundling and up to three years after execution date.

Data analysis was performed using SPSS Version-12 for Windows package as well as MS Excel for the spreadsheet. All information obtained through the questionnaire was coded into the SPSS database. The information regarding the value uplift was also coded into SPSS to make statistical analysis easier. Tables of statistical data were presented.

3.7 Nature and Form of Results

Tables showing the returns before, at the time of unbundling or after and value uplift were produced. Statistical conclusions on the effects of unbundling on shareholder value and company performance were drawn. An increase in the shareholders' return, and uplift in value was interpreted to mean maximisation of shareholder wealth and improvement in performance as a result of the unbundling exercise.

3.8 Advantages and Disadvantages of the Methods Used

The use of quantitative techniques was intended to ensure that the objectives of the study are met and sought to ensure that all the research questions were addressed. The mail survey enabled contact with otherwise inaccessible investment sector executives and allowed for high quality and unbiased responses as respondents had more time to think through questions.

The period covered January 2000 to December 2005 was short as only a few unbundled companies qualified for inclusion in the sample.

3.9 Conclusion

This chapter presented the methodology used in this study. It explained the quantitative methods used which are: the market based measure and accounting based measure. For the market-based measure, changes in the stock market prices were used and for accounting-based measure, a questionnaire was used in addressing the issues raised in the research questions. The mail survey was used, with questionnaires being hand-delivered, posted or emailed. The questionnaire allowed respondents time to think about the questions resulting in good quality responses. It also enabled the researcher to obtain responses form the otherwise inaccessible executives.

The next chapter outlines the analysis of data and the results. The analysis is intended to ensure that research objectives and questions outlined in Chapter One have been answered.

CHAPTER 4

DATA ANALYSIS AND RESULTS

4.1 Introduction

This chapter presents the data analysis and results of the study on the unbundling of listed companies in Zimbabwe. The chapter highlights the performance effects of unbundling as measured by the returns on investment, the value uplift of the emerging companies compared with that of the industrial index for up to three years after unbundling. The objective was to establish if positive returns were achieved through unbundling. Responses obtained on the questionnaires were also analysed to determine if the unbundling process is a viable strategy for Zimbabwean companies listed on the ZSE or not. In analysing data, the research questions outlined in Chapter One were addressed.

4.2 Data Analysed and the Results

4.2.1 Market Based Measure - Market Adjusted Return Model

Though nine companies listed on the ZSE have unbundled, only seven of these companies qualified for inclusion in the sample as their unbundled entities were subsequently listed on the ZSE. Two companies that did not qualify were dropped from the sample.

Share prices were adjusted for the effects of inflation in line with International Accounting Standard 29 for the computation of Cumulative Abnormal Returns (CAR). Appendix 5 shows the share prices before adjustment for inflation and the prices were rising. However, after the adjustment for inflation, some of the computed returns from both the security and the industrial index were negative (as shown in Appendix 6). This was attributed to the poor performance of the Zimbabwean economy as shown by the inflation levels of 585.8% in December 2005. The cumulative abnormal returns for both the parent companies and the spun-off companies are 725.4 and 559 respectively and are shown in Tables 4:1 and 4:2. These positive returns show that unbundling results in an increase in shareholder value.

Table 4.1 Cumulative abnormal returns (CAR) - Parent Company

PARENT COMPANY

	A1			A2			A3			A4			A5			
	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	CRi
1 Year Before	-14	-55	41	10	-51	61	-20	-54	34	-20	-54	34	179	0	179	
6 months Before	-2	-43	41	5	1	4	-15	-44	29	-15	-44	29	146	86	60	
Cri			82			65			63			63			239	512
																102
1 month After	-67	-2	-65	5	4	1	27	-14	41	27	-14	41	-35	-11	-24	
6 Months After	67	-30	97	35	26	9	32	-28	60	32	-28	60	-32	20	-52	
1 Year After	224	2	222	119	-7	126	86	31	55	86	-31	117	-25	33	-58	
2 years After	223	28	195	-14	-6	-8	-7	-42	35	-7	-42	35	646	16	630	
3 Years After	2	74	-72	-38	-59	21	-42	-76	34	-42	-76	34	2138	45	2093	
CRi			377			149			225			287			2589	3627
CAR																**725**

Table 4.2 Cumulaative abnormal returns (CAR) - Spun-off company

SPUN-OFF COMPANY

	B1			B2			B3			B4			B5		
	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t
1 month After	-55	-2	-53	-66	-2	-64	39	4	35	5	4	1	-20	-3	-17
6 Months After	23	-30	53	-44	-30	-14	21	-20	41	57	18	39	217	-6	223
1 Year After	132	2	130	204	2	202	-98	-7	-91	-29	0	-29	69	-39	108
2 years After	-69	28	-97	85	28	57	56	-6	62	-82	-67	-15	-51	-59	8
3 Years After	-87	-74	-13	11	-74	85	13	-59	72	-89	10	-99	-72	-58	-14
CRi			20			266			119			-103			308
CAR															

	B6			B7			B8			B9			B10			B11			
	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	Ri,t	Rm,t	Ai,t	CRi
1 month After	4	-9	13	-8	-9	1	-2	-9	7	5	-14	19	22	6	16	-27	-11	-16	
6 Months After	85	5	80	139	5	134	68	5	63	-21	-28	7	36	29	7	-7	20	-27	
1 Year After	-9	11	-20	47	11	36	28	11	17	-37	-31	-6	23	106	-83	-46	33	-79	
2 years After	-27	56	-83	27	56	-29	31	56	-25	12	-42	54	1040	59	981	225	16	209	
3 Years After	-53	58	-111	74	58	16	13	58	-45	12	-76	88	4114	56	4058	303	45	258	
CRi			-121			158			17			162			4979			345	6150
CAR																			559

4.2.2 Market Based Measures - Value Uplift

The value of shareholding before unbundling, and value of holding one year up to three years after unbundling in the emerging companies was determined as illustrated on Appendix 7. This was compared to the value uplift of the industrial index. The results of the study are as detailed in Tables 4:3 to 4:5 below.

Bivariate Correlation Analysis

According to Cooper and Schindler (2001), the Pearson (product moment) correlation coefficient varies over a range of +1 through 0 to -1. Correlation coefficients reveal the magnitude and direction of relationships. +1 represents perfect positive correlation, 0 represents no correlation and -1 represents perfect negative correlation. The direction of the coefficient signs tells whether large values on one variable are associated with large values on the other (and small values with small values). Table 4:3 below shows the relationship between variables. The table shows that there is a significant relationship between the year of unbundling and value uplift in years two and three at the 0.05 and 0.01 confidence levels. However, the analysis also shows that there is no significant relationship between year of unbundling and value uplift in year one. The table also shows that there is negative correlation between the number of resultant companies after unbundling and value uplift as shown by the p values in years one, two and three (post unbundling) which are greater than 0.05. This shows that the number of resultant companies does not have an effect on the overall performance of an unbundled company.

Table 4.3 Analysis of correlations

		Category-Unbundled firm or Industrial Index	Year of Unbundling	Number of Resultant Companies Post-Unbundling	Value Uplift Year 1	Value Uplift Year 2	Value Uplift Year 3
Category-Unbundled firm or Industrial Index	Pearson Correlation	1	.844(**)	.921(**)	-.326	-.464	-.415
	Sig. (2-tailed)		.000	.000	.255	.095	.140
	N	14	14	14	14	14	14
Year of Unbundling	Pearson Correlation	.844(**)	1	.897(**)	-.168	-.625(*)	-.730(**)
	Sig. (2-tailed)	.000		.000	.566	.017	.003
	N	14	14	14	14	14	14
Number of Resultant Companies Post-Unbundling	Pearson Correlation	.921(**)	.897(**)	1	-.125	-.408	-.505
	Sig. (2-tailed)	.000	.000		.670	.148	.066
	N	14	14	14	14	14	14
Value Uplift Year 1	Pearson Correlation	-.326	-.168	-.125	1	.633(*)	-.132
	Sig. (2-tailed)	.255	.566	.670		.015	.652
	N	14	14	14	14	14	14
Value Uplift Year 2	Pearson Correlation	-.464	-.625(*)	-.408	.633(*)	1	.625(*)
	Sig. (2-tailed)	.095	.017	.148	.015		.017
	N	14	14	14	14	14	14
Value Uplift Year 3	Pearson Correlation	-.415	-.730(**)	-.505	-.132	.625(*)	1
	Sig. (2-tailed)	.140	.003	.066	.652	.017	
	N	14	14	14	14	14	14

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Analysis of Variance (ANOVA)

The statistical method for testing the null hypothesis that the means of several populations are equal is the analysis of variance (ANOVA). One-way analysis of variance was used in this study. According to Cooper and Schindler (2001) one-way ANOVA is a single factor, fixed effects model to compare the effects of one factor on a continuous dependent variable. ANOVA uses squared deviations of the variance so computations of the distances of individual data points from their own mean can be summed. The total deviation of any particular data point may be partitioned into between groups variance and within groups variance as shown in Table 4:5 below. The within groups variance describes the deviations of the data points within each group from the sample mean. This results from variability among subjects and from random variation. The test statistic for ANOVA is the *F* ratio. If the null hypothesis is true, there should be no difference between the populations and the ratio is close to one. From Table 4.5 above, the population means are not equal and the *F* ratio is greater than 1 for the three years under study. The null hypothesis that there is no difference between value uplift of the resultant companies and the industrial index is thus rejected in all cases. This shows that in both the short run and the long run, the differences in the mean returns between the resultant companies and the industrial index is statistically significant. The value uplift from year one to three for the resultant companies is higher than the value uplift from the industrial index. This means that investors buying into the unbundling companies are in a position to realise higher returns. Habib *et al.*,'s (1997) findings support the value uplift concept. They observed that a spin off will lead to an increase in the number of shares that are traded on the market. This makes the price system more informative and hence leads to decrease in information asymmetry. This decrease in information asymmetry will lead to an increase in the total value of the firm and its spun-off subsidiary. The descriptive statistic and ANOVA results are presented in Tables 4:4 and 4:5.

Table 4.4 Descriptive statistics used for variance analysis

		N		Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Value Uplift Year 1	Unbundled Firm	7	476.00	528.738	199.844	-13.00	965.00	0	1605
	Industrial Index	7	230.43	127.927	48.352	112.12	348.74	54	437
	Total	14	353.21	390.920	104.478	127.50	578.93	0	1605
Value Uplift Year 2	Unbundled Firm	7	2206.00	2156.581	815.111	211.50	4200.50	331	5748
	Industrial Index	7	706.57	373.957	141.343	360.72	1052.42	415	1482
	Total	14	1456.29	1678.211	448.521	487.32	2425.26	331	5748
Value Uplift Year 3	Unbundled Firm	7	17365.29	23628.428	8930.706	-4487.37	39217.94	447	66567
	Industrial Index	7	3202.86	1614.157	610.094	1710.01	4695.70	1090	5485
	Total	14	10284.07	17688.456	4727.439	71.06	20497.08	447	66567

Table 4:5 Analyses Of Variance (ANOVA)

		Sum of Squares	df	Mean Square	F	Sig.
Value Uplift Year 1	Between Groups	211068.643	1	211068.643	1.426	.255
	Within Groups	1775575.714	12	147964.643		
	Total	1986644.357	13			
Value Uplift Year 2	Between Groups	7869001.143	1	7869001.143	3.285	.095
	Within Groups	28744101.714	12	2395341.810		
	Total	36613102.857	13			
Value Uplift Year 3	Between Groups	702010340.643	1	702010340.643	2.503	.140
	Within Groups	3365448724.286	12	280454060.357		
	Total	4067459064.929	13			

4.2.3 Questionnaire Analysis

Questionnaires were administered on financial executives of the parent, spun-off companies and stockbrokers. Twenty-five responses were received distributed among the three categories of respondents as shown in table 4.6 below: An overall response rate of 73% was achieved.

Table 4:6 Response Rate

Respondent category	Target sample	No. of Responses	Response Rate %
Parent company	7	6	85%
Spun-off companies	9	7	77%
Stockbrokers	18	12	66%
Total	**34**	**25**	**73%**

The 73% response rate was achieved because preliminary telephone calls made to respondents helped ensure a high response as some respondents opted to complete and return the questionnaire at the time of delivery. Though follow-ups were made by telephone and email to improve the response rate, 34% of the stockbrokers did not return completed questionnaires. On the other hand, the response from parent companies and spun-off companies was relatively good. The results of the questionnaire analysis are detailed in Tables 4:7 to 4:24 below:

Q1. Category of Entity or Company

Table 4:7 Company categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parent Company	6	24.0	24.0	24.0
	Spun-off Company	7	28.0	28.0	52.0
	Stockbroker	12	48.0	48.0	100.0
	Total	25	100.0	100.0	100.0

Of the twenty-five responses received, 24% were from the parent companies, 28% from spun-off companies and 48% were from the stockbrokers. Though responses of the parent and spun-off constitute 24% and 28% respectively, their response rates compared to the targeted sample were higher. This was attributed to the fact that the financial executives in these companies had information readily available for answering the questionnaires as compared to stockbrokers.

Q2. **Factors behind the Decision to Unbundled**

Table 4:8 Significant unbundling drivers

	Mentions	Not mentioned	Share of Respondents (25)
Focus on core competencies	19	6	76%
Realise potential as a standalone entity	6	19	24%
Eliminate inefficiencies	6	19	24%
Unlock shareholder value	23	2	92%
Facilitate future growth	10	15	40%
No synergy in the business	7	18	28%
Increase visibility of a firm	4	21	16%

The three most significant drivers for the decision to unbundle as outlined in Table 4.8 above are: unlocking shareholder value, the need to focus on core competences and facilitation of future growth. The need to unlock shareholder value was mentioned by 92% of the respondents, which means that though there are several drivers, unlocking shareholder value is the most significant.

Q3. **Extent to Which the Drivers Were Achieved**

Table 4:9 Extent of achieving unbundling drivers

	0-25%	26-50%	51-75%	76-100%	Above 100%	Not mentioned
Focus on core competencies				76%		24%
Realise potential as a standalone entity				24%		76%
Eliminate inefficiencies				24%		76%
Unlock shareholder value				80%	12%	8%
Facilitate future growth				40%		60%
No synergy in the business			4%	24%		72%
Increase visibility of a firm				16%		84%

Respondents indicated that the drivers for the decision to unbundle were achieved, with the extent of achieving them lying in the 76-100% range as shown in the Table 4:9 above. 12% of the respondents that identified unlocking shareholder value as a driver indicated that the extent of achieving it was above 100%, which shows that unbundling unlocks shareholder value.

Q4. **Is there a Relationship between Unbundling and Increase in Shareholder Value?**

Table 4:10 Relationship between unbundling and shareholder value

	Yes	No
Is there a relationship between unbundling and an increase in shareholder value	100%	0%

All the respondents highlighted that there is a relationship between unbundling and an increase in shareholder value as shown in Table 4:10. Consequently an investor would benefit from investing in an unbundling company.

Q5. **Shareholder Returns 6 Months before Unbundling**

Table 4:11 Returns 6 months before unbundling

	Very Good	Good	Fair	Poor	Very Poor
How do you rate the returns on shareholder investment 6 months before unbundling			72%	28%	

Seventy-two percent of the respondents highlighted that returns were fair and twenty-eight indicated that the returns were poor six months before unbundling. This shows that returns are not responding positively to the news of the pending unbundling exercise.

Q6. **Shareholder Returns on Unbundling Date**

Table 4:12 returns on unbundling

	Very Good	Good	Fair	Poor	Very Poor
How do you rate the returns on shareholder investment on the unbundling date		56%	44%		

The ratings by respondents of returns are gradually shifting from fair and poor six months before unbundling to fair (44% of respondents) and good (56% of the respondents) on unbundling date. This shows that returns improve on the unbundling day when the unbundled entities are listed.

Q7. **Shareholder Returns after Unbundling**

Table 4:13 Returns after unbundling

	Very Good	Good	Fair	Poor	Very Poor
How do you rate the returns on shareholder investment after unbundling	88%	12%			

Eighty-eight percent of the respondents indicated that the returns after unbundling were very good and twelve percent indicated that the returns were good.

In Table 4:11 to 4:13 the responses given by the respondents are in line with the findings of Krisnaswami and Subramaniam (1999) and Habib *et al.* (1997), that a decrease in information asymmetry will lead to an increase in the total value of the firm and its spun-off subsidiary. The information hypothesis predicts that the level of information asymmetry will decrease for these firms after the completion of the unbundling process. According to the respondents, the returns are moving from being fair and poor six months before unbundling to good and very good after unbundling.

Q8. Impact of unbundling on turnover 1 year after unbundling

Table 4:14 Impact on year 1 turnover

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-25%	2	8.0	8.0	8.0
	26-50%	23	92.0	92.0	100.0
	Total	25	100.0	100.0	100.0

Tables 4:14 to 4:17 show that the improvement in performance is gradual. Ninety-two percent of the respondents indicated that turnover increased from 26-50% after the first year and eight percent indicated that increase in turnover of between 0-25 percent was realized in the first year. The turnover improves as the unbundled entities focus on core businesses.

Q9. Impact of unbundling on turnover 2 years after unbundling

Table 4:15 Impact on year 2 turnover

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-50%	6	24.0	24.0	24.0
	51-75%	19	76.0	76.0	100.0
	Total	25	100.0	100.0	

Q10. Impact of unbundling on turnover 3 years after unbundling

Table 4:16 Impact on year 3 turnover

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-50%	1	4.0	4.0	4.0
	51-75%	3	12.0	12.0	16.0
	76-100%	21	84.0	84.0	100.0
	Total	25	100.0	100.0	

According to 84% of the respondents in Table 4.16 above, turnover in the third year increases by between 76 to 100% as a result of unbundling. All respondents indicated that there are improvements in turnover as a result of unbundling.

Q11. Impact on profitability and activity ratios

a) Impact of on operating profit margin 3 years after

Table 4:17 Impact on operating profit margin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase 51-100%	25	100.0	100.0	100.0

Operating profit margin is an indication of the firm's profitability from current operations without regard to the interest charges accruing from the capital structure. All of the respondents indicated that unbundling improves operating profit margin with increases of between 51-100%. It can therefore be interpreted that unbundling improves the operating profit margin.

b) Impact of unbundling on earnings per share 3 years after

Table 4.18 Impact on Earnings per share

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase 51-100%	25	100.0	100.0	100.0

(Source: Respondents)

The Earnings Per Share ratio shows the earnings available to the owners of each share of common stock. All the respondents show that unbundling result in an increase in the Earnings Per Share (EPS) (as shown in Table 4:18) that range from 51 to 100%, indicating that it is worthwhile to invest in a company that is about to unbundle.

c) Impact of unbundling on inventory turnover 3 years after

Table 4:19 Impact on inventory turnover

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase 51-100%	25	100.0	100.0	100.0

Inventory turnover provides an indication of whether a company has excessive or inadequate finished goods inventory. Hundred percent (100%) of the respondents as shown in Table 4:19 indicated that unbundling results in an increase of between 51-100% in inventory turnover. A high turnover implies that the entity does not hold excessive stocks of inventories that are unproductive and lessen its profitability.

d) Impact of unbundling on total assets turnover 3 years after

Table 4:20 Impact on total assets turnover

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase 51-100%	25	100.0	100.0	100.0

Respondents to the survey also indicated that unbundling results in an increase in total assets turnover of between 51-100% as shown in Table 4:20 above. Total assets turnover is a measure of the utilisation of all the firm's assets. Unbundling therefore results in the efficient and effective utilisation of the firm's assets as each entity begins to focus on its core business in the process putting all the assets to full use.

Q12. **Is unbundling a viable strategy for listed companies?**

Table 4:21 Unbundling- a viable strategy or not

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	100.0	100.0	100.0

(Source: Respondents)

All the respondents (as shown in Table 4:21 above) indicated that unbundling is a viable strategy for listed companies in Zimbabwe. Respondents indicated that there were two major reasons why unbundling is a considered a viable strategy for conglomerates. The reasons advanced were that returns on shareholder investment improved and that there was an improvement in performance as a result of the unbundling process. Eighty percent of the twenty five respondents indicated that unbundling was a viable strategy for conglomerates because it leads to an increase in shareholder returns. Thirty-six percent of the respondents also indicated that unbundling was a viable strategy because it s results in improved performance as shown in Tables 4:22 and 4:23 below respectively.

Reason 1: Unbundling viable strategy-returns on shareholder investment improved

Table 4:22 Improvement in shareholder return

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mentioned	20	80.0	80.0	80.0
	Not Mentioned	5	20.0	20.0	100.0
	Total	25	100.0	100.0	100.0

Reason 2: Unbundling viable strategy-Improvement in performance

Table 4:23 Improvement in performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mentioned	9	36.0	36.0	36.0
	Not Mentioned	16	64.0	64.0	100.0
	Total	25	100.0	100.0	

4.3 Conclusion

This chapter has presented the findings on the performance of the conglomerate before and after unbundling. The findings were that cumulative abnormal returns were realised through unbundling and that there was value uplift in the resultant companies as compared to the industrial index and hence an investor would benefit from investing in a company that is planning to unbundle. The study also established that there are several drivers for the decision to unbundle but the most significant was to unlock shareholder value. It was also established that there is a relationship between unbundling and an increase in shareholder value and that unbundling is a viable strategy for conglomerates. The reason being that as companies focus on core competences, performance improves as well as returns to shareholders.

Chapter Five contains conclusions, recommendations made from the study and direction for future research on unbundling.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study sought to establish whether the unbundling of conglomerates unlocks or results in an increase in shareholder value and improved performance of the resultant companies overall and draw conclusions on whether unbundling is a viable strategy for listed conglomerates. The study further sought to establish the stages at which any increase in shareholder returns accrues, the most significant drivers behind the decision to unbundle and whether there is a relationship between unbundling and increase in share price.

This chapter is organised as follows: conclusions drawn from the study and based on the data analysis in Chapter Four are discussed followed by recommendations. Limitations of the study are discussed next followed by a discussion of directions for future research.

5.2 Conclusions

The following conclusions can be drawn from this study:

5.2.1 Unlocking of Shareholder Value

The unbundling of conglomerates results in the unlocking of shareholder value as measured by the cumulative abnormal returns as shown in Tables 4:1 and 4:2. Firms that unbundle in experience an increase performance when the results of the resultant companies are combined. Unbundling unlocks shareholder value as it provides an additional investment opportunity for the existing shareholders to participate on separately listed companies (after the shareholders have been allocated additional shares in the spun-off companies).

5.2.2 Performance Improvement

Unbundling is a viable strategy as performance measured in terms of turnover, operating profit margin, assets turnover and earnings per share ratios improves after unbundling. This shows that unbundling enhances management of smaller units since normally as the organisation grows through diversification (before unbundling), managerial diseconomies of scale tend to occur, resulting in difficulty in managing the conglomerate. As a result of management being able to focus on smaller units there will be improved efficiency and productivity on the unbundled division.

As shown by the exceptional performance of the unbundled conglomerates that unbundled their operations, it is likely that more companies will follow the unbundling route. Investors have had an opportunity to study the growing literature on unbundling and tend to position themselves in companies that announce unbundling plans, as they tend to benefit significantly.

5.2.3 Value Uplift

Unbundling in the form of a spin-off results in an increase in number of shares for the existing shareholders and the value uplift for the resultant companies is greater than the value uplift from the industrial index. Consequently an investor would benefit from investing in a company that has got plans to unbundle. Similarly existing investors in a company that is planning to unbundle would be better off not disposing of their shareholding in the parent company. Such investors should wait for the unbundling process to take effect and realise the benefits.

5.2.4 Drivers to the Decision to Unbundle

Though there are several drivers, the unlocking shareholder value is the most significant followed by the need to focus on core competences and facilitation of future growth. Opportunities for the enhancement of long-term growth are made available to the parent company as a result of its operational focus being centred on its core business after the unbundling process. Other drivers behind the decision to unbundle include the need to increase visibility of the firm, eliminate inefficiencies in the business, realise potential as a standalone entity and to address the lack of synergy in businesses. The stated drivers for unbundling were successfully achieved and it can therefore be concluded that unbundling maximises shareholder, enables companies to focus on core competences and facilitates future growth.

Unbundling is the most equitable and consistent means by which critical empowerment objectives can be achieved, allowing for the meaningful participation in the spun off company by the spun off company management and employees together with other investors after completion of the unbundling. This also ensures that the spun off company is adequately capitalised on the implementation of the proposed unbundling and after the listing. Unbundling enables the spun off company to pursue financial policies and strategies considered appropriate for itself and consistent with its operations and sector. Unbundling facilitates the investment by a class of shareholders who would not normally be attracted to the conglomerates as previously constituted. Unbundling widens the pool of potential investors and thereby enhances trading and liquidity.

5.2.5 Elimination of Information Asymmetries

Though returns to shareholder six months before unbundling range from poor to fair, the returns improve after unbundling as the firms are undervalued due to information asymmetry. Such firms experience an improvement in market valuation when they divest through spin-off. The spun-off company assumes increased visibility within the financial community and its unbundling will enable the financial community to better evaluate its performance hence increasing the prospects of proper recognition by the financial community.

5.3 Recommendations

Investors should position themselves in companies that announce unbundling plans, as they tend to benefit significantly from increases in returns and uplift in value resulting from more shares being traded when shareholders in the parent company are allocated additional shares in the spun off companies.

Existing shareholders in a conglomerate with plans for unbundling should avoid disposing of their shareholding in the company until after the allocation of additional shares in the spun-off companies.

Conglomerates that realise that diversification has resulted in inefficiencies that may lead to declines in performances or that there is no synergy between businesses should unbundled with a view to unlocking shareholder value and focus on core competences.

Unbundling frees managerial, administrative and financial resources to concentrate on strategic projects; it increases the firm-specific risk (compared to a diversified company which is considered to be less risky) thus aligning the company's actions with the interests of the shareholders according to the agency perspective and decreases transaction costs in the form of administrative and managerial burden.

5.4 Limitations of study

Only seven parent companies unbundled their operation during the period 2000 and December 2005. The conclusions drawn are based on the study of a small sample of companies listed on the ZSE.

5.5 Directions for future research

While this study has shown that unbundling unlocks shareholder value, it did not cover other aspects of unbundling such as the effects on human resources, the steps of the unbundling process. There is therefore need for further studies on the issues outlined below:

5.5.1 Need for Process Studies

The exiting literature focuses on antecedents and outcomes. More research is needed on the process of unbundling and the decision-making dynamics. Research on the unbundling process could distinguish between intended and unanticipated outcomes. Studies focussing on the economic outcome of unbundling have neglected variables at the process management level. Studies that focus on the link between corporate characteristics, such as the management team, and economic outcome, fail to explain hoe the management team or employees' perception, other than on lay-offs affect the outcome of the unbundling process. Factors at process level rather that simple antecedents may affect the outcome of the unbundling operation and enhance a firm's competitive position and performance.

5.5.2 Need for Studies on Long-Term Effects

Analysis of the long-term consequences of unbundling could help managers to understand how they can determine ex ante whether unbundling will increase their firm's value and in which divesting modes such value is maximised.

GLOSSARY OF TERMS

Carve out/ partial spin off: A parent company sells a stake for less than 20% in an initial public offering and/or rights offering and typically will spin off the remaining interest to existing shareholders at a later date. This sale provides capital to the parent and a completely new shareholder base for the public portion of the subsidiary.

Company performance: the growth and performance, which ensure the profitability of businesses.

Dividend-in-specie/ distribution-in-specie: shares in the company to be unbundled are distributed to shareholders of the parent company.

Resultant companies: the companies emerging after unbundling that is the parent and spun-off companies.

Share Price: is representative of all future earnings discounted at an appropriate rate or the value of a share on the Zimbabwe Stock Exchange (ZSE).

Shareholder wealth maximisation: the maximisation of shareholder's purchasing power. In an efficient market, it is the maximisation of the current share price.

Spin off: a parent company distributes some or all of its equity ownership in a subsidiary company as a pro-rata dividend to its shareholders. After the distribution, the operations and management of the subsidiary are separated from those of the parent.

Split off: A distribution by a parent company of a subsidiary's stock to its shareholders in exchange for shares of the parent company's stock.

Split up: a distribution by a parent company of the shares of two or more subsidiary companies in exchange for all the parent company's stock, followed by the liquidation of the parent company. The parent company's former shareholders become shareholders of the subsidiary companies.

Spun-off company: subsidiary company that has been unbundled.

Unlock shareholder value: the stock market's ability to put a higher value on the businesses that make up a conglomerate if they trade as separate companies.

REFERENCES

Anslinger, P Bonini, S and Patsalos-Fox, M 2000. *Doing The Spin-Out.* http://www.mckinseyquartely.com. accessed 20 November 2005.

Arnold, G. 1998. *Corporate Financial Management*, England: Financial Times Prentice Hall.

Benza ,2003. Firms Unbundled To Stay Afloat. *The Business Herald* 12 September 2003.

Brealey, R. A. and Myers, S. C. 2000. *Principles Of Corporate Finance,* Boston (Mass): Irwin/ Mcgaw-Hill Boston, Boston (Mass).

Brown, N., Kaur, P., Maugham ,S. and Rendall, J., 1995. *Financial Strategy,* 1995 Edition, London: Certified Accountants Educational Projects Ltd.

Cooper, D.R. and Schindler, P.S., 2001. *Business Research Methods,* Singapore: International Edition, McGraw- Hill.

Copeland, T., Lemgruber, E., Mayers, D., 1987. *Corporate Spin-Offs: Multiple Announcements and E x-Date Abnormal Performance*, New York: In Copeland T (Eds.), Modern Finance And Industrial Economics. Basil Blackwell, p 114-137.

Cusatis, P.J., Miles, J.A. and Woolridge J. R., (1993), Restructuring through spin-offs. The stock market evidence, *Journal of Financial Economics*, 33 (3), p293-311.

Daley, L., Mehrotra, V., and Sivakumar, R., (1997). Corporate Focus and Value Creation: Evidence From Spin Offs. *Journal of Financial Economics*. 45, 257-281.

Davis, G. F., Diekman, K. A. and Tinsly, C. H., 1994. The Decline And Fall of The Conglomerate Firm in the 1980s: The Deinstitutionalisation of An Organisational Form, *American Sociology Reviews*, 59 (August): 547-570.

Desai, H. and Jain, P., 1998. Firm Performance and Focus: Long Run Stock Market Performance Following Spin Offs. *Journal of Financial Economics* 54, 75-101.

Devogelaer, D., 2003. *European Refocusing Throughout The Nineties.* Ecsocman.edu.ru/images/pubs/2003/01/05/0000035697/refocusing.pdf. Accessed 23 November 2006.

Dillon, W. R, Madden T J, and Firtle N H, 1994. *Marketing Research in a Marketing Environment*, 3rd Edition,New York: Times Mirror/ Mosby College Publishing.

Diversification and Divestiture, 2002. http://www.google..../search?q=corporate refocusing&hl. Accessed 28 October 2002.

Donaldson, G., 1990. Voluntary Restructuring: The Case of General Mills, *Journal of Financial Economics,* 27(1), 117-141.

Fama, E., 1998, Market Efficiency, Long Term Returns and Behavioural Finance, *Journal Of Financial Economics* 49, 283-306.

Ferreira, M. A., 1997a. *Corporate Refocusing: Theoretical Explanations and Performance Consequences.*
http://www.sabusinessreview.co.za/December1997/ferreira2.htm. Accessed on 31 October 2002.

Ferreira, M. A., 1997b. *The Evolution Of The Role Of The Corporate Centre: A Value Addition Perspective.*
http://www.sabusinessreview.co.za/December1997/ferreira2.htm. Accessed on 31 October 2002.

Ferreira, M. A., 1997c. *Corporate Diversification Motive And Consequences: A Theoretical Analysis.*

http://www.sabusinessreview.co.za/December1997/ferreira3.htm. Accessed on 31 October 2002.

Ferreira, M. A., 1999. *Explaining Voluntary Corporate Unbundling: An Evolutionary Model*.
http://www.sabusinessreview.co.za/December1999/articles/ferreira.htm. Accessed on 31 October 2002.

Fidelity Life Asset Management (2003). Companies Benefit From De-Mergers. *Business Tribune*, 20 November to 26 November 2003.
http://www.btribune.co.zw/2003/nov20 nov26/investor/011.htm. Accessed on 24 November 2003.

Gadad, A. M. and Thomas, H., Discussion paper No. 04-10. *Sources of Shareholder's Wealth Gains From Asset Sales.* http://www.essex.ac.uk/afm/finance-discussion-papers/herdy.pdf. Accessed 27 October 2006.

Garvin, D.A.,1983.Spin Offs and The New Firm Formation Process. *California Management Review,* 25(2):3-20

Gitman, L. J., 1994. *Principles of Managerial Finance*, 7th Edition, New York: HarperCollins College Publishers.

Gleason, D. with Levin, A, 1999. *Breaking Out of Wedlock; Unbundling 2: Gencor.* http://secure.finacnialmail.co.za/report/unbundle/unbun2.htm. Accessed on 20 November 2003.

Gonde, W., 2003. *A Comparative Study of Cooperate Restructuring Strategies: An Analysis of Mergers And De-Mergers Effect on Shareholder Value.* University of Zimbabwe, Graduate School of Business.

Habib, M.A., Johnsen, D.B., Naik, N.Y., 1997. *Spin-Offs and Information* Http://Papers.Ssrn.Com/Sol3/Papers.Cfm?Abstract_Id=6918. Accessed November 2006.

Heath, D., and Zaima, J. K.,1984. Voluntary Corporate Divestiture and Value. *Financial Management*, 13 (1): 10-16.

Hite,G. L., and Owers, J. E., 1983. Security Price Reactions Around Corporate Spin-Off Announcements, *Journal of Financial Economics*, 12: 409-436.

Kang, H., and Diltz, D. .J, 2000. *Dividend Announcements and The Valuation Effects of Corporate Divestiture.* http://www.studyfinance.com/jfsd/pdffiles/v13n2/kang.pdf. Accessed on 18 June 2003.

Kirchmaier, T., 2003. *The Performance Effects of European De-Mergers.* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=432000. Accessed on 5 August 2006.

Klopper and Lubbe© 2005- concept matrix.

Krishnaswami S and Subramaniam V, 1999. *Information Asymmetry, Valuation and The Corporate Spin-off Decision.* http://papers.ssrn.ccom/sol13/papers.cfm?abstract_id=123088. Accessed on 18 February 2006.

Lynch, 2004. *Strategic Financial Management*, Great Britain December 2004 Edition: FTC Foulks Lynch.

Markides, C., 1995. Diversification, Restructuring and Economic Performance, *Strategic Management Journal*, 16: 101-118.

Miles J and Rosenfeld, 1983. The Effect Of Voluntary Spin-Off Announcements on Shareholder Wealth, *Journal Of Finance* 37, 1597-1606.

Montgomery, C., Thomas, A., and Kamarth, R., 1984. Market valuation and strategy, Academy of management journal , 2 (4):830-840.

Moschieri, C. and Mair, J., 2005. *Research on Corporate Unbundling: a Synthesis*, Working Paper, University of Navarra. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875587. Accessed 17 February 2006.

Moschieri, C., and Mair, J., 2006. *Unbundling Frees Business For Take Off.* http://www.ft.com/sms/s/0b8b78e8-85f62-11ad-a011-0000779e2340,dwp_uuid=4e612cca. Accessed 24 November 2006.

Myers, S. C., Brealy, R. A., 1996, *Principles of Corporate Finance*, International Edition,New York: McGraw- Hill Companies, Inc.

Nanda, V., and Narayanan, M., 1997. *Disentangling Value: Mis-Valuation and The Scope of The Firm.* Working Paper, University of Michigan, Ann Arbor, MI.

Nyandoro, T., 2004. *Unbundling of ZESA.* University of Zimbabwe, Graduate School of Business.

Ovtchinnikov, A. V., 2003. *Long Run Stock Price Performance of Spin Offs and Their Parents.* Working paper, Krannert Graduate School, Purdue University.

Owen, G., and Harrison, T., 1995. *Why ICI Chose To De-merge,* Harvard Business Review, March to April, 133-142.

Palepu, K., 1985. Diversification Strategy, Profit Performance and The Entropy Measure. *Strategic Management Journal,* 6, 239-255.

Powers, E .A., 2001. *Spin-offs, Sell offs And Equity Carve Outs: An Analysis Of Divestiture Method Choice.* Working Paper University Of South Carolina.

Rosenfeld, J., 1984. Additional Evidence On The Relation Between Divestiture Announcements And Shareholder Wealth, *The Journal Of Finance*.

Schipper, K., and Smith, A., 1983. Effects Of Recontracting On Shareholder Wealth: The Case of Voluntary Spin-Offs, *Journal Of Financial Economics* 12, 437-467.

Senderayi S, 2004. *Organisational Change Management- A Case Study of The Unbundling of ZESA- Projects Department.* University of Zimbabwe, Graduate School of Business.

Staff Reporter, 2002. Zimre to De-Merge, List Fidelity Life Separately. *The Financial Gazette* C4, 14-20 November 2002.

Staff Reporter, 2002. Delta's Core Business Grows. *Business Tribune* 5-11 December 2002. http://wwwbtribune.co.zw/dec05 dec11/columns/005htm. Accessed 24 November 2003.

Thaler and Lamont (2001), *Can The Market Add Or Subtract? Mispricing In Tech Stock Carve Outs*. http:// papers.ssrn.com/sol3/papers.cfm?abstract_id=270372. Accessed 24 November 2006.

Veld, C., and Veld-Merkoulova, Y. V., 2003. *Do Spin-Offs Really Create Value? The European Case.* http://www.tilburguniversity.nl/faculties/few/finance/people/veld/preprints/velve1.pdf . Accessed 18 June 2003.

Vroom, H. J., and Frederikslust, R., 1999. *Share Holder Wealth Effects Of Corporate Spinoffs. The Worldwide Experience 1990-1998.* www.Fbk.eur.nl.PRJ/RIFM/WorkingPapers/wp99_6.pdf. Accessed 23 November 2006.

Vijh, A,.2002. The Positive Announcement Period Returns Of Equity Carve outs: Asymmetric Information Or Divestiture Gain? *Journal Of Business,* 75 (1): 153-191.

Appendix 2
(Source- Prof. Rembrandt Klopper and Prof. Sam Lubbe© 2005.

References / **Concepts**	Reaction to error of judgement by management	Shareholder wealth maximisation	Elimination of negative synergies	No synergies between parent and subsidiary	Elimination of managerial economies of scale	Geographical focus	Legal, market and strategic origins	Mitigation of information asymmetry	Unbundling results in cumulative abnormal returns	**Objectives of unbundling**	Cumulative abnormal returns	**Results of unbundling**										
(Owen and Harrison, 1995				✓							✓											
(Rosenfeld, 1984).											✓											
Anslinger *et al.* (2000)			✓																			
Copeland *et al.* (1987)											✓											
Cusatis *et al.* (1993)											✓											
Daley *et al.* (1997		✓									✓											
Davies *et al.* (1994)									✓													
Desai and Jain (1998)																						
Diversification and Divestiture (2002)					✓																	
Fama (1998)																						
Ferreira (1997a),		✓																				
Ferreira (1997a),											✓											
Ferreira (1999)											✓											
Garvin (1983)									✓													
Habib *et al.* (1997)								✓														
Hearth and Zaima, 1984			✓																			
Hite and Owers (1983)				✓							✓											
Kang and Diltz					✓																	

Appendix 2
(Source- Prof. Rembrandt Klopper and Prof. Sam Lubbe© 2005.

(2000)																						
Kirchmaier (2003)			✓																			
Krisnaswami and Subramaniam (1999)								✓														
Montegomery *et al.* 1984					✓																	
Moschieri and Mair (2005)							✓															
Moschieri and Mair (2005, 3)	✓																					
Ovtchinnikov (2003)											✓											
Palepu, 1990		✓																				
Powers (2001).		✓																				
Schipper and Smith (1983)											✓											
Thaler and Lamont (2001)											✓											
Veld and Merkoulova (2003)						✓																
Vijh, 2002								✓														

Appendix 1
(Source- Prof. Rembrandt Klopper and Prof. Sam Lubbe© 2005.

References \ Concepts	Reaction to error of judgement by management	Shareholder wealth maximisation	Elimination of negative synergies	No synergies between parent and subsidiary	Elimination of managerial economies of scale	Geographical focus	Legal, market and strategic origins	Mitigation of information asymmetry	Unbundling results in cumulative abnormal returns	**Objectives of unbundling**	Cumulative abnormal returns	**Results of unbundling**										
(Owen and Harrison, 1995				✓							✓											
(Rosenfeld, 1984).											✓											
Anslinger *et al.* (2000)			✓																			
Copeland *et al.* (1987)											✓											
Cusatis *et al.* (1993)											✓											
Daley *et al.* (1997		✓									✓											
Davies *et al.* (1994)									✓													
Desai and Jain (1998)																						
Diversification and Divestiture (2002)					✓																	
Fama (1998)																						
Ferreira (1997a),		✓																				
Ferreira (1997a),											✓											
Ferreira (1999)											✓											
Garvin (1983)									✓													
Habib *et al.* (1997)								✓														
Hearth and Zaima, 1984			✓																			
Hite and Owers (1983)				✓							✓											
Kang and Diltz					✓																	

Appendix 1

(Source- Prof. Rembrandt Klopper and Prof. Sam Lubbe© 2005.

(2000)																						
Kirchmaier (2003)			✓																			
Krisnaswami and Subramaniam (1999)								✓														
Montegomery *et al.* 1984					✓																	
Moschieri and Mair (2005)							✓															
Moschieri and Mair (2005, 3)	✓																					
Ovtchinnikov (2003)											✓											
Palepu, 1990		✓																				
Powers (2001).		✓																				
Schipper and Smith (1983)											✓											
Thaler and Lamont (2001)											✓											
Veld and Merkoulova (2003)						✓																
Vijh, 2002								✓														

Appendix 2 **Informed Consent Document**

UNIVERSITY OF KWAZULU NATAL

FACULTY OF MANAGEMENT STUDIES

FOR OFFICE USE ONLY Respondent code……….

Voluntary questionnaire for listed companies on the Zimbabwe Stock Exchange (ZSE) that have unbundled

Research Topic: ***Unbundling of Listed Companies: Does It Unlock Shareholder Value and Improve Performance? A Case for Zimbabwe***

Researcher: Tambudzayi Furamera Tel 04 610663, Email furamerat@yahoo.com

Supervisor: Dr J MacDonald, Email: johnm@pmi-sa.co.za

Graduate School of Business, University of KwaZulu Natal

Note to respondent

This study is conducted to determine to what extent the unbundling exercise has achieved intended objectives of companies that unbundled, and to determine the optimal timing of investing in the company before or after unbundling.

- Although the survey is voluntary, your input would be extremely valuable in helping to determine optimal unbundling strategies for Zimbabwean companies.
- The survey is targeting financial executives, investment analysts and investors in the companies that have unbundled.
- Your response to this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you individually or to your organisation.
- Participation is voluntary and you are free to withdraw from the study at any stage and for any reason.

This questionnaire consist of four parts:

- Part 1 asks for permission to use your response for an academic research;
- Part 2 asks for the category into which your organisation falls and the drivers of unbundling.
- Part 3 asks for information about your opinion on the unbundling process.
- Part 4 deals with open ended questions in which you are requested to give reasons in support of your answer.

The results of the study will be made available to the participating organisations on request. All data collected will be kept at home and any papers containing data will be shredded at the end of the study. Data saved on disks will also be deleted upon completion of the study.

Your prompt response, no latter than 15 November 2006, would be highly appreciated.

Participant Declaration

I.. (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Postal address (for mailing results purposes):...

Signature... Date...........................

Appendix 3

Questionnaire

Voluntary questionnaire for listed companies on the Zimbabwe Stock Exchange that have unbundled

Unbundling of listed companies: Does It Unlock Shareholder Value and Improve Performance? A Case for Zimbabwe

Researcher: Tambudzayi Furamera - *Tel.: 04 610663,* furamerat@yahoo.com)

Supervisor: Dr J MacDonald, Email johnm@pmi-sa.co.za

Graduate School of Business, University of KwaZulu-Natal

Notes to the respondent

This study is conducted to determine to what extent the unbundling exercise has achieved intended objectives of companies that unbundled, and to determine the optimal timing of investing in the company before or after unbundling.

- Although the survey is voluntary, your input would be extremely valuable in helping to determine optimal unbundling strategies for Zimbabwean companies.
- Your response to this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you individually, or to your organisation.

This questionnaire consists of four parts:

- Part 1 asks for permission to use your response for an academic research;
- Part 2 asks for the category into which your organisation falls and the drivers of unbundling.
- Part 3 asks for information about your opinion on the unbundling process.
- Part 4 deals with open ended questions in which you are requested to give reasons in support of your answer.

How to complete the questionnaire

- Please answer all questions by ticking (√) the appropriate box and or writing in the space provided. Where the space provided is not adequate please feel free to use and attach an extra sheet.
- Please answer the questions as best as you can and be sure to read and follow the instructions for each part.

The results of the study will be made available to the participating organisations on request. Your prompt response, no latter than 15 November 2006, would be highly appreciated.

Thank you very much for taking your time to complete this questionnaire.

Part 1: Permission to use responses

I________________________ (name) hereby give permission that my responses may be used for research purposes provided that my identity and that of my organisation is not revealed in the published records of the research.

Postal address (for mailing results to participants): ________________________________
____

Contact numbers: Work: ____________________ Mobile: ____________________

Part 2: Please complete the following information about your organization

1. **What category of entity does your organisation fall in? (Tick (✓) the appropriate option)**
   ☐ Parent company ☐ Spun-off company ☐ Stockbroker
2. What were the most significant benefits or drivers behind the decision to unbundle?
   a. ____
   b. ____
   c. ____
3. To what extent were these achieved?

Drivers	0-25%	26-50%	51-75%	76-100%	100%+
a.					
b.					
c.					

Part 3: The unbundling process

Please show your rating on each of the questions by ticking (✓) the appropriate box.

4. Is there a relationship between unbundling and an increase in shareholder value?

☐ Yes ☐ No

5. How do you rate the returns on shareholder investment 6 months before unbundling.
☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very poor

6. How do you rate the returns on shareholder investment on the unbundling date.
☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very poor

7. How do you rate the returns on shareholder investment after unbundling.
☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very poor

8. What was the impact of unbundling on turnover 1 year after unbundling?

☐ 0-25% ☐ 26-50% ☐ 51-75% ☐ 76%-100% ☐ over 100%

9. What was the impact of unbundling on turnover 2 years after unbundling?

☐ 0-25% ☐ 26-50% ☐ 51-75% ☐ 76%-100% ☐ over 100%

10. What was the impact of unbundling on turnover 3 years after unbundling?

☐ 0-25% ☐ 26-50% ☐ 51-75% ☐ 76%-100% ☐ over 100%

11. What was the impact on the following ratios, 3 years after unbundling?

Ratio	**Increase**		**Decrease**		**No Change**
	0-50%	51-100%	0-50%	51-100%	
Profitability Ratios					
Operating Profit margin					
Earnings per Share					
Activity Ratios					
Inventory Turnover					
Total asset turnover					

Part 4. Please fill in the following information, giving reasons in support of your answer.

12. In your opinion is unbundling a viable strategy for companies listed on the ZSE?

....

....

....

Thank you very much for your time and cooperation.

Please return the completed questionnaire by 15 November 2006 in the self-addressed and stamped envelope that accompanied it.

Appendix 4

SHARE PERFOMANCE REVIEW (BEFORE INFLATION ADJUSTMENTS)

Table Showing Comparative Movement of Share Price Before and After Unbundling

				SHARE PRICES IN CENTS						
Parent Company	**Unbundled Company**	**1 Yr Before**	**6 mts Before**	**Listing date**	**On Unbundling**	**1 mth After**	**6 mth Afte**	**1 Yr After**	**2 Yrs After**	**3 Yrs After**
Astra Industries		500	700		1,050	400	2,700	8,000	42,000	55,000
Market index		**10,588**	**16,457**		**42,663**	**48,443**	**46,073**	**102,484**	**674,979**	**577,298**
	Cairns			17/8/01	900	470	1,700	4,900	3,400	6,000
	Tractive Power Holdings			17/8/01	700	275	600	5,000	16,000	40,000
	Market index				**42,663**	**48,443**	**46,073**	**102,484**	**674,979**	**577,298**
Delta Corporation		1,700	2,950		3,050	3,300	5,600	16,300	40,000	90,000
Market index		**11,229**	**29,192**		**45,617**	**49,008**	**49,493**	**104,040**	**656,947**	**880,630**
	OK Zimbabwe			18/10/01	105	150	173	605	2,500	5,600
	Market index				**45,617**	**49,008**	**49,493**	**104,040**	**656,947**	**880,630**
	Pelhams			3/4/2002	800	905	2,250	2,100	3,200	4,350
	Market index				**47,457**	**53,315**	**100,785**	**175,322**	**345,709**	**2,665,385**
	Zimsun			Did not de-list	290	250	1,650	1,805	3,200	4,100
	Market index				**45,664**	**47,585**	**77,233**	**102,229**	**414,228**	**974,695**
TZI		825	2,500		6,300	6,600	4,350	6,100	**8,400**	10,100
Market index		**38,123**	**47,377**		**77,148**	**87,560**	**100,153**	**259,991**	**589,306**	**2,869,331**
	Art			24/6/02	4,600	4,900	5,400	22,500	25,000	32,500
	Market index				**77,148**	**87,560**	**100,153**	**259,991**	**589,306**	**2,869,331**
TH Zimbabwe										
Market index		**48,772**	**62,885**		**96,619**	**100,250**	**210,031**	**618,101**	**874,589**	**4,414,126**
	Steelnet			25/11/02	1,150	1,375	4,400	7,500	15,000	58,500
	General Belting			25/11/02	850	900	4,200	9,000	11,100	24,000
	Turnall			25/11/02	980	1,100	3,400	9,000	23,000	120,000
	Market index				**96,619**	**100,250**	**210,031**	**618,101**	**874,589**	**4,414,126**
T A Holdings		300	380		580	800	1,200	2,400	4,800	16,300
Market index		**12,125**	**17,574**		**40,763**	**38,123**	**45,767**	**62,885**	**210,031**	**484,933**
	Zimnat			24/5/01	110	125	135	155	1,100	6,000
	Market index				**40,763**	**38,123**	**45,767**	**62,885**	**210,031**	**484,933**
Mashonalnd Holdings		75	110		80	50	26	30	155	4,000
Market index		**10,306**	**16,863**		**14,498**	**15,734**	**22,842**	**50,828**	**87,560**	**429,717**
	Powerspeed			24/7/00	120	150	200	250	5,200	96,000
	Market index				**14,498**	**15,734**	**22,842**	**50,828**	**87,560**	**429,717**
Apex		310	350		180	120	150	250	6,000	100,000
Market index		**11,584**	**27,653**		**18,760**	**17,138**	**27,653**	**46,355**	**96,972**	**674,542**
	Phoenix			18/9/00	200	150	230	200	2,900	20,000
	Market index				**18,760**	**17,138**	**27,653**	**46,355**	**96,972**	**674,542**

Appendix 5

SHARE PERFOMANCE REVIEW- INFLATION ADJUSTED

Table Showing Comparative Movement of Share Price Before and After Unbundling and Retuns

					SHARE PRICES IN CENTS						RETURNS						
Parent Company	Unbundled Company	1 Yr Before	6 mts Before	Listing date	On Unbundling	1 mth After	6 mth Afte	1 Yr After	2 Yrs After	3 Yrs After	1 yr before	6 mnth before	1 mth after	6 mth after	1 yr after	2 yrs after	3 years after
Astra Industries		413,906	474,515		482,127	158,420	806,308	1,562,654	1,557,870	492,252	-14%	-2%	-67%	67%	224%	223%	2%
Market index		8,764,783	11,156,145		19,589,629	19,185,766	13,758,991	20,018,283	25,036,422	5,166,829	-55%	-43%	-2%	-30%	2%	28%	-74%
	Caims			17/8/01	413,252	186,143	507,675	957,126	126,113	53,700			-55%	23%	132%	-69%	-87%
	Tractive Power Holdings			17/8/01	321,418	108,914	179,179	976,659	593,474	358,001			-66%	-44%	204%	85%	11%
	Market index				19,589,629	19,185,766	13,758,991	20,018,283	25,036,422	5,166,829			-2%	-30%	2%	28%	-74%
Delta Corporation		1,219,506	1,683,159		1,105,583	1,161,588	1,493,273	2,419,838	948,862	690,889	10%	52%	5%	35%	119%	-14%	-38%
Market index		8,055,030	16,655,952		16,535,501	17,250,801	13,197,475	15,445,341	15,583,808	6,760,193	-51%	1%	4%	-20%	-7%	-6%	-59%
	OK Zimbabwe			18/10/01	38,061	52,799	46,131	605	59,304	42,989			39%	21%	-98%	56%	13%
	Market index				16,535,501	17,250,801	13,197,475	15,445,341	15,583,808	6,760,193			4%	-20%	-7%	-6%	-59%
	Pelhams			3/4/2002	213,325	223,728	334,027	151,657	38,194	22,667			5%	57%	-29%	-82%	-89%
	Market index				12,654,707	13,180,211	14,962,122	12,661,281	4,126,295	13,888,628			4%	18%	0%	-67%	10%
	Zimsun			Did not de-lis	77,330	61,803	244,953	130,352	38,194	21,364			-20%	217%	69%	-51%	-72%
	Market index				12,176,521	11,763,603	11,465,723	7,382,715	4,944,121	5,078,886			-3%	-6%	-39%	-59%	-58%
TZI		419,382	833,557		1,492,693	1,437,587	485,195	311,129	86,632	39,410	-72%	-44%	-4%	-67%	-79%	-94%	-97%
Market index		19,379,518	15,796,555		18,279,183	19,072,080	11,170,956	13,260,768	6,077,682	11,196,012	6%	-14%	4%	-39%	-27%	-67%	-39%
	Art			24/6/02	1,089,903	1,067,300	602,311	1,147,607	257,832	126,814			-2%	-45%	5%	-76%	-88%
	Market index				18,279,183	19,072,080	11,170,956	13,260,768	6,077,682	11,196,012			4%	-39%	-27%	-67%	-39%
TH Zimbabwe																	
Market index		17,167,596	15,546,061		12,344,230	11,181,810	12,977,145	10,976,080	6,230,708	5,220,696	39%	26%	-9%	5%	-11%	-50%	-58%
	Steelnet			25/11/02	146,926	153,366	271,861	133,183	106,862	69,189			4%	85%	-9%	-27%	-53%
	General Belting			25/11/02	108,597	100,385	259,504	159,820	79,078	28,385			-8%	139%	47%	-27%	-74%
	Turnall			25/11/02	125,206	122,693	210,075	159,820	163,856	141,927			-2%	68%	28%	31%	13%
	Market index				12,344,230	11,181,810	12,977,145	10,976,080	6,230,708	5,220,695			-9%	5%	-11%	-50%	-58%
T A Holdings		256,584	272,595		319,047	406,674	422,396	593,312	296,576	183,529	-20%	-15%	27%	32%	86%	-7%	-42%
Market index		10,370,244	12,606,958		22,422,869	19,379,518	16,109,804	15,546,061	12,977,145	5,460,093	-54%	-44%	-14%	-28%	-31%	-42%	-76%
	Zimnat			24/5/01	60,509	63,543	47,520	38,318	67,965	67,557			5%	-21%	-37%	12%	12%
	Market index				22,422,869	19,379,518	16,109,804	15,546,061	12,977,145	5,460,093			-14%	-28%	-31%	-42%	-76%
Mashonalnd Holdings		95,246	117,080		66,225	40,436	17,625	14,606	33,762	174,427	44%	77%	-39%	-73%	-78%	-49%	163%
Market index		13,087,679	17,947,898		12,001,887	12,724,131	15,483,834	24,745,701	19,072,080	18,738,518	9%	50%	6%	29%	106%	59%	56%
	Powerspeed			24/7/00	99,338	121,308	135,576	121,713	1,132,644	4,186,241			22%	36%	23%	1040%	4114%
	Market index				12,001,887	12,724,131	15,483,834	24,745,701	19,072,080	18,738,518			6%	29%	106%	59%	56%
Apex		370,361	326,385		132,770	86,083	89,796	99,012	990,552	2,971,415	179%	146%	-35%	-32%	-25%	646%	2138%
Market index		13,839,141	25,787,084		13,837,482	12,293,717	16,564,200	18,358,945	16,009,386	20,043,461	0%	86%	-11%	20%	33%	16%	45%
	Phoenix			18/9/00	147,522	107,603	137,688	79,210	478,767	594,283			-27%	-7%	-46%	225%	303%
	Market index				13,837,482	12,293,717	16,564,200	18,358,945	16,009,386	20,043,461			-11%	20%	33%	16%	45%

APPENDIX 6

ILLUSTRATION OF VALUE UPLIFT

ASTRA HOLDINGS LTD

Initial Holding				1,000	shares
Share price on unbundling anouncement				1,050	cents
Value of Holding on unbundling				1,050,000	cents

New shares received		Proportion	Share holding		
	Cairns	0	1000		
	TPH	0	1000		

Value as at		No. of shares	Share price	Value of Holding	
	Astra	1000	55,000	55,000,000	
	Cairns	1000	6,000	6,000,000	
	TPH	1000	40,000	40,000,000	
				101,000,000	

Value Uplift %	9,519	%
Industrial index at unbundling	42,663	
Industrial index as at	577,298	
Industrial index -Value uplift	1,253	%

DELTA CORPORATION

Initial Holding				1,000	shares
Share price on unbundling anouncement				3,100	cents
Value of Holding on unbundling				3,100,000	cents

New shares received		Proportion	Share holding		
	OK Zim	3.3	3300		
	Pelhans	0.27	270		
	Zimsun	0.39	390		

Value as at		No. of shares	Share price	Value of Holding	
	Delta	1000	90,000	90,000,000	
	OK Zim	3300	7,500	24,750,000	
	Pelhams	270	4,350	1,174,500	
	Zimsun	390	4,000	1,560,000	
				117,484,500	

Value Uplift %	3,690	%
Industrial index at unbundling	47,723	
Industrial index as at	2,665,385	
Industrial index -Value uplift	5,485	%

TZI LIMITED

Initial Holding				1,000	shares
Share price on unbundling anouncement				6,300	cents
Value of Holding on unbundling				6,300,000	cents

New shares received		Proportion	Share holding
		0	0
	Art	0.36	360
		0	0

Value as at		No. of shares	Share price	Value of Holding
	TZI	1000	10,100	10,100,000
	Art	750	32,500	24,375,000
		0	-	-
		0	-	-
				34,475,000

Value Uplift %	447	%
Industrial index at unbundling	62,417	
Industrial index	2,869,331	
Industrial index -Value uplift	4,497	%

TH Zimbabwe

Initial Holding				1,000	shares
Share price on unbundling anouncement				3,850	cents
Value of Holding on unbundling				3,850,000	cents

New shares received		Proportion	Share holding
	General Be	0.2	200
	Steelnet	1.16	1160
	Turnall	1.03	1030

Value as at		No. of shares	Share price	Value of Holding
	General Be	200	58,500	11,700,000
	Steelnet	1160	24,000	27,840,000
	Turnall	1030	120,000	123,600,000
				163,140,000

Value Uplift %	4,137	%
Industrial index at unbundling	115,097	
Industrial index	4,414,126	
Industrial index -Value uplift	3,735	%

T A Holdings

Initial Holding			1,000	shares
Share price on unbundling anouncement			580	cents
Value of Holding on unbundling			580,000	cents

New shares received		Proportion	Share holding
		0	0
	Zimnat	567	567
		0	0

Value as at		No. of shares	Share price	Value of Holding
	T A	1000	16,300	16,300,000
	Zimnat	567	6,000	3,402,000
		0	-	-
		0	-	-
				19,702,000

Value Uplift %	3,297	%
Industrial index at unbundling	40,762	
Industrial index	484,933	
Industrial index -Value uplift	1,090	%

Mash Holdings

Initial Holding			1,000	shares
Share price on unbundling anouncement			80	cents
Value of Holding on unbundling			80,000	cents

New shares received		Proportion	Share holding
	Power	20	200
		0	0

Value as at		No. of shares	Share price	Value of Holding
	Mash	1000	4,000	4,000,000
	Power	200	96,000	19,200,000
		0	-	-
				23,200,000

Value Uplift %	28,900	%
Industrial index at unbundling	14,498	
Industrial index	429,717	
Industrial index -Value uplift	2,864	%

APEX

Initial Holding				1,000 shares
Share price on unbundling anouncement				180 cents
Value of Holding on unbundling				180,000 cents

New shares received		Proportion	Share holding
	Phoenix	0	1000
		0	0

Value as at		No. of shares	Share price	Value of Holding
	Apex	1000	100,000	100,000,000
	Phoenix	1000	20,000	20,000,000
		0	-	-
				120,000,000

Value Uplift %	66,567	%
Industrial index on unbundling	18,759	
Industrial index	674,542	
Industrial index -Value uplift	3,496	%

RESEARCH OFFICE (GOVAN MBEKI CENTRE)
WESTVILLE CAMPUS
TELEPHONE NO.: 031 – 2603587
EMAIL : ximbap@ukzn.ac.za

UNIVERSITY OF KWAZULU-NATAL

27 NOVEMBER 2006

MS. T FURAMERA (200297079
GRADUATE SCHOOL OF BUSINESS

Dear Ms. Furamera

ETHICAL CLEARANCE APPROVAL NUMBER: HSS/06748A

I wish to confirm that ethical clearance has been granted for the following project:

"Unbundling of listed companies: Does it unlock value and improve performance – A case for Zimbabwe"

Yours faithfully

MS. PHUMELELE XIMBA
RESEARCH OFFICE

cc Faculty Office (Christel Haddon)
cc Supervisor (Dr J MacDonald)