

1998

## An empirical model for predicting the feasibility of corporate turnaround

Syed Kamalludin bin Syed Alaudin Al Qadiri  
*Edith Cowan University*

Follow this and additional works at: <https://ro.ecu.edu.au/theses>



Part of the [Business Administration, Management, and Operations Commons](#)

---

### Recommended Citation

bin Syed Alaudin Al Qadiri, S. (1998). *An empirical model for predicting the feasibility of corporate turnaround*. <https://ro.ecu.edu.au/theses/1432>

This Thesis is posted at Research Online.  
<https://ro.ecu.edu.au/theses/1432>

# Edith Cowan University

## Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

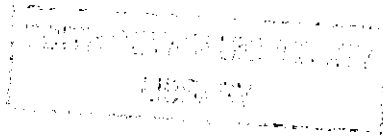
The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.



**AN EMPIRICAL MODEL FOR  
PREDICTING THE FEASIBILITY  
OF CORPORATE TURNAROUND**

**By**

**Syed Kamalludin B. Syed Alaudin Al Qadiri**

**Thesis**

**Submitted in fulfilment of the requirements  
for the award of the Degree of Doctor of  
Philosophy in Management at the Faculty of  
Business, Edith Cowan University,  
Western Australia**

**Date of Submission: 9<sup>th</sup> April 1998**

## **ABSTRACT**

The primary objective of this research was to identify the determinants of corporate turnaround feasibility and their effect (in terms of their state of existence and their existence) on the probability of corporate turnaround feasibility in Successful and Non Successful Turnaround Companies. The other objective was the development of an empirical model of the determinants of corporate turnaround feasibility capable of predicting the feasibility of corporate turnarounds.

One hundred 'troubled companies' were identified out of two hundred and eleven publicly listed companies of the Kuala Lumpur Stock Exchange through observations of their share price performance, earnings before interest and tax, earnings after interest and tax and by the the Malaysian Z - Score (PNB Score) failure detection model test. They were further demarcated into 57 Successful Turnaround Companies (STC) and 43 Non Successful Turnaround Companies (NSTC). These two groups were then compared on the determinants of turnaround feasibility. The study confirms that the feasibility of corporate turnaround of an organisation is dependent on the existence (exists or non existant) and the state of existence (whether favourable or non favourable) of a set of variables or determinants of corporate turnaround feasibility i.e. Causes of Decline, Severity of Crisis, Company's Historical Strategy, Industry Characteristics, Company's Cost Price Structure, Commitment of Shareholders, Commitment of Bankers, Commitment of Creditors, Commitment of Employees, New Competent Management, Viable Core Business, Bridge Capital and Realistic Turnaround Plan. In identifying the existence and the state of existence of the key determinants of corporate turnaround feasibility in the STC and the NSTC, it was found that the STC had higher occurrences of favourable states of existence for the key determinants than the NSTC. STC's were also found to experience higher occurrences of existence (exists) in the key determinants compared to the NSTC.

A 'Corporate Turnaround Feasibility Intensity Model' was developed to test corporate turnaround feasibility intensity level. Subsequently, the empirical model or the multivariate logistic regression model was then applied to finalise and reaffirm the feasibility of the corporate turnaround of the organisation. The qualitative and empirical models complement each other in their application, or used on their own can test the feasibility of corporate turnaround. The availability of both qualitative and empirical models above to test and to predict the feasibility of corporate turnaround from this research can help solve one of the biggest dilemmas facing numerous shareholders, top management, management consultants and bankers, namely, deciding whether to go ahead with the turnaround process or not. The models can help save costly errors in terms of money, labour cost, psychological turmoil, time and wasteful resources due to wrong decision making. They also constitute a new contribution to knowledge.

**I certify that this thesis does not, to the best of my knowledge and belief:**

- (i) incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education**
- (ii) contain any material previously published or written by another person except where due reference is made in text; or**
- (iii) contain any defamatory material.**

**Name: Syed Kamalludin B. Syed Alaudin Al Qadiri**

**Signature:**

**Date: 9<sup>th</sup> April 1998**

**Dedicated to**

**Syed Alaudin Al Qadiri**

**Halimah Abdullah**

**Sharifah Khatijah Al Kaff**

**Syed Mohiyuddin Al Qadiri**

**Syed Qayyumuddin Al Qadiri**

**Sayyida Rabiatal Adawiyah Al Qadiri**

**And specially for my ancestor,**

**Sayyid Muhyiddin Abu Muhammad Abdul Al Qadir Al  
Gilani (1077 - 1166 c.e), a great scholar, philosopher and  
saint of his time and who have been the greatest source of  
my inspiration.**

# **ACKNOWLEDGEMENTS**

**[ IN THE NAME OF GOD THE MOST COMPASSIONATE  
AND THE MOST MERCIFUL ]**

I would like to acknowledge the help of the research muse, who came to me at odd times without any understanding of the requirements of family life. The time required to do a research must be paid for by family and friends.

I owe a debt of gratitude to many people who have helped me to make it possible, to complete this research. To my two most wonderful and extraordinary supervisors, Associate Professor Alan Brown and Associate Professor Atique Islam, for their guidance, insights, motivation and patience. I am indebted to them forever. Barry Chapman, who was always there when I needed to cross the ‘ thorny roads ’, I shall never forget everything Barry has done for me. Special thanks also to Professor Geoff Soutar (Dean, Faculty of Business), Dr. Peter Standen, Judy Gliddon, Lorraine O’ Neill, Charlie Huang and Sharon Johnston. I am also grateful to Professor M. Idrees Ahmad, Department of Mathematics, University Putra, for his valuable insights and comments on the logistic regression model.



Special thanks to Agnes Noronha and the staff of the Edith Cowan University library, for helping me out in finding books and reference numbers. My thanks is also extended to the staff of the Kuala Lumpur Stock Exchange library for their generosity in allowing me to use the facilities there.

To my bosom buddy, Pushkar Saxena, who has never said ' no ' and who has always been there to assist me in my personal difficulties in every way he could. Thank you buddy. Also to Mustapha Kamal, Norlela and Razak, I owe all of you a great deal for allowing your apartment to be the research base in Malaysia. This research could not have been completed without the editorial assistance from friends like Audrey L. Fernando and Mary L. Gill. Thank you for your patience and kind help.

There are many more who have contributed directly or indirectly to the success of this research, whose name I may not have mentioned above, but I would like you to know that I appreciated highly all the help you have extended to me to enable this research to be a success. God Bless You!

Syed Kamalludin B. Syed Alaudin Al Qadiri

# TABLE OF CONTENTS

Title Page	1
Abstract	2
Declaration	3
Acknowledgments	5
List of Tables	12
List of Figures	13
List of Appendices	14

## **CHAPTER 1: INTRODUCTION** 15

1.1 Research Background	16
1.2 Research Significance	17
1.3 Research Objectives	18
1.4 Brief Literature Review	18
1.4.1 Corporate Turnaround	18
1.4.2 Phases of Turnaround	19
1.4.3 Corporate Turnaround Strategies	19
1.4.4 Key Factors in Turnaround Success	21
1.4.5 Classifying Corporate Turnaround	22
1.4.6 Previous Empirical models	22
1.4.7 Corporate Turnaround Models	23
1.5 Research Limitations	24
1.6 Methodology	25
1.7 Thesis Outline	26

## **CHAPTER 2: LITERATURE REVIEW** 28

2.1 Troubled Companies, Corporate Decline, Failure, Collapse and Bankruptcy	30
2.2 Definition of Troubled Companies	33
2.3 Why do Companies Get into Trouble	40
2.4 Corporate Turnaround	47
2.5 Definition of Corporate Turnaround	51
2.6 Phases of Corporate Turnaround	53
2.7 Corporate Turnaround Strategies	56
2.8 Key Factors in Turnaround Success	61

2.9 Classifying Corporate Turnaround	65
2.10 Previous Empirical Work	69
2.10.1 Univariate Analysis for Paired Samples	70
2.10.2 Decomposition Analysis	70
2.10.3 The Gambler's Ruin Model	71
2.10.4 The Catastrophe Model	72
2.10.5 Subjectively Determined Ratios And Weights	73
2.10.6 Multiple Regression Analysis (MRA)	74
2.10.7 Multiple Discriminant Analysis (MDA)	74
2.10.8 MDA Models for Turnaround	76
2.10.9 Drawbacks in Using The Multiple Discriminant Analysis (MDA)	79
2.11 Alternative Statistical Modelling Technique	84
2.11.1 Cumulative Uniform Probability Function	85
2.11.2 Cumulative Normal Probability Function (Probit)	85
2.11.3 Cumulative Logistic Probability Function (Logit)	86
2.12 Theoretical Framework	88
2.13 Research Hypotheses	93
2.14 Summary	95
<b><u>CHAPTER 3: METHODOLOGY</u></b>	<b>98</b>
3.1 Sampling	100
3.2 Identifying Troubled Companies	102
3.2.1 Identifying and Classifying the Population or Troubled Companies	102
3.2.1.1 Identification of Troubled Companies	103
3.2.1.2 Classifying Troubled Companies into Successful and Non Successful Turnaround Companies	107
3.2.2 The Sample	109
3.3 Analysing the Determinants of Corporate Turnaround Feasibility	109
3.3.1 Data Collection through personal Interviews	109
3.4 Measurements	126
3.4.1 Conceptual and Operational Definitions	126
3.4.2 Scales of Measurements	127

3.4.3 Two Level of Measurements	127
3.4.4 Measuring The Variables	129
3.5 Data Collection Procedure	133
3.6 Data Analysis	134
3.7 Developing the Corporate Turnaround Feasibility Models	134
3.7.1 Initial Variables for Modelling	137
3.7.2 Scales of Measurement	139
3.7.3 The Multivariate Logistic Regression Model	140
3.7.4 Application Assumptions	141
3.7.5 Model Building	142
3.7.6 Selecting Predictor (Independent) Variables	144
3.7.7 Test Statistics	146
3.7.8 Model Diagnosis	149
3.7.9 Model Validation	153
3.8 Summary	156

## **CHAPTER 4: IDENTIFYING TROUBLED COMPANIES**

**158**

4.1 Findings and Interpretations	159
4.1.1 Identification of Troubled Companies	159
4.1.1.1 Results of The Financial Times Extel	159
4.1.1.2 Observations on Earnings Before Interest and Tax (EBIT) and Earnings after Interest and Tax (EAIT)	160
4.1.1.3 Results of the PNB Score (Malaysian Z Score)	161
4.1.1.4 Extraordinary Items	163
4.1.2 Classifying Successful Turnaround Co.s (STC) and Non Successful Turnaround Co.s (NSTC)	167
4.1.2.1 Trough Period	168
4.1.2.2 Solvency and Liquidity Crisis	168
4.1.2.3 Financial Leverage	169
4.1.2.4 Loan Capital	171
4.1.2.5 Paid Up Capital	171
4.1.2.6 Corporate Strategies	172
4.1.2.7 Changes of Core Business	174
4.2 Summary	174

**CHAPTER 5: DETERMINANTS OF**  
**CORPORATE TURNAROUND**  
**FEASIBILITY** **176**

5.1 Findings and Interpretations	178
5.1.1 D1. Causes of Decline	178
5.1.1.1 Internal Causes	178
5.1.1.2 External Causes	195
5.1.2 D2. Severity of Crisis	205
5.1.3 D3. Company's Historical Strategy	208
5.1.4 D4. Industry Characteristics	211
5.1.5 D5. Company's Cost Price Structure	231
5.1.6 D6. Commitment of Shareholders	236
5.1.7 D7. Commitment of Bankers	239
5.1.8 D8. Commitment of Creditors	243
5.1.9 D9. Commitment of Employees	247
5.1.10 D10. New Competent Management	253
5.1.11 D11. Viable Core Business	279
5.1.12 D12. Bridge Capital	287
5.1.13 D13. Realistic Turnaround Plan	292
5.2 Identifying the Existence and the State of Existence of the Key Determinants of Corporate Turnaround Feasibility in Successful and Non Successful Turnaround Companies	300
5.2.1 Category A: State of Existence	300
5.2.1.1 D1. Causes Of Decline	301
5.2.1.2 D2. Severity Of Crisis	301
5.2.1.3 D3. Company's Historical Strategy	301
5.2.1.4 D4. Industry Characteristics	302
5.2.1.5 D5. Company's Cost price Structure	302
5.2.1.6 D6. Commitment of Shareholders	302
5.2.1.7 D7. Commitment of Bankers	303
5.2.1.8 D8. Commitment of Creditors	303
5.2.1.9 D9. Commitment of Employees	303
5.2.2 Category B: Existence	304
5.2.2.1 D10. New Competent Management	304
5.2.2.2 D11. Viable Core Business	304

5.2.2.3 D12. Bridge Capital	304
5.2.2.4 D13. Realistic Turnaround Plan	305
5.3 Summary	309

## **CHAPTER 6: DEVELOPING THE CORPORATE TURNAROUND FEASIBILITY MODELS** **311**

6.1 Realisation of a Qualitative Corporate Turnaround Feasibility Model	312
6.1.1 Description of the Model	313
6.1.2 Workings of the Model	314
6.1.3 Brief Example of the Model Workings	315
6.2 The Quantitative Corporate Turnaround Model	320
6.2.1 Application Assumptions	320
6.2.2 Model Building Chronology and Results	322
6.2.3 Model Validation Results	334
6.2.3.1 Data Splitting Technique	334
6.2.3.2 Lachenbruch Method	337
6.3 Summary	340

## **CHAPTER 7: SUMMARY AND CONCLUSIONS** **342**

7.1 Research Summary	343
7.2 Research Conclusions	350
7.3 Research Limitations	355
7.4 Future Research Opportunities	357

## **REFERENCES** **360**

## **APPENDICES** **369**

## LIST OF TABLES

1	Business Failure in England and Wales (1971-1982)	31
2	Causes of Corporate Decline	44
3	Principal Reasons for Corporate Decline	45
4	Cases in the Turnaround Sample	48
5	A Perspective of Bibeault's Study	50
6	Change of Successful Recoveries	51
7	Comparison of Successful and Unsuccessful Recovery Strategies	58
8	Contrasting Elements in the Business Plan by Turnaround Stage	61
9	Steps Towards a Successful Recoveries Strategies	63
10	The Major Turnaround Moves Accomplishes according to a Formal Plan or mostly by Intuitive	126
11	Recoded Variables	141
12	Gearing Levels of Successful Turnaround Companies and Non Successful Turnaround Companies	172
13	Corporate Strategies used	174
14	Marketing Problems	186
15	Causes of High Cost Structures	189
16	Problems with Big Projects	195
17	Causes of Overtrading	196
18	Causes of Market Decline	198
19	Competitive Pressure	201
20	Range of the Causes of Decline	205
21	Severity of Crisis	208
22	Company's Historical Strategy	211
23	Company's Cost-Price Structure	235
24	Commitment of Shareholders	239
25	Commitment of Bankers	243
26	Commitment of Creditors	247
27	Number of Occurrences in ' Troubled Companies '	309
28	Feasibility Intensity Level Test Results	321

## **LIST OF FIGURES**

<b>1</b>	<b>Framework Of A Successful Turnaround Process</b>	<b>64</b>
<b>2</b>	<b>Types Of Corporate Recovery</b>	<b>69</b>
<b>3</b>	<b>Corporate Turnaround Feasibility Intensity Model</b>	<b>316</b>
<b>4</b>	<b>Corporate Turnaround Feasibility Intensity Model Test For An STC</b>	<b>317</b>
<b>5</b>	<b>Corporate Turnaround Feasibility Intensity Model Test For An NSTC</b>	<b>318</b>



## LIST OF APPENDICES

Appendix A (Classifying Companies into Successful and Non Successful Turnarounds)	370
Appendix B (Causes of Decline)	373
Appendix C (Industry Characteristics)	374
Appendix D (Commitment of Employees)	379
Appendix E (New Competent Management)	383
Appendix F (Viable Core Business)	384
Appendix G (Bridge Capital)	385
Appendix H (Realistic Turnaround Plan)	386
Appendix I (Consolidated Results)	389
Appendix J (Determinants: Identifying the Existence and the State of Existence)	392
Appendix K (Corporate Feasibility Intensity: Results for the Successful Turnaround Companies and Non Successful Turnaround Companies Tests)	393
Appendix L (The Dependent Variable)	394
Appendix M (Model Building Results)	398
Appendix N (Model Validation: Data Splitting Test)	401
Appendix O (Model Validation: Lachenbruch Test)	407
Appendix P (Histogram of Unstandardised Residuals With Normal Curve)	408
Appendix Q (Normal P-P Plot of Deviance)	409
Appendix R (Detrended Normal P-P Plot of Deviance)	410
Appendix S (Confirmation on Asymptotes at 0 & 1)	411
Appendix T (Confirmation on Sigmoidal Response Function)	412
Appendix U (Questionnaire)	413



## CHAPTER 1

## **INTRODUCTION**

The decades of the 80's and the 90's have been periods of harsh realities. No longer can organisations remain complacent about their business strengths and market shares. In times of economic recession and even in normal times, companies may decline because of environmental adversities or internal inefficiencies. Once this becomes serious, companies make efforts to work their way back to profitability and financial good health. Some succeed in these efforts and bounce back to prosperity while others fail to negotiate their way out and end up insolvent. The efforts to halt the process of decline and generate new life into organisations is popularly known as corporate turnaround.

### **1.1 RESEARCH BACKGROUND**

This research focuses on corporate turnaround. Specifically, corporate turnaround strategies and the key factors for a successful turnaround are examined to identify the determinants of corporate turnaround feasibility. In this work, an attempt will be made to identify the existence and the state in which these determinants exist in Successful and Non-Successful Turnaround Companies. The ultimate aim is to develop an empirical predictive model of corporate turnaround feasibility using the Logit modelling approach.

## 1.2 RESEARCH SIGNIFICANCE

The bulk of previous research has concentrated heavily on strategies used in corporate turnarounds. Attempts via empirical approaches were not far different from non-empirical ones, where models were developed to assist the prediction of corporate turnaround based on turnaround strategies. Some researchers developed models of turnaround by considering certain determinants (e.g. industry characteristics) in their modelling approach. However, the models developed were not comprehensive enough to capture all aspects of the practical realities of a turnaround.

A model must take into consideration as many factors as is feasible to enhance its predictive power. A 'wholesome' and 'realistic' model for predicting the feasibility of corporate turnaround is expected to be highly useful to a number of groups in the corporate world. The biggest dilemma facing numerous shareholders, top management, management consultants and especially bankers in the context of a troubled company is whether or not to keep supporting a troubled company. If the company ultimately goes into bankruptcy, such support would have only made all the groups worse off. This is the common predicament faced by everyone concerned with a troubled company. In many instances, decisions have been made based on limited information and 'gut-feeling'. And in some cases a price has been paid in terms of money, man-hours, psychological turmoil, time and wasted resources.

Thus, the availability of a model that can predict the feasibility of corporate turnaround is timely and can contribute to a more effective diagnosis of troubled companies in terms of the chances for survival.

### **1.3 RESEARCH OBJECTIVES**

The objectives of this research are as follows:

- **To identify the key success factors (determinants) of corporate turnaround feasibility.**
- **To determine the effect of the key determinants of corporate turnaround feasibility (in terms of their state of existence and their existence) on the probability of corporate turnaround success.**
- **To develop an empirical model to predict the feasibility of corporate turnarounds.**

### **1.4 BRIEF LITERATURE REVIEW**

#### **1.4.1 CORPORATE TURNAROUND**

Corporate turnaround has been defined among others by Goldston (1992) Schendel, Patton and Riggs (1976), Slatter (1984) and Sloma (1985).

However, the definitions given by the different authors and researchers on corporate turnaround have similar and common elements, namely;

1. Turnaround deals with troubled companies, featured by poor financial performance, probably with losses and are in a downturn phase of the business.
2. Turnaround deals also with the need to counter the problems of the troubled companies by taking measures, steps and corrective actions to reverse its situation into an upturn business phase.
3. That if no action is taken to turn the company around, it will most likely face financial disaster and become a failure.

#### **1.4.2 PHASES OF CORPORATE TURNAROUND**

Slatter (1984) presented four strategic phases in corporate turnaround:

1. **The Analysis Phase:** This phase involves problem identification,
2. **The Emergency Phase:** This phase involves those actions necessary to ensure survival,
3. **The Strategic Change Phase:** This phase involves the emphasis on operational factors,
4. **The Growth Phase:** This phase involves growth either organically through new product development and market development or via acquisition or both.

#### **1.4.3 CORPORATE TURNAROUND STRATEGIES**

To give it the best chance of rejuvenation company must have the right turnaround strategies.

Slatter (1984) found that the key strategies used in corporate turnaround were Asset Reduction, Change of Management, Financial Control, Debt / Financial Restructuring, Improved Marketing, Organisational Change, Product-Market Change, Growth via Acquisition and Investment. Davis (1988) stated four turnaround strategies similar to the ones in the study above. Improvement in human resource was also considered as a strategy in turnaround (Eisenberg, 1972). Silver (1992) cited strategies that were in support of Davis's and Eisenberg's mentioned above. Carrington and Aurelio (1976) indicated that in addition to cost cutting, renegotiation of terms with creditors was another key strategy in turnaround. Kilroe (1981) found that the turnaround strategies employed were similar to strategies of companies with low market share.

There are others who have mentioned strategies for corporate turnaround such as Hamermesh (1976), Biteman (1979), Hofer (1980), Hambrick and Schechter (1983), Ramanujam (1984), Melin (1985) and Firsirotu (1985) but the strategies put forward were very similar in nature with those cited before.

According to Bibeault (1982) among other factors such as objectives, tactics and review methods, strategies incorporated in a turnaround plan vary from one stage of the turnaround to the next. Taylor (1983) found that different strategies were implemented according to what he called 'Contraction' or immediate corrective actions to ensure survival, and 'Expansion' or the long term actions to effect a substantial and sustained improvement in performance.

#### **1.4.4 KEY FACTORS IN TURNAROUND SUCCESS**

According to Slatter (1984) there are other elements and key factors which can dictate the right strategy or combination of strategies to be used for a successful turnaround. Sloma (1985) commented that a successful turnaround must consist of only two elements. These are one, there must be a turnaround plan and two, the plan must be communicated.

Zimmerman (1991) created a model that described successful turnaround as a function of three principles (Low Cost Operation, Product Differentiation and Appropriate Turnaround Organisation). Slatter (1984) found six sets of factors that determine which generic strategies are required to effect corporate recovery. They are the Causes of Decline, Severity of the Crisis, Attitude of Stakeholders, Company's Historical Strategy, Industry Characteristics and the Company's Cost-Price Structure.

Bibeault (1982) stressed that there are certain key elements that lead to turnaround success and in their absence a turnaround effort is highly risky. These key elements are New Competent Management with full authority to make all the required changes, an economically and competitively Viable Core Operation, 'Bridge Capital' from external and internal sources to finance the turnaround and a Positive Attitude and motivated people so that the initial turnaround momentum is sustained. Silver (1992) added that damage done by creditors can cause the turnaround plan to go amiss.



## 1.4.5 CLASSIFYING CORPORATE TURNAROUND

Slatter (1984) pointed out four types of recovery situations and further categorised them into Non-Recoverable Turnarounds and Recoverable Turnarounds: *Non-Recoverable Turnarounds*: 1. **The No Hoppers**; Despite the efforts put in, they simply can no longer exist as viable business entities. 2. **Short Term Survivors**; Despite succeeding in improving real profits temporarily, they eventually go into insolvency. *Recoverable Turnarounds*: 1. **Mere Survival**: Despite sustainability of recovery, the value of investment is questionable. 2. **Sustainable Recovery**: Making above average profits and embarking onto the growth phase of the turnaround process.

## 1.4.6 PREVIOUS EMPIRICAL MODELS

Various statistical failure identification models have been developed for predicting corporate failures and the main techniques being used are as follows:

*Univariate analysis for paired samples* e.g. Fitzpatrick (1932, cited in Failure identification models, 1989, p.1) and Beaver (1966), *Decomposition analysis* e.g. Lev (1973), *The gambler's ruin model* e.g. Wilcox (1971), *The catastrophe model*, *Subjectively determined ratios and weights* e.g. Tamari (1966), *Multiple regression analysis (MRA)* e.g. in the USA i.e. Meyer and Pofar (1970), Hambrick and Schecter (1983), Edmister (1972) and in the U.K, the Bank of England model developed by Marats (1979), *Multiple discriminant analysis (MDA)* e.g. Altman (1968) and Taffler (1982).

### 1.4.7 CORPORATE TURNAROUND MODELS

Models have been developed to predict corporate turnaround e.g. by Ramanujam (1984), Pant (1986) and Akaradejdachachai (1993) using both Multiple Discriminant (MDA) and Logit techniques. However, the drawback in using the MDA is that there are a host of statistical problems associated with it, rendering the results somewhat problematic (Altman, 1993).

Wilson (1989) indicated that there was often a 'grey area' associated with the MDA and stressed that various technical problems needed to be overcome for the model to be statistically valid. The Logit technique on the other hand is a powerful alternative, which does not require the use of non-linear estimation techniques (Ohlson, 1980) and gives significantly better probability estimates than the MDA (Martin, 1977).

Pant and Akaradejdachachai have developed corporate turnaround models using the Logit technique other than the MDA.

However, their models were based on data gathered during the Upturn phase of the turnaround and concentrated heavily on one particular determinant of corporate turnaround - Industrial Structure. The models were unable to predict corporate turnaround feasibility.

## **1.5 RESEARCH LIMITATIONS**

The first limitation of this research pertains to the information gathered through the questionnaire interviews with the CEOs (Chief Executive Officers) of the 'troubled companies'. The accuracy and validity of the information gathered rest on the the honesty, sincerity and integrity of each of the CEOs responding to the questions asked. The second limitation could be due to the type of 'troubled companies' that were studied. All of the 'troubled companies' are basically publicly listed companies of the Kuala Lumpur Stock Exchange.

The third limitation of this research could be that the study was made based on the general publicly listed companies of the Kuala Lumpur Stock Exchange (excluding the Financial and Extractive Industries) and was not according to their respective industrial sectors (as this was not the main intention of the research due to constraints on resources and time).

The fourth possible limitation is related to the element of culture found in this research pertaining to the Malaysian corporate scene, thus the usage of its findings for the corporate scene in other countries may be subjective. The fifth possible limitation could be due to the exclusion of governmental influence in the corporate turnaround process of certain politically linked companies.

Despite verification by external auditors, annual accounts may contain elements of window dressing. This is viewed as the sixth limitation.

The seventh limitation, possibly the last foreseen limitation is that the whole research, its findings and outcomes are based on the Malaysian scenario.

## **1.6 METHODOLOGY**

In identifying the 'troubled companies', the share prices trend indicator (Financial Times Extel, C.D Rom), the earnings before interest and tax (EBIT) and earnings after interest and tax (EAIT) trends were observed in terms of their Downturn and Upturn phases.

The final confirmation on 'troubled companies' was achieved by using the PNB-Score (Malaysian Z-Score), a composite failure identification model.

Subsequently, a comparative analysis of the Return on Shareholders Funds (ROSF) and the Commercial Banks Fixed Deposit Rates was carried out in order to further classify the 'troubled companies' into Successful and Non Successful Turnaround Companies.

The determinants or key success factors of corporate turnaround feasibility were analysed further in terms of their existence and state of existence in Successful and Non Successful Corporate Turnaround companies. Personal interviews with the respective Chief Executive Officers of the identified 'troubled companies' using a structured questionnaire were carried out.

Data pertaining to each determinant were analysed in order to help understand how each determinant and combinations of determinants contributed to the feasibility of corporate turnaround.

The State of Existence (Favourable / Non Favourable) of Category A determinants and the Existence (Exist / Non Existent) of Category B determinants in Successful (STC) and Non Successful Turnaround companies (NSTC), were further classified using measurements prescribed.

The application assumptions for using the multivariate logistic regression model were tested to ensure that the usage of the model was appropriate for the study.

Several multivariate logistic regression models were analysed in terms of their logic, appropriateness and suitability for predictive usage purposes using test and diagnosing statistics to find the "best" and final model. Subsequently, the model was tested for its validity and predictive power using the Data Splitting technique and the Lachenbruch method.

## **1.7 THESIS OUTLINE**

The thesis is organised as follows: Chapter 2 examines three areas of literature relevant to the understanding of corporate turnaround. The first area is concerned with 'troubled companies'; corporate decline, failure, collapse and bankruptcy and their definitions. The causes of decline and failure are also reviewed.

The second area examines corporate turnaround; its definition, phases, strategies used in corporate turnaround, the key success factors of successful turnarounds and corporate turnaround classifications. The third area critically reviews previous empirical work on failure identification and corporate turnaround models.

Chapter 3 describes the research methodology used to identify the 'troubled companies', to analyse the determinants of corporate turnaround feasibility and to develop the empirical model for predicting corporate turnaround feasibility.

Chapter 4 presents the findings and interpretation on the identification of the 'troubled companies'.

Chapter 5 presents the findings and interpretation on the analysis of the determinants of corporate turnaround feasibility. Chapter 6 presents the findings and interpretation on the development of the empirical model for predicting corporate turnaround feasibility. Chapter 7 summarises the findings and interpretation, concludes the research and proposes possible future research opportunities.

## CHAPTER 2

## LITERATURE REVIEW

This chapter examines three areas of literature relevant to the understanding of corporate turnaround. It focuses on 'troubled companies'; corporate decline, failure, collapse and bankruptcy and their definitions, where the causes for decline and failure are reviewed. It also examines corporate turnaround; its definition, phases, strategies used, the key success factors of successful turnarounds and corporate turnaround classifications. Previous empirical works on failure identification and corporate turnaround models are reviewed and subsequently the research theoretical framework and hypotheses are also addressed.

Business glory and success of a corporation at a particular time, period and place are no longer the determinants of its existence in the future. The periods of the 80's and the 90's have been the periods of harsh realities. No longer can organisations stay complacent or become myopic of their business strengths and market shares. Globalization has invited in harsh competitors from other parts of the world. Nowadays, a business is concerned about more than just staying at the top or continuing to survive within its familiar territories.

Competition and survival today means that the organisation will have to defend itself from alien market share raiders and competitors and to some extent the organisation itself will have to adopt the similar tactic of business and market share expansion into international and uncharted territories.



In this harsh competitive era organisations are faced with threats and opportunities from externalities and strengths and weaknesses from within. Threats and weaknesses are the two main dangers for any organisation today especially to those who are not sensitive enough or too complacent to respond to them. These eventually make corporations susceptible to corporate crisis, decline, failure and eventually bankruptcy. Corporations, that are quick and conscious enough to respond to the symptoms of trouble, are expected try their best to reverse the process of decline, a process that is known as- Corporate Turnaround.

## **2.1 TROUBLED COMPANIES, CORPORATE DECLINE, FAILURE, COLLAPSE AND BANKRUPTCY**

Troubled companies, corporate decline, failure, collapse and bankruptcy are words often heard and used in the business world. They are ' real situations ' and not mere theories or business jargon. Historically, between the period 1955 and 1965 itself, the numbers of business failures in the United States ranged between 13,000 and 17,000 firms each year (Dun & Bradstreet, 1966).

Argenti (1976) found that the average number of companies on the British register was 586,000 between 1969 to 1974. The average number of new registrations each year was 43,000 or 7% of companies registered. The average number dissolved and struck off was 26,000 or 4.5 %.

The comparable figures for the United States was that of approximately 9% removal from the register each year. He suggested that 20,000 of the 26,000 companies removed from the register each year were failures. He also suggested that the process of failure took 2.5 years and thus the number of companies that have collapsed or were in a state of failure in any average year was 50,000 or 10% of all companies. One out of 10 companies would be seen to be a failure for Britain and America since their profitability was so poor that they were bound to become insolvent within the average of 2.5 years.

Slatter (1984) pointed that statistics in Britain for the period between 1971 to 1982 itself indicated how business failures had increased (refer to Table 1).

**Table 1**

Business Failure In England And Wales (1971-1982)

<u>Year</u>	<u>Failures</u>	<u>Year</u>	<u>Failures</u>
1971	3506	1977	5831
1972	3063	1978	5086
1973	2575	1979	4537
1974	3720	1980	6890
1975	5398	1981	8607
1976	5939	1982	12067

Source: Slatter, S. (1984). Corporate Recovery. England: Penguin Books Ltd (p. 18).

Work undertaken by Performance Analysis Services Ltd estimated that among the 850 largest U.K manufacturing concerns, about 15% to 20% were in the risk of insolvency at any one time.

Altman (1993) states that:

During the unprecedented length of time of economic expansion of the 1980's, business failed at stubbornly high levels every year in the United States of America. With the increase in corporate distress of the early 1990's, business failures and bankruptcy soared, (p. 3) Since 1980, there have been over 224,000 ' Chapter 11 ' filings in total with just a bit over 1,200 involving publicly traded companies. Liquidation under ' Chapter 7 ' reached a record number of over 650,000 in 1991 alone, (p. 8).

Dun & Bradstreet (1991) compiled an index which measured the number of failures recorded per 10,000 firms listed with Dun & Bradstreet which was an excellent barometer of corporate distress in the United States. The data covered the period from 1971 to 1991 involving over 5 million firms.

The number of failures rose in 1991 to over 87,000, a 44% increase over 1990. The 1991 total was 68% larger than that in 1984. The lingering recession in 1991 contributed strongly to those results.

Despite the unprecedented length of Gross National Product (GNP) expansion from 1983 to 1990, the nation's business failures were high and the business failure rate was over 100 per 10,000 during 1984 to 1987.

The failure rate surged dramatically in 1991 by over 41%, reaching 106 and failure liabilities topped \$100 billion for the first time. Through the first seven months of 1992, business failures increased by about 16% over the comparable period in 1991.

## **2.2 DEFINITION OF TROUBLED COMPANIES, DECLINE, INSOLVENCY, FAILURE, LIQUIDATION, RECEIVERSHIP AND BANKRUPTCY**

As mentioned earlier, the terms troubled companies, decline, insolvency, failure, liquidation, receivership and bankruptcy have been used and quoted by both the academic and corporate sectors synonymously. This research will attempt to define them more clearly in accordance with their real meaning in usage. Argenti (1976) found that it was difficult to draw hard and fast lines between failure and collapse. He claimed that the most definite words are insolvent, liquidation, receivership and bankruptcy. In Britain companies do not go bankrupt (that is a term reserved for people only), they become 'insolvent' which means they cannot pay their debts as they fall due or that their net assets are of negative value. It is an offence to continue to trade while insolvent and directors and others who do so are liable to severe penalties.

Instead, the bank usually calls in a ' Receiver ' who takes over the management of the company and then does one or two things. The Receiver either continues trading with the permission of the creditors and others, in the hope of bringing the company (or parts of it) around to profitability again, or puts it into ' liquidation ' which means the company stops trading and all its assets are sold off for the benefit of the creditors. The word failure (or fail, failing...etc.) he suggested should be used to refer to a company whose performance is so poor that sooner or later it is bound to have to call in the receiver or cease to trade or go into voluntary liquidation, or which is about to do any of these, or has already done so. He further stressed that a company can be a failure without ever having been a success but it can only collapse if it was once successful but now is not.

Altman (1993) has a similar definition to Argenti and elaborated the definitions to include not only failure, insolvency and bankruptcy but also the term ' default '. He said that their meanings are interchangeable although they are distinctly different in their formal usage.

Altman (1993) stresses that:

Failure, by economic criteria, means that the realised rate of return on invested capital, with allowances for risk consideration, is significantly and continually lower than prevailing rates on similar investments. Somewhat different economic criteria have also been utilised, including insufficient revenues to cover costs and cases of the average return on investments being below the firm's cost of capital, (p. 4).

(Dun & Bradstreet, 1991, as quoted by Altman, 1993) has adopted the term 'business failure' to describe various unsatisfactory business conditions.

According to Dun & Bradstreet, business failure includes:

Business that cease operation following assignment or bankruptcy: those that cease with loss to creditors after such actions as execution, foreclosure, or attachment: those that voluntarily withdraw, leaving unpaid obligation: or those that have been involved in court actions such as receivership, organisation or arrangement: and those that voluntarily compromise with creditors, (p. 4).

Insolvency, Altman (1993) stresses:

Depicts negative firm performance and when the firm is not able to meet its current obligation. Signifying a lack of liquidity and insolvency, in a bankruptcy sense, is when a firm's total liabilities exceed a fair valuation of its total assets. The real networth of the firm is, therefore, negative, (p. 4).

It is observed that the definitions for insolvency by Altman above are somewhat inline with that of Argenti (1976), where he stresses that " default on the otherhand is characterised by the violation of the firm towards a condition of an agreement for example, the violation of a loan covenant. But such default are usually renegotiated and are used to signal deteriorating firm performance " (p. 5).

Finally, Altman divided bankruptcy into two types; one type of bankruptcy is described as above and refers to the net worth position of an enterprise.

A second, more observable type, is a firm's formal declaration of bankruptcy in a U.S. Federal District Court, accompanied by a petition either to liquidate its assets or attempt a recovery program. The latter procedure is legally referred to as a bankruptcy reorganisation.

Bibeault (1982) viewed the definition of failure and decline from a slightly different context. Business failure was defined from at least four standpoints: social, economic, legal and managerial. The social impact of the business failure definition deals with the human suffering aspects when such a phenomenon occurred. A company's decline and fall took on a different, more human perspective when it was perceived at floor level, so to speak, where men and women were fighting for their livelihood as well as for the survival of the organisation. From the economic standpoint, he added, failure represents a situation where the realised rate of return on invested capital is significantly and continually lower than the prevailing rates on similar investments (this definition of failure from the economic standpoint is seen similar to Altman's definition of failure based on economic criteria).

Legal failure, according to Bibeault was where an entrepreneur discontinued operations for a variety of reasons, such as loss of capital, inadequate profits, ill health, or retirement, but if his creditors were paid in full, the entrepreneur was not tallied as failure by Dun & Bradstreet (usually classifies about 4% of discontinuances as failures).

Decline from the managerial standpoint, he stressed, is defined as business failure. A business can be a failure from a managerial standpoint before it is an economic failure and certainly long before it is declared a legal failure. Management usually receives pressure when profitability plateaus or declines and several back to back years mean real trouble. If decline leads to large write offs and to losses at the bottom line, there usually is intense pressure for a change in management.

Bibeault explained that decline in his study was concerned with several years of deteriorating profits. In four out of five cases decline included one or more years of unprofitable operations, large non operating write offs or both.

From the definitions used above, it is clear that the research is not interested in corporations or business which have failed and ceased to be in operation or existence. This is probably due to the non existence of efforts by the business to revive or turnaround their fate. However, if turnaround efforts did exist, then they will definitely fall within the ambit of this research. The definitions of failure that are of interest to this research are the economic and managerial failure definitions. It may also be worthwhile at this point to further explore other definitions that may knit well into the interest of this research.

Argenti (1976) had, for instance, defined three types of corporate failure; Type 1 companies are small companies that never rise above a poor level of performance. They usually have a very short life span.



Then there are the Type 2 companies that definitely get off the ground and usually do so in a spectacular manner, often shooting upwards to fantastic heights before crashing down again. They attract attention far beyond their social or economic significance because of the squeals of delight from the press on their way up and again on the way down. Type 3 companies are professionally managed but are mature, sluggish and have lost touch with their markets or the needs of their customers. The larger of them, can be called institutions, have lost their competitive edge and usually have a number of management and control defects.

Perhaps the nearest of the defined decline or failure types of corporations that is clear and is of interest to this research is what Bibeault defined as ' Troubled Companies '. According to Bibeault they ranged from mild (but sustained) underperformance to severe viability that may lead to bankruptcy reorganisation and / or liquidation. In general, it is easy to think of three levels of trouble:

1. Mild - Performance problems related to return of equity and below industry performance.
2. Moderate - Losses and potential liquidity problems.
3. Severe - Viability problems and possible bankruptcy.

Bibeault continued by elaborating the degree of seriousness of troubled companies by dividing them into three stages:

**STAGE 1**

**CHARACTERISTICS**

Declining Business Position  
Losing Market Leadership  
Declining Market Share  
Declining Profitability  
Return on Equity Low for Industry  
Balance Sheet Strong

**STAGE 2**

Continuing Losses

At least One Year of Loss  
Prospect for More Losses  
Balance Sheet Deteriorating  
Decreasing Equity  
Margins Unsatisfactory  
Unused Capacity

**STAGE 3**

Survival

Losses Threaten Existence  
Liquidity Crisis  
Balance Sheet a Mess  
Equity Nearly Exhausted  
Debt Piling Up  
Morale Low  
Danger of Bankruptcy

Source: Bibeault, D.B. (1982). Corporate Turnaround: How Managers Turn Losers Into Winners. New York: Mc Graw Hill (p. 67).

It can be observed from the characteristics of troubled companies and their degree of seriousness that they encompass not only the obvious ailing companies (in Stage 3) but also those that may well think that the scenario they are in is nothing to be alarmed about until the situation worsens (Stage 1). At this point it is important to stress that the research will focus on ' Troubled Companies ' as defined by Bibeault as a guide for further identification of companies that require turnaround.

### **2.3 WHY DO COMPANIES GET INTO TROUBLE? (CAUSES FOR DECLINE AND FAILURE)**

It may perhaps be appropriate to understand in the first place as to why companies get themselves into trouble, in other words the causes of decline and failure - since there would not be any need for a turnaround if they weren't in trouble in the first place. It is not the intention of this research to elaborate on each of the causes in detail since each major cause of decline can be a potential research topic by itself. Instead, a summary on this topic from a number of interesting literature and research is subsequently presented.

In a 1991 survey of over 1,300 turnaround managers, Buccino & Associates, a Chicago based turnaround consultant (as quoted by Altman, 1993) found that the quality of management was identified by 88% of the respondents as the primary difference between success and failure and the overwhelming cause of individual firm failure was some type of managerial incompetence.

Argenti (1976) listed 12 major causes of corporate decline in his book 'Corporate Collapse'. Failure is seen as a sequential process involving a progression of steps towards the ultimate demise of the firm.

The causes for decline are as follows:

1. Poor management, including one-man rule, a non participative board of directors, an unbalanced top management and lack of management depth.
2. Defective accounting information, including erroneous cashflow forecasts, costing systems and assets valuations.
3. Exposure to change, including competitive, economic, social and technological change.
4. Externally induced constraints, including governmental, union, public opinion and consumer constraints.
5. Overtrading, involving expansion that is faster than cashflow or profits will permit.
6. The 'Big Project', in which cost and time are underestimated and revenue is overestimated.

7. Excessive gearing up, in which the company borrows more money than the volume of business can reasonably support.
8. Bad financial ratios, which, with traditional financial analysis, indicate slippage in the firm's competitive position.
9. Creative accounting, involving the delayed publication of financial information, capitalised research and development costs, payment of dividends from borrowed money, reduction of maintenance on capital equipment, treatment of extraordinary income as ordinary income and incorrect valuation of assets.
10. Normal business hazards, involving strikes by suppliers and fires or other disasters for which the firm is unprepared.
11. Non financial symbols of decline, including low morale, poor maintenance, poor house keeping and slippage in quality service.
12. " Last few months " indicators, including low stock prices, management's denial of circumstances and callous disregard for customers.

Slatter (1984) in his study of forty U.K turnaround situations identified eleven frequently occurring factors which were the principal causes of corporate decline.

He admitted that these factors were somewhat similar to the factors identified by Argenti, which he developed by summarising the literature and talking to receivers and others involved in failing companies situations. The causes of decline he identified were compared with those identified by Argenti (1976) in the U.K, Schendel, Patton and Riggs (1976) and Sigoloff (1981) in the U.S. A comparative table (Table 2) is referred here without Argenti's, since this has already been discussed earlier.

Robert Di Giorgio, Chairman of Di Giorgio Corporation (1978, as quoted by Bibeault, 1982) stated that the problem does not arise from external conditions, but a change of external conditions causing the unbalance internally. The problems come from an internal source, but the triggering mechanism that suddenly makes things that formerly worked no longer work is a change in external things...- a condition of tight money, a condition of high interest rates, a condition of faltering industry sales, or any combination of those things. It works on the company's internal problems such that the company can no longer live with them, and so the company has at this point to either fall by the wayside or correct the internal problems.

Table 2

Causes Of Corporate Decline

<u>Slatter</u>	<u>Schendel, Patton &amp; Riggs</u>	<u>Sigoloff</u>
Lack of financial control		Lack of control
Inadequate management	Management problems	Peter principle, Management without guts Interpersonal conflict at decision making level
Competition	Increase competitive pressure, Lower revenues	Change in technology firm hostage to current product markets
High cost structure relative to competitors	Higher costs	Development of locational disadvantages
Changes in market demand Adverse movements (eg. commodity, interest)	Demand declines	Change in market place Increasing cost of debt
Operational marketing problem	Market problems	Poor distribution
Big projects		Dependence on single customer
Wrong acquisitions		
Financial Policy		Limited financial resources
Overtrading		Sales growth faster than working capital
	Strikes	

Source: Slatter, S. (1984). *Corporate Recovery*. England: Penguin Books Ltd (p. 26).

Bibeault supported the statement made by Robert Di Giorgio, that decline and troubles were both externally and internally triggered. In his survey of eighty one turnaround company Chief Executives, April 1978, he found out the principal reasons for corporate decline to be as follows (refer to Table 3).

Bibeault divided external factors into five categories:

- Economic Change
- Competitive Change
- Government Constraints
- Social Change
- Technological Change

Table 3

Principal Reasons For Corporate Decline

---

Reasons	Percent
Sheer Bad Luck (Dun & Bradstreet, 1977)	1
External Factors beyond Management's Control	8
Real Balance of External and Internal Factors	24
Internal Problems Triggered by External Factors	15
Internally Generated Problems within Management's Control	52
Total	100

Source: Bibeault, D.B. (1982). Corporate Turnaround: How Managers Turn Losers Into Winners. New: Mc Graw Hill (p. 25).



However, Bibeault's outlook towards internal reasons for decline strongly emphasised bad management. His findings were backed up by extensive surveys and discussions he held with over 100 turnaround leaders where seven out of ten decline cases were internally generated and 85% of the time caused by bad management. Among the characteristics of bad management quoted were incompetence, narrow vision, displacement activity, management errors, one-man rule, one-man band, lack of management depth, management change problems, inbred bureaucratic management, unbalanced top management team and non participative board of directors. Apart from bad management, Bibeault has also quoted a weak finance function within the organisation as another internal cause of decline.

Similar reasons for corporate decline were cited by Davis (1988) who, like Bibeault, divided the causes of decline into two categories i.e. Internal causes and external causes. Problems related to management, similar to those quoted by previous authors, such as one-man rule, complacency, panic paralysis, incompetent management, myopic syndrome, quality and skills of executives and lack of proper direction, were among those cited. Other internal causes of decline discussed were poor financial control, operational problems (production and marketing) and 'one-off' causes such as catastrophic capital project and unwise diversification.

As for external causes, Davis summarised them into problems with competition, market decline and 'one off' catastrophic external cases such as sudden change in the movement of commodity prices, an 'oil shock', major political impact, shortage of foreign currency or even civil war.

Summarising the causes for corporate decline, it is obvious that the reasons given by several authors on the causes of corporate decline are basically similar and for categorisation purposes they can be divided into internal and external causes of decline.

## **2.4 CORPORATE TURNAROUND**

Most business firms at some time suffer decline. Some die, others recover and go on, maybe to another crisis, and as such the circumstances where companies decline then recover and survive - a turnaround was in performance.

Corporate turnaround is not a new subject; no doubt it became a "buzz word" in the 80's and especially in the 90's when incidences of corporate decline were on the increase. Firms in both traditional and high tech industries for example; ICL Computers, Dunlop and BSR in the U.K :Peugeot, Waterman on the Continent : Westinghouse, Control Data, Walt Disney Co and United Airlines in the U.S have been known to implement turnaround strategies (Hoffman,1989). Similar claims were made by Alderman (1998) for Paragon and by Bowman (1998) for Scandinavian Airlines System.

But corporate turnaround is not something new. Zimmerman (1991), for instance, studied databases on significant firms operating in the automotive and agricultural industries since the turn of the century and their attempts to turnaround. Table 4 depicts the result of his analysis.

Another study in the United States concerning corporate records of the 4000 listed companies of the New York Stock Exchange (NYSE), the American Stock Exchange and the NASDAQ / over-the-counter (NASDAQ / QTC) was undertaken by Donald B. Bibeault for the period 1967 - 1976. This was in order to overcome the paucity of data on decline and turnaround. About 1,100 of these were companies found to have declined to the point of sustaining losses in net income or experienced severe losses in earnings (80% or more). Of these, about 370 had turnarounds during the same period. Table 5 depicts Bibeault's study in relation to the U.S economy.

Table 4

Cases In The Turnaround Sample

---

Case 1. Buick 1906-1925	Successful
Case 2. International Harvester 1966-1985	Unsuccessful
Case 3. Jeffrey Motors 1911-1930	Successful
Case 4. Willys Overland 1916-1935	Unsuccessful
Case 5. American Motors Corp 1951-1970	Successful
Case 6. Ford Motor Co. 1975-1988	Successful
Case 7. Kaiser Frazer 1944-1956	Unsuccessful
Case 8. Cadillac 1897-1916	Successful
Case 9. Hudson Motor Co. 1927-1946	Unsuccessful
Case 10. Chrysler Corp 1975-1988	Successful
Case 11. Amc/Renault 1971-1987	Unsuccessful
Case 12. Maxwell Chalmers 1916-1935	Successful
Case 13. Allis Chalmers 1965-1986	Unsuccessful
Case 14. Packard 1929-1948	Successful
Case 15. Studebaker Packard 1949-1966	Unsuccessful
Case 16. Deers & Co. 1927-1946	Successful

Source: Zimmerman, F.M. (1991). *The Turnaround Experience*. New York: Mc Graw Hill Inc (p. 32).

In the United Kingdom about 20% of quoted companies and probably a greater percentage of smaller independent companies, have been in need of turnaround (Slatter, 1984). The author undertook a study of publicly quoted firms in the U.K in 1978 over a fifteen year period (1961 - 1976). He found that 20% of the approximately 2,100 firms that were publicly quoted for part or all of the period 1961 - 1976 were classified as in need of turnaround. Of the 437 firms so identified, only 102 continued to show a fourth year of profit decline, and only 18 showed five and more years of consecutive decline. On average, about one in four of the firms managed successful recovery. Table 6 depicts the findings above.

Table 5

A Perspective Of Bibeault's Study Related To The U.S Corporate Economy

Number of person in the labour force	100,000,000
Number of economic units ( business professionals..etc )	13,000,000
Number of business establishments	4,100,000
Number of corporations filing with the U.S Treasury	2,000,000
Number of public companies	11,000
Number of listed companies	4000
Percent median income of listed companies with losses (1967-76)	90
Number of listed companies with losses (1967-76)	1094
Number of listed companies with turnarounds (1967-76)	369
Number of turnaround companies responding to questionnaire	81
Number of additional companies covered in indepth interviews	16

Sources: Bibeault, D.B. (1982). *Corporate Turnaround: How Managers Turn Lossers Into Winners*. New York: Mc Graw Hill (p. 12).

Table 6

Change Of Successful Recoveries

No. of years of declining earnings (in 1970 prices)	No. of firms needing recovery	No. of firms successfully recovered	Recovery success (%)
3	335	81	24
4	84	22	27
5	13	2	15
6	5	1	20
Total	437	107	24 (Average)

Source: Slatter, S. (1984). *Corporate Recovery*. England: Penguin Books Ltd (p. 19).

## 2.5 DEFINITION OF CORPORATE TURNAROUND

A variety of definitions are given to corporate turnaround. Some are basically qualitative in nature, some quantitative in nature.

Bibeault (1982) defined corporate turnaround as the substantial and sustained positive change in the performance of the business and in most cases the turnaround followed several years of declining profitability.

“ When a company is in ‘ trouble ’ and is in need of a turnaround, the whole world seems to know it and the entity becomes something of a spectacle for the business community to feed upon. The true art of management is in reading the symptoms of a company heading for trouble and taking the appropriate steps to fend off disaster ” (Goldston, 1992, p. 3).

Whitney (1987) has a rather interesting way to define corporate turnaround that is:

By forsaking old habits and embracing a disciplined rehabilitation program, the recovered patient may acquire even greater vitality than it had before it became ill. And by taking its turnaround medicine before the ambulance is called, the company slipping into trouble may avoid the trauma of management change or reorganisation, (p. v).

Successful turnaround is when the firm takes urgent action to stem losses, and also refocuses strategy in order to effect a substantial and sustained improvement in performance (Henley's Strategic Management Notes, 1990).

Schendel, Patton and Riggs (1976) defined turnaround as the changing of the downturn phase of the business back into the upturn. Another definition of corporate turnaround as cited by Slatter (1984) is “ the company whose financial performance indicates that the firm will fail in the foreseeable future unless short term corrective action is taken ” (p. 14). Sloma (1985) has a similar definition which is “ a business that faces financial disaster unless action is taken to prevent the occurrence of that financial disaster ” (p. 11).

Observing the definitions given by different authors and researchers on corporate turnaround, it is easily detectable that they all have similar and common denominators in them;

1. Turnaround deals with troubled companies, featured by low financial performances, probably with losses and are in downturn phase of the business.
2. Turnaround deals also with the need to counter the problems of the troubled companies by taking measures, steps and corrective actions to reverse its fate into an upturn business phase.
3. That if no action is taken to turnaround the company, most likely it will face a financial disaster and become a failure.

The definitions of corporate turnaround above will act as one of the key tools in identifying potential turnaround candidates in the research. The research will address the technique of identifying turnaround candidates in detail in Chapter 3.

## **2.6 PHASES OF CORPORATE TURNAROUND**

Corporate turnaround is a process that will require time to bring the company from the ' red ' to ' black '. It cannot be completed in a very short period of time.

Larger companies are known to take nearly a decade to turnaround while smaller companies can be turned in six months (Bibeault, 1982).

Just as there are a number of phases leading to crisis, so there are a number of typical phases that a company goes through in achieving recovery (Slatter, 1984).

The two authors mentioned above, have addressed the phases in corporate turnaround in detail.

Slatter (1984) presented four strategic phases in corporate turnaround:

**The Analysis Phase:** This phase involves problem identification, deciding the appropriate mix of turnaround strategies needed for short term survival and developing a detailed action plan. The actual time available for analysis is determined by the severity of crisis and the size and complexity of the business.



**The Emergency Phase:** Consists of those actions necessary to ensure survival and focuses on generic strategies that can most easily be implemented in the short term. The emergency phase is often characterised by surgery, divesting subsidiaries, closing plants, employee redundancy, firing incompetent managers, reducing surplus inventories, cutting out unprofitable product lines...etc. - all actions designed primarily to improve the cashflow and stop the losses. It is also the time when the company seeks additional financing to implement its recovery strategy. This phase typically lasts from six to twelve months.

**The Strategic Change Phase:** Whereas the emergency phase emphasises operational factors, the strategic change emphasises on product - market reorientation. By the implementation of the appropriate recovery strategy in the emergency phase, the company now has more assurance on short term survival and can begin to think about the longer term.

It is also at this phase that management and / or shareholders may realise the long term viability of the firm looks doubtful, or that the investment of money and time required to achieve sustainable recovery is not worth the risks involved. They may therefore, decide to look for a suitable purchaser for the business. However, if the product - market reorientation appears viable, the strategic change phase is characterised by:

- An increased emphasis on profits in addition to the early emphasis on cash.

- Return on Capital Employed (ROCE) is unlikely to be satisfactory at this phase even though losses have been eliminated.
- Continued improvements in operational efficiency.
- Organisation building - bearing in mind that the organisation may have been traumatised in the emergency phase.

**The Growth Phase:** By this time of the turnaround process, the balance sheet would have improved and it is now that the company needs to grow either organically through new product development and market development or via acquisition or both.

Slatter stressed that there may be considerable overlay between the four phases of turnaround. He added that not all companies go through each phase of the turnaround in sequence since conditions may demand that the company go through the phases all at once. The length of each phase may also vary depending on the industry's cycle.

The phases in corporate turnaround stated by Bibeault (1982) are very similar to that of Slatter's, with the exception of the Management Change Stage in Bibeault's. Slatter did not give much emphasis on this stage but did mention that it takes place before the Analysis Phase - that is the recovery phase would begin when the new Chief Executive is appointed.

Understanding and appreciating the different phases in corporate turnaround will enable the research to identify better in terms of companies who are actually undergoing a turnaround exercise and the phases they are in.

## **2.7 CORPORATE TURNAROUND STRATEGIES**

From the definitions given earlier on corporate turnaround, it is obvious that turnaround deals with the turning of the company's downturn phase back to its upturn phase. However, as easy as it may sound the process can be tiring and complex. And like any other key factors in business, the company must have the right turnaround strategies to enable it to change the course of its fate.

Many authors and researchers have presented their views on what constitutes corporate turnaround strategies.

Slatter (1984) studied forty United Kingdom public companies in the 1970's, thirty of which were successful turnaround situations and ten were failures. He found the following as key strategies used in corporate turnaround:

1. Asset Reduction
2. Change of management
3. Financial Control
4. Cost Reduction
5. Debt Restructuring / Financial
6. Improved marketing

7. Organisational Change
8. Product-Market Change
9. Growth via Acquisition
10. Investment

A detailed comparison of Slatter's findings is depicted in table 7.

Table 7

Comparison Of Successful And Unsuccessful Recovery Strategies

	Firms using generic turnaround strategy (%)	
	Successful recovery situations	Failed recovery situations
Asset reduction	93	50
Change of management	87	60
Financial control	70	50
Cost reduction	63	90
Debt / Financial Rest.	53	20
Improved marketing	50	50
Organisational changes	47	20
Product-market changes	40	30
Growth via-acquisition	30	10
Investment	30	10

Source: Slatter, S. (1984). *Corporate Recovery*. England: Penguin Books Ltd (p. 121).

Slatter also mentioned that his study for the U.K companies in comparison with twenty Californian companies bore similar patterns of generic strategy usage. A similar study to the one by Slatter was undertaken in 1976 on fifty four manufacturing companies by Schendel, Patton and Riggs (1976). Generic strategies used in turnarounds were observed to be as follows:

1. Organisational and Management Change
2. Marketing Strategy
3. Plant Expenditures
4. Efficiency Increases
5. Diversification
6. Divestiture
7. Vertical Integration

However, their results differ from that of Slatter's, in that they found a much higher incidence of new product development, major plant expenditure and diversification and a much lower incidence of new control systems.

It is also interesting to note that the gap between these two studies was somewhat narrowed when Schendel, Patton and Riggs (1976) undertook another study in that same year and found that additional strategies such as sales growth, capital investment, cost cutting and acquisition were also used in corporate turnarounds.

Davis (1988) stated four turnaround strategies similar to the ones in the two studies above. Apart from the strategies above, improvement in human resource issues was also considered as a strategy in turnaround (Eisenberg, 1972). Silver (1992) cited strategies that were in support of Davis's and Eisenberg's. Carrington and Aurelio (1976) in a case study of a small U.S firm indicated that other than cost cutting, renegotiation of terms with the creditors was another key strategy in turnaround.

In a study of ten South African companies, Kilroe (1981) found that the turnaround strategies employed were similar to strategies of companies with low market share. O' Neil (1986) in his study of fifty one U.S banks found a rather contrasting strategy from some of the ones mentioned above and that the restriction of growth was one of the key strategies in banking turnaround.

Among the key strategies for turnaround stated by Sloma (1985) in his book "The Turnaround Manager's Handbook", was the reduction of people-related expenses or employment layoffs. This strategy was obviously in contrast with that of Davis's, where the human resource strategy was one of maintaining employee motivation. There have been others who have written on strategies for corporate turnaround such as Hamermesh (1976), Biteman (1979), Hofer (1980), Hambrick and Schechter (1983), Ramanujam (1984), Melin (1985) and Firsirotu (1985), but the strategies put forward were very similar in nature with others cited before.

Bibeault (1982), however, had interestingly categorised the key strategies for turnaround according to the corporate turnaround phases. According to Bibeault, among other factors such as objectives, tactics and review methods, strategies incorporated in a turnaround plan vary from one stage of the turnaround to the next (refer to table 8).

Table 8

Contrasting Elements In The Business Plan By Turnaround Stage

Planning	Emergency Plan	Stabilization Plan	Return-to Growth Plan
Objective(s)	Survival, return to positive cashflows	Profit improvement earn acceptable ROI	Growth and development Growth in Market Share
Strategies	Liquidation/ Divestment product elimination, head count cuts	Divestment, product- mix, enhancement, improve operations, reposture the business	Acquisition, new products, new markets, increase market penetration
Tactics	Numerous	Numerous	Numerous
Review & Control	"Hands-on" management, daily and weekly cash reports	Managerial accounting emphasis, weekly operations review, monthly controls, quarterly profit and loss reviews	In addition to stabilization planning reviews

Source: Bibeault, D.B. (1982). Corporate Turnaround. New York: Mc Graw Hill (p. 239).

An almost similar study was undertaken by Taylor (1983). Taylor studied the characteristics of successful turnaround strategies in a number of companies and had identified a pattern of steps that needed to be taken. First, he looked into a wide variety of strategies necessary in a turnaround situation. Second, he observed the tenor or tone of how these strategies were being used. Different strategies were implemented according to what he called ' Contraction ' or immediate corrective actions to ensure survival and ' Expansion ' or the long term actions to effect a substantial and sustained improvement in performance (refer to table 9).

## **2.8 KEY FACTORS IN TURNAROUND SUCCESS**

Having identified and implemented the strategies to turn around the company, it will not be sufficient to guarantee the success of the company's turnaround. This is because the way in which these strategies are combined to provide a company with an overall recovery strategy can vary enormously (Slatter, 1984).

There are other elements and key factors which can dictate the right strategy or combination of strategies to be used for a successful turnaround. The common thing that comes to the mind of the person or team handling the turnaround is the turnaround plan. A successful turnaround according to Sloma (1985), consists of only two elements " first, there must be a turnaround plan and second it must be communicated " (p. 35).



Table 9

Steps Towards A Successful Recovery Strategies

	<u>Contraction</u>	<u>Expansion</u>
Industry structure	Reduce no. of firms Concentrate production capacity	Arrange mergers Co-operative supply agreement
Finance and Liquidity	Reduce overheads, costs working capital, Sell off assets	Reestablish profitability Raise cash for investor
Management and organization	Cut back administration and central staff	Appoint 'entrepreneurs' Hold them accountable
Planning and control	Eliminate five -year planning control on tight monthly budget	Re-allocate resources based on strategy for each operation
Product / markets	Prune existing product line Close marginal business	Invest in fewer key products/markets, Introduce more cost effective products
Production/ operations	Fewer models, simpler designs, close capacity Reduce manning, move labour-intensive operations	Invest in latest machinery, Involve work force in improved quality productivity
Technology	Close obsolete plant Withdraw outdated products	Invest in modern process and new products
Persomel	Reduce manning. Eliminate inefficient methods	Increase productivity re-train, increase pay
Socio- practical	Collaborate to build new businesses	Collaborate to minimise social problems

Source: Taylor, B. (1982/3). Turnaround, Recovery And Growth. Journal Of General Management, 8 (2) 5-13.

Zimmerman (1991) created a model that described successful turnaround as a function of three principal factors:

1. The firm's effectiveness as a low cost operator.
2. The firm's effectiveness as a provider of increasing differentiated products.
3. Existence of leadership as the turnaround agent with the significant and relevant industrial experience.

(Details on Zimmerman's model is depicted in Figure 1).

Slatter (1984) in his study of forty U.K public companies found six sets of factors that determine which generic strategies are required to effect corporate recovery.

They are:

1. Causes of Decline (as discussed in the earlier part of this research).
2. Severity of the Crisis i.e. the degree to which the firm has progressed towards insolvency.
3. Attitude of Stakeholders involved in the turnaround process i.e. ;  
the groups of people who influence the company or are influenced by it (e.g. shareholders, management, employees, customers, suppliers / creditors, banks, government, local community, competitors, trade union...etc.).

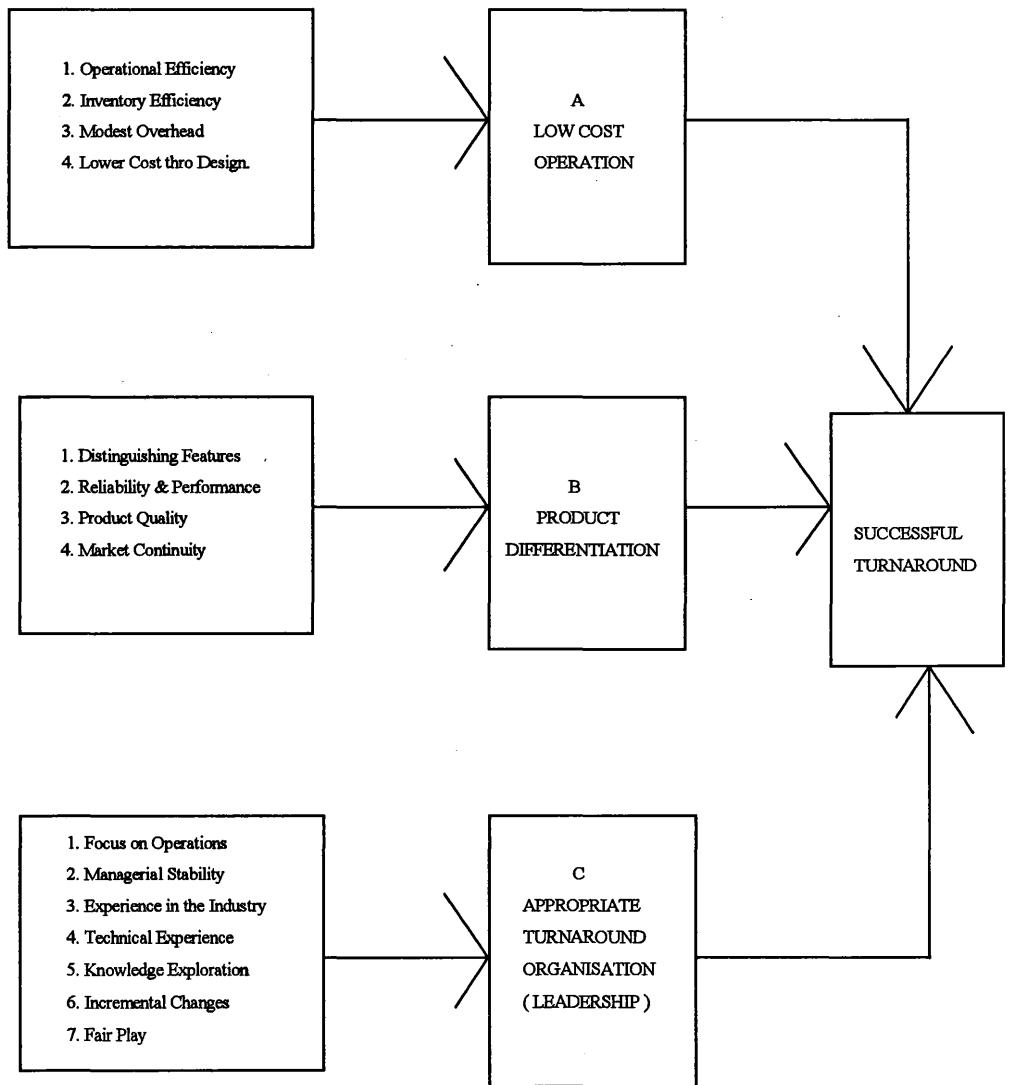


Figure 1. Framework of a Successful Turnaround Process

Source: Zimmerman, F.M. (1991). The Turnaround Experience.

New York: Mc Graw Hill (p. 13).

4. **Company's Historical Strategy** (even if the historical strategy was not a cause of decline). The company's historical strategy directly influences the appropriate recovery strategy. Both the company's product market scope and the deployment of its assets influence which generic strategies are feasible.
5. **Industry Characteristics** i.e. the nature of the product, market segmentation, relative size and strength of competitors, exit barrier, bargaining power of suppliers, bargaining power of customers, threat of retaliation, rate of technological change, capital intensity and industry growth rate. The characteristics of an industry in which the firm competes always influence strategy formulation, whether the company is in a turnaround situation or not.
6. **The Company's Cost-Price Structure** (which in turn is determined partly by the industry characteristics and causes of decline). The cost-price structure is extremely important in determining whether management should focus short term attention on cost reduction strategy, marketing improvement strategy, or both to achieve rapid improvement in profit margins. (Zimmerman's low cost operator strategy is parallel to Slatter's cost-price structure strategy).

Bibeault (1982) stressed that there are certain key elements that lead to turnaround success and in their absence a turnaround effort is highly risky, and they are the following:

1. New Competent Management with full authority to make all the required changes.
2. An economically and competitively viable Core Operation.
3. "Bridge" Capital from external and internal sources to finance the turnaround.
4. A positive attitude and motivated people so that initial turnaround momentum is sustained.

Bibeault added that all the factors above are important and interact in creating a successful turnaround.

Key factors for successful turnaround have also been cited in other literature. Both Davis (1988) and Silver (1992) cited similar key factors as Slatter's and Bibeault's. However, Silver added that negative publicity, writ of attachment or blistering lawsuit can cause the turnaround plan to go amiss. These were the degree of damages done to the company by creditors, the press and internal discussions.

## **2.9 CLASSIFYING CORPORATE TURNAROUND**

Just as in the case with any event, the turnaround has its own outcomes. Not all corporate turnarounds result in success. Some fail while some others land in the zone of "uncertainty". Possibly the best work done in classifying corporate turnaround is by Slatter (1984).

Slatter pointed out four types of recovery situations and further categorised them into Non-Recoverable Turnarounds and Recoverable Turnarounds:

### ***Non-Recoverable Turnarounds***

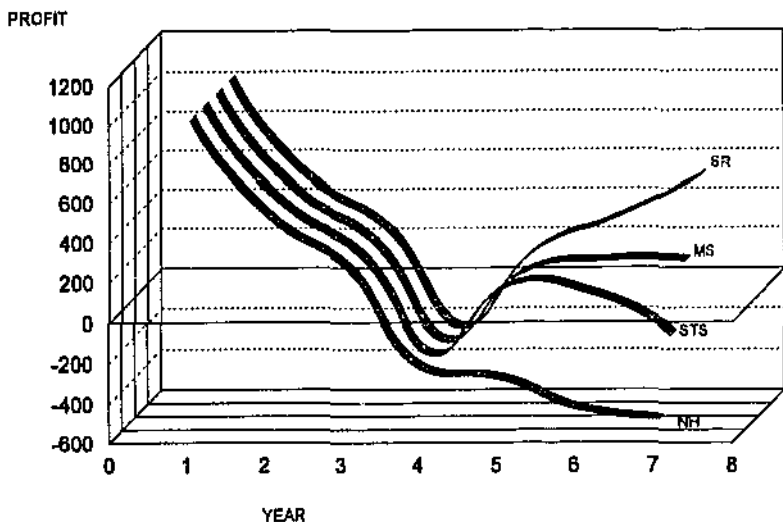
Basically he sees two types namely:

- 1. The No Hoppers;** Companies characterised by a serious attempt at turnaround, although they soon become insolvent or are acquired, because despite the efforts put in by management, they simply can no longer exist as viable and independent business entities even in the short period of time.
- 2. Short Term Survivors;** Companies that may well have succeeded in improving real profits for four successive years or more but eventually go into insolvency due to their inability to develop sustainable competitive advantage.

### ***Recoverable Turnarounds***

It implies survival and has its own set of degrees:

- 1. Mere Survival:** Companies who have survived the trough of decline and are moving into the upward phase. However, the sustainability of recovery of these companies are doubtful and the value of money and time for investors is questionable.
  
- 2. Sustainable Recovery:** Companies who have successfully implemented recovery strategies that permit them to make above average profits in the long term and possibly embark into the growth phase of the turnaround process. A graphic representation of the above classification is depicted in Figure 2.



Note:

NH - No Hoppers  
 STS - Short Term Survivors  
 MS - Mere Survivors  
 SR - Successful Recovery

Figure 2: Types Of Corporate Recovery.  
 Source: Slatter, S. (1984). Corporate Recovery (p. 117).

## 2.10 PREVIOUS EMPIRICAL WORK

Various statistical failure identification models have been developed, the main techniques used being as follows:



### **2.10.1 UNIVARIATE ANALYSIS FOR PAIRED SAMPLES**

The original study using this technique was that of Fitzpatrick (1932, cited in Failure identification models, 1989, p.1), who examined financial ratios of 19 pairs of failed and non-failed companies and found persistent differences at least 3 years prior to failure, with Net profit / Net worth and Net worth / Debt being the best discriminating indicators.

Beaver (1966) examined trends in ratios for 79 failed firms, paired by industry and size, with 79 non-failed companies. To eliminate the worst effects of multicollinearity, Beaver chose the most representative ratio in each of the six groups and then studied trends over 5 years prior to failure to see which discriminated the best in terms of identifying the failed firms. Cash flow / Total debt classified correctly in 90% of cases one year prior to failure; and 78% five years before hand; and Net income / Total assets 88% correctly 1 year prior to failure and 75% five years before hand.

### **2.10.2 DECOMPOSITION ANALYSIS**

Lev (1973) used the Theil entropy measure on Beaver's sample, postulating (1) that a current / non current balance sheet classification of assets and claims was potentially economically significant; and (2) that the structural changes in such balance sheet categories of failed companies were likely to be larger for failed companies as bankruptcy approached. His results were slightly superior to Beaver's in discriminating between failed and non-failed companies.

### 2.10.3 THE GAMBLER'S RUIN MODEL

This model employs Markov chain techniques and is based on the notion of probabilities of alternate states of the world. This considered a firm faced with various possible states of liquidity over a future time horizon. The worst possible state is insolvency (zero liquid wealth). The model is concerned with the probabilities of the state of liquidity changing from one period to the next. Assume the existing state,  $n$ , at  $t=0$  is 3. The possibilities can then be mapped out for 3 periods.

Using this simplified version of the model (as used by Wilcox, 1971), the firm's liquidity position is expected to change each period - a steady state is not permitted (which is perhaps unrealistic). The really disastrous probability path (which leads to gambler's ruin) is marked by a broken line, where the probability for the next period is always that liquidity is going to get worse until it reaches the insolvency 'floor'. (The model only has a lower bound, not an upper one and the insolvency state is the only one where the state for the next period cannot change - it is known as the 'absorbing state'). Formally, the probability of failure,  $F$ , can be expressed as :

$$P(F) = \begin{cases} 1 & \text{if } p < q \\ (q/p)^N & \text{otherwise} \end{cases}$$

To estimate the parameters  $N$  and  $q/p$  using accounting data, a firm's average gain or loss of liquidity during an accounting period is assumed to be  $\bar{g}$ . Suppose this is \$20,000, and the cash balance,  $\bar{g}$ , at  $t=0$  is \$60,000.

Then if the firm loses all the 'gamblers' over 3 periods, the cash balance will be zero at  $t=3$ . The ratio  $q/p$  relates to average 'cash flow' and is described as a 'drift rate'. The drift rate per period along the sequence of states in cash flow terms is  $(p-q) \sigma$ . Thus,

$$q/p = (1-c/\sigma) / (1+c/\sigma)$$

and  $\sigma$  can be defined as  $\sqrt{(\text{mean cash flow})^2 + \text{variance of cash flow}}$

It is of course possible to collect data showing companies' cash position and cash flow, and then analyse past failed and non-failed firms to see whether differential trends in liquidity over time are good indicators of likely bankruptcy. Wilcox did this for 52 failed and non-failed companies paired by asset size, industry and period over a five year time span prior to failure. The results were better at 'identifying' failure than those obtained by using Beaver's ratios.

#### 2.10.4 THE CATASTROPHE MODEL

Catastrophe theory is a mathematical concept which can help to explain the nature of various social systems. Basically the theory is concerned with different points of potential equilibrium in a system, and analyses the effects of sudden, discontinuous changes following periods of smooth changes. The concept can best be explained in terms of a diagram representing a length of cloth. A fold in the cloth at one side represents a catastrophe manifold, which can be expressed mathematically.

The control variables are the explanatory variables (e.g. ROCE and Risk): gradual changes in these represent a movement across the surface of the cloth until (say) point A on the state variable (non-failure) is reached, when there will be a sudden, precipitous drop to point B on the lower (failed) level of the state variable. The catastrophe model as such, though it can be formulated mathematically, is not strictly operational, rather it offers a broader perspective of how other models can be viewed.

### **2.10.5 SUBJECTIVELY DETERMINED RATIOS AND WEIGHTS**

Tamari (1966) developed a multivariate model based upon survey evidence from bankers, and then adjusted the parameter weights to find the best discriminating function.

Six ratios were included in the original version (maximum scores in brackets):

- (1) Equity / Total assets (25 points)
  - (2) Trend of Profits / Value of production (i.e.; Sales + changes in finished goods stocks and work in progress) (25 points)
  - (3) Current ratio (20 points)
  - (4) Value of production / Stocks of raw materials and finished goods and work in progress (10 points)
  - (5) Sales / Trade debtors (10 points)
  - (6) Value of production / Net current assets (10 points).
- Scores for each ratio depended on the ratio values (e.g.; for (1) : 25 points if the value were >50%; 20 if they were in the range 41% to 50%; 15 in the range 21% to 40%; etc.).

The closer a company's score is to the maximum 100, the 'safer' it should be. In a sample of 130 Israeli companies, 52% of those scoring <30 points went bankrupt, and only 6% of those scoring between 30 and 60 points faced the same fate.

## **2.10.6 MULTIPLE REGRESSION ANALYSIS (MRA)**

The MRA model with a two point dichotomous dependent variable (e.g.; 0=failed; 1=non-failed) is an alternative to MDA (Multivariate Discriminant Model, to be discussed subsequently) which gives similar results even though the assumptions which underlie it are technically different.

In most respects, however, the requirements and problems are effectively the same as those with the MDA. The technique has been used in the USA [e.g.; Meyer and Pofer (1970), Hambrick and Schechter (1983), Edmister (1972) ] and in the U.K. the Bank of England model was developed by Marats (1979).

## **2.10.7 MULTIPLE DISCRIMINANT ANALYSIS (MDA)**

In simple terms this technique identifies two types of companies (failed and non-failed) and evaluates them in terms of their characteristics. Assuming just two explanatory variables, i.e. current ratio, P ; and return on capital employed (ROCE), Q; a line fitted statistically that best discriminates between the two types of companies.

This technique selects stepwise from a set of variables, establishing the optimal discriminating parameter weights, until it determines the best combination. Thus, assuming that the variables P and Q above are chosen, it will establish the parameter values for a and b in the equation:

$$Z = aP + bQ$$

So, if it is found that the model discriminates optimally when  $a = 1.5$  and  $b = 3$ , the Z scores for companies in terms of their current and ROCE ratios can be calculated. In some versions of the model a critical Z score has to be calculated, above which the firm is likely to be a ' non-failure ' and below which a ' failure '. In other versions the cut-off point is set at zero by rescaling.

The first MDA model applied to failure identification of manufacturing companies was that of Altman in 1968, but it was a very crude model, not the least of its imperfections being that it derived from a sample of only 33 bankrupt companies and their pairs pooled over a 20 year period, 1945-64, during which time economic conditions changed considerably. Nevertheless, Altman was able to claim that the model discriminated correctly in 95% of cases one year prior to failure; and in 72% of cases two years. Subsequently, Altman has produced a more refined, ZETA model; while other researchers have produced alternative models e.g.; for small firms or for particular industries; or including CPP indicators or variances of ratios in the data set. In the U.K, a number of similar models have been developed, the chief exponent being Taffier (1982).

According to the Journal of Banking and Finance (1984) the procedures for the use of the model have also been reviewed for several other countries e.g. France, Netherlands, and Japan.

However, the fact remains that the models themselves really only provide an 'autopsy of failed firms'. Thus, it is not very surprising that a common characteristic is that ROCE is a major explanatory variable in MDA models, since bankrupt firms are typically not earning large profits.

The fact that a model identifies a failed firm as such is quite probably not news to market agents - the accounting indicators after all are merely reflecting economic events already known to them. The real test of the model's potential value is to see whether they convey news at least as early as it appears to be reflected in market indicators, such as relative share price, or bond and credit ratings.

#### **2.10.8 MULTIPLE DISCRIMINANT ANALYSIS MODELS FOR TURNAROUND**

While extensive empirical work has been done by previous researchers, they have, however, concentrated on the area of predicting corporate failure and collapse. Very little has been done in the area of corporate turnaround.

O'Neil (1986) undertook an analysis of the turnaround strategy in commercial banking.

Discriminant analysis was used to test the predictions of turnaround strategies in the banking industry. Two hypotheses were tested - one consisting of twelve turnaround variables in order of their predicted magnitude; the other to test the non-existence of relationships between local market concentration and turnaround performance. Some of his findings are that turnarounds in banks were indeed fuelled by both revenue generation and cost control. Successful turnaround banks exhibited elements of both selective product-market pruning and piecemeal productivity. O'Neil's findings are consistent Hofer (1980), Schendel et al. (1976) and Hambrick & Schechter (1983).

The declining banks were found to have higher interest costs, higher loan loss experience, have fewer loans per deposit dollar and have higher costs in general. They also showed lower levels of cash and treasuries / deposits, earned more from loans but were not able to control costs. The turnaround banks were found to be paying their employees more resulting in higher productivity. According to O'Neil, his model was successful with an 82% predictive rate of accuracy.

A study of corporate turnaround using the probability of bankruptcy was undertaken by Arkaradejdachachai (1993). He took a different approach to study turnaround where the probability of bankruptcy instead of profit rates was used as a turnaround criterion. Discriminant analysis of bankrupt and non-bankrupt firms was first done to develop a bankruptcy model.



The model was then used to calculate the probability of bankruptcy for the firms in the database. Firms that reduced the probability of bankruptcy over periods of time were identified as turnaround firms. Hypotheses testing and statistical modelling were subsequently carried out to develop a turnaround model. The turnaround model was then used to identify actions taken by troubled firms that led to a lowering of their probability of bankruptcy over time. He found that turnaround firms did not have the same mean rates of return during the distress period, the recovery period and the return to normal period.

Secondly, groups of turnaround firms with different durations did not have different mean rates of change of the probability of bankruptcy. Thirdly, the rates of change of the probability of bankruptcy before the turnaround and during the turnaround period were found to be positively correlated with the probability of bankruptcy at the beginning of the pre-turnaround. Lastly, the growth rate of the industry, size of the industry, cost cutting and product initiative affect turnaround duration (the length of time it took for troubled firms to turnaround).

Pant (1986) studied corporate turnaround by focusing on structural characteristics of turnaround firms and their industries (sample of 137 mixed U.S Industrial firms was taken for the period 1970 to 1983). Variables suspected to capture these characteristics were used in developing models to predict turnarounds. Variables used for industrial characteristics included seller concentration, barrier to entry, industry growth and R&D expenditures of total industry.

Variables used for firm characteristics included market share, change in market share, size, level of diversification, leverage and capital intensity. Two other variables i.e. ownership control and profit margins were also considered.

Her findings indicated that four characteristics i.e. size, R&D, external control and interaction variable combining margin and advertising were included in models developed by MDA. These models also provided help in distinguishing between the two groups. Several changes in turnaround firms were also observed.

Turnaround firms had substantially increased their revenue, decreased their leverage and capital intensity and increased their market share and margins. They were also firms that invested more heavily in R&D. However, the industry growth was negative for both the turnaround and non-turnaround groups. She added that both groups experienced change in control type i.e. some turnaround firms changed from being externally controlled to being owner controlled and some non-turnaround firms had changed from being owner controlled to being externally controlled.

### **2.10.9 DRAWBACKS IN USING THE MULTIPLE DISCRIMINANT ANALYSIS (MDA)**

The drawback in modelling using the MDA is that there are a host of statistical problems associated with it rendering the results somewhat problematic (Altman, 1993).

The potential problems, he explained can be categorised as follows:

- Violations of the underlying normality and independent assumptions of the classical linear regression or discriminant approaches.
- Reduction of dimensionality issues.
- Interpretation of the relative importance of individual variables.
- Specification of the appropriate classification algorithm.
- Time series prediction test interpretation.

Wilson (1989) indicated a common problem with the multivariate model and the MDA, namely, there was often a 'grey area' in which the classification as 'failed' or 'non-failed' was determined. This was unsatisfactory, since it would often be more helpful to the user to classify such problem companies as a separate category. He stressed that various technical problems must be overcome for the model to be statistically valid and these have gradually been recognised by researchers over the years. These are listed as follows:

- How wide should the data set be from which the variables are related? Should it include macro economic indicators, since companies are more likely to fail at different points in the trade cycle? Should it include industry dummies, since different types of firms are vulnerable at different times and have different compositions of assets and claims? As regard to company specific information, should it include non-accounting information, such as increasing lags before publication of accounts; qualified auditors reports; or resignation of auditors, etc.?

Or, to take the argument to its logical conclusion, should it include share price indicators, which - if market is informationally efficient - will impound all other information contained in the other indicators? In fact it has not proven feasible to include macro-economic indicators - instead models have had to be reformulated for different periods (which nevertheless have been derived from data pooled over lengthy periods).

- As for the industry aspect, dummies have been used to represent broad industry categories, but it has been more usual to develop models for specific sectors (e.g. railways, banks, savings and loan, engineering, retailing and distribution). In a few studies 'non-accounting' and share price residual indicators have also been included in the variable set - but there are problems in calculating the latter.
- Factors included in the variable set ought to be stable in representing particular characteristics of the firm over time if the model is to be applied to data for a number of years. Thus Cash flow / Debt may correlate strongly with ROCE one year before failure; but with gearing ratios more than 3 years before failure. Such stability can be identified using a form of factor analysis known as 'principal component analysis'. If instability exists in a particular ratio it should be excluded from the variable set.
- The ratios or their transformation should be normally distributed.

- The optimal discriminant function may in fact be curvilinear rather than linear. However, experiments have shown that this is unlikely to be the case.
- Most models have been based on data for companies one year prior to failure. It could be argued that it might be more helpful to see whether failing firms exhibited different characteristics from their non-failing counterparts. When earlier base years have been tried, the characteristics of the models have been somewhat different, emphasising liquidity rather than gearing.
- Certain statistical requirements should be met for the models to be valid; most obviously that the group dispersion (variance - covariance) matrices should be equal for failed and non-failed groups.
- The statistical power of the model has to be tested. Overall significance is measured by the  $F$ -test while the relative importance of the individual explanatory variables can be measured in various ways (broadly equivalent to the  $T$ -test in regression); standardised coefficients; Mosteller and Wallace scores; conditional deletion procedures, and Mahalanobis's  $D^2$  distance statistic (hold outs).
- The problem of sample selection bias is a major one, since the researcher typically selects his failed company sample first and then chooses a non-failed control sample. (In fact, the latter is often done matching for size, industry and

/ or period, which excludes these potential explanatory variables). However, the control sample does not have to be equal in number to the failed sample, but it would be inconceivable that it should be as high as say 950 - which is what it would need to be if the prior probability of failure was 5% and the failed company sample was 50. In an attempt to allow for this, some researchers have calculated the cost of misclassifying a company, given the prior probabilities of failure.

- The robustness of the model can be tested in various ways - e.g. split the sample into two, derive the model from one half and see whether it performs well on the other (hold out test); derive the model over one period of time and then test it intertemporally on a sample from another period; or use the Lachenbruch jack-knife procedure - i.e. with  $n$  sample companies, proceed iteratively to see whether, when including each company in turn, a model derived from the other  $n-1$  companies classifies it correctly.

Furthermore, the limitations of the use of MDA and the absence of any underlying theoretical model suggest that either alternative techniques or different data are required if significant improvements in predictive power are to be obtained (D. Storey, n.d).

## 2.11 ALTERNATIVE STATISTICAL MODELLING TECHNIQUE

Just to classify firms as ' failed ' or ' non-failed ' is of limited interest. it would be far more useful if a likelihood of failure index could be devised and indeed, Taffler (1982) has produced a Performance Analysis Score (PAS), which uses the  $Z$  value as one of its 3 inputs, the other two being number of years at risk and trend.

A purpose of the general regression model is to determine the probability of a particular outcome when the dependent variable  $Y$  is limited to two values, 0 and 1, representing binary choice, the regression model has to be modified, the simplest modification being to use the linear probability model.

$Y = a + bX + e$  where  $Y$  can be only 0 or 1.

The probability distribution  $P$  of  $Y$  can be described as

$$E(Y) = 1(P) + 0(1-P).$$

Unfortunately, this formulation means the error term will be heteroscedastic, since there will be higher variances in  $e$  where  $Y = 1/2$  than when  $Y = 0$  or 1. This does not produce biased or inconsistent parameter estimates. But it will result in loss of efficiency. Correlation by weighted least squares (WLS) gives further problems. Therefore, it is better to use the ordinary least squares procedure.

However, another problem arises where the estimated regression line is misestimated, when the predicted value lies outside the range 0 and 1.

These problems with the linear probability model can in fact be largely avoided if the probability distribution can be transformed in some way. In order to ensure that increases / decreases in the explanatory variable(s)  $\underline{X}$  are associated with increases / decreases in the dependent variable  $\underline{Y}$ , it is necessary to use a cumulative probability function for transformation purposes. There are numerous possibilities, of which three are as follows:

### **2.11.1 CUMULATIVE UNIFORM PROBABILITY FUNCTION**

This is a constrained version of the linear probability function where the model is transformed using a cumulative uniform probability function and is hereby denoted as;

$$P_i = \alpha + \beta X_i$$

### **2.11.2 CUMULATIVE NORMAL PROBABILITY FUNCTION: (PROBIT)**

The Probit model is associated with the cumulative normal probability function. The model assures that there exists a theoretical (but not actually measured) index  $\underline{Z}_i$ , which is determined by an explanatory variable  $\underline{X}_i$ , as in the linear probability model. The index  $\underline{Z}_i$  is assumed to be a continuous variable which is random and normally distributed for the usual econometric reasons.



The standardised cumulative normal function is written as;

$$P_i(Z) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^z e^{-s^2/2} ds$$

The Probit model involves non linear estimation and thus added computational work.

### 2.11.3 CUMULATIVE LOGISTIC PROBABILITY FUNCTION : (LOGIT)

The Logit model is based on the cumulative logistic probability function and is specified as;

$$P_i(Z) = \frac{1}{1 + e^{-(\alpha + \beta x_i)}}$$

In this notation,  $e$  represents the base of natural logarithms, which is approximately equal to 2.718. Under Logit  $P$  is the probability of the choice given the factor  $X_i$ . The dependent variable is simply the logarithms of the odds that a particular choice will be made, which applies over the whole range 0 to 1.

Because the slope of the cumulative logistic distribution is greatest at  $P = 1/2$ , changes in the independent variable(s)  $X$  will have their greatest impact on the probability of alternative at the midpoint of the distribution and relatively little impact at either of its ends. At the limit, where  $P = 0$  or  $P = 1$ , the logarithm of the odds will be undefined. This means in fact that the Logit model should be estimated for each point in the distribution across  $X$ , with a minimum of 5 observations per value of  $X$ . This is unlikely to be possible where the population is small; where variables are continuous; and where  $X$  represents several explanatory variables. In such circumstances it will be necessary to use maximum likelihood estimates involving non linear techniques.

Ohlson (1980) pointed out that the Logit model is a powerful alternative. It does not require normality of the ratio distribution, nor that the variance - covariance matrices of the two groups have to be the same. It is also superior due to the fact that it is computationally simpler, not requiring the use of non linear estimation techniques. (Martin, 1977) found that the Logit model gave significantly better probability estimates than the MDA. The only two empirical studies in corporate turnaround using the Logit model are by Pant (1986) and Arkaradejdachachi (1993). Their research involved the usage of the Logit and the MDA (as previously cited) in developing turnaround models.

## **2.12 THEORETICAL FRAMEWORK**

From the literature review and the definitions given by several authors, corporate turnaround can be said to be the process of trying to change the unfavourable fate or conditions of a company which is undergoing a Downturn Phase back to a better position in an Upturn Phase.

Causes of decline in troubled companies are complex; ranging from management fault, lack of financial control, high cost structure and many more as mentioned by researchers like Altman (1993), Slatter (1984), Davis (1988), Schendel et al (1976), Sigoloff (1981) and Bibeault (1982) in our literature review. The causes of decline in a troubled company can be a singular main problem or combinations of problems. We also know from Bibeault (1982) that troubled companies can be classified by the level of trouble they are in i.e. mild, moderate and severe troubled companies. The latter is a serious condition where the troubled company's very existence can be threatened. Declining or troubled companies signal or beacon one common thing - that something must be done or actions must be taken immediately to stop slipping downwards further to the point of no return or 'death of the corporation'.

These actions or steps taken by troubled companies to turnaround their corporations' fate are what is called 'Turnaround Strategies'. Like the causes of decline, there are also several strategies available as the panacea to stop further decline and to turnaround the troubled company.

As quoted by several authors like Slatter (1984), Bibeaault (1982), Davis (1988), Schendel et al (1976), Silver (1992), Eisenberg (1972), Carrington and Aurelio (1976), they can range from strategies like changes in leadership and management, cost reduction, asset reduction.....to even contrasting strategy like growth restriction (O'Neill, 1986). It is also interesting to note that successful recovery situations have been characterised by vigorous implementation of those strategies (Slatter, 1984). Vigorous implementation of the right strategy or combination of strategies alone is of no guarantee for a successful corporate turnaround.

Bibeaault (1982) states that:

Before a company can cure its problem, it must realise that it has major problems and make the decision to do something about them. This is what I call reaching the 'Moment of Truth'. At the point where a company reaches its moment of truth and decides to make fundamental changes, it has gone from absolute decline to potential turnaround (p. 93).

The moment of truth is an event classified by Bibeaault under the 'Management Change Stage' of the turnaround phase.

As stated above, recognising the existence of major problems and analysing them is not enough, plans of action or strategies must be identified to be implemented to counter the problems. This is usually done under what Bibeaault calls the 'Evaluation Stage' or Slatter's 'Analysis Phase'. Analysis involves problem identification, deciding the appropriate mix of turnaround strategies needed for short term survival and developing a detailed action plan (Slatter, 1984).

However, it is interesting to note here that there is a 'missing link' or gap that exists between the 'moment of truth' in the management change stage and the point where decisions are made as to the type and combination of strategies to be implemented to turnaround the company in the 'Analysis Phase / Evaluation Stage'. Many researchers have ignored this 'gap' or 'missing link' and concentrated on identifying causes of decline and strategies to counter the decline and turnaround of the company.

As Bibeault (1982, p. 111) states "there are certain key elements that lead to turnaround success and in their absence, a turnaround effort is highly risky.

All these factors are important and interact in creating a successful turnaround". Slatter (1984) stressed that there are six factors that determine which generic strategies and combination of strategies are to be used to effect a corporate recovery. The authors above were supported by (Davis, 1988).

Davis pointed out that in order to assess whether to undertake a company rescue, judgements on what was achievable must be made and he suggested that the best way to do this was to determine broadly what was necessary to render the company viable and to draw up an outline plan to that end. He cautioned, however, that for any plan to work five essential key factors must exist.

Zimmerman (1991) as described in the earlier section of this research cited three principal factors that influence successful turnarounds. However, like Davis, the key factors or elements were very much similar to the ones described by Slatter and Bibeault.

From the literature and the findings made by authors above, we can deduce that the existence of the key factors or elements not only influence the type and combination of strategies to be used enabling them to affect the turnaround process but are also actually the key determinants of a feasible corporate turnaround and in their absence the turnaround effort can be highly risky. Based on the literature, the determinants for a feasible corporate turnaround are hereby summarised:

- 1. Causes of Decline**
- 2. Severity of Crisis**
- 3. Company's Historical Strategy**
- 4. Industry Characteristics**
- 5. Company's Cost-Price Structure**
- 6. Attitude of Shareholders**
- 7. Attitude of Bankers**
- 8. Attitude of Creditors**
- 9. Attitude of Employees**
- 10. New Competent Management**
- 11. Viable Core Operation**
- 12. "Bridge" Capital**
- 13. Realistic Turnaround Plan**

As mentioned earlier, many researchers on corporate turnaround have ignored this area and concentrated heavily on the causes of decline in troubled companies and the strategies available and used for successful turnarounds. Thus, a vacuum exists which creates an opportunity for research to test the above findings cited by Slatter (1984), Bibeault (1982) and Davis (1988). Similarly, empirical research on corporate turnarounds have been few. The research that used the ' Logit Model ' function in studying corporate turnarounds (which is the similar statistical technique this research will make use of ) was by Pant (1986) and Arkaradejdachachai (1993). Pant's model was, however, found to be better at predicting unsuccessful turnarounds (Hoffman, 1989).

The limitations of the previous empirical research on corporate turnaround areas follows:

- **Based totally on historical data patterns during the Downturn Phase and the Upturn Phase.**
- **Focused heavily on strategies used for corporate turnarounds.**
- **Analysed in-depth one particular element or determinant of corporate turnaround feasibility.**
- **Empirical models developed are not for testing or predicting the feasibility of corporate turnaround.**

Thus, again an opportunity exists for empirical research to develop a predictive model for testing the feasibility of corporate turnaround by taking into account all

of the relevant determinants that dictate whether a turnaround will be feasible or not through a more integrated and comprehensive approach.

## **2.13 RESEARCH HYPOTHESES**

Identifying the determinants of feasible corporate turnarounds, as stated by authors like Slatter (1984) and Bibeault (1982), is simply not enough. It can be observed that the authors have not undertaken further observations and analysis on these determinants in both successful and non-successful turnaround companies nor have they categorised them. It is important that further observations or analysis be carried out to shed new light and understanding with regard to the determinants or key success factors of feasible corporate turnarounds. It is also considered that there is a need to categorise these determinants or key success factors before any form of hypotheses can be formulated and tested. It can be observed that the twelve determinants can be further broken down into 2 main categories.

The determinants under category A are as follows:

- **Causes of Decline**
- **Severity of Crisis**
- **Company's Historical Strategy**
- **Industry Characteristics**
- **Company Cost-Price Structure**
- **Commitment of Shareholders**
- **Commitment of Bankers**
- **Commitment of Creditors**
- **Commitment of Employees**



### ***CATEGORY A : HYPOTHESES***

For determinants under category A, the research is interested in the state of their existence (i.e. whether the state of their existence is favourable or non-favourable for a feasible corporate turnaround) . The earlier quoted researchers suggested that they are pertinent determinants of feasible corporate turnarounds and the state of their existence has an effect on the probability of corporate turnaround success.

Thus, could it be that if the state of these determinants is favourable, a turnaround is then feasible, giving a company higher chances of achieving successful turnaround? And on the contrary it may have resulted in a turnaround not being feasible, and thus a company may not achieve a successful turnaround? Given these questions, the research hypothesised the following:

#### **Hypothesis I**

**The favourable state of the determinants of turnaround feasibility enables companies to achieve successful corporate turnarounds.**

#### **Hypothesis II**

**The non-favourable state of the determinants of turnaround feasibility impedes companies to achieve successful corporate turnarounds.**

The determinants under category B are as follows:

- **New Competent Management**
- **A Viable Core Business**
- **Bridge Capital**
- **Realistic Turnaround Plan**

### **CATEGORY B : HYPOTHESES**

For determinants under category B, the research is interested in their existence [i.e. whether they exist or do not exist (non-existent)]. Again, they are quoted by previous authors like Slatter (1984), Bibeault (1982) and Sloma (1985) as pertinent determinants of feasible corporate turnarounds and their existence have an effect on the probability of corporate turnaround success.

Thus, could it be that if these determinants exist, a turnaround is then feasible, giving a company higher chances of achieving successful turnaround? And on the contrary it may have resulted in a turnaround not being feasible, and thus a company may not achieve a successful turnaround? Given these questions, the research hypothesised the following:

#### **Hypothesis III**

**The existence of the determinants of turnaround feasibility enables companies to achieve successful corporate turnarounds.**

#### **Hypothesis IV**

**Non-existence of the determinants of turnaround feasibility impedes companies to achieve successful corporate turnarounds.**

## **2.14 SUMMARY**

The definitions given by the different authors and researchers on corporate turnaround have similar and common elements, namely; 1. Turnaround deals with troubled companies, featured by low financial performances, probably with losses

and are in a downturn phase of the business; 2. Turnaround deals also with the need to counter the problems of the troubled companies by taking measures, steps and corrective actions to reverse its fate into an upturn business phase; 3. That if no action is taken to turn around the company, it will most likely face financial disaster and become a failure.

Corporate turnaround also involves four strategic phases; 1. The Analysis Phase; 2. The Emergency Phase; 3. The Strategic Change Phase and 4. The Growth Phase. Among the key strategies used in corporate turnaround were Asset Reduction, Change of Management, Financial Control, Debt Restructuring / Financial, Improved Marketing, Organisational Change, Product-Market Change, Growth via Acquisition and Investment. Factors such as objectives, tactics, review methods and strategies incorporated in a turnaround plan may also vary from one stage of the turnaround to the next. Corporate turnaround is also categorised as *Non-Recoverable Turnarounds*: 1. The No Hoppers; 2. Short Term Survivors, and *Recoverable Turnarounds*: 1. Mere Survival; 2. Sustainable Recovery.

There are other key factors (i.e. determinants) identified, which can dictate the right strategy or combination of strategies to be used for a successful turnaround. They are the Causes of Decline, Severity of the Crisis, Attitude of Stakeholders, Company's Historical Strategy, Industry Characteristics, Company's Cost-Price Structure, New Competent Management, Viable Core Operation, Bridge Capital and a Realistic Turnaround Plan.

However, this was the area ignored by previous authors and researchers and a vacuum therefore exists to test the above determinants in Successful and Non Successful Turnaround Companies.

Various statistical failure identification models have also been developed for predicting corporate failures and the main techniques being used are as follows: *Univariate analysis for paired samples, Decomposition analysis, The gambler's ruin model, The catastrophe model, Subjectively determined ratios and weights, Multiple regression analysis (MRA)* and the *Multiple discriminant analysis (MDA)*. There are models developed to predict corporate turnaround using both Multiple Discriminant (MDA) and the Logit techniques. However, the drawback in using the MDA is that there are a host of statistical problems associated with it, rendering the results somewhat problematic. Whereas the Logit technique on the other hand is a powerful alternative and gives significantly better probability estimates than the MDA.

Although corporate turnaround models have been developed using the Logit technique other than the MDA, these models were based on data gathered during the Upturn phase of the turnaround and concentrated heavily on one particular determinant of corporate turnaround - Industrial Structure. The models were however, unable to predict corporate turnaround feasibility.

## CHAPTER 3

## METHODOLOGY

Chapter 3 describes the research methodology used to identify the 'troubled companies'. The research methodology used to analyse the determinants of corporate turnaround feasibility in Successful and Non Successful Turnaround Companies and to develop the empirical model for predicting corporate turnaround feasibility is also addressed in detail.

The research adopted a Descriptive study technique using a survey research method of personal interviews with a structured questionnaire. Verbal confirmations were made with the interviewees to ascertain that turnaround efforts were undertaken in reference to their organisations past financial performances. Subsequently, the confirmation process above was followed by the administration of the structured questionnaire interviews. Corporate turnaround efforts and plans were also reconfirmed during the interviews through question D13. Realistic Turnaround Plan, in the structured questionnaire. The comparative financial analysis, other than to help identify 'troubled companies' also acted as a detector of corporate turnaround.

Results from the survey were qualitatively analysed and empirically tested and modelled. The purpose for using the Descriptive study technique is to provide an accurate snapshot of some aspects of the targeted environment, in this case the determinants of corporate turnaround feasibility in Successful and Non Successful Turnaround Companies. In the Descriptive study technique, hypotheses often exist but they may be tentative and speculative. Subsequently, the usage of the Survey method through personal interviews is considered an appropriate method under the Descriptive study technique (Aaker & Day, 1990).

### **3.1 SAMPLING**

The Kuala Lumpur Stock Exchange has a total of 361 companies listed on its board. The population from which the samples were taken consisted of 'troubled companies', classified under the Consumer, Industrial, Trading & Services, Construction, Property Development, Plantations and Hotels sectors with the exclusion of those under the Finance and Extractive sectors. However, the population was not categorised into their industry groupings since this was not the intention of the research. The research intends to develop a model that can predict corporate turnaround feasibility, which can be of use to most publicly quoted companies of the Kuala Lumpur Stock Exchange. It was also foreseen that difficulties may arise in modelling the multivariate logistics regression should a particular industry sample size is small.

The research used data from these 'troubled companies' for the period between 1975 and 1995. The reason for selecting this time period was because of the high incidence of decline in profitability of a large number of listed companies due (as claimed) to the economic downturn in the mid eighties. Some schools of thought may not agree with the data of 'troubled companies' in economic downturns. On the contrary, economic downturn should not be an excuse for getting companies into trouble.

Argenti (1976, cited in Bibeauff, 1982, p. 24) states that:

A manager who blames external forces for a company's decline is like a ship's captain who has not heard the weather forecast. What does he expect, a world in which taxes and laws are not changed? This is like the captain of a ship which is grossly overloaded blaming a two-foot wave for the sinking - and, in one case, he is right; it was a two-foot wave that sank it! But what about all the other ships near by which are still afloat?.

Furthermore, a company or organisation does not exist in isolation. Organisations are born in a climate of excitement and hope: they must survive in a world of test and challenge. As in most cases the fault for declining is blamed on something other than the organisation itself since most ailing organisations have developed a functional blindness to their own defects. They are not suffering because they cannot solve their problems but because they cannot see their problems (Gardner, 1965).



## **3.2 IDENTIFYING ‘ TROUBLED COMPANIES ’**

### **3.2.1 IDENTIFYING AND CLASSIFYING THE POPULATION OR ‘ TROUBLED COMPANIES ’**

While there can be many characteristics and indicators for identifying potential ‘ troubled companies ’ for the research e.g. symptoms of decline and failures as cited by authors and researchers mentioned earlier, the practicality aspects of their usage should be first established. It would not be that easy to identify all symptoms of decline in prospective companies given that those symptoms can only be identified by getting inert details within those companies of which, at this early stage in trying to establish the identification, would render the technique as not being practical and possibly time consuming.

In his article ‘ Strategies for Corporate Turnarounds : What do we know about them ’, Hoffman (1989), evaluated seventeen studies concerning corporate turnaround strategies and found two key features which can be used to identify the potential ‘ troubled companies ’.

The two key features are turnaround cycle and profitability. He quotes that “ six studies suggest a downturn phase average of 2.8 years of decline with a range from 2 to 12.5 years. This is followed by an upturn phase in which financial performance exceeds the acceptable norm for a period of time (in the turnaround cycle). This phase averaged 3.1 years with a range of 1 to 7.7 years ” (p. 48).

He added that profitability was agreed as the yardstick for defining turnaround in the studies. The most popular indicator of profitability is Net Income and the other most frequently suggested measures are ROI and ROA. The research indicated that turnaround cycles are determined by comparing the change in the growth rate of a firm's profitability to norms such as : the firm's prior performance, industry profits, riskless government bonds or GNP. For the purpose of this research, the approach taken for identifying and classifying the population ('troubled companies') will be as follows:

### ***TURNAROUND CYCLE***

Downturn phase of 3 years

Upturn phase of 3 years

(Based on Hoffman's findings and approximated to the nearest absolute number for practical reasons).

### **3.2.1.1 IDENTIFICATION OF TROUBLED COMPANIES**

#### ***1. SHARE PRICES TRENDS INDICATOR (FINANCIAL TIMES EXTEL, C.D ROM)***

Stock prices can, to some extent be reflective of the earning power of a company although there are of course other factors such as payout ratio, market news, market pressures and sentiments that influence the stock prices. Brealey (1971) in his empirical approach towards proving the key determinants that influences stock prices indicated that stock prices are determined by the following variables;

1. Required Rate of Return or a,

2. Market Capitalised Dividends Rate or b,

3. Multiple Applied to Retentions or c.

The expanded equation would then read:

$$\text{Stock Price} = a + b \times \text{Average Dividends Per Share in 3 prior years} + c \times \text{Average Per Share in 3 prior years}$$

It can be clearly denoted from the above model for the stock price determinant that the base element in all three variables, whether required return, average dividends or average retentions, is earnings or profits.

Thus based on this argument, it can be said that one way that can help the analysis in shortlisting 'troubled companies' out of the 300 listed companies (excluding those of the Finance and Extractive Industries), would be by observing the trends in their prices via the Financial Times Extel C.D Rom database.

## **2. PROFITABILITY YARDSTICK**

Once shortlisted using the F.T Extel C.D. Rom database they were double checked by analysing their earnings before interest and tax (EBIT) and earnings after interest and tax (EAIT). At this stage it is important to observe the trends in EBIT and EAIT to see whether these trends clearly depict the Downturn and Upturn phases.

### **3. PNB-SCORE (MALAYSIAN Z-SCORE)**

The final confirmation on the status of the shortlisted 'troubled companies' was determined by using a composite failure identification model similar to the Z-Score of (Altman, 1983) which is the PNB Score (Malaysian Z-Score). Bidin (1988) stated that it was important to develop a mathematical model to describe the performance of Government companies and it was decided to name it PNB-Score model. The derivation of the model for companies operating in Malaysia was based on the concept proposed by Dr. E.I. Altman of New York university in 1968, 1977, and which was subsequently summarised in 1983.

In deriving the PNB-Score model, 42 companies were selected for the model development and these companies were divided into two groups. The first group of 21 companies consisted entirely of companies which were known to have serious financial problems. The other group consisted of the same number of companies, only these were financially sound. The companies selected were entirely Malaysian companies and which were undertaking business activities in Malaysia.

The equations derived for the companies facing problems and no problems are as follows:

$$M_p = 1.38 - 5.79xR_1 - 0.21xR_2 - 1.05xR_3 - 0.05xR_4 + 0.041xR_5 - 0.002xR_6 + 0.26xR_7$$

$$M_{np} = 9.68 + 17.42xR_1 + 4.99xR_2 + 1.95xR_3 + 0.23xR_4 - 0.05xR_5 + 0.08xR_6 + 1.94xR_7$$

R1 = Operating Profit / Total Liabilities,  
R2 = Current Assets / Current Liabilities,  
R3 = EAIT / Paid-up Capital,  
R4 = Sales / Working Capital,  
R5 = Current Assets - Stocks - Current Liabilities / EBIT,  
R6 = Total Shareholders' Fund / Total Liabilities,  
R7 = Ordinary Shareholders' Fund / Employment of Capital.

Mp and Mnp are the equations for problem and no problem characteristics respectively.  $M_{diff} = M_{np} - M_p$ . If  $M_{diff}$  is positive, the status of a company is a 'no-problem' status and if  $M_{diff}$  is negative, the status of the company is a 'problem' status.

The application of the PNB-Score model was found to be suitable for companies grouped under most industrial sectors with the exception of extractive and financial sectors. It was observed that the model is heavily oriented towards variables that denote liabilities of the company. Hence, companies with large borrowings tend to have PNB-Score biased towards 'problem' status.

The model has been tested on over 600 companies with known financial information, in which data on the performance had been stored in the computer database. The results predicted by the model were found to be consistent with the actual performance of the companies in over 90 percent of the cases considered. In cases where the model failed to predict the performance of the companies accurately, it was found that this happened only when the values of working capital or the earnings before interest and tax were very small.

### **3.2.1.2 CLASSIFYING ' TROUBLED COMPANIES ' INTO SUCCESSFUL AND NON SUCCESSFUL TURNAROUND COMPANIES**

#### ***1. RETURN ON SHAREHOLDERS FUND AND COMMERCIAL BANKS FIXED DEPOSITS RATES***

The confirmed ' troubled companies ' were further classified into Successful and Non Successful Turnaround companies by a comparative analysis of their Return On Shareholders Fund (ROSF) and the Commercial Banks Fixed Deposit Rates.

Eventually, two major turnaround situations will prevail i.e. the ' Mere Survivals ' and the ' Sustainable Recoveries '. For the purpose of this research, the two major turnaround situations will be classified as:

**Sustainable Recoveries : Successful Turnaround Companies (STC)**

**Mere Survivors : Non Successful Turnaround Companies (NSTC)**

The reason for coding the ' Mere Survivors ' as Non Successful Turnaround Companies is due to the fragile conditions of these types of turnaround situations (details as explained earlier in its definition under topic ' Classifying Corporate Turnaround '). As mentioned earlier, their sustainability in recovery is doubtful and investors will question the time value of their money.

This type of turnaround situation can also be categorised as ' Economic Failures ' or ' Economically Unsuccessful ', or companies whose realised rate of return on invested capital is significantly and continually lower than the prevailing rates on similar investments.

And as cited by Hoffman (1989) there must be a norm for comparison purposes as the company's prior performance and industrial average may not be good comparative indicators since the latter is calculated from returns of not only performing companies within the industry but also of non performing ones. The other is based on the company's very own historical performance, which is subjective and may well be below the industry's average.

While riskless returns on government bonds are good comparative norms, it may be advisable to compare with a commercial return as the norm for comparison and with this the " Fixed Deposit " rates offered by commercial banks will be used (since government bonds are difficult to obtain in the Malaysian financial market).

Thus, for the purpose of this research the ' Economically Failed ' companies or Non Successful Turnaround Companies will be those whose rate of returns (ROSF) are lower than that provided by an alternative investment - Bankers' ' Fixed Deposit '.

Undertaking the above two stage filtration process for identifying and classifying the population will eventually enable the research to close in on the actual candidates required for the survey. These will then be the population or ‘troubled companies’.

### **3.2.2 THE SAMPLE**

The ultimate sample was derived after the successful completion of both the Identification and Classification procedures. Two groupings were created, the Successful Turnaround Companies (STC) and the Non Successful Turnaround Companies (NSTC). The next step was to obtain information and data pertaining to the determinants of corporate turnaround feasibility via personal interviews with the respective Chief Executive Officers of the above groups of companies.

## **3.3 ANALYSING THE DETERMINANTS OF CORPORATE TURNAROUND FEASIBILITY**

### **3.3.1 DATA COLLECTION THROUGH PERSONAL INTERVIEWS**

As mentioned earlier, data was collected through personal interviews with the respective current Chief Executive Officers of the ‘troubled companies’. The interviews were supported by a structured questionnaire (refer to Appendix U) aimed at examining the research hypotheses, always bearing in mind the research objectives.



As cited in the research hypotheses section, the determinants of corporate turnaround feasibility are categorised (for this research purposes) into Category A and Category B. Whereas in Category A, the research is interested in establishing their state of existence (favourable or non-favourable) towards turnaround feasibility; and in Category B it is to their existence (exist or non existant).

### **CATEGORY A**

The following are the factors considered in developing the questionnaire for testing the determinants under Category A. For the purpose of variable classification, they will be identified as D1, D2, D3.....D9.

#### ***D1: CAUSES OF DECLINE***

Divided into Internal and External causes:

##### **Internal Causes**

Poor Management

Inadequate Financial Control

Financial Policy

Marketing Problem

High Cost Structure

Mistaken Acquisitions

Problem With Big Projects

Overtrading

## **External Causes**

Decline of Market

Competitive Pressure

Product Life Cycle

Other Environmental Factors

There is a direct influence in terms of the generic strategies to be used for successful turnaround by the number of decline causes. Many causes of decline require the use of multiple generic strategies and the average number of generic strategies employed in successful turnarounds are considerably greater than the average number of factors causing decline (Slatter, 1984).

However, we must bear in mind that not all 'troubled companies' are in the position of simply applying combinations of generic strategies. Availability of generic strategies may well depend on the background of the company itself. What can be implied from Slatter's statement is that if a company has fewer causes of decline, then it may need less application of generic strategies. The lower the cause of decline the better the chance of a feasible turnaround.

## ***D2: SEVERITY OF THE CRISIS***

Possibly one of the best definitions given relating to severity of crisis is by Bibeault (1982).

Severity of crisis can be divided into three levels of trouble:

- **Mild Level** or declining business position, generally featured by performance problems related to return on equity and sub-par industry performance.
- **Moderate Level** or continuing losses, generally featured by losses and potential liquidity problems.
- **Severe Level** or survival, generally featured by viability problems and possible bankruptcy.

The key characteristics of each of these levels will become the features to be captured in the questionnaire. Both mild and moderate levels are levels that have not yet reached to the point of threatening the existence and viability of the company whereas the severe level is an existence threatening level. If a 'troubled company' falls within the mild or moderate level, possibly, this would be more favourable for a feasible turnaround.

### ***D3: COMPANY'S HISTORICAL STRATEGY***

Historical strategy is concerned with the company's product market scope and how assets were deployed, and how these influence the feasibility of the generic strategies to be considered. There is a difference between these when comparing a diversified company and a non diversified company. In a diversified company two levels of strategy exist i.e. the corporate level and the business unit level. The corporate level generic strategy mix is limited to new management, strong central financial control, decentralisation and divisionalization, asset reduction, divestment, growth, acquisition and investment.

Other strategies such as cost reduction, improved marketing effort and product market reorientation are not feasible and these are strategies available only at the business unit level.

Strategies such as divestment and acquisition which are feasible at the corporate level may not be feasible options at the business unit level (Slatter, 1984).

As such, strategies available to a non diversified company are similar to the strategies available to a business unit of a diversified company. The inference we can make from the point above is that the more diversified the company, the greater the generic strategies available for setting a feasible turnaround. A non diversified company's generic strategies are limited.

#### ***D4: INDUSTRY CHARACTERISTICS***

Porter (1985) had cast a very high analytical insight on the issue of industry characteristics. He quotes that:

The collective strength of the five competitive forces determines the ability of firms in industry to earn, on average, rates of return on investment in excess of the costs of capital. The strength of the five forces varies from industry to industry and can change as an industry evolves. The result is that all industries are not alike from the standpoint of inherent profitability. In industries where the five forces are favourable, such as pharmaceuticals, soft drinks and database publishing, many competitors earn attractive returns. Not in industries where pressure from one or more of the forces is intense, as in rubber steel and video games, few firms command attractive returns, despite the best efforts of management. Industry profitability is not a function of what product looks like, or whether it embodies high or low technology, but of industry structure. Some very mundane industries such as postop meters and grain trading are extremely profitable, while the more glamorous high technology industries such as personal computers and cable television are not profitable for many participants, (p. 4).

However, for the purpose of the questionnaire design, the five forces in industry characteristics analysis are further elaborated and broken down according to Slatter's (1984) analogy of industry characteristics.

The breakdown is as follows:

#### **Nature Of Product**

The more differentiated and less price-sensitive the product, the better will the product-market focusing be. Consumer based products have shorter lead time to increase sales than industrial based products.

### **Market Segmentation**

Highly segmented market will enable the company to develop a focused and defensible product-market strategy for turnaround due to the varying customer preferences than lowly segmented market.

### **Relative Size And Strength Of Competitors**

Fragmented industry will enable the company to develop successful recovery strategies than industry dominated by few powerful competitors or in an industry characterised by global competition based on technological and cost leadership strategies.

### **Exit Barriers**

Low exit barriers pose favourable condition for implementing asset-reduction strategy as against high exit barriers. An example of a high exit barrier are specialised assets that are not easily disposable.

### **Entry Barriers**

High entry barriers pose a favourable condition to keep the intensity of competition intact as against low entry barriers. Examples of high entry barriers are high capital intensity, patented or licensed manufacturing or production process and government controlled and regulated industries.

### **Rate Of Technological Change**

Slower rate of technological change favours the turnaround company. It gives the company feasibility of implementing viable product-market and investment strategies. High rate of change forces the company to acquire more financial resources to bring it to a competitive position.

### **Threat of Retaliation**

Where powerful suppliers are present, the turnaround company has less bargaining power and lesser chance of achieving substantial price reduction in raw material and component costs (vice - versa) and longer credit period. A powerful supplier situation exists when the number of suppliers is very few.

### **Bargaining Power of Customers**

Where powerful customers are absent, the turnaround company has more chance of increasing prices (vice - versa). Powerful customers are known to also affect the marketing mix of companies. Powerful customers just like powerful suppliers exist when their number is few and they hold the main bulk of the purchase.

### **Industry Growth Rate**

The different stages of industry growth affect the usage of recovery strategies. The company's profit potential and hence its recovery potential, in part is a function of the industry it is in.

The chance of corporate recovery in an industry which is declining and with low profit potential must be lower than that in an industry growing with profit potential, as it may be easier to attract additional finance for investment and to implement an asset reduction strategy of divestment, because there are other companies willing to enter the growing industry.

### ***DS: COMPANY'S COST-PRICE STRUCTURE***

Strategies to obtain short term profit improvement are dependent to a large degree on the company's cost-price structure at the time of crisis. This is only determined in part by the industry's characteristics and in part by the causes of decline.

Cost-price structure of the firm is extremely important in determining whether management should focus short term attention on cost-reduction strategies, marketing improvement strategy, or both, to achieve a rapid improvement in profit margins.

A company with high cost structure depicted by the high percentage of cost over sales (given the volume of sales is constant) as compared to the industry will face tougher times in trying to achieve a favourable turnaround (especially when the industry characteristics are not attractive) as compared with a company with lower cost structure.



## ***D6: COMMITMENT OF SHAREHOLDERS***

Commitment by shareholders is the willingness of the shareholders to put proper authority in the hands of the rescue specialists, new leadership or new management and to support the plan to turnaround the company (Davis, 1988). In the absence of crisis, new management usually has fewer constraints determining the recovery strategy but this may not be the case in the presence of crisis, where management action may take place under the watchful eyes of the board and the principal shareholders (Slatter, 1984). However, if the rescuing concern (shareholders) is not willing to give proper authority and confidence to the new leadership and management, which in effect means handing over virtually absolute power, then it should not have started the exercise in the first place.

Nothing destroys turnaround more effectively than an attempt to run them by a committee and having a board of directors worrying about every penny of its investment (Davis, 1988).

What can be inferred from the above is that for a turnaround to be favourable, shareholders must give proper and absolute power and put confidence in the new leadership / management to implement the strategies deemed fit for the turnaround.

#### ***D7: COMMITMENT OF BANKERS***

The problem with bankers is significant in most turnaround cases especially when the troubled company is highly leveraged. It is critical to understand their attitude, expectations and commitments. Bankers will, most obviously, be concerned about the state of the company and the safety of their loan to it. Or they may be getting nervous and ready to cut or 'pull the plug'. Bankers' commitment is very important for a turnaround process to be favourable. Their commitment may appear from supporting the rescue plan, rescheduling the loan, giving leeway in terms of time for interest and principal repayments to virtually helping management to decide which generic strategies should be given the most attention.

#### ***D8: COMMITMENT OF CREDITORS***

While possibly the troubled company is able to obtain commitment from its bankers, it does not stop the creditors from taking harsh actions on the company such as foreclosure, petition for involuntary liquidation and suing for bankruptcy.

Thus, this poses another challenge that the new leadership / management must attend to. Commitment from creditors in a favourable turnaround may include things like consensus towards forming of the creditors committee, rescheduled payments or leeway in terms of time period and minimum amount for payments to continuing the provision of supplies.

### ***D9: COMMITMENT OF EMPLOYEES***

Getting support from the shareholders, bankers and creditors is simply not enough for a favourable turnaround. The company like any organisation is made up of workers. In most troubled companies the damage may have already occurred. Morale may already be at its lowest ebb. Unless the basic motivation of the people changes from a defeatist attitude to one of confidence, it is doubtful that the company can stabilise its base and return to growth (Bibeault, 1982). Motivating and getting their confidence back are steps to getting their commitment. Employees must not only believe in what the new management is trying to do but must also feel to a certain degree that they are participants in ensuring the success of the turnaround process.

Their commitment can be detected from the incidence of employee turnover, accepting more responsibility and probably longer working hours with the same or less pay to even pay cuts.

### **CATEGORY B**

The following are the proposed considerations to be taken in account when developing the questionnaire for testing the determinants under Category B. For the purpose of variable classification, they will be identified as D10.....D13.

## ***D10: NEW COMPETENT MANAGEMENT***

As Bibeault (1982) quotes:

In more than seven out of ten cases, management has to be replaced because they either cannot cope with the problem or they themselves (or least the CEO) are the problem. Those managements that do hold on do so because the problems are recognised as external, they recognise the problems early enough, or in rare cases, they take bold action. Existing management is a problem because it lacks credibility and it cannot cope with the job at hand. It lacks credibility because it was the cause of the problem. It did not recognise the problems early enough, and it didn't want to do anything about them. It cannot cope with the difficult step of firing lots and lots of people, an action which is almost inevitable in a serious turnaround. It doesn't matter whether you use an axe or scalpel, the cutting back of unprofitable operations is very difficult for existing management for emotional reasons, (p. 94).

In a company where the top person has a strong ownership position, top management change can take place but in the form of the change of heart, new thrust, or an ability to make the tough decisions to save the business. The leader can also be an insider and does not necessarily have to be an outsider. However, as Robert Brown points out (1978, cited in Bibeault, 1982) "there is too much in-house fellowship and you need a bloody bastard to go in and do it" (p. 95).

How then can we detect the existence of a new competent management? Does having a new CEO or management team mean that a new competent management is in existence?

Both Bibesult (1982) and Davis (1988) have cited certain key characteristics of new competent management:

- **Able to identify ' sore spots ' / problems**
- **Able to fire a lot of people**
- **Not people oriented but people user**
- **Makes decision by itself**
- **Achievement and objective driven**
- **Action oriented**
- **Self confident**
- **Innovative and creative**
- **Hands - on approach**
- **Requires high standard of performance and evaluation**
- **Makes bold, decisive moves**
- **Making use of absolute power**
- **Industry experienced person**
- **Information oriented**
- **Exercises tight controls**
- **Inconsistent**
- **High level of stress tolerance**

There are altogether 17 key characteristics that can be used to detect the existence of a new competent management. The higher the number of key characteristics scored, the more favourable it will be to prove the existence (actual score and cut-off point will be discussed in the next topic - measurement).

### ***D11: VIABLE CORE BUSINESS***

The existence of an economically viable core business to stabilise the company and possibly finance the turnaround is important. Frank Grisanti says that (1978, as cited in Bibeault, 1982) " you got to have a business that is worth perpetuating. Without a viable core, turnaround is very difficult, if not an impossible task. Some turnarounds are accomplished by stripping out the old core business, but very few succeed in this way " (p. 115).

Bibeault (1982) adds that " the turnaround itself normally means shrinking to those segments of the business that can provide positive cashflow and a platform to stabilise the company " (p. 115). A similar fact was cited in this proposal on the technique of ' contraction ' and ' expansion ' used in corporate turnaround by Taylor (1982).

Bibeault (1982) also cited five key characteristics to determine whether a viable core business exists in the first place or not.

The core business must have:

- **Positive Cashflow**
- **Sales Volume 'Umbrella'**
- **Competitive Equipment**
- **Competitive Location**
- **Awareness Of Changes (recent, past or near future)**

The core business must bear the five key characteristics to enable what is termed as ' the existence of a viable core business ' .

### ***D12: BRIDGE CAPITAL***

Bridge capital depends on both external support available to the company and the internal ability to raise funds to weather and finance the turnaround process.

Bridge capital can come from the following parties:

- **Shareholders through advances or new right issues**
- **Management through sale of assets**
- **Bankers through ' bridge credit ' for working capital**
- **Creditors through continuous support by supplying material at credit**

Availability of any of the above or combinations of them signals the existence of bridge capital.

### ***D13: REALISTIC TURNAROUND PLAN***

There is no way a turnaround process is to be exercised without a proper turnaround plan and certainly a turnaround leader will not take the risk by doing the contrary or only by simply using his intuition. In Bibeault's survey (1982) (refer to Table 10), seven out of ten cases of turnaround moves are ' at first ' based on intuitive action with either no plan or a very informal plan.

However, at some point in eight out of ten cases, the formal plan was utilised and five of ten of these formal plans came after the emergency stage. Having a formal plan may not be what key stakeholders are seeking for especially the bankers, but a realistic and workable turnaround plan would be more appropriate.

Table 10

The Major Turnaround Moves Accomplished According to A Formal Plan Or Mostly By Intuitive Management Action

Response	%
Intuitive action first	19.3
Intuitive action followed by formal plan	50.6
Formal plan followed by implementation	30.1
Total	100

Source: Bibeault, D.B. ( 1978 ). Survey of eighty one turnaround company Chief Executives (p. 372).

And like any other corporate or strategic plan, the turnaround plan must have the following key attributes:

- 1. Objectives or Targets**
- 2. Strategies to be used**
- 3. Tactics or details on how strategies will be implemented**
- 4. Review and control system**



Whether the plan is realistic and workable will depend not only on the factors above but also the evolution of these factors according to the turnaround phases.

As mentioned earlier, data collection for the determinants of corporate turnaround feasibility are to be used for testing the determinants existence and state of existence in Successful and Non Successful Turnaround Companies.

### **3.4 MEASUREMENTS**

To have precise measurement in the research it is important that the conceptual and operational definitions and system of consistent rules for assigning numbers or scores be established.

#### **3.4.1 CONCEPTUAL AND OPERATIONAL DEFINITIONS**

There will be two conceptual and operational definitions given the existence of 2 categories i.e. Category A and Category B.

##### **CATEGORY A**

Conceptual definition for the variables will be "the state of their existence".

Operational definition for the variables will be whether the state of their existence is "favourable" or "non-favourable".

## **CATEGORY B**

Conceptual definition for the variables will be the “existence”. Operational definition for the variables will be whether they “exist” or “do not exist (non existant)”.

### **3.4.2 SCALES OF MEASUREMENT**

The nominal and interval scales will be used in the measurement of the variables. Application of the nominal scale in research measurement is generally for the purpose of coding questionnaire responses in which the data collected place the respondent into a particular category. For example, to facilitate tabulation and computer / mathematical analysis (Weiers, 1988). The nominal scale will be applied due to the nature of certain variables whose measurements are categorical (dichotomous) in feature.

The interval scale on the other hand will arrange the responses according to their magnitude and distinguish this ordered arrangements in units of equal interval. It will also allow the usage of a broad range of statistical methods for the description and analysis of information collected.

### **3.4.3 TWO LEVELS OF MEASUREMENT**

At level 1, the nominal (dichotomous) scale and the interval scale with magnitude will be used to measure the variables.

Subsequently, variables will be classified into Favourable or Non Favourable state of existence and Exist or Do Not Exist at level 2 using (where applicable) arbitrary cut-off points. There are nine variables in Category A and four variables in Category B. In order to smoothen the process of measuring and variable identification in the questionnaire, the nine variables in Category A are coded as D1, D2, D3.....D9 and the four variables in Category B are coded as D10....D13.

## **NOMINAL SCALE VARIABLES**

### **Level 1**

Categorising responses to questionnaires into dichotomous scale e.g. Diversified / Non Diversified, Higher / Lower, Yes / No ..etc. Variables under this measurement are D3, D5, D8.

### **Level 2**

Classifying variables into Favourable or Non Favourable state of existence. Variables will be classified into Favourable or Non Favourable state of existence by the group types they fall under.

## **INTERVAL SCALE VARIABLES**

### **Level 1**

Arranging responses to questionnaires according to their magnitude. Each variable will have its own scale of magnitude. Variables under this measurement are D1, D2, D4, D6, D7, D9, D10, D11, D12 and D13.

### **Level 2**

Classifying variables into Favourable or Non Favourable state of existence and Exists or Non Existant. All variables will have arbitrary cut-off points to be used for classification purposes.

## **3.4.4 MEASURING THE VARIABLES**

### **VARIABLE D1: CAUSES OF DECLINE**

As mentioned earlier, this variable will be measured using the frequency of occurrence and an arbitrary cut-off point. And as implied by Slatter (1984) the fewer the causes of decline the better the chances for a feasible turnaround.

The arbitrary cut-off point will be 4 causes of decline. Meaning, occurrences below or equal to 4 causes for decline fall under the category of Favourable and beyond which classifies them under Non-Favourable.

#### **VARIABLE D2: SEVERITY OF CRISIS**

Falling under mild and moderate level of crisis or trouble will classify it under Favourable. Falling under severe level of crisis or trouble will classify it under Non-Favourable.

#### **VARIABLE D3: COMPANY'S HISTORICAL STRATEGY**

If the company is diversified then it will fall under the Favourable classification. If the company is not diversified then it will fall under the Non-Favourable classification.

#### **VARIABLE D4: INDUSTRY CHARACTERISTICS**

This variable deals with the frequency of occurrence of Favourable and Non-Favourable at each of the ten industry characteristics. Ultimately, whether the company is classified as Favourable or Non-Favourable will depend on the magnitude of frequency of occurrences of these factors. For example, if the company scores more than 5 occurrences (the arbitrary cut-off point) of Favourables, out of ten industry characteristics, say 6 or 7 Favourables, then the ultimate classification will be under Favourable. Otherwise it will fall under Non-Favourable.

#### **VARIABLE D5: COMPANY'S COST PRICE STRUCTURE**

Higher or equal cost structure (% of cost over sales) as compared to the industry will classify it under Non-Favourable. Lower or equal cost structure (% of cost over sales) as compared to industry will classify it under Favourable.

#### **VARIABLE D6: COMMITMENT OF SHAREHOLDERS**

The variable deals with 3 types of commitment level. Scoring type no. 2 will classify it under Favourable whilst scoring type no. 1 or 0 will classify it under Non-Favourable.

#### **VARIABLE D7: COMMITMENT OF BANKERS**

The variable deals with 4 types of commitment level. Scoring type no. 2 or 3 classified it under Favourable, whilst scoring type no. 1 or 0 classifies it under Non-Favourable.

#### **VARIABLE D8: COMMITMENT OF CREDITORS**

Committed creditors (Yes) will classify it under Favourable. Non commitment by creditors (No) will classify it under Non-Favourable.

#### **VARIABLE D9: COMMITMENT OF EMPLOYEES**

The variable deals with 4 features of employees commitment. Scoring  $\geq 3$  (Yes / N.A) will classify it under Favourable whilst scoring  $< 3$  (Yes / N.A) will classify it under Non-Favourable.

#### **VARIABLE D10: NEW COMPETENT MANAGEMENT**

The higher the frequency score of the key characteristics, the more favourable the prove for existence will be. The arbitrary cut-off point will be at 10. Anything equal or below 10 characteristics will classify it under Non-Existant. Above 10 characteristics will classify it under Exists.

#### **VARIABLE D11: VIABLE CORE BUSINESS**

There are five key characteristics under this variable. The arbitrary cut-off point is 4 key characteristics (since the element of location is not crucial in all businesses e.g. Plantations, Construction ..etc. Less than 4 key characteristics will classify it as Non-Existant whilst greater or equal to 4 key characteristics will classify it as Exists).

#### **VARIABLE D12: BRIDGE CAPITAL**

There are 4 main sources of ' bridge capital '. The arbitrary cut-off point is 2, since having more than one source will give an alternative source should the other fail. Less than 2 sources of ' bridge capital ' will classify it as Non-Existant whilst two or more sources will classify it as Exists.

### **VARIABLE D13: REALISTIC TURNAROUND PLAN**

Occurrence of the 4 key characteristics for a realistic and workable turnaround plan and their evolution track will classify it as Exists and non occurrence or insufficient occurrence of the 4 key characteristics and their evolution track will classify it as Non-Existant. The arbitrary cut-off point is equal to 4 key characteristics for Exists whilst less than 4 key characteristics will classify it as Non-Existence.

## **3.5 DATA COLLECTION PROCEDURE**

Two types of data were used in the research:

### **PRIMARY DATA**

To be collected from structured questionnaire interviews with the respective CEOs of the corporations concerned.

### **SECONDARY DATA**

To be collected from the following sources:

- Accounting Firms
- Securities Firms
- Kuala Lumpur Stock Exchange (KLSE)
- Ministry Of Trade
- Government Publications



- Chambers Of Commerce
- Malaysian Institute Of Economic Research
- Federation Of Malaysian Manufacturers
- Statistical Publications

### **3.6 DATA ANALYSIS**

The data collected especially from the questionnaire interviews was analysed as follows:

The analysis used the qualitative approach (cross tabulation and frequency observations) to detect the occurrence of, and identify, the Existence and the State of Existence of each of the determinants in Successful Turnaround Companies and Non-Successful Turnaround Companies.

### **3.7 DEVELOPING THE CORPORATE TURNAROUND FEASIBILITY MODELS**

The objective of Chapter 6 of the research is the development of an empirical model consisting of the key success factors or determinants of corporate turnaround to predict the feasibility of corporate turnaround.

The development of such a model will not only satisfy one of the main objectives of the research but can also contribute to a new approach and knowledge.

It can also be used as one of the tools to facilitate the making of the right decisions in predicting the feasibility of corporate turnaround so as to reduce costly errors in terms of money, man-hours, psychological turmoil, time and wasteful resources.

The multivariate logistic regression model in which the dependent variable is associated with dichotomous (binary) qualitative choice will be used to develop the empirical model. The rationale for employing the multivariate logistic regression model will be dealt with later under ' Model Basic Assumptions '. Dichotomous or binary qualitative choice models are not new and have been used by many researchers before on different occasions.

Examples of such application include the " Econometric Analysis Of The Market for General Obligation Municipal Bonds " by Rubinfeld (1972), " Probing The Bonds of Conventional Wisdom (Voting Behaviour) " by Aldrich and Cnudde (1975), " The Effects Of Registration Laws On Voters Turnout " by Rosenstone and Wolfinger (1978), " Shadow Prices, Market Wages And Labour Supply " by Fair and Jaffe (1974) and many others.

The use of nominal dichotomous (binary) qualitative choice technique has been extended into the development of failure / bankruptcy predicting models using the multivariate technique.

Edmister (1972) in his work " An Empirical Test Of Financial Ratio Analysis for Small Business Failure Prediction " analysed 19 financial ratios including most of those found to be important in previous failure prediction studies. He employed a zero - one regression technique with the intention of limiting the effect of multicollinearity in the regression. Rather than having the independent variables enter in their raw ratio form, he transformed each ratio into qualitative, zero - one variables based upon arbitrary cut-off points.

For example, if the ratio of annual funds flow (defined as the Net Profit before taxes plus Depreciation) to Current Liabilities was less than 0.05, the ratio was assigned a value of one; otherwise it was assigned a value of zero. The Classification results all have an overall accuracy of at least 90%. For example, using  $Z \geq 0.530$  to determine non-failure and  $Z \leq 0.530$  for failure, all of the failed firms and 86% of the non failed firms were classified correctly for an overall accuracy rate of 93%.

The technique administered by Edmister above will be basically similar to the one the research is attempting to do using the Logit model. However, instead of transforming each independent variable (in this case each key success factor or determinant of corporate turnaround feasibility) into nominal dichotomous (0, 1) qualitative variables, only two variables (one is the dependent and the other an independent variable) will be in this form and the rest will still be in their interval format.

### **3.7.1 INITIAL VARIABLES FOR MODELLING**

There will be altogether 8 initial variables to be included for the modelling purposes.

The details of the variables are listed as follows:

D1 - Causes Of Decline

D2 - Severity Of Crisis

' D6 ' - Commitment Of Stakeholders

D10 - New Competent Management

D11 - Viable Core Business

D12 - Bridge Capital

D13 - Realistic Turnaround Plan

D14 - Observed Feasible (Successful Turnarounds) / Non Feasible  
(Non Successful Turnarounds)

It can be observed from the above that the 3 variables (D3, D4 and D5) have been excluded from the modelling since it was found earlier in Chapter 5 that there are no significant differences between the STC and the NSTC as far as these variables are concerned. Their presence is of no benefit and may affect the discriminant power of the ultimate model.

The variable ' D6 ' i.e. Commitment Of Stakeholders is a composite score of the determinants D6 (Commitment Of Shareholders), D7 (Commitment Of Bankers), D8 (Commitment Of Creditors), and D9 (Commitment Of Employees).

The transformation of D6, D7, D8 and D9 into a composite score variable ' D6 ' is inevitable in view of the total available observations / cases (which in this case is 86 observations / cases) when the STC and the NSTC are paired for modelling purposes and the need to comply to the rules in terms of the number of required observations / cases for regression model building.

Neter, Kutner, Nachtsheim and Wasserman (1996) state that " it is important, however, that the model building data set be sufficiently large so that a reliable model can be developed. The number of cases should be at least 6 to 10 times the number of variables in the pool of predictor variables " (p. 437).

In addition, the variable D14 is included for the modelling purposes, since this variable contains the observed Feasible (Successful Turnarounds) and Non Feasible (Non Successful Turnarounds) for the corresponding cases in the independent variables. In fact D14 is the dependent variable for the model.

Subsequently, the variables will be recoded as the followings (refer to Table 11) for the ease of identification purposes in the computer modelling process.

Table 11

Recoded Variables

---

Former Codes	New Codes
D1 - Causes of Decline	COD
D2 - Severity of Crisis	SOC
' D6 ' - Commitment of Stakeholders	COST
D10 - New Competent Management	NCOM
D11 - Viable Core Business	VCB
D12 - Bridge Capital	BCAP
D13 - Realistic Turnaround Plan	RTP
D14 - Observed Feasible (Successful Turnarounds) / Non Feasible (Non Successful Turnarounds)	FNF

### 3.7.2 SCALES OF MEASUREMENT

The types of measurement scales that will be deployed in Chapter 6 of the research are in tandem with the employment of the multivariate logistic regression model i.e. the nominal and the interval scales.

#### NOMINAL SCALE VARIABLES

Variables that are in the nominal scale with dichotomous (0, 1) qualitative choice will be D2 or Severity Of Crisis. D2 was originally a categorical determinant, transformed into binary (0, 1) using the arbitrary cut-off point mentioned earlier. The other variable that is in nominal scale is D14 or the Observed Feasible (Successful Turnarounds) / Non Feasible (Non Successful Turnarounds).

## **INTERVAL SCALE VARIABLES**

Variables that are in the interval scales with numeric values will be D1 (Causes Of Decline), ' D6 ' (Commitment Of Stakeholders), D10 (New Competent Management), D11 (Viable Core Business), D12 (Bridge Capital) and D13 (Realistic Turnaround Plan).

### **3.7.3 THE MULTIVARIATE LOGISTIC REGRESSION MODEL**

Norusis (1994) explains that:

A variety of multivariate statistical techniques can be used to predict a binary dependent variable from a set of independent variables. Multiple regression analysis and discriminant analysis are examples of two related techniques. However, these techniques pose difficulties when the dependent variable can have only two values - binary or dichotomous. When the dependent variable is binary or dichotomous, the assumptions necessary for hypothesis testing in regression analysis are necessarily violated i.e. the distribution of the errors must be normal and the predicted values are not interpreted as discrete probabilities within a constrained interval of 0 and 1. No doubt that the linear discriminant analysis allows direct prediction of group category, but the assumption of multivariate normality of the independent variables and the equal variance-covariance matrices in the two groups is necessary for the prediction rule to be optimal (p.1).

The logistic regression model requires fewer assumptions than the discriminant analysis; and even when the assumptions required for discriminant analysis are satisfied, logistic regression still performs well (Hosmer and Lemeshow, 1989).

However, the application of the multivariate logistic regression model, like any other non linear regression model must satisfy certain basic assumptions for the appropriateness of its usage.

### 3.7.4 APPLICATION ASSUMPTIONS

Guidelines for the application assumptions of the multivariate logistic regression model as stated by authors like Aldrich and Nelson (1984) and Neter, Kutner, Nachtsheim and Wasserman (1996) can be summarised as follows:

1. The dependent variable is usually a binary response or dichotomous response variable, taking on the values 0 and 1.
2. Non normal error terms: For a binary 0, 1 response variable (dependent variable), each error term  $\epsilon_i = Y_i - (\beta_0 + \beta_1 X_i)$  can take on only two values;

a. When  $Y_i = 1$ :  $\epsilon_i = 1 - \beta_0 - \beta_1 X_i$

b. When  $Y_i = 0$ :  $\epsilon_i = -\beta_0 - \beta_1 X_i$

The assumption that  $\epsilon_i$  are normally distributed as in the normal error regression model is violated.



A test for non normal error terms will be the Histogram Plot of the errors (unstandardized residuals) with a normal curve superimposed and the Normal Probability and Detrended Normal Probability Plot of the deviances.

3. Constraints on response function: The response function represents probabilities when the outcome variable is a 0, 1 indicator variable. The mean responses should be constrained as follows;

$$0 \leq E\{Y\} = \pi \leq 1$$

The above will be tested by plotting the Histogram (with the normal curve superimposed) of the logistic response function. Confirmation on its asymptotes at 0 and 1 will automatically satisfy the constraints above.

4. Sigmoidal Response Function: The logistic response function must be curvilinear in the shape of either a titled S or a reverse titled S since its response variable (dependent variable) is binary. The above will be tested by plotting the logistic response function against the linear combination values to confirm its shape.

### **3.7.5 MODEL BUILDING**

The parameters of the logistic regression model will be estimated using the Maximum - Likelihood method, where the coefficients that make the observed results most 'likely' are selected.

Since the logistic regression model is non linear, an iterative algorithm (Gauss & Fisher Method) is necessary for parameter estimation and will be supplemented by ' starting value  $\theta_0$  for the parameter vector ' and by a ' convergence criterion ' to stop the process.

The multivariate logistic regression can be written as:

$$\text{Prob ( event )} = \frac{e^z}{1 + e^z}$$

or

$$\text{Prob ( event )} = \frac{1}{1 + e^{-z}}$$

where  $Z$  is the linear combination;  $Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p$

Note: The SPSS 6.1 statistical software package for personal computers will be used for the logistic regression model building and statistical analysis. It is also important to note here that not all statistical tests as implied by numerous books on logistic regression are available in all statistical software.

The available statistical tests for multivariate logistic regression in SPSS 6.1 is reasonably good enough for the purpose of logistic regression model building and diagnostics. The following procedures and statistical tests are accordance to the SPSS 6.1 statistical software package for modelling and diagnosing multivariate logistic regression models.

### **3.7.6 SELECTING PREDICTOR (INDEPENDENT) VARIABLES: ENTER, FORWARD AND BACKWARD CONDITIONAL STEPWISE PROCEDURE**

The Enter procedure, known also as the *all-possible-regressions procedure* calls for considering all possible subsets of the pool of potential predictor variables and identifying for detailed examination a few "good" subsets to eventually find the "right" model. It is a manual procedure where variables are entered into and removed from the model at will.

Forward Conditional Stepwise procedure variable selection techniques can be used by starting a model that contains only the constant and at each step the variable which is significant at 5% (the chosen cut-off value : 0.05) is entered into the model. The variables will be entered and examined to see if they meet the removal criteria. The process will continue until either no more variables meet entry or removal criteria or the most 'likely' model is encountered.

The Backward Conditional Stepwise procedure almost the opposite of the Forward Conditional Stepwise procedure can be used by starting a model that contains all of the variables, then at each step, variables are evaluated for entry and removal. The score statistic will be used to determine whether variables should be added to the model and as in the Forward Conditional Stepwise procedure, the Wald, loglikelihood ratios or the conditional score statistic can be used to select variables for removal.

Both Forward and Backward Conditional Stepwise procedure are automatic search procedures with the attempt to identify a single regression model as the "best". These automatic procedures are not without their pitfalls.

According to Neter, Kutner, Nachtsheim and Wasserman (1996):

The identification of a single regression model as "best" by the automatic search procedures is a major weakness of these procedures. Experience has shown that each of the automatic search procedures can sometimes err by identifying a poor regression model as "best". In addition, the identification of a single regression model may hide the fact that several other regression models may also be "good" (p. 348).

In view of the above, the study proposed the usage of the Enter procedure as the base procedure for finding the "right" model and to reaffirm the results with the Forward and Backward Conditional Stepwise procedures.

### **3.7.7 TEST STATISTICS**

#### ***CLASSIFICATION TABLE***

Used to assess how well the logistic regression model fits by comparing the predictions to the observed outcomes through a number of correctly classified and misclassified observations.

#### ***HISTOGRAM OF ESTIMATED PROBABILITIES***

Used to assess how well the logistic regression model fits by observing how the number of cases are correctly designated to their respective groups. If the logistic regression model successfully distinguishes the two groups, the cases for the STC should be to the right of 0.5 and the cases for the NSTC should be to the left of 0.5. The more the two groups cluster at their respective ends of the plot, the better.

#### ***EXPONENTIAL BETA (EXP ( B ))***

Used to test the influence in the amount of change in the dependent variable for a one unit change in the independent variable or the odds of an event occurring as in logistic regression. The EXP (B) will indicate the factor of increase due to the change of the ratio of the odds of an event occurring by the increase in the value of an independent variable from 0 to 1.

### **WALD STATISTIC**

Used for testing whether a variable coefficient is 0, using a chi-square distribution.

It is the square of the ratio of the coefficient to its standard error ;

$$\text{WALD} = \frac{B_i}{SE_i}$$

An almost similar test to the Asymptotic T Ratios, the larger the Wald Statistics the more significant the coefficient is from 0 (using significance level of 0.05).

### **PARTIAL CORRELATION (R- STATISTIC)**

Used for testing the contribution of individual variable in the logistic regression model. R can range from -1 to 1. Positive values indicate that if the variable increases in value, so does the likelihood of the event occurring and if R is negative, the opposite is the case. Small R values indicate that the variable has small partial contribution to the model. The equation for the R statistic is;

$$R = \pm \sqrt{\text{wald} - 2K / -2LL}$$

### **GOODNESS OF FIT (- 2 LL)**

Used to measure how well the estimated model fits the data. Models of good fit result in high likelihood of the observed results and translate to a small value for -2 LL.

### ***MODEL CHI-SQUARE AND IMPROVEMENT CHI-SQUARE***

Two other tests that attach themselves with the -2 LL test are the model chi-square and the improvement chi-square tests. The model chi-square test is actually the difference between -2 LL for the model with only the constant and -2 LL for whatever the current model is. It tests the null hypothesis that the coefficients for all the independent variables in the current model, except the constant, are 0. It is comparable to the overall F test for other regression models. The improvement chi-square test is the change in -2 LL between successive steps of building the model. It tests the null hypothesis that the coefficients for the independent variables added at the last step are 0. It is comparable to the F change test in other regression models.

### ***LIKELIHOOD RATIO TEST (LR)***

An alternative to the WALD statistic and used as a removal criteria by estimating the model with each variable eliminated in turn in relation to the change in the loglikelihood when each variable is deleted. Based on the chi-square distribution, it tests the null hypothesis that the coefficients of the terms removed are 0.

### ***SCORE STATISTIC***

It is an alternative to the Wald and the Likelihood Ratio test (LR) and test the hypothesis that a coefficient is 0. However, unlike the Wald statistic, it does not require the explicit computation of parameter estimates.

### ***RESIDUAL CHI-SQUARE STATISTIC***

Used to test the null hypothesis that the coefficients for all the variables not in the model are 0. It is calculated from the above Score statistic. It is comparable to the improvement chi-square test.

### **3.7.8 MODEL DIAGNOSIS**

Model diagnosing is important once the model has been built to examine the adequacy of the resulting model. There are several comparable diagnostic tools in the logistic regression as in the linear regression, and they are as follows:

#### ***RESIDUAL***

It is the difference between the observed probability of the event and the predicted probability of the event based on the model and is denoted by:

$$E_i = P_i - \hat{P}_i$$

The smaller the residuals the better the fit between the observed and the predicted probability of the event.



### ***STANDARDISED RESIDUAL***

It is the residual divided by an estimate of its standard deviation and is denoted by:

$$Z_i = \frac{e_i}{\sqrt{P_i(1 - P_i)}}$$

The smaller the standardised residuals the better the fit between the observed and predicted probability of the event.

### ***DEVIANCE***

It is the square root of  $-2 \log (P_i)$  and attaching a negative sign if the event did not occur for that case and is denoted by:

$$DEV = - \sqrt{-2 \log (P_i)}$$

Large values for deviance indicate that the model does not fit the case well.

### ***STUDENTIZED RESIDUAL***

It is the change in the model deviance if the case is excluded. Discrepancies between the deviance and the studentized residuals may identify unusual cases and is denoted by:

$$r_j = \frac{e_j}{S\{e_j\}}$$

### **LOGIT RESIDUALS**

It is the residual for the model if it is predicted in the logit scale and is denoted by:

$$\text{Logit } e_j = \frac{e_j}{P_i(1 - P_i)}$$

### **LEVERAGE**

Used for detecting observations that have a large impact on the predicted values.

The leverage values are bonded by 0 and 1, in fact they should not exceed 1 and their average value is  $\frac{P}{n}$  (where  $P$  is the number of parameters in the model including the constant and  $n$  is the sample size).

The leverage is denoted by:

$$\sum_{i=1}^h h_{ii} = P$$

The leverage value  $h_{jj}$  is considered large if it is more than twice as large as the mean leverage value.

### **COOK'S DISTANCE**

It measures the influence of a case and indicates how much deleting that case affects not only the residual for that case but also the residuals of the remaining cases and is denoted by:

$$D_i = \frac{Z_i^2 \cdot h_i}{(1 - h_i)^2}$$

### **DFBETA**

It measures the change in the logistic coefficient when a case is deleted from the model and is denoted by:

$$DfBeta (B_{1(i)}) = (B_{1(i)} - B_1)$$

A case is considered influential if the absolute value of DFBETAS exceeds 1.

### **3.7.9 MODEL VALIDATION**

The multivariate logistic regression model, like other regression models, must be checked in terms of the appropriateness of the variables selected, the magnitudes of its coefficients, accuracy and predictive ability through a model validation process. There are several available model validation processes, as indicated below. However, the decision to use any one of the processes is dependent on several issues.

#### **NEW DATA SAMPLE**

The best and simpler approach of model validation is through the collection of new data for testing the applicability of the model on new data. However, this is not always easy to do because of the problems of limited number in new 'troubled companies'. This difficulty is also found in observational studies and even in controlled experiments.

#### **SAME DATA SAMPLE**

The same data sample used in the construction of the logit model could be used for validation of the model. This technique was employed by Arkraejdachachai (1993) in his logistic bankruptcy model. However, the setback of this technique was that it suffered from an upward bias problem.

## **DATA SPLITTING TECHNIQUE**

In the data splitting technique for model validation, the data sets are split into two sets. The first set, called the model building set, is used to develop the model and the second data set called the validation or prediction set, is used to evaluate the reasonableness and predictive ability of the model. The validation set is used in the same way as when new data are collected. Ideally, the data sets are often split equally into model building and validation sets. However, if the entire data set is not enough to make an equal split, the validation set will need to be smaller than the model building data set.

As mentioned earlier, the number of observations / cases for the model building data set should be at least 60 to 100 if 10 independent (predictor) variables are in the pool. In the case of 7 independent (predictor) variables, the model building data set should hold between 42 and 70 observations/ cases.

## **THE LACHENBRUCH (1968) METHOD**

In this method, validation samples are obtained by randomly selecting one or more observations / cases (at a time) from the original samples, re-estimating the models from the reduced samples, and then using the new coefficients to predict on the hold out samples. This process is repeated until all observations / cases are exhausted.

It provides a nearly unbiased estimate of prediction accuracy and can be viewed as a generic test of the predictive ability of the models, since it is equivalent to commencing the research with reduced samples and then finding additional observations / cases to form holdout samples. The Lachenbruch method was used in other bankruptcy models for example by Altman (1971), Peel and Wilson (1988) and many others.

In the case of the above researchers, the samples of observations / cases taken out each time were based on  $(n - 8)$ . However, for the purpose of this research it will be based on  $(n - 1)$  or a single observation / case to be taken out for validation test at every one time.

It is common in most bankruptcy and corporate turnaround studies, the cut-off point or criteria for the multivariate logistic regression model is chosen to be 0.5 for classification purposes. If the estimated feasibility of a company is found less than or equal to 0.5, the firm is classified as a Non Feasible Corporate Turnaround; otherwise, it is classified as a Feasible Corporate Turnaround.

Thus, the total correct classification rate is calculated as

$$\text{Total Percent Correct Classification} = \frac{\pi_1 + \pi_2}{N}$$

where :

1.  $n_1$  is the number of observations / cases correctly classified as Feasible Corporate Turnaround
2.  $n_2$  is the number of observations / cases correctly classified as Non Feasible Corporate Turnaround
3.  $N$  is the sample size

### 3.8 SUMMARY

This chapter has outlined the methodology used in this research. Specifically, share prices trend indicators (Financial Times Extel, C.D Rom), the earnings before interest and tax (EBIT) and earnings after interest and tax (EAIT) trends were observed in terms of their Downturn and Upturn phases for the purpose of identifying 'troubled companies'. The PNB-Score (Malaysian Z-Score) was used to confirm the 'troubled companies'. Classifying the 'troubled companies' was carried out by comparing the Return on Shareholders Fund (ROSF) with the Commercial Banks Fixed Deposit Rates.

The determinants or key success factors of corporate turnaround feasibility were analysed further in terms of their existence and state of existence in Successful and Non Successful Corporate Turnaround companies.

Personal interviews with the respective Chief Executive Officers of the identified 'troubled companies' using a structured questionnaire were carried out. Data pertaining to each determinant were analysed in order to help understand how each determinant and combinations of determinants contributed to the feasibility of corporate turnaround. The State of Existence (Favourable / Non Favourable) of Category A determinants / variables and the Existence (Exist / Non Existent) of Category B determinants / variables in Successful (STC) and Non Successful Turnaround companies (NSTC), were further classified using measurements prescribed.

The application assumptions for using the multivariate logistic regression model were tested to ensure that the usage of the model was appropriate for the study. Several multivariate logistic regression models were analysed in terms of their logic, appropriateness and suitability for predictive usage purposes using test and diagnosing statistics to find the "best" and final model. Subsequently, the model was tested for its validity and predictive power using the Data Splitting technique and the Lachenbruch method.



## CHAPTER 4

## **IDENTIFYING TROUBLED COMPANIES**

Chapter 4 presents the findings and interpretation on the identification of the 'troubled companies' and their classification into Successful and Non Successful Turnaround Companies.

In identifying the 'troubled companies', the share prices trend indicator (Financial Times Extel, C.D Rom), the earnings before interest and tax (EBIT) and earnings after interest and tax (EAIT) trends were observed in terms of their Downturn and Upturn phases. The final confirmation on 'troubled companies' was achieved by using the PNB-Score (Malaysian Z-Score), a composite failure identification model. Subsequently, a comparative analysis of the Return on Shareholders Fund (ROSF) and the Commercial Banks Fixed Deposit Rates was carried-out in order to further classify the 'troubled companies' into Successful and Non Successful Turnaround Companies.

### **4.1 FINDINGS AND INTERPRETATIONS**

#### **4.1.1 IDENTIFICATION OF TROUBLED COMPANIES**

##### **4.1.1.1 RESULTS OF THE FINANCIAL TIMES EXTEL**

Share prices performance trends of 300 public listed companies (excluding Finance and Extractive sectors) of the Kuala Lumpur Stock Exchange were each carefully scanned.

This was in order to observe patterns that may resemble a Downturn and Upturn phase of a 'troubled company' trying to turnaround. From the scanning exercise it was found that 211 companies exhibited such trends. Based on the argument set forth earlier by Brealey (1971) on share prices and company performances, these 211 companies suspected as the 'troubled companies' were analysed further to confirm their status.

#### **4.1.1.2 OBSERVATION ON EARNINGS BEFORE INTEREST AND TAX (EBIT) AND EARNINGS AFTER INTEREST AND TAX (EAIT)**

The 211 suspected 'troubled companies' were further observed in terms of their earnings before interest and tax (EBIT) and earnings after interest and tax (EAIT). For the purpose of this exercise the analysis took a step further to observe earnings after minority interest and extraordinary items or earnings distributable to shareholders. Some interesting observations were made. The use of EBIT and EAIT to confirm suspected 'troubled companies' has its pros and cons. Careful thought should be given when using their trends to confirm Downturn and Upturn phases of the 'troubled companies'. For instance, it was observed that in highly geared companies, the impact of interest on profit are not significant if only EBIT is taken into account. EBIT for most of the highly geared companies depicted reasonably healthy profit trends.

However, once the elements of interest and tax were deducted, profits or earnings after interest and tax were left in a thin layer of margin and in several cases in the negative (red).

Earnings or profits distributable to shareholders [earnings (EAIT) after minority interest and extraordinary items] were also observed. Certain interesting trends were exhibited and it is felt that these should be discussed specifically on their own under the topic of extraordinary items.

As recommended earlier under the methodology for identification of 'troubled companies', there should not be a sole reliance on EBIT and EAIT for identification purposes and a more structured and composite financial model should be deployed to help identify the 'troubled companies' - in this case the PNB Score or the Malaysian Z-Score.

#### **4.1.1.3 RESULTS OF THE PNB SCORE (MALAYSIAN Z-SCORE)**

Of the 211 companies suspected of being 'troubled companies', the usage of the PNB Score or the Malaysian Z-Score failure detection model helped to further shortlist confirmed 'troubled companies'. According to (Bidin, 1988) the original results of the model when they were first tested placed companies into two categories i.e. 'problem' and 'no problem'.

' Problem ' companies exhibited negative PNB Score whilst ' No Problem ' companies exhibited positive PNB Score. In the application of the PNB Score in this analysis to help confirm ' troubled companies ' it was found that this was not always the case i.e. where the results of the score must be negative to confirm whether the companies are in trouble or not.

The PNB Scores in majority of the cases are powerful enough to exhibit significant trends depicting the Downturn and Upturn phases, confirming that these companies are ' troubled companies ' who had undergone both the declining and turnaround period.

Having identified 100 companies as the confirmed ' troubled companies ' was simply not enough. There was a need to further demarcate and classify them into Successful and Non Successful Turnaround companies. Based on the argument set forth earlier the suggested methodology used a comparative analysis between the Return On Shareholders Fund (ROSF) and the Commercial Banks Fixed Deposit Rates.

However, it was pertinent that some issues and observations pertaining to Extraordinary Items be clarified and subsequently they would help further justify the usage of the Return On Shareholders Funds (ROSF) as a basis of comparison with the Commercial Banks Fixed Deposits Rates for classification purposes.

#### **4.1.1.4 EXTRAORDINARY ITEMS**

Extraordinary items in company accounts, although unusual and nonrecurring, are significant items to be taken into cognisance because of the effect they have towards the final earnings or profit distributable to the shareholders.

Many financial statement users rely heavily on the income or earnings before extraordinary items when they make predictions and evaluate management's performance, to indicate how profitable the company is without considering the effects of extraordinary items (Warren, Fess and Reeve, 1996).

Meigs & Meigs (1983) defined extraordinary items as a gain or loss that is material in amount, unusual in nature and not expected to recur in the foreseeable future. By definition extraordinary items are extremely rare. Hence they seldom appear in financial statements.

In "Accounting Trends and Techniques" the AICPA (1993, p. 377) states that "the term extraordinary items therefore has a technical meaning in accounting that differs from the everyday connotations of items that are simply unusual or peculiar. Furthermore, the criteria require the accountant to consider the specific characteristics of the company as well as the environment in which it operates".

Examples of extraordinary items include the effects of unusual casualties (such as earthquakes or tornadoes) expropriation of assets by a foreign government, and gains or losses that may result from a newly enacted law.

From the list of the 100 'troubled companies' it was found that 75 companies or 75% of the companies exhibited high occurrence of extraordinary items for more than one year. In most of the cases extraordinary items occurred continuously during the Downturn and Upturn phase.

Details of the events of the extraordinary items for these 75 companies can be summarised as follows:

1. Loss in disposal of shares
2. Loss in disposal of land / building / assets
3. Loss in sale of subsidiary
4. Loss in disposal of investments
5. Loss in sale of associated company
6. Retrenchment Benefits
7. Bad debts written-offs
8. Diminution in investment value
9. Write down on land / building / assets
10. Loss from cessation of business
11. Write off on assets

12. Abortive acquisition expenses
13. Provision for rationalisation
14. Capital reduction
15. Capital reserve write offs
16. Financial restructuring of debts
17. Loans written offs
18. Gains on sale of shares
19. Gains on disposal of investment
20. Gains on disposal of subsidiary
21. Gains on disposal of property / assets
22. Gains on disposal of interest in associated company

Based on the statement by the AICPA and the authors above, it can be concluded that the above, reported as extraordinary items, was justified since their occurrence concentrated in a non-usual business operating environment i.e. in the recession times. However one must carefully observe that extraordinary items in 'troubled companies' did not just happen.

They are the results of certain strategies undertaken by the management of these companies to alleviate their financial crisis; in other words they occurred deliberately.



They are part and parcel of possibly several generic turnaround strategies such as Organisational Changes strategies, Finance and Financial strategies, Cost Reduction strategies, Assets Reduction strategies and Revenue generating strategies undertaken by management to reduce the financial crisis and to turnaround the companies, which are reflected by gains, losses, write downs and write offs under extraordinary items.

In instances where disposal ended up in losses, extraordinary items eroded the already thin profit margin layer, sometimes resulting in negative earnings. This consecutively affected Earnings per Share (EPS) and the Return on Shareholders Fund (ROSF). Yet within extraordinary items in a turnaround situation there could have been other hidden agendas.

“ For public companies, write offs and reserves are also driven by the requirement to inform shareholders. That is why turnaround write offs are so high. The new managers want to inform the shareholders how bad the old guys were, while setting the stage to make themselves look good ” (Whitney, 1987, p.132).

On the other hand, troubled companies undergoing turnaround need to raise funds. Funds may not be easily available and careful disposal of investments and assets may be required to raise funds or working capital to further enable other generic turnaround strategies such as diversification or acquisitions to be deployed for the turnaround.

Given the observations and points set above, it can be argued that the earnings after extraordinary items ( earnings distributable to shareholders ) in ' troubled companies ' undergoing turnaround are reflective of required generic strategies and actions by top management to arrest the crisis situation and to try to improve the company's performance simultaneously.

Subsequently, Meigs & Meigs (1983) also argued that gains or losses from such transactions as sales of plant, assets strikes and settlements of litigation are recurring events in the environment and do not qualify as extraordinary items. Based on the above arguments, it is felt that it would be appropriate to use the earnings after minority and extraordinary items and distributable to shareholders (ROSF) to be compared with the Commercial Banks Fixed Deposits Rates for classifying the ' troubled companies ' into Successful Turnaround Companies (STC) and Non Successful Turnaround Companies (NSTC).

#### **4.1.2 CLASSIFYING SUCCESSFUL TURNAROUND COMPANIES (STC) AND NON SUCCESSFUL TURNAROUND COMPANIES (NSTC)**

Comparative analysis of individual company's Return on Shareholders Fund (based on the last available financial year) with the Commercial Banks Fixed Deposit Rates was made. Using the Fixed Deposit Rates as demarcation points for classification purposes, 57 out of 100 ' troubled companies ' were classified as Successful Turnaround Companies, whereas 43 companies fell under the Non Successful Turnaround Companies. (refer to Appendix A).

#### **4.1.2.1 TROUGH PERIOD**

The trough period consisted of the Downturn and Upturn period. On the average the trough period for both Successful Turnaround Companies (STC) and Non Successful Turnaround Companies (NSTC) was found to be between 6 and 7 years. This supports Hoffman (1989) findings on the average turnaround cycle period.

#### **4.1.2.2 SOLVENCY AND LIQUIDITY CRISIS**

The companies were analysed in terms of their solvency and liquidity during the Downturn and Upturn period by observing the movements in their working capital. Basically, the movements or trends in their working capital depicted similar pattern as that of the trough period for both Successful Turnaround Companies (STC) and Non Successful Turnaround Companies (NSTC). This is logical as these companies were facing further decline with the amount of working capital available being depleted. Similarly, as the performance of these companies improved, working capital was observed to improve. Working capital in the form of cash was vital in any turnaround effort.

However, this was not always easily available and in the worst case scenario many companies got themselves into the predicament of a ' cash trap ' and became technically insolvent. " In turnarounds a cash crunch is almost always inescapable" (Whitney, 1987, p. 357).

Out of the 100 'troubled companies', 71 companies were seen to have faced negative working capital situation or technical insolvency. The period of technical insolvency differed from one company to the other. Some underwent a technical insolvency period of basically one to two years only, whilst others faced a continuous 8 year period.

Forty insolvencies belonged to the companies who later achieved a successful turnaround (STC), whereas 31 belonged to the Non Successful Turnaround Companies (NSTC). Insolvency and liquidity crisis according to Bibeault (1982), are characteristics of companies facing the third level of trouble i.e. the Severe stage - facing viability problems and possible bankruptcy.

#### **4.1.2.3 FINANCIAL LEVERAGE**

Gearing of individual company was analysed. Trends in gearing were observed for the Downturn and Upturn period. Overall, 42% of 'troubled companies' ended up with higher gearing in the Upturn period while 34% exhibited lower gearing. For twenty four companies (24%), gearing did not change in either period.

Table 12 depicts the breakdown for STC and NSTC :

Table 12

Gearing Level of STC and NSTC

	Lower	Higher	Same
Successful turnaround companies (STC)	37%	37%	26%
Non successful turnaround companies (NSTC)	30%	49%	21%

From the above table it can be deduced that the percentage of NSTC who ended up with more financial leverage is higher than the STC.

This could also be the contributing factor for their low Return on Shareholders Fund (ROSF) since the bulk of the earnings would have been used to repay those fixed financial commitment e.g. repayment of loan interests.

Caution should be taken in analysing the gearing trends of the 'troubled companies'. In most cases gearing was seen to increase as earnings declined. This is logical since decline in earnings reduced the Total Shareholders Fund which eventually increased gearing even when there is no actual increase in net borrowings. This phenomena is salient at the point where the trough pits. Thus, the analysis was done by comparing gearing during the early Downturn period and the later part of the Upturn period.

#### **4.1.2.4 LOAN CAPITAL**

When the 'troubled companies' were analysed in terms of borrowings i.e. introduction of loan capital, only 65% depicted significant increase in loan capital (specifically term loan). Out of which 45 companies were STC and 20 were NSTC. Introduction of loan capitals were also significant towards the Upturn periods.

The reasons for this could be that bankers must have felt more comfortable once companies showed potential to turnaround with higher returns. Overall, bankers were seen to have supported a large number of companies turning around (especially the STC) by allowing for more borrowings, where appropriate, to finance the turnarounds.

#### **4.1.2.5 PAID UP CAPITAL**

Another significant trend observed was the increase in paid up capital in both STC and NSTC. Eighty two out of the 'troubled companies' had their paid up capital increased of which 47 were STC and 35 were NSTC. The move in increasing the paid up capital indicated strong shareholders' commitment to finance and support the turnaround exercises.

#### 4.1.2.6 CORPORATE STRATEGIES

Abrupt increase in certain financial indicators such as sales and profits and the volumetric increase in the paid up capital, gave suspicion that these companies may have deployed certain corporate strategies to help them achieve rapid turnaround.

Further analysis on the 'troubled companies' resulted in the following findings as depicted by Table 13.

Table 13

#### Corporate Strategies used by STC and NSTC

	Divest	Diver	Prod/mar	Ver.int	Aqc
STC	3	17	7	4	27
NSTC	10	15	5	nil	20

keynote:

STC - Successful Turnaround Companies

NSTC - Non Successful Turnaround Companies

Diver - Diversification

Prod/mar - Product / market strategies

Ver.int - Vertical integration

Aqc - Acquisitions

Divest - Divestments

Different corporate strategies were used either on their own or in combination for turnaround. For example a decision to diversify into a different business activity which is more profitable may have taken place via Internal growth or Acquisition. From the figures above, it is obvious that acquisition was more frequently used than other corporate strategies.

Higgins & Vincze (1986) explained that an organisation can grow in four basic ways i.e. internally, by acquisition, by merger or by joint venture.

However, Internal growth takes much longer to become larger than the other three external form of growth.

A company undergoing turnaround is required to cut down on losses and to improve its earning within a crucial time frame and acquisition would be the answer to put the organisation into instant diversification resulting in instant increase in sales and profits. However, on the other hand, acquisition always involves a premium to be paid for acquiring the company. The acquirer must have the necessary financial support to undertake such an exercise.

While there is no data available on the type of corporate strategy used by the other 'troubled companies', one could not help but imagine that the turnaround exercise must have been supported by other turnaround generic strategies such as Cost-Reduction, Asset-Reduction, Organisational Changes...etc.



Subsequently, there was no detailed evidence to show that business level strategies such as the Offensive or Defensive strategies were used in the turnaround exercise above.

#### **4.1.2.7 CHANGES OF CORE BUSINESS**

It is also interesting to note that in the effort to turnaround these companies through the use of generic turnaround strategies or the deployment of corporate strategies or combination of both, a group of companies had simultaneously undergone the process of changing their core businesses e.g. from Mining to Construction, Mining to Plantations, Plantations to Property Development, Property Development to Construction.....etc. Twenty seven companies were no longer in their original industry after their turnaround exercise, fifteen of which were companies of the STC. category and twelve were of the NSTC category. It was obvious that the corporate and generic strategies undertaken by these companies had led them to be completely out of their original core businesses and into new ones.

## **4.2 SUMMARY**

One hundred 'troubled companies' were identified using the Financial Times Extel, EBIT, EAIT, earnings after minority interest and extraordinary items (or earnings distributable to shareholders) and the PNB Score.

They were further demarcated into Successful Turnaround Companies and Non Successful Turnaround Companies by a comparative analysis of their last financial year with the Commercial Banks deposit rates. The result identified 57 Successful Turnaround Companies (STC) and 43 Non Successful Turnaround Companies (NSTC).

Extraordinary items were found to be part and parcel of possibly several generic turnaround strategies being implemented. The trough period was similar with those as described by Hoffman (1989) and NSTC were found to end up with higher gearing (more financial leverage) than the STC in the Upturn period. The STC were also found to be able to obtain more borrowings than the NSTC. Strong shareholders commitment was also found in 47 STC and 35 NSTC in the form of an increase in paid capital to support the turnaround exercise.

While different corporate strategies were found to be used on their own or in combination with others for turnaround by both STC and NSTC, acquisitions were found to be more frequently used than other corporate strategies in view of the crucial time frame in turnaround situations. It was also interesting to note that 15 STC and 12 NSTC, through their efforts to turn around, ended up in the total change of their original core businesses to new ones.

## CHAPTER 5

## **DETERMINANTS OF CORPORATE TURNAROUND FEASIBILITY**

Chapter 5 presents the findings and interpretation on the analysis of the determinants of corporate turnaround feasibility in Successful and Non Successful Turnaround Companies.

The determinants of corporate turnaround feasibility, mentioned in Chapter 2, need to be analysed further in terms of their existence and state of existence in Successful and Non Successful Corporate Turnaround companies.

Personal interviews with the respective Chief Executive Officers of the identified 'troubled companies' using the structured questionnaire were carried out. Data pertaining to each determinant were analysed in order to help understand how each determinant and combination of determinants contributed to the feasibility of corporate turnaround.

Favourable / Non Favourable existence (Category A determinants) and Existence / Non Existence (Category B determinants) of the determinants in each Successful and Non Successful Turnaround companies were further classified using the measurements as set forth in Chapter 3.

## **5.1 FINDINGS AND INTERPRETATIONS**

### **5.1.1 D1 CAUSES OF DECLINE**

#### **5.1.1.1 INTERNAL CAUSES**

##### ***A. POOR MANAGEMENT***

All problems often start at the top, and so poor management is the key to declining profitability. Those responsible for the operations of the company are making wrong decisions with respect to strategic decisions and implementation. Thus, the role and style of the Chief Executive Officers (CEOs) is critical. Poor management was observed in all 'troubled companies', out of which 57 were STC (100% of STC) and 43 were NSTC (100% of NSTC) and they all suffered from poor management (refer to Appendix B).

Previous authors and researchers such as Argenti (1976), Bibeault (1982), Slatter (1984), Schendel, Patton and Riggs (1976), Sigoloff (1981), Davis (1988) and many others stressed this factor as one of the main causes of corporate decline. Davis (1988) states that " it is inappropriate management that kills companies " (p. 5).

As stated earlier, the features of poor management include one person rule (CEO with autocratic leadership style), chairperson or shareholder combined CEO, incompetent management, lack of management knowledge or depth, narrow vision, management change problems, inbred bureaucracy, unbalanced top management, ineffective board of directors, etc.

The high occurrence of poor management in both STC and NSTC is not at all surprising. This finding is supported by Bibeault (1982), who stated that 85% of the time 'bad management' is the cause for decline and, subsequently, also supports those of Argenti's findings (1976), who stressed that management should not blame external problems entirely for corporate decline but should first blame themselves. They could have suffered from 'functional blindness' acquired through time that could have rendered them unable to see their own organisational problems (Whitney, 1987). However, the findings above and that of Bibeault's may differ slightly from those of Slatter's, where he found that the 'failed to recover companies' were suffering more from poor management problems than the 'successfully recovered companies'.

Interesting observations pertaining to poor management are also made in both STC and NSTC. It was found that 38 STC (67% of STC) and 23 NSTC (53% of NSTC) did not change their top management (CEOs). Only 19 STC (33% of STC) and 20 NSTC (47% of NSTC) had their top management changed.

There were 4 isolated cases in the STC where change in top management was due to new ownerships gained through acquisitions of these companies.

Change in top management is cited as one of the key strategies in corporate turnaround as indicated by authors and researchers such as Slatter, Schendel, Patton and Riggs, Davis, Eisenberg, Silver, Bibeault and many others.

Bibeault (1982) for instance, argued that a management change is a pre-requisite for corporate turnaround and generally occurred at the top. His argument is supported by earlier findings by Schendel, Patton and Riggs (1976), where they equally stressed that a most successful turnaround must involve general management changes.

It is also interesting to note that out of the 38 STC, those with no change in top management (CEOs), 32 STC or 56% of STC CEOs are also shareholders and chairpersons of these companies. This is suspected to be one of the main reasons why no change in top management occurs in these companies.

Slatter (1984) believes that " in those companies where the position of both chairperson and chief executive officer is held by the same individual, there will not be any effective ' watchdog ' -accountability of the activities of these CEOs " (p.28) .

However, this is contrary to the findings of the research above, where the majority or 67% of STC did not undertake any change in top management. The same owners cum chairpersons / CEOs propelled the successful turnarounds of these companies. These owners cum chairpersons / CEO's may have been the very driving force behind the corporate turnarounds. And since they are affected in terms of their investments and value of investments in these companies, they could have possibly given their maximum commitment to battle to save these companies and enable their successful turnarounds. These findings also contradict those of Pant's (1986) where she found that externally owned and controlled firms are associated with successful turnarounds (the number of externally owned successful turnarounds is twice the number of non-successful turnarounds).

#### ***B. FINANCIAL POLICIES AND INADEQUATE FINANCIAL CONTROL***

Finance is corporate function which has aspects such as acquisitions of funds, structure of funds (mix), use of such funds for projects, provision of information to top management for strategic decisions, etc. Funding and investment decisions are fundamental to corporate strategy. Corporate performance can be seriously implicated due to the amount and mixture of long term and short term debt when combined with the owner's capital (gearing ratio). Simultaneously, imperfections in financial control, the speed of preparing relevant financial information and the improper treatment of such information can result in poor strategic decision making.



Forty nine of the 'troubled companies' (49%) reported having financial policies and inadequate financial control problems, out of which 33 were NSTC (77% of NSTC) and only 16 were STC (28% of STC). NSTC are thus found to have more financial policies and inadequate financial control problems than STC (refer to Appendix B).

Slatter (1984), however, did not find any great difference in the occurrence of both financial policies and lack of financial control problems in 'failed to recover' and 'successfully recovered companies'.

In both NSTC and STC, financial policies and inadequate financial control problems were due to the substantial level of gearing or leverage, accounting information that was not strategically designed and used and the common problem in most large companies - a structure that hinders effective control.

The findings above support those of Slatter (1984) where he explains that :

The management accounting system in declining companies is too complex, producing a lot of poorly presented information and subsequently giving the wrong information to top management, (p. 30). The financial information may not be used as a guide to management action and the over centralisation structure of large companies seems to make financial control difficult, (p. 31). Moreover, for many firms, a high gearing ratio is the result rather than the cause of corporate decline, especially when bank borrowings escalate as losses mount due to the price of competition, inefficient manufacturing ...etc., (p. 51).

The above finding also supported earlier findings on the same issue of leverage discussed in Chapter 4 of the research, where the percentage of NSTC that ended up with more financial leverage was higher than STC.

Similar findings are also reported by (Pant, 1986), where leverage variables were found to be significantly higher for ' non turnaround companies ' compared to ' turnaround companies '.

### ***C. MARKETING PROBLEMS***

Companies which fail to understand and operationalize the concept of marketing will result inadequate marketing functions. Marketing activities in a company are derived from a marketing plan. This plan subsequently acts as a guide for the company / customer relationship and will be dependent on the market research information gathered and the ability to generate new products in the market.

' Troubled companies ' with marketing problems, usually, have failed to embrace the marketing concepts in these terms.

Only 30 of the ' troubled companies ' (30%) faced marketing problems. Out of this number 19 are NSTC (44% of NSTC) and only 11 are STC (19% of STC) (refer to Appendix B).

The details on their marketing problems are in Table 14;

Table 14

Marketing Problems

---

<u>Problems</u>	<u>STC</u>	<u>NSTC</u>
Poorly motivated sales force	nil	2
Non aggressive sales manager	2	nil
Efforts not targeted on key customers and products	8	9
Poor after sales services	nil	nil
Lack of market research / knowledge	2	nil
Outdated / lack of promotion	11	19
Weak / non existent of new product development	11	12

The number of STC facing marketing problems is found to be lower in comparison to NSTC. This supports Slatter's findings (1984) where he found the percentage of 'successfully recovered companies' facing marketing problems to be lower (only 17%) compared to the 'failed to recover companies' (40%).

Amongst the marketing problems STC and NSTC were facing included the high occurrence of outdated product development or lack of product promotion and the weak or non existence of new product development.

There could be many reasons behind this. One of the reasons could have been that these companies have suffered from what is termed as 'marketing myopia'.

These companies may have strong beliefs that their products are superior and subsequently did not focus more attention to the ever changing requirements of their customers and needless to say their competitors.

Kotler (1988) states that "sellers who concentrate on the product instead of customers' needs are said to suffer from 'marketing myopia'" (p. 15).

Slatter (1984) adds that "a firm that fails to respond to changing market needs or that responds too late to changing needs is likely to find itself heading towards extinction" (p. 32).

Thus, if a company is to succeed it should not neglect the marketing concept and function. In a study by Hambrick and Shecter (1983), in their attempt to find a common set of strategies for corporate turnaround, three forms of clusters of strategies were found and one of these clusters is 'selective product / market pruning', which is a marketing approach. This particular strategy cluster represents a product / market refocussing its strategy, concentrating on the most profitable sectors which have a quality rather than cost advantage.

This is manifested as increases in relative prices, direct costs and product quality.

Whitney (1987) expresses that " when marketing solutions are successful, an unexpected bonus is received: improved productivity resulting from sales increases, improvement occurs in such key ratios as sales per labour hour, sales per square foot, distribution costs as percentage of sales and store labour as percentage of sales " (p. 34).

#### ***D. HIGH COST STRUCTURE ( COST DISADVANTAGE )***

High cost structure not only places a company in a cost disadvantage position but also to be in a competitive disadvantage position in relation to its competitors. It will not be able to compete in prices since its cost structure is high.

Sixty nine ' troubled companies ' (69%) experienced a high cost structure (cost disadvantage situation). Out of which 42 were NSTC (98%) and 27 were STC (47 %) (refer to Appendix B). Their details are in Table 15.

Table 15

Causes Of High Cost Structure

<u>Causes</u>	<u>STC</u>	<u>NSTC</u>
Inability to achieve economy of scale	20	28
Competitors controlling strategic variables	nil	nil
Diversification	nil	1
Management style and organisational structure	4	6
Operational Inefficiencies	27	42
Unfavourable government policies	nil	1

Almost all of the NSTC were found to suffer from the high cost structure (cost disadvantage) syndrome. The most salient cause for high cost structure in the NSTC was operational inefficiencies followed by the inability to achieve economy of scale. But what could have caused operational inefficiencies?

Slatter (1984) stated that operational inefficiencies are largely due to poor management. With the intensity of poor management in turnaround situations, operating inefficiencies affect all elements of the cost structure.

“ Some of the areas in which inefficiencies may directly or indirectly have caused higher costs ”, he added, “ are low labour productivity, poor production planning, lack of adequate maintenance, plant layout, allocation of sales force time, allocation of advertising and promotional expenditure, distribution and after sales service, terms of trade that ‘ encourage ’ a large volume of small orders and office procedures ” (p. 39).

Given the above, it is also highly probable that operational inefficiencies could have resulted in the ability to achieve economy of scale given the backdrop of intense competition and the probable decline in demand (resulting in a lower sales volume) due to the recession period. Thus, what is salient is that all these add up as a formula for a high cost structure.

Maintaining a lower cost structure is not only vital for profitability but also for competitive reasons. Porter (1985, as cited in Kotler, 1988, p. 308) describes competitive advantage (i.e. the power that enables a company to be better off than its competitors) as follows:

Competitive advantage grows out of a value a firm is able to create for its buyers that exceeds the firm's cost of creating it. Value is what buyers are willing to pay, and superior value stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset a higher price. There are two basic types of competitive advantages: cost leadership and differentiation.

The inference that can be derived from the above explanation is that to acquire one of the features of competitive advantage, in specific cost leadership, a company must be able to have a lower cost structure than its competitors to enable it to manipulate pricing in the competition. However, this would mean that NSTC suffering from high cost structure, due mainly to operational inefficiencies, and the inability to achieve economy of scale may not be able to acquire cost leadership as a competitive advantage to compete.

The findings above in terms of high cost structure in STC and NSTC are almost similar to those of Slatter's (1984) in his study of 40 U.K firms, where ' failed to recover companies ' were found to have faced more high cost structure problems than the ' successfully recovered companies '.

However, with the exception of a minor difference, 70% of ' failed to recover companies ' faced economy of scale problem as compared to 65% of NSTC and 17% of ' successfully recovered companies ' faced similar problems as compared to 35% of STC. In terms of operating inefficiencies, only 40% of ' failed to recover companies ' faced this problem as compared to 98% of NSTC. On the side of the ' successfully recovered companies ' 36% faced similar problems as compared to 47% of STC.



### ***E. MISTAKEN ACQUISITIONS***

Acquisition is an alternative corporate strategy to internal development used as an entry tactic into an industry or market through the purchase of a firm in that business, instantly acquiring the requisite skills and resources although in some instances they may not be operating to satisfactory performance standards. For some companies, an acquisition which failed to generate the expected returns becomes a major cause of corporate decline.

Mistaken acquisition is not found to be a major cause of corporate decline in the 'troubled companies'. Only 3 'troubled companies' (3%) recorded mistaken acquisitions as one of the causes for their decline. None of the STC faced this problem. However, 3 NSTC (7% of NSTC) recorded having this problem (refer to Appendix B).

The mistaken acquisitions problem in these NSTC are divided basically into two typical problems i.e. acquisition of losers (acquiring companies with weak competitive positions in their own markets) in 3 cases, and poor post acquisition management (inadequate managerial control, financial control or / and organisational resistance to change) in one particular case.

The findings above support some of those of Slatter (1984) where he found that 20% of the 'failed to recover companies' in the U.K facing mistaken acquisition problems.

The difference is that he also found about 13% of the ' successfully recovered companies ' facing the same problem, which the finding of this research did not in the STC. While mistaken acquisitions is one of the causes of corporate decline, properly planned acquisitions, pursued with caution can, instead, can be rewarding.

Luffman, Sanderson, Lea and Kenny (1988) explained that acquisition should be pursued when:

- The product is in the maturity or decline stage of the PLC
- The company has little knowledge of the products or markets it wishes to develop
- Earliest entry is desirable
- There are few internal development skills within the company
- There is no production capacity
- Costs do not need to be spread over time

Acquisitions were also found to be more frequently used as one of the corporate strategies to turn around the companies in Chapter 4 as compared to other available corporate strategies. Twenty seven STC and 20 NSTC adopted this strategy in their effort to turnaround their companies.

Subsequently, Schendel and Patton (1975) found similar results in their turnaround study, where they concluded that turnaround firms are able to generate new businesses whether internally or through acquisitions and are able to operate these businesses more efficiently.

Slatter (1984) who earlier found mistaken acquisitions as one of the causes for corporate decline also supported this viewpoint and quoted that " a somewhat surprising but quite common recovery strategy is growth via acquisition " (p. 96).

#### ***F. PROBLEMS WITH ' BIG PROJECTS '***

' Big Projects ', sometimes called ' Mega Projects ', can be a large acquisition, a major capital investment, a major marketing campaign or substantial research and development expenditure which are large in terms of company resources and have significant effect on profitability. Thus, when a ' big project ' goes wrong, profitability is badly affected and the company faces decline and failure.

Only 13 ' troubled companies ' (13%) faced this problem. The number of STC with ' Big Project ' problems is only 1 or 2% of STC. NSTC have 12 or 30% of NSTC affected by this problem (refer to Appendix B). Details of the ' Problems With Big Projects ' are in Table 16.

The three major problems in ' Big projects ' for the NSTC are start-up difficulties (i.e. technical difficulties, poor project planning, lack of trained employees, etc), capacity expansion (i.e. wrong timing and feasibility error) and market entry costs (i.e. product development and market development costs wrongly anticipated).

Table 16

Problems With Big Projects

<u>Problem</u>	<u>STC</u>	<u>NSTC</u>
Underestimating capital requirements	nil	2
Start-up difficulties	nil	9
Capacity expansion	1	7
Market entry costs	nil	5
Major contracts	nil	1

The findings above are similar to that of Slatter (1984) with the exception that he found the ' successfully recovered companies ' to be affected by ' Big Projects ' problem more than the ' failed to recover companies ', and this of course is the opposite of the finding above.

**G. OVERTRADING**

Growing at the rate faster than the company's own ability to finance from internally generated cashflows and external borrowings may cause overtrading.

Increase in turnover by increasing volume and unprofitable customers is pursued at the expense of profitability.

Thirty six ' troubled companies ' (36%) suffered from overtrading. Given this number, only 11 are STC (19% of STC) and 25 are NSTC (58% of NSTC).

The percentage of STC suffering from overtrading is significantly less than that of NSTC (refer to Appendix B).

Details of overtrading causes in STC and NSTC are in Table 17;

Table 17

Causes Of Overtrading

---

<u>Causes</u>	<u>STC</u>	<u>NSTC</u>
Going for sales growth regardless of profitability	11	25
Going for sales growth despite small capital base	nil	1

From the above the main cause for overtrading for both STC and NSTC is that these companies went after sales growth regardless of whether or not it was profitable. One obvious reason for embarking on the above strategy may be linked to the economic recession period of the mid 80s. Intensity of competition may be higher in the economic recession period as the number of recession sensitive markets start to shrink. In many cases, companies will have to compete not only in terms of product features but also in terms of prices.

Thus, the practise of price undercutting to capture sales volume is inevitable irrespective of whether sufficient profits are made or in certain circumstances to cover operating costs in order to survive.

Kotler (1988) mentions that " the firm needs additional business and cannot generate it through increased sales efforts, product improvement or other alternative measures, which led to price cutting. Companies will consider cutting prices in a period of economic recession " (p. 517).

(Slatter, 1984) did not find the problem of overtrading in his study, but he did mention that overtrading is a characteristic of growth firms.

While it is not the objective of this research to include the study of the characteristics of growth firms, its findings obviously pointed out that overtrading is a strategy that has resulted in companies declining when faced with harsh competition, especially during an economic recession period.

#### ***5.1.1.2 EXTERNAL CAUSES***

##### ***A. DECLINE OF MARKET***

One of the significant external causes for corporate failure is falling demand of the product or service provided by the company - declining market sales. These declining sales could be temporary but could also be associated with long term declining trend or an economic recession.

Decline of the market seems to affect a large portion of 'troubled companies' where 89 % or 89 of these companies are affected. Those affected are strong majorities of both NSTC and STC. It was found that 51 STC (89% of STC) and 38 NSTC (88% of NSTC) were affected by this problem (refer to Appendix B).

Their details are in Table 18;

Table 18

Causes Of Market Decline

---

<u>Causes</u>	<u>STC</u>	<u>NSTC</u>
Secular decline in demand	nil	nil
Cyclical market decline	48	37
Changing pattern of demand	3	2

None of the STC and NSTC suffered from secular decline in demand (i.e. when a product becomes obsolete due to the introduction of new or improved products).

The bulk of the STC and NSTC suffered from cyclical market decline (i.e. when decline is due to economic or business cycles).

When cyclical market decline is analysed further, it is found that 39 STC and 33 NSTC faced this problem due to the economic recession in the mid 80s. About 9 STC and 4 NSTC suffered cyclical market decline due to erratic commodity prices. While most top management blamed recession as the prime cause for decline, recession by itself realistically and rarely causes a company to decline.

Slatter (1984) supports Argenti's (1976) argument on this issue (as explained earlier). Slatter stressed that recession must have coupled with other factors, such as lack of financial control, weak competitive position and possibly a financial policy of high gearing, to spell disaster in an economic recession period. He also added that recession tends to expose a company's competitive weaknesses, although the source of these weaknesses is often the result of management decisions or acts of omission during the previous economic boom period.

However, in his study, Slatter did not find similar details as that of the above findings. He found that only 30% of the ' failed to recover companies ' and 40% of the ' successfully recovered companies ' faced cyclical market decline due to economic recession.

Recession is part and parcel of the economic trends. As stated earlier, recession alone may not cause a company to decline. Changes in commodity prices , another factor in cyclical market decline, can have a significant impact on heavy users of certain types of commodities.



For example when the price for latex increases, producers of rubber items will have no choice but to increase the selling prices of their products. This has led customers to seek for an alternative to rubber based products, consequently, causing a decline in the demand for rubber products. Similarly, changes in fashion or technology can result in the changing pattern of demand resulting in and the former product being made obsolete.

### ***B. COMPETITIVE PRESSURE***

Competition is inevitable. Like variables in an ecosystem, companies compete with one another not only for sales and profits but also for growth and market share. It will not be long when a company enjoying success in a market faces competitive pressure from existing players and new entrants, all aimed at harvesting the same success as the former.

Competitive pressure is another significant external cause for corporate decline among the ‘troubled companies’. Eighty one ‘troubled companies’ (81%) encountered competitive pressure problems. Almost all of the NSTC (42 companies or 98% of NSTC) faced competitive pressure compared to 39 STC (68% of STC) (refer to Appendix B). The details for competitive pressure are in Table 19.

Table 19

Competitive Pressure

---

<u>Causes</u>	<u>STC</u>	<u>NSTC</u>
Product competition	35	34
Price competition	38	42

In terms of percentage, the NSTC (79%) were found to have faced more product competition than the STC (61%). However, 98% or almost all of the NSTC faced competition in terms of price as compared to the STC (67%). Thus, STC faced significantly less price competition.

The findings above support that of Slatter (1984), where, in his study, he found more ' failed to recover companies ' facing both price and product competition compared to the ' successfully recovered companies '. Product and price competition from overseas producers have been known to have made many sectors of industries in developed countries such as United States of America, Britain and other European countries to decline.

In times of economic recession (as cited earlier), the market for certain products may shrink. Here intense competition in terms of product and price will prevail forcing those companies without significant product differentiation and with a lower price tag to be out of the game. In order to survive in this harsh environment some companies may go for sales volume with ridiculous low prices, irrespective of profitability, or to overtrade (as cited earlier).

While it is believed that product and price competition increases as an industry matures, the above findings have made it clear that this may not necessarily be the case. An industry may be in its growth stage but economic recession is equally capable of triggering product and price competition.

### ***C. PRODUCT LIFE CYCLE***

An extension related to the issue of competition is the product life cycle. The product life cycle provides insights into a product's competitive dynamics.

Companies need to plan for successive strategies appropriate to each stage of the product's life cycle.

Only 18 of the 'troubled companies' (18%) were observed to have had problems related to the product life cycle, out of which 8 were STC (14% of STC) and 10 were of NSTC (23% of NSTC) (refer to Appendix B). The problems relating to the product life cycle are: having the same product too long in the market and having saturated sales which are declining.

The bulk of STC and NSTC above faced the problem of having the same products too long in the same market (8 STC and 10 NSTC). Only 1 NSTC company reported facing saturated sales which were declining.

Whitney (1987) explained that life cycle studies have proven companies like to hold on too long to their products in the market. The reasons behind this could be due to ' marketing myopia ' as cited earlier. A firm that fails to respond to changing market needs or that responds too late to changing needs is likely to find itself heading towards extinction (Slatter, 1984).

Hofer (1980) produced a product / market matrix which can help companies to assess the appropriate strategic responses given the competitive position and the current stage it is in the product life cycle. The matrix utilised the product life cycle and market share to translate into competitive position.

#### ***D. OTHER ENVIRONMENTAL FACTORS***

There are other environmental factors that can cause corporate decline or, in some instances, failure. These factors can range from economic, social, political and technological environments that can have influence company performance such as the GNP growth, Monetary policy, Material sciences, Mechanisation and Robotization, Nationalised industries, etc.

Only one particular company (an NSTC) was reported to have declined due an environmental factor. The particular circumstances was due to the move by the government to initiate a nationalised car industry, which in fact was a political decision and subsequently was followed by the increase in the excise duty for importers of ' completely knocked down units ' (CKD) motorcars.

This move by the government affected the particular company's internal cost structure and efficiency, which resulted in the increase in the cost of production, forcing the importer to increase the ultimate selling prices and eventually eroding the profit margin away due to the competitor pricing.

In summary, there is a direct influence in terms of the generic strategies applicable for a successful turnaround by the causes of decline. The higher the number of decline causes, the more the generic strategies that will be required to turnaround the company.

With reference to Appendix I, it was found that the majority (46%) of 'troubled companies' faced 4 causes of decline. Ten percent faced 3 causes of decline, another 10% 5 causes of decline, 19% 6 causes, 12% 7 causes and the remaining 2% and 1% faced 8 causes and 10 causes of decline respectively.

Comparative analysis was also made between the STC and the NSTC. It was found that a group of 10 STC (17% of STC) faced 3 causes of decline. It was also observed that the majority of 'troubled companies' facing 4 causes of decline belonged to the STC. None of the NSTC was observed in the above range of decline causes. Ten NSTC (23% of NSTC) faced 5 causes of decline while the majority of NSTC (18 companies or 42% of NSTC) faced 6 causes of decline. There was also one STC observed in this range.

Another 12 NSTC (28% of NSTC) were found with 7 causes of decline while the remainder 2 (5% of NSTC) and 1 (2% of NSTC) faced 8 and 10 causes of decline respectively.

What can be observed further from the above is that the statistical mode for the number of causes of decline for the STC and the NSTC is 4 and 6 causes of decline respectively, meaning, that the STC are facing less causes of decline than the NSTC. When the range of the causes of decline was further analysed in terms of internally and externally generated causes, the followings were observed (refer to Table 20);

Table 20

Range Of The Causes Of Decline

---

	<u>Internal causes (No.s)</u>		<u>Eternal causes (No.s)</u>	
	Min	Max	Min	Max
STC	1	4	nil	2
NSTC	3	7	nil	3

For both internal and external causes of decline, NSTC are found facing higher number in terms of both types of causes of decline than STC.

However, it is also fascinating to observe that both STC and NSTC faced more internally generated causes of decline than externally generated ones. The findings above also supports the statement made by Robert Di Giorgio, chairman of Di Giorgio Corporation (as cited earlier) that problems come from an internal problem aggravated or triggered by external changes.

Slatter (1984) as cited earlier, stated that if a company has fewer causes of decline then it may need less application of generic strategies to turnaround. This is in view of the position of 'troubled companies', where not all them will be at the liberty, of simply applying every available combinations of generic strategies to turn around, and therefore the fewer the causes of decline the better would be the chances for them to have a feasible turnaround. Slatter also found that the number of generic strategies employed in successful turnarounds are considerably greater than the average number of factors causing decline (also cited earlier).

The inference that can be made from Slatter's statement and findings above is that since STC faced fewer causes of decline, this would have placed them in a better position to turn around their companies successfully and STC would probably have been in a better position to use more combinations of generic strategies for corporate turnaround than the NSTC.

While it is better to have fewer causes of decline so that fewer generic strategies are needed to turn around the companies, it does not stop these companies (STC) with fewer causes of to apply higher number or combinations of generic strategies to turn around their companies. This creates greater higher chances for successful corporate turnarounds, but it may not have been the case with the NSTC.

### **5.1.2 D2. SEVERITY OF CRISIS**

Threatening events and defects in a company's environment can generate crisis. Crisis promotes anxiety and stress, bringing about a negative impact on managerial emotions and behaviours and has the ability to deteriorate the whole organisation.

Slatter (1984) commented that crisis tends to accentuate the internal affairs causing decline, reinforcing and accelerating the down turn trend and if no action is taken to effect a turnaround, the end result is insolvency and failure.

Only 23 of the 'troubled companies' (23%) suffered from mild crisis, out of which 17 were STC (30% of STC) and 6 were NSTC (14% of NSTC).

Subsequently, 34 of the 'troubled companies' (34%) suffered from moderate crisis, where 21 were STC (37% of STC) and 13 were NSTC (30% of NSTC).

The bulk of the 'troubled companies' (43 companies or 43 %) suffered from severe or survival crisis situation.



Out of these, the majority were NSTC (24 companies or 56% of NSTC) and only 19 were of STC (33% of STC). Thus, the NSTC suffered more severe crisis than the STC (refer to Table 21).

**Table 21**

**Severity OF Crisis**

	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Mild	23	23	17	30	6	14
Moderate	34	34	21	37	13	30
Severe or Survival	43	43	19	33	24	56

Crisis and its severity may have direct or indirect links with other determinants and factors. The problems with inadequate financial control and financial policy for instance, can lead a company into crisis. High internal cost structure, in another instance, coupled with overtrading can together cause negative profitability and cashflows.

Subsequently, intense competition can erode away profit margins or even put a company into losses. A formula for disaster can arise if these and other negative factors acted upon the company all at once.

With reference to the issue of ' solvency and liquidity crisis ' in Chapter 4 of the research, Bibeaault (1982), Slatter (1984) and the other researchers found that insolvency and liquidity crisis are characteristics of companies facing a severe stage of crisis - those facing viability problems and possible bankruptcy.

The findings above do not support those of Bibeaault's (1982), Slatter's (1984) and the others. In phase one, it was found that 40 insolvencies which belonged to companies, who later successfully turned around were STC and 31 belonged to the NSTC. Out of the 40 technically insolvent STC only 19 companies were found to be in the severe or survival crisis stage while 21 companies suffered moderate crisis.

Consequently, it is not necessary that companies facing technical insolvencies are also companies who are in their severe stage of crisis. There are also STC at the moderate crisis stage with 1 or 2 years of technical insolvency. Thus, the argument that arises at this point is that it may be necessary to determine the length of time a company has faced technical insolvency before categorising it into the severe crisis stage. As a suggestion, a company that is facing more than 2 years of technical insolvencies may be categorised as being in the severe crisis stage.

However, it is important to note from the above that 19 STC (33% of STC) who were in the severe crisis stage did manage to turn around successfully. This has led the research to believe that it may not be necessary that a company facing severe or survival crisis stage will eventually go into bankruptcy.

Positive contributions from other factors such as industry characteristics, shareholders' commitment, bankers' commitment, creditors' commitment and others (it is not the intention to discuss them in detail at this stage) may have the role to play for enforcing the success of the turnaround.

### **5.1.3 D3. COMPANY'S HISTORICAL STRATEGY**

Diversification can be a good growth strategy given the existence of strategic opportunities, when the industry is very attractive and the company has the right capabilities to be successful in such an industry. As mentioned in the earlier part of the research (specifically under the research methodology), diversified companies have better opportunities in terms of the number of generic strategies available for corporate turnaround than non diversified ones due to the existence of two levels of strategies, that is, the corporate and the strategic business unit levels.

Sixty of the 'troubled companies' (60%) were found to be non diversified companies, out of which 30 belonged to the STC (53% of STC) and 30 to the NSTC (70% of NSTC).

The number of diversified ‘troubled companies’ was 40, out of which 27 were of the STC (47 % of STC) and 13 were of the NSTC (30% of NSTC) (refer to Table 22).

Table 22

Company’s Historical Strategy

	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Diversified	40	40	27	47	13	30
Non diversified	60	60	30	53	30	70

For the STC, the ratio between diversified and non diversified companies was almost negligible. However, the fact remained, that the majority of the STC were non diversified companies. As for the NSTC, the ratio between diversified and non diversified companies was obvious and a strong majority (70%) of NSTC were non diversified companies.

No doubt the NSTC have more non diversified companies than the STC but both types of companies have their majority of companies falling under the non diversified category.

The argument at this point is whether there are real differences in terms of achieving a successful turnaround between diversified and non diversified companies.

Slatter (1984) believes that the availability and the liberty to use more generic strategies to turnaround companies exist better in diversified companies (as cited earlier). Subsequently, Luffman, Sanderson, Lea and Kenny (1988) comment that " the further a company moves from its existing product market portfolio (diversify) and the resultant core skills and key resources, the greater the possibility of failure " (p. 88).

The findings above do not seem to support previous. While 70% of the NSTC were found to be non diversified, the majority of the STC were also non diversified, but yet they have managed to achieve successful turnarounds. Equally by having 70% non diversified companies in the NSTC, it did not guarantee them from failing to achieve successful turnarounds.

Thus, the research found no differences in terms of a company's historical strategy (diversification) between the STC and the NSTC. But it did not deny the fact that further diversification can be employed as one of the strategies for turning around companies as found in phase one under the issue of ' corporate strategies '.

#### **5.1.4 D4. INDUSTRY CHARACTERISTICS**

The dynamics of an industry starts with the basic condition underlying demand and supply. These conditions influence the industry structure or characteristics. The industry structure or characteristics in turn influences the industry conduct such as product strategy, pricing, investment, etc. And, subsequently the industry conduct which in turn shapes the way the industry performs, that is its efficiency, growth and employment. The way the industry conducts itself may have a substantial influence on the way the companies within the industry perform.

This is because the characteristics of an industry influence the way companies formulate their strategies. Thus, as part of the industry dynamics, the industry structure or characteristics must be taken seriously to further understand its impact on companies intending to turn around.

### ***A. NATURE OF PRODUCT***

The understanding of the nature of a product is important. As part of the marketing mix, product strategies will be formulated in accordance with the nature of the product, which subsequently influences the other marketing mix components such as pricing, promotion and distribution.

Eleven of the 'troubled companies' (11%) were involved with consumer products, out of which 4 were STC (7% of STC) and 7 were NSTC (16% of NSTC). Those involved with industrial products consisted of 50 'troubled companies' (50%) of which 30 were STC (53% of STC) and 20 were NSTC (47% of NSTC).

'Troubled companies' dealing with both types of products consisted of 39 companies of which 23 were STC (40% of STC) and 16 were NSTC (37% of NSTC) (refer to Appendix C).

When product differentiation was analysed, 84 'troubled companies' (84%) were found not to be highly differentiated and only 16 companies (16%) were highly differentiated. Forty STC (81% of STC) and 38 NSTC (88% of NSTC) did not have highly differentiated products and only 11 STC (19% of STC) and 5 NSTC (12% of NSTC) had highly differentiated products.

Subsequently when price sensitivity was viewed, 92 'troubled companies' (92%) reported having products that were more price sensitive. Out of this figure, 57 were of the STC (100% of STC) and 35 were of the NSTC (81% of NSTC). Only 8% of the 'troubled companies' reported having products that were less price sensitive and all 8 belonged to the NSTC.

The findings above showed that a majority of both STC and NSTC were involved with industrial products. They also showed that a majority of STC and NSTC were having products that were not highly differentiated. Subsequently, the majority of STC and NSTC were also having products that were more price sensitive.

Contrary to the beliefs of previous researchers such as Porter (1980) and Slatter (1984) where companies dealing with consumer products that are highly differentiated and less price sensitive are likely to be in a better position to compete and subsequently turn around, the findings above found otherwise. The majority of STC were found to be dealing in industrial products, which were more price sensitive and less differentiated. Furthermore, as far as these were concerned it was found that there were no apparent differences between the STC and the NSTC.



## **B. MARKET SEGMENTATION**

“Target marketing is the decision to distinguish the different groups that make up a market and to develop corresponding products and marketing mixes for each target market” (Kotler, 1988, p. 280). However, the number of target markets will depend on the number of potential market segments. The greater the number of potential market segments, the greater are the target markets. Thus, the marketer will be able to develop more products and marketing mixes for the different ranges of target marketing in these segments. Existence of multiple segments also gives the marketer the freedom of choice to choose which segment the marketer prefers to concentrate upon.

Eighty nine of the ‘troubled companies’ (89%) reported having highly segmented markets. Fifty six of them belonged to the STC (98% of STC) and 33 to the NSTC (78% of NSTC). Only 11 of the ‘troubled companies’ (11%) reported not having highly segmented markets, out of which 1 was an STC (2% of STC) and 10 were of the NSTC (23% of NSTC) (refer to Appendix C).

From the above, it is found that there is no apparent difference between the STC and the NSTC as far as market segmentation is concerned. The majority of STC and NSTC companies depended their businesses from the multiple market segments. One reason may be connected to the issue of differentiation under ‘nature of product’ as cited earlier.

Whitney (1987, p. 148) stated that " much nonsense has been written about market segmentation without concomitant consideration of product differentiation or, worse still, about product differentiation without a sharp eye on market segmentation ".

Levitt (1981, as cited in Whitney, 1987, p. 149) says that " to differentiate an offering effectively requires knowing what drives and attracts customers. It requires knowing how customers differ from one another and how those differences can be clustered into commercially meaningful segments ".

From the citations above, what can be inferred is that it is simply not enough just to have multiple segments but what is more important is how differentiation can be effectively captured into these market segments. Thus, a possible reason as to why NSTC found having high market segmentations did not succeed in their turnarounds may be due to the lack of product differentiation. However, the STC were also found to be in a similar position as the NSTC. Thus, this has further led the research to believe that there are other interacting factors in play to affect a successful turnaround other than merely having highly segmented markets.

### ***C. RELATIVE SIZE AND STRENGTH OF COMPETITORS***

The fragmentation of the industry a company is in has an influence over the number of approaches the company is able to achieve in terms of competitive advantages and the size of the competitive advantages.

Thus, the more fragmented the industry, the greater the opportunities for differentiation although the size of the differentiations may be smaller. The fragmentation of the industry is also related to the concentration of the players in the industry. A less fragmented industry is depicted by a small number of competing companies, thus, increasing 'player' concentration.

George and Joll (1988) gave an example of what is meant by a small number of firms in an industry. They explain that "each with a substantial share of a market that is not showing any growth will mean that a substantial increase in the sales of one firm results in a noticeable loss to the others. The firms will quickly learn why they have lost sales and are likely to respond in an attempt to regain their market share" (p. 109).

Only 36 of the 'troubled companies' (36%) reported being in industries which were fragmented, out of which 19 were STC (33% of STC) and 17 were NSTC (40% of NSTC). The majority of the 'troubled companies' (64 %) were in industries which were not fragmented out of which 38 were STC (67% of STC) and 26 were of NSTC (60% of NSTC) (refer to Appendix C).

From the above it is observed that there are no apparent differences and the majority of STC and NSTC are both in industries which are not fragmented.

As explained earlier, the concentration of the ' players ' in non fragmented industries is higher and each ' player ' may be fighting to increase or maintain its existing market share. Thus it was not surprising when the majority of the STC and NSTC reported that they were facing intense competition pressure in the earlier findings, given that both types of company were equally suffering from external pressure due to the recession and subsequently, aggravated by the non fragmented industry characteristics they are in.

#### ***D. ENTRY BARRIERS***

Given the already intense competitive pressure from the existing ' players ' in the industry, a low entry barrier means that new entrants can add to the existing competitive pressure and worsen the conditions for the existing ' players '.

High entry barriers would be of help to deter newcomers especially in a turnaround situation.

Forty three ' troubled companies ' (43%) were in industries with low entry barriers. Out of these 22 were STC (39% of STC) and 21 were NSTC (49% of NSTC). The majority of the ' troubled companies ' (57%) were in industries with high entry barriers of which 35 were STC (61 % of STC) and 22 were of NSTC (51 % of NSTC) (refer to Appendix C).

It can be observed from the above that there are more STC who are in industries with high entry barriers than there are NSTC. In fact, a strong minority of NSTC (49 %) are in industries with low barriers of entry.

Given the scenario above, one cannot help imagine that the strong minority of NSTC are facing possible intense competition not only from the existing rivals but also from new entrants. Entry barriers may also be linked to several other factors such as economies of scale and differentiation.

Porter (1980) stated six major sources of barriers to entry, out of which two are economies of scale and product differentiation (both are factors cited in the earlier findings of the research). While it is pointless to detail Porter's comments on product differentiation since the majority of both STC and NSTC do not have highly differentiated products, his explanation on the relationship between barriers of entry and economies of scale is worth mentioning. Porter says that " economies of scale alter entry by forcing the entrants to come in at large scale and risk strong reaction from existing firms or to come in at a small scale and accept a cost disadvantage " (1985, p. 7).

In the case of the STC it was found that only 27 companies or 47% of the STC suffered from cost disadvantage in terms of not having economies of scale and faced operational inefficiencies compared to 42 NSTC (98% of NSTC).

This number of STC suffering from cost disadvantage may be linked to the high minority (39%) of STC in the low entry barrier industries. The features of low entry barrier industries would have placed them in worse off positions in terms of economies of scale and operational efficiencies.

The majority of NSTC who did not achieve economies of scale and operational efficiencies but are enjoying the protection from the high entry barrier features may also be deriving benefits from other high entry barrier features such as high capital intensities, high switching costs, costs disadvantages independent of scale, etc.

#### ***E. EXIT BARRIERS***

Companies may want to exit from an existing industry since they may no longer consider that they can make returns on investments that exceed the opportunity costs of capital. By the reduction in the number of companies through the exit process the industry structure changes and subsequently leaves the leading ones to dominate. This strategy is also recognised as an 'Asset Reduction Strategy' in corporate turnarounds and may be chosen by a declining company as one of the strategies to turnaround. However, there are barriers to the application of this strategy.

Fifty two of the 'troubled companies' (52%) were in industries with low exit, out of which 29 were STC (51% of STC) and 23 were NSTC (53% of the NSTC).

The number of companies found in high exit barrier industries were 48 'troubled companies' (48%), out of which 28 were STC (49% of STC) and 20 were NSTC (47% of NSTC) (refer to Appendix C).

It can be observed from the above findings that there are no significant differences between the number of STC and NSTC in high exit barrier industries and those in low exit barrier industries. For those in the high exit barrier industries the reasons could be due to high investments (capital intensity) in non transferable assets (e.g. specialist plant), the high cost of redundancy, the reliance on one product to be credible within a market sector, even if the product itself is making heavy losses, and the possibility of political intervention. It is also possible that the exit barriers faced by the companies above may be linked to factors found earlier in the research such as poor management, non diversified structure, non fragmented industries with high entry barriers and 'tied down assets'.

Poor management feature of a declining company coupled with 'sentimental' emotions for a company's asset or subsidiary may be the cause for the reluctance to sell off the asset or subsidiary in order to raise the extra cash required. In addition, in a non diversified company where there are no spare or excess assets available, all there is left is the company itself with nothing else to be sold except the company.

}}

As observed earlier, the majority of the STC and the NSTC are in non fragmented and high entry barrier industries. Non fragmented industries, featured by several powerful ' players ' with high entry barriers may not be attractive to a new comer or potential buyer of the company on sale. Subsequently, given the significant number of NSTC with high borrowings and the STC who are able to raise bridge capital from their bankers (to be discussed later), the assets available would probably have been pledged as collateral for the loans given - meaning they are ' tied up'.

#### ***F. RATE OF TECHNOLOGICAL CHANGE***

It is recognised that technology, even in its simplest form exists in almost all value activities in a company. Technology development may exist in the inbound logistics, main operation / production, outbound logistics, marketing and sales and service sections of a company. Subsequently, the same or even different technology may be used by other competitors in the same industry. In some industries technology improvements occur at a fast pace while in others it may not be so.

Only 7 of the ' troubled companies ' (7%) reported being in industries with frequent technological changes. Out of these 4 were STC (7% of STC) and 3 were NSTC (7% of NSTC). The majority of the ' troubled companies ' (93%) admitted that they were in industries where technology does not change too frequently.



And out of these 53 were STC (93% of STC) and 40 were NSTC (93% of NSTC) (refer to Appendix C).

While the minority of both STC and NSTC (reported being in industries with frequent technological changes) may be in 'technology - based' industries such as electronic engineering, robotics and information technology (I.T), it is arguable whether the majority of the STC and NSTC are in industries without frequent technological changes, since it is accepted in this era that the pace of technological change in many industries is so rapid that product and process life cycles have become even much shorter.

What can be inferred from the above is that there is the possibility of a link between the situation above and that of poor management problems. As stated earlier, one of the characteristics of poor management is the lack of awareness and the inability to react to external changes due to their 'functional blindness' and being 'myopic'.

Luffman, Sanderson, Lea and Kenny (1988) warn that "whilst some industries may feel somewhat immune from such changes, technological development in related industries can have a large effect" (p. 29).

Thus, it may not be true that the industries the majority of the STC and NSTC are in are not the ones facing frequent technological changes.

Frequent changes in technology may not be the only problem. The other reason could be the management of these companies, who are not sensitive enough to capture the changes due to their poor management characteristics.

### ***G. THREAT OF RETALIATION***

A company contemplating any change in terms of its marketing mix must take into account the reaction of its competitors or their threat of retaliation. Some competitors react instantaneously while others may take a longer period of time to react.

Seventy two of the 'troubled companies' (72%) reported having a slower rate of reaction by their competitors. Out of which 38 were STC (67% of STC) and 34 were NSTC (79% of NSTC). Only 28 'troubled companies' (28%) admitted that their competitors were quick to react or retaliate. Out of these 19 were STC (33% of the STC) and only 9 were NSTC (21% of the NSTC) (refer to Appendix C).

The majority of the STC and the NSTC were found to have experienced slower competitors' rate of reaction. These findings are somewhat contradictory to comments made by authors such as Kotler (1988) and Johnson and Scholes (1988).

Johnson and Scholes (1988) for instance, stated several factors that they believe contributed to the degree of rivalry e.g. market growth, competitors size, fixed costs, capacity, differentiation and exit barriers. They added that intense competition and quick reaction by competitors are likely to be found in an industry where the market growth is slow, the competitors are almost equal in size, with high fixed costs, extra capacity in large increments, where products are not differentiated and where the exit barriers are high.

Contradictory to the above, the competitors' rate of reaction for retaliation is found to be slower despite the fact that the majority of the STC and NSTC are in markets with slow growth (due to the recession), in non fragmented industries without product differentiation and with excess capacity and high exit barriers.

The reasons for this could be explained in Porter (1980) terms as 'factors for quick response capability' or reasons behind a competitor's quick rate of reaction or retaliation. These factors are as follows;

- Uncommitted cash reserves
- Reserve borrowing power
- Excess capacity
- Unintroduced but on-the-shelf new products

However, by observing the factors given by Porter, it may be difficult to believe that most companies during an economic recession may have the luxury of experiencing all of the factors above, except possibly, having to had excess plant capacity, which in this case is true due to the downturn of the market, which may have affected their sales and subsequently forcing these companies to produce less, with higher costs, without the economies of scale and at lower margins. On the other side of the argument, it may also be due to not having these factors as stated by Porter to enable them to have ' quick response capability ' as in the case above, that have resulted in the competitors to react slower?!

#### ***H. BARGAINING POWER OF SUPPLIERS***

Suppliers tend to be powerful when their concentration is high (i.e. when their numbers are few), when there a few substitutes and the supplied product is an important input and where switching costs are high. It is thus necessary in this case to have multiple supply sources. However, not all companies are in the position to do so and are basically ' locked in ' with their suppliers.

" Suppliers can exert a bargaining power over participants in an industry by threatening to raise prices or reduce the quality of purchased goods and services " (Porter, 1980, p. 27). Powerful suppliers can squeeze profitability out of a company who is unable to recover cost increases and further dampen the hope of a successful turnaround.

Ninety six of the 'troubled companies' (96%) reported having depended on more than 5 suppliers (the arbitrary cut of point rate), meaning that their number of suppliers were many and the suppliers were not able to exert much bargaining power due to their low concentration level.

Out of these 56 were STC (98% of the STC) and 40 were NSTC (93% of the NSTC). Only 1 STC and 3 NSTC reported having to depend on less than 5 suppliers (refer to Appendix C).

From the above it can be observed that the majority of the STC and the NSTC did not have to depend on a few suppliers. As such they were not 'locked in' by the suppliers and dictated on the purchasing terms and conditions.

Whilst, the majority of both STC and NSTC enjoyed this freedom of having suppliers without strong bargaining powers, it did not make any difference in terms of trying to achieve successful turnarounds for the NSTC. They still did not manage to achieve successful turnarounds. Thus it is believed that there are other factors in play that may have compounded negative impacts on the NSTC from achieving successful turnarounds.

## ***I. BARGAINING POWER OF CUSTOMERS***

Customers bargaining power grows when they are a few and become more concentrated. They will try to force down prices, demand better quality products or services, longer credit periods and in some cases set competitors against each other. For example, a seller who deals with a few large retail outlets may have to offer special discounts, longer credit periods and may even have to pay for the sales space of his products in these outlets. As stated by (Luffman, Sanderson, Lea and Kenny, 1988) "supplying firms can become heavily dependent on one or two retailers which gives great power in such aspects as price negotiation and product quality and quantity" (p. 40).

The majority of the 'troubled companies' (89%) reported having more than 5 customers (the arbitrary cut off point), out of which 47 were STC (82% of STC) and 42 were NSTC (98% of NSTC). Only 11 of the 'troubled companies' (11%) were found to be servicing less than 5 customers and out of these 10 were STC (18% of STC) and 1 was NSTC (2% of NSTC) (refer to Appendix C).

From the above, it can be observed that a strong majority of both STC and NSTC are not relying on a few customers for their revenue and as such they would not probably have to face the problem of strong customers' bargaining power. They are in a better position to decide which customer they find comfortable and more profitable to do business with.

However, it is questionable as to why NSTC who are in similar position as the STC did not achieved successful turnarounds. As reasoned out earlier under ' bargaining power of suppliers ' this particular factor alone may not be able to substantiate the ability of the NSTC to turn around. There may be other factors in play that can determine the ability of the NSTC to turn around.

#### ***J. INDUSTRY GROWTH RATE***

An attempt to turn around a company in a mature or declining industry can be harder or even futile compared to when the industry is in its introduction or growth stage.

“ It is simply because the life cycle has an influence, not only on the functional activities of a company but also on its corporate strategy ” (Luffman, Sanderson, Lea and Kenny, 1988, p. 130).

For instance, the industry characteristics in a mature industry are not as attractive as when it is in the growth stage. In the mature stage it is plagued by reducing market growth, oligopolistic structure, significant reduction in product variety and differentiation and depending on the rate of investment of the company, it can be either a ' cashcow ' or a ' cash drainer '. The characteristics in the growth stage are somehow more positive than those described in the mature stage.

Eighty one 'troubled companies' (81 %) were reported to be in industries which are growing. Out of these 46 were STC (81% of the STC) and 35 were NSTC (81 % of the NSTC). Only 19 of the 'troubled companies' (19%) were in mature industries and out of which 11 were STC (19 % of STC) and 8 were NSTC (19% of the NSTC) (refer to Appendix C).

From the above findings, a strong majority of both STC and NSTC are in industries which are growing. There could have been multiple attractive characteristics apparent in these industries such as rapid market growth, fewer competitors, more profitability to 'plough back' for reinvestment or expansion and with reduced costs due to the rapid move along the experience curve. While these may have been beneficial to the STC, they did not make any difference to the NSTC.

As stated clearly by Slatter (1984) "a firm's profit potential and hence its recovery, in part is a function of the industry it is in" (p. 11). It is also believed that there could be other factors or combination of factors that have resulted in the NSTC experiencing non successful corporate turnarounds.



Overall, when the industry characteristics were analysed, it was found that 6 'troubled companies' (6%) had 3 occurrences of favourable industry characteristics, out of which only 1 was STC (2% of STC) and 5 were NSTC (11% of NSTC). Ten STC (17% of STC) and 4 NSTC (9% of NSTC) were observed to have had 4 occurrences and 9 STC (16% of STC) and 8 NSTC (19% of NSTC) had 5 occurrences of favourable industry characteristics.

The number of STC and NSTC having 6 occurrences were 12 STC (22% of STC) and 7 NSTC (17% of NSTC). Seven STC (12% of STC) and 5 NSTC (11% of NSTC) had 7 number of occurrences. The majority of the NSTC (10 NSTC or 23% of NSTC) had 8 occurrences of favourable industry characteristics. Only 8 STC (14% of STC) were observed for this number of occurrences. Another 10 STC (17% of STC) were observed to have 9 occurrences. Lastly, only 2 NSTC (5% of NSTC) were observed to have 10 occurrences of favourable industry characteristics while none of the STC were observed here (refer to Appendix G).

From the findings above, the bulk of the the STC and NSTC have both higher number of occurrences of favourable industry characteristics. But the fact remains that NSTC did not benefit from the favourable characteristics of the growing industries they are in. Being in growing industries did not guarantee them to have successful turnarounds.

And as mentioned in the earlier observations, there may be other factors or combinations of factors that have the influence over the success of the NSTC turnarounds.

To substantiate the comments above, Porter (1980) stated that " forces outside the industry are significant primarily in a relative sense; since outside forces usually affect all firms in the industry, the key is found in the differing abilities of firms to deal with them " (p. 3).

Thus, possessing an attractive industry characteristic may not be enough to determine a successful turnaround. What is equally important are other influential factors such as the firm's own internal abilities. This is logical and it is also the very reason for this research which is trying to identify and understand the other determinants of turnaround feasibility such as commitment of shareholders, bankers, creditors, availability of bridge capitals, viable core business, new competent management, etc.

#### **5.1.5 D5. COMPANY COST PRICE STRUCTURE**

In the ' emergency phase ' of a corporate turnaround, generic strategy such as cost reduction is usually applied as a short term measure in an attempt to ' stop the bleeding ' or further erosion of the company's going concern. However, the cost reduction strategy is dependent on the company's existing cost price structure.

In some companies, management could take full advantage of cutting costs in every possible costing variable to reduce losses and improve profitability. In others, however, once certain cost variables are reduced to a point, further cost reduction may not be possible. A company undergoing a corporate turnaround situation may still need to compete intensively in the market.

Thus, the company with the lower cost price structure may be able to compete more effectively than others, with higher or equivalent cost price structure in the industry.

Twenty five of the 'troubled companies' (25%) were found to have lower cost price structures than their industry standards. While 25 STC (44% of STC) reported having lower cost price structure, none of the NSTC reported this. The bulk of the 'troubled companies' (75%) reported having cost price structures that were equivalent to that of their industry, out of which 32 were STC (56% of STC) and 43 were NSTC (100% of NSTC) (refer to Table 23).

Porter (1985) stresses that "cost advantage is one of the two types of competitive advantages a firm may possess. Cost is also of vital importance to differentiation strategies" (p. 62).

Table 23

Company's Cost - Price Structure

	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Lower than industry	25	25	25	44	0	0
Equal or higher than industry	75	75	32	56	43	100

Slatter (1984) gave a comparative example of two companies (both were making losses) in terms of cost price structure and the impact on profits by a 10% change in pricing, volume generation and cost reduction strategies. The company with the lower variable costs was found to have more impact on profits when the sales volume was increased. On the other hand, the company with higher variable costs and smaller contribution margin, had little impact on profit improvement even when the sales volume was increased.

Hofer (1980) found that turnaround companies increased sales and market share to the level of non turnaround companies and that turnaround companies appeared to have been more effective in their efforts to manage costs and assets. He also found that turnaround companies have been able to generate increases in sales without corresponding increases in costs, fixed assets and debts. His findings are consistent with those of Schendel and Patton (1975) and Ramanujam (1984).

The inference that can be made from the findings of Hofer and other researchers above is that turnaround companies, through effective management of costs and the other variables mentioned, may have increased their sales volume while achieving lower costs levels.

However, in contrast to the above researchers' findings, the research did not observe any apparent differences in terms of cost price structure between the STC and the NSTC. Majority of the STC and the NSTC had cost price structures which were equivalent to their industry.

This is supported by the research findings earlier in terms of cost disadvantage (discussed under ' Causes of Decline '), where, even though the figures reported then were not exactly the same as the ones reported here, they are close enough to indicate the existence of a possible relationship or link with each other.

In the findings of determinant D1 (Causes of Decline), it was observed that 27 STC (47% of STC) and 42 NSTC (98% of NSTC) suffered from being in a cost disadvantage position or having higher cost structure due to operational inefficiencies and the inability to achieve economies of scale. Researchers such as Schoeller (1977), Buzzell and Heaney (1971), Schendel and Patton (1975) and Hambrick and Schecter (1983) had observed the reduction in costs due to economies of scale workings.

Subsequently, both high cost price structure and cost disadvantage may not only be due to internal weaknesses of these companies but also may be caused by external factors such the recession reported earlier. Recession as explained before, affected 39 STC and 33 NSTC. Intense competition and shrinking markets in recessionary periods could have forced down sales, lowering production volume. Coupled with operational inefficiencies non economies of scale and higher costs resulted.

It is also interesting to note that given the high number of companies affected by the recession, another inference that can be derived from this is that, comparing a company's cost price structure with its respective industry may not be the right form of performance control since other companies and competitors are equally affected by the recession.

And high cost price structure and cost disadvantage may also incur in companies with inappropriate organisational structure and management style which subsequently hinders effective cost control (inadequate financial control).

### **5.1.6 D6. COMMITMENT OF SHAREHOLDERS**

The shareholders are the legal owners of the company. Their interest in the company is reflected by the amount of their investments in terms of paid up capital in the shareholders fund of the company's balance sheet.

The reason for their investments is not solely to own the business but to ensure their investments are protected and further enhanced in terms of growth in the shareholders fund and prudent dividend payments. Equally, in a decline situation, shareholders are the most worried due to their depleting investment values and the possibility of greater losses leading to bankruptcy and demise of the business.

Fifty nine of the 'troubled companies' (59%) reported that they had always received the commitment of their shareholders, out of which 57 were STC (100% of STC) and 2 were NSTC (5% of the NSTC).

In addition, 41 'troubled companies' (41%) admitted that they did not always receive the commitment of their shareholders. All 41 belonged to the NSTC (95% of the NSTC). None of the companies receiving absolutely no form of commitment from their shareholders (refer to Table 24).

Table 24

Commitment Of Shareholders

Level of commitment	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Always	59	59	57	100	2	5
Not always	41	41	0	0	41	95
Never	0	0	0	0	0	0

From the above, it can be observed that the majority of the NSTC did not always receive the full commitment of their shareholders in terms of the full authority and absolute power to initiate and implement a corporate turnaround. Their actions were usually highly scrutinised and monitored closely by their shareholders.

The reasons for the above could be due to the NSTC shareholders who may be overly concerned and deeply worried over the security of their investments in the NSTC, given that the majority of the NSTC were in the severe crisis stage.



Thus, shareholders may be scrutinising actions by the top management closely to ensure that things do not go wrong at every step of the turnaround process.

Salancik and Pfeffer (1980) found that externally controlled firms are likely to have management performance closely reviewed and evaluated by external shareholders who will intervene when performance is judged to be unsatisfactory.

The research findings supports those of Salancik and Pfeffer since it was found that 34 of the NSTC (79% of NSTC) were actually externally owned. Most of the CEOs were employed and only a handful of the NSTC (9 NSTC or 21% of NSTC) were owner cum chairperson / CEO. This may have explained the reasons for the tight decisions and actions of the majority of the NSTC shareholders.

In contrast to the NSTC, the STC have always received the full commitment of their shareholders. The compelling reason behind this could be due to the high number of owner cum chairperson / CEO who are also the shareholders of these companies (and in most cases they are the main shareholders) and as such they may not require higher authorisation or sanctions to initiate or implement recovery strategies which they feel are deemed fit for turning around the companies. In addition, they themselves are the dominating powers within their company boards.

The findings above for the STC are also in contrast with of Slatter (1984) where he commented that only a few turnaround managers would have the freedom in terms of determining the recovery strategy to take and to implement them, unless the firm has just been acquired.

These CEOs as described by Slatter would have to obtain the blessings and sanctions from the main shareholders through their board of directors for every action that they may want to embark on. This is, however, similar in the case of the NSTC above.

#### **5.1.7 D7. COMMITMENT OF BANKERS**

A company undergoing the process of turnaround must establish and communicate credibility with the influential stakeholder group. This group has the power to appoint or not appoint a receiver, to restructure the debt and / or to offer additional financing. This particular group in discussion is the bankers.

The turnaround CEO must convince the banks with their strategic turnaround plan and must also persuade the banks not to put the company into receivership.

Communication is vital with the bankers. The turnaround CEO may also seek the commitment of the bankers in various forms such as an agreement to restructure the debt, defer principal payments, waive the interest charges and may also request for additional financing to weather the turnaround period.

None of the 'troubled companies' found their bankers to be not all supportive in terms of their commitment level. However, 29 of the 'troubled companies' (29%) found their bankers not so supportive and all 29 belonged to the NSTC (67% of NSTC). However, 27 of the 'troubled companies' (27%) obtained the supportive level of commitment from their bankers.

Within this group 21 were STC (37% of STC) and only 6 were of the NSTC (14% of NSTC). The major group of 44 'troubled companies' (44%) received the very supportive commitment level from their bankers, out of which 36 were STC (63% of STC) and only 8 were NSTC (19% of NSTC) (refer to Table 25).

It can be observed from Table 25 that the STC received either the supportive or the very supportive levels of commitment. The number of NSTC experiencing these levels of commitment were only 14 or 33% of NSTC. The bulk of the NSTC fell within the not supportive level of bankers commitment.

The reasons the STC received the supportive and the very supportive levels of commitment from the bankers compared to the NSTC, could be due to certain factors of 'comfort' that bankers may have found in them and which may be linked to determinants such as the number of decline causes, severity of crisis, industry characteristics (as discussed earlier) and viable core business, realistic turnaround plan or recovery plan and new competent management (to be discussed later).

Table 25

Commitment Of Bankers

Level of commitment	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Very supportive	44	44	36	63	8	19
Supportive	27	27	21	37	6	14
Not so supportive	29	29	0	0	29	67
Not supportive at all	0	0	0	0	0	0

It is worth recalling the earlier findings on some of these determinants where the STC were found to have positive attributes of these determinants compared to the NSTC. For instance, it was found that STC suffered fewer causes of decline, and had always received the commitment of their shareholders, etc. more than the NSTC had received.

At this point it may also be worth citing a contrasting observation. Several authors and researchers such as Schendel, Patton and Riggs (1976), Davis (1988), Eisenberg (1972), Pant (1982), Taylor (1982), Slatter (1984), Bibeault (1982) and others, have stressed the importance in the change in top management. In fact Bibeault emphasised that the recovery phase should begin only when a new CEO is appointed.

Bibeault is supported by Slatter, who also recommended the removal of the former CEO to show tangible evidence to interested parties such as investors, employees and, specifically the bankers, to prove to them that something positive is being done to improve the firm's performance.

The emphasis and recommendations of the researchers contrast with those findings above. It must be re-emphasised that out of the 57 STC, 38 STC did not have any change in their top management and 32 STC were literally managed by owner cum chairperson / CEO. It was also emphasised earlier under ' commitment of shareholders ' that one of the reasons STC received a greater level of commitment from their shareholders was due to the fact that the majority of STC were managed by owner cum chairperson / CEO.

Subsequently, it is also felt that this could be one of the compelling reasons bankers are found to be giving greater levels of commitment to the STC.

Bankers, similar to those shareholders, are equally worried about the value and fate of their monies loaned to these companies. Bankers are more assured when they know that these owners cum chairpersons / CEOs are also striving hard, giving their best and their part of the commitment to ensure that these companies do not decline further and are seen to be taking steps toward successful turnarounds.

What can be derived from the above argument is that bankers may not be looking for assurances such as a strong chance for a successful corporate turnaround. They are also looking for the type and level of commitment that can be given by the leadership of the company wanting to turnaround. It is not necessary that only new top management possess this level of commitment. Instead greater levels of commitments are also found in companies with the owner cum chairperson / CEO type, those who are equally concerned with the fate of their investments.

### **5.1.8 D8. COMMITMENT OF CREDITORS**

Another party with which a turnaround leadership must establish and communicate credibility are the creditors. Creditors or suppliers must be persuaded not to apply for a creditor-winding-up-order and wherever possible should be persuaded to ensure the continuity of supplies during the process of turning around the company.

In most cases creditors usually realise that they have a greater chance to get back monies due to them by co-operating closely with the turnaround leadership rather than pushing the company into receivership or liquidation. They also realise that by resorting to harsh decisions, as mentioned above, they may be at the losing end because the proceeds to be derived from a winding up exercise will first benefit the secured creditors such as the banks, government taxes, employee salaries, etc since most creditors are unsecured.

Out of the 66 'troubled companies' (66%) reported to have received strong commitments from their creditors in terms of their creditors agreeing to the rescheduling / deferring of payments, continuation of supplies and the formation of creditors committee, 57 were STC (100% of STC) and only 9 were NSTC (21% of NSTC). Thirty four NSTC (79% of NSTC) who did not receive the commitment of their creditors were also the 34 'troubled companies' (34%) who were facing similar problems (refer to Table 26).

From Table 26, the STC were found to be in a better position as far as getting the commitment of their creditors was concerned compared to the NSTC. The latter group found it more difficult to defer payments, that is, the creditors were insisting that payments be made immediately and were also deciding not to continue their supply, far from agreeing to the formation of the creditors committee.

Table 26

Commitment Of Creditors

Agreement on rescheduled / deferred payment, continuation of supply and creditors committee	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Yes	66	66	57	100	9	21
No	34	34	0	0	34	79

As Slatter (1984) states " the suppliers greatest leverage comes from threatening to stop supplies, but in situations where there are no alternative sources of supply, cutting off supplies may mean that management has no alternative but to ask the bank or court to appoint a receiver " (p. 136).



In practice, usually creditors insist that any further supply to the company be made on a ' c.o.d ' or cash on delivery basis. This will not help a company already in a ' cash trapped ' position.

The reasons creditors gave their commitment to the STC may be similar to the reasons set forth as to why bankers are giving their commitment to this group of companies.

The findings above contradict those of the researchers such as Slatter (1984), Whitney (1987) and others mentioned before.

Whitney (1987) for instance states that " a skilful negotiator will sustain the suppliers' fear at the subliminal level while providing a modicum of wholesome greed. After all, dynamic new management is now in place, old and festering problems are being recognised, new financing facilities are being negotiated and new marketing programs are being developed " (p. 56).

As pointed out earlier under ' commitment of bankers ' a strong majority of STC did not have their top management changed and most of them were managed by owner cum chairperson / CEO. It may be worth reiterating the same argument put forward earlier, but this time in the context of creditors.

One of the compelling reasons why creditors gave their commitment to the STC may have been due to the existence of the strong commitment by the owner cum chairperson / CEO, who is also a shareholder and are equally concerned about the fate of his or her investments in these companies. They will take all appropriate actions to ensure a successful turnaround of their company. The reasons for the commitment of the bankers toward to the STC may also help to reinforce the above argument.

### **5.1.9 D9. COMMITMENT OF EMPLOYEES**

No turnaround leadership works on their own. They need not only the commitment of other stakeholders such as the shareholders, bankers and creditors but, in every of their attempts to further arrest the crisis situation and to later implement changes to turnaround the company, they will need the commitment of the employees.

In a crisis situation, employees would have already taken the blow from demotivation, low morale and would have shown resistance to change. An easy answer out of this would be to execute a redundancy program or even fire the 'hard core' personnel. However, as easy as it may sound, what the turnaround leadership would really require is a strong commitment by the employees to weather together the crisis period. At times, everyone may have to do their bit of sacrifice for the company even if it means getting less pay and handling increased job loads.

### ***A. HIGH RATE OF VOLUNTARY RESIGNATION***

Only 5 of the 'troubled companies' (5%) reported having a high rate of voluntary resignation, meaning employees left the companies on their own accord. All 5 companies were of the NSTC (12% of NSTC) and none was reported for the STC. A strong majority of the 'troubled companies' (95%) reported that they did not have a high rate of voluntary resignations. Thirty eight were NSTC (88% of NSTC) and 57 were STC (100% of STC) (refer to Appendix D).

### ***B. ACCEPTING INCREASED JOB LOADS WITH SAME WAGES***

The number of 'troubled companies' reporting this were 36 or (36% of the 'troubled companies') out of which 34 were STC (60% of STC) and only 2 were NSTC (5% of NSTC). Twenty three companies of the NSTC (53% of NSTC) reported that their employees did put up a resistance and did not accept a heavier job load given the same amount of wages. Forty one 'troubled companies' (41%) reported that they did not take such a measure as above, out of which 23 were STC (40% of STC) and 18 were NSTC (42% of NSTC) (refer to Appendix D).

### ***C. ACCEPTING SAME JOB LOAD WITH WAGES CUT***

Eighty two of the 'troubled companies' (82%) reported that they did not take such a measure. Fifty six were STC (98% of STC) and 26 were NSTC (60% of NSTC). Seventeen of the NSTC (40% of NSTC) reported that their employees did not accept having their wages cut for doing the same job load. None of the STC reported this.

Only one STC reported that it did not face resistance from its employees for having their wages cut for doing the same job load (refer to Appendix D).

#### ***D. TOLERATING LATE PAY***

Thirty 'troubled companies' reported having employees that tolerated late pay and out of which all 30 belonged to the STC (53% of STC). None was reported for the NSTC. However, 42 NSTC (98% of NSTC) and only 1 STC (2% of STC) reported that their employees did not tolerate late pay. Twenty seven 'troubled companies' (27%) reported that they did not resort to late pay practice, out of which 26 were STC (45 % of STC) and only 1 was an NSTC (2% of NSTC) (refer to Appendix D).

#### ***E. PARTICIPANTS SUPPORTING TURNAROUND PROCESS***

Thirty eight of the 'troubled companies' reported having employees who recognised themselves as participants supporting the turnaround process. Out of which 37 were STC (65% of STC) and one was a NSTC (2% of NSTC). Thirty seven NSTC (86% of NSTC) did not have employees who recognised themselves as participants supporting the turnaround process. None of the STC was reported for this. However, 20 STC (35% of STC) and 5 NSTC (12% of NSTC) reported that their employees neither felt that they were participants nor non participants supporting the turnaround process (neutral) (refer to Appendix D).

The overall commitment of employees was also analysed in terms of the number of positive responses (yes / n.a) of the STC and of the NSTC to the 5 inquiries above. It was found that the bulk of the STC (53 companies or 93% of STC) responded positively to all 5 inquiries. Only 1 NSTC (2% of NSTC) was reported to be so. Responding positively to four inquiries were 4 STC (7% of STC) and none of the NSTC.

Subsequently, the majority of the NSTC (38 companies or 88% of NSTC) responded positively to 2 inquiries. None of the STC was reported here. Four NSTC (10% of NSTC) responded positively to one inquiry and no STC was reported here (refer to Appendix I).

Several interesting observations were made from the above. All of the STC (57 STC or 100% of STC) and a majority of the NSTC (38 NSTC or 88% of NSTC) reported that they did not have a high rate of voluntary resignation. With regard to accepting a greater job load for the same wages, a majority of STC (34 STC or 60% of STC) reported that their employees responded more positively than the NSTC. While only 17 NSTC (40 % of NSTC) reported that their employees responded negatively towards accepting the same job load but with wages cut, most of the NSTC (26 NSTC or 60% of NSTC) and STC (56 STC or 98% of STC) were not found to be involved with this issue.

However, a majority of STC (30 STC or 53% of STC) reported that their employees responded positively in terms of receiving a late payment on their wages compared to the majority of the NSTC (42 NSTC or 98% of NSTC) whose employees did not.

Subsequently, a majority of STC (37 STC or 65% of STC) reported that their employees felt that they were participants supporting the turnaround process compared to the majority of NSTC (37 NSTC or 86% of NSTC) whose employees did not . Lastly, the STC were found to have more positive responses from their employees than the NSTC when compared in terms of the total five inquiries (refer to Appendix I).

The reasons for the above could be several. Firstly, the recessionary period which both STC and NSTC are facing could have discouraged the employees in the companies to resign voluntarily due to job security and the fear of being ' worse off ' if they were to joint other companies. Simultaneously, this factor, like the other factors mentioned such as tolerating late pay, accepting the same job load with wages cut and accepting a heavier job load for the same wages, could be linked to another factor, that is, employees feeling that they are participants supporting the turnaround process. They may feel that they are part of the company and would stay to weather through the toughest of times just as when they are with the company when times are good.

This leads to the second possible reason. It is believed that culture, loyalty and relationship may have been a force behind the above behaviour.

Abdullah (1992) mentions that:

Very often employees are considered members of an extended family and the employer a good parent who will protect them. Malaysians live in a complicated web of kinship ties based on the concept of mutual and traditional obligations as demonstrated in the relationship especially with one's family, village, state or social group. It is likely that an employee who has a good relationship with his supervisor will also be loyal to the organisation (p.12).

“ The team members are prepared to work beyond the call of duty ”,

(Mansor, 1992 , p.52). Abdullah and Singh (1992) also commented that in many instances people are willing to work themselves to death for the sake of a good boss.

The explanation given above has resulted in the possibility of a third linking reason, that is, the leadership.

When compared earlier, both STC and NSTC experience poor management problem. However, the reason behind the commitment received from the bankers and creditors in the STC, compared to the NSTC, is the high number of owner cum chairperson / CEO background.

As mentioned earlier, these owners cum chairpersons / CEOs, whose investments are at stake, would have given their maximum commitment to enable the companies to achieve successful turnarounds. In trying to change the fate of these companies, the leadership themselves, would have undergone several phases of changes. Thus a ' changed ' owner, striving to keep the company afloat with support from the bankers and creditors may have generated the very confidence of the employees, leading them to feel that they are participants supporting the turnaround, making them feel willing to toil and face any hardship to keep the company afloat.

#### **5.1.10 D10. NEW COMPETENT MANAGEMENT**

Even with the commitment of the bankers, creditors, employees and the capacity to use multiple generic strategies for a turnaround, the company is still missing one of the vital factors for a turnaround success, that is a new competent management (or strategic turnaround leadership) who will take charge to ensure that the whole exercise will not end up being futile. In otherwords, a new competent management with the right characteristics to deliver a successful turnaround is needed.

The turnaround management style may totally contradict the ' usual or traditional ' management styles because turnaround warrants a dramatic change through the use of strong, autocratic and sometimes dictatorial approaches. Neither time nor circumstance will permit traditional structures and processes.



“ Turnarounds are akin to war and the traditional participative process, so often effective in other situations, is apt to leave corpses sprawled all over the landscape ” (Whitney, 1987, p. 11).

The key characteristics of a new competent management for corporate turnaround are analysed as follows.

#### ***A. ABILITY TO IDENTIFY ORGANISATIONAL PROBLEMS / SORE SPOTS QUICKLY***

The quicker top management are able to identify the problems or sore spots in the organisation the faster will appropriate actions be taken to rectify the problem.

Seventy six of the ‘ troubled companies’ (76%) CEOs admitted that they were able to identify problems in the organisation very quickly. Among these 56 were of the STC (98% of STC) CEOs and 20 were of the NSTC (47% of NSTC) CEOs. Twenty three NSTC (53% of NSTC) CEOs and only 1 STC (2% of STC) CEOs admitted that they were unable to identify problems in the organisations very quickly (refer to Appendix E).

From the above, a strong majority of STC CEOs were found to be able to identify problems in their organisations quicker than those of the NSTC. The ability to do so had placed them in a better position to arrest problems before it was too late.

The evidence for the above can be observed from the high incidence of STC which were found earlier to be in the ' mild or moderate ' crisis stage compared to the majority of the NSTC found in the severe stage.

### ***B. ' STOMACH ' TO FIRE PEOPLE***

During the implementation of the generic strategies to turn the company around, especially the ' cost reduction ' strategy, there may be a need to execute a redundancy program. Immediate action to reduce total labour costs is a characteristic of many recovery situations (Slatter, 1984). However, making employees redundant or firing people is a very emotional issue and it takes a tough minded turnaround leader to make such a decision to necessitate the turnaround process.

Only 25 of the ' troubled companies '(25%) admitted having the ' stomach ' to fire employees or make them redundant. Twenty four of the STC (42% of STC) CEOs and only 1 NSTC (2% of NSTC) CEO admitted that they had the ' stomach ' to fire employees or make them redundant. Forty two of the NSTC (98% of NSTC) CEOs and 33 of the STC (58% of STC) CEOs admitted that they did not have the ' stomach ' to do so (refer to Appendix E).

The finding above is somewhat dissimilar to those of Slatter (1984). One of his observations includes the redundancy of 25,000 workers of British Leyland in 1979 alone. Another, is the redundancy of 750 workers of one of the largest British companies (with sales of £ 450 million in 1979 alone).

It could probably be true that more turnaround leaders in Britain have the 'stomach' to fire their employees or execute redundancy programs compared to their Malaysian counterparts in implementing the 'cost reduction' turnaround strategy. This dissimilarity may be due to a cultural and value background.

Abdullah and Singh (1992) stress that :

Leadership is still paternalistic because of the hierarchical nature of the Malaysian society. There is a moral component in the relationship between the employers and the employees which is similar to the relationship of a child with the extended family. There are mutual traditional obligations: on the side of the employer, protection of the employee, almost regardless of the latter's performance; and on the side of the employee, loyalty towards the employer (p. 37).

The above could be one of the reasons why many turnaround leaders in Malaysia do not have the 'stomach' to implement redundancy programs. These turnaround leaders could have taken advantage of the not so powerful position of Unions in Malaysia (as compared to their counterparts in Britain). But they did not.

It is also possible that they could have resorted to other alternatives such as the introduction of a no hiring policy, early retirement, voluntary redundancy, reduction of overtime, shorter working hours, longer working time with the same pay, work sharing, freeze in pay increase, staff transfer and a cut in wages, salaries and bonuses.

### ***C. PEOPLE USER AND NOT PEOPLES' MAN***

A turnaround leader does not take part in a popularity contest or in trying to be ' Mr. Nice ' to every one in the company at all times. They are tough minded and objective driven and are racing against time to ensure the successful turnaround of the company.

Fifty five of the ' troubled companies ' (55%) CEOs considered themselves as a people user and not a peoples' man. Fifty two of these were STC (91% of STC) CEOs, who considered themselves people users, that is they got things done even if it required the use of stringent techniques e.g. ' management by fear ', ' perform or leave ', etc. The opposite was the case for the NSTC, where 40 NSTC (93% of NSTC) CEOs believed in being nice and popular with the employees and restrained themselves from ' hurting ' the feelings of their employees (refer to Appendix E).

Being ' Mr. Nice ' will lead the already declining company to nowhere. Getting the employees' commitment is important.

The turnaround leadership should also be able to use their charisma with the employees to get them to perform their tasks as required. They must be able to mobilise the company resources (inclusive of human resources) and use them to the maximum to turn the company around.

#### ***D. MAKING DECISIONS ON THEIR OWN***

In a turnaround situation especially in the early stages, decision making is centralised and most of the time the turnaround leader will make the decisions on his own. Thus participative management techniques should be avoided in the early stages of the turnaround (Whitney, 1987).

Only 27 of the 'troubled companies' (27%) CEOs admitted that they made decisions on their own compared to 73 others who did not practise such a behaviour. Out of these 26 CEOs were of the STC (46% of STC) and only 1 belonged to the NSTC. The majority (98%) of the NSTC CEOs (42 CEOs) and 54% of the STC CEOs (31 CEOs) did not result to making decisions on their own (refer to Appendix E).

From the above, it can be observed that an element of participative management, especially in terms of consensus decision making is still the practice in the majority of NSTC and STC despite being in a crisis situation. However, the practice is seen to be greater in the NSTC than the STC.

It is also suspected that the 26 CEOs belonging to the STC, who made decisions on their own could have been of the owner cum chairperson / CEO type.

#### ***E. OFTEN MAKING BOLD DECISIONS***

More often than not the turnaround leadership is faced with multifaceted issues which are complex with very little time to make decisions. By not deciding or resitating will worsen the situation. It is necessary in many circumstances for the leadership to make decisions based on little information and at times to take a firm stand by making bold decisions. Slatter (1984) mentions that “ even in the case of divesting a subsidiary, the decision may be taken with virtually no analysis ” (p. 151).

The majority (95%) of the NSTC CEOs (41 CEOs) and 27 STC ( 47% of STC ) CEOs admitted that often they did not make bold decisions. Thirty of the STC (53% of STC) CEOs and only 2 of the NSTC (5% of NSTC) CEOs admitted to making bold decisions often (refer to Appendix E).

The reasons above could again be linked to the significant number of owner cum chairperson / CEOs found in the STC. Also being the shareholders, they could have been in a better position to make decisions on the spot compared to the CEOs who were employed and who reported to their respective boards of directors.

These CEOs would have to obtain clearance from their boards and would avoid as far as possible, making bold decisions on their own (as evidenced by the high number of CEOs who admitted to not making decisions on their own).

#### ***F. SETTING DEFINITE TARGETS / OBJECTIVES***

The turnaround leadership must know what they are trying to do for the company. They must set certain targets and objectives to be achieved and when they are supposed to be achieved (the time frame). Definite targets / objectives serve as benchmarks if not guides for the company as it undergoes the turnaround process.

Ninety nine of the 'troubled companies' (99%) CEOs admitted to setting definite targets / objectives that were to be achieved. All 57 STC (100% of STC) CEOs and 42 NSTC (100% of NSTC) CEOs admitted to having done as such. Only 1 NSTC (2% of NSTC) CEO did not do it (refer to Appendix E).

Both STC and NSTC CEOs acknowledged the importance of having definite targets / objectives that are to be achieved in their companies turnaround process, which served as beacons or guides or even as benchmarks for assessing the performance of the turnaround.

### ***G. IMPOSING HIGH STANDARDS OF PERFORMANCE EVALUATION***

One may be excused for thinking that in a turnaround situation the standard of performance evaluation may be compromised as long as the turnaround leadership manages to get the company out of the 'red' or losses. In fact, given that definite targets / objectives of the turnaround are set to be achieved by the turnaround leadership, they will subsequently devise a control system based on high standards of performance evaluation to ensure that the turnaround process is on the right track. Stringent as it may seem to be, the intention is purely to steer the company out of the 'red' and into a sustainable turnaround level where further growth can take place.

Imposing high standards of performance evaluation is an obvious move found in most of the STC and NSTC CEOs. Ninety two of the 'troubled companies' (92%) CEOs admitted to imposing high standards of performance evaluation. All 57 CEOs of the STC (100% of STC) admitted that they imposed high standards of performance evaluation. Thirty five CEOs of the NSTC (81%) admitted to having done as much while the remainder 8 NSTC (19% of NSTC) CEOs did not (refer to Appendix E).

It is obvious from the above that all of the STC and most of the NSTC CEOs viewed imposing high standards of performance evaluation as an important component in the turnaround process.



In fact, the establishment of performance standards plays a key role in changing the culture of an organisation (Slatter, 1984).

However, it must be mentioned here that what constitutes a high standard in one company may differ from that of another (no data is available for this since it does not constitute the main interest of the research).

#### ***H. SPENDING MORE TIME IN IMPLEMENTATION THAN MEETINGS***

It cannot be denied that having meetings with the operational and functional heads of divisions / departments is important. However, as in strategic planning, failure to realise what has been planned, frequently occurs during the implementation phase. It is in this phase, unfortunately, that top management are found to be lacking emphasis on. Equally, in a turnaround process, the leadership must not only formulate plans and strategies to turn the company around but must spend more time in ensuring their successful implementation.

Sixty five of the 'troubled companies' (65%) CEOs admitted that they did not spend more time in implementation but regarded having meetings as a more strategic move, from among which 27 were of the STC (47% of STC) CEOs and 38 were of the NSTC (88% of NSTC) CEOs. Thirty STC (53% of STC) CEOs and only 5 of the NSTC (12% of NSTC) CEOs admitted spending more time in implementation than in meetings (refer to Appendix E).

From the above, it is found that a strong majority of NSTC CEOs spent more time in having meetings compared to those of the STC. Although a majority of the STC CEOs were found spending more time in implementing, a strong minority of the STC CEOs also preferred attending more meetings than implementing.

Meetings are absolutely necessary as it represents a forum for planning and evaluating turnaround progress. However, as stressed by Slatter (1984), ideally the turnaround leader will want time to make evaluations, but crisis turnarounds demand analysis and actions and discussions invariably have to be cut short in order to start the implementation phase.

### ***I. OFTEN WITH NEW IDEAS / TECHNIQUES OR SUPPORTED THEIR EMERGENCE***

Changing the ' old ways ' or habits of the company undergoing a turnaround process is unavoidable especially when the ' old ways ' or habits are part of the cause for decline. The turnaround leadership must be able to ' pump in ' new effective techniques, new ideas for change and simultaneously encourage and support the emergence of innovative methods and thinking at all levels of the company.

Eighty seven of the 'troubled companies' (87%) CEOs admitted that they often did not come up with new ideas / techniques or even supported their emergence, out of which 48 were of the STC (84% of STC) CEOs and 39 were of the NSTC (91% of NSTC) CEOs. Only a handful of the STC CEOs (9 CEOs) and the NSTC CEOs (4 CEOs) did otherwise (refer to Appendix E).

Rickards (1985) identified 12 key issues with regard to innovation and one that may be linked to the issue above is innovation and that it involves conflict which must be resolved through negotiation and participation.

Participative management as understood earlier is not one of the themes in a turnaround process. Equally, time is crucial and turnaround leaders would not want to spend a lot of time solving conflicts. Also, as observed earlier, a majority of turnaround leaders are found to be making decisions more on their own.

Thus, these characteristics certainly do not support the conditions for innovation to prevail as described by Rickards above and explains why the existence of a strong majority of both STC and NSTC CEOs who did not often come up with new ideas / techniques or supported their emergence.

## ***J. LIMITED DELEGATION AND MORE OF DIRECT INVOLVEMENT***

It is obvious in many turnaround situations where the power or authority of the whole company is centralised around the leadership, the leadership may want to be directly involved in every aspect of the company ('hands on approach') and will limit the practice of delegating to his subordinates.

Fifty three of the 'troubled companies' (53%) CEOs admitted that they were more directly involved in every aspects of the company and limited the practice of delegation. Among these 37 were of the STC (65% of STC) CEOs and only 16 were of the NSTC (37% of NSTC) CEOs. Twenty seven NSTC (63% of NSTC) CEOs were found to practice delegating to their subordinates and did not get directly involved in every aspects of the company compared to 20 CEOs from the STC (35% of STC) (refer to Appendix E).

Limited delegation and getting oneself involved in almost all aspects of the company may describe the turnaround leadership as being authoritarian. Like it or not, authoritarian leadership may be quite necessary especially in the early stages of the turnaround, as described by Whitney (1987) "on the one hand, it is nice, neat, and comfortable - for the leader and for those being led - when a clear and uncomplicated authority is designated to bring order out of chaos" (p. 12).

### ***K. STRONG FEELINGS IN ACTIONS OR DECISIONS TAKEN OR ABOUT TO BE TAKEN***

The last thing a company undergoing a turnaround process needs is a turnaround leadership plagued with uncertainty in making decisions and in actions that they have taken or are about to take. As observed earlier, the turnaround leadership is the pivotal point of not only power but also of all other aspects of the company. There is simply no room for a weak and indecisive leader.

All 100 'troubled companies' (100%) CEOs admitted that they have strong feelings in actions or decisions that they had taken or about to take. None reported otherwise (refer to Appendix E).

As far as the above factor is concerned, it can be observed that all turnaround leaders, whether STC or NSTC, believed and were committed to their decisions and actions.

Two out of 8 features of management required in a turnaround situation described by Taylor (1983), supports the above findings. They are:

1. **Decisiveness** (the situation calls for speed of decision and ruthlessness in decision making, willing to take unpleasant decisions, and to face public criticism in order to ensure the continuation and recovery of the overall business).

2. Personal responsibility and accountability (not only at the level of the turnaround leadership but at all levels, for meeting the targets and deadlines which are necessary if the business is to survive).

#### ***L. REQUIRED PLENTY OF INFORMATION TO HELP MANAGE THE ORGANISATION***

Information is vital for the turnaround leadership. They would have asked many questions before accepting the job, analysed available financial data, have taken a tour of the main physical facilities, read market reports and other background data and from the data, the turnaround expert would have developed a feeling for the principal causes of decline and will have some idea about the type of recovery strategy required (Slatter, 1984). The more available the strategic information, the better it will benefit the turnaround decision making process. However, much will also depend on whether the information is used or not.

More than half of the 'troubled companies' (53 companies or 53%) CEOs claimed that they did not require plenty of information to help them manage the companies. The majority of these CEOs (37 CEOs) were from the NSTC (86% of NSTC) or and only 16 CEOs were from the STC (28% of STC). The majority of the STC (72% of STC) or 41 CEOs admitted that they required plenty of information to help them to manage their organisation (refer to Appendix E).

Regarding information and turnaround leadership, Whitney (1987) states that

“ he must develop and use information from any source, even from sources that he knows will soon be terminated. Lack of information and misinformation are two of his most dangerous adversaries ” (p. 7).

The importance of information cannot be stressed enough than what has been stated by authors like Whitney (1987) and Slatter (1984). However, from the findings above, the problem that exists may not be due to the lack of information available but rather to not having used all information available. This was especially true of the majority of the NSTC CEOs. These CEOs may have their own reasons for not doing so but by not making use of all available information they may be making less effective, and even the wrong decisions, during the turnaround process.

In the case of the NSTC CEOs, the situation above may also be linked to the incidence of getting less directly involved in all aspects of the company and delegating more to their subordinates. If these CEOs were to be involved more directly in all aspects of the company and practise less delegation, most certainly they would require plenty of information to help them manage. However, this was not the case.

There is also the possibility that, due to the usage of plenty of information to help them manage, their direct involvement in most aspects of the company, and less delegation, the CEOs of the STC were able to make more effective decisions for the turnaround success and would have arrested any form of deviation as early as it may have appeared.

### ***M. SETTING TIGHT CONTROL SYSTEMS AT EVERY LEVEL***

Having merely imposed high standards of performance evaluation may mean nothing. What is equally important is to have tight control systems at every level of the company to act as a ‘ watch dog ’ or an early warning system so that the necessary actions can be taken to arrest the potential problem.

Eighty two of the ‘ troubled companies ’ (82%) CEOs admitted to setting tight control systems at every level of their companies while the remaining 18 or (18%) of the ‘ troubled companies ’ CEOs did not. Fifty seven of the STC (100% of STC) CEOs and 25 of the NSTC (58% of NSTC) CEOs admitted having set tight control systems at every level of their companies. Eighteen of the NSTC (42% of NSTC) CEOs admitted that they had not done so (refer to Appendix E).



It was obvious from the above that the STC and a majority of the NSTC CEOs would be in a better position to ensure that things were going according to the standard of performance evaluation imposed compared to the remaining 18 CEOs of the NSTC. They would have prevented deviations from occurring and would have spent more of their time managing other aspects of the turnaround.

#### ***N. MAXIMISING POWER BESTOWED BY THE BOARD / SHAREHOLDERS***

Managing a turnaround requires that appropriate changes be made to several critical areas of the company. In trying to do so, the turnaround leadership must be bestowed with the appropriate power either by the board or by the shareholders to immediately effect changes. In one instance, the leadership may not be fortunate enough to have bestowed absolute power and they may have to report every single matter to the board / shareholders. In another instance, the leadership may be fortunate to be bestowed absolute power to do whatever is necessary within their jurisdiction to make the appropriate changes for the turnaround. Ironically, there are some who may not maximise the power given to them to effect change.

Sixty three of the 'troubled companies' (63%) CEOs admitted that they maximised the power given to them while the remaining 37 did not, out of which 54 of the STC (95% of STC) CEOs and only 9 of the NSTC (21% of NSTC) CEOs admitted that they did maximise the power bestowed on them by their board / shareholders.

Thirty four of the NSTC (79% of NSTC) CEOs did not maximise the power bestowed to them (refer to Appendix E).

From the above findings, a strong majority of STC CEOs maximised the power given to them by their boards / shareholders to effect all necessary changes required by the turnaround.

This is only inevitable and as stressed by Whitney (1987) " leadership implies the use of power to take the organisation in a new direction, either agency power conferred on the leader or personal power that, as a result of his experience and skills, the leader derives from the ' consent of the governed ' " (p. 11).

However, this does not seem to be the case of the NSTC CEOs, the majority of whom did not maximise the power given to them. There could be many reasons behind this (which may warrant a whole new research in itself) but one that was observed earlier and may be linked with this issue is the Commitment of the Shareholders of the NSTC itself, where it was found earlier that 95% of NSTC did not receive the full commitment of their shareholders.

At this point it may be worthwhile to reiterate (Slatters, 1984) comments on shareholders in a turnaround, that is " in the absence of crisis, a new management usually has fewer constraints determining the recovery strategy, although it is hoped that management action will take place under the watchful eye of the board and the principal shareholders - few turnaround managers have this freedom " (p. 107).

Given that turnarounds are crisis situations, it is not surprising that the board / shareholders of the NSTC may have been even more ' watchful ' over the turnaround leadership and although power is given to the leadership to effect the necessary changes, these leaders may have taken the careful attitude of not maximising such power bestowed on them for fear of making the wrong moves and would have preferred to consult the boards / shareholders on all matters. The situation may have been the opposite for the turnaround leadership in the STC.

#### ***O. MAKING DIFFERENT DECISIONS IN DIFFERENT SITUATIONS AND TIMES ON THE SAME ISSUES***

" Turnaround situations bring the prospect of sudden and dramatic changes " (Carnall, 1990, p. 198). The turnaround leadership cannot afford to remain with the same decision that is made pertaining to a particular issue for the rest of the turnaround process.

The leadership must be flexible, articulate and accommodating, given that the whole organisation itself is undergoing phases of change.

Seventy nine of the 'troubled companies' (79%) CEOs admitted that they did not make different decisions in different situations and times on the same issues. Thirty nine of the STC (68% of STC) CEOs and 40 of the NSTC (93% of NSTC) CEOs admitted to such practise. Only a handful of the STC (18 STC or 32% of STC) CEOs and 3 NSTC (7% of NSTC) CEOs admitted that they made different decisions in different situations and times on the same issues (refer to Appendix E).

There is no real explanation in terms of their rigidity in not making different decisions in different situations and times pertaining to the same issues.

However, this alone did not seem to affect, for example, the STC from achieving successful turnarounds. Subsequently, the findings above challenge several turnaround leadership attributes as quoted by Whitney (1987) such as adaptability (since the turnaround leader seldom knows what the next crisis will be or when it will come) and flexibility (the turnaround leader must be able to devise new strategies to cope with unexpected events).

***P. ABILITY TO CONTROL MULTIPLE DIMENSIONAL ORGANISATIONAL PROBLEMS FROM AFFECTING MENTAL AND PHYSICAL WELL BEING***

Stress, complexities, chaos, urgency, resistants, frustrations, to name a few, are characteristics of a declining company in a turnaround. And since the whole turnaround process pivots around the leadership, it is pertinent that the leadership is someone who is able to control multi-dimensional organisational problems and can avoid these problems from taking a toll on their mental and physical well being. If the leadership succumbs to these problems, the fear is that the success of the turnaround will be compromised.

One hundred of the 'troubled companies' (100%) CEOs admitted that they were able to control multi-dimensional organisational problems during the turnaround process from affecting them mentally and physically. All of the STC and NSTC CEOs admitted having the same controlling capability (refer to Appendix E).

Carnall (1990) pointed out that "the effective corporate leaders bring human scale to risk, change, success, challenge and crisis - they translate the pressures that can confuse or paralyse so many into acceptable levels" (p. 181).

While the statement by Carnall may well describe the situation of the STC and NSTC CEOs above, it is questionable as to whether that is enough to help classify all of the above CEOs as effective leaders. It is felt that the components that make a leader effective could be more than just the above capability.

### ***Q. FROM THE SAME INDUSTRY***

Not everyone can be a turnaround leader. It is believed that a turnaround leader is a person with substantial general management skills with experiences in the same or similar industry. It is also believed that the leader with the same industry track record would understand the ' going-ons ' of the organisation better since they would have acquired the ' tricks of the trade ' from years of experiences, being in the same industry.

On the contrary, however, Slatter (1984) stated that this will depend on the characteristics of the turnaround firm, whether it is a diversified or non diversified company. Subsequently, he also argued that the new chief executive's lack of industry experience tends to be less important in those situations where the turnaround firm is a diversified group consisting of a number of different businesses.

Seventy four of the ' troubled companies ' (74%) CEOs were from the same industrial background and the remaining 26 CEOs were not. Forty nine of the STC (86% of STC) CEOs and 25 of the NSTC (58% of NSTC) CEOs were from the same industry. A strong minority of the NSTC (42% of NSTC) CEOs and only 8 of the STC (14% of STC) CEOs were not of the same industry background (refer to Appendix E).

When the results of D2 (Determinant No. Two) on Diversification were compared with the findings above, it was found that the STC, where there were more than half (53%) non diversified companies, 86% of CEOs had vast experience in the same industry and acted as the turnaround leadership. Subsequently, for the NSTC ( where 70% of the companies were non diversified ) only 58% of the CEOs had experience in the same industry and who were also the turnaround leaders.

Somehow, the above findings do not totally support Slatter's argument. In the case of the NSTC, it may be appropriate (if based on Slatter's argument) to have had more CEOs with similar industry background as the turnaround leaders due to the high number of non diversified companies.

And subsequently for the STC, where a strong minority (47%) were of diversified companies, it would have been less important to have such a high number of turnaround leaders with similar industry background.

However, in either of these cases, this was not so. Having high number of turnaround leaders with similar industry background in the STC may have been one of their strong attributes for having successful turnarounds. Similarly, with fewer turnaround leaders with similar industry background in the NSTC may have been one of their weaknesses for not achieving successful turnarounds.

Overall, It was found that the STC CEOs had more favourable characteristics of ' new competent management ' than the NSTC CEOs. Twenty one percent of the NSTC CEOs were found with five favourable characteristics, 28% with six favourable characteristics, 12% with eight favourable characteristics and 7% with nine favourable characteristics. The majority (32% or the mode) of the NSTC CEOs had seven favourable characteristics of ' new competent management '. None of the STC CEOs were found within these range.

Most of the STC CEOs were found to have a number of favourable characteristics within the range of 12 to 15. Thirty five percent (the mode and majority of which) had 11 favourable characteristics, 17% with 12 favourable characteristics, another 17% with 13 favourable characteristics, 23% with 14 favourable characteristics and only 8% with 15 favourable characteristics. It is obvious from the above that the STC CEOs possess more favourable characteristics of ' new competent management ' than the NSTC CEOs (refer to Appendix I).

However, what is defined as ' new competent management ' remains to be argued. Most of the previous authors and researchers such as Slatter (1984), Luffman, Sanderson, Lea and Kenny (1988), Carnall (1990), Whitney (1987), Schendel, Patton and Riggs (1976), Bibeault (1982), and many others are of the opinion that a ' new competent management ' is derived from the installation of a new chief executive or a new leadership.



The appointment of a new chief executive is heavily emphasised by management gurus who suggested that the appointment of the new chief executive should take place well before recovery strategies are put in place.

The findings in this research challenge previous thinking. As observed earlier, 61% of the 'troubled companies' did not have change to their top management. In fact, 67% of the STC did not have any change in top management but this did not hinder them from achieving successful turnarounds.

Furthermore, it was also observed that more than half (56%) of the STC were managed by owner cum chairperson / CEO, which was one of the contributing factors for no change occurring in top management in these companies.

From the observations noted above, one would question how these companies, managed successful turnarounds, even without having to change their top management (defined as having 'new competent management' by previous authors and researchers).

One explanation, which may be controversial to some, lies in what really constitutes 'new competent management' and that it may not necessarily be defined or characterised as the installation of a New Chief Executive or top leadership.

Instead, the ' new competent management ' may be the same owner cum chairperson / CEO who is quick to realise the devastating state the company is in and immediately takes the necessary action to turn around the company even if it means that he or she may have to change totally the methods, styles and paradigm of his type of management.

Bibeault (1982) previously cited, admitted that in a company where the top person has a strong ownership, top management change can take place but in the form of the change of heart, new thrust, or an ability to make tough decisions to save the business. Subsequently, he also added that the leadership can also be an insider and does not necessarily have to be an outsider.

Subsequently, Whitney (1987) also supported Bibeault:

There is no prototype - the leader does not have to be a Greek God or Goddess - clear eyed, tall, " out thrust jaw ", stentorian voice - he does have to know how and when to act - he must know business, and he must learn the new business as quickly as possible - he must be able to formulate and activate strategies that will induce understanding, inspire, respect and command dedication - so, whats new? nothing, really, except emphasis! (p. 5).

#### **5.1.11 D11. VIABLE CORE BUSINESS**

A common dilemma in declining companies trying to turnaround is ' cash trap ' situation.

The existence of a viable core business can, not only support the company financially in weathering the turnaround period but can also enable the company to use strategic options, such as acquisition, to help speed up the process of the turnaround. As mentioned in the research design, a viable core business, basically have five key characteristics. It is rare that a company will possess all five key characteristics, but it is important that a company should have at least four of the key characteristics to render its core business viable.

#### ***A. POSITIVE CASHFLOW***

Out of the 100 'troubled companies', 84 companies or 84% were reported to have core businesses with positive cashflows. Fifty seven were STC (100% of STC) and 27 were NSTC (63% of the NSTC). The relevance of having positive cash flows needs no repetition here (refer to Appendix F). As mentioned earlier under subchapter 4.1.2.2, working capital in the form of cash is vital in any turnaround effort.

#### ***B. 'SALES VOLUME UMBRELLA'***

'Sales volume umbrelia' is the volume of sales that is more than sufficient to generate continuous revenue for the turnaround company while simultaneously covering the lack of revenue experienced by other business units within the company.

Ninety three of the 'troubled companies' (93%) were reported to have a 'sales volume umbrella', out of these, 56 were STC (98% of STC) and 37 were NSTC (86% of NSTC) (refer to Appendix F).

While the majority of the NSTC were found to be enjoying a 'sales volume umbrella', it is important to note here that 'sales volume umbrella' will eventually diminish if the companies are facing cash flow problems. Sales, unless on a cash basis, were not going to help 27 NSTC (63% of NSTC) who were already in a 'cash trap' situation, and who probably could not maintain their liquid position to meet short term obligations such as payments to suppliers for raw materials that would subsequently be converted into finished products for sales.

### ***C. COMPETITIVE EQUIPMENT***

Only 64 of the 'troubled companies' (64%) reported having competitive equipment. Out of which 39 were STC (68% of STC) and 25 were NSTC (58% of NSTC) (refer to Appendix F).

Porter (1985) stresses that "the significance of technology for competition is not a function of its scientific merit or its prominence in the physical product. Any of the technologies involved in a firm can have a significant impact on competition" (p. 166).

Thus, while one may argue that those reported to have competitive equipment may have belonged to the manufacturing group, the non manufacturing group, such as trading and services, hotels and leisure businesses are also equally affected by competitive equipment due to advancement / changes in technology. Machines are becoming more and more competitive each day due to the ever changing evolution in technology.

Morris (1985) states that " machine technology has for many years been the domain of manufacturing operations, but the so called ' micro revolution ' has accelerated a trend towards automation and mechanisation in the service operations " (p. 95).

Subsequently, the Trade Union Congress of Britain (1979, as cited in Morris, 1985, p. 96) admitted that it felt fairly positive about new technology, in that it presented an opportunity to improve the competitiveness of business and industry, improved the quality of working life and provided benefits for working people.

#### ***D. COMPETITIVE LOCATION***

There are many questions that need to be addressed in planning the resources within organisational operations, one of which is location of the business (Johnson and Scholes, 1988).

Fifty one of the 'troubled companies' (51%) reported having competitive locations. Thirty five were STC (61% of STC) and only 16 were NSTC (37% of NSTC) (refer to Appendix F).

From the above, it is obvious that the STC are in more competitive business locations than the NSTC. A competitive business location is important for most types of businesses such as trading and services, hotels and leisure, property development and manufacturing.

Slatter (1984) stresses that "the location of manufacturing facilities can lead to significant cost disadvantages due to differences in wage rates, and differences in productivity which are independent of capital investments and training efforts" (p. 38).

However, one needs to take extra care when reviewing this argument.

A competitive business location may not be strategically critical to other businesses such as plantations, which are dependant on the availability of suitable vacant land.

The construction business, is another example, where equipment needs to be moved from one construction site to another, depending on clients and contracts.

Subsequently, with the advent of multimedia computer technology and revolution, businesses today can operate 'virtually' and do not necessarily have to be in strategic locations or near to their clients.

### ***E. AWARENESS OF CHANGE***

Organisations today are like living, breathing organisms that constantly evolve and change. They interact with their environment as internal and external changes occur; as markets expand or contract, as technology advances and is replaced, etc. Thus, even the simplest of organisations are not easy to manage today. In order to make the best use of capital, human and material resources, organisations require sound systems, policies and procedures. In other words, they need to be fully aware of the changes around them and subsequently manage those changes.

Fifty eight of the 'troubled companies' (58%) admitted that they were aware of the changes in their business environment, out of which 55 were STC (96% of STC) and only 3 were NSTC (7% of NSTC) (refer to Appendix F).

A company who is not aware and is not sensitive enough towards the rapid and harsh changes in its business environment will either be left behind, faces decline and crisis, and could eventually run out of business.

However, a competent organisation will recognise early warning signs of the external changes so that it can promptly make internal changes designed to keep it viable in the changing external world.

Therefore, competent organisations are those that continue to change to survive (Goodstein and Burke, (n.d) as cited in the Henley Management College's 'Managing Strategic Change' Module 1994).

There is a strong indication that a large disparity in terms of the awareness of change exists between the STC and the NSTC. STC may have top management who may be sensitive and are aware of changes in their business environment. They will react quickly to change by taking the necessary steps to recover. This could have been one of the reasons for their success in turning around those companies compared to the NSTC.

The other possibility could be due to the high number of STC CEOs with similar industry experience and background, who were then in a better position to recognise the obvious and not so obvious 'goings - on' within their businesses.

Slatter (1984) comments that:

At the initial stage - the hidden crisis stage - the management group and the organisation are unaware of the existence of a crisis. Often, this is due to the lack of adequate control systems - not just financial control systems but more of formal systems that monitor and interpret unexpected environmental events. Typically, the firm will be complacent and may even be arrogant about its capabilities and market position (p. 68).



It is also interesting to note that the problem of not being aware of changes in the business environment experienced above may also be linked to the problem of 'poor management' discussed earlier, especially on the issue of 'functional blindness'.

Twenty one of the 'troubled companies' (21%) were found to have only 2 of the key characteristics of viable core business, and all 21 were NSTC (49% of NSTC). The number of 'troubled companies' found to have three key characteristics of a viable core business was 22 (22%) and again all 22 again were NSTC (55% of NSTC). Another 43 'troubled companies' (43%) were found to have four key characteristics and all 43 were STC (75% of STC). The balance of 14 'troubled companies' (14%) were found to have five key characteristics of a viable core business and all 14 companies were STC (25% of STC) (refer to Appendix I).

From the above, it can be observed that the NSTC are companies with fewer characteristics of a viable core business compared to the STC. This could also be one of the reasons why STC have accomplished more successful turnarounds than the NSTC.

### **5.1.12 D12. BRIDGE CAPITAL**

As mentioned earlier, funds in terms of cash generated from sales of fixed assets, capital injections, additional loans and even continuation in the supply of raw materials on credit are vital for a company experiencing a turnaround. In turnaround a cash crunch is almost always inescapable (Whitney, 1987), thus, any fund in any of the forms mentioned above will help to alleviate the immediate problem of the company and further sustain it while it weathers the turnaround period.

#### ***A. ADVANCES OR RIGHT ISSUES FROM SHAREHOLDERS***

Eighty two of the 'troubled companies' (82%) reported having received additional capital injections into their paid up capital through right issues by the existing shareholders, out of which 47 were STC (82% of STC) and 35 were NSTC (81% of NSTC) (refer to Appendix G).

The explanation for the above could be that irrespective of whether they were STC or NSTC, the shareholders of these companies were equally concerned about their investments and the survival of the companies, which may have been the main driving force for them to further inject funds in the form of additional paid up capital in these companies.

At this point, it is also interesting to note the linkage between the findings above and that of the 'paid up capital' in Chapter 4 of the research.

In fact, the above findings have further strengthened what was found in Chapter 4, where the shareholders' strong commitment to finance and support in the turnaround exercise was displayed by their willingness to increase paid up capital. The number of STC and NSTC receiving such additional increase in paid up capital are similar to the one above. The reason there are more STC than NSTC may be due to the owner cum chairperson / CEO background of the majority of the STC.

#### ***B. SALES OF ASSETS BY MANAGEMENT***

In a turnaround situation, sale of surplus and obsolete inventories, sale of plants, subsidiaries and any other assets of the company are ways the management of the turnaround exercise may seek to raise extra funds. Actions to improve profitability may increase the cashflow, but a specific asset reduction strategy is likely to have more and maybe a traumatic impact on the firm's cash flow position (Slatter, 1984).

Thirty six of the 'troubled companies' (36%) embarked on this exercise to raise funds for the turnaround out of which 23 were STC (40% of STC) and 13 were NSTC (30% of NSTC) (refer to Appendix G).

The suspicion that there might have been sales in assets was first detected in the findings in Chapter 4 under 'extraordinary items' where 75 companies were detected exhibiting high occurrences of extraordinary items.

However, it must be cautioned that gains or losses in the disposal of any form of assets are just a few of the many items termed as ' extraordinary items '. Thus, it does not necessarily mean that all of the 75 companies cited above, detected for ' extraordinary items ', were involved in disposing of their assets to raise funds.

From the above findings, it is also interesting to observe that there more STC than NSTC found disposing their assets to raise funds for the turnaround. One reason could be that, since the NSTC are more geared than the STC, their assets may not be free of encumbrances and may have been used as ' collateral ' against their borrowings.

Luffman, Sanderson, Lea and Kenny (1988) mention that " another means of reducing assets is to sell some or all of the assets to a finance company and to lease them back. This would only be possible if the assets were not being used as collateral for some form of borrowing " (p. 102).

### ***C. BRIDGE CREDITS FOR WORKING CAPITALS FROM BANKERS***

Like the additional capital injection by the declining companies' shareholders, any further financial assistance from bankers, probably in the form of overdrafts for working capital, and additional loans are most welcome by the management to sustain the going concern of the company and to weather the turnaround period.

Sixty five of the 'troubled companies' (65%) admitted that they received 'bridge credits for working capitals' from their bankers. Forty five such companies were STC (79% of STC) and only 20 were NSTC (47% of NSTC) (refer to Appendix G). The results above strengthen the findings in Chapter 4 under 'loan capital' where similar observations were made.

From the above, it is also found that more STC received bridge credits for working capital from their bankers than the NSTC. There is no one reason that can explain this situation. However, it is believed that bankers would be more comfortable with the STC since they (STC) are less geared, are in the mild or moderate crisis level, in attractive industries, with more committed shareholders (owner cum chairperson / CEOs) and have more viable core businesses than the NSTC.

Thus, the bankers themselves would look into all aspects that can give some indication that a successful turnaround is possible. "Even bankers have heard of present value and compound interest tables so they can't be pushed too far" (Whitney, 1987, p. 74).

#### ***D. CONTINUATION OF RAW MATERIAL BY CREDITORS***

Similar to the financial assistance from shareholders and bankers, the company wanting to turn itself around must receive a good commitment from its creditors (or suppliers) not only by agreeing to reschedule its previous unpaid debts but also to continue to provide raw materials where necessary.

Seventy of the 'troubled company' (70%) admitted that they received this type of support from their creditors, out of which 57 were STC (100% of STC) and only 13 were NSTC (30% of NSTC) (refer to Appendix G). Thus, the STC were found to have received more support in terms of the continuation of raw materials from their creditors than the NSTC.

Reasons behind this can again be linked to several determinants and probably similar to those of the bankers cited earlier. STC, who are in a better financial position (less geared) and have more viable core businesses that can allocate cash for the payment of the raw materials, are preferred by the creditors.

Simultaneously, STC are also enjoying better commitment from the shareholders (whom, the majority are owners cum chairpersons / CEOs), their bankers (providing bridge credits) could have also made creditors felt more comfortable to deal with them and as such they would have agreed to continue the supply of raw materials. The similar situation may not have prevailed for the NSTC.

Overall, both STC and NSTC received some form of bridge capital to weather the turnaround period. However, the difference between them is in the number of sources of bridge capital received. Those admitted receiving from only one source consists of 4 STC (7% of STC) and 26 NSTC (60% of NSTC). Thirteen STC (23% of STC) and 12 NSTC (28% of NSTC) admitted receiving bridge capital from 2 sources. The bulk of the STC (28 companies or 49% of STC) and 3 NSTC (7% of NSTC) received bridge capital from 3 sources. Finally, 12 STC (21% of STC) and only 2 NSTC (5% of NSTC) admitted that they received bridge capital from 4 different sources (refer to Appendix I).

As mentioned in the research methodology, having to depend on only one particular source of bridge capital may not be prudent. It is wiser to have 2 or more sources of bridge capital such that if any event stops one of the sources, there is always another to fall back on. The reason STC have more sources of bridge capital than the NSTC needs no further explanation since it has been described in detail when the individual sources were discussed above.

### **5.1.13 D13. REALISTIC TURNAROUND PLAN**

“ The things to do with the future is not to forecast it, the objective of planning should be to design a desirable future and to invent ways to bring it about ”  
(Ackoff, (n.d), as cited in Higgin and Vincze, 1986, p. 69).

“ We plan for the future, because people who stay in the present will remain in the past ” (Abraham Lincoln, (n.d), as cited in Higgin and Vincze, 1986, p. 180) .

As the saying goes “ failing to plan is planning to fail ” the management attempting to turnaround a declining company must have a plan to rescue it. The process of turning around a company is not simply a ‘ blind leap ’ i.e. without critical thinking, proper planning and usage of appropriate strategies to ensure the turnaround success. Through the turnaround plan the turnaround management may be able to convince the stakeholders such as the shareholders, bankers, creditors and, even the employees, that the company can survive and has got a future.

Furthermore, the turnaround plan acts as a detailed guidance for the whole turnaround process. It is thus pertinent that a realistic (logical and workable) turnaround plan with clear sets of objectives, strategies, tactics and effective control systems exists before any turnaround efforts are initiated.

In terms of the availability of a turnaround plan, all STC and NSTC claimed that they had one (refer to Appendix H). But whether the plans were realistic or not will depend on the plans satisfying the following criteria.



### **A. SPECIFIED OBJECTIVES / TARGETS**

When asked in terms of having specified objectives / targets, it was found that 70 of the 'troubled companies' (70%) admitted that their turnaround plans had specified objectives/ targets, out of which 57 were STC (100% of STC) and only 13 were NSTC (30% of NSTC) (refer to Appendix H).

Whether qualitative and or quantitative, objectives serve as a form of an internal benchmark for the company. Objectives are also reference points for corporate performance and as such they need to be clearly identifiable, and to be of most use, objectives should be measurable, achievable, realistic and communicable (Luffman, Sanderson, Lea and Kenny, 1988).

Johnson and Scholes (1988) stressed the importance of having objectives especially in a turnaround situation. They stated that there are times when specific objectives are required and these are likely to be used when urgent action is needed, such as in a crisis or at times of major (usually strategic) transition, and it becomes essential for management to focus its attention on a limited number of priority requirements. An extreme example would be in a turnaround situation. If the choice is between getting out of the business or surviving, then there is no latitude for vaguely stated requirements.

It is obvious from the above findings that the majority of the NSTC did not specify objectives / targets to be achieved in their turnaround plans.

By not having such, NSTC will not have a reference point to evaluate the progress that they have made. They would probably want to get the company out of trouble but as stated by Johnson and Scholes above, this cannot be done through vaguely stated requirements.

### ***B. STRATEGIES TO BE USED***

Having specified objectives / targets to be achieved is not an end in itself. It will not help to turnaround the company unless the means by which these given objectives can be achieved are elaborated i.e. the strategies to be used. Thus, strategy is concerned with integrating company activities and allocating scarce resources so that the present objectives can be met (Luffman, Sanderson, Lea and Kenny, 1988).

All 57 STC (100% of STC) and 43 NSTC (100% of NSTC) admitted to having clearly defined the strategies used in their turnaround exercises (refer to Appendix H).

Slatter (1984) states that " the management actions needed to effect a turnaround involves deciding upon the appropriate set of turnaround strategies and implementing strategies in as short a time span as possible " (p. 103).

The research agrees with what Slatter (1984) has stated about effecting turnaround by implementing strategies in the shortest time span possible, but the research also views it as a pitfall for many corporate turnarounds. In the theoretical framework, it has been stressed that previous work on turnaround has ignored the 'missing link' or 'gap' between declining problems and turnaround strategies (which the research termed as 'the feasibility for corporate turnaround').

Similar patterns of action would have been taken by the NSTC as stated by Slatter above, where they would have emphasised more heavily on the turnaround strategies (but ignored the 'feasibility' issue) even at the expense of not having specified objectives / targets. Thus, the turnaround strategies they may have employed may have not been guided by specified objectives while simultaneously ignoring the requirements of turnaround feasibility.

### ***C. TACTICS / DETAILS ON HOW STRATEGIES ARE TO BE IMPLEMENTED***

Tactics are simply details or action plans on how the strategies are to be implemented. Tactics merely interpret the strategic framework into detailed plans (Strategic Management Module, Henley Management College, 1990).

Sixty eight of the 'troubled companies' (68%) admitted having detailed strategies or tactics for implementation, out of which 56 were STC (98% of STC) and only 12 were of the NSTC (28% of NST) (refer to Appendix H).

Slatter (1984) stresses that "once the turnaround manager has decided on the appropriate recovery strategy, he must develop an action plan in conjunction with his management team" (p. 145). He also states that action planning assists by providing a framework for implementation.

Thus, from the above citation, what can be inferred is that by just having sets of strategies for turnaround is simply not enough. Strategies must be transformed into action plans, detailing specifically what is to be done, by whom, how and by when in order to smoothen the implementation process.

From the above findings, the majority of NSTC did not have details on how the strategies they had chosen were to be implemented. They lacked the action plan or tactics, and it will not be surprising if the strategies chosen did not work effectively to help turn around their companies.

#### ***D. REVIEW AND CONTROL SYSTEMS***

There must be continuous monitoring of progress and of analysis and feed back concerning the variations, not only with respect to performance but also with respect to the assumptions on which the strategies are based. Thus, the existence of effective review and control systems is inevitable.

Eighty nine of the 'troubled companies' (89%) admitted having effective review and control systems, out of which 57 were STC (100% of STC) and 32 were NSTC (74% of NSTC) (refer to Appendix H).

Johnson and Scholes (1988) stressed that systems of control are particularly important in complex organisations to ensure that the various parts of such organisations are integrated sufficiently to implement corporate strategy.

When the organisation becomes involved in the real problems of implementing strategic change, managers therefore need some means of identifying how implementation is proceeding and the extent of the variances from the plan.

From the above, all STC and the majority of the NSTC admitted to having review and control systems. However, it is important to note here that an effective review and control system may be rendered useless if there are no benchmarks such as specified objectives / targets to compare with. This was the case for the NSTC.

Overall, it was found that 56 of the 'troubled companies' (56%) had all 4 pertinent features (as discussed in detailed above) of a realistic turnaround plan. All 56 companies belonged to the STC (100% of STC) and none was observed for the NSTC. Sixteen of the 'troubled companies' (16%) were observed to have 3 pertinent features, out of which 15 were NSTC (35% of NSTC) and only 1 was an STC. The majority of the NSTC (28 companies or 65% of NSTC) are observed to have 2 pertinent features of a realistic turnaround plan. None of the companies was observed having only one pertinent feature (refer to Appendix I).

The STC, who have more pertinent features of a realistic turnaround plan, as seen above, are in a better position to turn around than the NSTC. As mentioned earlier, a realistic turnaround plan can help further convince stakeholders such as shareholders, bankers and creditors to gain their support and commitment to help turn around the company. It is also felt that the reason NSTC have less pertinent features of a realistic turnaround plan than the STC is connected to the weak features of their leadership observed earlier under 'new competent management'.

Steiner (1972) outlined ten reasons which caused planning to fail (will not be elaborated here). However, if the ten reasons are to be carefully analysed, one cannot help but to observe that bad leadership in management is practically behind those ten pitfalls for planning. This could have been the case for the NSTC but not for the STC.

## **5.2 IDENTIFYING THE EXISTENCE AND THE STATE OF EXISTENCE OF THE KEY DETERMINANTS OF CORPORATE TURNAROUND FEASIBILITY IN SUCCESSFUL AND NON SUCCESSFUL TURNAROUND COMPANIES**

The observations, findings and interpretations discussed earlier have to a great extent revealed valuable insights and details pertaining to the key determinants of corporate turnaround feasibility. At this point, the research attempts to further identify the existence and the state of existence of the 13 key determinants of corporate turnaround feasibility. It is envisaged that this will enable the research to achieve not only its main purpose and one of its objectives but it will also help to answer the research hypotheses. Using the arbitrary cut off points as set in the research methodology, specifically for phase two, the following findings were obtained (refer to Appendix J) in accordance with the key determinants categories.

### **5.2.1 CATEGORY A: STATE OF EXISTENCE (FAVOURABLE / NON FAVOURABLE)**

As mentioned earlier in the hypotheses, the research is interested in identifying these determinant state of existence in successful and non successful turnaround companies, whether they are favourable or non favourable states of existence.

### **5.2.1.1 D1. CAUSES OF DECLINE**

Fifty six of the ‘troubled companies’ (56%) had favourable states of existence as headed in D1 and the remaining 44 ‘troubled companies’ (44%) had non favourable states of existence. With the exception of one STC, all other 56 STC (98% of STC) had favourable states of existence as headed in D1. All 43 NSTC (100% of NSTC) did not have favourable of existence.

### **5.2.1.2 D2. SEVERITY OF CRISIS**

Fifty seven of the ‘troubled companies’ (57%) had favourable states of existence as headed in D2. The remaining 43 ‘troubled companies’ (43%) had non favourable state of existence. A majority of STC (38 STC or 67% of STC) had favourable states of existence as in D2 while the majority of the NSTC (24 NSTC or 56% of NSTC) had non favourable states of existence of D2.

### **5.2.1.3 D3. COMPANY'S HISTORICAL STRATEGY**

The majority of ‘troubled companies’ (60 companies or 60%) had a non favourable state of existence as headed in D3. The remaining 40 ‘troubled companies’ (40%) enjoyed a favourable state of existence. Thirty STC (53% of STC) and 30 NSTC (70% of NSTC) had a non favourable state of existence. Only 27 STC (47% of STC) and 13 NSTC (30% of NSTC) had a favourable state of existence as in D3.



#### ***5.2.1.4 D4. INDUSTRY CHARACTERISTICS***

The majority of the 'troubled companies' (63 companies or 63%) had a favourable state of existence as described by D4. The remaining 37 'troubled companies' (37%) had a non favourable state of existence. Those enjoying a favourable state of existence as in D4 were 37 STC (65% of STC) and 26 NSTC (60% of NSTC). Twenty STC (35% of STC) and 17 NSTC (40% of NSTC) experienced a non favourable state of existence as in D4.

#### ***5.2.1.5 D5. COMPANY'S COST PRICE STRUCTURE***

Seventy five of the 'troubled companies' (75%) experienced a non favourable state of existence as in D5 and the remaining 25 'troubled companies' (25%) enjoyed favourable states of existence as in D5. Thirty two STC (56% of STC) and all 43 NSTC (100% of NSTC) had a non favourable state of existence in D5. Only 25 STC (44% of STC) had a favourable state of existence in D5.

#### ***5.2.1.6 D6. COMMITMENT OF SHAREHOLDERS***

Fifty nine of the 'troubled companies' (59%) enjoyed a favourable state of existence as in D6 and the remaining 41 'troubled companies' (41%) had a non favourable state of existence in D6. All 57 STC (100% of STC) and only 2 NSTC (5% of NSTC) enjoyed a favourable state of existence in D6. Forty one NSTC (95% of NSTC) experienced a non favourable state of existence in D6.

#### **5.2.1.7 D7. COMMITMENT OF BANKERS**

Seventy one of the 'troubled companies' (71%) enjoyed a favourable state of existence in D7 and the remaining 29 'troubled companies' (29%) experienced a non favourable state of existence in D7. All 57 STC (100% of STC) and only 14 NSTC (33% of NSTC) had a favourable state of existence in D7. Twenty nine NSTC (67% of NSTC) had a non favourable of existence in D7.

#### **5.2.1.8 D8. COMMITMENT OF CREDITORS**

Sixty six of the 'troubled companies' (66%) experienced a favourable state of existence as in D8 and the remaining 34 'troubled companies' (34%) had non favourable state of existence in D8. All 57 STC (100% of STC) and only 9 NSTC (21% of NSTC) enjoyed a favourable state of existence in D8. Thirty four NSTC (79% of NSTC) had a non favourable state of existence in D8.

#### **5.2.1.9 D9. COMMITMENT OF EMPLOYEES**

Fifty eight of the 'troubled companies' (58%) enjoyed a favourable state of existence as headed in D9 and the remaining 42 'troubled companies' (42%) had non favourable state of existence in D9. All 57 STC (100% of STC) and only 1 NSTC (2% of NSTC) experienced a favourable state of existence in D9. Forty two NSTC (98% of NSTC) had a non favourable of state of existence as in D9.

## **5.2.2 CATEGORY B: EXISTENCE (EXISTS / NON EXISTANT)**

As mentioned earlier in the hypotheses, the research is interested in identifying these determinants' existence in successful and non successful turnaround companies, whether they exist or do not exist (non existant).

### ***5.2.2.1 D10. NEW COMPETENT MANAGEMENT***

D10 existed in 57 of the 'troubled companies' (57%) but did not exist (non existant) in the remaining 43 'troubled companies' (43%). All 57 STC experienced the existence of D10. But D10 did not exist (non existant) in all 43 NSTC (100% of NSTC).

### ***5.2.2.2 D11. VIABLE CORE BUSINESS***

D11 existed in 57 of the 'troubled companies' (57%) and did not exist (non existant) in the remaining 43 'troubled companies' (43%). All 57 STC (100% of STC) experienced the existence of D11. But D11 did not exist (non existant) in all 43 NSTC (100% of NSTC).

### ***5.2.2.3 D12. BRIDGE CAPITAL***

D12 existed in seventy of the 'troubled companies' (70%) and did not exist (non existant) in the remaining 30 'troubled companies' (30%).

Fifty three STC (93%) and only 17 NSTC (40% of NSTC) experienced the existence of D12. But D12 did not exist (non existant) in 26 NSTC (60% of NSTC) and 4 STC (7% of STC).

#### ***5.2.2.4 D13. REALISTIC TURNAROUND PLAN***

D13 existed in 56 of the 'troubled companies' (56%) and did not exist (non existant) in the remaining 44 'troubled companies' (44%). Fifty six STC (98% of STC) experienced the existence of D13. But D13 did not exist (non existant) in all 43 NSTC (100% of NSTC) and 1 STC (2% of STC).

From the findings above and with reference to determinants under category A [(with the exception of determinants D3 (company's historical strategy), D4 (industrial characteristics), and D5 (company's cost price structure)], all other determinants were found to be in a favourable state of existence in the STC compared to the NSTC.

The situations for D3, D4 and D5 are also hereby explained . For D3 for instance, even though a strong minority of STC (47%) enjoyed a favourable state of existence of D3, a majority of the STC (53%) on the other hand were in a similar position as the NSTC i.e. experiencing non favourable state of existence in D3.

Similarly for D5, although a strong minority of STC (44%) were found to be enjoying a favourable state of existence in D5, the majority of the STC (56%) were in a similar position as the NSTC i.e. experiencing a non favourable state of existence in D5. In both of these cases, the majority of STC were found to be experiencing a non favourable state of existence and there is no significant difference in their position compared to the NSTC.

However, for D4, the case has a slightly different twist. Here, the majority of both STC (65%) and the NSTC (60%) enjoyed a favourable state of existence in D4. But again, there is no significant difference between them since the majority of both were in a similar position. It is interesting to note that while the majority of the NSTC had a favourable state of existence in D4 just as did the STC, it did not give any real help to the NSTC in terms of the overall turnaround feasibility.

Overall, there is a need to observe the number of occurrences of favourable state of existence and non favourable state of existence for the majority of STC and NSTC, for determinants under category A. Observations will also be required for the number of occurrences of existence (exists) and non existence for the majority of STC and NSTC, for determinants under category B. The total number of occurrences for determinants under category A will be at 9 and for determinants under category B the number of occurrences will be at 4.

Subsequently, the following findings are reported for the above (refer to Table 27):

Table 27

No. Of Occurrences in ' Troubled Companies '

<u>Determinants</u>	<u>STC</u>	<u>NSTC</u>
<u>Category A</u>		
<b>Favourable State Of Existence</b>	<b>7 out of 9</b>	<b>1 out of 9</b>
<b>Non Favourable State Of Existence</b>	<b>2 out of 9</b>	<b>8 out of 9</b>
<u>Category B</u>		
<b>Exists</b>	<b>4 out of 4</b>	<b>0 out of 4</b>
<b>Non Existant</b>	<b>0 out of 4</b>	<b>4 out of 4</b>

Based on the above, it can be observed that the determinants under category A have a favourable state of existence that occurred more frequently in the STC than in the NSTC, where 7 out of 9 occurrences were observed for the STC and only 1 out of 9 for the NSTC.

The determinants under category A also experienced a non favourable state of existence that occurred more frequently in the NSTC than the STC, where 8 out of 9 occurrences were observed for the NSTC and only 2 out of 9 were observed for the STC.

For category B, it was observed that the occurrences of the determinants' existence (i.e. exists) were found more frequently in the STC than the NSTC, where 4 out of 4 occurrences were observed for the STC and none for the NSTC. The occurrences of the determinants' non existence were frequently found more in the NSTC than the STC, where 4 out of 4 occurrences were observed for the NSTC and none for the STC.

With reference to the research hypotheses and to the above observations, it is believed that the high occurrences of the favourable state of existence and the existence (i.e. exists) of the key determinants of turnaround feasibility in the STC have enabled the STC to achieve successful corporate turnarounds.

Subsequently, it is also believed that the high occurrences of the non favourable state of existence and the non existence of the key determinants of turnaround feasibility in the NSTC have impeded the NSTC from achieving successful corporate turnaround.

These findings and observations above support all 4 hypotheses of the research and reaffirm that:

- 1. The favourable state of existence of the determinants of turnaround feasibility enables companies to achieve a successful corporate turnaround.**
- 2. The non favourable state of existence of the determinants of turnaround feasibility impedes companies from achieving a successful corporate turnaround.**
- 3. The existence (i.e. exists) of the determinants of turnaround feasibility enables companies to achieve a successful corporate turnaround.**
- 4. The non existence of the determinants of turnaround feasibility impedes companies from achieving a successful turnaround.**

### 5.3 SUMMARY

When causes of decline were analysed, it was found that the STC faced fewer causes of decline than the NSTC. More NSTC were also found to be in the severe crisis stage than the STC. However, the NSTC were found to be more non diversified than the STC.

Although both STC and NSTC were found to have high occurrences of favourable industry characteristics, the NSTC were found not to have benefited from this feature. When the company's cost - price structure was analysed, a majority of NSTC and STC had an equal or higher cost price structure than their industry.



STC were also found to have received very supportive commitment from their bankers compared to the NSTC. Subsequently, when the commitment of creditors was analysed, again the STC were found to have received a stronger commitment from their creditors compared to the NSTC. The majority of the STC were also found to have received a stronger commitment from their employees compared to the NSTC.

In addition, the STC CEOs were also found to have a higher number of favourable characteristics of new competent management when compared with the NSTC.

Subsequently, STC have been found to have more key characteristics of viable core business, received bridge capital from more than one source and they have more realistic turnaround plan pertinent features than the NSTC.

It was also found that the STC had high occurrences of favourable states of existence for the key determinants under category A and experienced high occurrences of existence (exists) in the key determinants under category B compared to the NSTC. These findings and observations have thus supported all 4 hypotheses of the research.

## CHAPTER 6

## **DEVELOPING THE CORPORATE TURNAROUND FEASIBILITY MODELS**

Chapter 6 presents the findings and interpretation on the development of the qualitative ' Feasibility Intensity Level ' model and the empirical model for predicting corporate turnaround feasibility using the multivariate logistic regression technique.

The application assumptions for using the multivariate logistic regression model were tested to ensure that its usage was appropriate for the study. Several multivariate logistic regression models were analysed in terms of their logic, appropriateness and suitability for predictive usage using test and diagnosing statistics as set forth in Chapter 3 to find the " best " and final model.

Subsequently, the model was tested for its validity and predictive power using the Data Splitting technique and the Lachenbruch method.

### **6.1 REALISATION OF A QUALITATIVE CORPORATE TURNAROUND FEASIBILITY MODEL**

As stated earlier, one of the main objectives of the research was to develop an empirical model consisting of the key determinants of corporate turnaround which could be used to predict the feasibility of corporate turnarounds.

This will be dealt with in this chapter and will be based on the findings and observations reported in Chapter 5. The findings and observations reported in Chapter 5 have also led to the realisation of a qualitative corporate turnaround feasibility model which is subsequently discussed.

### **6.1.1 DESCRIPTION OF THE MODEL**

The qualitative model (refer to Figure 3) was named as the 'Corporate Turnaround Feasibility Intensity Model', since it is concerned with the different levels of feasibility intensity of corporate turnaround.

The model consists of 10 'inner cores' or 10 feasibility intensity levels (FIL 1 to FIL10) and 1 'outer core' which consists of the 10 key success factors or determinants of corporate turnaround feasibility (excluding D3, D4 and D5). These 3 determinants are not included in the model since it was found in Chapter 5 that there were no significant differences between the STC and the NSTC as far as these determinants were concerned. Thus it would be pointless to have them included. The 10 determinants included in the model are as follows:

- **D1 - Causes of Decline**
- **D2 - Severity of Crisis**
- **D6 - Commitment of Shareholders**
- **D7 - Commitment of Bankers**
- **D8 - Commitment of Creditors**

- **D9 - Commitment of Employees**
- **D10 - New Competent Management**
- **D11 - Viable Core Business**
- **D12 - Bridge Capital**
- **D13 - Realistic Turnaround Plan**

There are altogether 20 directional pointers (arrows) categorised into 2 basic types; the ones pointing toward the determinants (inquiring function), and the ones pointing toward the feasibility intensity levels (responding function).

### **6.1.2 WORKINGS OF THE MODEL**

Inquiries will be made according to the determinants and their categories. For instance D1 is a determinant under category A where an inquiry is made pertaining to the (Causes of Decline) state of existence in the company. If the state of existence is found favourable, then the feasibility intensity level one or FIL 1 is shaded. Similar inquiries will be made of all other determinants under category A.

If the state of existence is found to be non favourable for any one of the determinants, the corresponding feasibility intensity level will be left unshaded and the inquiry moves on to the next determinant.

Similarly, for the determinants under category B, inquiries will be made of their existence in the company.

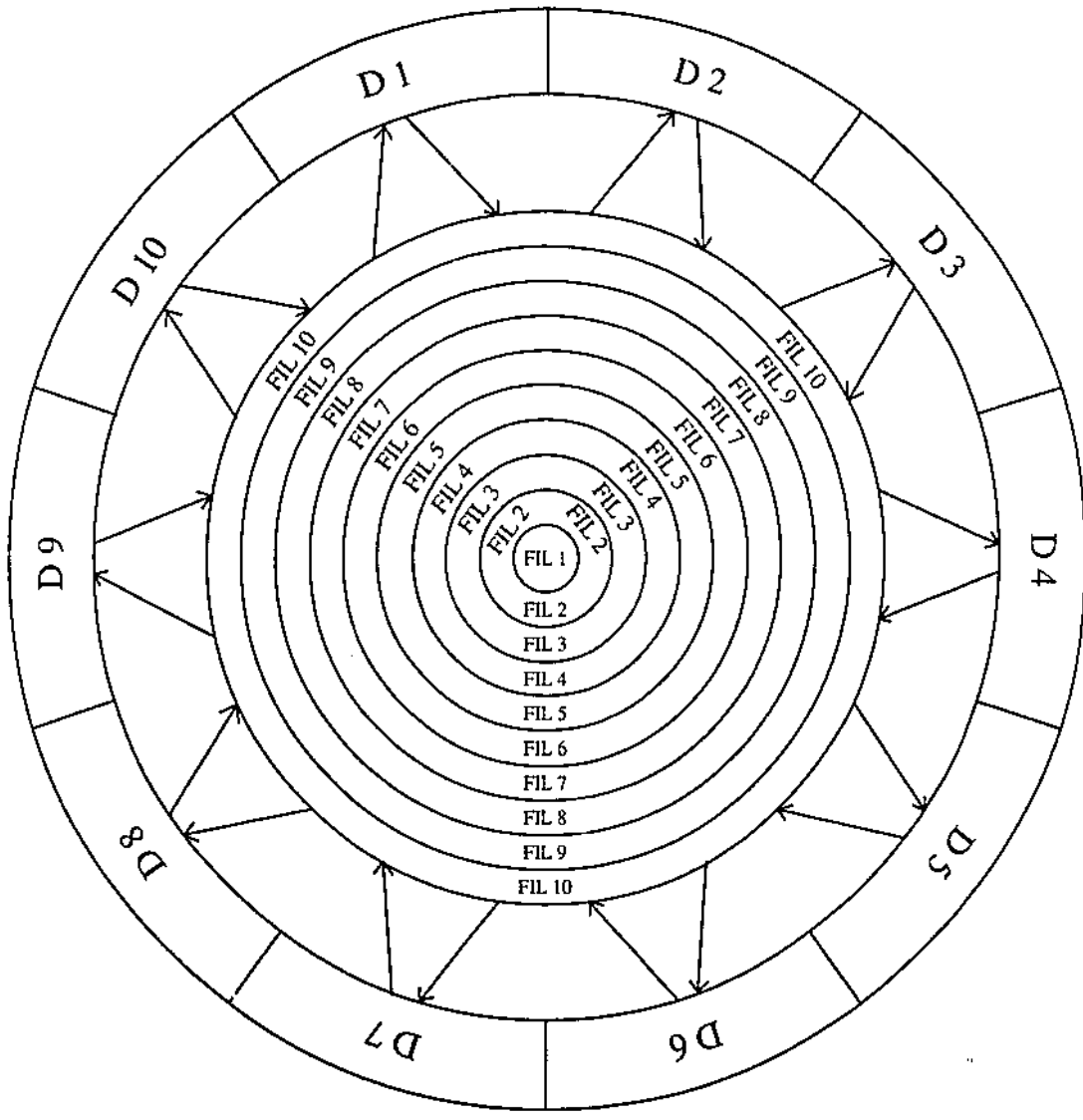
If a particular determinant is found to exist, the next available corresponding feasibility intensity level is shaded and if it is non-existent, the corresponding feasibility intensity level will be left alone and the inquiry moves to the next determinant and so on.

It is cautioned here that the 'inner cores' or feasibility intensity levels do not correspond rigidly to any one particular determinant. If a particular feasibility intensity level is not shaded due to a negative response of a particular determinant inquired, it will be left unshaded and will be used subsequently for the next determinant inquiry.

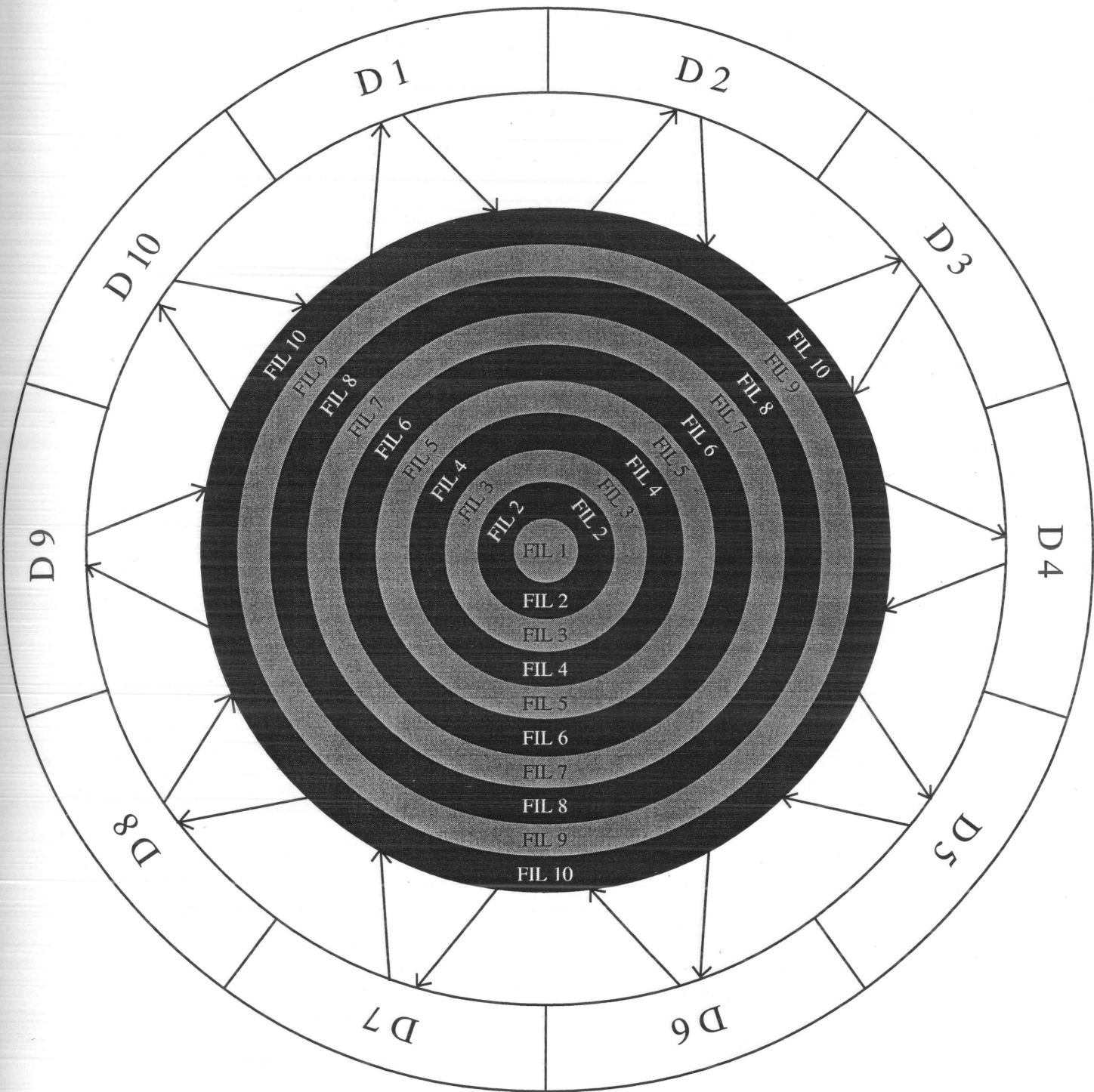
Corporate turnaround feasibility intensity can be observed from the number of successful feasibility intensity levels shaded. The higher the number of feasibility intensity levels shaded, the greater the corporate turnaround feasibility intensity.

### **6.1.3 BRIEF EXAMPLE OF THE WORKINGS OF THE MODEL**

Two 'troubled companies' are taken at random, one is an STC and the other is an NSTC. Both are tested with regard to the state of existence and the existence of the corresponding 10 determinants using the 'Corporate Turnaround Feasibility Intensity Model' and their results are depicted in Appendix K, Figure 4 and Figure 5.



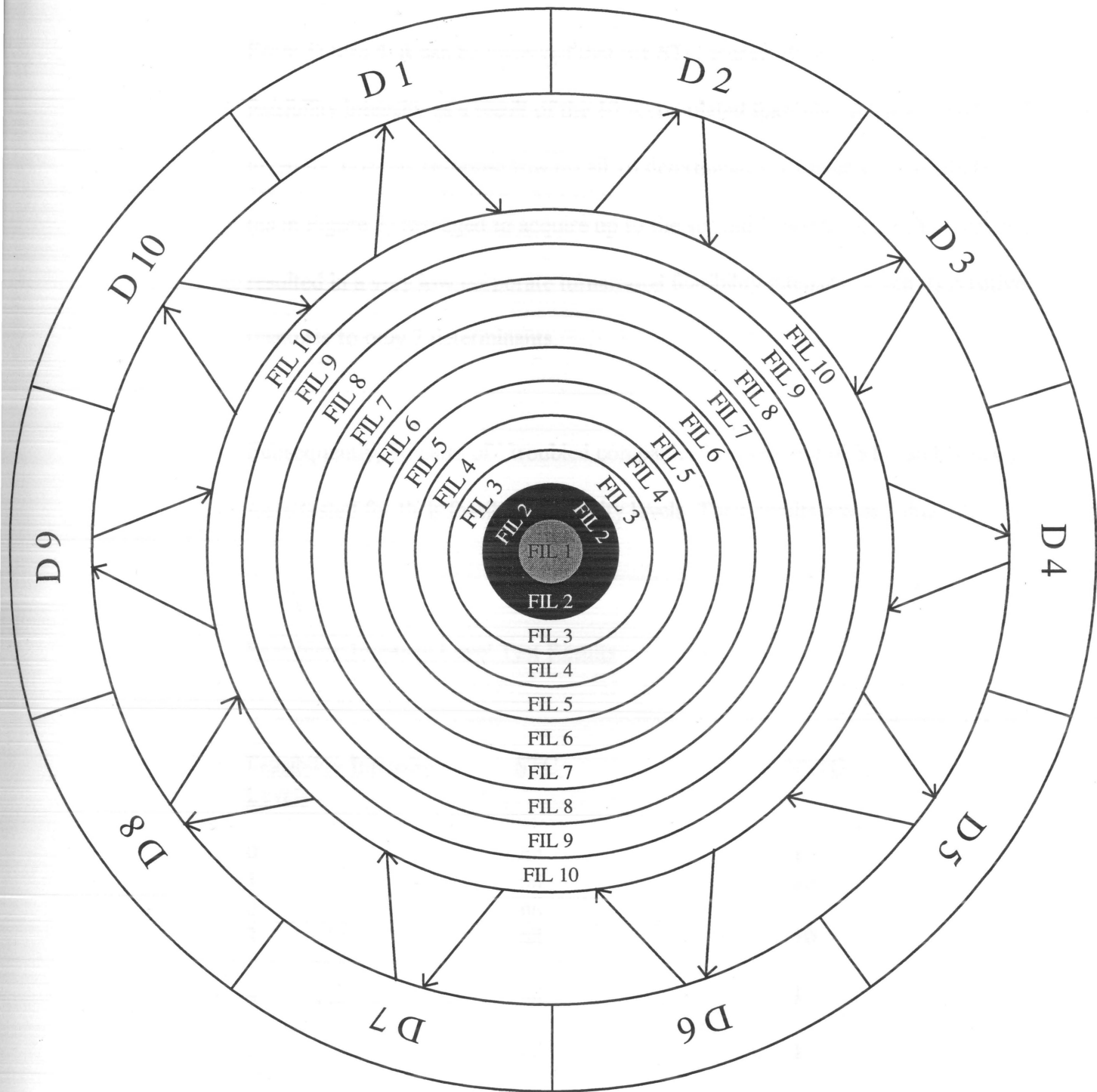
**Figure 3.** Corporate Turnaround Feasibility Intensity Model



**Figure 4. Corporate Turnaround Feasibility Intensity Model**

Test for an STC





**Figure 5. Corporate Turnaround Feasibility Intensity Model**

Test for an NSTC

From Figure 4, it can be observed that the STC scored every corporate turnaround feasibility intensity as a result of the 10 accumulated feasibility intensity levels, given its positive response toward all 10 determinants. Conversely, the NSTC (as in Figure 5) managed to acquire up to the second feasibility intensity level and resulted in a very low corporate turnaround feasibility intensity, given its positive response to only 2 determinants.

Subsequently, 86 pairs of 'troubled companies' (consisting of STC and NSTC) were tested for their feasibility intensity levels. Their results are in Table 28:

Table 28

Feasibility Intensity Level Test Results

<u>Feasibility Intensity Levels</u>	<u>STC</u>	<u>NSTC</u>
0	nil	13
1	nil	13
2	nil	5
3	nil	10
4	nil	1
6	nil	1
9	7	nil
10	36	nil
<b>Total</b>	<b>43</b>	<b>43</b>

From the above, it can be observed that most STC have accumulated feasibility intensity levels of 9 and 10 (in the upper intensity level range), whereas the NSTC have accumulated feasibility intensity levels ranging from 0 to 6 (with majority of them are in the lower intensity level range).

On the whole, a guide for using the model can be that the higher the corporate turnaround feasibility intensity, the more feasible it will be for a successful turnaround, and the lower the corporate turnaround feasibility intensity, the less feasible it will be for a successful corporate turnaround.

## **6.2 THE QUANTITATIVE CORPORATE TURNAROUND FEASIBILITY MODEL**

The following are findings and interpretations on the results obtained from modelling the multivariate logistic regression.

### **6.2.1 APPLICATION ASSUMPTIONS**

The dependent variable (refer to Appendix L) which is FNF or Observed Feasible Turnarounds (Successful Turnarounds) / Non Feasible Turnarounds (Non Successful Turnarounds) is in the nominal scale with dichotomous / binary response (0, 1), as explained earlier under the scale of measurement in the methodology.

When  $\epsilon_i$  (the error term) was tested for its normality by plotting a Histogram (with the normal curve superimposed) of its unstandardized residuals,  $\epsilon_i$  was found to be not normally distributed (refer to Appendix P). This was further reaffirmed by plotting the Normal Probability and Detrended Normal Probability plot of the deviances, where it was found that the deviances did not appear to be normally distributed (refer to Appendix Q and Appendix R).

A test on the constraint of the logistic response function was also undertaken to confirm whether the asymptotes were at 0 and 1 by plotting the Histogram (with the normal curve superimposed) of the response function. Variables from the Data Splitting model were used for this purpose. The Histogram plot confirmed that the logistic response function's asymptotes were at 0 and 1 (refer to Appendix S) and reaffirmed that the mean responses were constrained by

$$0 \leq E \{ Y \} = \pi \leq 1$$

Further tests were undertaken to confirm whether the logistic response function was curvilinear in shape (sigmoidal) by plotting the response function against  $Z$  (the value of its linear combination). The logistics response function was found to be curvilinear and sigmoidal in shape (tilted 'S'). Its asymptotes were at 0 and 1, which also reaffirmed the above mean responses constraint (refer to Appendix T).

The above tests have satisfied the application assumptions of the multivariate logistic regression model and confirmed the usage of the multivariate logistic regression model for this study to be appropriate.

## **6.2.2 MODEL BUILDING CHRONOLOGY AND RESULTS**

Twenty eight multivariate logistic regression models were run, tested and analysed, and their results are in Appendix M. Each of the models was tested and analysed using the relevant test and diagnostic statistics (as stipulated in the methodology) for their appropriateness, suitability and logic.

The findings and interpretation of the results are as follows:

Model 1 consisting of all the predictor variables (COD, SOC, COST, NCOM, VCB, BCAP and RTP) with 86 cases / observations inclusive of the intercept (INTP) was run using the Enter procedure. Subsequently, the same variables were modelled (Model 2 and 3) using the Forward and Backward Conditional Stepwise procedures respectively. With the exception of the Score statistics in Model 2, which were found to be significant at the 0.05 level for variables not in the equation, the overall results for the first three models were basically similar i.e. they faced computational problems where the covariance matrices were not able to be computed and all other statistical results omitted.

Subsequent models (Model 4, 5 and 6) were run using the Enter, Forward and Backward Conditional Stepwise procedures without the intercept (INTP). With the exception of the Score statistics that were found to be significant at the 0.05 level in Model 5 for all variables not in the equation and the significant Wald statistics for variable COST at the 0.05 level, further computational problems, similar to Model 1, 2 and 3 and the omission of other statistics were met.

For Model 7 onwards, it was decided that each predictor variable be entered into the equation one at a time using the Enter procedure. Only when a prospective model was found, would the Forward and Backward Conditional Stepwise procedures then be applied to reaffirm results obtained using the Enter procedure.

In Model 7, the predictor variables entered were COD and SOC. The intercept (INTP) was reintroduced into the equation. Reading for the -2 loglikelihood was at 18.17, while the Model and Improvement Chi-Square was significant at the 0.05 level. The model had a 98.8% Correct Classification for Feasible and Non Feasible Corporate Turnaround. While all coefficients in the equation were found to have the correct a priori sign, the Wald statistic for SOC was found to be not significant at the 0.05 level. By excluding the intercept (INTP) again, another model (Model 8) was run and it was found that the Wald statistics for COD and SOC were significant. However, the value for -2 loglikelihood had increased to 70, with an 86% Correct Classification despite the significance of the Model and Improvement Chi-Square.

Subsequently, for Models 9, 10, 11 and 12, variables such as COST, NCOM, VCB and RTP were entered and eliminated from the equation one at a time to obtain their results. It is unfortunate that all four models suffered from computational problems with similar symptoms as some of the models before.

Another model (Model 13) was run with variables COD, SOC and BCAP. The -2 loglikelihood was 25.76 with significant Model and Improvement Chi-Square at the 0.05 level. The model had a Correct Classification of 95.3%, correct a priori sign and significant Wald statistics. The variable RTP was then added to the equation of Model 13 when Model 14 was run. Unfortunately, Model 14 suffered similar computational problems as some of the models before.

A decision to drop the variable COD and to ignore the Wald statistical results was made for subsequent models (Models 15 to 25). Predictor variables were again entered and eliminated from the equation one at a time. Those that contributed to the significance of the test statistics were allowed to remain in the equation. The reason for ignoring the Wald statistic was due to some undesirable property that it is said to have. Hauck and Donner (1993, as quoted by Norusis, 1994) stated that when the absolute value of the regression coefficient became large, the estimated standard error would also be large, producing Wald statistics that were too small leading one to accept the null hypothesis when the coefficient is 0, when in fact one should reject it. Therefore, whenever there is a large coefficient, one is advised not to rely on the Wald statistic for hypothesis testing.

Model 15 was run with variables SOC and COST. Both the Model and Improvement Chi-Square were found to be significant at the 0.05 level, with 79.15 for the -2 loglikelihood. The model had a Correct Classification of 70.9% and unfortunately suffered from having the incorrect a priori sign for SOC. There were also two cases of outliers.

When the variable NCOM was included in the equation of Model 15 for Model 16, the -2 loglikelihood improved from 79.15 to 48.05 with a significant Model and Improvement Chi-Square. The model ability to Classify Correctly also improved to 90.7%. However, the coefficient of NCOM suffered from having the incorrect a priori sign.

Subsequently, the variable VCB was entered into the equation of Model 16 for Model 17. The -2 loglikelihood improved slightly to 41.86 with significant Model and Improvement Chi-square at the 0.05 level. The Correct Classification remained at 90.7%. Unfortunately, Model 17 suffered computational problems as did some of the earlier models. Variable BCAP was entered into the equation of Model 17 for Model 18. Unfortunately again, it suffered from similar computational problems.

The variable BCAP was then eliminated and the variable RTP entered into the equation of Model 18 for Model 19. The -2 loglikelihood improved to 35.07 with significant Model and Improvement Chi-Square.



The model had a Correct Classification of 94.2% but suffered from having the incorrect a priori sign for the coefficients of VCB and RTP.

With the exception of Model 18, all models from 15 to 19 resulted with several cases of outliers. The outliers were addressed where model diagnostic statistics were used to identify significant outliers. All 86 cases were observed and compared in terms of the Cooks Distance, Logit Residuals, Studentized Residuals and Deviances, Standardised Residuals and the Dfbetas. Three significant outliers were found i.e. cases 8, 42 and 86.

A simple remedial measure was taken by eliminating the outliers above. Both Lapin (1993) and Norusis (1994) recommended the elimination of outliers by removing the data for the said cases / observations in situations where the number of the overall cases / observations was large enough to warrant the elimination to take place. In the situation above, it was found appropriate to eliminate the cases with the significant outliers since the overall number of cases / observations which were 86, were more than the minimum requirement for model building data sets. Data sets which should be at least between 30 and 50 cases / observations in view of 5 predictor variables in the equation.

It must also be stressed here that the elimination of the cases / observations with significant outliers must be done in pairs with a view of maintaining the balance in number between the STC and NSTC in the data set.

Thus the elimination of 6 cases / observations (3 pairs) would result in a remainder of 80 cases / observation in the data set for the modelling.

Model 20 onwards were run with 80 cases / observations in the data set. The -2 loglikelihood was 7.47 with significant Model and Improvement Chi-Square at the 0.05 level. The model had a Correct Classification of 97.5%. However, all of the coefficients suffered from having the incorrect a priori sign. When the Backward Conditional Stepwise procedure was applied for the same variables in the equation of Model 20 for Model 21, the -2 loglikelihood became 8.82 with an insignificant Improvement Chi-Square at the 0.05 level. The model has a Correct Classification of 96.2%. Model 21 similarly suffered from having the incorrect a priori sign for all coefficients and even the loglikelihood ratios were not significant at the 0.05 level for 2 variables (NCOM and VCB). Residual Chi-Square for variables not in the equation was also not significant at the 0.05 level.

The Forward Conditional Stepwise procedure was also applied for the same variables as in Model 21 for Model 22. Similar results were obtained for Model 22 as far as the -2 loglikelihood, Correct Classification and the Residual Chi-Square were concerned. No beta coefficients were available for 2 of the variables (NCOM and VCB) while RTP had an incorrect a priori sign. Although the Score statistics for variables not in the equation were significant at the 0.05 level, the loglikelihood ratios for 2 variables (NCOM and VCB) were not computed.

The reason was because these two variables were found to be insignificant at the 0.05 level, and as such under the Forward Conditional Stepwise they were excluded from the equation. Overall, no significant outliers were found in the three models above.

From the test statistics in Model 21 two variables i.e. NCOM and VCB were highlighted as not being significant. Similarly, in Model 22, several test statistics were not computed since the variables were excluded from the equation.

Both variables (NCOM and VCB) were eliminated from the equation for Model 23. The results in terms of the -2 loglikelihood, Model and Improvement Chi-Square and the Correct Classification did not differ from those of Model 22. Apart from the above, the coefficient for RTP suffered again from having the incorrect a priori sign.

The Backward and Forward Conditional Stepwise procedures were applied for the variables in the equation of Model 23, respectively. With the exception of the significance of the Score statistics for all variables not in the equation in Model 25 and the loglikelihood ratios in both Models 24 and 25, the results of other test statistics inclusive of the beta coefficients remained unchanged. Similarly, no significant outliers were found.

After 25 models were run, it was felt that there must be an underpinning cause for the illogicalness, inappropriateness and unsuitability of the models. From the symptoms indicated by several test statistics, it was suspected that the models suffered from the problem of 'multicollinearity' i.e. where high correlations existed between several predictor variables.

The evidence is the incorrect a priori sign of the coefficients suffered by several predictor variables which had opposite signs from what would logically be expected, large standard errors making the Wald statistic insignificant and computational problems for the covariance matrices as observed in most of the models. Furthermore, the large beta coefficients in the later models posed additional computational difficulties in terms of the exponential of the linear combinations if they were to be calculated.

Aldrich and Nelson (1984) stated that the assumptions for logit and probit models were exactly the same as those made for OLS (Ordinary Least Squares), and that if near though not exact linear dependencies existed (collinearity), then problems of computational imprecision and unstable estimates may occur.

They also stressed that the logit and probit models suffer the same problems of multicollinearity as does the OLS models.

In the study by Peel and Wilson (1988) for liquidation / merger alternative of distressed companies, 54 logistic models were run using 18 predictor variables to find logit estimates that could best predict distressed companies that were successfully acquired and those that failed. Multicollinearity problems were encountered. As a result, one of their most successful models was based on only 4 predictor variables (since the introduction of additional variables resulted in multicollinearity problems).

It must be stressed here also that the existence of multicollinearity problems in most of the above models in this study is not incidental and probably unavoidable. Recall in the findings of Chapter 5 , that the determinants or key success factors for feasible corporate turnaround are not totally unrelated. In the STC for instance, the Commitment of Bankers and Creditors was also related to the Commitment of the Shareholders and the existence of the owner cum chairperson / CEO management. Similarly, any additional funds in the form of either bridge capital from the bankers or allowable deferred payment from the creditors was also found to be related to the existence of the owner cum chairperson / CEO in the STC compared to the NSTC.

Although it would be impossible to totally eliminate the problem of multicollinearity in the modelling attempt of this study, the priority, however, is to find a reasonably balanced model with a reduced impact of multicollinearity and while being logical, appropriate and suitable for its predictive usage purposes.

While suggestions on how the multicollinearity problem can be reduced includes the change of the equation structure by dividing some series to both left and right hand variables or to construct several composite variables in place of the existing predictor variables (as proposed by several statistical authors), it was felt that these suggestions would only increase the complexity and introduces greater complications for usage of the ultimate model. The model reflects a more theoretical than practical one as such compromising a significance of this research is trying to achieve i.e. a wholesome and realistic model for predicting the feasibility of corporate turnaround. The practical aspects of the model would contribute new approaches and knowledge not only to the academic world but will find its usefulness in the corporate world as one of the tools to facilitate the making of the right decisions. This can avoid costly errors in terms of money, man-hours, psychological turmoil and wasteful resources.

A simple conventional yet effective approach (similar to that used by Peel and Wilson, 1988), is to eliminate several highly correlated predictor variables. However, in the last model run i.e. Model 25, there were only 3 predictor variables used in the equation out of the total of 7 predictor variables, meaning, 4 other predictor variables had already been eliminated from the equation.

Reobservation of all the 25 models indicated that one of the more appropriate, suitable, logical models with the correct a priori sign for all coefficients in the equation, with reasonable results for its test statistics was Model 13, containing the variables COD, SOC and BCAP.

A decision was made to run a model with the above predictor variables, this time using 80 cases / observations in the data set (as in Models 20 to 25) and bringing back into cognisance the Wald statistic for Model 26. The Enter procedure was used and the results found confirmed the above decision. The -2 loglikelihood was 19.43 with significant Model and Improvement Chi-Square at the 0.05 level. The model had a Correct Classification of 91.2% with significant Wald statistic at the 0.05 level. The beta coefficients too had the correct a priori sign and even the value of the partial correlations were more apparent.

The variables in the equation of Model 26 were used in Models 27 and 28 using the Backward and Forward Conditional Stepwise procedure respectively and similar results were obtained. The loglikelihood ratios, significant at the 0.05 level, in Models 27 and 28 confirmed that of the Wald statistics. Furthermore, no significant outliers were found. Results of the correlation matrix indicated that COD and SOC were highly correlated but not enough to cause intense multicollinearity problems, such as computational problems with the covariance matrices and the omission of test statistics, resulting in incorrect a priori signs.

No doubt there were only 3 predictor variables in these models but they appeared more appropriate, suitable and logical.

Lapin (1993) advises to " keep the regression equation simple. In a multiple regression, this is achieved by minimising the number of predictors. Limiting the numbers of predictors gives stability to predictions made from different data sets " (p. 507).

Thus, the final linear combination of the logistic regression model equation estimates is as follows:

$$Z = -2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}$$

When placed within the logistic regression function the ultimate model reads as:

**Feasible / Non Feasible Corporate Turnaround =**

$$\frac{e^{-2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}}}{1 + e^{-2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}}}$$



The interpretation of the above model is ; The feasibility of corporate turnaround is dependant on the base of natural logarithm  $e$  to the power of the logistic regression model linear combination i.e. negative 2.2250 COD (Causes of Decline) plus 3.6892 SOC (Severity of Crisis) plus 3.7575 BCAP (Bridge Capitals), divided by One plus the base of natural logarithm  $e$  to the power of the logistic regression model linear combination i.e. negative 2.2250 COD (Causes of Decline) plus 3.6892 SOC (Severity of Crisis) plus 3.7575 BCAP (Bridge Capitals).

## **6.2.3 MODEL VALIDATION RESULTS**

The multivariate logistic regression model was tested in terms of its robustness, predictive ability and accuracy through the Data Splitting and the Lachenbruch validation technique.

### **6.2.3.1 DATA SPLITTING TECHNIQUE**

Two sets of data were obtained, each with 40 cases / observations when the data set used in developing the final logistic regression model (i.e. containing 80 cases / observations) was split equally into two. Each of the data set consists of 20 pairs of STC and NSTC. One data set was used for model building purposes and the other for data validation or prediction test purposes.

The model was run using the Enter procedure and the linear combination of the logistic regression model equation estimates for the Data Splitting technique was as follows:

$$Z = -2.0385 \text{ COD} + 4.891 \text{ SOC} + 3.9228 \text{ BCAP}$$

The -2 loglikelihood was 8.87 with significant Model and Improvement Chi-Square at the 0.05 level. The model had a 92.5% Correct Classification, with correct a priori sign for all coefficients and without any significant outliers reported.

Subsequently, the model robustness, predictive ability and accuracy were tested by obtaining the linear combination or Z value of each of the cases / observations using the validation data set, after which the logistic response probabilities were calculated. A comparison between the values of the observed FNF (the dependent variable) and the Probability of FNF (the values of the logistic response function) was made (refer to Appendix N).

The model Correct Classification / Prediction was then calculated as follows:

**Model Correct Classification / Prediction:**

$$n1 = 20$$

$$n2 = 16$$

$$N = 40$$

**\* Total Percent of Correct Classification / Prediction:**

$$= \frac{n_1 + n_2}{N} = \frac{20 + 16}{40} * 100\% = 90\%$$

The model Total Error Rate was also calculated and the result was as follows:

$$\begin{aligned} \text{Total Error Rate} &= (1 - \text{Total Correct Classification}) * 100\% \\ &= (1 - 0.90) * 100\% \\ &= 10\% \end{aligned}$$

Subsequently, there was a need to ascertain that the proportion of the Correct Classification was not due to a 50% chance. This test as applied to a classification problem was proposed by Frank, Massy and Morrison (1965, as quoted by Peel and Wilson, 1988) and Morrison (1969, as quoted by Wilson, 1989).

The results were as follows:

**Test of significant difference from a 50% chance at the 0.005 level where  $Z = 2.5758$ ,  $Q = 0.9$ ,  $P = 0.5$  and  $N = 40$ .**

$$Z = \frac{(Q - P)}{\sqrt{P(1 - P)/N}}$$

$$Z = \frac{0.4}{\sqrt{0.5(0.5)/40}}$$

$$Z = \frac{0.4}{0.079056}$$

$$Z = 5.0597$$

\* Critical point of 90% at 0.005 level was  $Z = 5.0597$ , beyond the critical point of the 50% chance where  $Z = 2.5758$ .

The overall prediction accuracy for using the Data Splitting technique validation test for the model equalled to 90% when the 0.5 cut-off point was applied.

Twenty Observed Feasible Corporate Turnaround cases were correctly classified as Feasible Corporate Turnarounds and 16 Observed Non Feasible Corporate Turnaround cases were correctly classified as Non Feasible Corporate Turnaround out of 20, making the overall Total Predictive Error Rate of the model at 10%. And the test proportion indicate that the proportion of Correct Classification (90%) was significantly different from a 50% chance at the 0.005 level.

#### **6.2.3.2 LACHENBRUCH METHOD**

Out of the total 80 cases / observations in the data set, a single case / observation was taken out randomly for the validation test at every one time ( $n - 1$ ), the model reestimated and the linear combination ( $Z$  values) and the logistics response probabilities calculated. Details of the results are in Appendix O. Overall the models were observed to be relatively stable and were not significantly different from the original model. The same linear combination of the logistic regression model equation estimates i.e.  $Z = -2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}$  was used.

The Correct Classification / Prediction was calculated as follows:

**Model Correct Classification / Prediction:**

$$n1 = 37$$

$$n2 = 35$$

$$N = 80$$

**\* Total Correct Classification / Prediction:**

$$= \frac{n1 + n2}{N} = \frac{37 + 35}{80} * 100\% = 90\%$$

The Total Error Rate was also calculated and the result is as follows:

$$\begin{aligned} \text{Total Error Rate} &= (1 - \text{Total Correct Classification}) * 100\% \\ &= (1 - 0.90) * 100\% \\ &= 10\% \end{aligned}$$

As in the Data Splitting technique, there was a need to ascertain that the proportion of the Correct Classification was not to a 50% chance. This test as applied to a classification problem was proposed by Frank, Massy and Morrison (1965, as quoted by Peel and Wilson, 1988) and Morrison (1969, as quoted by Wilson, 1989).

The results were as follows:

Test of significant difference from a 50% chance at the 0.005 level where  $Z = 2.5758$ ,  $Q = 0.9$ ,  $P = 0.5$  and  $N = 80$ .

$$Z = \frac{(Q - P)}{\sqrt{P(1 - P)/N}}$$

$$Z = \frac{0.4}{\sqrt{0.5(0.5)/80}}$$

$$Z = \frac{0.4}{0.05590} \quad Z = 7.1556$$

\* Critical point of 90% at 0.005 level is  $Z = 7.1556$ , beyond the critical point of the 50% chance where  $Z = 2.5758$ .

The overall prediction accuracy using the Lachenbruch method for validation of the model equalled 90% when the 0.5 cut-off point was applied. Thirty seven Observed Feasible Corporate Turnaround cases were correctly classified as Feasible Corporate Turnarounds out of 40 and 35 Observed Non Feasible Corporate Turnaround cases were correctly classified as Non Feasible Corporate Turnaround out of 40, making the overall Total Predictive Error Rate of the model at 10%. And the test proportion indicate that the proportion of Correct Classification (90%) was significantly different from a 50% chance at the 0.005 level.

### 6.3 SUMMARY

In the empirical modelling work, the logistic application assumptions were tested for the multivariate logistic regression model and the test results satisfied the logistic application assumption and confirmed the appropriateness of its usage for this study.

A total of 28 multivariate logistic regression models were run, tested and analysed using the Enter procedure as the base procedure and reaffirming results of the Enter procedure by the Backward and Forward Conditional Stepwise procedures. Remedial measures taken included the elimination of the cases / observations with significant outliers and the exclusion of several predictor variables to reduce the multicollinearity problem.

Models 26, 27 and 28 with COD, SOC and BCAP in their equations have good test statistics results with no significant outliers and with less of a multicollinearity problem. Thus the final logistic model estimates are:

**Feasible / Non Feasible Corporate Turnaround =**

$$\frac{e^{-2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}}}{1 + e^{-2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}}}$$

The model validation tests were carried out using the Data Splitting technique and the Lachenbruch method. Both validation tests confirmed the 90% Correct Classification / Prediction power of the model, the 10% Total Error Rate and that the proportion of Correct Classification (90%) was significantly different from a 50% chance at the 0.005 level.



## CHAPTER 7

## **SUMMARY AND CONCLUSIONS**

### **7.1 RESEARCH SUMMARY**

The objective of this research was to identify the key determinants of corporate turnaround feasibility. This was measured by examining two aspects, namely, their existence and the state in which these determinants exist in Successful Turnaround Companies (STC) and Non Successful Turnaround Companies (NSTC). The ultimate aim was the development of an empirical model of the key success factors or determinants of corporate turnaround feasibility capable of predicting the feasibility of corporate turnarounds.

Two hundred and eleven publicly listed companies of the Kuala Lumpur Stock Exchange were shortlisted through observations in their share price performance, using the Financial Times Extel. The companies were further observed in terms of their EBIT (earnings before interest and tax), EAIT (earnings after interest and tax) and earnings after minority interest and extraordinary items or earnings distributable to shareholders. Subsequently, the 211 companies were tested using the PNB Score (Malaysian Z - Score), a failure detection model to help further shortlist the confirmed 'troubled companies'.

One hundred 'troubled companies' were identified and further demarcated into Successful Turnaround Companies and Non Successful Turnaround Companies by a comparative analysis of their last financial year ROSF (return on shareholders fund) with the Commercial Banks deposit rates. The result identified 57 Successful Turnaround Companies (STC) and 43 Non Successful Turnaround Companies (NSTC).

Other interesting observations were also made. Extraordinary items were found to be part and parcel of possibly several generic turnaround strategies being implemented. Thus, it was felt that the use of the earnings after minority interests and extraordinary items and distributable to shareholders were more appropriate for comparison with the Commercial Banks deposit rates.

The trough period was similar to those as described by Hoffman (1989) and it was found that 40 technically insolvent companies were the same companies which later experienced successful turnaround (the STC group). The NSTC were found have higher gearing (more financial leverage) than the STC in the Upturn period but gearing was also observed to have increased despite no additional borrowings, which was due to the decline in earnings, which reduced the Total Shareholders Fund. STC were also found to be able to obtain more borrowings than the NSTC because bankers could have been more comfortable with their turnaround potential.

Strong shareholder commitment was also found in 47 STC and 35 NSTC in the form of an increase in paid capital to support the turnaround exercise.

Different corporate strategies were found to be used on their own or in combination with others for turnaround by both STC and NSTC.

Acquisitions were more frequently used than other corporate strategies in view of the crucial time frame in turnaround situations. It was also interesting to note that 15 STC and 12 NSTC, through their efforts to turn around, ended up in the total change of their original core businesses to new ones.

When causes of decline were analysed, it was found that the STC faced fewer causes of decline than the NSTC. It was also interesting to observe that both NSTC and STC faced more internally generated causes of decline than externally generated ones. More NSTC were also found to be in the severe crisis stage than the STC. However, it was interesting to note that 19 STC, who were in the severe crisis stage did eventually have successful turnarounds. A majority of the STC and the NSTC were found to be non diversified companies. However, the NSTC were found to be more non diversified than the STC.

Both STC and NSTC were found to have high occurrences of favourable industry characteristics but the NSTC were found not to have benefited from this feature and it is believed that there are other influential factors involved that can determine successful turnaround.

When company cost - price structures were analysed, it was found that the majority of NSTC and STC had an equal or higher cost price structure than their industry. High cost price structures were also found to exist not only due to being at a cost disadvantage but also due to the intense competition and shrinking markets in the recession period. STC were found to have always received the commitment of their shareholders compared to the NSTC. STC were also found to have received very supportive commitment from their bankers compared to the NSTC.

Subsequently, when the commitment of creditors was analysed, again the STC were found to have received a stronger commitment from their creditors compared to the NSTC. The majority of the STC were also found to have received a stronger commitment from their employees compared to the NSTC.

In the analysis of the above determinants (commitment of shareholders, bankers, creditors and employees, also known as the commitment of the stakeholders), an interesting finding believed to have contributed towards the strong commitment received by the STC compared to the NSTC, was the high number of owners cum chairpersons / CEOs in the background of the STC.

In addition, the STC CEOs were also found to have a higher number of favourable characteristics of new competent management when compared with the NSTC.

Another interesting argument set forth here is that new competent management did not necessarily have to be characterised by the installation of a new CEO. It could also be the same owner cum chairperson / CEO, who is taking every possible steps to save the company to turn it around, even if it meant that he or she may have to totally change the methods, styles and paradigms of his ways of managing.

Subsequently, STC have been found to have more key characteristics of viable core business compared to the NSTC. More STC are also found to have received bridge capital from more than one source and they have more realistic turnaround plan pertinent features than the NSTC.

In identifying the existence and the state of existence of the key determinants of corporate turnaround feasibility in the STC and the NSTC, it was found that the STC had high occurrences of favourable states of existence for the key determinants under category A than the NSTC. Similarly, the STC were also found to experience high occurrences of existence (exists) in the key determinants under category B compared to the NSTC. These findings and observations have thus supported all 4 hypotheses of the research.

The findings and observations in Chapter 5 have also led to the realisation of a qualitative corporate feasibility model named as the ' Corporate Turnaround Feasibility Intensity Model ', that can be used to test the corporate turnaround feasibility intensity.

The higher the corporate turnaround feasibility intensity, the more feasible it will be for a successful turnaround and the lower the corporate turnaround feasibility intensity, the less feasible it will be for a successful corporate turnaround.

In the empirical modelling work, the logistic application assumptions were tested for the multivariate logistic regression model, its error term and deviances were found not to be normally distributed. The asymptotes of the logistic response function were found to be at 0 and 1, confirming the mean response constraints while a scatter plot of the logistic response function against  $Z$  (the values of its linear combination) confirmed its curvilinear sigmoidal shape. Furthermore, the dependent variable was also in a nominal scale with a dichotomous / binary response (0,1). The above test results satisfied the logistic application assumption and confirmed the appropriateness of its usage for this study.

A total of 28 multivariate logistic regression models were run, tested and analysed using the Enter procedure as the base procedure and reaffirming results of the Enter procedure by the Backward and Forward Conditional Stepwise procedures. A majority of the models faced computational problems, omission of the test statistics and having incorrect a priori signs for several of the coefficients. A major problem encountered was ' multicollinearity ' and several significant outliers.

However, this was not incidental and could have been due to the relationship between the determinants or key success factors of Corporate Turnaround Feasibility, as found the earlier part of the study.

Remedial measures taken included the elimination of the cases / observations with significant outliers and the exclusion of several predictor variables.

Reobservations were also made on all available models and Model 13 (with the best statistical results among the first 25 models) was rerun using 80 cases / observations in the data set for Models 26, 27 and 28.

Results for Models 26, 27 and 28 were basically similar, except for the difference in the procedure used to run the models. Models 26, 27 and 28 with COD, SOC and BCAP in their equations have good test statistics results with no significant outliers and with less of a multicollinearity problem. Thus the final logistic model estimates are:

**Feasible / Non Feasible Corporate Turnaround =**

$$\frac{e^{-2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}}}{1 + e^{-2.2250 \text{ COD} + 3.6892 \text{ SOC} + 3.7575 \text{ BCAP}}}$$



The model validation tests were carried out using the Data Splitting technique and the Lachenbruch method. Both validation tests confirmed the 90% Correct Classification / Prediction power of the model, the 10% Total Error Rate and that the proportion of Correct Classification (90%) was significantly different from a 50% chance at the 0.005 level.

## **7.2 RESEARCH CONCLUSIONS**

This research has shed new insights as far as the feasibility of corporate turnaround of an organisation is concerned. The identification of thirteen key success factors or determinants of corporate turnaround feasibility contributes to solving the gap or 'missing link' that exists between the 'moment of truth' in the Management of Change stage and the point where decisions are made as to the type and combination of strategies to be implemented to turn around the company in the Analysis / Evaluation stage.

Deeper understanding of each of the thirteen key success factors or determinants of corporate turnaround feasibility in Successful (STC) and Non Successful Turnaround (NSTC) Companies was not made by previous authors and researchers, whereas in this study an attempt was made to analyse their impact in the sample of companies.

The key success factors or determinants of corporate turnaround feasibility must be taken seriously not only because they are able to influence the decision making process as to the type or combination of strategies to be used to turn around the company but also because a turnaround effort can be highly risky in their absence. They have however, as mentioned earlier, been ignored by previous authors and researchers.

Simultaneously, the research has also contested previous authors and researchers such as Slatter (1984), Porter (1980), Luffinan, Sanderson, Lea and Kenny (1988), George and Joll (1988), Hofer (1980), Schendel and Patton (1975), Ramanujam (1984), Pant (1986), Arkaradejdachachai (1993) and several others. These authors and researchers found variables such as Industrial Structure (or several components of Industrial Structure), Company's Historical Strategy and Cost-Price Structure as variables that can determine an organisation's performance in an industry. Some of them regarded these as determinants of corporate turnaround and others have included them in their corporate turnaround models.

However, in this research the 3 determinants above were not significant between Successful Turnaround Companies (STC) and Non Successful Turnaround Companies (NSTC).

The study confirms that the feasibility of corporate turnaround of an organisation is dependent on the state of existence (whether favourable or non favourable) of determinants or key success factors such as Causes of Decline , Severity of Crises, Commitment of Shareholders, Commitment of Bankers, Commitment of Creditors and Commitment of Employees.

Subsequently, it is also dependent on the existence (whether they exist or dont exist) of the determinants or key success factors for corporate turnaround feasibility such as New Competent Management, Viable Core Business, Bridge Capital and Realistic Turnaround Plan.

Subsequently, it also confirms the apparent differences of these determinants or key success factors of corporate turnaround feasibility in both Successful Turnaround Companies (STC) and Non Successful Turnaround Companies (NSTC). An organisation with the potential for a feasible corporate turnaround is likely to have a favourable state of existence for determinants such as Causes of Decline (i.e. fewer causes of decline), Severity of Crises (i.e. at the mild or moderate crisis levels), Commitment of Shareholders (i.e. committed always), Commitment of Bankers (i.e. supportive or very supportive), Commitment of Creditors (strong commitment), and the Commitment of Employees (strong commitment).

An organisation with a potential for a feasible corporate turnaround is also likely to have the existence of determinants such as New Competent Management, Viable Core Business, Bridge Capital (i.e. with at least 2 sources) and a Realistic Turnaround Plan, compared to an organisation that does not have the potential for a feasible corporate turnaround.

An important element found in the research in relation to determinants such as the Commitment of Shareholders and New Competent Management, that acted as a pulling factor, especially for rallying commitment from Bankers, Creditors and Employees in feasible corporate turnarounds, is the existence of an owner cum chairperson / CEO structure. While this may not have been taken into cognisance in previous corporate turnaround studies and may not have played any significant role in the corporate turnaround feasibility of organisations in other cultures, it is apparent in this research and that it is found to have played a significant role and contributed to the corporate turnaround feasibility of organisations in the Asian Business Community such as that of Malaysia.

The organisation's corporate turnaround feasibility intensity level can subsequently be tested using the ' Corporate Turnaround Feasibility Intensity Model '. The qualitative model can reaffirm the feasibility of an organisation's corporate turnaround from its determinants or key success factors existence and state of existence, which are transformed into a graphical depiction in terms of the intensity levels of its corporate turnaround feasibility.

The empirical model or the multivariate logistic regression model can then be applied to finalise and reaffirm the feasibility of the corporate turnaround of the organisation. Although with only 3 determinants or key success factors of corporate turnaround feasibility (where the other 4 determinants were excluded from the model due to the constraints of multicollinearity problems in logistic regression), it was powerful enough to correctly classify or predict a corporate turnaround feasibility by a 90% rate of accuracy. This warrants its usage for future testing of corporate turnaround feasibility of other 'troubled' organisations. Both qualitative and empirical models can be used complementary to each other or on their own to test the feasibility of corporate turnaround.

The availability of both qualitative and empirical models above to test and to predict the feasibility of corporate turnaround from this research may now help to solve the biggest dilemma facing numerous shareholders, top management, management consultants and bankers, that is in deciding whether to go ahead with the turnaround process or not. Other than helping to save costly errors in terms of money, man-hours, psychological turmoil, time and wasteful resources due to wrong decision making, the models are also a new contribution to knowledge.

### **7.3 RESEARCH LIMITATIONS**

The first limitation of this research pertains to the information gathered through the questionnaire interviews with the CEOs (Chief Executive Officers) of the 'troubled companies'. The accuracy and validity of the information gathered rest on the honesty, sincerity and integrity of each of the CEOs responding to the questions. While 61% of the 'troubled companies' CEOs were the same CEOs who tried to turn them around, the others were new CEOs, either promoted internally or through external recruitment, brought into the organisations to help either turnaround the organisations or just to succeed a CEO who has accomplished the turnaround process (replacement may be due to organisational politics). Those who are successors to the former CEOs after the process of corporate turnaround may claim that they have full knowledge of how the organisation got into trouble in the first place and how turnaround took place. But the basic question that remains is that they are not the same CEOs responsible for the corporate turnaround process.

The second limitation could be due to the type of 'troubled companies' that were studied. All of the 'troubled companies' are public listed companies on the Kuala Lumpur Stock Exchange. The reason for studying 'troubled' public listed companies is because information (both qualitative and quantitative) of private limited companies are either incomplete in nature, hard to obtain or even unavailable. Information on public listed companies are more readily available and are published in Malaysia.

The third limitation of this research could be due to the fact that the study was made based on the general public listed companies of the Kuala Lumpur Stock Exchange (excluding the Financial and Extractive Industries) and was not according to their respective industrial sectors (as this was not the main intention of the research) due to constraints on resources and time. This limitation also applies for both Qualitative and Quantitative Models found in this study.

The fourth possible limitation is related to the element of culture found in this research that has played a significant role in determinants such as Commitment of Shareholders, Bankers, Creditors and more specifically in the relationship between the employees and the leadership of the organisation. There may be a need to specify the uniqueness of culture (whether it is totally Asian or a hybrid of Asian and Western) and how extensive its influence is on the decision making process, commitment of stakeholders, loyalty, etc. in a corporate turnaround process. The fifth possible limitation could be the exclusion of government influence in the corporate turnaround process in this research, where ensuring a feasible corporate turnaround depended on the injection of ' Mega Projects ' (multi-million of dollar projects, generally above 100 million Malaysian Ringgit) into certain ' troubled companies ' which are politically linked with the ' powers that be '.

Creative accounting and ' window dressing ', although hard to pinpoint, especially when public listed companies' accounts are usually verified by external auditors, can still take place in these accounts.

This is viewed as the sixth limitation as far as using the financial information from these companies is concerned and it would be almost impossible to pinpoint unless one has total access to all ' hidden ' accounting books of these companies. Again, if this is possible, the tasks of going through these books would be insurmountable.

The seventh limitation, possibly the last foreseen limitation, is that the whole research, its findings and outcomes are based on the Malaysian context. One may have to be cautious when making use of its findings and interpretations for interpolating corporate turnaround feasibility conditions of organisations of other countries with differing cultural background and corporate practices.

## **7.4 FUTURE RESEARCH OPPORTUNITIES**

Several issues discussed under the research limitations are also seen as possible extensions and opportunities for future research. Further research could be undertaken to study differences as far as the determinants of corporate turnaround feasibility are concerned, in the various industrial sectors. The aim would be to find out whether there are real differences within the industry and inter industry pertaining to their existence and state of existence in Successful Turnaround Companies and Non Successful Turnaround Companies.



Similarly, qualitative and empirical models that are capable of testing and predicting the feasibility of corporate turnaround in each of the industrial sectors could be built, if the number of cases / observations in the data sets permits the development of the models.

It is also obvious that the element of culture as stated in the limitation can be further explored and analysed. Can culture truly make an impact on employee and organisational leadership relationship and how extensive and powerful is it as a cohesive force to keep loyalty, confidence and perseverance in an organisation undergoing a turnaround process? Is it uniquely Asian or a blend of Asian and Western? Is it uniquely the culture in general or culture embedded in organisational values and practices? These are some of the areas that could be explored further in future research.

Simultaneously, another research project could concentrate on analysing the governmental influence in deciding the fate of 'troubled companies'. Can the injection of 'Mega Projects' truly open a 'new life' or make corporate turnaround feasibility possible for 'troubled companies' that are politically linked and connected? Because of the injection of the 'Mega Projects' or governmental influence, will financial institutions e.g. banks, who were hesitant in giving additional form of borrowings earlier, now go against their earlier decision?

Would they now offer even millions of dollars in loans (even if it means bankers raising money through loan syndication) to these 'troubled companies' despite the latter's existing financial positions?

Research could also be undertaken on similar grounds as this for privately owned limited companies. This could open up a whole new perspective in terms of the existence and the state of existence of the determinants of corporate turnaround feasibility in privately owned limited companies that are in trouble.

Finally, the study could be replicated in countries with different cultural backgrounds and corporate practices. Modification of the existing determinants or finding a total new set of determinants of corporate turnaround feasibility for that particular country may be required. Subsequently, a different model for testing the feasibility of corporate turnaround for the country may be realised, and this is not uncommon since the original Altman's Bankruptcy Model (or Z Score) has been modified multiple times to suit an individual country's financial and corporate practices.

## REFERENCES

## REFERENCES

- Abdullah, A. (1992). Influence of ethnic values at the Malaysian workplace: understanding the Malaysian workforce. Kuala Lumpur: Malaysian Institute of Management.
- Abdullah, A., & Singh, S. (1992). Leading and motivating: Understanding the Malaysian workforce. Kuala Lumpur: Malaysian Institute of Management.
- AICPA, (1993). Accounting trends & techniques (47<sup>th</sup> ed.). New York
- Aaker, D.A., & Day, G.S. (1990). Marketing Research (4<sup>th</sup> ed.). New York: John Wiley & Sons.
- Alderman, W. (1998). Paragon Publishing: A Turnaround That Worked [on-line]. Available WWW: <http://WWW.imate.com>
- Aldrich, & Cnudde, (1975). Probing the bounds of conventional wisdom: A comparison of regression probit and discriminant analysis. American Journal of Political Science, 19, 571-608.
- Aldrich, J.H., & Nelson, F.D (1984). Linear probability, logit and probit models. Beverly Hills, C.A: Sage.
- Altman, E.I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. Journal of Finance, 23 (4), 589-609.
- Altman, E.I. (1983). Corporate financial distress and bankruptcy: A complete guide to predicting and avoiding and dealing with bankruptcy. New York: John Wiley & Sons Inc.
- Altman, E.I. (1993). Corporate financial distress and bankruptcy: A complete guide to predicting and avoiding distress and profiting from bankruptcy. New York: John Wiley & Sons Inc.
- Argenti, J. (1976). Corporate collapse: The causes and symptoms. London: Mc Graw Hill.
- Arkaradejdachachai, C. (1993). Study of corporate turnaround: Using a probability of bankruptcy. Unpublished doctoral dissertation, University of Missouri, Missouri.

- Bank Negara Malaysia. Monthly Statistical Bulletin (1987 to 1996).  
Kuala Lumpur: Economic Department of Malaysia.
- Beaver, W.H. (1966). Financial ratios as predictors of failure, empirical supplement to research in accounting. Journal Of Accounting Research, 71-111.
- Bibeault, D.B. (1982). Corporate turnaround: How managers turn losers into winners. New York: Mc Graw Hill.
- Bidin, A.R. (1988). The development of a predictive model (PNB score) for evaluating performance of companies owned by the government of Malaysia. Studies In Banking And Finance, 7, 91-103.
- Biteman, J. (1979). Turnaround management: an exploratory study of rapid total organization change. Unpublished doctoral dissertation, Harvard University, Massachusetts.
- Bourgeois, L.J. (1996). Strategic Management: From concept to implementation. Orlando: The Dryden Press.
- Bowman, L. (1998). It's a Tricky Business: Scandinavian Airlines System [on-line]. Available WWW: <http://WWW.Proquest.Umi.Com/pqdweb>.
- Brealey, R.A. (1971). Security prices in a competitive market. London: The M.I.T. Press.
- Buzzell, R.D. & Heaney, D.F. (1971, March-April). The impact of strategic planning on profit performance. Harvard Business Review, 52 (2), 137-145.
- Campbell, M.G., & Alexander, M. ( 1994 ). Corporate Level Strategy: Creating value in the Multibusiness company. New York: John Wiley & Sons.
- Carnall, C.A. (1990). Managing change in organizations: England: Prentice Hall Ltd
- Carrington, & Aurelio. (1976). Survival tactics for the small business. Business Horizons, 19 (1), 13-24.
- Cramer, J.S. (1991). The logit model for economists. London: Edward Arnold.
- Di Giorgio, R. (1978, Feb). Interview By Bibeault, D.B.  
San Francisco, California.

- Davis, D. (1988). How to turnaround a company: A practical guide to company rescue. Cambridge: Simon & Schuster International Group.
- Dun & Bradstreet. (1966). Failure record through 1965. New York: Dun & Bradstreet Inc.
- Dun & Bradstreet. (1991). Business failure record. New York: Dun & Bradstreet Inc.
- Edmister, R.O. (1972, March). An empirical test of financial ratio analysis for small business failure prediction. Journal of Financial and Quantitative Analysis, 7 (2), 1477-1493.
- Eisenberg, J. (1972). Turnaround Management: A Manual For Profit Improvement And Growth. New York: Mc Graw Hill.
- Fair, R.C., & Jaffe, D.M. (1972). Methods of estimation for markets in disequilibrium. Econometrica, 40 (3), 497-514.
- Financial Times Equity Research & Company Research [C.D. ROM]. (20<sup>th</sup> ed, 1996). Kuala Lumpur, Malaysia.
- Firsirotu, M.E. (1985). Strategic turnaround as cultural revolution: The case of Canadian National Express. Unpublished doctoral dissertation, Mc Gill University, Montreal.
- Failure identification models. (1989). [Handout]. (Available from the University Of Bradford, Elm Street, Bradford, West Yorkshire).
- Gardner, J.W. (1965, October). How to prevent organizational dry rot. Harper's Magazine, 20.
- George, K.D., & Joll, C. (1988). Industrial organization: Competition, growth and structural change. London: Unwin Hyman Ltd.
- Goldston, M.R. (1992). The turnaround prescription: Repositioning troubled companies. New York: Mac millan Inc.
- Hambrick, D., & Schecter, S.M. (1983, June). Turnaround strategies for mature industrial product business units. Academy Of Management Journal, 26 (2), 231-248.
- Hamermesh, R.G. (1976). The corporate response to divisional crisis. Unpublished doctoral dissertation, Harvard University, Massachusetts.

- Hax, A.C., & Majluf, N.S. (1996). The Strategy Concept and Process. New Jersey: Prentice-Hall Inc.
- Managing strategic change module. (1994). [Handout]. (Available from the Henley Management College, Reading, England).
- Strategic management module. (1990). [Handout]. (Available from the Henley Management College, Reading, England).
- Hensher, D.A., & Johnson, L.W. (1981). Applied discrete choice modelling. London: Croom Helm.
- Higgin, J.M., & Vincze, J.W. (1986). Strategic management and organizational policy. New York: The Dryden Press Int.
- Higgin, J.M., & Vincze, J.W. (1992). Strategic Management and Organisational Policy. New York: The Dryden Press.
- Hofer, C.V. (1980, Summer). Turnaround strategies, The Journal of Business Strategy, 11 (1), 19-31.
- Hoffman, R.C. (1989). Strategies for corporate turnarounds: What do we know about them. Journal of General Management, 14 (3), 46-66.
- Hosmer, D.W., & Lemeshow, S. (1989). Applied logistic regression. New York: John Wiley & Sons.
- Hunger, J.D., & Wheelen, T.L. (1998). Strategic Management. Massachusetts: Addison Wesley.
- Johnson, G. And Scholes, K. (1988). Exploring corporate strategy. England: Prentice Hall Ltd.
- Johnson, G., & Scholes, K. (1993). Exploring Corporate Strategy. New York: Prentice-Hall.
- Kilroe, P.J.G. (1981). An exploratory study into corporate failure and turnaround situations. Unpublished doctoral dissertation, University Of South Africa.
- Kotler, P. (1988). Marketing management: analysis, planning, implementation and control. New Jersey: Prentice Hall Inc.

- Kotler, P. (1991). Marketing Management: Analysis, planning, implementation and control. New Jersey: Prentice-Hall Inc.
- Lapin, L.L. (1993). Statistics for modern business decisions (6<sup>th</sup> ed.). Orlando: The Dryden Press Int.
- Lev, B. (1973, Spring). Decomposition measures for financial analysis. Financial management, 36-63.
- Levitt, T. (1981, May-June). Marketing Intangible Products And Product Intangibles. Harvard Business Review, 59 (3), 94-102.
- Luffman, G., Sanderson, S., Lea, E., & Kenny, B. (1988). Business policy: an analytical introduction. England: Basil Blackwell Ltd.
- Luffman, G., Sanderson, S., Lea, E., & Kenny, B. (1994). Business Policy: An analytical introduction. England: Basil Blackwell Ltd.
- Mansor, N. (1992). Building a multicultural team: Understanding the Malaysian workforce. Kuala Lumpur: Malaysian Institute of Management.
- Marats, D.A. (1979, July). A method of quantifying companies relative financial strength. Bank of England Discussion (Paper no.4).
- Martin, D. (1977). Early warnings of bank failure: A logit regression approach. Journal of Banking and Finance, 1 (3), 249-276.
- Meigs, W.B., & Meigs, R.F. (1983). Financial Accounting. (4<sup>th</sup> ed.). New York: Mc Graw Hill.
- Melin, L. (1985). Strategies in managing turnaround. Long Range Planning, 18 (1), 80-86.
- Mintzberg, H. (1988). The Strategy Process: Concepts, context and cases. New Jersey: Prentice Hall.
- Morris, B. (1985). Operations management in service industries and the public sector. United Kingdom: John Wiley & Sons.
- Meyer, P., & Pifer, H. (1970, September). Prediction of bank failures. Journal of Finance, 25 (4), 853-868.
- Neter, J., Kutner, M.H., Nachtsheim, C.J., & Wasserman, W. (1996). Applied linear statistical model (4<sup>th</sup> ed.). Chicago: Irwin.



- Norusis, M.J. (1994). SPSS advanced statistics 6.1. Chicago: SPSS Inc.
- O'Neil, H.M. (1986). turnaround and recovery: What do you need?. Long Range Planning, 19 (1), 80-88.
- Ohlson, J.A. (1980). Financial ratios and the probabilistic prediction of bankruptcy. Journal of Accounting Research, 18 (1), 109-131.
- Pant, L.W. (1986). The determinants of corporate turnaround. Unpublished doctoral dissertation, Boston University, Massachusetts.
- Peel, M.J., & Wilson, N. (1988). The liquidation / merger alternative: Some results for the U.K. corporate sector. Bradford: University Of Bradford.
- Pindyck, R.S., & Rubinfeld, D.L. (1988). Econometric models and economic forecasts. Singapore: McGraw Hill.
- Porter, M.E. (1980). Competitive strategy: Techniques for analysing industries and competitors. New York: (The Free Press) Mac Millan Inc.
- Porter, M.E. (1985). Competitive advantage: Creating and sustaining superior performance. New York: (The Free Press) Mac Millan Inc.
- Ramanujam, V. (1984). Environmental context, organization context, strategy and corporate turnaround: An empirical investigation. Unpublished doctoral dissertation, University Of Pittsburgh, Pennsylvania.
- Rubinfeld, D.L. (1972). An econometric analysis of the market for general obligation municipal bonds. Unpublished doctoral dissertation, MIT, Massachusetts.
- Rosenstone, S.J., & Wolfinger, R.E. (1978). The effect of registration laws on voter turnout. American Political Science Review, 72 (1), 22-45.
- Salancik, G., & Pfeffer, J. (1980, December). Effects of ownership and performance on executive tenure in U.S. corporations. Academy of Management Journal, 23 (4), 653-664.
- Schendel, D., & Patton, G.R. (1975). Corporate stagnation and turnaround. Journal of Economics and Business, 28 (3), 236-241.
- Schendel, D., Patton, G.R., & Riggs, J. (1976). Corporate turnaround strategies: A study of profit decline and recovery. Journal of General Management, 3 (3), 3-11.

- Schoeller, S. (1977). Cross sectional study of strategy, structure and performance: Aspects of PIMS program: Strategy plus structure = performance. Indiana: Indiana University Press
- Shell, K. (1974). Economic theory and mathematical economics. New York: Academic Press Inc.
- Sigoloff, S. (1981). Causes of corporate decline. Los Angeles: UCLA
- Silver, D. (1992). The turnaround survival guide: Strategies for the company in crisis. USA: Dearborn Financial Publishing Inc.
- Slatter, S. (1984). Corporate recovery: A guide to turnaround management. England: Penguin Books Ltd.
- Sloma, R.S. (1985). The turnaround manager's handbook. New York: (The Free Press) Mac Millan Inc.
- Stacey, R.D. ( 1996 ). Strategic Management & Organisational Dynamics. London: Pitman Publishing.
- Steiner, G.A. (1972). Pitfalls in comprehensive long range planning. England: The Planning Executive Institute.
- Storey, D. (n.d). Economic performance of small firms. (n.a).
- Taffler, R.J. (1982). Forecasting company failure in the U.K using discriminant analysis and financial ratios data. Journal of Royal Statistical Society, 145 (3), 342-358.
- Tamari, M. (1966, Winter). Financial ratios as a means of forecasting bankruptcy. Management International Review, 15-21.
- Taylor, B. (1982 / 3). Turnaround, recovery and growth: The way through the crisis. Journal of General Management, 8 (2), 5-13.
- Thacker, R.J. (1992). Accounting principles. Singapore: Prentice Hall.
- Thompson, A.A., & Strickland, A.J. ( 1998 ). Strategic Management. Massachusetts: McGraw-Hill.
- Viljoen, J. ( 1994 ). Strategic Management: Planning and implementing successful corporate strategies. Melbourne: Longman.

- Warren, C.S., Fees, E.F., & Reeve, J.M. (1996). Financial accounting. Southwestern Ohio: The Dryden Press Int.
- Weiers, R.M. (1988). Marketing research. New Jersey: Prentice Hall.
- Weston, J.F., & Copeland, T.E. (1992). Managerial finance (9<sup>th</sup> ed). Orlando, Florida: The Dryden Press Int.
- Wilcox, J.W. (1971, September). A gambler's ruin prediction of business failure using accounting data. Sloan Management Review.
- Wilson, N. (1989). Failure identification models. Economics and corporate planning notes. Bradford: University Of Bradford.
- Whitney, J.O. (1987). Taking charge: Management guide to troubled companies and turnarounds, USA: Dow Jones Irwin.
- Zimmerman, F.M. (1991). The turnaround experience: Real world lessons in revitalizing corporations. New York: Mc Graw Hill Inc.

## APPENDICES

## Appendix A

### Classifying Companies Into Successful And Non Successful Turnarounds

Company/ score number	Last financial year	ROSF	Commercial banks fixed deposits rates	Classifi- cation
1	95	6.34	6.5	NSTC
2	92	4.85	8.03	NSTC
3	94	-4	5.46	NSTC
4	90	6	6.21	NSTC
5	95	1	6.5	NSTC
6	89	10.51	5.73	STC
7	87	2.55	5.18	NSTC
8	92	13.36	8.03	STC
9	94	28.24	5.46	STC
10	95	1.08	6.5	NSTC
11	95	23.76	6.5	STC
12	94	1.53	5.46	NSTC
13	92	1.46	8.03	NSTC
14	89	10.85	5.73	STC
15	92	4.03	8.03	NSTC
16	95	-2.27	6.5	NSTC
17	92	9.78	8.03	STC
18	95	10.18	6.5	STC
19	95	7.05	6.5	STC
20	92	13.34	8.03	STC
21	92	22.6	8.03	STC
22	95	2.72	6.5	NSTC
23	95	2.74	6.5	NSTC
24	94	8.27	5.46	STC
25	95	6.42	6.5	NSTC
26	94	6.5	5.46	STC
27	94	1.15	5.46	NSTC
28	94	21.79	5.46	STC
29	94	4.1	5.46	NSTC
30	94	25.33	5.46	STC
31	94	11.23	5.46	STC
32	92	1.76	8.03	NSTC
33	94	7.98	5.46	STC
34	92	14.44	8.03	STC
35	94	16.43	5.46	STC
36	95	24.52	6.5	STC
37	92	15.27	8.03	STC
38	95	12.61	6.5	STC
39	93	5.14	6.95	NSTC
40	95	29.88	6.5	STC

## Appendix A ( contd')

41	94	8.09	5.46	STC
42	95	6.55	6.5	STC
43	92	7.94	8.03	NSTC
44	95	10.61	6.5	STC
45	93	34.44	6.95	STC
46	95	7.18	6.5	STC
47	94	4.10	5.46	NSTC
48	94	20.15	5.46	STC
49	92	5.96	8.03	NSTC
50	95	8.26	6.5	STC
51	94	20.83	5.46	STC
52	95	12.38	6.5	STC
53	95	1.96	6.5	NSTC
54	95	-0.6	6.5	NSTC
55	93	15.79	6.95	STC
56	95	8.6	6.5	STC
57	95	7.52	6.5	STC
58	95	8.21	6.5	STC
59	95	4.77	6.5	NSTC
60	92	1.83	8.03	NSTC
61	94	0.22	5.46	NSTC
62	93	6.42	6.95	NSTC
63	95	14	6.5	STC
64	91	15.7	7.48	STC
65	93	14.35	6.95	STC
66	92	6.13	8.03	NSTC
67	95	9.17	6.5	STC
68	94	4.08	5.46	NSTC
69	92	17.07	8.03	STC
70	95	5.3	6.5	NSTC
71	95	34.57	6.5	STC
72	95	3.76	6.5	NSTC
73	94	15.49	5.46	STC
74	91	8.34	7.48	STC
75	93	14.07	6.95	STC
76	95	4.76	6.5	NSTC
77	95	36.75	6.5	STC
78	93	6.05	6.95	NSTC
79	93	10.03	6.95	STC
80	93	1.16	6.95	NSTC
81	95	6.18	6.5	NSTC
82	95	4.25	6.5	NSTC
83	95	5.42	6.5	NSTC
84	94	-17.1	5.46	NSTC
85	95	6.37	6.5	NSTC
86	95	-0.12	6.5	NSTC
87	93	-191.63	6.95	NSTC
88	93	21.66	6.95	STC

**Appendix A ( contd' )**

89	95	7.08	6.5	STC
90	91	16.07	7.48	STC
91	95	14.33	6.5	STC
92	95	15.15	6.5	STC
93	93	1.75	6.95	NSTC
94	95	4.10	6.5	NSTC
95	91	23.6	7.48	STC
96	95	8.81	6.5	STC
97	93	16.89	6.95	STC
98	94	47.48	5.46	STC
99	93	8.31	6.95	STC
100	95	34.33	6.5	STC

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix B

### Causes OF Decline

	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b><u>Internal Causes</u></b>						
Poor management	100	100	57	100	43	100
Inadequate financial control	49	49	16	28	33	77
Marketing problem	30	30	11	19	19	44
High cost structure	69	69	27	47	42	98
Mistaken acquisitions	3	3	0	0	3	7
Problems with big projects	13	13	1	2	12	30
Overtrading	36	36	11	19	25	58
<b><u>External Causes</u></b>						
Decline of market	89	89	51	89	38	88
Competitive pressure	81	81	39	68	42	98
Product life cycle	18	18	8	14	10	23
Other environmental factors	1	1	0	0	1	2

STC : Successful Turnaround Companies

NSTC : Non Successful Turnaround Companies



## Appendix C

### Industry Characteristics

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>1. Nature of product</b>						
• Consumer product	11	11	4	7	7	16
• Industrial product	50	50	30	53	20	47
• Both products	39	39	23	40	16	37
• Highly differentiated						
A. Yes						
B. No	16	16	11	19	5	12
• Less price sensitive	84	84	46	81	38	88
A. Yes						
B. No	8	8	0	0	8	19
	92	92	57	100	35	81
<b>2. Market segmentation</b>						
• Highly segmented						
A. Yes						
B. No	89	89	56	98	33	77
	11	11	1	2	10	23

### Appendix C ( Contd' )

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>3. Relative size &amp; strength of competitors</b>						
• Industry fragmented?						
A. yes	36	36	19	33	17	40
B. No	64	64	38	67	26	60
<b>4. Entry barriers</b>						
• Easy entrance into industry						
A. Yes	43	43	22	39	21	49
B. No	57	57	35	61	22	51
<b>5. Exit barriers</b>						
• Easy exit out of industry						
A. Yes	52	52	29	51	23	53
B. No	48	48	28	49	20	47
<b>6. Rate of technological change</b>						
• Rate of technology changes frequently						
A. Yes	7	7	4	7	3	7
B. No	93	93	53	93	40	93

Appendix C ( Contd' )

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>7. Threat of retaliation</b>						
• Competitors rate of reaction						
A. Slower	72	72	38	67	34	79
B. Quicker	28	28	19	33	9	21
<b>8. Bargaining power of supplier</b>						
• No. of suppliers						
A. $\geq 5$						
A. $< 5$	96	96	56	98	40	93
	4	4	1	2	3	7
<b>9. Bargaining power of customers</b>						
• No. of customers						
A. $\geq 5$						
B. $< 5$	89	89	47	82	42	98
	11	11	10	18	1	2
<b>10. Industry growth rate</b>						
• Introduction						
• Growth	0	0	0	0	0	0
• Mature	81	81	46	81	35	81
• Decline	19	19	11	19	6	19
	0	0	0	0	0	0

## Appendix C ( Contd' )

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix D

### Commitment Of Employees

Reactions	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>High rate of voluntary resignations</b>						
Yes	5	5	0	0	5	12
No	95	95	57	100	38	88
<b>Accepting more job load with same wages</b>						
Yes						
No	36	36	34	60	2	2
N.a	23	23	0	0	23	53
	41	41	23	40	18	42
<b>Accepting same job load with wages cut</b>						
Yes						
No	1	1	1	2	0	0
N.a	17	17	0	0	17	98
	82	82	56	98	26	2

**Appendix D ( Contd' )**

Reactions	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b><u>Tolerating late pay</u></b>						
Yes	30	30	30	53	0	0
No	43	43	1	2	42	98
N.a	27	27	26	45	1	2
<b><u>Participants supporting turnaround process</u></b>						
Yes	38	38	37	65	1	2
No	37	37	0	0	37	86
N.a	25	25	20	35	5	12

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix E

### New Competent Management

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>1. Ability to identify organizational problems / sore spots <u>quickly</u></b>						
A. Yes	76	76	56	98	20	47
B. No	24	24	1	2	23	53
<b>2. Stomach to fire <u>people</u></b>						
A. Yes	25	25	24	42	1	2
B. No	75	75	33	58	42	98
<b>3. People user and not <u>peoples' man</u></b>						
A. Yes	55	55	52	91	3	7
B. No	45	45	5	9	40	93
<b>4. Making decision <u>on their own</u></b>						
A. Yes	27	27	26	46	1	2
B. No	73	73	31	54	42	98
<b>5. Often making bold <u>decisions</u></b>						
A. Yes	32	32	30	53	2	5
B. No	68	68	27	47	41	95

## Appendix E ( Contd' )

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>6. Setting definite targets / objectives</b>						
A. Yes	99	99	57	100	42	98
B. No	1	1	0	0	1	2
<b>7. Imposing high standards of performance &amp; evaluation</b>						
A. Yes	92	92	57	100	35	81
B. No	8	8	0	0	8	19
<b>8. Spending more time in implementation than meetings</b>						
A. Yes	35	35	30	52	5	12
B. No	65	65	27	47	38	88
<b>9. Often with new ideas / techniques or supported their emergence</b>						
A. Yes	13	13	9	16	4	9
B. No	87	87	48	84	39	91
<b>10. Limited delegation and more of direct involvement</b>						
A. Yes	53	53	37	65	16	37
B. No	47	47	20	35	27	63



**Appendix E ( Contd' )**

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>11. Strong feelings in action or decisions taken or about to be taken</b>						
A. Yes	100	100	57	100	43	100
B. No	0	0	0	0	0	0
<b>12. Required plenty of information to help manage organization</b>						
A. Yes	47	47	41	72	6	14
B. No	53	53	16	28	37	86
<b>13. Setting tight control systems at every level</b>						
A. Yes	82	82	57	100	25	58
B. No	18	18	0	0	18	42
<b>14. Maximizing power bestowed by board / shareholders</b>						
A. Yes	63	63	54	95	9	21
B. No	37	37	3	5	34	79

**Appendix E ( Contd' )**

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>15. Making different decisions at different situations and time on <u>the same issues</u></b>						
<b>A. Yes</b>	23	23	18	32	3	7
<b>B. No</b>	79	79	39	68	40	93
<b>16. Ability to control multiple dimensional organization problems from affecting mental and physical <u>well being</u></b>						
<b>A. Yes</b>	100	100	57	100	43	100
<b>B. No</b>	0	0	0	0	0	0
<b>17. From the same <u>industry</u></b>						
<b>A. Yes</b>	74	74	49	86	25	58
<b>B. No</b>	26	26	8	14	18	42

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix F

### Viable Core Business

Features	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Positive cashflow	84	84	57	100	27	63
Sales volume umbrella	93	93	56	98	37	86
Competitive equipment	64	64	39	68	25	58
Competitive location	51	51	35	61	16	37
Awareness of change	58	58	55	96	3	7

STC : Successful Turnaround Companies

NSTC : Non Successful Turnaround Companies

## Appendix G

### Bridge Capital

Sources	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Advances or right issues from shareholders	82	82	47	82	35	81
Sales of assets by management	36	36	23	40	13	30
Bridge credits for working capital from bankers	65	65	45	79	20	47
Continuation of raw material supply by creditors	70	70	57	100	13	30

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix H

### Realistic Turnaround Plan

Features	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
Availability of turnaround plan	100	100	57	100	43	100
Specified objectives / targets	70	70	57	100	13	30
Strategies to be used	100	100	57	100	43	100
Tactics / details on how strategies are to be implemented	68	68	56	98	12	28
Review and control systems	89	89	57	100	32	74

STC : Successful Turnaround Companies

NSTC : Non Successful Turnaround Companies

# Appendix I

## Consolidated Results

Determinants	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>D1. Causes of decline</b> <b>(no. of causes)</b>						
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	10	10	10	17	0	0
4	46	46	46	81	0	0
5	10	10	0	0	10	23
6	19	19	1	2	18	42
7	12	12	0	0	12	28
8	2	2	0	0	2	5
9	0	0	0	0	0	0
10	1	1	0	0	1	2
11	0	0	0	0	0	0
<b>D4. Industry characteristics</b> <b>(no. of favourable occurrences)</b>						
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	6	6	1	2	5	11
4	14	14	10	17	4	9
5	17	17	9	16	8	19
6	19	19	12	22	7	17
7	12	12	7	12	5	11
8	18	18	8	14	10	23
9	12	12	10	17	2	5
10	2	2	0	0	2	5

### Appendix I ( Contd' )

Determinants	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>D9. Commitment of employees</b> ( no. of positive responses ( yes ) )						
1	4	4	0	0	4	10
2	38	38	0	0	38	88
3	0	0	0	0	0	0
4	4	4	7	7	0	0
5	54	54	53	93	1	2
<b>D10. New competent management</b> (no. of favourable characteristics )						
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	9	9	0	0	9	21
6	12	12	0	0	12	28
7	14	14	0	0	14	32
8	5	5	0	0	5	12
9	3	3	0	0	3	7
10	0	0	0	0	0	0
11	20	20	20	35	0	0
12	10	10	10	17	0	0
13	10	10	10	17	0	0
14	13	13	13	23	0	0
15	4	4	4	8	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0

Appendix I ( Contd' )

Characteristics	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>D11. Viable core business ( no. of characteristics )</b>						
1	0	0	0	0	0	0
2	21	21	0	0	21	49
3	22	22	0	0	22	51
4	43	43	43	75	0	0
5	14	14	14	25	0	0
<b>D12. Bridge capital ( no. of sources )</b>						
1	30	30	4	7	26	60
2	25	25	13	23	12	28
3	31	31	28	49	3	7
4	14	14	12	21	2	5
<b>D13. Realistic turnaround plan ( no. of pertinent features )</b>						
1	0	0	0	0	0	0
2	28	28	0	0	28	65
3	16	16	1	2	15	35
4	56	56	56	98	0	0

STC : Successful Turnaround Companies

NSTC : Non Successful Turnaround Companies



## Appendix J

### Determinants: Identifying The Existence And The State Of Existence

Determinants	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>D1. <u>Causes of decline</u></b>						
• Favourable	56	56	56	98	0	0
• Non favourable	44	44	1	2	43	100
<b>D2. <u>Severity of crisis</u></b>						
• Favourable	57	57	38	67	19	44
• Non favourable	43	43	19	33	24	56
<b>D3. <u>Company's historical strategy</u></b>						
• Favourable	40	40	27	47	13	30
• Non favourable	60	60	30	53	30	70
<b>D4. <u>Industry characteristics</u></b>						
• Favourable	63	63	37	65	26	60
• Non favourable	37	37	20	35	17	40

## Appendix J ( Contd' )

Determinants	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>D5. Company's cost-price structure</b>						
• Favourable	25	25	25	44	0	0
• Non favourable	75	75	32	56	43	100
<b>D6. Commitment of shareholders</b>						
• Favourable	59	59	57	100	2	5
• Non favourable	41	41	0	0	41	95
<b>D7. Commitment of bankers</b>						
• Favourable	71	71	57	100	14	33
• Non favourable	29	29	0	0	29	67
<b>D8. Commitment of creditors</b>						
• Favourable	66	66	57	100	9	21
• Non favourable	34	34	0	0	34	79

## Appendix J ( Contd' )

Determinants	Troubled Companies		STC		NSTC	
	No.	%	No.	%	No.	%
<b>D9. Commitment of employees</b>						
• Favourable	58	58	57	100	1	2
• Non favourable	42	42	0	0	42	98
<b>D10. New competent management</b>						
• Exits	57	57	57	100	0	0
• Non existence	43	43	0	0	43	100
<b>D11. Viable core business</b>						
• Exits	57	57	57	100	0	0
• Non existence	43	43	0	0	43	100
<b>D12. Bridge capital</b>						
• Exits	70	70	53	93	17	40
• Non existence	30	30	4	7	26	60
<b>D13. Realistic turnaround plan</b>						
• Exits	56	56	56	98	0	0
• Non existence	44	44	1	2	43	100

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix K

### Corporate Feasibility Intensity : Results For The STC and NSTC Tests

<b>Determinants</b>	<b>STC</b>	<b>NSTC</b>
<b>D1</b>	<b>Favourable State of Existence</b>	<b>Non Favourable State of Existence</b>
<b>D2</b>	<b>Favourable State of Existence</b>	<b>Non Favourable State of Existence</b>
<b>D6</b>	<b>Favourable State of Existence</b>	<b>Non Favourable State of Existence</b>
<b>D7</b>	<b>Favourable State of Existence</b>	<b>Favourable State of Existence</b>
<b>D8</b>	<b>Favourable State of Existence</b>	<b>Non Favourable State of Existence</b>
<b>D9</b>	<b>Favourable State of Existence</b>	<b>Non Favourable State of Existence</b>
<b>D10</b>	<b>Exists</b>	<b>Non Existence</b>
<b>D11</b>	<b>Exists</b>	<b>Non Existence</b>
<b>D12</b>	<b>Exists</b>	<b>Exists</b>
<b>D13</b>	<b>Exists</b>	<b>Non Existence</b>

**STC : Successful Turnaround Companies**

**NSTC : Non Successful Turnaround Companies**

## Appendix L

### The Dependent Variable

1	1	26	0	51	1	76	0
2	0	27	1	52	0	77	1
3	1	28	0	53	1	78	0
4	0	29	1	54	0	79	1
5	1	30	0	55	1	80	0
6	0	31	1	56	0	81	1
7	1	32	0	57	1	82	0
8	0	33	1	58	0	83	1
9	1	34	0	59	1	84	0
10	0	35	1	60	0	85	1
11	1	36	0	61	1	86	0
12	0	37	1	62	0		
13	1	38	0	63	1		
14	0	39	1	64	0		
15	1	40	0	65	1		
16	0	41	1	66	0		
17	1	42	0	67	1		
18	0	43	1	68	0		
19	1	44	0	69	1		
20	0	45	1	70	0		
21	1	46	0	71	1		
22	0	47	1	72	0		
23	1	48	0	73	1		
24	0	49	1	74	0		
25	1	50	0	75	1		

**Appendix M**  
**Model Building Results**

M.N	NOI	VAR	$\beta$	R	W sig	S.S sig	LOG LR sig	$\epsilon\chi^2$ sig	-2LL	$M\chi^2$ sig $I\chi^2$ sig	C.C
1	21	INTP COD SOC COST NCOM VCB BCAP RTP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
2	20	INTP COD SOC COST NCOM VCB BCAP RTP	NFA	NFA	NFA	N.A sig sig sig sig sig sig sig	N.A	N.A	N.A	N.A	N.A
3	21	INTP COD SOC COST NCOM VCB BCAP RTP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
4	21	COD SOC COST NCOM VCB BCAP RTP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
5	26	COD SOC COST NCOM VCB BCAP RTP	N.A N.A .51 N.A N.A N.A N.A	N.A N.A .39 N.A N.A N.A N.A	N.A N.A sig N.A N.A N.A N.A	sig sig sig sig sig sig sig	N.A N.A sig N.A N.A N.A N.A	sig	N.A	N.A	N.A
6	21	COD SOC COST NCOM VCB BCAP RTP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A

Appendix M ( Contd' )

M.N	NOI	VAR	$\beta$	R	W sig	S.S sig	LOG LR sig	$\epsilon\chi^2$ sig	-2LL	$M\chi^2$ sig $I\chi^2$ sig	C.O %
7	7	INTP COD SOC	21.84 -4.83 1.27	N.A -.32 .000	sig sig nsig	NFA	NFA	N.A	18.17	sig sig	98.8 %
8	5	COD SOC	-.64 3.68	-.34 .39	sig sig	NFA	NFA	N.A	70.99	sig sig	86 %
9	25	COD SOC COST	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
10	23	COD SOC NCOM	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
11	23	COD SOC VCB	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
12	25	COD SOC RTP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
13	7	COD SOC BCAP	-1.96 3.40 3.07	-.28 .23 .27	sig sig sig	NFA	NFA	N.A	25.76	sig sig	95. %
14	25	COD SOC BCAP RTP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
15	4	SOC COST	-1.39 .82	-.18 .42	sig sig	NFA	NFA	N.A	79.15	sig sig	70. %
16	5	SOC COST NCOM	1.56 2.44 -.68	.07 .38 -.30	nsig sig sig	NFA	NFA	N.A	48.05	sig sig	90. %
17	5	SOC COST NCOM VCB	2.19 2.32 -0.49 -1.83	.14 .36 .00 -.16	sig sig nsig sig	NFA	NFA	N.A	41.86	sig sig	90. %
18	24	SOC COST NCOM VCB BCAP	NFA	NFA	NFA	NFA	NFA	N.A	N.A	N.A	N.A
19	6	SOC COST NCOM VCB RTP	1.76 2.69 .45 -.85 -2.90	.08 .34 .00 .00 -.14	nsig sig nsig nsig sig	NFA	NFA	N.A	35.07	sig sig	94. %

### Appendix M ( Contd' )

M,N	NOI	VAR	$\beta$	R	W sig	S.S sig	LOG LR sig	$\chi^2$ sig	-2LL	$M\chi^2$ sig $I\chi^2$ sig	C.C
20	14	SOC COST NCOM VCB RTP	13.35 23.14 -.82 -1.69 -18.40	.00 .00 .00 .00 .00	nsig nsig nsig nsig nsig	NFA	NFA	N.A	7.47	sig sig	97.5 %
21	13	SOC COST NCOM VCB RTP	13.35 23.14 -.82 -1.69 -18.40	.00 .00 .00 .00 .00	nsig nsig nsig nsig nsig	NFA	sig sig nsig nsig sig	nsig	8.82	sig nsig	96.2 %
22	14	SOC COST NCOM VCB RTP	11.31 21.79 N.A N.A -21.44	.00 .00 N.A N.A 0.00	nsig nsig N.A N.A nsig	sig sig sig sig sig	sig sig N.A N.A sig	nsig	8.82	sig sig	96.2 %
23	13	SOC COST RTP	11.31 21.79 -21.44	0.00 0.00 0.00	nsig nsig nsig	NFA	NFA	N.A	8.82	sig sig	96.2 %
24	13	SOC COST RTP	11.31 21.79 -21.44	0.00 0.00 0.00	nsig nsig nsig	NFA	sig sig sig	N.A	8.82	sig sig	95.2 %
25	13	SOC COST RTP	11.31 21.79 -21.44	0.00 0.00 0.00	nsig nsig nsig	sig sig sig	sig sig sig	N.A	8.82	sig sig	96.2 %
26	7	COD SOC BCAP	-2.22 3.68 3.75	-.25 .21 .25	sig sig sig	NFA	NFA	N.A	19.43	sig sig	91.2 %
27	7	COD SOC BCAP	-2.22 3.68 3.75	-.25 .21 .25	sig sig sig	NFA	sig sig sig	N.A	19.43	sig sig	91.2 %
28	7	COD SOC BCAP	-2.22 3.68 3.75	-.25 .21 .25	sig sig sig	sig sig sig	sig sig sig	N.A	19.43	sig sig	91.2 %



## Appendix M ( Contd' )

### NOTE:

M.N - MODEL NUMBER

NOI - NUMBER OF ITERATIONS

VAR - VARIABLES IN MODEL

$\beta$  - BETA COEFFICIENTS

R - PARTIAL CORRELATIONS

W sig - WALD'S SIGNIFICANCE

S.S sig - SCORE STATISTICS SIGNIFICANCE

LOG L.R sig - LOG LIKELIHOOD RATIO SIGNIFICANCE

$E\chi^2$  - RESIDUAL CHI SQUARE SIGNIFICANCE

-2LL - GOODNESS OF FIT ( -2 LOG LIKELIHOOD )

$M\chi^2$  sig - MODEL CHI SQUARE SIGNIFICANCE

$I\chi^2$  sig - IMPROVEMENT CHI SQUARE SIGNIFICANCE

C.C - CORRECT CLASSIFICATION

N.A - NOT APPLICABLE / AVAILABLE FOR CORRESPONDING VARIABLE

NFA - NOT APPLICABLE / AVAILABLE FOR ALL VARIABLES

sig - SIGNIFICANT AT 0.05 LEVEL

nsig - NOT SIGNIFICANT AT 0.05 LEVEL

## Appendix N

### Model Validation: Data Splitting Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
1	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.99979668	FEASIBLE
2	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.000476579	NON FEASIBLE
3	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999973647	FEASIBLE
4	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.805604784	FEASIBLE
5	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999979668	FEASIBLE
6	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.001892796	NON FEASIBLE
7	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.989875290	FEASIBLE
8	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.927176146	FEASIBLE
9	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.998669867	FEASIBLE
10	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.927176146	FEASIBLE
11	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999995996	FEASIBLE
12	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.031762225	NON FEASIBLE
13	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.989875290	FEASIBLE
14	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.027347547	NON FEASIBLE

## Appendix N ( Contd' )

### Model Validation: Data Splitting Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
15	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.989875290	FEASIBLE
16	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.001619689	NON FEASIBLE
17	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999995996	FEASIBLE
18	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.004253714	NON FEASIBLE
19	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999797668	FEASIBLE
20	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.386369213	NON FEASIBLE
21	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.98985290	FEASIBLE
22	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.000032098	NON FEASIBLE
23	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999797668	FEASIBLE
24	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.000246427	NON FEASIBLE
25	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999797668	FEASIBLE
26	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.012304614	NON FEASIBLE
27	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999995996	FEASIBLE
28	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.201217867	NON FEASIBLE

## Appendix N (Contd')

### Model Validation: Data Splitting Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
29	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999995996	FEASIBLE
30	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.000246427	NON FEASIBLE
31	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.988207163	FEASIBLE
32	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.000004180	NON FEASIBLE
33	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.927176146	FEASIBLE
34	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.927176146	FEASIBLE
35	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999995996	FEASIBLE
36	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.177569777	NON FEASIBLE
37	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.999797668	FEASIBLE
38	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.031762225	NON FEASIBLE
39	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	1	0.989875290	FEASIBLE
40	-2.0385 COD + 4.8910 SOC + 3.9228 BCAP	0	0.201217867	NON FEASIBLE

## Appendix O

### Model Validation: Lachenbruch Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
1	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.99765565	FEASIBLE
2	-2.2250 COD + 3.6892 SOC + 3.7575 BCAP	0	0.000015954	NON FEASIBLE
3	-2.2245 COD + 3.6885 SOC + 3.7567 BCAP	1	0.999747816	FEASIBLE
4	-2.1585 COD + 3.1787 SOC + 3.8611 BCAP	0	0.582951142	FEASIBLE
5	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
6	-2.2239 COD + 3.6875 SOC + 3.7557 BCAP	0	0.000633384	NON FEASIBLE
7	-2.1891 COD + 3.5861 SOC + 3.6976 BCAP	1	0.902463361	FEASIBLE
8	-2.1659 COD + 3.9457 SOC + 3.6643 BCAP	0	0.609402178	FEASIBLE
9	-2.2151 COD + 3.6693 SOC + 3.7410 BCAP	1	0.989078064	FEASIBLE
10	-2.1659 COD + 3.9457 SOC + 3.6643 BCAP	0	0.609402178	FEASIBLE
11	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
12	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.00276246	NON FEASIBLE
13	-2.1891 COD + 3.5861 SOC + 3.6976 BCAP	1	0.902463361	FEASIBLE
14	-2.2226 COD + 3.6866 SOC + 3.7536 BCAP	0	0.001376272	NON FEASIBLE

## Appendix O ( Contd' )

### Model Validation: Lachenbruch Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
15	-2.1891 COD + 3.5861 SOC + 3.6976 BCAP	1	0.902463361	FEASIBLE
16	-2.2244 COD + 3.6882 SOC + 3.7566 BCAP	0	0.000316586	NON FEASIBLE
17	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
18	-2.2244 COD + 3.6886 SOC + 3.7565 BCAP	0	0.000295750	NON FEASIBLE
19	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
20	-2.1592 COD + 3.5276 SOC + 3.6638 BCAP	0	0.129678994	NON FEASIBLE
21	-2.1891 COD + 3.5861 SOC + 3.68976 BCAP	1	0.902463361	FEASIBLE
22	-2.2250 COD + 3.6892 SOC + 3.7575 BCAP	0	0.000007374	NON FEASIBLE
23	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
24	-2.2248 COD + 3.6890 SOC + 3.7573 BCAP	0	0.000068302	NON FEASIBLE
25	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
26	-2.2208 COD + 3.6823 SOC + 3.7511 BCAP	0	0.002951164	NON FEASIBLE
27	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
28	-2.1986 COD + 3.6713 SOC + 3.7113 BCAP	0	0.026329063	NON FEASIBLE

## Appendix O ( Contd' )

### Model Validation: Lachenbruch Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
29	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
30	-2.2248 COD + 3.6890 SOC + 3.7573 BCAP	0	0.000068302	NON FEASIBLE
31	-2.1905 COD + 3.5745 SOC + 3.6823 BCAP	1	0.814330789	FEASIBLE
32	-2.2250 COD + 3.6892 SOC + 3.7576 BCAP	0	0.000000797	NON FEASIBLE
33	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
34	-2.1659 COD + 3.9457 SOC + 3.6643 BCAP	0	0.609402178	FEASIBLE
35	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
36	-2.2095 COD + 3.6746 SOC + 3.7318 BCAP	0	0.013018241	NON FEASIBLE
37	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
38	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.002762646	NON FEASIBLE
39	-2.1891 COD + 3.5861 SOC + 3.6976 BCAP	1	0.902463361	FEASIBLE
40	-2.1986 COD + 3.6713 SOC + 3.7113 BCAP	0	0.026329063	NON FEASIBLE
41	-2.1891 COD + 3.5861 SOC + 3.6976 BCAP	1	0.902463361	FEASIBLE
42	-2.2208 COD + 3.6823 SOC + 3.7511 BCAP	0	0.002951164	NON FEASIBLE

## Appendix O (Contd')

### Model Validation: Lachenbruch Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
43	-2.2151 COD + 3.6693 SOC + 3.7410 BCAP	1	0.989078064	FEASIBLE
44	-2.2549 COD + 3.3587 SOC + 3.9974 BCAP	0	0.672100340	FEASIBLE
45	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
46	-2.2244 COD + 3.6886 SOC + 3.7565 BCAP	0	0.000295750	NON FEASIBLE
47	-2.2151 COD + 3.6693 SOC + 3.7410 BCAP	1	0.989078064	FEASIBLE
48	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.002762646	NON FEASIBLE
49	-2.2245 COD + 3.6885 SOC + 3.7567 BCAP	1	0.999747816	FEASIBLE
50	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.002762646	NON FEASIBLE
51	-3.1498 COD + 3.9847 SOC + 5.4362 BCAP	1	0.039990548	NON FEASIBLE
52	-2.2244 COD + 3.6882 SOC + 3.7566 BCAP	0	0.000316586	NON FEASIBLE
53	-2.1779 COD + 3.6882 SOC + 3.6529 BCAP	1	0.904400093	FEASIBLE
54	-2.1986 COD + 3.6713 SOC + 3.7113 BCAP	0	0.026329063	NON FEASIBLE
55	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
56	-2.2250 COD + 3.6892 SOC + 3.7575 BCAP	0	0.000007374	NON FEASIBLE



## Appendix O ( Contd' )

### Model Validation: Lachenbruch Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
57	-2.2245 COD + 3.6885 SOC + 3.7567 BCAP	1	0.999747816	FEASIBLE
58	-2.2248 COD + 3.6890 SOC + 3.7573 BCAP	0	0.000068302	NON FEASIBLE
59	-2.6565 COD + 4.6785 SOC + 4.2793 BCAP	1	0.112305980	NON FEASIBLE
60	-2.2248 COD + 3.6890 SOC + 3.7573 BCAP	0	0.000068302	NON FEASIBLE
61	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
62	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.00276246	NON FEASIBLE
63	-2.2249 COD + 3.6890 SOC + 3.7573 BCAP	1	0.999945573	FEASIBLE
64	-2.2250 COD + 3.6892 SOC + 3.7575 BCAP	0	0.000007374	NON FEASIBLE
65	-2.6565 COD + 4.6785 SOC + 4.2793 BCAP	1	0.112305980	NON FEASIBLE
66	-2.2248 COD + 3.6890 SOC + 3.7573 BCAP	0	0.000068302	NON FEASIBLE
67	-2.2250 COD + 3.6892 SOC + 3.7575 BCAP	1	0.999994121	FEASIBLE
68	-2.2248 COD + 3.6890 SOC + 3.7573 BCAP	0	0.000068302	NON FEASIBLE
69	-2.1891 COD + 3.5861 SOC + 3.6976 BCAP	1	0.902463361	FEASIBLE
70	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.00276246	NON FEASIBLE

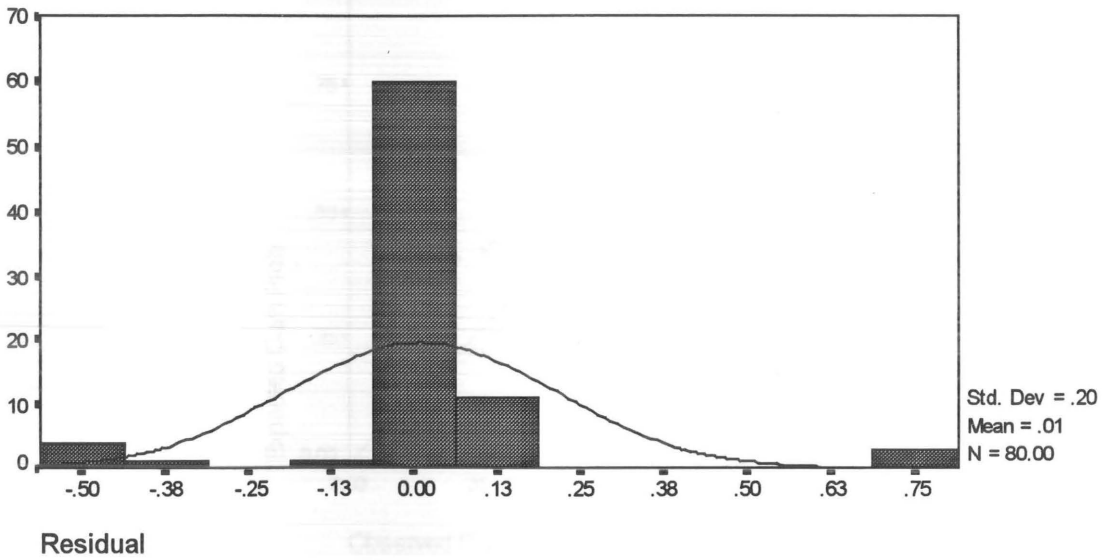
## Appendix O ( Contd' )

### Model Validation: Lachenbruch Test

CASES NOT IN MODEL	MODEL	DEPENDENT VARIABLE SCORE	$e^2 / 1 + e^2$	REMARKS
71	-2.1779 COD + 3.6746 SOC + 3.6529 BCAP	1	0.904400093	FEASIBLE
72	-2.2207 COD + 3.6852 SOC + 3.7502 BCAP	0	0.002762646	NON FEASIBL
73	-2.1779 COD + 3.6746 SOC + 3.6529 BCAP	1	0.904400093	FEASIBLE
74	-2.2208 COD + 3.6823 SOC + 3.7511 BCAP	0	0.002951164	NON FEASIBL
75	-2.2245 COD + 3.6885 SOC + 3.7567 BCAP	1	0.999747816	FEASIBLE
76	-2.2250 COD + 3.6892 SOC + 3.7575 BCAP	0	0.000007374	NON FEASIBL
77	-2.2220 COD + 3.6842 SOC + 3.7524 BCAP	1	0.997655650	FEASIBLE
78	-2.2239 COD + 3.6875 SOC + 3.7557 BCAP	0	0.000633384	NON FEASIBL
79	-2.2245 COD + 3.6885 SOC + 3.7567 BCAP	1	0.999747816	FEASIBLE
80	-2.2208 COD + 3.6823 SOC + 3.7511 BCAP	0	0.002951164	NON FEASIBL

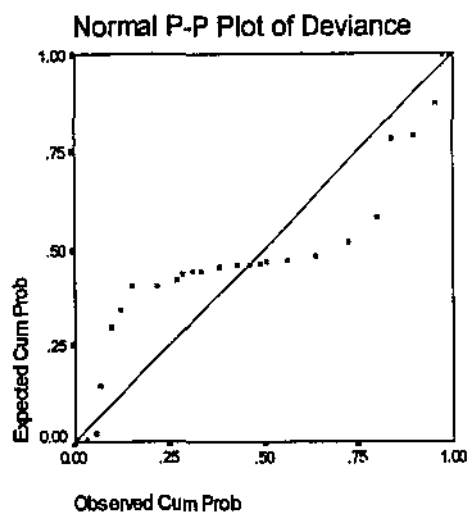
# Appendix P

## HISTOGRAM : UNSTANDARDIZED RESIDUALS WITH NORMAL CURVE



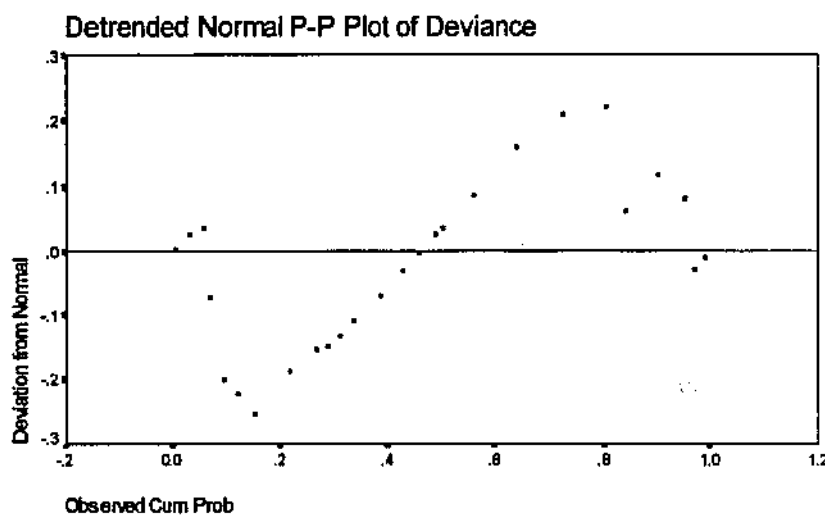
### Histogram of Unstandardised Residuals with Normal Curve

## Appendix Q



Normal P-P Plot of Deviance

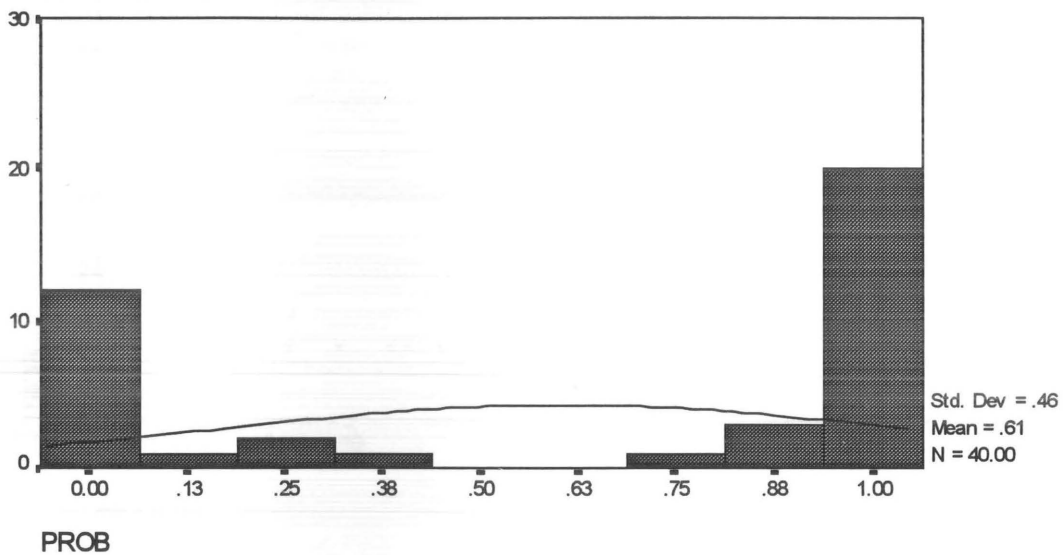
## Appendix R



Detrended Normal P-P Plot of Deviance

# Appendix S

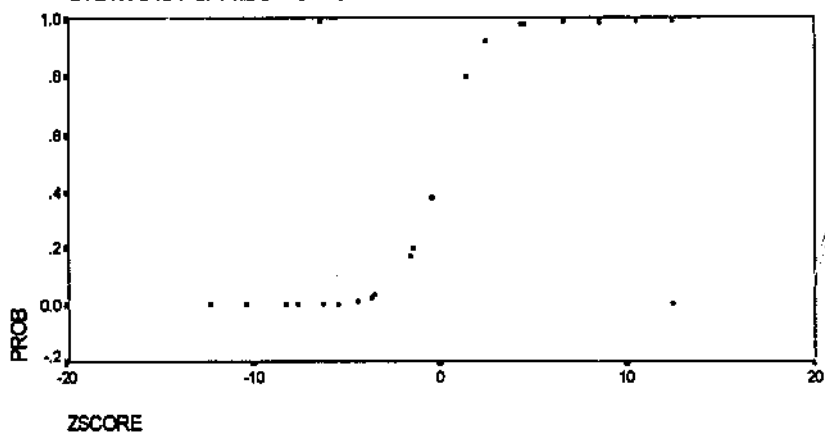
## CONFIRMATION ON ASYMPTOTES AT 0 & 1



## Confirmation on Asymptotes at 0 & 1

## Appendix T

### SCATTER DIAGRAM : CONFIRMATION ON SIGMOIDAL RESPONSE FUNCTION



### Confirmation on Sigmoidal Response Function

## Appendix U (Questionnaire)

**IMPORTANT:** Note whether there has been an organisation change!

### D1. CAUSES OF DECLINE

Q1. Are any of the following responsible for the decline of the organisation:

#### *Internal Causes:*

##### \* Poor Management

Poor management (if new top management)  
autocratic ceo, combined chairman and ceo, ineffective board of directors,  
management neglect core business, lack of management depth...

Poor management (if top management hasn't change)  
miscalculation, misinterpretation, non awareness, misguided..

##### \* Inadequate Financial Control

poorly designed management accounting systems, management accounting  
information poorly used, organizational structure hinders effective control,  
methods of overhead allocation distorts the costs...

##### \* Marketing Problem

poorly motivated salesforce  
non aggressive sales manager  
efforts not targeted on key customers and products  
poor after sales service  
lack market research / knowledge  
outdated / lack of promotion  
weak / non existant new product development



- \* **High Cost Structure (Cost Disadvantage)**  
 inability to achieve economies of scale  
 competitors controlling strategic variables  
 due to diversification  
 due to management style and organisational structure  
 operational inefficiencies  
 unfavourable government policies
  
- \* **Mistaken Acquisitions**  
 acquisition of losers  
 paying too much for the acquisition  
 poor-post acquisition management
  
- \* **Problem With Big Projects**  
 underestimating capital requirements  
 start up difficulties  
 capacity expansion  
 market entry costs  
 major contracts
  
- \* **Overtrading**  
 going for sales growth regardless of profitability  
 going for sales growth despite small capital base

***External Causes:***

- \* **Decline of Market**  
 secular decline in demand  
 cyclical market decline  
 changing pattern of demand
  
- \* **Competitive Pressure**  
 product competition  
 price competition

\* Product Life Cycle  
same product too long in the market  
saturated sales declining  
secular demand decline

\* Other Environmental Factors  
catastrophe  
war  
civil riots  
legislation  
politics  
diseases  
pressure group

### Measurement

1 2 3 4 5 6 7 8 9 10 11

1<sup>st</sup> level: Frequency of occurrence ( $\leq 4$  favourable,  $>4$  non favourable)

2<sup>nd</sup> level: \_\_\_\_\_ Favourable      \_\_\_\_\_ Non-Favourable

## **D2. SEVERITY OF CRISIS**

Q1. Which of the following key symptoms the organisation was facing:

### ***Mild***

losing market leadership or position  
declining market share  
declining margins  
declining profitability  
lower return on capital employed  
strong balance sheet

***Moderate***

at least one year of loss  
prospect for more losses  
balance sheet deteriorating  
margins unsatisfactory  
decreasing return on capital employed  
unused production capacity  
decreasing equity / funds

***Severe or Survival***

balance sheet 'shaky' or in a mess  
debt piling up  
equity / funds nearly exhausted  
negative returns on capital employed  
liquidity problem / crisis  
loss threatening existence  
danger of bankruptcy  
morale low

**Measurement**

1<sup>st</sup> level: Mild or Moderate \_\_\_\_\_  
Severe or Survival \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non-Favourable

**D3. COMPANY'S HISTORICAL STRATEGY**

Q1. Is the corporate structure of the organisation divided to strategic business units according to their different product-market scopes or divisionalized.

If Yes \_\_\_\_\_ Diversified Company

If No \_\_\_\_\_ Non Diversified Company

## Measurement

1<sup>st</sup> level: Diversified Company \_\_\_\_\_  
Non Diversified Company \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non Favourable

## **D4. INDUSTRY CHARACTERISTICS**

Q1. Can you confirm the following industry characteristics in terms of their breakdowns:

### \* Nature of Product

Q2. Are they Consumer Products \_\_\_\_\_ Favourable  
or Industrial Products \_\_\_\_\_ Non Favourable  
or both \_\_\_\_\_ Favourable

Q3. Are they highly differentiated \_\_\_\_\_ Yes (Favourable)  
\_\_\_\_\_ No (Non Favourable)

Q4. Are they less price sensitive \_\_\_\_\_ Yes (Favourable)  
\_\_\_\_\_ No (Non Favourable)

$\geq 2$  Favourables (Favourable)

$< 2$  Favourables (Non Favourable)

### \* Market Segmentation

Q1. Is the market highly segmented ( $> 1$  segment)

\_\_\_\_\_ Yes (Favourable)

\_\_\_\_\_ No (Non Favourable)

**\* Relative Size And Strength Of Competitors**

**Q1. Is the industry fragmented (not dominated by a few powerful competitors but many players)**

\_\_\_\_\_ Yes (Favourable)

\_\_\_\_\_ No (Non Favourable)

**\* Entry Barriers**

**Q1. Is it easy for any organisation to enter into the industry (no need for high capital intensity, patents or licenses or governmental controls / regulated)**

\_\_\_\_\_ Yes (Favourable)

\_\_\_\_\_ No (Non Favourable)

**\* Exit Barriers**

**Q1. Is it easy for any player in the industry to exit out of the business (business or assets easily disposable)**

\_\_\_\_\_ Yes (Favourable)

\_\_\_\_\_ No (Non Favourable)

**\* Rate Of Technological Change**

**Q1. In this particular industry does the rate of technology changes too frequently.**

\_\_\_\_\_ Yes (Favourable)

\_\_\_\_\_ No (Non Favourable)

**\* Threat Of Retaliation**

**Q1. How do you find the rate of reaction by your competitors towards your change in product-market emphasis, are they quicker to react or slower.**

\_\_\_\_\_ Slower (Favourable)

\_\_\_\_\_ Quicker (Non Favourable)

**\* Bargaining Power Of Suppliers**

**Q1. How many suppliers are you depending on for raw material or production materials ( $\geq 5$  for lower bargaining power)**

$\geq 5$  \_\_\_\_\_ Favourable

$< 5$  \_\_\_\_\_ Non Favourable

**\* Bargaining Power Of Customers**

**Q1. How many customers are you depending your sales on. ( $\geq 5$  for lower bargaining power)**

$\geq 5$  \_\_\_\_\_ Favourable

$< 5$  \_\_\_\_\_ Non Favourable

**\* Industry Growth Rate**

**Q1. At what stage is the industry / Market life cycle.**

Introduction \_\_\_\_\_  
Growth \_\_\_\_\_  
Mature \_\_\_\_\_  
Decline \_\_\_\_\_

\_\_\_\_\_ Introduction or Growth stage (Favourable)

\_\_\_\_\_ Mature or Decline stage (Non Favourable)

**Measurement**

1 2 3 4 5 6 7 8 9 10

1<sup>st</sup> level: Frequency of favourable occurrences ( $\leq 5$  non favourable,  $>5$  favourable)

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non-Favourable

**D5. COMPANY'S COST-PRICE STRUCTURE**

Q1. How would you classify your cost structure in terms of percentage of costs over sales as compared to the industry.

\_\_\_\_\_ lower than industry

\_\_\_\_\_ equal or higher than industry

**Measurement**

1<sup>st</sup> level: Lower than industry \_\_\_\_\_  
Equal or higher than industry \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non Favourable

## **D6. COMMITMENT OF SHAREHOLDERS**

**Q1. Is the top management of this organisation given the absolute, proper power and confidence to implement the turnaround strategies they observed fit for the exercise by the shareholders.**

### Measurement

1<sup>st</sup> level: Never (0)    Not Always (1)    Always (2)

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non Favourable

## **D7. COMMITMENT OF BANKERS**

**Q1. Does or do the banker / bankers support the turnaround / rescue exercise by, for example, deferring the time for interest and principal payments and / or rescheduling the loan.**

### Measurement

1<sup>st</sup> level: Not Supportive At All (0)    Not So Supportive (1)  
                    Supportive (2)    Very Supportive (3)

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non Favourable

## **D8. COMMITMENT OF CREDITORS**

**Q1. Did the creditors agreed to rescheduled and / or deferred payments and have periodical meetings with top management (creditors committee?)**

### Measurement

1<sup>st</sup> level: Yes \_\_\_\_\_ No \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non Favourable



## D9. COMMITMENT OF EMPLOYEES

Q1. Was there a high rate of voluntary resignation

Yes \_\_\_\_\_

No \_\_\_\_\_

NA \_\_\_\_\_

Q2. Given the same wages did the employees in general accepted higher job loads easily

Yes \_\_\_\_\_

No \_\_\_\_\_

NA \_\_\_\_\_

Q3. Given the cut in wages did the employees in general accept the same job load easily

Yes \_\_\_\_\_

No \_\_\_\_\_

NA \_\_\_\_\_

Q4. Did the employees tolerate delays in getting their pay

Yes \_\_\_\_\_

No \_\_\_\_\_

NA \_\_\_\_\_

Q5. Overall did the employees feel that they are participants in supporting the turnaround process

Yes \_\_\_\_\_

No \_\_\_\_\_

NA \_\_\_\_\_

### Measurement

1<sup>st</sup> level: Number of Yes/NA  $\geq$  3 \_\_\_\_\_

Number of Yes/NA  $<$  3 \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Favourable \_\_\_\_\_ Non Favourable

## **D10. NEW COMPETENT MANAGEMENT**

**Q. Kindly respond to the following questions:**

**1. Are you able to identify problems / sore spots in the organisation very quickly**

**Yes      No**

**2. Do you have the 'stomach' to fire people**

**Yes      No**

**3. Would you consider yourself a people user and not the people's man**

**Yes      No**

**4. Do you make decisions on your own**

**Yes      No**

**5. Do you often make bold decisions**

**Yes      No**

**6. Do you set definite targets / objectives to be achieved**

**Yes      No**

**7. Do you impose high standards of performance and evaluation**

**Yes      No**

**8. Do you spend more time in implementing things than having meetings**

**Yes      No**

**9. Did you often come up with new ideas and techniques or support their emergence**

**Yes      No**

10. Did you practise limited delegation and involve yourself directly in a lot of the organisational issues

Yes      No

11. Did you feel strongly in the decisions or actions that you are about to take or have taken

Yes      No

12. Did you require plenty of information in helping you to manage the organisation

Yes      No

13. Did you set and exercise tight control systems at every level of the organisation (eg by hard policies, early warning systems...etc)

Yes      No

14. In exercising the turnaround process, did you maximise the power given to you by the shareholders / board

Yes      No

15. Did you always make different decisions at different situations and time pertaining to the same issues

Yes      No

16. Were you able to control the multiple dimensional problems of the organisation from affecting you mentally and physically

Yes      No

17. Are you from the same industry as the existing one

Yes      No

Total number of Yes \_\_\_\_\_

Measurement

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

1<sup>st</sup> level: >10 \_\_\_\_\_  
                  ≤ 10 \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Exists \_\_\_\_\_ Non Existant

**D11. VIABLE CORE BUSINESS**

Q1. Did the core business have the following features:

- Positive Cashflow \_\_\_\_\_
- Sales Volume Umbrella \_\_\_\_\_
- Competitive Equipment \_\_\_\_\_
- Competitive Location \_\_\_\_\_
- Awareness of Change \_\_\_\_\_  
(recent, past or near future)

Total occurrences \_\_\_\_\_

Measurement

1<sup>st</sup> level: >4 occurrences \_\_\_\_\_  
                  <4 occurrences \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Exists \_\_\_\_\_ Non Existant

## **D12. BRIDGE CAPITAL**

Q1. Did any of the following exist:

Advances or rights issues from shareholders \_\_\_\_

Sales of assets by management \_\_\_\_

Bridge credits for working capital from bankers \_\_\_\_

Continuation of raw materials supply by creditors \_\_\_\_

Total occurrences \_\_\_\_\_

### Measurement

1<sup>st</sup> level:  $\geq 2$  \_\_\_\_  
                   $< 2$  \_\_\_\_

2<sup>nd</sup> level: \_\_\_\_ Exists \_\_\_\_ Non Existant

## **D13. REALISTIC TURBAROUND PLAN**

Q1. Was a turnaround plan available

Yes \_\_\_\_ (goto Q2)

No \_\_\_\_ Non Existant

Q2. Did the turnaround plan have the following features:

Specified objectives or targets \_\_\_\_

Strategies to be used \_\_\_\_

Tactics or details on how strategies will be implemented \_\_\_\_

Review and control systems \_\_\_\_

Total features \_\_\_\_\_

Measurement

1<sup>st</sup> level: = 4 features \_\_\_\_\_  
< 4 features \_\_\_\_\_

2<sup>nd</sup> level: \_\_\_\_\_ Exits \_\_\_\_\_ Non Existant