

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**DETERMINANTS OF VOLUNTARY DISCLOSURE BY NEW ZEALAND
LIFE INSURANCE COMPANIES**

A thesis presented in partial
fulfilment of the requirements
for the degree of
Doctor of Philosophy
in
Accountancy
at Massey University

Michael Bryan Adams

1996

**This study is dedicated to my wife, Lesley,
for her unwavering love and support.**

*“ The challenge . . . is to gain insight into the motives
and means by which management exercises discretion
over financial reporting. ”*

(Lev, 1989, p. 189).

A C K N O W L E D G E M E N T S

This study could not have been completed without the guidance, help and support of many people. I owe a great debt of gratitude to my supervisors at Massey University New Zealand, Associate Professor Asheq Rahman and Professor Hector Perera, for their wisdom and considerable assistance at all stages of this project. Special thanks are extended to my external supervisor, Dr Greg Tower (Murdoch University, Perth, Western Australia), who first encouraged me to pursue doctoral study and who has provided boundless enthusiasm and unwavering support ever since. I am also grateful for the financial assistance provided by the Massey University Research Fund, and in particular, the Price Waterhouse Doctoral Research Scholarship. I also acknowledge the help given to me by my former colleagues at Massey University, particularly Mahmud Hossain, Steven Cahan and Mike Pickford, and by my contemporary peers at the University of Glasgow, United Kingdom. The typing assistance of Judith Brooker and Sheryl Osbourne is also very much appreciated.

Many outsiders also furnished me with great assistance during the completion of this project. In particular, I am grateful to Keith Brown (Prudential), Arthur Davis (Life Office Association of New Zealand), Pat Gallagher (New Zealand Department of Justice), Phil Gendall (Department of Marketing, Massey University), Dick Jessup (Melville Jessup Weaver), Boyd Klap (Price Waterhouse), April McKenzie (New Zealand Society of Accountants), John Melville (Melville Jessup Weaver), Jeff Wilson (Price Waterhouse), and Quentin Wilson (AMP). I also appreciate the assistance of senior managers and staff from New Zealand's life insurance industry who so willingly provided me with the information needed to complete this study.

I also acknowledge the support of my family during the course of this project. I am indebted to my parents Elvira and Brian, and my parents-in-law Bob and Rita Dunstone for their unwavering encouragement and support. My two young children, Daniel and Rebecca, also played their part by helping me to maintain my humour and sense of perspective during this project. Finally, this study could not have been carried out without the love and support of my wife, Lesley. She is, and always will be, my main support in this life. It is therefore appropriate that this study should be dedicated to her.

TABLE OF CONTENTS

	Page
Acknowledgements	i
Table of Contents	ii
List of Tables	vii
List of Figures	ix
Appendices	x
Abstract	xi

CHAPTER 1. OVERVIEW OF THE STUDY

1.1. INTRODUCTION	1
1.1.1. Accounting and reporting issues in the life insurance industry . .	2
1.1.2. Life insurance company regulation and current developments . . .	3
1.2. AIM AND OBJECTIVES OF THE STUDY	6
1.3. CONTRIBUTION TO KNOWLEDGE	7
1.4. RESEARCH METHODOLOGY	9
1.5. ASSUMPTIONS AND SCOPE	10
1.5.1. Assumptions and definitions	10
1.5.2. Scope of the project	15
1.6. OUTLINE OF THE THESIS	17

CHAPTER 2. THE NEW ZEALAND LIFE INSURANCE INDUSTRY

2.1. INTRODUCTION	19
2.2. INSTITUTIONAL BACKGROUND	19
2.3. REGULATORY ENVIRONMENT	21
2.3.1. Statutory reporting	21

	Page
2.3.2. The Companies Act 1955	22
2.3.3. Company law reform	23
2.3.4. Accounting standards	24
2.3.5. Appointed actuary regime	25
2.4. CORPORATE DISCLOSURE IN LIFE INSURANCE MARKETS . . .	25
2.4.1. International survey evidence	26
2.4.2. The 1994 New Zealand survey	29
2.4.3. Importance of life insurance company disclosure	33
2.4.4. Implications of this study	36
2.4.5. Merits of the research environment	37
2.5. CONCLUSION AND SUMMARY	38

CHAPTER 3. LITERATURE SEARCH AND THEORY SELECTION

3.1. INTRODUCTION	40
3.2. POSITIVE-DESCRIPTIVE THEORIES	41
3.2.1. Key features	41
3.2.2. Main criticisms and merits	42
3.3. ANALYSIS OF POSITIVE-DESCRIPTIVE THEORIES	45
3.3.1. Contingency theory	45
3.3.2. Signalling and efficient-markets hypotheses	47
3.3.3. Positive accounting hypotheses	50
3.3.4. Costly contracting theory	55
3.3.5. Insurance industry hypotheses	59
3.4. CONCLUSION AND SUMMARY	63

CHAPTER 4. HYPOTHESES DEVELOPMENT

	<u>Page</u>
4.1. INTRODUCTION	64
4.2. TOWARDS A THEORY OF CORPORATE DISCLOSURE	64
4.2.1. Preamble	64
4.2.2. Linkages with prior corporate disclosure research	66
4.3. HYPOTHESES DEVELOPMENT	69
4.3.1. Organisational form	69
4.3.2. Assets-in-place	72
4.3.3. Product concentration	74
4.3.4. Reinsurance	75
4.3.5. Localisation of operations	76
4.3.6. Non-executive directors	77
4.3.7. Firm size	78
4.3.8. Distribution system	79
4.4. CONCLUSION AND SUMMARY	81

CHAPTER 5. RESEARCH METHODOLOGY

5.1. INTRODUCTION	82
5.2. TRIANGULATION METHODOLOGY	82
5.2.1. Main features	82
5.2.2. Origins and prior research	84
5.2.3. Merits and limitations of data-triangulation	87
5.3. USE OF TRIANGULATION METHODOLOGY IN THIS STUDY. . .	89
5.3.1. Rationale	89
5.3.2. Procedure	91
5.4. STATISTICAL METHODS	93
5.4.1. Data description	93
5.4.2. Dependent variable	94
5.4.3. Independent variables	98

	Page
5.4.4. Statistical procedures	100
5.5. FIELD-STUDY METHODS	104
5.5.1. Background	104
5.5.2. Field-site selection	106
5.5.3. Interview instrument	108
5.5.4. Conduct of interviews	110
5.5.5. Analysis of interview evidence	111
5.5.6. Analysis of corporate documents	112
5.6. CONCLUSION AND SUMMARY	115

CHAPTER 6. EMPIRICAL RESULTS

6.1. INTRODUCTION	117
6.2. STATISTICAL RESULTS	117
6.2.1. Cluster analysis	117
6.2.2. Discriminant analysis.	122
6.2.3. Descriptive statistics.	124
6.2.4. Univariate results.	128
6.2.5. Multivariate results.	133
6.2.6. Diagnostics and sensitivity tests.	135
6.3. INTERVIEW EVIDENCE.	138
6.3.1. Details of interviewees.	139
6.3.2. Analysis of interview evidence	139
6.4. DOCUMENTARY EVIDENCE	154
6.5. CONCLUSION AND SUMMARY.	159

CHAPTER 7. ANALYSIS AND EVALUATION OF RESULTS

7.1.	INTRODUCTION	160
7.2.	CONVERGENCE ANALYSIS	160
	7.2.1. Strong-supportive convergence	161
	7.2.2. Moderate-supportive convergence	163
	7.2.3. Strong-contradictory convergence	166
	7.2.4. Weak-contradictory convergence	168
	7.2.5. Non-supportive evidence.	169
7.3.	OTHER DETERMINANTS OF VOLUNTARY DISCLOSURE	171
	7.3.1. The multi-dimensional nature of voluntary disclosure	172
	7.3.2. Organisational ritualism and opportunism	173
	7.3.3. Environmental opportunism and ritualism	175
7.4.	CONCLUSION AND SUMMARY	177

CHAPTER 8. SUMMARY AND CONCLUSIONS

8.1.	INTRODUCTION	179
8.2.	OVERVIEW OF THE PROJECT	179
8.3.	MAIN CONCLUSIONS AND IMPLICATIONS	181
8.4.	CONTRIBUTION OF THE RESEARCH PROJECT.	184
8.5.	LIMITATIONS OF THE STUDY	187
8.6.	AREAS FOR FUTURE RESEARCH	188
8.7.	FINAL REMARKS	190

REFERENCES	192
-----------------------------	------------

LIST OF TABLES

		Page
Table 2.1:	Main Findings of Descriptive Survey-Based Disclosure Studies Carried Out in International Insurance (Life & General) Markets	27
Table 2.2:	Main Issues Identified from a Disclosure Content Analysis (DCA) of the 1992 Annual Reports of New Zealand Life Insurance Companies (n=33)	30
Table 3.1:	A Summary of Positivist-Descriptive Theories and Hypotheses Used in Accounting and Finance Studies	44
Table 5.1:	Characteristics of Statistical, Interview and Document Analysis Techniques	83
Table 5.2:	Relative Strengths of the Techniques Used in the Evaluation of Research Evidence	92
Table 5.3:	New Zealand Life Insurance Companies - Field-Sites	105
Table 5.4:	New Zealand Life Insurance Companies - Corporate Documents	113
Table 6.1:	New Zealand Life Insurance Companies - Changes in Composition of Clusters 1988 - 1992	118
Table 6.2:	Pooled (Within-Group) Correlations Between Discriminant Variables and Discriminant (Canonical) Functions - 1988 and 1992 Clusters	124
Table 6.3:	New Zealand Life Insurance Companies - Descriptive Statistics	125
Table 6.4:	New Zealand Life Insurance Companies - Voluntary Disclosure Scores 1988-1993	127
Table 6.5:	Upper and Lower Rankings of New Zealand Life Insurance Companies by Voluntary Disclosure Scores 1988-1993	129

Table 6.6:	New Zealand Life Insurance Companies - Correlation Coefficients	130
Table 6.7:	New Zealand Life Insurance Companies - Multivariate Results	132
Table 6.8:	Other Important Influences on the Levels of Voluntary Disclosure made by New Zealand Life Insurance Companies	152
Table 6.9:	Summary of the Key Findings Arising From an Analysis of Corporate Documents	155
Table 7.1:	Statistical, Interview and Documentary Evidence: Construct and Data Convergence Analysis	164

LIST OF FIGURES

	Page
Figure 2.1: Key Institutional Influences on Life Insurance Company Disclosure Practices	35
Figure 5.1: A Taxonomy of Triangulation Methodology Used in Accounting Research	86
Figure 6.1: New Zealand Life Insurance Companies: Dendrogram of Voluntary Disclosure Scores - 1988	120
Figure 6.2: New Zealand Life Insurance Companies: Dendrogram of Voluntary Disclosure Scores - 1992	121
Figure 7.1: A Framework for the Analysis of the Multi-Dimensional Nature of Corporate Disclosure.	172

APPENDICES

	Page
Appendix 1: New Zealand Life Insurance Companies - Salient Features as at Year-End 1993	210
Appendix 2: New Zealand Life Insurance Company Voluntary Disclosure Index and Score Sheet	213
Appendix 3: Voluntary Disclosure by New Zealand Life Insurance Companies - Field-Site Interviews Instrument 1994-1995	223
Appendix 4: Demographic Details of New Zealand Life Insurance Company Managers Interviewed	227
Appendix 5: Field-Site Interviews - Summary of Interviewees' Responses Matched with the Predictions of The Managerial-Discretion Hypothesis	233

ABSTRACT

Surveys carried out in international insurance markets, including New Zealand, indicate that there is considerable diversity in the levels of voluntary disclosure made by companies in their annual reports. Critics argue that such disparity diminishes the stewardship and decision-usefulness value of annual reports for users such as policyholders, shareholders and industry regulators. However, a major deficiency with the prior surveys is that they do not explain the different reporting practices observed in insurance markets. Drawing a framework from the *managerial-discretion hypothesis*, this thesis thus seeks to explain the level of information voluntarily disclosed in the annual reports of New Zealand-based life insurance companies.

The *managerial-discretion hypothesis* holds that the diffused nature of policyholders' ownership rights in mutuals makes it more difficult for them to monitor and control managerial behaviour compared with the relatively more closely-held shareholdings of stock companies. In such a situation, policyholders are likely to control managerial discretion across a range of business activities by means of restrictive mechanisms such as internal regulations. The relationship between the level of voluntary disclosure and eight explanatory variables - organisational form, assets-in-place, product concentration, reinsurance, localisation of operations, non-executive directors, firm size and distribution system - each representing the major constructs of the *managerial-discretion hypothesis*, is tested empirically in this study using data-triangulation. This methodology comprises a statistical analysis of pooled 1988-1993 data drawn from New Zealand's life insurance industry as well as an evaluation of field interviews and documentation obtained from 12 companies representing a cross-section of the industry. Data-triangulation helps to test the validity of the constructs used and evaluate the reliability of the evidence collected.

Consistent with what was hypothesised, the empirical results indicate that the level of information voluntarily disclosed by life insurance companies in their annual reports is positively associated with stock companies, firm size, product diversity and reliance on independent sales agents/brokers. Contrary to expectations, the evidence suggest that non-executive directors complement rather than substitute for voluntary disclosure. Also contrary to what was hypothesised, the statistical analysis indicate that reinsurance had a positive influence on voluntary disclosure, but this observation was not supported by the fieldwork. Furthermore, two variables - assets-in-place and localisation of operations - were found not to be important determinants of voluntary disclosure in both the statistical analysis and field-based research. The study thus provides mixed support for the *managerial-discretion hypothesis*. The field-based research also reveals that other factors such as company culture and market competition could be important determinants of voluntary disclosure. Finally, a major contribution of this study is that the empirical results could assist industry regulators to better understand the disclosure practices of life insurance companies and so enable them to gauge the likely success of new reporting rules.

CHAPTER 1: OVERVIEW OF THE STUDY

1.1. INTRODUCTION

Drawing a framework from the *managerial-discretion hypothesis* (Mayers & Smith, 1981, 1982a, 1986, 1988, 1994), this thesis examines the determinants of, and thus explain differences in, the overall level of information voluntarily disclosed by life insurance companies in their published annual reports ¹. The need to research this subject is underpinned by the disparate accounting and reporting practices identified by descriptive-type surveys carried out in many international insurance markets. These insurance markets include: Australia (Lamble, 1981; Lamble & Minehan, 1987), Canada (Gilbert, 1991), New Zealand (Adams, 1994a), the United Kingdom (UK) (KPMG Peat Marwick McLintock, 1990; 1992), the United States (US) (KPMG Peat Marwick, 1991), and elsewhere (Organisation for Economic Cooperation & Development (OECD), 1988, 1992). Although these surveys report observed differences in accounting and reporting practices among insurance companies, they do not explain why such diversity exists. With certain exemptions (e.g., Lamm-Tennant & Rollins, 1994; Klumpes, 1995) there has been little published work in the academic literature which contributes insights as to the reasons for the different accounting and reporting behaviour of insurance companies ². By isolating those factors which could help to explain the different voluntary disclosure practices of New Zealand-based life insurance companies, this study thus seeks to make a contribution

¹ The terms “company”, “corporation”, “entity”, “firm” and “organisation” are used interchangeably in this thesis, and refer to those corporate bodies registered to transact life insurance business under New Zealand's *Life Insurance Act 1908*. Additionally, under the 1908 Act, mutuals are deemed to be “companies” limited by guarantee as opposed to issued share capital.

² One plausible explanation for the relative paucity of prior empirical academic research in technically complex fields such as insurance, could be the lack of industry-specific knowledge of accounting academicians (Watts & Zimmerman, 1990).

to the extant literature.

1.1.1. Accounting and reporting issues in the life insurance industry

The insurance industry plays a significant role in the economies of most OECD member states, with total annual premiums accounting for 10 per cent or more of Gross Domestic Product (GDP) in several countries, including Japan, New Zealand and the US (OECD, 1988, 1992; Price Waterhouse, 1991). However, the accounting and reporting of insurance activities, particularly life insurance transactions, are very technical and complex activities predicated on actuarial science (Vachon, 1973). This emanates from the necessity to account for long-term insurance liabilities, the need to value assets in a manner which is consistent with those liabilities, and the requirement to ensure an equitable distribution of surplus to policyholders and shareholders. The long-term nature of the business together with the uncertainty associated with the coverage of insurance risk, causes special problems with regard to the recognition of profits and the matching of costs and revenues (Miles & Gubbay, 1987). The life insurance industry is further complicated by the intangible nature of its products, the trustee status of life insurance funds and the management of insurance risk based on actuarial estimates and assumptions. These factors combine to produce unique difficulties for the accounting and reporting of long-term life insurance (Bartlett, 1992).

The process which determines the annual reported surplus (or deficit) of life insurance companies is the actuarial valuation of policyholders' long-term liabilities (Benjamin, 1976). To ensure that a life insurance company can meet its future obligations to policyholders, reserves are established by the actuaries based on their estimates of mortality, expenses, taxation, rates of interest, inflation and policy persistence. Smith (1973, p. 249) reports that “. . . because [actuaries] take a long-term view of life insurance business, [they] place less reliance on annual financial reporting than . . . to the maintenance of long-term corporate solvency”. Consequently, in many jurisdictions, including Australia and New Zealand, the primacy of the actuarial

valuation in determining long-term solvency has underpinned insurance law and accounting and reporting practices. However, over the last decade or so, there have been calls from industry commentators, financial analysts, shareholders and others, for life insurance companies to move away from statutory solvency reporting to a basis of disclosure that reflects more closely generally accepted accounting principles (GAAP) and *true and fair* reporting (Horton & Macve, 1992, 1994). Such views have been given added credence as a result of the inter-play of prominent institutional events. The most important of these developments are considered to be: (1) the demutualisation of large mutuals like Australia's National Mutual Life (Ries, 1992; Needleman & Whitehead, 1993); (2) the increased incidence of corporate takeovers (Field, 1991; Salmon & Fine, 1991); (3) a greater public interest in the financial performance of insurance companies (Creedon, 1979; Smart, 1985; Burrows & Whitehead, 1987); and (4) the desire of industry regulators in several jurisdictions to harmonise the accounting and reporting practices of insurance companies with entities operating in other industries (Whewell, 1990; Adams & Scott, 1994).

Therefore, in summary what determines the voluntary disclosure practices of life insurance companies is a subject of international importance given developments such as the demutualisation of large mutuals, the increased incidence of takeover activity in insurance markets and the desire of industry regulators, legislators and the accountancy profession to harmonise the corporate reporting of life insurers with those of other companies.

1.1.2. Life insurance company regulation and current developments

Several commentators (Hay-Davison, 1984; Miles & Gubbay, 1987; KPMG Peat Marwick McLintock, 1990, 1992; Horton & Macve, 1992, 1994; Adams, 1994b) report that in many life insurance markets throughout the world (including New Zealand), variations observed in corporate reporting practices have been exacerbated by the flexibility of disclosure and presentation afforded to entities under companies legislation, the absence of GAAP and the lack of actuarial standards. For example,

in recognition of their statutory solvency reporting obligations to industry regulators, companies law in most western countries has traditionally given concessions to life insurance companies as to the detail of information disclosure, classification of accounting items and form of presentation of their general purpose annual reports (KPMG Peat Marwick, 1990). However, widespread differences in the annual reporting practices observed in international insurance markets have been criticised by industry groups, financial analysts, and others in at least two main respects. First, critics assert that disparate disclosure and presentation practices among insurance companies diminishes the information value of the published annual report for users such as investors, shareholders and policyholders, and so prevents them from making efficient and effective economic decisions. Second, such diverse practices are deemed to reduce the effectiveness of corporate governance (or stewardship) within companies.

For several years, members of both New Zealand's accountancy and actuarial professions have speculated that major inadequacies and diversities in accounting and reporting practices also exist among New Zealand-based life insurance companies (Reid, 1988; Wood, 1991). For instance, Wood (1991, p. 3) criticised the published annual reports of New Zealand life insurance companies for exhibiting “. . . solvency orientated accounting practices which do not necessarily give a ‘true and fair’ view [of financial performance] . . .”. A survey carried out by Adams (1994a) on the 1992 published annual reports of New Zealand-based life insurance companies, supported the views of industry commentators such as Reid (1988) and Wood (1991) by documenting differences in accounting and reporting practices.

In the aftermath of the 1987 stock market crash, legislators and industry regulators in several countries including New Zealand, have taken a closer interest in the issue of corporate disclosure (Hossain, Perera & Rahman, 1995). As far as the New Zealand life insurance industry is concerned, initiatives such as the proposed life insurance accounting standard, the publication of a statement of financial reporting concepts and the introduction of statutory backing for accounting standards through the Financial

Reporting Act 1993 represent efforts by regulators to achieve greater consistency in the treatment and reporting of accounting items and events among life insurance companies³. Whether these recent initiatives do, or do not, improve the comparability and relevance of the annual reports of life insurance companies and promote decision-usefulness and stewardship, are empirical questions which can be addressed only by future research.

Despite recent developments in regulation, during the six-year period covered by the empirical component of this study (i.e., 1988-1993) the New Zealand life insurance industry, was relatively unregulated. Under this regime, owners and managers of New Zealand life insurance companies had considerable discretion over the choice of accounting methods and disclosure practices. This attribute makes the New Zealand life insurance industry an interesting environment within which to examine firm-specific incentives for voluntary disclosure because it largely avoids the potentially confounding effects of external regulation on managerial decision-making (see chapter 2)⁴.

-
- ³ Due to the technical and complex nature of the issues involved in the development of a life insurance accounting standard, the New Zealand Society of Accountants (NZSA) issued a Pre-Exposure Draft (ED) to interested parties in December 1993. In addition, to enable life insurance companies to comply with the GAAP requirements laid down in clause 4(b) of the Financial Reporting Act 1993, the NZSA (1994a) issued an interim guidance note (*Release 4: Accounting for Certain Life Assurance Offices*) in August 1994 pending the issue of the full life insurance accounting standard. A full ED is expected to be issued in late 1996, and a life insurance accounting standard is likely to be promulgated soon thereafter.
- ⁴ Notwithstanding the benefits of conducting this study in a relatively unregulated environment, it is possible that in the run-up to the introduction of the Financial Reporting Act 1993, New Zealand life insurance companies may have been induced to disclose more information in their annual reports by the prospect of tighter regulation. This possibility is examined further in chapter 6 of this thesis (section 6.3.2).

1.2. AIM AND OBJECTIVES OF THE STUDY

The purpose of this research project is to examine the determinants of voluntary disclosure in the annual reports of New Zealand-based life insurance companies and to explain observed variations in reporting practices. To achieve this aim, the study has five main objectives:

1. To provide background information on the accounting and financial reporting regime within which the New Zealand life insurance industry operates and to examine the insurance and investment implications for policyholders, shareholders, and others, of variations in voluntary disclosure practices between life insurance companies.
2. To identify and critically review by means of a comprehensive literature search, the major theories and hypotheses which attempt to explain differences in the level of voluntary disclosures made by companies in their annual reports.
3. To establish an appropriate theoretical framework which can provide insights into the determinants of voluntary disclosure by life insurance companies, and so explain observed variations in reporting practices.
4. To test empirically the predictions of hypotheses drawn from the selected theoretical framework by means of statistical techniques.
5. To further examine by means of interviews and a document study conducted in the field, the influence of theoretically constructed variables and other factors, on the voluntary disclosure decisions of owners and managers in life insurance companies.

1.3. CONTRIBUTION TO KNOWLEDGE

The project should contribute to the existing body of knowledge in at least six important respects as follows:

1. The study will extend current knowledge in the general field of corporate reporting as well as contribute insights into the complexities associated with the reporting of business activities in insurance markets which have been acknowledged in some recently published works (e.g., Klumpes, 1995). For instance, the study could highlight variations in information disclosure requirements among companies of different characteristics such as size and organisational form. This could assist policyholders, shareholders, financial analysts, and other users of life insurance annual reports, to better understand the accounting environment within which life insurance companies operate, and as a result, enable them to make better informed insurance and investment decisions.
2. Voluntary disclosure issues are considered to be important because of their influence on subsequent corporate reporting rules (Morris, 1984). Therefore, this project could help the accountancy and actuarial professions to make practicable recommendations for improvements to existing professional practices. For instance, if the level of information disclosed voluntarily by life insurance companies is found to be influenced by reinsurers, the accountancy profession may wish to seek greater liaison with such entities in the ongoing development of life insurance GAAP.
3. It should enhance understanding of the determinants of voluntary disclosure decisions in life insurance companies operating in a relatively unregulated environment. This could have important policy implications for the life insurance industry in that the results of this study could enable legislators, industry regulators, accounting standard-setters and others, to better assess the

need for, and more efficiently predict the likely success of developments in, or amendments to, insurance company law and/or life insurance GAAP. For example, evidence indicating that the level of voluntary disclosure varies according to organisational form could suggest that regulators could consider differential reporting requirements for mutuals and stock companies.

4. By focusing on a single industry - life insurance - this study avoids the potentially confounding effects which differences in ownership structure, managerial discretion and industry accounting and reporting practices could have on the empirical results obtained from cross-industry studies (Watts & Zimmerman, 1986, 1990; Lamm-Tennant & Rollins, 1994; Klumpes, 1995). Thus, a more robust test of the theoretical framework underlying the study could be carried out.
5. Recently, scholars such as Guttentag & Herring (1986) and Malone, Fries & Jones (1993), have called for more research to be carried out into the disclosure practices of companies operating in the economically important, yet relatively under-researched financial services sector, such as the life insurance industry. It is believed that this project is the first to examine empirically the relationship between the overall level of voluntary disclosure in general-purpose annual reports and the characteristics of life insurance companies. In this regard, the study represents an important addition to the extant literature. Moreover, by testing empirically the propositions of the *managerial-discretion hypothesis* with regard to the level of information voluntarily disclosed by life insurance companies, this study could contribute to theory development and thereby, help to promote a better understanding of the motives which underscore complex organisational behaviour such as corporate disclosure decisions (Gibbins, Richardson & Waterhouse, 1992).
6. The use of triangulation methodology (see section 1.4 below) helps to validate the constructs employed in this study and test the reliability of evidence

collected from different sources. These attributes enable researchers to make more substantive conclusions from their results (Jick, 1979; Patton, 1990). Triangulation is not often practised in disclosure studies and so its use in this study is considered to make a methodological contribution to the literature.

The important contributions of this study are re-stated in the concluding part of this thesis (chapter 8, section 8.3).

1.4. RESEARCH METHODOLOGY

Several scholars, such as Abdel-khalik & Ajinkya (1979), Jick (1979), and McKinnon (1988), have noted the growing use of convergent methodology (or triangulation) in studies employing more than one research method. Such authors argue that a multiple methods approach to evidence gathering and analysis can help researchers to better assess the reliability of their instruments and the validity of the theoretical constructs which they employ, as well as enhance the confidence of others in the veracity of empirical results. Accordingly, a combination of literature-based and empirical research methods are employed in this thesis in order to achieve the stated aim and objectives of the study. The research methods used in this study are categorised as:

1. A search and analysis of the relevant literature, leading to the selection of an appropriate theoretical framework to guide and direct empirical investigation.
2. An empirical research programme utilising:
 - (a) The application of statistical analysis to published financial and non-financial data.
 - (b) The employment of semi-structured interviews with financial managers in the field.

(c) A document study.

The types, merits and shortcomings of triangulation methodology and the reasons for its use in this particular study, are examined in more detail in chapter 5 of this thesis (sections 5.2 and 5.3).

1.5. ASSUMPTIONS AND SCOPE

This study is defined and conditioned both by the inherent assumptions and definitions underpinning the selected field of research and the scope of its analysis. These constraints are enumerated below.

1.5.1. Assumptions and definitions

This study is predicated on nine broad assumptions as follows:

1. The study assumes that the annual report is an important medium by which owners and managers of life insurance companies report their activities (Arnold, Moizer & Noreen, 1984). However, it is acknowledged that companies invariably disclose information to users via other channels such as the public media, interim financial statements, prospectuses and marketing brochures. The presumption that the annual report can be used as an optimal solution to the information asymmetry problem between the various contracting constituents in firms (i.e., owners, managers etc.) is implicit in much of the extant disclosure literature (e.g., Watts, 1977; Leftwich, Watts & Zimmerman, 1981; Chow & Wong-Boren, 1987).
2. In the computation and analysis of the voluntary disclosures made by New Zealand-based life insurance companies, it is assumed that each disclosure item has equal informational usefulness to general-purpose users (i.e., unweighted) and that each item reported is independent of other disclosures. The rationale

for this assumption is that contracting parties in firms demand a myriad of information disclosure so that they can monitor efficiently contract compliance (Ormrod & Cleaver, 1993). Also, the use of weightings in the development of disclosure indices has major shortcomings such as bias in their selection and measurement (Marston & Shrikes, 1991). Furthermore, the application of an index to measure overall voluntary disclosure is considered to be theoretically consistent with both the contracting theory and decision-usefulness approaches to disclosure research since “. . . the demand for monitoring can derive from [a consideration of] . . . both users' [investment] needs and agency relationships” (Pincus, Rusbarsky & Wong, 1989, p. 249).

3. The study assumes that contracting groups in life insurance companies (e.g., policyholders, shareholders) are likely to demand greater information disclosure to mitigate the information asymmetry problem *ex-ante* and improve the efficiency of contract monitoring *ex-post* (Ball & Foster, 1982; Barnea, Haugen & Senbet, 1985; Lang & Lundholm, 1993). Notwithstanding that too much information (i.e., "overload") could obfuscate users' ability to interpret and act on disclosures made in the annual report, this study nevertheless assumes that "high" disclosure is taken to be more informative to policyholders, shareholders and other users than "less" disclosure. For example, Barnea *et al.* (1985, pp. 140-141) report that “. . . detailed information is required for an effective *ex-post* monitoring of management performance . . . [and that] . . . if accounting numbers are produced in sufficient detail they allow for more accurate measurement of risk . . . in an *ex-ante* sense”. Empirical evidence supporting this assumption is also provided by Merton (1987). Moreover, it is assumed that the relative importance to general-purpose users of the disclosure items analysed in this study does not change over the six years 1988-1993 covered by this project (e.g., see Cooke, 1989a; 1989b).

4. Insurance transactions are often complex, and purchasers and investors tend to suffer from an acute information asymmetry problem at the point-of-sale (Fields, 1988, Datta & Doherty, 1990). For instance, Datta & Doherty (1990, p. 169) state that “. . . [insurance] policies issued by different firms are often not equivalent even in terms of the pay-offs they promise in the event of loss. The absence of secondary markets and of perfect substitutes for insurance contracts makes it difficult for buyers . . . to judge the true value of the policies they are purchasing.” Consequently, this study assumes that contracting groups in life insurance firms (e.g., policyholders, shareholders) are likely to have a major interest in public disclosure for monitoring purposes because they are unable to “price protect” themselves effectively *ex-ante* against *ex-post* risks such as the dilution in the value of their claims as a result of aberrant behaviour by managers. This view is also explicit in much of the disclosure literature examining the information asymmetry problem between contracting parties in firms over multi-period states (e.g., Leland & Pyle, 1977; Lang & Lundholm, 1993)⁵.
5. Gibbins *et al.* (1992, p. 25) observe that “. . . the incentives for a particular manager to disclose are not necessarily the same as the incentives faced by other managers in the same firm . . .”. However, consistent with the positivist-descriptive literature on insurance (e.g., Smith, 1986), this study treats the life insurance firm as a coherent entity comprising three main and competing contracting parties, namely the owners (policyholders/shareholders), customers (policyholders) and managers. These contracting parties are assumed to have homogenous economic interests.

⁵ This reasoning is an advancement on Jensen & Meckling's (1976) original agency model. In their analysis of the firm operating in a single period and perfect information market, claimants (such as debtholders) are able to efficiently “price protect” in a way that the costs of information production and disclosure are borne entirely by the managers.

6. The project examines the contracting and monitoring incentives for voluntary disclosure by owners as “producers” and managers as “preparers” of life insurance company annual reports. As mentioned earlier, such a view underpins many prior studies in the academic disclosure literature (Watts, 1977; Leftwich *et al.* 1981; Chow & Wong-Boren, 1987; Bradbury, 1991, 1992; Abrahamson & Park, 1994). Under this perspective, owners and managers are assumed to both have an equal economic interest in the overall level of voluntary disclosure. For example, owners have incentive to bear the cost of information production and dissemination to ensure more effective monitoring of managers *ex-post* (Elliot & Jacobson, 1994). Managers are also motivated to reduce costly contracting through public disclosure to “bond” their interests to those of owners thereby protecting their job security and promotional prospects (Jensen & Meckling, 1976). Implicit in this reasoning is the view that contracting parties are motivated to disclose both “good news” and “bad news” in the annual report (e.g., to minimise the risk of litigation and ~~to~~ maintain ^{their} credibility with the general public) (e.g., see Skinner, 1994).
7. It is assumed that because internal economic incentives between owners, managers and customers in life insurance firms are likely to be the same irrespective of their corporate status, New Zealand-based subsidiaries and branches of mutual and stock parent companies resident overseas are assumed to behave in a manner similar to that of the parent. For example, the owners (and managers) of the parent company could decide to sell the New Zealand subsidiary if managerial performance was unsatisfactory. Indeed, in 1989 the UK parent company of Royal Life sold its New Zealand-based subsidiary to Sun Alliance Life for this reason. Therefore, managers of the New Zealand subsidiary have incentives to align themselves to the interests of the shareholders of the parent company. There are other organisational factors (e.g., company culture) which could also help to explain similar behaviour between the parent company and its subsidiaries or branches. Previously

published research (e.g., Finsinger, 1983; Mayers & Smith, 1994) provides further support for this assumption. Furthermore, it is assumed that managers of closely held stock companies have incentive to disclose information publicly rather than privately to the few shareholders for two main reasons. First, public disclosure helps to reduce the current/future market cost of capital of firms and second, public disclosure could enhance the credibility of managers and hence increase the value of their human capital in the internal and external labour markets.

8. The study is predicated on the notion that owners of the parent company based overseas are likely to have relatively more interest in the consolidated annual performance of the group as a whole than in that of its New Zealand subsidiary or branch. This is because consolidated reporting shows the entire economic resources available to the entity, and thereby, helps shareholders (and others) to better ascertain the market value of their investment (Thomson, 1994). This implies that individual owners of the parent company will not vary greatly in terms of their information disclosure requirements of individual subsidiaries or branches. As a result, this study treats the parent company based overseas as a single and homogenous shareholder with a uniform derived demand for the information disclosed publicly in the annual report of the New Zealand-based life insurance company. Moreover, because the parent company is likely to have similar contract monitoring needs as “external” New Zealand shareholders (e.g., with regard to the monitoring of managerial activities), it is assumed that they are unlikely to have substantially different requirements for information disclosed publicly through the annual report.
9. In this thesis, life insurance companies are defined as those entities submitting financial returns to the New Zealand Department of Justice under section (s.) 78(1) of the Life Insurance Act 1908 and registered under s. 7(a) of the Securities Act 1978 as authorised issuers of public securities. This definition excludes friendly societies, reinsurance companies and trust funds since these

bodies transact very little direct life insurance business. Section 3a(5) of the Life Insurance Act 1908 provides a rather restrictive definition of life insurance which excludes many of the product-lines currently reported by life insurance companies in their published annual reports - for example, superannuation business. Therefore, for the purpose of this study, Australia's Life Insurance Act 1945 is considered to provide a more pertinent definition of life insurance. Section 4(1) of this Act states that life insurance embraces “ . . . amounts payable on death of a life insured . . . annuities . . . superannuation and investment-linked insurance funds”.

1.5.2. Scope of the project

The scope of the project is defined in four main respects as follows:

1. In many countries, the financial reporting of life insurance companies is the subject of various regulatory and legislative initiatives. As mentioned in section 1.1.2 of this thesis, New Zealand's Financial Reporting Act 1993 and the proposed life insurance accounting standard are new initiatives which will affect greatly the future reporting practices of life insurance companies. This study uses published information from 1st January 1988 to 31st December 1993 - a period when the disclosure decisions of New Zealand's life insurance companies were relatively unencumbered by legislation and external regulations. Complete and accurate data dating back to before 1988 proved difficult to obtain from public sources. In addition, evidence obtained from field-site interviews and the analysis of corporate documentation relate largely to events that occurred in the period 1988 to the end of 1994. The literature review and references cited in this thesis include works published up to 30th June 1996.
2. The focus of examination in this study is on the voluntary disclosures made in the general-purpose annual reports of life insurance companies. The special-

purpose disclosures made by life insurance companies in the annual statutory returns filed with industry regulators are outside the scope of this study since such disclosures are both mandatory and used mainly by industry regulators (e.g., the New Zealand Department of Justice) primarily for the purpose of long-term solvency monitoring rather than the assessment of annual financial performance.

3. The study is concerned with the overall level of information voluntarily disclosed by life insurance companies. Issues regarding the mode of disclosure (e.g., full or partial reporting), the geography of disclosure (e.g., on the face of the accounts or notes) or the frequency of disclosure of particular accounting items (e.g., variations among companies in the reporting of sales commission) are outside the empirical component of the project. Thus, it is not the purpose of this study to examine the impact of specific-item disclosures (e.g., bonus payments) on the monitoring efficiency of particular contracting constituents (e.g., policyholders). Indeed, some researchers (e.g., Chow & Wong-Boren, 1987; Ormrod & Cleaver, 1993) suggest that constituents in firms are likely to use a multitude of different types of information rather than specific disclosures to monitor compliance with contractual obligations *ex-post*.
4. In this project, voluntary disclosure includes non-financial as well as financial information, and embraces both qualitative as well as quantitative reporting items (Cooke, 1991; Lev, 1992). Non-financial/qualitative information is often considered to be as important for effective stewardship and investment decision-making as financial/quantitative information (Knutson, 1992). Thus, details such as the directors' report, corporate history and social disclosures contained in the published annual report are deemed to fall within the ambit of the project. However, statutorily prescribed information in the auditors' report is outside the scope of this study.

1.6. OUTLINE OF THE THESIS

This thesis is presented in eight chapters as follows:

Chapter 1. Overview of the Research Project.

Chapter 2. The New Zealand Life Insurance Industry. This chapter examines the main features of New Zealand's relatively unregulated life insurance industry and outlines its statutory and financial reporting regime. Additionally, the chapter re-states the research problem and discusses its importance as topic for academic investigation.

Chapter 3. Theory Search and Selection. This chapter identifies and reviews critically the various theories and hypotheses which have been advanced in the academic positive-descriptive literature to explain differences observed in corporate reporting practices. The purpose of this chapter is to select an appropriate theoretical framework within which to conduct the study.

Chapter 4. Hypotheses Development. This chapter examines the main propositions of the *managerial-discretion hypothesis* (Mayers & Smith, 1981, 1982a, 1986, 1988, 1994) and their implications for explaining the determinants of the voluntary disclosures made by life insurance companies. From this analysis, eight testable hypotheses are put forward to facilitate empirical testing.

Chapter 5. Research Methodology. This chapter analyses the origins, objectives and conceptual underpinnings of triangulation methodology. The chapter also discusses the merits and disadvantages of triangulation, and in particular, considers its suitability for use in this study. Furthermore, the rationale for using statistical, interview and document analysis methods in this project are explained. This chapter subsequently describes the sources of data,

the statistical procedures employed, the measurement of the variables used, the development of the interview instrument, the selection of field-sites and the conduct of the interviews, and the analysis of corporate documents.

Chapter 6. Empirical Results. The chapter reports the statistical results derived from the analysis of the published annual reports of all New Zealand-based life insurance companies for the period 1988-1993, including diagnostics and sensitivity tests. The chapter also reports the findings obtained from interviews and analysis of documentation conducted in the field.

Chapter 7. Analysis and Evaluation of Results. This chapter analyses and evaluates the statistical results and data obtained from the fieldwork in order to determine whether the empirical evidence accords, or otherwise, with the testable propositions derived from the *managerial-discretion hypothesis*. In this regard, factors which appear to explain the voluntary disclosure decisions of New Zealand-based life insurance companies are highlighted and discussed. Other determinants which could help to explain the overall levels of voluntary disclosure made by life insurance companies are also examined in this chapter.

Chapter 8. Summary and Conclusions. The research project is summarised and conclusions regarding the determinants of voluntary disclosure by New Zealand-based life insurance companies are presented in this chapter. The contribution of the research project is assessed and implications for the life insurance industry, regulatory authorities, professional bodies, and others, are also considered. Additionally, opportunities for future research are identified in this chapter.

CHAPTER 2. THE NEW ZEALAND LIFE INSURANCE INDUSTRY

2.1. INTRODUCTION

This chapter provides information on the institutional environment within which New Zealand-based life insurance companies operate. Specifically, the chapter examines the salient features of New Zealand's relatively unregulated life insurance industry and assesses the importance of corporate reporting issues to that industry, as highlighted by prior survey work. The main implications for users of observed variations in the level of voluntary disclosure in the annual reports of life insurance companies and the contribution of this research project are also outlined in this section of the thesis. Additionally, the advantages of conducting an empirical study of the determinants of voluntary disclosure in New Zealand's relatively unregulated life insurance industry are put forward in this chapter.

2.2. INSTITUTIONAL BACKGROUND

The New Zealand life insurance industry is unusual by international standards in being relatively small, highly concentrated, and largely unregulated (Carew, 1987). As at the end of 1993, the industry held total assets valued at NZ\$ 14.8 billion, equal to about 15 per cent of GDP, and so plays an important role in the small New Zealand economy (KPMG Peat Marwick, 1994). The salient features of each New Zealand-based life insurance company are given at Appendix 1. Amongst other things, Appendix 1 shows that the life insurance industry is long-established, with the Government Life Office (forerunner of Tower Life) commencing operations in 1869, followed shortly afterwards by Australian Mutual Provident (AMP) in 1871, National Mutual Life (NML) in 1879, and Colonial Mutual Life (CML) in 1883.

Appendix 1 also reveals that at the end of 1993, there were 34 life insurance companies operating in New Zealand, with the six largest accounting for

approximately 70 per cent of total annual premium income. Of the six major operators, only one (Tower Life) is New Zealand-owned; the remainder are controlled either from Australia (i.e., AMP, NML and CML) or from the UK (i.e., the Prudential and General Accident - which own NZI Life). As Appendix 1 further makes clear, the six largest life insurers sell a diversified range of products - including ordinary risk life insurance and investment-linked policies, superannuation business and investment-only products such as unit trusts - mostly through in-house and/or tied agents (i.e., exclusive agencies) operating through an extensive national networks of branch offices. In contrast, the smaller (mainly New Zealand-owned) companies - the 20 or so with life funds below NZ\$ 25 million (m) - typically offer a narrower range of products aimed at particular market segments distributed through non-tied agents and/or brokers (i.e., non-exclusive agencies). They rely heavily on reinsurance arrangements with either the largest companies or specialist international reinsurers. Of the 34 operatives, 14 companies are (or are owned by) entities with mutual status, while 20 companies are (or are owned by) stock companies. Of the latter category of companies, five entities are branches or subsidiaries of major trading banks. Therefore, New Zealand's life insurance industry is characterised by a mix of companies of different size, nationality and organisational form.

The New Zealand life insurance industry is rated as the least regulated in the western world (Commerce Clearing House, 1991). In contrast to the heavily regulated Australian market for example, there are no requirements to file quarterly returns with industry regulators, and competition is not impeded by stringent licensing requirements for new entrants. Freedom of entry and exit is evident from the fact that since the late 1980s seven companies (including five banks) have entered the market, and four small companies have exited because of corporate takeover or insolvency.

2.3. REGULATORY ENVIRONMENT

2.3.1 Statutory reporting

The main statutory reporting obligations of New Zealand-based life insurance companies are specified in the Life Insurance Act, 1908. This Act mirrors closely the minimum disclosure requirements of its antecedent UK solvency-based life insurance statute - the Life Assurance Act 1870. As in Australia and the UK, solvency monitoring requirements (including the maintenance of “hidden” reserves) have tended to influence the disclosure practices of New Zealand-based life insurance companies⁶. The principles and practices followed by the actuarial profession in their assessment of solvency and the determination of the annual surplus, has also underpinned the accounting and disclosure practices of the industry (Vachon, 1973; Horton & Macve, 1992; Horton, Macve & Hoskin, 1993).

Under s. 16 and s. 17 of New Zealand's Life Insurance Act 1908, life insurance companies are required to prepare a statement of revenue, together with a balance sheet for their long-term business at the close of each year, in accordance with the Second, Third, Fourth and Fifth Schedules to that Act. These statutory returns must be audited (s. 79(2)) and filed each year with the industry regulators - the Department of Justice and Government Actuary - for the purposes of monitoring corporate solvency. However, as mentioned previously, the statutorily prescribed disclosure requirements pertaining to these annual returns are considerably less than those specified for life insurance companies operating in other jurisdictions such as those

⁶ “Hidden” reserves allow life insurance companies to smooth-out fluctuations in underwriting and investment performance in order to maintain public confidence in periods of adverse economic conditions. The non-disclosure of reserves by New Zealand life insurance companies was permitted by the Companies Accounts (Life Insurance Companies) Exemption Order 1957. This regulation has now been superseded by the improved public disclosure requirements of the Financial Reporting Act 1993. This initiative was instigated by New Zealand legislators to increase the amount of information available to policyholders, shareholders, among others, so that they can make better insurance and investment decisions (Adams, 1994b).

of Australia and the UK. For example, unlike Australian life insurance companies, New Zealand companies are not required to maintain and report statutory minimum levels of solvency. One explanation for the lack of regulation on the disclosure of business activities in the New Zealand life insurance industry is that traditionally, the government has protected the public interest in the market (e.g., with regard to setting “socially fair” levels of premium and rates of commission) through its ownership (until 1989) of the Government Life Office (now Tower Life), thereby obviating the need for extensive (and hence costly) external control (Adams, 1994c).

2.3.2 The Companies Act 1955

Up to 1st July 1994, New Zealand-based life insurance companies were subject to the requirements of the Companies Act 1955, notably the *true and fair* provisions contained in s. 153(1) and s. 166(1), and the obligation to prepare general-purpose financial statements under Part XII (Overseas Companies) and Part XIII (Insurance Companies). However, in most other respects, life insurance companies were exempt from the provisions of the Eighth Schedule to the Companies Act 1955, which applied to other companies, by virtue of the Companies Accounts (Life Insurance Companies) Exemption Order 1957.

In recognition of their statutory reporting obligations under the Life Insurance Act 1908, New Zealand's life insurance companies were permitted to prepare their annual financial statements in accordance with the less detailed requirements of s. 16 and s. 17 of that Act. Furthermore, the Eighth Schedule exemption allowed life insurance companies considerable flexibility in respect of revenue recognition, asset valuation, classification of headings, and the presentation and disclosure of information in their published annual reports. To avoid the cost and effort of preparing full general-purpose financial statements, several New Zealand branches of large overseas-owned companies, including AMP, CML and NML, sought (and were granted) exemption under the provisions of s. 402(6) and s. 402(7) of the 1955 Act. Instead, these companies were permitted to file group accounts with the Registrar of Companies and

publish financial statements of their New Zealand activities in a summary form prescribed by the Companies (Overseas Companies Accounts) Order 1971. The considerable flexibility in the disclosure and presentation of information in the published annual report afforded to life insurance companies under the Companies Act 1955 could at least partially account for the wide variations in accounting and reporting practices observed in the New Zealand life insurance industry (Reid, 1988; Wood, 1991; Adams, 1994a, 1994b). In other words, the absence of statutory minimum reporting requirements has meant that the level of information disclosed in the published annual reports of New Zealand-based life insurance companies has been largely discretionary rather than mandatory in nature.

2.3.3. Company law reform

To improve accounting and reporting practices among all companies, the New Zealand government introduced new companies legislation in the form of the Companies Act 1993 and the Financial Reporting Act 1993 which both came into effect from 1st July 1994. The latter Act is of particular relevance to the accounting and reporting practices of life insurance companies. For instance, clause 4(b) of the Financial Reporting Act 1993 makes it a statutory requirement for life insurance companies, as issuers of public securities, to publish *true and fair* financial statements each year and to comply with GAAP. GAAP is defined in clause 3 of the 1993 Act as compliance with approved financial reporting (or accounting) standards, or when these are absent, practices that have the authoritative support of the New Zealand accountancy profession. The Companies Act 1993 has some (albeit lesser) relevance for the corporate reporting of life insurance companies, notably with regard to the reporting of directors' responsibilities and capital maintenance requirements. The new companies legislation enacted in 1993 should in future produce greater consistency of accounting treatments and more information disclosure among New Zealand-based life insurance companies than has hitherto been the case.

2.3.4. Accounting standards

In spite of the special statutory reporting provisions and disclosure exemptions applicable to them, New Zealand-based life insurance companies have nevertheless been expected to comply with the general body of accounting standards promulgated by the NZSA, except when statutory provisions render these inapplicable - as for example, with NZSA *SSAP-9: Information to be Disclosed in Company Balance Sheets and Profit and Loss Accounts* (see NZSA, 1994b). Consequently, New Zealand's accountancy profession has deemed that all accounting standards, except four, have been applicable to life insurance companies⁷. However, the life insurance industry has long argued that an additional thirteen financial reporting (accounting) standards are not relevant to its long-term insurance business and that compliance could mislead users as to the annual performance and financial condition of the entity. As such, compliance with some extant promulgations of the NZSA (1994b) - notably *SSAP/FRS-10: Cash Flow Statements* - has been variable (Adams, 1994b).

To ensure that life insurance companies meet the requirements of the new companies legislation, and to serve better the information needs of users such as policyholders, shareholders and industry regulators, the NZSA has drafted an ED on life insurance accounting and reporting. This document provides details on how life insurance companies should account for transactions and events, and how that information should be disclosed in the published annual financial statements. The Life Office

⁷ As at 30th June 1996, there were 32 extant financial reporting (accounting) standards promulgated by the NZSA. In addition to their exemption from *SSAP 9*, the Income Tax Act 1976, overrides the need for life insurance companies to comply with *SSAP-12: Accounting for Income Tax*. Additionally, two other accounting standards, namely *SSAP- 4: Accounting for Inventories* and *SSAP 16: Accounting for Government Grants*, do not apply to life insurance companies because they neither maintain inventories nor receive government grants. Adams (1994b) provides a detailed analysis of the relevance of the 31 extant accounting standards to the New Zealand life insurance industry as at 31st December 1994.

Association of New Zealand (LOANZ) anticipates that when issued (possibly in late 1996), the new accounting standard should also herald greater uniformity in the published financial statements of life insurance companies, and thus enable users to make better informed business judgements with regard to the performance and value of New Zealand-based life insurance companies (LOANZ, 1993).

2.3.5. Appointed actuary regime

In parallel with developments in financial reporting and accounting regulation, the LOANZ has worked closely with the Department of Justice, Government Actuary and the New Zealand Securities Commission to pave the way for an appointed actuary regime. Under this proposal, every life insurance company will be required to appoint an actuary to prepare an annual report for the executive directors on its long-term financial condition and the adequacy of risk management strategy. This initiative seeks to complement the solvency and internal business monitoring activities of directors and regulatory authorities, and so provide additional protection and security to policyholders, shareholders, and other investors. This approach has been employed successfully in other countries, such as Australia and the UK, and is expected to be introduced to New Zealand's life insurance market over the next two or three years in conjunction with reforms to existing insurance legislation. Currently, under s. 52 of the New Zealand Life Insurance Act 1908 life insurance companies only have to carry out an annual (or at the discretion of the Government Actuary, a triennial) actuarial valuation of policy liabilities, rather than prepare a thorough and extensive report for directors and industry regulators covering matters such as the company's long-term financial condition, asset-liability structure and its exposure to business risks.

2.4. CORPORATE DISCLOSURE IN LIFE INSURANCE MARKETS

The purpose of this thesis is to examine the determinants of voluntary disclosure in the New Zealand life insurance industry, and so explain variations observed in

corporate reporting practices. As mentioned earlier in chapter 1 (section 1.1), the research problem is underpinned by survey work carried out previously both in overseas insurance markets and in New Zealand. The important features identified by these surveys and the importance of voluntary disclosure in the New Zealand life insurance industry as a topic for academic research are elaborated further in the remainder of this section.

2.4.1. International survey evidence

Over two decades ago, Smith (1973) criticised the lack of information disclosed to UK consumers of life insurance products in the annual report and other media (e.g., policy documents). Recently, descriptive-based surveys conducted in several countries have documented significant diversity in the annual reporting practices of companies in both the general and life sectors of insurance markets (Lamble, 1981; Lamble & Minehan, 1987; OECD, 1988, 1992; KPMG Peat Marwick McLintock, 1990, 1992; Gilbert, 1991; KPMG Peat Marwick, 1991). For instance, in their survey of UK-based insurance company annual reports, KPMG Peat Marwick McLintock (1990, p. 1) state that “. . . despite the growing debate on financial reporting within the industry, the financial statements of insurers continue to exhibit a considerable diversity, both in terms of accounting treatment and presentation”. In his analysis of the 1992 published annual reports of 33 life insurance companies, Adams (1994a) produced evidence supporting the contention of life insurance industry commentators such as Reid (1988) and Wood (1991), that variations in disclosure practices also exist in New Zealand, as well as overseas. The main findings and implications arising from prior survey work carried out previously in five Anglo-American insurance markets (including New Zealand) are summarised in Table 2.1 and examined briefly below.

All five of the studies listed in Table 2.1 report variations in the level of information disclosed by insurance companies in their annual reports. However, a comparative analysis of these studies suggests that the degree of variation in the reporting practices of US companies does not appear to be as great as that among entities operating in other insurance markets, particularly those of Australia, New Zealand and the UK.

Table 2.1

**Main Findings of Descriptive Survey-Based Disclosure Studies Carried Out in
International Insurance (Life & General) Markets**

This table summarises the salient features of survey work carried out in insurance markets in Australia, Canada, New Zealand, the UK and US. The survey evidence indicates that all Anglo-American insurance markets exhibit diversity of accounting and reporting practice amongst insurance companies. The findings of prior survey work underscores the research problem investigated in this study.

Study	Jurisdiction	Subjects	Key Findings on Disclosure Issues	Principal Conclusions
Lamble & Minehan (1987)	Australia	27 General Insurance Companies (mainly stocks)	<ul style="list-style-type: none"> • Inadequate disclosure of reinsurance coverage and claims funding methods • Non-disclosure of business segments 	<ul style="list-style-type: none"> • Prevents policyholders from assessing full nature & extent of liabilities & business activities
Gilbert (1991)	Canada	23 Life Insurance Companies (mutuals & stocks)	<ul style="list-style-type: none"> • Variations in specific item disclosure exist (e.g., with regard to reserves) • Greater disclosure of investment yields - due to increased consumer demand following October 1987 crash 	<ul style="list-style-type: none"> • Disclosure diversity inhibits investment decision-making and effective regulation • Situation may prompt tighter disclosure rules
Adams (1994a)	New Zealand	33 Life Insurance Companies (mutuals & stocks)	<ul style="list-style-type: none"> • Variations reported in overall disclosure (as measured by disclosure content analysis) • Variations in specific-item disclosure (e.g., with regard to taxation methods and treatment of new business costs) 	<ul style="list-style-type: none"> • Inhibits usefulness of annual report for decision-making & stewardship purposes • Vindicates need for GAAP reporting
KPMG Peat Marwick McLintock (1990)	UK	9 Composite Insurance Companies (mainly stocks)	<ul style="list-style-type: none"> • Considerable variation in disclosure of the valuation basis of business-in-force • Variations in specific-item disclosure (e.g., with respect to movements on reserves) • Non-disclosure of business acquisition costs, reinsurance and foreign exchange transactions by some companies 	<ul style="list-style-type: none"> • Inhibits investment decision-making and stewardship • Non-disclosures (e.g., of business acquisition costs) by new companies does not present fairly their cash flow position
KPMG Peat Marwick (1991)	US	81 Life & General Insurance Companies (mutuals, stocks & friendly societies)	<ul style="list-style-type: none"> • In general, comprehensive disclosures are provided by companies • Some 'within GAAP' variations (e.g., with regard to tax disclosures & contingent liabilities) • Some items not disclosed (e.g., treatment of reinsurance) 	<ul style="list-style-type: none"> • Extensive disclosure can inhibit usefulness of annual report (e.g., for brokers) • 'Within GAAP' variations often need more explanation to ensure users are able to make better judgements & control managerial activities

Source: Derived from those studies listed in the first column of the table.

Two plausible reasons could explain this observation. First, the US has had insurance GAAP for much longer than elsewhere and as a consequence, there may be less scope for substantive differences in accounting and reporting practices to emerge⁸. Second, under strict state insurance laws, US life insurance companies are frequently obliged to make more detailed solvency-related disclosures (e.g., with regard to actuarial assumptions, reinsurance terms and reserving levels) in separate filings to regulatory authorities, plus other information of consumer interest (e.g., sales commission, bonus returns). These statutory reporting requirements are more comprehensive than those applicable to companies operating in other Anglo-American insurance markets such as New Zealand. It is also plausible that US-based insurance companies may voluntarily disclose such information publicly to general-purpose users in their annual reports. This is because managers may perceive that the benefits of doing so (e.g., in terms of better informed, and hence more satisfied users) are likely to exceed the marginal cost of information preparation and public dissemination.

It was noticeable from the survey work carried out in most insurance markets that companies frequently differed in terms of whether they disclosed, or otherwise, actuarial-type information, reinsurance details and sales commission. For example in Australia, Lamble & Minehan (1987) noted variations in the disclosure of the underwriting/actuarial methods and assumptions used in the determination and valuation of expected general insurance losses and claims reserves. Furthermore, few insurance companies revealed the nature and extent to which their business was reinsured with other entities. Gilbert (1991) also observed differences in the amount of information disclosed by Canadian life insurance companies relating to the actuarial methods and assumptions employed in the valuation of policy liabilities and the determination of annual surplus, as well as with respect to the procedures adopted for establishing reserves. Adams (1994a) noted that in New Zealand, life insurance companies are fairly consistent in their non-disclosure of actuarial-type information

⁸ For example, *FAS 60: Accounting for Life Insurance in Stock Companies* was promulgated in the US in 1982.

and reinsurance details. Moreover, some New Zealand-based life insurance companies did not report the amount of sales commission paid to agents in their annual reports - a feature mirrored to a lesser extent in the UK (KPMG Peat Marwick McLintock, 1990). KPMG Peat Marwick McLintock (1990) further reported that UK-based insurance companies varied in terms of their disclosure in the annual report of the actuarial matters, the methods adopted in setting reserves and annual movements on those reserves. However, in their later survey KPMG Peat Marwick McLintock (1992) reported that the amount of information on reinsurance disclosed by UK insurance companies had increased substantially compared with the evidence reported in their 1990 survey.

2.4.2. The 1994 New Zealand survey

Adams (1994a) documented and described the different disclosure practices (and accounting treatments) of New Zealand-based life insurance companies from an analysis of their 1992 published annual reports. In this study, a preliminary analysis of the form and content of the 1992 annual reports was carried out using disclosure content analysis (DCA)⁹. The application of DCA involved describing the key features of the annual reports (e.g., their page length) and identifying the extent to which information on accounting treatments and measurement issues (e.g., with respect to taxation, investment valuation and new business acquisition costs) were disclosed. The process also involved sorting, classifying and summarising the information contained in the annual reports in terms of its nature (e.g., financial versus non-financial details) and mode of presentation (e.g., whether it was disclosed in the main financial statements or in the notes to the accounts). Subsequently, the major variations in disclosure (and accounting) practices exhibited by life insurance companies were identified and compared. The salient findings arising from the 1994 New Zealand survey are summarised in Table 2.2 and discussed further below.

⁹ The DCA technique has been used in prior academic studies of corporate reporting practices. For example, Dixon, Coy & Tower (1991) employed DCA to analyse the annual reports published by New Zealand's universities.

Table 2.2

Main Issues Identified from a Disclosure Content Analysis (DCA) of the 1992 Annual Reports of New Zealand Life Insurance Companies (n=33)

This table summarises the key findings of Adams' (1994a) survey of the corporate reporting practices of all 33 New Zealand-based life insurance companies based on an analysis of their 1992 annual reports. The survey evidence indicates that major differences exist among companies not only in terms of the overall level of information voluntarily disclosed, but also in terms of specific-item disclosures and the format in which they are presented.

Main Findings	Examples	Possible Implications
<ul style="list-style-type: none"> Variations in the amount of information disclosed in the notes and in page-length of annual reports. 	<ul style="list-style-type: none"> Tower Life - high disclosure (80 notes, 39 pages). Southsure Assurance - nil disclosure (0 notes, 3 pages). 	<ul style="list-style-type: none"> Inhibits effective decision-making and stewardship. Thus, the value of shareholders' and policyholders' claims could be reduced by aberrant managerial behaviour.
<ul style="list-style-type: none"> Variations in specific-item disclosures e.g., <ul style="list-style-type: none"> - taxation treatment. - new business costs. - investment valuation. 	<ul style="list-style-type: none"> Tower Life - high disclosure (full details in notes). ANZ Life - nil disclosure. 	<ul style="list-style-type: none"> Prevents users from ascertaining the "true" financial position of the entity. Hence, poor investment and insurance decisions could be made by users.
<ul style="list-style-type: none"> Differences in amount of non-financial disclosure (e.g., community support). 	<ul style="list-style-type: none"> Sovereign Assurance - high disclosure (6 pages). BNZ Life - nil disclosure (0 pages). 	<ul style="list-style-type: none"> Fails to convey the degree of corporate social responsibility to the public. Such a situation could adversely affect the company's sales & marketing strategies.
<ul style="list-style-type: none"> Variations in the amount of cash flow information disclosed. 	<ul style="list-style-type: none"> Sovereign Assurance - high disclosure. Greenwich Life - low disclosure (excludes commission and reinsurance cash flows). 	<ul style="list-style-type: none"> Non-standardised practice could confuse users. The situation is also inconsistent with NZSA SSAP/FRS 10. Thus, audit qualifications to the financial statements could affect adversely policyholders' and investors' confidence in the company.
<ul style="list-style-type: none"> Different formats used to present financial information. Information sometimes reported in the notes or on the face of the financial statements. Assets placed above liabilities and <i>vice versa</i>. 	<ul style="list-style-type: none"> Southsure Assurance - horizontal format. Tower Life - vertical format. Sovereign Assurance discloses reinsurance adjustments in the revenue account. Tower Life discloses reinsurance details in the notes to the accounts. Westpac Life reports assets above liabilities. Prudential Assurance reports liabilities above assets 	<ul style="list-style-type: none"> Non-standardised practice could confuse and mislead users and inhibit effective comparisons. Non-standard practice could confuse and mislead users and inhibit effective comparisons. Non-standard practice could confuse and mislead users and inhibit effective comparisons.

Source: Derived from Adams (1994a).

Table 2.2 indicates that as with the studies carried out in Canada (Gilbert, 1991) and the UK (KPMG Peat Marwick McLintock, 1990, 1992), there are diverse disclosure practices among New Zealand-based life insurance companies. The DCA identified major disparities with regard to several aspects of the form and content of the annual reports published by life insurance companies. These include: variations in terms of the page length, the number of notes appended to financial statements, the disclosure (or otherwise) of particular accounting treatments and measurement issues (e.g., bases used to determine taxation liabilities and investment values), the separate classification and disclosure of specific items of financial information (e.g., operating and investment cash flows and sales commission), and in the amount of qualitative/non-financial details reported. Adams (1994a) argued that such diversity in corporate reporting practices could prevent policyholders and shareholders from making effective insurance and investment decisions, and reduce the ability of owners' to efficiently monitor and control the activities of management. Furthermore, with regard to the mis-classification of operating, investment and financing cash flows, and the non-disclosure of pertinent cash flow information (e.g., cash flows pertaining to reinsurance transactions) the practices of life insurance companies were found to be inconsistent with the prescriptions of the NZSA's *SSAP/FRS-10: Cash Flow Statements*.

In addition to variations in the levels of disclosure in the published annual reports, the 1994 New Zealand survey identified major differences between life insurance companies in terms of the format in which they present information. For instance, some companies (e.g., Sovereign Assurance) adjusted their annual premium income for amounts paid to reinsurance companies on the face of the revenue statement, while other companies (e.g., Tower Life) disclosed such information in the notes to the financial statements. Additionally, a minority of companies (e.g., Southsure Assurance) published their annual reports in the horizontal format of the statutory (solvency) reports, while most companies (including larger operatives like NZI Life and Tower Life) reported their financial information in the vertical format as adopted

in the general-purpose financial statements of most non-insurance companies. Furthermore, life insurance companies were found to be split evenly between those firms (e.g., Tower Life, Westpac Life) which presented assets above liabilities in the balance sheet and others (e.g., Sovereign Assurance, Prudential Assurance) which reported liabilities above assets. Again, such diversity in the format of presentation among life insurance companies could obfuscate effective comparison of corporate performance, confuse and mislead users, and reduce the value of the annual report as a basis for making efficient and effective investment and insurance decisions.

Casual observation of the 1994 survey evidence further suggests that variations in amount of information disclosed voluntarily in the published annual report may be distinguished by the characteristics of New Zealand-based life insurance firms. For example, Tower Life (a long-established and large New Zealand-owned mutual) reported more information in its 39-page annual report (with 80 notes) compared with the three page annual report (without notes) published by Southsure Assurance (a relatively new and small New Zealand-owned mutual). There were also incompatible classifications used for accounting items, particularly with regard to the published cash flow statement. For example, Ansvar Life treated principal repayments on inter-company loans as an operating cash flow and not as a financing activity like the majority of life insurance companies. Moreover, the number of headings used to classify accounting items in financial statements appeared to vary between companies of different size. For instance, large companies (e.g., Tower Life) use multiple headings in their published accounts, while small companies, particularly those employing statutory solvency reporting formats (e.g., CUNA, Southsure Assurance) kept the balance sheet and revenue account headings to a minimum.

As made clear in chapter 1 (section 1.6), the possible linkages between the overall level of voluntary disclosure and the characteristics of New Zealand-based life insurance companies are examined empirically in chapters 6 and 7 of this thesis. However, the 1994 New Zealand survey nonetheless furnishes *prima facie* evidence that the disparate accounting and reporting practices witnessed in insurance markets

overseas also applies to New Zealand's life insurance industry. Furthermore, such evidence underscores the importance of this research project and provides justification for conducting the study in the New Zealand environment.

2.4.3. Importance of life insurance company disclosure

Since the early 1980s the diversity of disclosure practices exhibited by life insurance companies operating in international insurance markets has become an issue of increasing public importance (Smart, 1985; Horton & Macve, 1992, 1994; Ries, 1992; Adams & Scott, 1994; Thomson, 1994). A summary of the important factors underlying the emergence of voluntary disclosure by life insurance companies as a prominent public issue, and hence its importance as a subject for research, is illustrated in Figure 2.1. Four of the major factors accounting for the increased public saliency of the issue of different corporate reporting practices among life insurance companies are examined further below:

(a) Demutualisation

Horton & Macve (1994, p. 83) contend that for mutuals “ . . . accounting results have not . . . generally been an issue . . . as only policyholders share in profits, and their commitment is generally long-term.” However, in recent years the intention of some major mutual Australian life insurance companies (e.g., NML and CML) to seek listing status on international stock exchanges in order to raise additional capital has led to public concern about the lack of information disclosure in annual reports, and the adverse effect that this could have on the ability of prospective investors and financial analysts to make sound economic judgements (Ries, 1992; Needleman & Westall, 1993). Therefore, demutualisation has prompted greater public demand for a consistent basis for annual performance measurement and more information disclosure by life insurance companies in their annual reports. Since Australian mutuals such as CML and NML play an important role in the New Zealand life insurance industry, the demutualisation issue and its influence on corporate reporting

practices are likely to be of as much relevance in New Zealand as it is in other markets in which mutuals operate.

(b) Regulatory developments

Since the October 1987 stock market crash, there has been an increasing trend by regulators in many countries to introduce life insurance GAAP and instigate tighter legislative and regulatory control over the reporting for life insurance companies' activities. Internationally, such initiatives have sought to increase information disclosure among insurance companies primarily to enable investors to better gauge the current and projected yields from investing in life insurance companies compared with alternative investment opportunities (Creedon, 1979; Smart, 1985; Whewell, 1990). Regulatory developments have also been motivated by the desire of industry regulators to improve corporate governance in insurance markets (Cowe, 1993). The New Zealand Financial Reporting Act 1993 and the development of an accounting standard for the life insurance industry are examples of the new regulations which aim to improve consistency among life insurance companies in New Zealand.

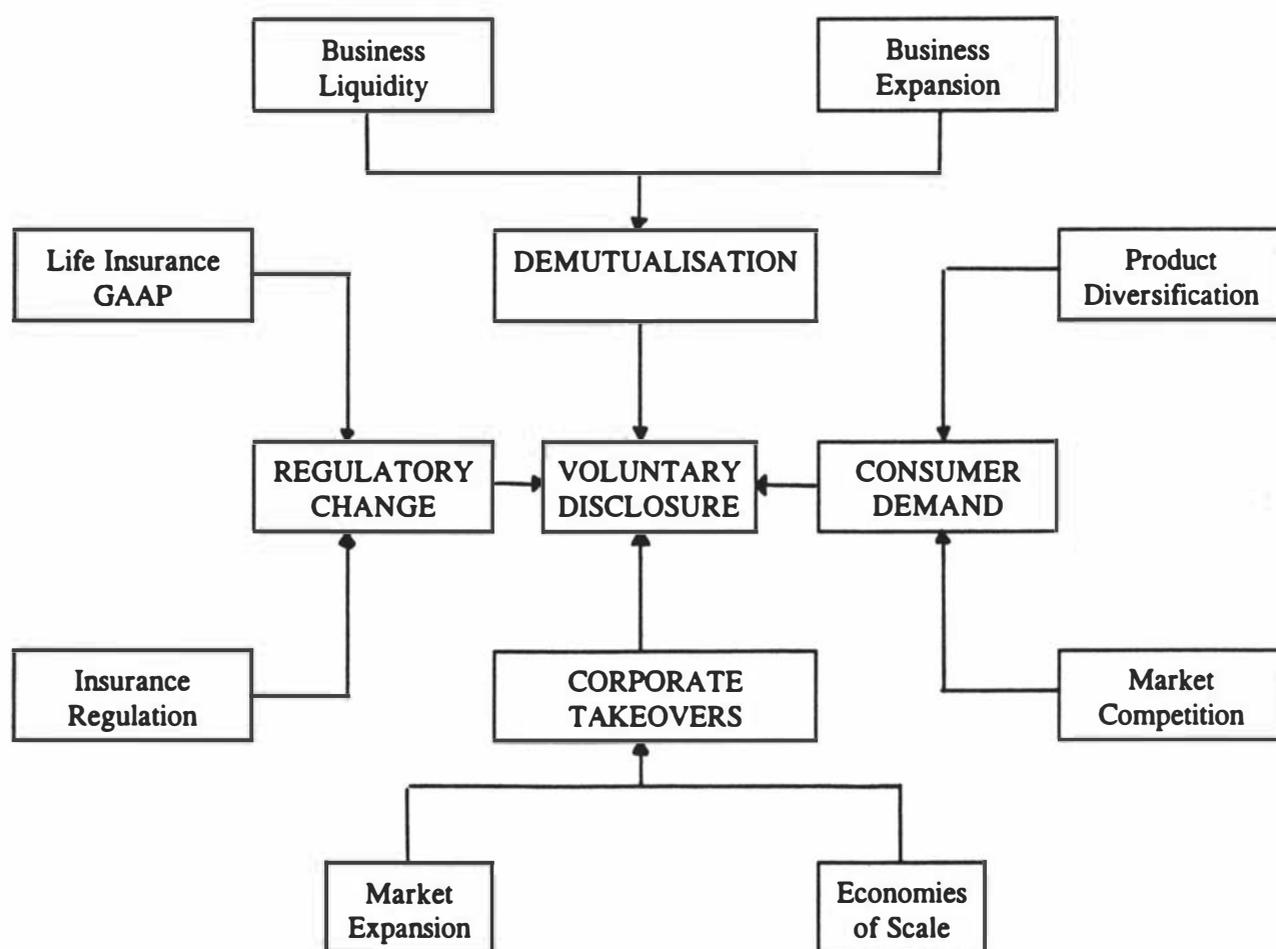
(c) Takeover activity

Several factors can motivate corporate takeover activity, including the desire to expand into new markets (or new segments of existing markets) or to realise economies of scale in business operations. However, some commentators (e.g., Field, 1991; Salmon & Fine, 1991; Horton & Macve, 1992) have suggested that insufficient corporate disclosure in annual reports could encourage takeover activity because it does not reflect *true and fair* performance and could understate the traded market value of life insurance companies. For example, in their analysis of the 1988-1989 takeover of the UK Pearl Assurance Group by the Australian mutual company AMP, Salmon & Fine (1991) contend that greater information disclosure, particularly with regard to the actuarial assumptions and methods used in the valuation of the assets and liabilities of Pearl Assurance, would have allowed management in the target company

Figure 2.1

Key Institutional Influences on Life Insurance Company Disclosure Practices

This figure illustrates the major institutional factors which have helped to make the corporate disclosure practices of life insurance companies an important public issue both in New Zealand and elsewhere. Four of the most significant factors which have been reported in the literature in recent years are: demutualisation proposals, regulatory developments (e.g., GAAP), the increased incidence of corporate takeover activity, and product-market factors (e.g., increased competition).



Source: Derived from various sources (e.g., Miles & Gubbay, 1987; Field,1991; Ries, 1992).

to have staged a more credible defence. Furthermore, greater disclosure could have prevented the target company from being “under-valued” and would have resulted in the shareholders of Pearl Assurance being offered a price per share which reflected more closely the underlying value of the firm. As in other jurisdictions, the New Zealand life insurance industry has also witnessed takeover activity in recent years. For example, in 1989 the Prudential acquired General Accident Life and Sun Alliance Life took over the New Zealand operations of Royal Life.

(d) Product-market factors

Increasing competition and greater product diversification within a rapidly changing insurance market has led policyholders, shareholders and other investors in many countries to demand more information on the type and performance of life insurance products through various disclosure media, including the annual report (Miles & Gubbay, 1987). Indeed, in several countries this phenomenon is mirrored across other (non-insurance) sectors of the economy (Gibbins *et al.*, 1992). Over the last decade or so, the New Zealand life insurance market has also been subject to greater consumer awareness and increased market competition, particularly from the insurance activities of trading banks and other new entrants (Adams, 1994c). Therefore, product-market considerations are likely to be important motivating factors in making the level of corporate disclosure a salient issue in the New Zealand life insurance industry.

2.4.4. Implications of this study

The academic study of the differences in voluntary disclosure among New Zealand life insurance companies could be of interest to users of annual reports such as policyholders, shareholders and industry regulators, in at least two respects. First, disparate disclosure practices make it difficult for policyholders and shareholders to compare and evaluate efficiently the financial performance of life insurance firms. Second, the situation prevents policyholders and industry regulators from fully

assessing the ability of life insurance companies to fulfill long-term insurance contracts *ex-ante* and effectively monitor managerial compliance with contractual obligations *ex-post*. The results of this study could therefore help policyholders and shareholders to make better insurance and investment decisions. For example, a positive relationship between the level of voluntary disclosure and firm size could give assurance to policyholders and shareholders that their insurance and investment interests are being properly managed. In addition, evidence reported in this study could have important policy implications for legislators and accounting standard-setters. For example, evidential linkages between the level of voluntary disclosure and organisational form could suggest to policymakers that different reporting and disclosure rules should be applied to mutuals and stock companies. The study could thus contribute insights as to the different disclosure needs of life insurance companies and as such, provide a useful yardstick against which the results of future empirical studies can be carried out. For instance, comparative studies could be carried out in more tightly regulated insurance markets, such as those of Australia and the UK, or in other relatively unregulated insurance markets such as those emerging in the Far East (e.g., Indonesia). The implications of this study are examined further in chapter 8 (section 8.3.2).

2.4.5. Merits of the research environment

As mentioned previously (section 2.2), the New Zealand life insurance industry is small, concentrated and largely unregulated. Several researchers (e.g., Watts, 1977; Chow, 1982; Watts & Zimmerman, 1986; Ball, 1989) have espoused the virtues of unregulated environments for the analysis of corporate accounting and reporting decisions, particularly as such environments enable researchers to draw inferences regarding the motives for such behaviour which are not distorted by external factors such as regulation.

New Zealand's relatively unregulated life insurance industry provides a good environment within which to conduct this study in at least three major regards. First,

the decision of owners and/or managers to disclose information in the annual report is unlikely to be encumbered by external regulations such as statutory minimum reporting requirements. Therefore, unlike in companies operating in more stringently regulated insurance markets such as those of Australia and the UK, the incentives to disclose information publicly are more likely to be firm-specific rather than influenced by factors operating in the external environment (e.g., see Watts, 1977). Second, unlike in some jurisdictions (e.g., some states in the US) taxation laws relating to New Zealand's life insurance industry treat mutual and stock companies on the same basis. Therefore, any variations observed in the amount of information voluntarily disclosed by mutuals and stock companies in their annual reports will not be influenced by differences in their respective taxation positions. Third, 13 out of the 20 New Zealand-based stock companies have a single shareholder - the parent company - while the remainder have relatively few shareholders. As a result, there is a clear distinction between the widely-held policyholder-owners of mutuals and the relatively more closely-held shareholders in stock companies. This enables a more rigorous empirical test of the possible differences in the public information needs of disparate policyholder-owners of mutuals and more closely-held shareholders in stock companies to be carried out. It is considered that on balance, these institutional advantages outweigh the limitations of small sample (population) size and diversity which exists with the New Zealand data compared with that which could have been obtained from larger life insurance markets such as those of the UK and US.

2.5. CONCLUSION AND SUMMARY

This chapter has presented the salient features of the small, highly concentrated and relatively unregulated New Zealand life insurance industry. Descriptive-based survey evidence gathered from international insurance markets demonstrate the disparate nature of accounting and reporting practices among insurance companies. Although differences observed in New Zealand mirror those reported in other international insurance markets, New Zealand-based life insurance companies nevertheless appear to exhibit greater diversity in their accounting and corporate reporting practices,

particularly when compared with US-based insurance companies. Institutional differences, particularly the long-established existence of US insurance GAAP, probably explain this observation. Prior surveys however criticise the widespread diversity of corporate reporting practices because it inhibits the decision-usefulness and stewardship value of the annual report for policyholders, shareholders and others. But a noteworthy deficiency of all the surveys carried out previously is that they do not furnish explanations as to why such differences exist. Therefore, it is considered that there is a need to examine empirically the factors underpinning the voluntary disclosure of information in the annual reports of life insurance companies, and thereby explain variations observed in practice. The growing importance of the subject of differences in corporate disclosure among insurance companies is further underscored by recent events occurring in international life insurance markets such as demutualisation and corporate takeovers. Additionally, the chapter considered that New Zealand's unregulated life insurance industry provides a unique environment within which to study the voluntary disclosure practices of companies. For example, the disclosure decisions of owners and managers of New Zealand-based life insurance companies are unlikely to be distorted by regulation-induced reporting requirements. The various theories and hypotheses which could help to explain the voluntary disclosure practices of life insurance companies are reviewed in the next chapter of this thesis.

CHAPTER 3. LITERATURE SEARCH AND THEORY SELECTION

3.1. INTRODUCTION

The academic literature contains several theories and hypotheses which purport to explain observed variations in the reporting practices of companies. Collectively, these theories/hypotheses are commonly referred to as positivist-descriptive theories (Mathews & Perera, 1993). There are also normative-prescriptive theories which interpret and prescribe improvements to corporate reporting practices. However, normative-prescriptive theories are deemed not to be germane to the stated purpose of this research project - namely, to examine the determinants of voluntary disclosure in the New Zealand life insurance industry, and so explain variations observed in practice. This chapter reviews critically the relevant positivist-descriptive literature in order to determine an appropriate theoretical framework within which the empirical component of this study can be carried out. The literature search includes the following bodies of theory and hypotheses:

- (1) Contingency theory.
- (2) Signalling and efficient-markets hypotheses.
- (3) Positive accounting hypotheses, namely:
 - the bonus plan hypothesis.
 - the debt-equity hypothesis.
 - the political-cost hypothesis.
- (4) Costly contracting theory.
- (5) Insurance industry hypotheses.

3.2. POSITIVE-DESCRIPTIVE THEORIES

3.2.1. Key features

Positivist-descriptive theories used in accounting research adopt an objective (i.e., “value-free”) ontological perspective which holds that reality is a measurable phenomenon which can be analysed independently of the prejudices of the researcher (Burrell & Morgan, 1979). Such approaches are predicated largely on the tenets of neo-classical economics which postulate that there is perfect information and that people in the modern corporation behave rationally to maximise their wealth at the expense of other interest groups (Barnea *et al.*, 1985). Positivist-descriptive theories in accounting thus provide economics-based explanations and predictions of accounting and reporting practices which derive from the theory of the firm developed originally by Coase (1937), and actively promoted by several scholars researching in the accounting discipline since then (e.g., Watts, 1977, 1992; Watts & Zimmerman, 1978, 1986, 1990; Leftwich *et al.*, 1981).

Recent advances in positivist-descriptive research (e.g., Barnea *et al.*, 1985) have acknowledged explicitly the existence of market imperfections such as information asymmetry, transactional uncertainty, and the costs associated with contracting and political (state) intervention¹⁰. Such imperfections necessitate the production and dissemination of information in order to facilitate efficient economic exchange. In other words, the notion that financial (and other) information is a commodity which can be supplied and purchased to promote the efficient operation of internal (e.g.,

¹⁰ Information asymmetry arises where one party in an exchange (e.g., the management) has an economic advantage because it has better access to information than the other party (e.g., the customer). Contracting costs include monitoring expenditures incurred by owners (e.g., the costs of financial reporting), bonding costs incurred by managers (e.g., costs of internal auditing), the residual loss (the opportunity cost associated with incurring monitoring and bonding expenditures), and other contracting costs (e.g., the legal costs associated with writing and negotiating contracts). Political costs include increased taxation and compliance costs associated with government intervention in the activities of the firm (Demski, 1988).

contracting) and/or external (e.g., capital) markets is an integral part of the current positive-descriptive literature. It is considered that this body of literature could therefore provide important insights into the determinants of corporate disclosure decisions because it makes explicit the information demand and supply relationship among owners, managers and other interested parties in the firm.

3.2.2. Main criticisms and merits

The academic accounting literature is replete with the debate amongst scholars concerning the conceptual and methodological virtues of positive-descriptive theories. Critics (e.g., Christenson, 1983; Sterling, 1990) have criticised positive accounting studies on three main grounds. First, opponents argue that the objective view of reality upon which positive-descriptive theories are founded is fallacious because accounting researchers bring their own perceptions and biases to bear on the phenomenon being investigated. However in defence, this criticism is a common feature in both positive and normative research. Second, critics report that the assumptions of self-interest and rational behaviour among actors in the firm are unrealistic. For example, altruistic and social factors rather than economic incentives may motivate managers to disclose information publicly in annual reports. Proponents (e.g., Watts, 1977; Demski, 1988; Watts & Zimmerman, 1978, 1986, 1990) nonetheless advocate that these alleged shortcomings should not detract from the general predictive power of positivist models of accounting behaviour because models can never be perfect representations of complex reality. A third criticism of positivist-descriptive studies commonly cited in the literature is that the research methods employed (e.g., with regard to variable definition and measurement) frequently produce ambiguous and counter-intuitive results. Therefore, inferences drawn from the results of this study may be limited by problems of model mis-specification and incorrect measurement of the variables used. However, as Christie (1990) notes, the increasing body of empirical studies reported in the positive accounting literature has led to improvements in variable definition and the measurement of proxies, which have produced more consistent findings and results supportive of theoretical

predictions.

Advocates of positive-descriptive theories such as Watts (1977) and Demski (1988), among others, have argued strongly that positive accounting research has made an important contribution to explaining (and predicting) corporate accounting and reporting practices. Furthermore, they contend that positivist-descriptive theories have been developed from well-established economics-based research which has proven its ability to withstand the “survival test” across several studies and continues to be popular among academics working in the accounting discipline. The extensive body of empirical research reported in the academic literature also provides a basis against which extensions to previous studies and/or new tests of theoretical predictions in relatively under researched environments (such as the insurance industry) can be carried out (Smith, 1986). In addition, proponents consider that positive-descriptive theories provide a useful basis for predicting events which could help practitioners to better gauge the likely effects of decisions such as the introduction of a new accounting method or particular form of financial reporting regulation. Indeed, such sentiments are shared by academicians working in the insurance discipline. For instance, Smith (1986, p. 710) remarks that “. . . I believe a line of academic inquiry [i.e., positive theory] which has proved quite productive in accounting could yield similarly interesting results if applied in insurance . . .”. Since positive-descriptive theories seek to explain (and predict) different accounting phenomena observed among companies, they are deemed to be particularly appropriate with regard to achieving the stated aim of this research project. That is, to explain differences in voluntary disclosure among New Zealand-based life insurance companies. Consequently, it is considered that positive-descriptive theories and hypotheses not only offer an intuitively plausible basis for the conduct of empirical analysis, but they are also likely to provide a framework which is particularly apt for this research project. The application of positive-descriptive theories to the analysis of the reporting practices of life insurance companies is critically reviewed in the next section.

Table 3.1**A Summary of Positivist-Descriptive Theories and Hypotheses Used in Accounting and Finance Studies**

This table summarises the important features of the positive-descriptive theories and hypotheses (including their major assumptions) which have been used in prior studies.

Theory	Proponents (Example)	Main Stimuli	Key Assumptions	Rationale for Disclosure
<ul style="list-style-type: none"> Contingency Theory 	<ul style="list-style-type: none"> Thomas (1986, 1990) 	<ul style="list-style-type: none"> Environment (e.g., regulation) Organisational factors (e.g., structure) 	<ul style="list-style-type: none"> Managerial perceptions determine behaviour Direct cause-effect relationships exist 	<ul style="list-style-type: none"> To respond to environmental/organisational needs
<ul style="list-style-type: none"> Positive Accounting Hypotheses: - bonus plan - debt-equity - political-cost 	<ul style="list-style-type: none"> Healy (1985) Press & Weintrop (1990) Cahan (1992, 1993) 	<ul style="list-style-type: none"> Compensation contracts Debt contracts Government agencies 	<ul style="list-style-type: none"> Opportunism Wealth maximisation GAAP rules incomplete 	<ul style="list-style-type: none"> To maximise compensation To avoid debt restrictions To avert political interference
<ul style="list-style-type: none"> Signalling & Efficient Markets Hypotheses 	<ul style="list-style-type: none"> Dye (1985) 	<ul style="list-style-type: none"> Proprietary costs Market benefits 	<ul style="list-style-type: none"> Efficient markets Perfect information Rational behaviour 	<ul style="list-style-type: none"> To minimise proprietary costs To maximise returns to shareholders
<ul style="list-style-type: none"> Costly Contracting Theory 	<ul style="list-style-type: none"> Chow & Wong-Boren (1987) 	<ul style="list-style-type: none"> Contract monitoring Incentive realignment 	<ul style="list-style-type: none"> Costly contracting Self-motivation Wealth maximisation 	<ul style="list-style-type: none"> To alleviate costly contracting To prevent wealth transfers
<ul style="list-style-type: none"> Insurance Industry Hypotheses: - regulator-monitor - managerial - discretion 	<ul style="list-style-type: none"> Demsetz & Lehn (1985) Mayers & Smith (1981) 	<ul style="list-style-type: none"> Regulation Organisational factors (e.g., organisational form) 	<ul style="list-style-type: none"> Regulator an efficient monitor of the interests of customers & owners As per costly contracting 	<ul style="list-style-type: none"> To respond to regulatory requirements As per costly contracting

Source: Various (see second column of table)

3.3. ANALYSIS OF POSITIVE-DESCRIPTIVE THEORIES

Table 3.1 summaries the main positivist-descriptive theories and hypotheses employed in the academic accounting literature, together with their important characteristics. The extent to which each of the theories and hypotheses provides a tenable framework for the study of voluntary disclosure practice in the life insurance industry is examined below.

3.3.1. Contingency theory

Contingency theory originates from the organisational science literature and is predicated largely on the notion that accounting and financial reporting practices are determined by the environment within which an entity exists (Emmanuel, Otley & Merchant, 1990). Several studies have employed contingency theory as a framework for analysing accounting and financial reporting practices between countries (e.g., Frank, 1979; Nair & Frank, 1980; Schweikart, 1985; Cooke & Wallace, 1990). Some researchers (e.g., Thomas, 1986, 1991) also assert that contingency theory has intuitive appeal for examining accounting and disclosure choice decisions in nation-specific contexts. Prior studies tend to examine corporate reporting in the context of contingent societal-environmental factors such as the state of economy or nature of the political system, as well as organisational-specific variables such as firm size and ownership structure.

The influences of society and environment on corporate accounting and reporting practices are widely acknowledged by proponents of contingency theory. For instance, Thomas (1991, p. 42) argues that “. . . the theoretical framework underlying research in comparative international accounting is essentially a contingency perspective . . . [with] an implicit underlying theory that reporting practices of each country are contingent on certain societal variables . . .”. Contingency theory postulates that environmental variables such as the extent of market competition and industry regulation, the nature of the legal structure, and

level of economic development, directly affect organisational activities such as disclosure decisions. For instance, Gordon & Miller (1976) consider that management perceptions of environmental uncertainty have a major impact on the nature and form of accounting information produced by the organisation. They argue that in dynamic and hostile environments (e.g., highly competitive markets), managers in companies will voluntarily disclose non-financial as well as financial information in order to help them, and other users (such as investors) to better evaluate business performance.

Gray (1988) considers that the extent to which legislation and regulation encourage openness (or secrecy) and uniformity (or flexibility) in corporate reporting are important institutional traits affecting disclosure decisions in firms. For example, life insurance companies are reported to frequently operate in highly competitive market sectors which in some cases (such as the UK) are made more unstable by frequently changing regulation (Msheliza, 1990). Indeed, Horton & Macve (1992) suggest that the assumptions and methods used to value long-term liabilities in life insurance companies could be determined by how actuaries perceive future environmental developments such as prospective changes in taxation legislation. Thus, contingency theory could be usefully employed in an exploratory analysis of the likely implications of environment changes (e.g., new regulations) on organisational behaviour.

Contingency theory-based studies acknowledge explicitly the importance of organisational variables such as company size, leverage and ownership structure, in explaining differences in corporate accounting and reporting practices. In particular, proponents of contingency theory (e.g., Jones, 1985; Thomas, 1986) suggest that company size is likely to be an important factor which determines the nature and amount of accounting information produced and disclosed by an entity. Accounting systems could also be influenced by organisational structure. For instance, Ginzberg (1980) argues that because bureaucracies tend to develop in relatively stable environments, their accounting systems are likely to be incapable of responding rapidly to changing institutional conditions. Indeed, from his observations of the

Australian life insurance industry, Wise (1991) suggests that companies often have difficulty in responding to changes in internal and external reporting requirements because technologically their accounting systems cannot adjust quickly enough to cope with changes in market conditions.

Despite its conceptual appeal, contingency theory has been subject to extensive criticism in the academic literature (e.g., Child, 1975; Waterhouse & Tiessen, 1978; Otley, 1980; Shoonhoven, 1981). It is considered that there are two main shortcomings that weaken substantially the case for employing contingency theory in this study. First, as Waterhouse & Tiessen (1978) and Hopper & Powell (1985) point out, contingency theory is not based on a cogent and clearly defined set of propositions which are easy to measure and test empirically. For example, Waterhouse & Tiessen (1978, p. 66) state that in prior empirical tests of contingency theory “ . . . technology and environment have often varied and the distinction between the two has not been clearly established.” Therefore, contingency theory appears to lack strong explanatory and predictive qualities which would enable it to offer fruitful insights into the determinants of voluntary disclosure in life insurance companies. Second, it is often cited that contingency studies suffer from limited empirical proof. For example, Tiessen & Waterhouse (1983, p. 251) report that the “. . . apparent absence of substantial amounts of empirical research based on contingency theory as presently formulated has not provided a sufficiently rich base from which to conduct research . . .”. These limitations thus suggest that contingency theory does not offer a viable framework within which the empirical results of this study can be compared and evaluated against those of other contingency theory-based studies.

3.3.2. Signalling and efficient-markets hypotheses

Morris (1984) reports that the signalling and efficient-markets hypotheses have certain similarities with other positive-descriptive theories, notably costly contracting theory (e.g., with regard to the assumptions of rational and self-seeking behaviour by

interest groups). Morris (1984, p. 52) adds that “. . . the predictions of accounting [and disclosure] choices can at least be improved by adding together the predictions of [other positive-descriptive] theories”. However, he concedes that the positive-descriptive theories have generally been used in isolation from each other rather than fully integrated in accounting-based research.

The signalling hypothesis is based on the premise that managers in firms have market-based incentives to voluntarily disclose “good news” information (e.g., the successful launch of a new product) to the capital markets. These incentives include the desire to increase the traded value of the firm (Fishman & Hagerty, 1989), reduce the market cost of capital (Diamond & Verrechia, 1991), or enhance the corporate image in the public domain (Firth, 1979). Dye (1985) and Craswell & Taylor (1992) assert that companies are likely to disclose more information to prospective investors if the perceived private benefits to them are likely to outweigh the proprietary costs which could be incurred if disclosure gave a competitor a market advantage or prompted unwelcome (and hence costly) government intervention.

The signalling literature also suggests that the owners and managers of publicly-listed companies are likely to refrain from disclosing “bad news” (e.g., worse than expected earnings figures) to the markets because such action could reduce share prices (Verrechia, 1983). However, in the absence of disclosure, the signalling hypothesis postulates that investors will bid downwards the price they are willing to pay for the shares of the firm because they equate non-disclosure with “bad news”. Therefore, owners and managers will be motivated to incur disclosure costs and voluntarily release information in the annual report unless results are so poor as to have an adverse effect on share prices.

The relationship between information disclosure in the corporate annual report and the workings of efficient capital markets has been the subject of several studies cited in the academic accounting and finance literatures (e.g., Diamond, 1985; Meek & Gray, 1989; Saudagaran & Biddle, 1992). Foster (1986) also considers that capital

markets exert an important influence on the level of voluntary disclosure in the annual reports of companies. He argues that disclosure helps companies to compete effectively with each other in capital markets on the types of securities offered and their expected returns. In other words, voluntary disclosure helps to remove uncertainty regarding the “investment quality” of the firm, thereby reducing its market cost of capital. In his study, Diamond (1985) further demonstrated that by increasing public disclosure, firms can alleviate the information asymmetry problem between shareholders, prospective investors and managers. This helps to reduce share price speculation, improve risk-sharing between shareholders and bondholders, and contribute to the efficient operation of capital markets. In addition, Fishman & Hagerty (1989) showed that the extent to which companies rely on the market supply of capital could be an important determinant of the nature and amount of information they disclose publicly in their annual reports. Their US-based study therefore concluded that the market-listing status of firms (e.g., domestic versus multinational stock exchange listing) could help to explain differences observed in corporate disclosure practices.

However, as the New Zealand life insurance industry is greatly influenced by the activities of non-listed (mainly mutual) companies, the application of the signalling hypothesis and the associated efficient-markets literature is deemed to be inappropriate to this study. Some researchers (e.g., Skinner, 1994) also contest the view proposed in the signalling hypothesis that firms will disclose only “good news” and withhold “bad news”. For instance, Skinner (1994) argues that the owners and managers of firms could be motivated to disclose “bad news” in order to avoid litigation from users who use annual reports for investment and other business decisions. Moreover, much empirical work has tended to test predicted relationships between share prices and the use of earnings numbers rather than investigate the motives for observed voluntary disclosure practices which is the stated aim of this study. Watts (1977) also argues that because an extensive body of evidence suggests that information disclosed by companies does not appear to influence significantly the investment behaviour of firms, capital markets-based research does not have the same

potential for explaining the nature of corporate financial statements compared with alternative positive-descriptive approaches such as costly contracting theory.

3.3.3. Positive accounting hypotheses

This sub-section examines the appropriateness of positive accounting hypotheses for analysing and explaining voluntary disclosure decisions of companies operating in insurance markets.

Watts & Zimmerman (1986, 1990) discuss three positive accounting-based hypotheses which have been used in many of the accounting choice studies reported in the academic literature. These three hypotheses are: the *bonus plan hypothesis*; the *debt-equity hypothesis*; and the *political-cost hypothesis*. Each of these three hypotheses is predicated on the neo-classical economics-based notion that the selection of accounting methods in the firm is the manifestation of self-motivated wealth maximising behaviour by managers (Watts & Zimmerman, 1986, 1990; Watts, 1992). The testable propositions derived from the three positive accounting hypotheses could also have plausible implications for explaining the disclosure practices of companies. For example, managers in politically visible organisations (e.g., large firms) could be motivated to increase the amount of public disclosure in the annual report (e.g., with regard to corporate sponsorship of community activities), as well as employ earnings-reducing accounting techniques (e.g., manipulation of bad debt provisions) in order to avoid costly intervention from government agencies. The particular features of the three positive accounting hypotheses, and their implications for explaining the voluntary disclosure practices of life insurance companies are thus examined further below.

(a) *The bonus plan hypothesis*

The *bonus plan hypothesis* predicts that where the level of executive compensation is dependent upon reported financial performance, and the firm's compensation

contracts do not adjust bonuses for changes in accounting policy, there are incentives for managers to employ discretionary accruals methods (e.g., the deferral of tax expenses) in order to maximise returns from their bonus plans (Healy, 1985). Watts & Zimmerman (1986) suggest that managers will follow accounting procedures that shift reported earnings from future to current periods where actual earnings falls between the upper and lower bounds set out in the terms and conditions of the bonus scheme. When reported earnings are above the upper bounds of the bonus scheme, the *bonus plan hypothesis* predicts that managers are likely to employ accounting methods which reduce reported earnings since they will lose any bonus on the earnings in excess of the upper bound set by the bonus plan. Conversely, if earnings are below the lower bound, managers have incentive to reduce reported earnings (i.e., *take a big bath*) and thereby, defer reporting earned income to some future period. Since high disclosure (e.g., with regard to product performance forecasts) could stimulate sales growth, increase annual earnings and enhance pay-outs from bonus schemes, managers could also be motivated to manipulate disclosure policy choices as well as accounting methods in order to maximise their bonus returns.

Studies from the US insurance industry (e.g., Mayers & Smith, 1992) indicate that executive compensation schemes, including bonus plans and share options, may be linked to the annual reported surplus, particularly in stock insurance companies. Arguably, this gives executives incentive to select discretionary accruals techniques which maximise the number and value of shares assigned to them under the bonus plan. However, in New Zealand-based companies, bonus plans are reported to be rarely found in executive compensation packages (e.g., Wong, 1988)¹¹. Thus, there appears to be little scope to test empirically the *bonus plan hypothesis* with regard to voluntary disclosure by New Zealand's life insurance companies.

¹¹ Field research carried out during the course of this study confirmed that Wong's (1988) observation of the New Zealand corporate sector also applies to the life insurance industry.

(b) The debt-equity hypothesis

The *debt-equity hypothesis* postulates that accounting decisions which affect corporate leverage such as the choice of whether to treat loan interest as an expense or as a capitalised item, are influenced by the desire of shareholders and management to optimise returns from debt contracts (Press & Weintrop, 1990). Debt contracts tend to be based on the accounting numbers disclosed in financial statements, and bondholders assume that disclosed items are treated in accordance with GAAP (Watts, 1992). Duke & Hunt (1990), Press & Weintrop (1990), among others, predict that as a firm moves closer to the leverage ratio prescribed in the debt covenant, the greater the incentive for managers to employ accounting techniques which move reported earnings from future to current periods. This is because the cost of defaulting on a loan agreement (e.g., costs of renegotiation or receivership) could be prohibitively high for shareholders and their managers. The *debt-equity hypothesis* could be used to test whether managers in firms which are close to debt constraints publicly disclose high levels of information in their annual reports in order to falsely present a favourable financial position and thus avoid close scrutiny by bondholders.

Miles & Gubbay (1987), however, assert that unlike most other companies, life insurance companies are not normally substantial borrowers of long-term debt finance. They point out that in the life insurance industry, policyholders (as suppliers of fixed-claim capital) effectively represent the long-term creditors of the firm. This view is shared by Mayers & Smith (1988, p. 356) who cite that policyholders “ . . . face incentive contracting problems that are analogous to those of lenders in credit markets . . . ”. Life insurance policies are also not issued in the same manner as conventional company loans. For example, Blair & Ramsay (1992, p. 16) state that “ . . . while a group of debentures is usually issued at the same time and in the same units, life policies are issued continuously and can carry a variety of terms (e.g., as to the form of premium payments). ” Moreover, the capital resources of life insurance companies (particularly mutuals) comprise almost entirely of cash reserves built-up from premiums and investment income received over long periods of time. For these

reasons, the application of the *debt-equity hypothesis* is likely to be inappropriate for examining the determinants of voluntary disclosure by life insurance companies.

(c) The political-cost hypothesis

Watts & Zimmerman (1986), Cahan (1992, 1993), and others, argue that as large companies tend to have high political visibility, they are more likely than small companies to employ earnings-decreasing techniques to avoid potential wealth transfers (e.g., higher taxation). The *political-cost hypothesis* thus predicts that the larger the firm, the more likely managers are to select accounting procedures that defer reported earnings from current to future periods in order to avoid unfavourable political exposure. It is possible that managers in life insurance companies could also seek to defer current earnings to future periods to avoid costly government intervention. They could achieve this objective by the use of a variety of accounting and actuarial measures such as the use of actuarial valuation techniques which understate assets and overstate liabilities/reserves, or the application of discretionary accruals methods such as a change to depreciation and deferred taxation policy. In addition to employing accounting techniques, Zimmerman (1983), Craswell & Taylor (1992), McKinnon & Dalimunthe (1993), among others, contend that managers in politically visible firms could be motivated to disclose a large amount of information in their annual reports in order to circumvent scrutiny by government agencies. Therefore, the *political-cost hypothesis* could be used to examine the disclosure practices of life insurance companies.

Despite the prospects of the *political-cost hypothesis* as a framework for empirical accounting and corporate reporting research, only Lamm-Tennant & Rollins (1994) have tested that hypothesis in an insurance market using 1981-1987 data drawn from 70 US-based life and property-liability insurers. However, this study was only a limited empirical test of the *political-cost hypothesis* and produced mixed empirical results. Nonetheless, other studies have demonstrated that insurance companies are sensitive to the threat of increased political intervention and will accordingly modify

their accounting (or actuarial) procedures. For instance, evidence gathered by Petroni (1992) from the US property-casualty insurance industry supports the proposition that managers in financially weak companies could purposefully understate claims loss reserves in order to present a more favourable financial position and, thereby reduce the risk (and costs) of increased attention from industry regulators. Additionally, Horton & Macve (1992) report that in recent years, many managers in UK insurance companies believe that additional voluntary disclosure of information could help to obviate the risk of additional regulation from the European Community (EC).

One major problem with early empirical tests of the *political-cost hypothesis* was the weak theoretical underpinning for firm size as a construct for political visibility. For instance, Ball & Foster (1982) point out that firm size could proxy for factors other than political costs (such as competitive advantage and information production costs), and that this deficiency could weaken substantially the empirical support given to the *political-cost hypothesis*. More recently, some researchers (e.g., Cahan, 1992, 1993) have also questioned whether the earnings reported by companies actually influences political decision-making in the manner predicted by the *political-cost hypothesis*. Because of the problems of variable definition and the absence of a general body of theory specifying the linkage between information disclosure and choice of political decisions, particularly in insurance markets, the *political-cost hypothesis* is not considered to be a suitable framework for this study.

In summary, positive accounting hypotheses have the potential to be applied usefully to disclosure studies (Craswell & Taylor, 1992), despite the fact that the majority of studies have examined accounting treatment issues rather than voluntary disclosure decisions. However, it is considered that the unique features of the life insurance industry (e.g., the absence of equity capital in the mutual form), the absence of prior insurance industry-based research, and difficulties regarding the derivation of unambiguous proxies reduces the scope to which positive accounting hypotheses could be used to examine the voluntary disclosure decisions of New Zealand-based life insurance companies. Therefore, the prospects of costly contracting-based

frameworks for examining the incentives for voluntary disclosure decisions by insurance companies are examined below.

3.3.4. Costly contracting theory

Costly contracting theory is part of the genre of positive-descriptive literature which views the modern corporation as a “nexus of contracts” and postulates that corporate reporting enables principals (i.e., owners) to monitor agents' (i.e., managers') compliance with contractual obligations. That is, costly contracting theory reflects the traditional stewardship role of accounting information. Costly contracting theory embraces two important and related strands of the new institutional economics literature, namely classical agency theory (e.g., Jensen & Meckling, 1976) and transaction cost economics (e.g., Williamson, 1981, 1985, 1988). Although both strands adopt a contractarian framework, they differ as to their focus of analysis. For example, agency theory assumes perfectly rational behaviour of the contracting parties, while transaction cost economics assumes that actors' ability to act rationally is limited by information asymmetry and incomplete contracting (i.e., the so-called *bounded rationality* problem) (Williamson, 1988). Of these two approaches, agency theory has been the most extensively employed in the accounting literature to explain differences in corporate disclosure practices (e.g., Leftwich *et al.*, 1981; Watts & Zimmerman, 1981; Chow & Wong-Boren, 1987; Belkaoui & Karpik, 1989).

In their seminal study, Jensen & Meckling (1976) used classical agency theory to argue that potential transfers of wealth from bondholders to shareholders (and managers, if for example share option schemes are in place) can take place when the incidence of outside debt in the firm increases¹². To protect their interests, bondholders are predicted to “price protect” against aberrant managerial behaviour

¹² As mentioned earlier, policyholders in insurance companies are akin to bondholders in other industries (see Miles & Gubbay, 1987; Blair & Ramsay, 1992; Datta & Doherty, 1990; Mayers & Smith, 1988).

ex-post by charging the borrower a higher rate of interest than would be the case if costless contracting were possible. According to Jensen & Meckling (1976), managers have incentives to disclose information through media such as the annual report in order to reduce owners' contracting costs (e.g., interest on loans) and thereby enhance their job prospects within the firm. Drawing a framework from Jensen & Meckling (1976), Watts (1977) postulates that in an unregulated environment, corporate financial statements could help to reduce costly contracting between bondholders, shareholders and managers in the firm. Watts (1977) also contends that because managers are motivated to protect their interests (e.g., job security), they will disclose more information voluntarily to enhance the monitoring capabilities of external suppliers of capital the higher the leverage of the firm. Such action reduces the information acquisition costs to external suppliers of capital, thereby increasing the number of prospective investors and lowering the firm's market cost of capital.

Other scholars such as Barnea *et al.* (1985), Lang & Lundholm (1993), among others, suggest that bondholders and prospective investors could demand greater public disclosure in order to mitigate the information asymmetry problem between themselves and managers in the firm. Such reasoning implies that increased voluntary disclosure in the annual report helps to mitigate the *adverse selection* problem faced by suppliers of capital *ex-ante* concerning the "riskiness" of their investment in the firm. Additionally, an increase in public disclosure could alleviate the *moral hazard* problem which occurs when managers are motivated to mis-represent private information on the performance of the firm *ex-post* because their actions are not directly observable by the owners and outside creditors.

Shareholders could also have incentives to disclose information in the annual corporate report in order to ensure an uninterrupted supply of debt capital and enable them to ascertain the market value of their residual claims (Leland & Pyle, 1977; Barnea *et al.*, 1985). In other words, information disclosure helps the market to ascertain performance of the firm and thereby enables shareholders to mitigate the

contracting costs (e.g., costs of bankruptcy) associated with market imperfections such as information asymmetry. Furthermore, as Barnea *et al.* (1985, p. 142) report, greater public disclosure through the annual report could “. . . also increase the effectiveness of capital and labour markets in disciplining management to make decisions that maximise total firm value.”

Contracting (agency) theory further suggests that contracting costs will increase as a result of a growth in firm size and a separation of ownership and control (Jensen & Meckling, 1976). Therefore, in large firms, owners are predicted to demand more information disclosure in the annual report so that they can more effectively monitor managers and ensure that their economic interests are optimised (e.g., by limiting the opportunities for aberrant behaviour by managers due to information asymmetry) (Lang & Lundholm, 1993). Other endogenous incentives for shareholders to disclose more public information in large firms compared with small firms include the reduction of transaction costs (e.g., concerning product quality) (King, Pownall & Waymire, 1990), a lower market cost of capital (Diamond, 1985; Diamond & Verrecchia, 1991; Botosan, 1995), and the avoidance of litigation risks associated with non-disclosure (Skinner, 1994). Similarly, managers in large firms could also disclose information voluntarily to the public through the annual report so that they can demonstrate that they are acting in the best interests of the owners, and thereby promote their promotional prospects in the internal and external labour markets (Fama, 1980).

The notion relating observed variations in corporate reporting to the information asymmetry problem emanating from the separation of ownership from control in the firm has been embraced in a large and growing number of contracting (agency) theory-based disclosure studies. Broadly, these studies follow one of two main approaches. First, there are studies that have used contracting theory to analyse the overall level of disclosure made by companies (e.g., Chow & Wong-Boren, 1987; Hossain, Tan & Adams, 1994; Hossain, *et al.*, 1995; Hossain & Adams, 1995). Second, there are those studies that seek to explain the incentives for the disclosure

of specific items, such as segmental information (e.g., Bradbury, 1992; McKinnon & Dalimunthe, 1993; Mitchell, Chua & Loh, 1995), and interim financial performance (e.g., Leftwich *et al.*, 1981; Bradbury, 1991). However, Gibbins *et al.* (1992) report that contracting (agency) theory-based disclosure studies have frequently produced conflicting, inconclusive and counter-intuitive results. For example, Bradbury (1992) cites empirical evidence of a relationship between the reporting of segmental information among New Zealand companies, whereas McKinnon & Dalimunthe (1993) found no such relationship among Australian companies. In addition, contrary to what was hypothesised, Leftwich *et al.* (1981) found that the presence of non-executive directors in the firm complemented rather than substituted for the disclosure of interim results ¹³.

Companies operating in insurance markets adopt one of two major types of ownership structure - the stock and the mutual form. Stock companies are owned by shareholders, whereas mutuals have no equity capital and are owned nominally by their customers, the policyholders (Cummins & Weiss, 1991). Mayers & Smith (1981) also refer to a third organisational form in insurance markets - the direct underwriters (Lloyds Associations) where managers (the underwriters) are also the owners. In such circumstances, Mayers & Smith (1981, p. 409) report that “. . . there is no clear-cut principal-agent distinction . . . [so that] the distinction between monitoring and bonding costs is . . . lost.” In their 1988 paper, Mayers & Smith also discuss a fourth organisational form in insurance markets - the reciprocals (or friendly

¹³ Watts & Zimmerman (1990) attribute the mixed empirical evidence to the various sample selection methods and data sets employed by researchers in different institutional settings rather than to fundamental deficiencies in contracting (agency) theory. Christie (1990) reports that firm size, leverage, risk, management compensation and dividend policy are overwhelmingly statistically significant variables and consistent with theory in costly contracting studies reported in the US academic accounting literature. Furthermore, recent disclosure studies carried out both in developed economies outside of the US (e.g., McKinnon & Dalimunthe (1993) and Mitchell *et al.* (1995) in Australia; Bradbury (1991, 1992) in New Zealand), and in developing countries (e.g., Hossain *et al.*, 1994 in Malaysia) indicate that predictions drawn from contracting (agency) theory stand up well to empirical tests carried out in different environments.

societies). These are unincorporated bodies providing cooperative insurance cover on a basis similar to that of mutuals. However, compared with mutuals they tend to be much smaller and more specialised organisations governed by separate legislation from that which applies to the major insurance carriers. As mutuals and stock companies are by far the most significant carriers of life insurance business in New Zealand, it is these forms of organisation which are the focus of this study.

The life insurance industry is thus unique in that the fixed claims of “bondholders” are held by the policyholders and in mutuals, the policyholders also bear the residual ownership rights as both creditors and owners of the firm. However, for policyholders to optimise their long-term contracting interests as customers, owners and suppliers of capital is problematical and different from the shorter term incentives of shareholders in stock companies which are to maximise firm value (Pasegian, 1985). Therefore, the special contracting incentive problems in life insurance companies of different organisational form suggests that an industry-specific theoretical framework would be most appropriate for examining the determinants of voluntary disclosure in New Zealand's life insurance industry. Indeed, as Watts & Zimmerman (1990, p. 152) state, such an approach “. . . while requiring significant amounts of industry-specific knowledge by the researcher, [would] have the potential of generating useful insights about the magnitude of contracting costs . . . [and thus corporate disclosure behaviour] . . .”.

3.3.5. Insurance industry hypotheses

The search of the academic literature identified two hypotheses which appear to have the potential for explaining disclosure decisions in the life insurance industry. These hypotheses are the *regulator-monitor hypothesis* (Demsetz & Lehn, 1985) and the *managerial-discretion hypothesis* (Mayers & Smith, 1981, 1982a, 1986, 1988, 1994).

(a) *The regulator-monitor hypothesis*

Watts (1977) predicts that corporate reporting practices are likely to differ between regulated and unregulated environments because in regulated regimes, there will be more mandatory reporting requirements, closer external monitoring and less scope for firms to follow discretionary accounting and disclosure practices. Demsetz & Lehn (1985) also stress the importance of the regulatory environment in influencing the business activities of firms. They argue that characteristics such as firm size and organisational form, are less important determinants of activity choice behaviour in firms given the presence of regulators who act as effective surrogate monitors of managers' activities.

Empirical evidence supporting the *regulator-monitor hypothesis* was gathered by Boose (1990) from an eighteen-year (1966-1984) longitudinal study of 44 US-based life insurance companies. Boose's study supports Demsetz & Lehn's (1985) proposition that stringent external regulation has a significant impact on reported financial performance by highlighting systematic differences in expenses and investment earnings between life insurance companies operating in tightly regulated New York State compared with those in other less regulated states. She attributes this finding to the regulator's role as an effective surrogate for the monitoring activities of owners which helps owners of firms to reduce their costs of contracting. Therefore, the *regulator-monitor hypothesis* could be usefully applied in cross-boundary studies which focus on jurisdictions with different regulatory regimes such as a comparative study between Australia and New Zealand. However, in a nation-specific study such as that covered in this thesis, the *regulator-monitor hypothesis* is considered to be inappropriate. In addition, the amount of information voluntarily disclosed by New Zealand-based life insurance companies is unlikely to be associated with the monitoring activities of government agencies because as mentioned in chapter 2 (sections 2.2 and 2.4.5), the market is relatively unregulated by international standards.

(b) The managerial-discretion hypothesis

Researchers studying the behaviour of companies operating in insurance markets (e.g., Mayers & Smith, 1981, 1982a, 1986, 1988, 1994; Hansmann, 1985; Datta & Doherty, 1990) propose that the nature of contracting relations varies depending upon whether the entity is a mutual or a stock company. Such scholars argue that because there are different residual claims and incentive conflicts in mutuals and stock companies, different rules regarding managerial discretion over business decisions (such as disclosure) have evolved. In other words, the level of discretion afforded to managers by the owners is predicted to be a function of the characteristics of insurance firms such as their organisational form. From their observations of US insurance companies, Mayers & Smith (1981) first formulated such notions into a coherent and consistent set of propositions which they subsequently refer to as the *managerial-discretion hypothesis*¹⁴.

In essence, the *managerial-discretion hypothesis* postulates that mutuals have a more diffuse ownership-control structure than stock companies which means that policyholders are less able to efficiently monitor and control the contractual obligations of managers *ex-post*¹⁵. Because managers in mutuals are less closely monitored, they can take advantage of the *free-rider* problem (Hansmann, 1985; Blair & Ramsay, 1992) and the absence of a market for corporate control (Manne, 1965)

¹⁴ Although the propositions making up the *managerial-discretion hypotheses* derive from Mayers & Smith's (1981) original analysis, the label given to their hypothesis is formally assigned by them much later in Mayers & Smith (1988, p. 371).

¹⁵ As Rasmusen (1988) makes clear, stock companies can also be widely-held entities. But in these companies dissatisfied shareholders can sell their shares which can result in a more concentrated ownership-control structure (e.g., as a result of corporate takeover). The option of trading their residual claims does not exist to the same degree with policyholder-owners of mutuals. Thus, Rasmusen (1988) contends that it is the absence of the *threat* of concentrated control, rather than the absence of such control *per se* which makes the incentive conflict between policyholders and managers so acute in mutuals.

by imposing higher contracting costs on the owners of life insurance firms¹⁶. To mitigate costly contracting, policyholders are expected to protect their interests and control costly contracting by limiting managerial discretion over a range of policy choices which are likely to include accounting and disclosure decisions. The *managerial-discretion hypothesis* holds that contract-based restrictions (e.g., through by-laws and internal policies) limiting the activities of managers will be imposed by policyholders (or their actuarial representatives) *ex-ante*, while governance structures (e.g., non-executive directors) will be introduced to monitor compliance with contractual obligations *ex-post*. Fields & Tirtiroglu (1992, p. 40) contend that contracting theory-type frameworks such as the *managerial-discretion hypothesis* have “. . . tied many aspects of the [insurance] industry's diversity into a unified framework and has provided a common ground for analysis.” Moreover, as the *managerial-discretion hypothesis* is based on the notion that managerial discretion is determined in insurance firms rather than by exogenous forces such as industry regulation, it is also considered to be eminently suitable for an empirical study of the determinants of the different voluntary disclosure practices observed in New Zealand's relatively unregulated life insurance industry.

In summary, therefore, it is considered that the insights gained from linking managerial discretion to observed variations in decision-making in insurance companies of different firm-specific characteristics, such as organisational form and size, make the *managerial-discretion hypothesis* an intuitive framework for achieving the stated purpose of this study, namely to explain differences in voluntary disclosure by New Zealand life insurance companies.

¹⁶ In widely-held organisations (such as mutuals) individual owners may attempt to avoid bearing their share of the cost of controlling the activities of managers by *free-riding* on the monitoring expenditures of others. This situation arises when acting in self-interest, individual policyholders perceive that the economic cost of monitoring and controlling managers is greater than the benefit which they are likely to achieve from exercising such control (Blair & Ramsay, 1992).

3.5. CONCLUSION AND SUMMARY

This chapter has reviewed critically the extant positive-descriptive theories and hypotheses which have been put forward in the academic literature in order to explain the accounting and reporting practices of companies. Positive-descriptive theories and hypotheses are adjudged to be more compatible with the aim of explaining the determinants of voluntary disclosure in life insurance firms than alternative normative-positive approaches. Insurance industry researchers (e.g., Smith, 1986) have also acknowledged the virtues of positive-descriptive approaches for analysing and explaining activity decisions in insurance companies. Furthermore, a review of the academic literature suggests that theories and hypotheses which explicitly take cognisance of the unique contracting arrangements and business structures of the life insurance industry are particularly attractive as frameworks for empirical research.

One such framework which can be utilised to explain disclosure choice decisions in the life insurance industry is considered to be the *managerial-discretion hypothesis* (Mayers & Smith, 1981, 1982a, 1986, 1988, 1994). One of the attributes of the *managerial-discretion hypothesis* is that it accommodates both *ex-ante* contracting and *ex-post* monitoring rationale for voluntary information disclosure in the two major forms of organisation which operate in the life insurance industry - the mutual and stock form. The major constructs of the *managerial-discretion hypothesis* and their capacity for contributing insights into the determinants of voluntary information disclosure in the annual reports of life insurance companies are examined in more detail in chapter 4 of this thesis.

CHAPTER 4. HYPOTHESES DEVELOPMENT

4.1. INTRODUCTION

As chapters 1 and 2 make clear, the need for this study is underpinned by the disparate corporate accounting and disclosure practices identified by survey work carried out in international insurance markets. To explain the differences in voluntary disclosure exhibited by New Zealand-based life insurance companies reported by Adams (1994a), an appropriate theoretical framework has to be utilised in order to direct research enquiry and give meaning to the empirical results. A search of the academic literature carried out in chapter 3 identified the *managerial-discretion hypothesis* as an intuitively plausible framework which could be used to provide insights into the determinants of voluntary disclosure in the annual reports of life insurance companies, and so explain observed variations in actual reporting practice. This chapter thus examines the salient propositions of the *managerial-discretion hypothesis* (Mayers & Smith, 1981, 1982a, 1986, 1988, 1994) and puts forward eight hypotheses derived from this meta-hypothesis in order to facilitate empirical testing.

4.2. TOWARDS A THEORY OF CORPORATE DISCLOSURE

This section re-states briefly the key features of the *managerial-discretion hypothesis* and examines how constructs of that hypothesis relate to prior disclosure studies and how those elements can be used to explain voluntary disclosure by life insurance companies.

4.2.1. Preamble

Hambrick & Abrahamson (1995) contend that the concept of managerial discretion is theoretically important to researchers as it can provide insights into a wide range of organisational phenomena including differences in executive compensation, administrative intensity and functional behaviour. Such a view also underpins the

motivation for the use of the *managerial-discretion hypothesis* in this study.

The *managerial-discretion hypothesis* has its antecedents in the new institutional economics literature which encompasses positive-economics-based strands of the extant literature such as contracting theory and transaction cost economics. The hypothesis derives from a collection of propositions advanced in early work in the US insurance industry by Mayers & Smith (1981, 1982a) and forms an integral part of their generic positive theory of insurance. Since its original development, the *managerial-discretion hypothesis* has been used as a framework to explain various business activities observed in US insurance markets, including differences in executive compensation contracts (Mayers & Smith, 1992), the use of alternative distribution networks (Kim, Mayers & Smith, 1993), and variations in product-lines (Lamm-Tennant & Starks, 1993). The *managerial-discretion hypothesis* and associated aspects of the positive theory of insurance, have also been used to examine activity choice decisions in non-US jurisdictions such as the balance sheet structure of mutual and stock life insurance companies in New Zealand (Adams, 1995), and the voluntary disclosure practices of Australian life insurance companies promoting investment-linked policies (Klumpes, 1995).

A fundamental tenet of the *managerial-discretion hypothesis* is the notion that information asymmetry exists between managers, shareholders and policyholders in insurance companies, and that this situation results in incomplete (and hence costly) contracting. For instance, Mayers & Smith (1994, p. 640) state that “. . . generally, the more discretion managers are authorized to exercise, the greater the potential for the managers to operate in their own self-interest at the expense of the firm's other claimholders.” Two major incentive problems in the owner-manager relationship thus emerge from this situation. First, there is an *ex-ante* risk that managers could take non-optimal decisions (i.e., the *adverse selection* problem), and second, they could act opportunistically *ex-post* to fulfill self-interest objectives at the expense of owners' wealth (i.e., the *moral hazard* problem). The *managerial-discretion hypothesis* holds that such contracting problems and their solutions will vary between organisational

forms because the distribution and timing of financial claims, as well as internal contracting control structures, are different for policyholder-owners of mutuals compared with shareholders of stock companies (Mayers & Smith, 1981, 1982a; Fama & Jensen, 1983; 1985). For example, policyholders in mutuals are likely to demand private (actuarial) information concerning the value of their long-term insurance claims, whereas shareholders are likely to be more interested in how short-term financial performance of the firm affects the rate of return on their equity investment.

The *managerial-discretion hypothesis* also postulates that owners of insurance firms could vary the investment and production functions to reduce the costs of controlling managers. For instance, diffusely-held mutual companies could specialise in lines of insurance (e.g., life insurance) which require little managerial discretion (e.g., due to the existence of established mortality risk tables), whereas closely-held stock companies are likely to be observed in lines (e.g., property insurance) where managerial discretion is more important (Mayers & Smith, 1981, 1982a). One implication arising from this analysis is that discretion-limiting procedures in mutuals reduce the need for information disclosure through the annual report, while shareholders in stock companies are likely to demand more public disclosure in order to monitor, for example, the underwriting performance of managers. The linkages between the *managerial-discretion hypothesis* and prior disclosure research, particularly those studies which have utilised similar constructs such as organisational form, are further examined below.

4.2.2. Linkages with prior corporate disclosure research

Several scholars (e.g., Jensen & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1978, 1986; Leftwich *et al.*, 1981; Barnea *et al.*, 1985; Ball, 1989) propose that information disclosure in the annual report plays an important role in alleviating the problems of information asymmetry and incomplete contracting between owners, managers and others (e.g., customers) of the firm. For instance, Ball (1989, p. 24) states:

The contracting demands for disclosure extend to all parties contracting with the firm. . . . All actual and potential factor owners and consumers thus have a derived demand for information relevant to assessing their contract-cost investments in the firm. . . . While that demand is a function of the magnitude of the factor owner's or consumer's contracting-cost investment in the firm, it is positive for all contracting parties. Hence, firms voluntarily undertake "public" disclosure of information . . .

Coase (1937) was one of the first academicians to articulate that in the presence of costly contracting, various ownership-control structures, information production systems, and monitoring procedures will emerge to resolve incentive conflicts between different parties in firms. Like the *managerial-discretion hypothesis*, the Coasian analysis of the firm postulates that contracting solutions (e.g., information disclosure and monitoring) will vary across firms because costly contracting is predicted to be different in entities of different organisational form, capital structure, size, and so on. Indeed, the linkage between accounting and corporate reporting decisions and the organisational characteristics of firms has been explicitly recognised by scholars writing in the more recent academic literature. For example, Jensen (1983, p. 323) states that ". . . accounting is an integral part of the structure of every organization, and that accounting practice and organizational structure are related."

Watts & Zimmerman (1986, 1990) argue that much of the diversity of accounting and reporting practices exhibited by companies is due to contracting efficiency rather than managerial opportunism. Specifically, owners (and managers) are predicted to make disclosure decisions (or create an accepted set of accounting procedures) which mitigate costly contracting and maximise firm value *ex-ante*. Managers could be motivated to maximise shareholders' interests through voluntary disclosure either because their wealth is bound to that of shareholders by share-option or profit-share schemes, or they perceive that compliance with shareholders' interests enhances their job security and promotional prospects in the internal and external job markets (Fama, 1980).

Schipper (1981) asserts that one way to reduce contracting costs between owners and managers in firms is to disclose information regarding the investment and production decisions taken by management in the annual report. She opines that theoretically framed studies which account for the influence of the firm's investment-production opportunity sets and the structure of corporate ownership on the type and level of voluntary disclosure are therefore likely to offer intuitive insights into the motivation for actual reporting practices. Implicit in Schipper's (1981) reasoning is that the level of voluntary disclosure is an endogenous decision in firms which is influenced by explanatory variables such as organisational form and investment-mix. Indeed, some recent studies (e.g., Ruland, Tung and George, 1990; Dempsey, Hunt and Schroeder, 1993; Skinner, 1993) cite empirical evidence supporting the predicted relationship between voluntary disclosure decisions and corporate characteristics such as ownership-control structure and the investment opportunity set of firms.

The contention that variables, such as organisational form and the investment opportunity set, could be important determinants of disclosure policy in firms is also emphasised by Gibbins *et al.* (1992, p. 71) when they state that “. . . organization structure and positions matter in understanding and predicting disclosure activities . . .”, but they add (p. 78) that “. . . as yet [we have only a] crude understanding of the role that organizational structures play in disclosure . . .”. In addition, Gibbins *et al.* (1992) concur with Schipper's (1981) analysis that theoretical advances which incorporate constructs, such as organisational form and the investment-production opportunities of firms, are likely to make a positive contribution to the academic accounting literature by offering additional insights as to the determinants of variations in observed corporate reporting practices. As a result, the *managerial-discretion hypothesis* is considered to have intuitive appeal as a theoretical framework for the conduct of this study as it focuses on the determinants of activity decision-making in insurance firms. Specific hypotheses are thus formulated in the next section in order to facilitate empirical testing.

4.3. HYPOTHESES DEVELOPMENT

This section puts forward eight testable hypotheses derived from the *managerial-discretion hypothesis* concerning the linkage between the level of voluntary disclosure in the annual report and the characteristics of life insurance firms.

4.3.1. Organisational form

Policyholder-owners of mutuals could demand the public disclosure of selected items of information (e.g., on product development and bonus returns) for at least two main reasons. First, to encourage growth in annual premium income (thereby reducing their future market cost of capital) and second, to monitor the performance of the managers in functions such as investment, sales and marketing. Managers could also align themselves to policyholders' interests by voluntarily reporting such information in order to protect and promote their job prospects both inside and outside the firm (Fama, 1980). However, the principal contracting problem facing policyholder-owners in mutuals is to ensure that funds are sufficient to meet their long-term insurance claims (Mayers & Smith, 1981, 1982a). Therefore, to ensure that mutuals remain solvent in the long-term, policyholders are expected to exercise their ownership rights to demand privately selective information, such as mortality rates and business persistency statistics, which enables life insurance specialists - the actuaries - to better predict capital adequacy and determine appropriate levels of reserves¹⁷. In other words, policyholders are likely to employ actuaries to generate, disseminate and use actuarial information to mitigate the acute information asymmetry problem which some commentators (e.g., Fields, 1988) consider that they face in

¹⁷ In life insurance, actuaries provide an important custodial function for the interests of policyholders which is akin to a trusteeship (Sherris, 1987). Managers could bind themselves to policyholders' interests by voluntarily subjecting their systems to actuarial monitoring in an attempt to promote their own job security and rewards. Jones (1987) also notes that in complex transactions with high uncertainty and long duration (like life insurance), specialists (such as actuaries) are frequently used to facilitate the efficiency of the exchange process.

taking out long-term (and frequently complex) life insurance policies. The contention derived from the *managerial-discretion hypothesis* is that in mutuals, contracting measures (e.g., company by-laws and actuarial rules) are likely to prescribe that financial/statistical information is disseminated internally for private (mainly actuarial) consumption rather than disclosed publicly because it is more economically advantageous for the policyholder-owners.

The *managerial-discretion hypothesis* also implies that policyholder-owners in mutuals (or their actuarial representatives) are likely to introduce internal financial rules *ex-ante* restricting managerial discretion over the level of information which they disclose publicly in the annual report for other reasons of self-interest. For instance, without such restrictions over managerial activities, managers in mutuals could reduce accumulated life insurance funds by incurring non-trivial expenditure (e.g., verification and publication costs) in disclosing information (e.g., “good news” regarding short-term investment performance) in the annual report (and indeed through other media such as policy documents) which do not directly benefit policyholder-owners. Managers could be motivated to take such action to enhance their reputations for successful management and so increase the value of their human capital in the internal and external job markets. This reasoning therefore suggests that the limited discretion assigned by widely-held policyholder-owners to their managers is likely to be reflected in a lower amount of information voluntarily disclosed in the annual reports of mutuals. This is because private actuarial information helps policyholders (and actuaries) to better monitor long-term solvency, protect the value of long-term life insurance claims, and to more efficiently control the information asymmetry problem which arises in complex insurance transactions of long duration.

As with mutuals, stock life insurance companies are also likely to employ actuaries to use private solvency-based information to monitor and safeguard shareholders’ interests in the long-term financial condition of the entity. However, in contrast to the policyholder-owners of mutuals, the major contracting problem facing shareholders in stock companies is to maximise dividends and share prices in the short-term rather

than ensure long-term solvency (Datta & Doherty, 1990)¹⁸. To achieve this objective, managers in stock companies are predicted to be given greater discretion over voluntary disclosure in the annual report than their counterparts in mutuals, and that shareholders and prospective investors will use this information to monitor dividend pay-outs and fluctuations in firm value. Abrahamson & Park (1994) also contend that the disclosure of detailed information such as that exhibiting the performance of selected investment funds, will probably arise where residual claims are more closely-held (as in New Zealand-based stock life insurance companies) than in firms (like mutuals) with more widely dispersed ownership rights¹⁹. One plausible explanation for this view, is that major shareholders are likely to be more adept monitors of public disclosure and better placed to assess and verify the credibility of the items disclosed than minority shareholders.

Salamon & Dhaliwal (1980) also assert that publicly-listed stock companies are inclined to grant management more discretion to increase the level of information disclosed in the annual report than non-publicly-listed entities (such as mutuals) so that they can respond more efficiently to the information needs of both existing shareholders and prospective investors. That is, voluntary disclosure in the annual report enables shareholders and investors to distinguish between profitable and less profitable companies and thereby helps to alleviate the contracting costs (e.g., search and monitoring expenditures) associated with market imperfections such as information asymmetry. By mitigating information asymmetry, increased voluntary disclosure also enables stock companies to reduce their market cost of capital. Similarly, drawing a framework from transaction cost economics, Jones (1987) argues that when transactions are frequent (as in the case of share trading), buyers and sellers

¹⁸ Limited liability could also protect shareholders from the full economic effects of insolvency (Hoerger, Sloan & Hassan, 1990).

¹⁹ Thirteen out of 20 stock companies operating in the New Zealand life insurance industry in 1993 were subsidiaries owned by a single parent company resident overseas, while the remainder were not widely owned. However, as noted in chapter 1 of this thesis (section 1.5.1), subsidiaries were assumed to operate in a manner similar to that of the parent company reporting to its shareholders.

are likely to demand high levels of public disclosure in order to improve the efficiency and reduce the costs of exchange. Moreover, managers in stock companies could also have contracting incentives to publicly disclose more information voluntarily because their wealth could be inextricably bound to shareholders' interests through share option agreements or profit-share schemes (Forker, 1992). The import of the foregoing analysis is that there is a direct relationship between the level of managerial discretion which has evolved in life insurance companies of different organisational form and observed differences in the level of voluntary disclosure. Therefore, it is hypothesised that:

Hypothesis 1: Ceteris paribus, stock life insurance companies will have greater voluntary disclosure than mutuals.

4.3.2. Assets-in-place

Myers (1977) purports that the value of the modern corporation comprises two elements. The first element represents tangible assets (called assets-in-place), the market value of which are independent of the firm's future investment strategy. The second component represents growth options, the value of which depends on the performance of the firm's future discretionary investment. Myers's (1977) analysis suggests that contracting costs (e.g., monitoring expenditures) are likely to be lower when firms have more assets-in-place rather than growth options because the former are precommitted to particular business activities in the firm and require little managerial discretion. As a consequence, the level of information disclosed in the annual report is predicted to be inversely related to the value of assets-in-place and positively related to the value of growth options. Several cross-industry studies (e.g., Chow & Wong-Boren, 1981; Bradbury, 1992; Hossain *et al.*, 1995; Mitchell *et al.*, 1995) have tested empirically the relationship between voluntary disclosure and assets-in-place in several jurisdictions (including the US, Australia and New Zealand) with generally inconclusive results.

Alchian & Woodward (1988) predict that investment in assets-in-place is likely to occur in transactional arrangements (such as life insurance) where future performance is dependent upon the continued existence of the firm. Similarly, Klein & Leffler (1981) contend that investment in place-specific tangible assets (such as an imposing office block) communicates to consumers the producer's commitment to a particular product range. They consider that such signals - which Williamson (1983a, 1985) refers to as *credible commitments* - are especially valuable where for reasons of technical complexity and long duration, it is frequently difficult to measure and report information on product quality (like life insurance). Recourse to Klein, Crawford & Alchian (1978) also suggests that once policyholders' funds are invested in high value assets-in-place, such as salubrious owner-occupied premises, the company has an added incentive to uphold the value of its public reputation for prudent management because the salvage value of the asset is likely to fall if the company is liquidated. Moreover, policyholders can earn *appropriable quasi rents* on such assets because the " . . . costs of supplying credibility of future performance are repaid . . . by future sales on which a premium is earned . . . [which is] . . . merely a normal rate of return on the "reputation", or "brand name" capital created by the firm by these initial expenditures . . ." (Klein *et al.*, 1978, p. 306).

The analysis above could have implications for linking the asset structure of life insurance firms to the information needs of users such as policyholders, shareholders and managers. For instance, the *managerial-discretion hypothesis* implies that to ensure that funds are sufficient to meet their long-term fixed claims, policyholders are likely to instigate contractual mechanisms *ex-ante* (e.g., asset maintenance rules) restricting managerial discretion over investment decisions and directing free cash flows into firm-specific tangible assets (e.g., property and policy loans)²⁰. These measures could be more cost efficient for policyholders in controlling managerial opportunism in the investment function and reducing transactional uncertainty *ex-post*

²⁰ Jensen (1986, p. 323) defines free cash flows as cash amounts " . . . in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital."

than using publicly disclosed information to monitor compliance of managers with contractual obligations. On the other hand, in companies where the market value of ownership rights is dependent on the discounted value of future expected cash flows on growth opportunities rather than tangible assets-in-place, fixed and residual claimants are likely to demand more disclosure in the annual report. This will enable these claimants to better evaluate the financial performance of the firm and to determine its future economic prospects. Shapiro & Titman (1985) also consider that growth options provide poor collateral for fixed long-term claimants (like policyholders) because they are susceptible to lose their value when the firm is in financial distress. Therefore, public information disclosure could help fixed claimants to better assess the risk of financial loss prior to supplying capital to firms whose value is made up largely of growth options. Therefore, the second hypothesis is that:

Hypothesis 2: Ceteris paribus, life insurance companies with less assets-in-place than growth options in their investment opportunity set will have greater voluntary disclosure than life insurance companies with more assets-in-place than growth options in their investment opportunity set.

4.3.3. Product concentration

The *managerial-discretion hypothesis* predicts that product-line specialisation helps policyholders to cost-efficiently control managerial discretion *ex-ante* and reduces the need for monitoring using information disclosed in the annual report *ex-post* (Mayers & Smith, 1981, 1982a). Arguments linking public information disclosure to the production function of firms have been cited in other studies published in the academic literature. For instance, Nayyar & Kazanjian (1993) suggest that diversified organisations are more likely to disclose information publicly about their products than specialised companies. This is because such action enables diversified firms to alleviate the information asymmetry problem faced by consumers at the point of sale, notably with regard to the adequacy of product quality *ex-ante* and the monitoring of product performance *ex-post*. King *et al.* (1990) come to similar conclusions regarding

the role of information in reducing the uncertainty faced by customers in choosing between different types of product at the point-of-sale. Jones (1987) also reports that for efficient exchange to take place, buyers must be able to judge the performance value of the goods or services purchased (i.e., the so-called *performance ambiguity* problem). He reasons that product diversification exacerbates performance ambiguity which increases the demand from buyers for selected information disclosure (e.g., on product type and performance), so that they can economise on product-market transaction costs (e.g., information gathering and monitoring costs). Therefore, the disclosure of a high level of product information in the annual reports of life insurance companies could reduce the contracting costs of policyholders and shareholders, thereby enabling them to make more informed insurance and investment choices *ex-ante*, and better able to efficiently monitor managerial performance *ex-post* (e.g., with respect to meeting bonus forecasts). Others writing in the academic literature such as Gibbins *et al.* (1990, 1992) and Lev (1992), also stress the importance of product-market incentives for corporate disclosure. Therefore, it is hypothesised that:

Hypothesis 3: Ceteris paribus, life insurance companies with low product-line specialisation will have greater voluntary disclosure than life insurance companies with highly specialised lines of product.

4.3.4. Reinsurance

Mayers & Smith (1982b, 1987) contend that the corporate purchase of insurance from intermediated sources is an important means by which incentive conflicts between contracting constituents in firms can be resolved and contractual performance guaranteed. Essentially, reinsurance is a risk coverage option taken out by insurance companies to alleviate business risks and indemnify policyholders against claims' dilution (Cummins, 1988; Mayers & Smith, 1990). Berger, Cummins & Tennyson (1992) contend that reinsurance enables insurance companies to mitigate against inefficient risk-bearing and reduce the *ex-post* contracting costs of solvency monitoring and bankruptcy. Indeed, the important role played by financial

intermediaries (like reinsurers) in alleviating the information asymmetry problem between contracting parties in firms has been reported elsewhere in the academic literature (e.g., Main, 1982a, 1982b). In this regard, reinsurers could help to cost-efficiently monitor and control managerial activities in the direct insurer *ex-post*, for example, by imposing higher renewal reinsurance premiums if managers act in an aberrant manner. Therefore, the discretion-limiting effect of reinsurance could reduce the need for costly monitoring of policyholders' interests by disclosing a high level of information in the annual report. Furthermore, because the direct writer of life insurance has an incentive to protect its reputation (or *brand name*) for business stability, it is likely to supply private information on its asset and liability structure, plus its underwriting and investment performance and future business plans, to its reinsurer(s) prior to entering into the reinsurance agreement. Such screening of the direct insurance carrier by its reinsurers *ex-ante* reduces further the need for highly reinsured companies to incur the costs of making public disclosures *ex-post*. Therefore, to the extent that the writing of reinsurance contracts could substitute for costly monitoring through voluntary information disclosure, it is hypothesised that:

Hypothesis 4: Ceteris paribus, life insurance companies with low amounts of reinsurance will have greater voluntary disclosure than highly reinsured life insurance companies.

4.3.5. Localisation of operations

The *managerial-discretion hypothesis* postulates that by restricting the geographical span of business activities, policyholders can control the activities of managers more cost-efficiently than when such activities are spread across different markets (Mayers & Smith, 1981, 1982a, 1986). Likewise, Malone *et al.* (1993) assert that organisations with global operations are likely to disclose more information in their annual reports than entities operating in a single domicile because they can take advantage of scale economies in information production and hence, reduce the marginal costs of information dissemination. Therefore, there is likely to be a proclivity for the strategic business units (SBUs) of multinational entities to voluntarily disclose information in

the local market because the corporate group is required by statute to report that same information in other jurisdictions in which it operates. Williamson (1981) and Jones (1983), among others, also consider that because multinational corporations are likely to be highly divisionalised (M-form) structures, information disclosure enables corporate head office to monitor more efficiently the activities of managers in its SBUs, and so economise on transaction costs inside the firm. From their observations of the US insurance industry, Mayers & Smith (1981, 1982a, 1986, 1988, 1994) contend that geographical concentration (which could also be closely associated with bureaucratic (or U-form) structures) enables policyholders to better control managerial discretion and economise on information gathering and the monitoring of managerial activities. This analysis therefore implies that:

Hypothesis 5: Ceteris paribus, multinational life insurance companies will have greater voluntary disclosure than life insurance companies which operate in a single market.

4.3.6. Non-executive directors

The important governance role played by non-executive directors in companies is documented extensively in the academic literature (Fama & Jensen, 1983; Williamson, 1981, 1983a, 1983b, 1985; Mayers & Smith, 1992; Abrahamson & Park, 1994). Mayers & Smith (1992), for example, contend that in insurance companies, internal monitoring is likely to be stronger in entities where the board of directors is dominated by outsiders. Their reasoning is that unaffiliated directors will be motivated to act impartially in order to protect and promote their reputations as credible monitors of policyholders' interests, thereby increasing the market value of their human capital. Fama & Jensen (1983, p. 315) share this view when they state that non-executive directors " . . . have incentives to develop reputations as experts in decision control . . . The value of their human capital depends primarily on their performance as internal decision managers . . .". Leftwich *et al.* (1981) and Malone *et al.* (1993), among others, reason that since disclosure policy reflects the monitoring requirements placed on managers by owners of the firm, the level of information

disclosed by an entity in its annual report is expected to decline as the number of non-executive directors appointed to the board increases. In other words, the private monitoring of business activities by non-executive directors is deemed to be a cost-efficient substitute for public information disclosure in the annual report (Malone *et al.*, 1993). Williamson (1981) also argues that cost-efficient internal monitoring by non-executive directors helps to reduce monitoring costs in complex transactions of a long duration and uncertain performance (such as life insurance). Therefore, the sixth hypothesis is that:

Hypothesis 6: Ceteris paribus, life insurance companies with less non-executive directors will have greater voluntary disclosure than life insurance companies with more non-executive directors.

4.3.7. Firm size

Firm size is an important and widely employed construct in much of the academic accounting literature, despite criticisms that it could proxy for many different and competing firm-specific effects such as competitive advantage and economies of scale in information production (Ball & Foster, 1982). However, from their research in US insurance markets, Mayers & Smith (1992, 1994) provide theoretical motivation for incorporating the firm size variable into their analysis of activity choice decisions in insurance firms. For instance, the *managerial-discretion hypothesis* holds that policyholders could attempt to control corporate growth because restricting firm size allows them to economise on internal contracting costs (e.g., information gathering and monitoring expenditures), and thereby enables them to control more effectively managerial discretion over business activities.

Several prior disclosure studies (e.g., Chow & Wong-Boren, 1987; Bradbury, 1991; 1992; Malone *et al.*, 1993; Hossain *et al.*, 1994, 1995; Hossain & Adams, 1995; Mitchell *et al.* 1995) also cite firm size as an important variable which helps to explain the level of information voluntarily disclosed by companies in their annual

reports. This is because voluntary disclosure is predicted to help reduce the non-trivial information collection and monitoring expenditures which emanate from increased firm size. Additionally, Jensen & Meckling (1976) suggest that there is likely to be a positive relationship between firm size and the proportion of debt-to-equity in the balance sheet. This contention implies that larger firms are likely to disclose more information in their published annual report in order to alleviate the potential for wealth transfers from debtholders to shareholders and managers (Botosan, 1995)²¹. Owners and managers in large life insurance companies could also have incentives to publicly disclose selective information such as the performance of invested funds and the value of bonus payments. This is because such action helps them to promote their reputation for sound management with prospective suppliers of external capital (such as policyholders and investors) and reduces the contracting costs associated with the writing and enforcement of life insurance policies. Therefore, the seventh hypothesis is that:

Hypothesis 7: Ceteris paribus, large life insurance companies will have greater voluntary disclosure than small life insurance companies.

4.3.8. Distribution system

Smith (1973) and Miles & Gubbay (1987), among others, contend that in insurance markets, non-tied agents and independent brokers are likely to use the information disclosed in annual reports (e.g., with regard to investment performance and commission payments) to better advise their clients on product selection and determine

²¹ For example, Myers (1977) points out that shareholders can transfer wealth away from bondholders (policyholders) by under-investing in projects that do not maximise their utility and by substituting assets that provide collateral for loans with other assets over which bondholders do not have a claim. Myers (1977) refers to these contracting incentive problems as the *underinvestment* and *asset substitution* problems. Therefore, it is plausible that a high level of information disclosure in the annual report could make this incentive conflict more transparent to policyholders and their surrogate monitors (e.g., non-executive directors), and thereby enable them to instigate appropriate remedial measures such as the introduction of asset maintenance rules.

which companies they should do business. One reason why independent sales agents may rely on the annual report is that it is audited and so agents/brokers are likely to perceive that the information which it contains has credibility. As a consequence, voluntary disclosure could have important marketing implications for life insurance firms and be linked inextricably to their sales and marketing strategies.

The *managerial-discretion hypothesis* holds that variations in managerial decision-making autonomy in insurance companies not only affects production choice decisions, but also contracting relations in its product distribution networks (Kim *et al.*, 1993). In an earlier study, Joskow (1973) also argued that insurance companies are able to control managerial discretion and reduce transaction costs in the buyer-seller relationship by paying lower sales commissions, specialising in limited lines of insurance, and using salaried sales staff or tied agents to sell their products. He suggested further that such exclusive agency agreements can protect policyholders' interests, for example, by precluding agents from switching customers to another insurance company that pays a higher rate of commission. This analysis implies that policyholders do not have much incentive to demand public information disclosure in the annual reports in order to monitor efficiently the activities of exclusive sales personnel.

Kim *et al.* (1993) and Blair & Herndon (1994), among others, contend that non-tied agents and independent brokers are likely to be associated with more diversified and non-standard lines of insurance because they have the specialist knowledge and promotional expertise needed to sell these more complicated products. Similarly, Jones (1983; 1987) suggests that in uncertain and complex transactions, specialist personnel (like brokers) often have to be used in order to promote cost-efficient exchange. This reasoning implies that life insurance companies which sell complicated products are likely to disclose more information about the performance of those products in their annual reports than other companies because it enables them to reduce uncertainty and economise on transaction costs. Furthermore, residual claimants in companies selling non-standard lines of insurance have an additional

incentive to incur costly public disclosure because non-tied agents and independent brokers could use the annual report to determine which corporate products it is profitable for them to sell. In other words, non-exclusive sales agencies are likely to demand the disclosure of information such as commission payments, because it enables them to economise on their transaction costs and maximise their utility. Therefore, it is hypothesised that:

Hypothesis 8: Ceteris paribus, life insurance companies which sell policies through non-tied sales agents/brokers will have greater voluntary disclosure than life insurance companies which sell policies through in-house sales staff/tied sales agents.

4.4. CONCLUSION AND SUMMARY

This chapter has examined the main features of the *managerial-discretion hypothesis* and considered its implications for explaining voluntary disclosure decisions in life insurance companies. The *managerial-discretion hypothesis* derives from the work of Mayers & Smith (1981, 1982a, 1986, 1988, 1994) carried out in US insurance markets. The hypothesis holds that the level of managerial discretion in insurance companies is related to factors such as organisational form and firm size. Drawing a framework from the *managerial-discretion hypothesis* this chapter argues that observed variations in voluntary disclosure could be explained by differences in managerial discretion manifest in differences in the characteristics of life insurance companies such as their organisational form, size, product-market structure, and so on. In this regard, eight testable hypotheses representing the important constructs of the *managerial-discretion hypothesis*, are put forward in this chapter in order to facilitate empirical testing. The implications of the *managerial-discretion hypothesis* are also closely akin to arguments reported previously in the academic accounting literature by Schipper (1981), Gibbins *et al.* (1992), and others. The triangulation research methodology used in this study to test empirically each of the eight hypotheses advanced in this part of the thesis is examined in the next chapter.

CHAPTER 5. RESEARCH METHODOLOGY

5.1. INTRODUCTION

Convergent methodology (or triangulation) has received considerable attention in the academic literature (e.g., Abdel-khalik & Ajinkya, 1979; Jick, 1979; Patton, 1990; Gable, 1994). Triangulation is an approach to research which combines the strengths of quantitative and qualitative techniques in order to cross-check the reliability of empirical findings and test the validity of theoretical constructs (Jick, 1979). In this way, researchers are able to identify inconsistencies and minimise biases inherent in the research design. This study uses data-triangulation methodology to test empirically the eight hypotheses proposed in chapter 4. This chapter discusses the rationale for using triangulation and considers the manner in which it is implemented in this research project. The chapter also examines the research design used in this study, including the sources of data, definition and measurement of variables, and the statistical, interview and document analysis techniques employed.

5.2. TRIANGULATION METHODOLOGY

The following sub-sections outline the important features of triangulation methodology, including its origins and perceived strengths and weaknesses.

5.2.1. Main features

Several researchers in the social sciences (e.g., Denzin, 1978; Jick, 1979; Van Maanen, 1983; Patton, 1990), as well as in the academic accounting literature (Abdel-khalik & Ajinkya, 1979; McKinnon, 1988; Birnberg, Shields & Young, 1990) contend that researchers could benefit significantly from the synergistic inter-play of quantitative and qualitative perspectives by applying triangulation methodology. This view is predicated on the notion that quantitative and qualitative research techniques

Table 5.1**Characteristics of Statistical, Interview and Document Analysis Techniques**

This table summarises the important features of the three research methods used in the application of data-triangulation in this study. The key advantages and limitations of each method are also summarised in the table. It is considered that the advantages of one technique can help alleviate the shortcomings which may exist in the other two research methods.

TECHNIQUE	PURPOSE	MAIN ATTRIBUTES	ENVIRONMENT	APPROACH	KEY ADVANTAGES	KEY DISADVANTAGES
STATISTICAL ANALYSIS	<ul style="list-style-type: none"> • Inference • Prediction 	<ul style="list-style-type: none"> • Quantitative • Hypothetico-deductive • Scientific 	<ul style="list-style-type: none"> • External 	<ul style="list-style-type: none"> • Computational • Analytical 	<ul style="list-style-type: none"> • Generalisable • Replicable • Cost-efficient 	<ul style="list-style-type: none"> • Ignores the nature & impact of unique events (or outliers) which may be of research interest • Does not give a “rich picture” of phenomenon under investigation
INTERVIEWS	<ul style="list-style-type: none"> • Description • Illumination 	<ul style="list-style-type: none"> • Qualitative • Interpretative • Naturalistic 	<ul style="list-style-type: none"> • Internal 	<ul style="list-style-type: none"> • Discursive • Interpretative 	<ul style="list-style-type: none"> • Illuminating • Can generate (as well as test) hypotheses 	<ul style="list-style-type: none"> • Inconsistency between subjects • Time-consuming • Non-generalisable
DOCUMENT STUDY	<ul style="list-style-type: none"> • Description • Illumination • Prediction 	<ul style="list-style-type: none"> • Quantitative & Qualitative • Interpretative • Historical 	<ul style="list-style-type: none"> • Internal 	<ul style="list-style-type: none"> • Descriptive • Analytical • Interpretative 	<ul style="list-style-type: none"> • Illuminating • Objective 	<ul style="list-style-type: none"> • Confidentiality may limit access • Documentation may be incomplete, out-of-date or non-existent

(Source: Derived from Jick, 1979; Patton, 1990)

are complements rather than competitors (Kaplan & Duchon, 1988). Jick (1979) also espouses the virtues of mixing methods given the strengths and weaknesses found in single research designs. For example, Table 5.1 illustrates that statistical analysis has the advantage of producing generalisable results. However, interview evidence could lead the researcher to make a deeper and thus more meaningful interpretation of the phenomenon being investigated, and provide him/her with insights as to how that phenomenon affects, or is influenced by, the organisational and/or environmental context within which it operates. Moreover, although statistical techniques may lose sight of some underlying organisational or environmental “richness” in striving for generalisability of results, it nevertheless has advantages over fieldwork techniques such as interviews. For example, Table 5.1 indicates that statistical techniques have the advantage of being replicable and cost-efficient when applied to “reliable” sources of data such as audited corporate reports.

5.2.2. Origins and prior research

Triangulation methodology originated as a tool of military strategists who used it to locate the exact position of objects from a geometrically-defined set of coordinates (Smith, 1981). Denzin (1978) purports that researchers utilise triangulation methodology for one of three different purposes, namely to match and reconcile complementary theories (i.e., theory-triangulation), to verify evidence obtained by different members of the same research team (i.e., investigator-triangulation), or to check the consistency and comparability of data generated and collected from various sources (i.e., data-triangulation). A review of the extant academic accounting literature highlights examples of the three types of triangulation methodology identified by Denzin (1978). For instance, Figure 2 shows that accounting researchers have employed theory-triangulation (e.g., Berry, Laughton & Otley, 1991), investigator-triangulation (e.g., Berry, Capps, Cooper, Ferguson, Hopper & Lowe, 1985) and data-triangulation methods (e.g., Hoque & Hopper, 1994).

Theory-triangulation is an holistic approach which uses different theories or perspectives to discover new and alternative ways of interpreting the phenomena being investigated by researchers (Patton, 1990). For example, Berry *et al.* (1991) used theory-triangulation to explain the different management accounting practices identified in a UK-based financial services company. In contrast, investigator-triangulation is used to verify data generated and collected by different members of a research team investigating the same subject matter. For example, Berry *et al.* (1985) used investigator-triangulation to cross-check the completeness and accuracy of interview data gathered by several researchers engaged on a project which examined different management accounting practices employed in the UK coal mining industry.

As Figure 5.1 makes clear, data-triangulation is also frequently applied to verify the reliability of data and validate constructs using both within and between different research method ²². It can be argued, for instance, that many quantitative studies reported in the academic accounting literature (e.g., Bradbury, 1991, 1992; McKinnon & Dalimunthe, 1993), utilise a form of within-methods data triangulation in the sense that they often use more than one type of statistical test (e.g., univariate and multivariate analysis) to examine the robustness of empirical results. On the other hand, between-methods data-triangulation involves researchers employing a combination of different techniques to verify the reliability of data, and the validity of theoretical constructs (Patton, 1990). For example, Hoque & Hopper (1994) used interviews, participant observation and the analysis of archival records in their case study analysis of management accounting practices in a Bangladesh-based jute mill.

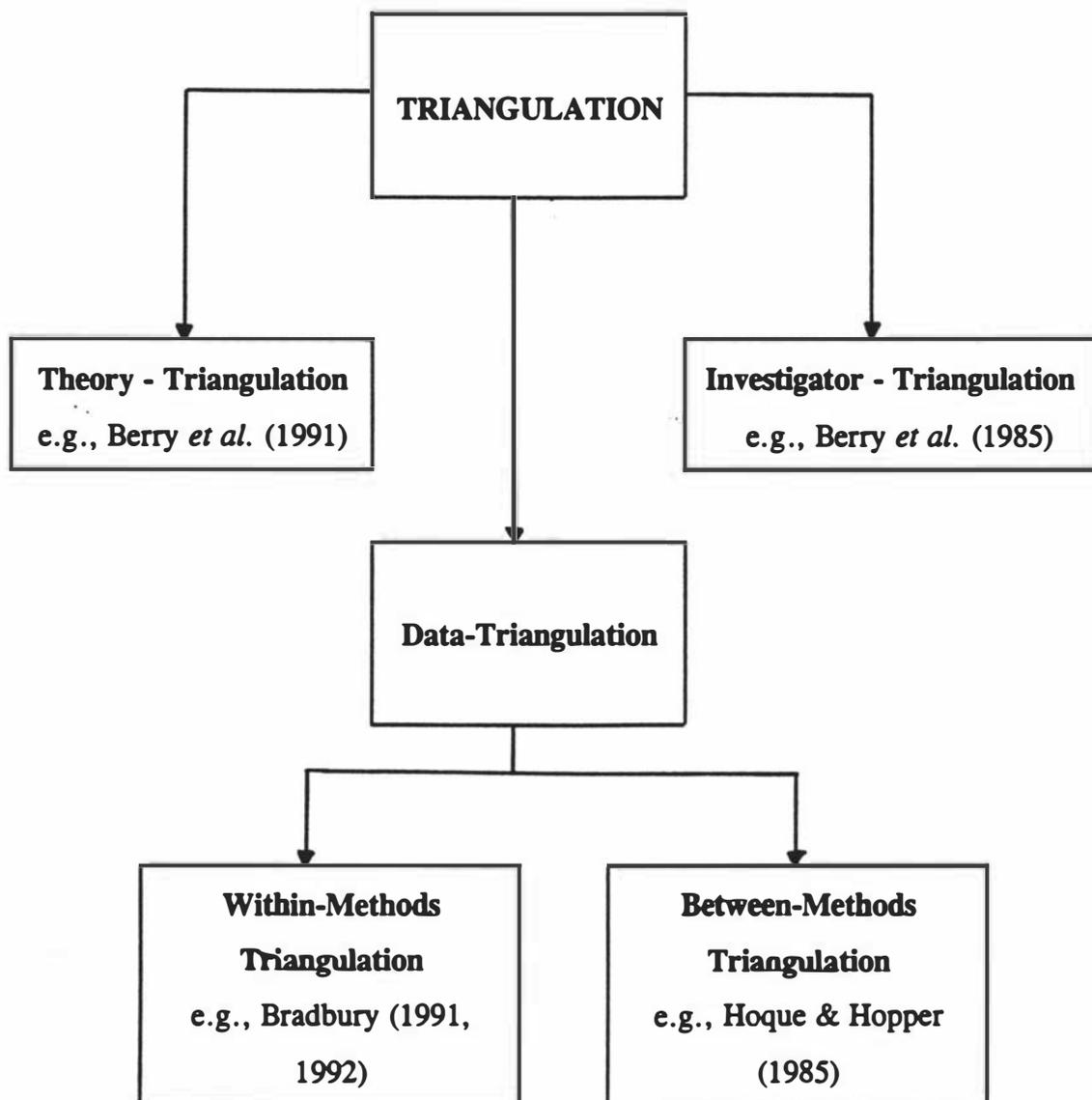
Since this research project is conducted within a single rather than multiple theoretical

²² McKinnon (1988, p. 36) notes that “. . . validity is concerned with the question of whether the researcher is studying the phenomenon she or he purports to be studying . . . reliability is concerned with the question of whether the researcher is obtaining data on which she or he can rely.”

Figure 5.1

A Taxonomy of Triangulation Methodology Used in Accounting Research

This figure illustrates the different types of triangulation methodology used in social science research, together with examples of relevant studies in which each method has been used. This study uses aspects of both within-data triangulation and between-data triangulation.



Source: Derived from Patton (1990)

framework (i.e., the *managerial-discretion hypothesis*), and data collection is performed by a solitary researcher as opposed to a team of individuals, theory and investigator-triangulation methods are deemed to be inappropriate. Furthermore, data-triangulation can help to validate constructs and cross-check the reliability of evidence, thereby enabling researchers to more effectively achieve their aims and objectives (Jick, 1979; Patton, 1990). Data-triangulation is thus the form of research methodology adopted in this study.

5.2.3. Merits and limitations of data-triangulation

Jick (1979), Gable (1994), and others, contend that an important advantage of data-triangulation is that it enables researchers to more readily assess the internal validity and reliability of their evidence by applying two or more mutually exclusive research methods to the problem under investigation. For example, in compiling data obtained by the convergence of multiple methods, the researcher is adjudged to be better able to determine whether findings reflect self-biases (e.g., in the framing of interview questions) or the manner in which a research instrument has been applied (e.g., the misuse of a statistical technique).

Jick (1979) also points out that in seeking explanations for divergent results (e.g., outliers), the researcher could uncover unexpected factors which significantly influence the interpretation of empirical results. Consequently, the application of data-triangulation could provide contextual breadth and depth to the phenomenon under investigation so enriching “ . . . our understanding by allowing for new or deeper dimensions to emerge . . . ” (Jick, 1979, p. 604). Denzin (1978, p. 28) also shares this view and purports that “ . . . because each [data collection] method reveals different aspects of empirical reality, multiple methods must be employed . . . I now offer as a final methodological rule the principle that multiple methods should be used in every investigation.” In this way, data-triangulation allows researchers to have more confidence in their evidence, and so enable them to justify their results and

better defend the conclusions of their research to peers, industry groups and other interested parties. In addition, improvements to the validity and reliability of data generated and analysed enable researchers to generalise their results to other similar circumstances and/or future periods of time.

Gable (1994) argues that data-triangulation can also be used to test deductively the validity of theoretical constructs, and thus contribute to theory development and verification. The importance of theory in both quantitative (e.g., statistical) and qualitative (e.g., interview) research is emphasised by Zimmerman (1987, p. 290) who argues that “. . . not all data and facts can be collected and reported - the world and field sites are too complex. Some theory, underlying model, or framework always directs the researcher to those facts considered interesting or important to collect and report . . .”. Baiman (1990) also argues that the use of a theoretical framework helps researchers to direct and sharpen the focus of investigation and minimises the risk of misinterpretation of evidence.

Despite its advantages, data-triangulation does have some limitations. First, the combination of different methods is unlikely to generate findings which converge automatically to produce an integrated whole (Patton, 1990). Therefore, the researcher may have to spend considerable time and effort (and possibly incur high costs) in reconciling conflicting findings obtained from various sources, and establishing the credibility of the evidence. Second, in instances where divergent results emerge, more complex explanations may have to be generated by the researcher, and this could obfuscate interpretation of the fundamental meaning of the research results (Jick, 1979). Third, Jick (1979) reports that deciding if, and when, the empirical results converge in a particular research setting is frequently a delicate exercise requiring sound judgement by the researcher (Smith, 1981; Patton, 1990). The researcher may not have the experience or expertise to make such decisions, and this could lead to the misinterpretation of evidence.

Nonetheless, Van Maanen (1983) considers that shortcomings (such as cost and time constraints) can be overcome if the research design used follows a well-structured and rigorous process. The use of theory to guide the application of multiple methods is also likely to enhance the efficiency and effectiveness of data-triangulation methodology and help to mitigate the effects of inherent constraints. In general, researchers such as Van Maanen (1983), Patton (1990) and Gable (1994), among others, argue that the advantages of triangulation methodology outweigh its limitations. Indeed, Gable (1994, p. 124) stresses that “. . . junior researchers and doctoral students should be encouraged to combine [research] methods as far as it is feasible”.

5.3. USE OF DATA-TRIANGULATION IN THIS STUDY

This section examines the reasons why data-triangulation was used in this study and outlines briefly the procedure for implementing the methodology.

5.3.1. Rationale

Watts & Zimmerman (1990) acknowledge that prior positive-descriptive accounting studies have produced inconclusive and counter-intuitive results in attempting to explain observed behaviour. The mixed results could be due to alleged conceptual deficiencies of positive-descriptive theories (e.g., Christenson, 1983; Sterling, 1990) or to limitations in the data and/or techniques used (e.g., Christie, 1990). The use of data-triangulation in this study seeks both to verify the validity of the constructs of the *managerial-discretion hypothesis* and test the reliability of the statistical data. This should enable more substantive conclusions to be made regarding the determinants of voluntary disclosure practices of New Zealand-based life insurance companies. In other words, data-triangulation is deemed to be an effective research methodology for addressing the aims and objectives of this project which were stated earlier in chapter 1 (section 1.2).

This study combines three different data-triangulation techniques in order to generate, collect and analyse appropriate empirical evidence. These research methods include a longitudinal statistical analysis of annual reports for the period 1988-1993, the conduct of interviews with managers of life insurance companies, and an analysis of corporate documents.

The three research methods were selected over other approaches (e.g., participant observation) for several reasons, including considerations such as whether the data would be accessible and whether the techniques could be applied given the time and financial constraints of this project. Craswell & Taylor (1992, p. 305) also contend that coupling statistical analyses with field-based research is particularly pertinent in corporate disclosure studies since such methods “ . . . may assist in providing additional explanations of differences in disclosure policies and the extent to which . . . costs of disclosure vary across firms . . .”. Gibbins *et al.* (1990) also used field-site interviews (and supplementary information such as published annual reports) to examine the nature of disclosure strategy followed by 20 Canadian-based manufacturing companies. Data access limitations, together with time and cost constraints, precluded the application and use of alternative field-based techniques such as participant observation and mail survey questionnaires. Indeed, Gable (1994, p. 115) is mindful of the need for researchers to rationalise the number of methods which they employ in triangulation in that he states that “ . . . given human limitations, individuals [i.e., researchers] must specialise in a limited number of methods . . .”. Moreover, techniques like participant observation and mail questionnaires have their own limitations. For example, Patton (1990) notes that in studies using participant observation, subjects may adopt their behaviour to meet the perceived expectations of the observant researcher, while in the case of mail surveys non-response bias may adversely affect the reliability of the empirical results. In both of these cases, financial and time constraints were considered to be major factors limiting their use in this research project.

Table 5.2 illustrates the relative strengths of using evidence obtained from statistical analysis, interviews and a document study. From Table 5.2, one can also discern how the use of the three different data collection methods can complement and supplement each other. For example, the high predictive capabilities provided by statistical analysis could complement the low generalisability of evidence obtained from interviews. In contrast, interviews could add deeper meaning to research issues, thereby complementing the possible weakness of statistical procedures as tools of “in-depth discovery”. Such attributes pertaining to data-triangulation methodology are likely to have three important benefits for this study. First, the reliability and credibility of the data could be assessed more rigorously using multiple methods compared with a single-method study. Second, a more robust test of the constructs of the *managerial-discretion hypothesis* could be carried out, thereby leading to possible theoretical refinements and development. Third, evidence concerning the multi-dimensional and contextual nature of corporate disclosure in the New Zealand life insurance industry could be used to provide additional insights as to the reasons for differences in actual reporting practices.

5.3.2. Procedure

The data-triangulation methodology adopted in this study was a systematic process guided by those propositions derived from the *managerial-discretion hypothesis* and advanced in chapter 4 of this thesis (section 4.3). A three-stage process was followed in order to implement data-triangulation in this study. First, statistical analysis on the published annual reports of all New Zealand-based life insurance companies was carried out for the six years 1988-1993. Second, 12 field-sites were selected and arrangements made to interview financial managers and/or senior executives, and to analyse relevant corporate documents²³. In broad terms, the key research findings

²³ Patton (1990, p. 184) notes that “ . . . *there are no rules for sample size in qualitative inquiry*. Sample size depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources . . .”. (Italics in the original). Field-sites were

Table 5.2
Relative Strengths of the Techniques Used in the
Evaluation of Research Evidence

This table presents the perceived relative strengths and weaknesses of empirical results derived from each of the three research methods used in this study - statistical analysis, interview work and document analysis. However, the relative strengths and weaknesses labelled below should only be viewed as generalisations. In practice, the strengths and weaknesses of each method are likely to depend upon the specification of the research design, the expertise and skill of the researcher as well as the nature of the phenomenon under investigation.

CRITERIA	STATISTICAL EVIDENCE	INTERVIEW EVIDENCE	DOCUMENT EVIDENCE
Consistency	High	Low	Medium
Controllability	High	Low	Low
Deductibility	High	Low	Medium
Discoverability	Low	High	Medium
Generalisability	High	Low	Low
Reliability	High	Low	Medium
Replicability	High	Low	High
Validity	Medium	Low	Medium

Source: Derived from various sources (e.g., Jick, 1979; Patton, 1990; Gable, 1994).

chosen purposively to cover a mix of companies of different characteristics rather than selected randomly.

from each technique were summarised and evaluated in terms of their internal (within-method) and external (between-method) compatibility, and their consistency with the hypotheses put forward in chapter 4. Inconsistencies (e.g., with respect to different responses made during the conduct of management interviews) were identified and reconciled through comparisons with data collected from alternative sources (e.g., corporate documents) or by instigating follow-up procedures (e.g., returning transcripts to interviewees for clarification and correction). Supplementary information identified from interview evidence (e.g., other factors motivating disclosure decisions) were also recorded and used to generate additional explanations for the diversity of voluntary disclosure exhibited by New Zealand-based life insurance companies in their annual reports.

The statistical and fieldwork aspects of the research design employed in this study are examined in more detail in sections 5.4 and 5.5 below.

5.4. STATISTICAL METHODS

This section considers the sources of data, the definition and measurement of variables, and the various techniques used to analyse statistically the data collected.

5.4.1. Data description

Data were obtained from the published annual reports of New Zealand life insurance companies and the statutory returns filed by them with the industry regulator - the Department of Justice - under the Life Insurance 1908 Act and an actuarial database²⁴. Data not available in published form (e.g., the number of non-executive and executive directors) were obtained directly from companies. The data covers all New

²⁴ Source: Melville Jessup Weaver (Consulting Actuaries, Wellington).

Zealand-based life insurance companies for the six years 1988-1993²⁵. This period represents the earliest and latest years for which complete data were available in 1994 when the analysis was carried out.

Of the 193 firm/year observations available, 84 are for mutuals and 109 for stock companies. Pooling the data, by increasing the degrees of freedom, gives rise to more robust parameter estimates and helps to alleviate heteroscedasticity in the error terms. Furthermore, to eliminate variation due to inflation, dollar values were divided by the consumer price index for the relevant year to convert them to real terms (1988 = base year).

As with most empirical studies, the data used in this study were also subject to some limitations such as measurement error and omitted variable bias. If measurement error is correlated with omitted variables (e.g., off-balance sheet items) inferences drawn from test statistics may be biased (Christie, 1990; Christie, Joye & Watts, 1991). Furthermore, the annual reports of life insurance firms which exited the New Zealand life insurance market in the six-year period 1988-1993 had been removed from public records. Therefore, the data set used in this study is unavoidably affected by "survivorship bias".

5.4.2. Dependent variable

Cooke & Wallace (1989), Marston & Shrives (1991), Malone *et al.* (1993) and Botosan (1995), among many others, perceive that the level of corporate disclosure is an abstract concept which is not amenable to precise measurement. However, these researchers contend that a disclosure index (or checklist) can be used to derive a surrogate measure for the amount of information disclosed by a company in its annual

²⁵ As the result of new entrants (e.g., some banks) and exits (e.g., due to insolvency and takeover) in New Zealand's life insurance market between 1988-1993, the number of firms varied as follows: 34 in 1993; 33 in 1992 and 1991; 32 in 1990; 31 in 1989; and 30 in 1988.

report. This study thus employs a self-constructed (i.e., researcher formulated) disclosure index to assess the level of information voluntarily disclosed by New Zealand-based life insurance companies in their 1988-1993 annual reports. This disclosure index is exhibited at Appendix 2. The following steps were taken to prepare the disclosure index:

- (1) Based on an extensive review of the relevant literature (Singhvi & Desai, 1971; Firth 1979, 1980; Chow & Wong-Boren, 1987; Bavishi, 1989; Botosan, 1995; Cooke, 1989a, 1989b, 1991; Gilbert, 1991; Gray, Meek & Roberts, 1995; Hossain *et al.*, 1994, 1995; Hossain & Adams, 1995; KPMG Peat Marwick McLintock, 1990, 1992; KPMG Peat Marwick, 1991), a preliminary list of 200 discretionary disclosure items was derived.
- (2) To ensure that disclosures were discretionary, the items were checked against all regulatory sources (e.g., the Life Insurance Act 1908 and extant accounting standards) that affected life insurance company accounting and reporting in New Zealand during the six-year period 1988-1993.
- (3) Similar to previous studies (e.g., Hossain *et al.*, 1994; 1995; Hossain & Adams, 1995), the list was then scrutinised by four accountants and two actuaries to further ensure that all items were voluntary. Their feedback (based on their perceived knowledge and expertise of New Zealand life insurance company accounting and reporting requirements) was subsequently used to modify the list of discretionary items.

From applying the above procedures, a final disclosure index comprising of 189 discretionary items was derived (see Appendix 2). As Appendix 2 makes clear, these 189 items were spread over the five major elements of the annual report - the balance sheet, revenue account, profit and loss account (stock companies only), cash flow statement (including relevant notes) and the directors' report. The directors' report invariably includes non-financial information (e.g., changes in market share, number

of employees and so on) which some commentators consider provides financial analysts, investors and casual users with “. . . perhaps the most useful single part of the annual report . . .” (Knutson, 1992, p. 7).

Once the disclosure index was developed, a scoring sheet was prepared to assess the extent of voluntary disclosure exhibited by the firms for each year in the six-year period 1988-1993. The contents of the annual reports were then compared with the items included in index and recorded as 1 if an item was disclosed, and 0 otherwise. The disclosure index derived by this means is unweighted and assumes that each item of disclosure is equally important (Cooke 1989a, 1989b; Gray *et al.*, 1995). Unweighted indices were used because many criticisms of weighted disclosure indices can be found in the academic accounting literature. For instance, Marston & Shrivies (1991) and Gray *et al.* (1995) report that subjectivity exists in the assignment of weights by user groups. Unweighted disclosure indices also tend to be the preferred research instrument when the focus of study (as in this project) is not directed at a single user group, but rather all users of corporate reports (Cooke, 1989a). Furthermore, some researchers such as Chow & Wong-Boren (1987) and Firth (1980) report that there is not much to choose between weighted and unweighted disclosure indices because analyses using both types of research instrument have generally produced similar results.

To avoid biases due to company size and/or organisational form, the aggregate disclosure score computed for each company during the coding process was the proportion of the actual score awarded to the maximum possible score applicable to that entity. Accordingly, companies were not penalised for failing to disclose items which are not pertinent to their business operations. For example, life insurance firms which operate principally or solely in New Zealand were not penalised for failing to disclose items such as geographical segmental information, which are not relevant to their business activities. Similarly, mutuals were not prejudiced for not reporting information relevant to shareholders such as earnings per share. As in Cooke (1989a) and Ahmed & Nicholls (1994), the entire annual report of each company was

therefore perused in order to ascertain the pertinence of items to them. The method of initially computing the disclosure score for each company can be expressed as follows:

$$DSCOR = \sum_{j=1}^n \frac{d_j}{n}$$

where, *DSCOR* = the aggregate disclosure score; d_j = 1 if the *j*th item is disclosed or 0 otherwise; and *n* = the maximum score an entity can obtain.

In addition, to satisfy the econometric assumption that the distribution of the dependent variable should not be constrained to lie between 0 and 1, *DSCOR* was transformed logarithmically. Following Hanusheck & Jackson (1977) and Ahmed & Nicholls (1994), the aggregate disclosure score computed for each company was therefore transformed by applying the following formula:

$$\ln DSCOR = \log\left[\frac{Y}{Y-1}\right]$$

where, *lnDSCOR* = the logarithmically transformed disclosure score; *Y* = the computed disclosure score for each company.

To control further for the possibility that researcher-induced bias and measurement error may have been introduced into the derivation of disclosure scores, a control-group comprising of four auditors from Price Waterhouse was established. Disclosure scores for each life insurance company for two selected periods - 1988 and 1992 - were recorded by members of this control-group²⁶. As suggested by Siegal & Castellan (1988, p. 284) a Kappa statistic (κ) was computed to determine whether there was statistical congruence between the disclosure items which were researcher-

²⁶ Annual reports for 1988 and 1992 represented the first two years for which the voluntary disclosure scores of New Zealand life insurance companies were derived.

coded and those which were coded by the independent control-group. The results of the κ test revealed that the researcher and control-group codings were reasonably congruent for the two years examined (i.e., for 1988, $\kappa = 0.41$ at $p > 0.10$; and for 1992 $\kappa = 0.45$ at $p > 0.10$). The control group also checked the accuracy of the denominator used in the disclosure ratio. By these standards, bias in the recording of voluntary disclosure items is not considered to be a major problem in this study.

5.4.3. Independent variables

The independent variables representing the main constructs of the *managerial-discretion hypothesis* used in this study are as follows:

- (1) Organisational form (OFORM): like Mayers & Smith (1992, 1994) a dummy variable 1 = stock and 0 = mutual was used to represent organisational form.
- (2) Assets-in-place (AIP): previous studies testing the impact of physical assets-in-place on voluntary disclosure decisions (e.g., Chow & Wong-Boren, 1987) have used the book value of fixed assets (net of depreciation) divided by total assets as a proxy for assets-in-place. However, since many New Zealand-based life insurance companies treat fixed assets (e.g., occupied property) as non-depreciable investments recorded at year-end market values, the conventional surrogate was deemed to be inappropriate. Therefore, an alternative proxy - the market value of property and fixed assets divided by the stated value of total assets (NZ\$ m) reported at year-end - was used as a proxy for assets-in-place in this study.
- (3) Product concentration (CONCN): as in Mayers & Smith (1990, 1994), product concentration was measured by means of a *Herfindahl* index which was computed using six major classes or lines of products sold by New Zealand-based life insurance companies as follows: conventional life and superannuation; unit-linked life and superannuation; annuities; and investment only products (e.g., unit trusts). The *Herfindahl* index was computed for each company as:

$$H = \sum_{l=1}^6 S_l^2$$

where l = line of business (1, 2, . . . , 6), $S_l = PI_l \div TPI$; PI_l is the amount of annual premium income written in a particular line/class of insurance (NZ\$ m), and TPI is the total value of annual premium income for all six lines (NZ\$ m). The closer the computed index is to 1 the more concentrated the production function of the company.

- (4) **Reinsurance (REINS)**: following Mayers & Smith (1990), reinsurance was measured as the ratio of annual reinsurance premiums ceded to total annual premium income (NZ\$ m).
- (5) **Localisation of operations (LOC)**: a dummy variable 1 = multinational and 0 = single domicile, was used to represent the geographical spread of operations.
- (6) **Non-executive directors (NEXECS)**: as in Mayers & Smith (1992) and Malone *et al.* (1993), this variable was measured as the proportion of non-executive directors on the board.
- (7) **Firm size (lnSIZE)**: most previous insurance studies (e.g., Mayers & Smith, 1990; 1992; 1994) have used the natural logarithm of total market value of assets reported by life insurance companies at year-end (NZ\$ m) as a proxy for firm size. The logarithmic transformation was necessary to mitigate skewness in the data set and minimise the risk of bias in the interpretation of the empirical results ²⁷.

²⁷ Annual premium income was also used as an alternative surrogate for firm size. However, the results remained unchanged and so are not reported.

(8) **Distribution system (DIST)**: this variable was measured by the ratio of annual premiums attributable to direct sales and exclusive agencies over total annual premium income (NZ\$ m).

5.4.4. Statistical procedures

This study employed five statistical procedures to analyse the data collected and test statistically the direction and significance of causality predicted by the eight hypotheses proposed in the previous chapter. The statistical procedures used were cluster analysis, discriminant analysis, descriptive and univariate statistics, and multivariate regression (i.e., the two-way fixed-effects covariance model). The nature and purpose of each of these statistical procedures are considered below.

(a) Cluster analysis

Romesburg (1984) considers that cluster analysis can benefit researchers in several respects and as such, be of benefit to this study. First, cluster analysis enables researchers to describe their data and to highlight visually variations between groups. A preliminary analysis of this type can thus act as a prelude for further investigation (e.g., the subsequent selection of field-sites) and provide a basis for additional statistical analysis. Second, the derivation of clusters for different time periods (in this study 1988 and 1992) enables the researcher to examine cross-temporal changes in the patterns of data at an early stage of analysis. In this research project such an analysis could shed light on the underlying influences affecting the level of voluntary disclosure position of life insurance companies which can be pursued further using other statistical procedures such as discriminant analysis.

Thorndike (1978) agrees with the advantages of cluster analysis espoused by Romesburg (1984). He adds that cluster analysis is a useful technique for initially identifying relationships within a data set, and highlighting items which appear to conform or otherwise, with the predictions of theory. The technique groups objects,

defines and measures their characteristics, and derives a resemblance matrix giving the distance or similarity between different objects in the data set. The researcher then selects a clustering algorithm to transform the resemblance matrix into a dendrogram in order to produce a visual illustration of the clusters. The higher the level at which objects and clusters meet in the dendrogram, the greater the difference between them (see chapter 6, section 6.2.1).

The cluster algorithm used in this study was a hierarchical procedure called *Ward's Error Sum of Squares (ESS)* which produces groups in which the distances between individual members are minimised (Romesburg, 1984). *Ward's ESS* was applied to the standardised financial and non-financial disclosure scores of New Zealand life insurance companies for two years - 1988 and 1992 (see chapter 6, section 6.2.1)²⁸. These two years represented the earliest and latest periods for which data were available at the time the cluster analysis was carried out. Financial disclosure were the sum of the scores obtained for voluntary disclosure in the balance sheet, revenue account, cash flow statement, and in the case of stock companies, the profit and loss statement. The non-financial disclosure scores were the aggregate measure of the amount of information disclosed in the annual report relating to social responsibility activities, such as staff training, health and safety, and the sponsorship of community projects.

The *Ward's ESS* clustering procedure has the advantage over other methods (e.g., nearest neighbour analysis) of assigning the objects to more homogeneous cluster groups. It also means that intra-group variation is magnified at the later stages of object classification procedure which makes it easier for the researcher to decide when to stop the clustering process. It is also useful for identifying outliers in complex data sets and thus providing a basis for identifying areas for further investigation

²⁸ Standardisation of the cluster variables eliminates the potential effect of scale differences distorting the cluster groups by transforming “. . . the distribution of elements along variables so that each has a mean of zero and standard deviation of one.” (Ketchen & Shook, 1996, p. 444).

(Romesburg, 1984).

(b) Discriminant analysis

Discriminant analysis is frequently used in conjunction with cluster analysis in order to identify those factors which distinguish derived groupings of observations (Hair *et al.*, 1987). The use of discriminant analysis in this study therefore contributes preliminary insights into the determinants of clusters, thereby providing information which may be useful in directing future investigation (e.g., the selection of field-sites). It also complements and supplements the univariate and multivariate analyses carried out subsequently on the pooled data set (i.e., 1988-1993).

(c) Descriptive statistics

The pooled data were first described using descriptive statistics, including means, medians and standard deviations, in order to ascertain its overall characteristics. This could also help to direct further analysis. For example, statistical measures of skewness such as the standard deviation, enable researchers to establish whether the distribution of the variables is normal or not, and so gives an indication as to whether parametric or non-parametric tests need to be carried out on the data.

(d) Univariate statistics

The univariate analysis conducted in this study involved establishing the existence of associations between dependent and independent variables (pairwise correlation analysis), and subsequently performing statistical tests (i.e., the Mann-Whitney U and Chi-square tests) to determine whether there were statistical differences between computed disclosure scores and the dichotomous independent variables organisational form and localisation of operations. Chow (1982) argues that univariate tests should be carried out prior to multivariate analysis in order to minimise the risk that variable measurement errors or inter-correlated variables may remain undetected, and thus

distort the statistical significance of multivariate results. In addition, correlation analysis could reveal high and statistically significant interactions between independent variables. Thus, additional diagnostic tests (e.g., variance inflation factors) may have to be carried out in order to ascertain whether coefficient estimates derived in multivariate tests are rendered inefficient by multicollinearity (Belsley, Kuh & Welsch, 1980) (see chapter 6, section 6.2.6).

(e) Multivariate model

To derive robust parameter estimates and mitigate heteroscedastic influences and correlations in the error (disturbance) terms caused by the 1988-1993 pooled (panel) data, a two-way fixed-effects covariance model was estimated²⁹. This procedure has been used in prior accounting studies using cross-sectional and time series data (e.g., Cahan, 1992, 1993) and is generally recommended for analyses using pooled data (Mills, Morling & Tease, 1995). The model assumes that the residual error term is composed of a time effect which is constant over time for all firms in year t and a firm effect, which is constant over time for each firm i . This is done by introducing a dummy variable for each firm/year into the pooled regression (Pindyck & Rubinfeld, 1981, pp. 254-255).

Cahan (1992, 1993) reports that the fixed-effects model has three important advantages. First, with pooled data, tests of statistical differences between firms can be derived from a single test of significance as opposed to a repeated series of individual cross-sectional tests for model stability (e.g., Chow tests). Second, by

²⁹ The pooling of data in regression analysis assumes tacitly that the dependent variable is temporally independent. There is some support in the academic literature to suggest that the selection of accounting methods (e.g., Anderson & Zimmer, 1992a, 1992b) and disclosure policies (Yarri, 1993) are time independent. However, others (e.g., Taylor, 1992; Gibbins *et al.*, 1990, 1992) dispute this view. On a more important and practical level, there is a risk that the use of a simple pooling design could create biased coefficient estimates due to serial dependency of the residuals. The fixed-effects model helps to mitigate this problem (Pindyck & Rubinfeld, 1981).

incorporating time and firm dummies in the estimation procedure, the fixed-effects model reduces correlations over time or between firms, and so yields better calibrated coefficient estimates, unbiased standard errors, and mitigates the effects of serial dependency among variables. Third, coefficients are likely to be the best linear unbiased estimates (BLUE) since the effect of omitted variables will be captured by the fixed-effects. Kennedy (1995, p. 222) also reports that the fixed-effects model is suitable in studies (such as this one) which use data drawn from a full population of observations. The fixed-effects model employed in this study is expressed as follows:

$$\begin{aligned} \ln DSCOR_{it} = & \beta_0 + \beta_1 OFORM_{it} + \beta_2 AIP_{it} + \beta_3 CONCN_{it} + \beta_4 REINS_{it} + \beta_5 LOC_{it} \\ & + \beta_6 NEXECS_{it} + \beta_7 \ln SIZE_{it} + \beta_8 DIST_{it} + \beta_9 YR_{it} + \dots + \beta_{14} YR_{it} + \\ & \beta_{15} FIRM_{it} + \dots + \beta_{49} FIRM_{33it} + \varepsilon_{it} \end{aligned}$$

where $\beta_0 \dots \beta_{49}$ are constants to be estimated; ε_{it} is a disturbance term; it are the variable observations for the six years 1988-1993; YR = dummy-coded as 1 for year ($t = 1988, 1993$); and $FIRM$ = dummy-coded as 1 for firm i ($i=1, \dots, 33$). The firm/year variables when combined define a unique intercept for each observation. The fixed-effects model used in this study gives degrees of freedom of 46, 146³⁰.

5.5. FIELD-STUDY METHODS

This section details the approach followed in conducting interviews and the study of corporate documentation in the field.

5.5.1. Background

The overwhelming majority of positive accounting-based disclosure studies reported in the literature (e.g., Leftwich *et al.*, 1981; Chow & Wong-Boren, 1987; Bradbury,

³⁰ The model's degrees of freedom are computed as follows: 46 = 34 firms + 6 years + 8 independent variables - 2 (for the dummies year and firm); 146 = 193 observations - 46 - 1 (for the model's constant).

Table 5.3**New Zealand Life Insurance Companies - Field-Sites**

This table summarises the important features of the 12 field-sites visited during the course of this study. To protect confidentiality company names are not disclosed. The aim of the purposive sampling of field-sites was to cover a mix of companies of different characteristics. The number of managers interviewed at each company are also given.

LIFE INSURANCE COMPANY	NATIONALITY	ORGANISATIONAL FORM	SIZE CATEGORY	SUBJECTS INTERVIEWED	
				FINANCIAL MANAGERS (n = 14)	SENIOR EXECUTIVES (n = 8)
1. Company A	Australia	Mutual	Large	1	1
2. Company B	New Zealand	Mutual	Small	1	1
3. Company C	New Zealand	Stock	Medium	1	1
4. Company D	Australia	Mutual	Large	2	-
5. Company E	UK	Mutual/Stock ¹	Medium	2	-
6. Company F	UK	Stock	Large	2	-
7. Company G	New Zealand	Stock	Small	-	1
8. Company H	UK	Stock	Large	1	2
9. Company I	New Zealand	Mutual Building Society	Small	1	-
10. Company J	New Zealand	Stock	Medium	1	1
11. Company K	New Zealand	Mutual	Large	1	-
12. Company L	Australia	Stock Bank	Medium	1	1

Source: Research data

Note: ¹ The New Zealand operation of Company E changed from a mutual branch office to a subsidiary company with share capital (100% owned by its UK parent) in 1992-1993.

1991, 1992) have employed conventional statistical methods to test empirically propositions drawn from positive-descriptive theories such as contracting (agency) theory. However, as mentioned earlier, exponents of conventional statistical analyses like Watts & Zimmerman (1986, 1990), acknowledge that such studies have frequently produced inconclusive and counter-intuitive results. Watts & Zimmerman (1986, 1990) suggest several reasons for the ambiguous results reported in many statistical studies, including the application of imprecise proxies, the use of inadequate sampling selection methods, different sample sizes, omitted variable bias, and incorrectly specified statistical models.

Over the last decade or so, a growing body of scholars (e.g., Jick, 1979; Palepu, 1987; McKinnon, 1988) have advocated the greater use of field-based research either as an alternative to more conventional quantitative methods, or in conjunction with statistical analysis using data-triangulation methodology. Broadly, field-based research encompasses a plethora of techniques, including subject interviews, document analyses, participant observation, and the use of controlled experiments (Patton, 1990). However, in accounting research, field-based projects have tended to examine accounting issues within an organisational-specific (i.e., case study) environment rather than cross-sectionally. Furthermore, with certain exceptions (e.g., Palepu, 1987; Zimmerman, 1987), most of the field studies reported in the academic literature have not been guided by positive theory. In utilising the positive-descriptive theory-based *managerial-discretion hypothesis* as a framework, it is considered that the use of fieldwork in this study goes some way in re-addressing the general dearth of positive-descriptive theory-based field research in the accounting discipline.

5.5.2. Field-site selection

Interview data were collected from 22 financial managers and/or senior executives in 12 life insurance companies at various dates between October 1994 and April 1995. In addition, key corporate documents (e.g., financial regulations) which could help to explain corporate reporting practices and procedures were obtained and analysed during the field-site visits. The 12 field-sites (representing approximately 35 per cent of the population) were selected purposefully from a cluster analysis of 1992

disclosure scores in order to obtain a mix of companies of different characteristics in terms of size, nationality and organisational form. Field-site visits to all New Zealand-based life insurance companies ($n = 34$) could not be made because some managers declined to participate. Furthermore, time and monetary constraints precluded the possibility of visiting more companies than the 12 selected. However, the companies selected were adjudged to represent a good cross-section of the New Zealand life insurance industry as a whole. The main features of the field-sites selected are given in Table 5.3.

Table 5.3 shows that roughly equal numbers of mutual and stock life insurance companies were visited in the field, including five of the six largest companies with the remainder split evenly between small firms (with life funds below NZ\$25 m) and medium-sized entities (life funds between NZ\$25m - NZ\$ 400m). Half of the sample were New Zealand-owned, whereas the remainder were entities owned by parent companies headquartered either in Australia or the UK. This feature is also reasonably representative of the New Zealand life insurance industry as a whole as most of the medium and large-sized companies are branches or subsidiaries of overseas-based corporations (Adams, 1994a). To provide comparison with the voluntary disclosure practices of traditional insurance organisations, two entities owned by non-insurance corporations (a building society and a major trading bank) were also included in the selection of field-sites.

Yin (1989) contends that researchers utilising fieldwork methods have to ensure that valid and reliable, yet flexible procedures (or protocol) are followed so that pre-determined goals can be achieved. These procedures include consideration of various design issues such as the setting of clearly defined goals, seeking cooperation from prospective subjects, designing and developing research instruments, and conducting pilot studies. Therefore, prior to making the field-site visits, a letter explaining the purpose of the study and an accompanying letter of support from the representative industry group - the Life Office Association of New Zealand (LOANZ) - were sent to the chief executives or managing directors of each of the 12 companies selected

from the cluster analysis performed on 1992 disclosure scores. Assurances stating that the information gathered would be used solely for the purposes of this study were also contained in the covering letter³¹. At the first round of contact, senior executives of 10 of these companies agreed to participate and two declined (e.g., due to pressure of work). Therefore, the senior management of two additional companies were approached and their agreement to participate in the research project was obtained.

5.5.3. Interview instrument

Snow & Thomas (1994) report that the use of interviews in field-based research enables researchers to appreciate the different meanings that people place on their experiences in organisations and thereby, achieve a more in-depth examination of the phenomena under investigation. In this regard, interviews are considered to be an integral part of the interpretative research tradition which has been particularly prevalent in the social sciences (Patton, 1990). It was considered that interview evidence would not only help to verify the reliability of statistical evidence, but also provide supplementary information as to the important drivers of voluntary disclosure in the New Zealand life insurance industry. That is, interview evidence could contribute to achieving the stated aim and objectives of this study.

In common with several previous studies employing interviews in the field (e.g., Palepu, 1987; Zimmerman, 1987; Innes & Mitchell, 1990), a semi-structured interview instrument was developed and used in this study. The instrument which is exhibited at Appendix 3 is structured in four parts. The first two sections cover personal details of the interviewee and provide introductory information on his/her perceptions as to the meaning and nature of voluntary disclosure. The third section contains semi-structured questions derived from the eight constructs of the

³¹ Managers in some companies expressed reservations about their perceptions and details of corporate documentation being identified in the public domain. For this reason, the names of companies and officials are not disclosed in the subsequent empirical analysis of fieldwork evidence reported in this thesis.

managerial-discretion hypothesis advanced previously in chapter 4 (section 4.3). The final section of the interview instrument seeks to elicit information from subjects regarding other organisational and environmental factors which could influence the overall level of information voluntarily disclosed by life insurance companies in their annual reports.

McKinnon (1988) contends that the completeness and accuracy of information obtained during interviews are dependent upon the form and content of the research instrument and the manner in which it is applied. Consequently, the researcher must expend considerable effort in designing and developing the questions which prospective subjects are to be asked. The interview instrument employed in this study was structured according to the theoretical constructs of the *managerial-discretion hypothesis* and the questions were phrased in an open-ended rather than closed manner so that the maximum amount of information could be obtained from the interviewees (see Appendix 3). Patton (1990) argues that the semi-structured interview process not only allows information to be collected in a systematic manner, but facilitates probing and thus helps the researcher to add richness and probe deeply the phenomenon under investigation.

Following the practice recommended by Denzin (1978), Bruns (1989) and Patton (1990), the development of the interview instrument involved an iterative process whereby questions were refined and revised following reviews by six academic colleagues (including an expert in the design and development of marketing research instruments). In addition, pilot interviews were conducted with eight senior members of the New Zealand life insurance industry. Each subject for the pilot interviews was selected on the basis on two key criteria. First, their perceived knowledge and experience of life insurance company accounting and reporting issues; and second, their willingness to cooperate and participate in the piloting exercise. In its final stages of development, the ethical implications of the draft interview instrument were reviewed by the Chairperson of the Massey University Research Ethics Committee.

5.5.4. Conduct of interviews

The original intention was to interview a minimum of two and maximum of three managers in each of the 12 companies selected, of which one manager would be at directorate level. It was anticipated that by adopting this procedure one would first, ensure that a valid and “rich” account of the reporting practices of the life insurance company was obtained, and second, enable the responses of managers in the same company to be cross-checked and reconciled at a later stage, if necessary. However, in two small life insurance firms (Companies G and I), one manager dealt exclusively with accounting and reporting matters, and in another instance (Company K), a second manager could not be interviewed during the arranged site visit due to unforeseen work commitments. Moreover, in three further cases (Companies D, E and F), third interviews could not be carried out with executive directors because they were too busy with work (see Table 5.3).

As suggested by Bruns (1989), a copy of the research instrument was sent to each interviewee prior to the interview so that he/she could organise their thoughts on the questions raised. Arrangements were also made to interview each manager separately so that they could express their views freely without feeling intimidated by the presence of others (Innes & Mitchell, 1990). Moreover, as recommended by Patton (1990) each of the interviews (except for two subjects who declined) were tape-recorded so as to ensure that a complete and accurate record of the dialogue could be made. Maximum flexibility was maintained in the conduct of each interview so that further facts and perceptions relevant to the topic of voluntary disclosure could be elicited from interviewees. After each interview had been carried out, typed transcripts were prepared and sent to each interviewee so that they could confirm the accuracy and completeness of the issues discussed, and to make corrections if necessary. Major differences in responses elicited from the interviewees at the same company were reconciled by clarifying the respective points of contention with each person immediately afterwards, and/or by cross-checking the responses to other sources of evidence such as relevant corporate documents.

5.5.5. Analysis of interview evidence

Following Krippendorff (1980) and Jankowicz (1991), the data generated from the field-site interviews were systematically organised, classified and analysed according to the constructs of the *managerial-discretion hypothesis*. Jankowicz (1991, p. 193) refers to this procedure as content analysis, and describes it as a method which allows empirical evidence gathered by means of subject interviews to “. . . be presented in a variety of ways, from the continuous narrative which blends empirically obtained information with your own interpretative comments, to a formal, tabular summary accompanied by the results of statistical tests.” Krippendorff (1980) contends that content analysis also helps to ensure that the interview evidence collected from different subjects captures efficiently the underlying theoretical constructs and enhances the accuracy and completeness of subsequent analysis. The technique has also been used in other finance-type studies reported in the academic literature (e.g., Lohtia, Brooks & Krapfel, 1994).

The content analysis procedure followed in this project involved the classification of interview questions according to the eight constructs of the *managerial-discretion hypothesis*, and then matching judgmentally the responses of the subjects interviewed to each of the constructs. A four-point coding scheme was used to label, classify and subsequently analyse the interview evidence as follows: 0 = not applicable, 1 = evidence generally neutral, 2 = evidence generally contrary to the construct, and 3 = evidence generally supportive of the construct. Overall conclusions as to whether the interview evidence was consistent, or otherwise, with expectations were reached on the basis of a majority of codings recorded against each construct across all 22 respondents. That is, if a majority of supportive statements were identified overall, the conclusion was deemed to be consistent with expectations and *vice versa*. Neutral and not applicable responses were excluded from the judgement-making process. Furthermore, to minimise the risk of errors and biases in the classification procedure, Lohtia *et al.* (1994) recommend that an independent judge be used to verify that the responses are properly classified and accurately reconciled to each construct.

Therefore, an academic colleague agreed to review the match between the transcribed responses of interviewees to the questions posed and the code assigned to them. This procedure provided further assurance that the classification process was accurate and complete.

5.5.6. Analysis of corporate documents

Patton (1990, p. 245) states that the analysis of organisational archives “. . . provides a behind-the-scenes look at the program that may not be directly observable and about which the interviewer might not ask appropriate questions without the leads provided through documents.” The analysis of corporate documentation also aids the interpretation of empirical results. Written assurances concerning the maintenance of confidentiality during the document study were given to the chief executive and/or managing director, and their permission to peruse the required documentation was obtained prior to carrying out the field-site visit. To further ensure confidentiality and promote trust with company officials, it was agreed that documents would not be taken away from company premises, but rather would be analysed on-site. Details of the corporate documentation required were sent to each company at least two weeks prior to the field-site visits so that arrangements could be made to collect the documents and make them available for analysis after the interviews had been conducted.

Various items of documentation were collected and analysed in order to support, or otherwise, the statistical results and information collected from the interviews. These documents are detailed in Table 5.4, and include the articles of association, company standing orders and financial regulations, contractual conditions of non-executive director appointments, reinsurance contracts, minutes of financial reporting meetings, investment policy statements, and sales and marketing guidelines and terms (including

Table 5.4**New Zealand Life Insurance Companies - Corporate Documents**

This table outlines the corporate documents requested and analysed at the 12 field-site visits made during the course of this study.

COMPANY	COMPANY DOCUMENTS ANALYSED						
	ARTICLES OF ASSOCIATION	INTERNAL REPORTING REGULATION	NON-EXECUTIVE CONDITIONS OF APPOINTMENT	REINSURANCE CONTRACTS	INVESTMENT GUIDELINES	SALES AND MARKETING GUIDELINES	FINANCIAL REPORTING MINUTES
1. Company A	✓	✓	NE	NA	✓	✓	✓
2. Company B	✓	✓	NE	✓	✓	NE	NA
3. Company C	✓	✓	NE	✓	✓	✓	✓
4. Company D	✓	NA	NA	✓	✓	NA	NA
5. Company E	✓	NE	NE	✓	✓	NA	✓
6. Company F	✓	NA	NA	NA	NA	NA	NA
7. Company G	✓	NE	NE	✓	NE	NE	✓
8. Company H	✓	✓	NE	✓	✓	✓	✓
9. Company I	✓	NE	NE	✓	NA	✓	NA
10. Company J	✓	NE	NE	✓	✓	NE	✓
11. Company K	✓	✓	NA	✓	✓	✓	✓
12. Company L	✓	✓	NE	✓	✓	✓	✓

Source: Research data

Notes: 1. ✓ = documents analysed ; NA = Not made available (e.g., because of confidentiality concerns); NE = Non-existent.

the method(s) used by companies to remunerate sales agents).

It was considered that each of the documents could shed light on the annual reporting practices of the company and provide evidence which could support, or otherwise, the hypotheses advanced previously in chapter 4 (section 4.3). For instance, there could be a specific requirement in the conditions of appointment for non-executive directors to approve the annual report (and monitor and control the level and type of information disclosed in it) prior to its publication. In addition, company documents such as financial regulations, investment guidelines and the terms of sales agency agreements, could help to explain various corporate reporting practices (e.g., regarding the investment performance, sales commission and so on). It was anticipated that the content of these internal documents could also vary between life insurance companies of different characteristics. For example, investment guidelines may stress that managers in stock companies should report good investment performance in the annual report in order to attract prospective investors, whereas in mutuals of equivalent size such requirements may not exist. Other information which could help to explain the reporting practices of New Zealand-based life insurance companies may also be discernable from corporate documents. For instance, the analysis of internal financial regulations may indicate the importance of other factors influencing the corporate reporting function such as parent company directives and marketing considerations.

As in Easterby-Smith, Thorne & Lowe (1991), the approach adopted to analyse corporate documents in this study was a subjective and iterative process which included the familiarisation of the content, reflection of that content, the linking of the content to conceptualisations (i.e., the constructs of the *managerial-discretion hypothesis*), and evaluating and re-evaluating judgementally whether extracts match with expectations. In practice, the approach involved sifting through documents in order to identify common themes and relationships with concepts or models - an approach which Kohak (1978, p. 23) has described as “ . . . a matter of looking, looking again, then again, each time with greater precision, until we reach a clear

evident grasp . . .”. In this regard, the form of analysis (or protocol) followed was less formal than that used to classify and analyse the interview evidence. Nonetheless, given the limited number of documents available (see Table 5.4), the approach was adjudged to be both appropriate and cost-effective.

Table 5.4 shows that all 12 life insurance companies visited retained their articles of association and all, except two cases, provided details of reinsurance contracts. However, the availability of investment guidelines, sales and marketing details and financial reporting minutes was found to be variable among companies. This situation arose either because some companies declined to provide the documentation requested (e.g., for reasons of commercial sensitivity) or the documentation did not exist. Unfortunately, conditions relating to the appointment of non-executive directors were not obtained for these reasons in all 12 field-sites visited. Therefore, a comprehensive analysis of corporate documentation was precluded by the limited evidence made available during the field-site visits.

5.6. CONCLUSION AND SUMMARY

This chapter has examined the rationale for using data-triangulation methodology in this study and described the research design adopted, including the sources of data, definition and measurement of the variables used, and the different research methods employed. It was explained that data-triangulation methodology helps researchers to enhance the reliability, validity (and hence credibility) of their data, improve the robustness of tests of theoretical propositions, and promote the contextual richness of their selected field of inquiry. Three main research methods - statistical analysis, field-site interviews and a document study - were employed to achieve the objectives of data-triangulation. The important characteristics and purpose of the three research methods are discussed in this chapter. The methods used in this research project are also considered to have important advantages (e.g., with regard to cost-effectiveness, convenience and objectivity) compared with other field research techniques such as participant observation and mail survey questionnaires. This chapter has also

acknowledged that the use of multiple methods research imposes limitations (e.g., cost and time) on the researcher. However, the merits of data-triangulation methodology are considered to outweigh its shortcomings - for example, in terms of its benefits with regard to the cross-verification of research results. As a consequence, the use of data-triangulation is likely to make a major contribution in achieving the overall aim of this project. The empirical results obtained from each of the three research methods used in this study are analysed in the next chapter of this thesis.

CHAPTER 6. EMPIRICAL RESULTS

6.1. INTRODUCTION

The implications of the *managerial-discretion hypothesis* for explaining the level of information disclosed voluntarily by life insurance companies have been examined in chapter 4 of this thesis. From this analysis, the eight testable hypotheses which were put forward in chapter 4 (section 4.3) are now tested using the data-triangulation methodology described in chapter 5. Three main research methods are employed, namely statistical techniques, interviews in the field and the analysis of corporate documentation.

6.2. STATISTICAL RESULTS

6.2.1. Cluster analysis

Recall from chapter 5 (section 5.4.4) that the purpose of the cluster analysis performed in this study was to highlight patterns in the general levels of voluntary disclosure among New Zealand-based life insurance companies. The rationale for this would be to provide at an early stage of the project an indication of the nature of the research environment and identify features (e.g., outliers) which might be worthy of further investigation (e.g., by fieldwork). For example, outliers could indicate that voluntary disclosure is influenced by unique firm-specific factors (e.g., culture) which may be worthy of documenting and analysing further.

Table 6.1

**New Zealand Life Insurance Companies -
Changes in Composition of Clusters 1988-1992**

This table highlights the major changes in the composition of four clusters derived from a cluster analysis of overall level of voluntary disclosure exhibited in the published annual reports of New Zealand-based life insurance companies for the two years 1988 and 1992 (n = 30 in 1988; n = 33 in 1992).

1988 GROUPINGS	1992 GROUPINGS				
	CLUSTER 1	CLUSTER 2	CLUSTER 3	CLUSTER 4	TOTALS - 1988
CLUSTER 1	6	5	0	0	11
CLUSTER 2	0	11 (+2)	1	0	12 (+2)
CLUSTER 3	0	0	5	0	5
CLUSTER 4	0	0	2	0 (+1)	2(+1)
TOTALS - 1992	6	16 (+2 = 18)	8	0 (+1 = 1)	30 (+3 = 33)

Source: Research data

Notes:

1. Table 1 should be interpreted as follows. For example, of the 11 companies in Cluster 1 1988, 6 of them remained in Cluster 1 in 1992, while 5 companies moved upwards into Cluster 2.
2. Numbers in parenthesis relate to three companies entering the market since 1988.
3. Spearman rank correlation coefficient (R_s) = 0.59 ($p < 0.001$, two-tailed). This statistic suggests that the composition of the clusters is reasonably stable across the five year period 1988-1992.

Using the *Ward's ESS* method, four clusters were derived. The distances between the disclosure scores of life insurance companies are represented graphically in the dendrograms shown in Figures 6.1 and 6.2. Using the procedure recommended by Romesburg (1984), the decision to terminate the clustering process was made at the point where both the number of clusters and the distance between them was minimised (i.e., at scaled distance of two for both 1988 and 1992 (see boxed row in Figures 6.1 and 6.2)). The number of life insurance companies in quartile groups for each year are: 1988 - cluster 1 (eleven firms), cluster 2 (twelve firms), cluster 3 (five firms) and cluster 4 (two firms); 1992 - cluster 1 (six firms), cluster 2 (eighteen firms), cluster

3 (eight firms) and cluster 4 (one firm).

Table 6.1 shows that although there has been some change in the mix and size of the clusters between 1988 and 1992, the computed Spearman rank correlation coefficient (R_s) of 0.59 (at $p \leq 0.01$) indicates that their composition was relatively unchanged over the five-year period. This observation supports the view of some researchers (e.g., Gibbins *et al.*, 1990, 1992; Mezas, 1990) that an organisation's accounting and disclosure positions are likely to remain stable over time because of antecedent organisational conditions such as company and management inertia.

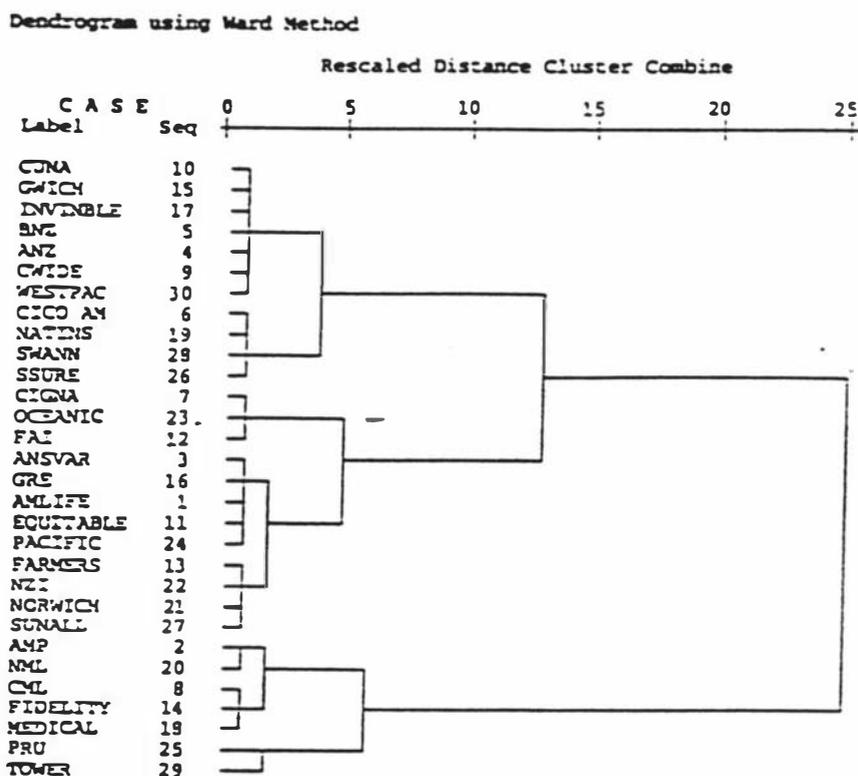
It would appear from the clusters shown ⁱⁿ Figures 1 and 2 that it is the large life insurance firms which generally have the higher levels of voluntary disclosure. However, notable exceptions are two small stock life insurance companies (i.e., both with total assets of less than NZ\$ 25 million) - Fidelity Life and Sovereign Assurance. The former company is placed highly in the disclosure rankings for both 1988 and 1992, while the latter, which entered New Zealand's market in 1989, registered the highest voluntary disclosure score in 1992 (and also 1993 - see Tables 6.4 and 6.5). Enquiries conducted with the management of these two companies, indicated that in one case, high disclosure was attributable to an influential non-executive director and a corporate culture that emphasises marketing through the annual report. Indeed, the important influence of product-marketing factors on corporate disclosure has also been recognised by other accounting researchers including Gibbins *et al.* (1990, 1992), Lev (1989, 1992) and Clarkson *et al.* (1994). In contrast, the other company is seeking public-listing status on the New Zealand stock exchange and planning expansion into the Australian market³². The phenomenon whereby small unlisted companies voluntarily report high levels of disclosure in order to attract the attention of analysts prior to an application for public listing status has also been reported elsewhere in the academic accounting literature (e.g., Mak, 1991). One feature discernable from

³² The companies to which the information relates are not specified here because of the sensitivity of the details given.

Figure 6.1

New Zealand Life Insurance Companies: Dendrogram of Voluntary Disclosure Scores -1988

This figure provides a dendrogram of the 1988 standardised disclosure scores of New Zealand life insurance companies (n = 30). The derivation of the clusters and members companies of each cluster are also given.



Derivation of clusters

Following Romesburg (1984) the boxed row indicates the optimum cluster solution where the scaled distance between clusters is minimised.

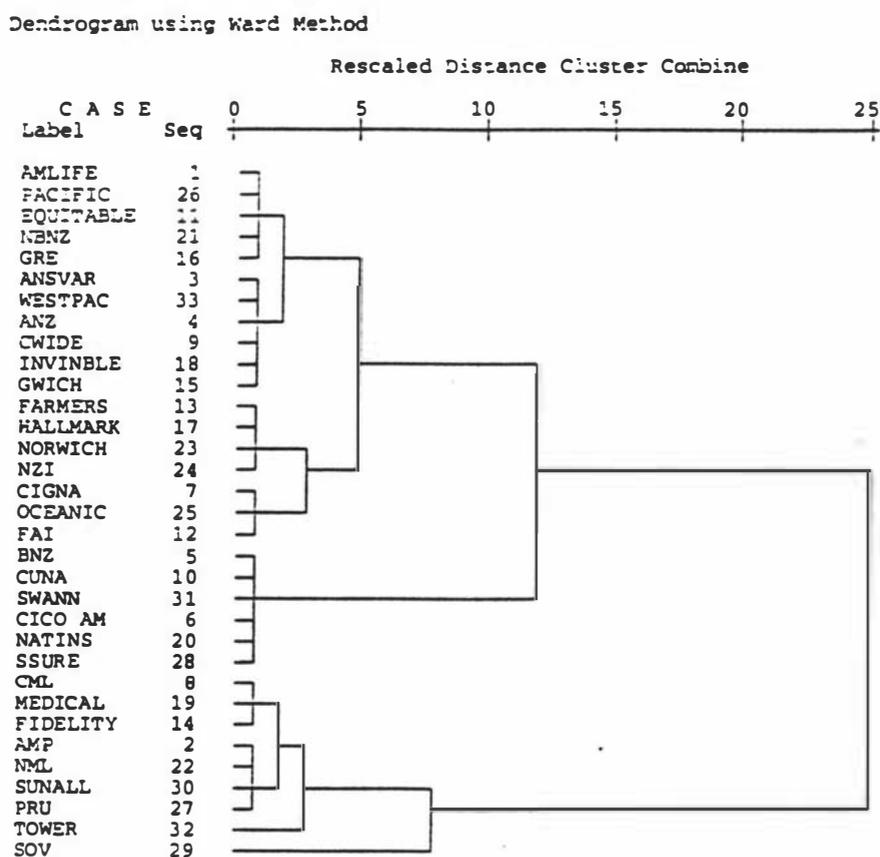
<u>Cut</u>	<u>Range</u>	<u>No. Clusters</u>	<u>Distance</u>	<u>Cumulative Distance</u>
1	0-1	30	1	1
2	2-3	17	2	3
3	4-5	4	2	5
4	6-13	2	8	13
5	14-25	1	12	25

Note: Members of clusters are: cluster 1 ("high"): Tower Life, Prudential; cluster 2 ("medium-high"): AMP, CML, Fidelity, Medical NML; cluster 3 ("medium"): American, ANSVAR, Cigna, Equitable, Farmers, GRE, Metropolitan, Norwich Union, NZI, Oceanic, Pacific, Sun Alliance; cluster 4 ("low"): ANZ, BNZ, CICO America, Countrywide, CUNA, Greenwich, Invincible, National Insurance, Southsure, Swann, Westpac.

Figure 6.2

New Zealand Life Insurance Companies: Dendrogram of Voluntary Disclosure Scores - 1992

This figure provides a dendrogram of the 1992 standardised disclosure scores of New Zealand life insurance companies (n = 33). The derivation of the clusters and members companies of each cluster are also given.



Derivation of clusters

Following Romesburg (1984) the boxed row indicates the optimum cluster solution where the scaled distance between clusters is minimised.

<u>Cut</u>	<u>Range</u>	<u>No. Clusters</u>	<u>Distance</u>	<u>Cumulative Distance</u>
1	0-1	33	1	1
2	2-3	10	2	3
3	4-5	4	2	5
4	1-12	2	7	12
5	13-25	1	13	25

Members of clusters are: cluster 1 ("high"): Sovereign; cluster 2 ("medium-high"): AMP, CML, Fidelity, Medical, NML, Prudential, Tower, Sun Alliance; cluster 3 ("medium"): American, ANSVAR, ANZ, Cigna, Countrywide, Equitable, Farmers, GRE, Greenwich, Hallmark, Invincible, Metropolitan, NBNZ, NZI, Norwich Union, Oceanic, Pacific, Westpac; cluster 4 ("low"): BNZ, CICO America, CUNA, National Insurance, Southsure, Swann.

cluster 1 for 1992 is that five out of the six life insurance firms recording low disclosures are small mutuals. Therefore, firm size in conjunction with organisational form may be an important influence on the overall level of voluntary disclosure in the New Zealand life insurance industry. More will be said of this later in the analysis of sensitivity tests on the multivariate model (section 6.2.6).

Although the cluster analysis indicates that the majority of life insurance companies reporting low levels of information disclosure appear to be small entities, the subsidiaries and branches of trading banks also tend to have low levels of voluntary disclosure relative to the size of their life insurance operations (as measured in this study by the market value of total assets). This observation was particularly noticeable from the 1988 clusters (soon after the banks first entered the New Zealand life insurance market) and could indicate that managerial discretion over disclosure policy was restricted in the life insurance companies owned by banks in order to facilitate head office control and limit information given to competitors. Fieldwork carried out in the life insurance operation of an Australian-owned bank (and reported later in section 6.5) appeared to support this possibility.

6.2.2. Discriminant analysis

As mentioned previously in chapter 5 (section 5.4.4), discriminant analysis is often used by researchers to highlight those factors which appear to statistically discriminate (or “explain”) clusters (Hair *et al.* 1987). Since four clusters are derived for each of the two years 1988 and 1992, the discriminant analysis used in this study produces three discriminant (or canonical) functions (i.e., $n - 1$) which could help to explain a certain proportion of the separation between the observed cluster patterns. As in Hair *et al.* (1987, p. 119), this study identifies and analyses those discriminant functions which explain 30 per cent or more of the separation between clusters. The explanatory variables (referred to in discriminant analysis as predictor variables) were the same as those defined previously in chapter 5 (section 5.4.3). The discriminant results for 1988 and 1992 are given in Table 6.2 and analysed further below.

The discriminant analysis indicated that Function 1 was the most robust function distinguishing between cluster groups, accounting for roughly 92 per cent of the variation between clusters in 1988 and 86 per cent in 1992. Table 6.2 illustrates that on Function 1 for 1988 two predictor variables appear to account for most of the separation of the clusters. Ranked in order of importance the variables are product concentration (-0.662) and firm size ($+0.491$). In 1992, product concentration (-0.838) and firm size ($+0.493$) were again important predictor variables, as is the variable representing non-executive directors ($+0.378$). Chi-square (χ^2) statistics computed for both 1988 and 1992 indicate that the discriminant function for these predictor variables are statistically significant at the 0.10 level or better. As expected, the discriminant results for both 1988 and 1992 revealed that firm size and product diversification were the key variables which discriminated between cluster groups. However, the positive discriminant influence of non-executive directors on voluntary disclosure evident from the 1992 clusters was a feature which appeared to be contrary to that which was hypothesised earlier in chapter 4 (section 4.3).

Table 6.2

**Pooled (Within-Group) Correlations Between
Discriminant Variables and Discriminant
(Canonical) Functions - 1988 and 1992 Clusters**

This table gives the variables which appear to statistically discriminate (i.e., "explain") the clusters derived from the voluntary disclosure score groups of New Zealand-based life insurance companies derived for 1988 (n = 30) and 1992 (n = 33).

	1988	1992
Discriminant Function Separating the Cluster Groups	Function 1	Function 1
Percentage of Cluster Separation Explained by Function 1	92.26%	85.61%
Variables with Statistically Significant Discriminatory Power (at the 0.10 level or better)	Product concentration - 0.662 Firm size +0.491	Product concentration - 0.838 Firm size +0.493 Non-executive directors +0.378
Variables Not Statistically Significant	Organisational form +0.064 Assets -in-place -0.112 Reinsurance +0.039 Localisation of operations -0.027 Non-executive directors +0.264 Distribution system +0.019	Organisational form +0.030 Assets-in-place -0.146 Reinsurance +0.103 Localisation of operations - 0.135 Distribution systems +0.023

Source: Research Data

6.2.3. Descriptive statistics

Table 6.3 gives the descriptive statistics for the 1988-1993 pooled data. The descriptive statistics show that there is diversity in the size of life insurance companies, even after the firm size variable had been transformed logarithmically (standard deviation (σ) = 1.044). This feature reflects the fact that New Zealand's life

Table 6.3**New Zealand Life Insurance Companies - Descriptive Statistics**

This table gives the descriptive statistics for the dependent variable (logged and unlogged) and independent variables for the pooled firm/year observations for New Zealand-based life insurance companies for 1988-1993 (n = 193).

VARIABLES	MEAN	MEDIAN	STANDARD DEVIATION	MINIMUM	MAXIMUM
<i>lnDSCOR</i>	-0.573	-0.545	0.294	-0.230	0.124
<i>DSCOR</i>	0.230	0.222	0.010	0.005	0.571
<i>OFORM</i>	0.560	1.000	0.498	0.000	1.000
<i>AIP</i>	0.279	0.277	0.147	0.000	0.972
<i>CONCN</i>	0.526	0.500	0.210	0.170	1.000
<i>REINS</i>	0.253	0.090	0.271	0.010	1.000
<i>LOC</i>	0.622	1.000	0.486	0.000	1.000
<i>NEXECS</i>	0.402	0.500	0.373	0.000	1.000
<i>lnSIZE</i>	1.583	1.411	1.044	-0.921	3.679
<i>DIST</i>	0.516	0.750	0.395	0.000	1.000

Source: Research data

Notes:

1. *lnDSCOR* = aggregate disclosure score (logged) (*DSCOR* is the unlogged variable); *OFORM* = organisational form - dummy variable, mutual = 0, stock = 1; *AIP* = assets-in-place - market value of fixed assets/property ÷ total market value of assets (NZ\$m); *CONCN* = product concentration - *Herfindahl Index*; *REINS* = reinsurance - annual reinsurance premiums ÷ total annual premiums; *LOC* = localisation of operations - dummy variable, 1 = multinational, 0 = single domicile; *NEXECS* = non-executive directors- proportion of non-executive directors on the board; *lnSIZE* = firm size - log of the market value of total assets; *DIST* = distribution system - annual premiums attributable to exclusive sales agencies ÷ total annual premiums.

2. Non-parametric Kruskal-Wallis tests on the annual variation of variable means indicated no major changes in the nature of the New Zealand life insurance industry (e.g., in terms of changes in size and organisational form) over the six years 1988-1993

insurance industry is dominated by a small number of very large, mainly overseas-controlled, companies (see chapter 2, section 2.2). However, in respect of the other independent variables, there does not appear to be as much variation among companies. A Kruskal-Wallis one-way analysis of variance was also computed for each variable across firm/years to determine whether there had been any substantial change in the characteristics of the New Zealand life insurance industry over the six-year period 1988-1993. In each case, the computed χ^2 statistics were found to be less than the critical value of χ^2 at the 0.05 level of significance (i.e., $\chi^2_{crit} = 11.071$, with five degrees of freedom (i.e., $n \text{ years} - 1$)). The non-transformed variable representing company disclosure score (*DSCOR*) reported in Table 6.3 further indicates that overall levels of voluntary disclosure ranged from 0.571 at the top end (i.e., in the case of Sovereign Assurance in 1992) to 0.005 at the bottom end (i.e., in the case of new entrant - Regent Insurance - in 1993).

Additionally, non-transformed voluntary disclosure scores for all New Zealand-based life insurance companies, together with their relative rankings in each of the six years 1988-1993, are given in Table 6.4. Table 6.4 shows that the average annual disclosure scores for all companies varied from a low of 0.207 in 1988 to a high of 0.255 in 1993, thus suggesting moderate increased levels of voluntary disclosure between 1988 and 1993. This could indicate that New Zealand life insurance companies may be responding (albeit slowly) to changing stewardship and marketing needs (e.g., with regard to increase product and investment performance). It could also reflect the reluctance of managers to radically change their disclosure strategies for reasons such as tradition or inertia (Gibbins *et al.*, 1990, 1992). This observation is further consistent with the results of the Spearman rank correlation analysis reported in Table 6.1. Table 6.4 also indicates that the six largest life insurers (a mix of mutuals and stock companies) were among the top third disclosing companies in 1988, although in 1993 some of them were overtaken by small stock companies (such as Sovereign Assurance) which were new entrants to the New Zealand market. It is thus plausible that these small companies sought to increase their voluntary disclosure as part of a strategy of increasing their market share (see section 6.3.2).

Table 6.4

New Zealand Life Insurance Companies - Voluntary Disclosure Scores 1988-1993

This table gives the aggregate annual voluntary disclosure scores for New Zealand-based life insurance companies 1988-1993. Life insurance companies are listed in alphabetical order. 1988 and 1993 rankings are also given.

COMPANY	1988 Rank	AGGREGATE VOLUNTARY DISCLOSURE SCORES						1993 Rank
		1988	1989	1990	1991	1992	1993	
		n=30	n=31	n=32	n=3	n=33	n=34	
American	=13th	0.19	0.19	0.20	0.20	0.21	0.21	14th
AMP	=7th	0.26	0.25	0.24	0.22	0.23	0.22	=13th
Ansvar Life	10th	0.22	0.22	0.21	0.21	0.19	0.17	18th
ANZ Life	15th	0.16	0.16	0.16	0.14	0.14	0.11	=21st
BNZ Life	19th	0.10	0.09	0.10	0.10	0.11	0.19	=16th
Cigna Life	=6th	0.27	0.28	0.27	0.28	0.27	0.21	14th
CML	=7th	0.26	0.26	0.28	0.28	0.30	0.32	8th
CICO Am.	23rd	0.05	0.05	0.06	0.08	0.08	0.10	=22nd
Countrywide	14th	0.17	0.16	0.14	0.14	0.12	0.12	20th
CUNA	18th	0.12	0.12	0.12	0.12	0.11	0.11	21st
Equitable Life	=12th	0.20	0.19	0.19	0.19	0.19	0.19	=16th
FAI Metro	=6th	0.27	0.27	0.29	0.29	0.29	0.28	=10th
Farmersl	8th	0.25	0.26	0.28	0.28	0.28	0.33	7th
Fidelity Life	5th	0.28	0.29	0.37	0.33	0.37	0.36	5th
Greenwich	17th	0.14	0.13	0.14	0.14	0.15	0.15	19th
Guardian	=9th	0.24	0.24	0.30	0.30	0.32	0.35	6th
Hallmark	-	-	-	-	0.18	0.18	0.18	=17th
Invincible	16th	0.15	0.14	0.16	0.18	0.20	0.24	=12th
Medical Life	3rd	0.31	0.33	0.38	0.35	0.36	0.37	4th
National Ins.	22nd	0.06	0.06	0.06	0.06	0.06	0.09	=23rd
NML	=7th	0.26	0.24	0.24	0.24	0.24	0.24	=12th
NBNZ	-	-	-	-	0.09	0.19	0.18	=17th
Norwich U.	11th	0.21	0.22	0.24	0.24	0.28	0.29	=9th
NZI Life	=7th	0.26	0.25	0.24	0.24	0.26	0.28	=10th
Oceanic Life	4th	0.29	0.29	0.29	0.27	0.27	0.27	11th
Pacific Life	=12th	0.20	0.20	0.20	0.20	0.20	0.22	=13th
Prudential	2nd	0.32	0.32	0.31	0.30	0.29	0.29	=9th
Regent Ins.	-	-	-	-	-	-	0.01	24th
Southsure	20th	0.09	0.09	0.08	0.08	0.09	0.09	=23rd
Sovereign	-	-	0.37	0.57	0.46	0.57	0.56	1st
Sun Alliance	=9th	0.24	0.24	0.29	0.29	0.34	0.39	3rd
Swann Life	21st	0.08	0.08	0.09	0.09	0.10	0.10	=22nd
Tower Life	1st	0.38	0.38	0.41	0.41	0.41	0.44	2nd
Westpac Life	=13th	0.19	0.19	0.19	0.19	0.20	0.20	15th
Mean	-	0.21	0.21	0.24	0.23	0.24	0.26	-
Std. Deviation	-	0.08	0.09	0.11	0.09	0.11	0.10	-

Source: Research data

Table 6.5 further suggests that at the higher and lower ends of the spectrum of voluntary disclosure scores the relative position of individual New Zealand life insurance companies did not appear to change dramatically each year over the period 1988-1993. For example Tower Life, Sovereign Assurance, Medical Life and Prudential Assurance are generally amongst the highest disclosing life insurance companies in each of the six years examined, while BNZ, Southsure, Swann Life and CICO America are consistently amongst those life insurance companies disclosing the least amount of information in their annual reports over the same period. This observation further suggests that firm-specific conditions such as company culture and the historical preferences of management to disclose or not to disclose information in the annual report could be influencing disclosure policy in New Zealand-based life insurance companies. Indeed, Gibbins *et al.* (1990, 1990) consider that cultural and historical antecedent conditions in companies are important determinants of corporate disclosure practice. The possibility that such antecedent conditions may be important determinants of the disclosure position of New Zealand-based life insurance companies was investigated further (and confirmed) during the course of the fieldwork conducted in this study (see sections 6.3 and 6.4).

6.2.4. Univariate results

Table 6.6 gives the Pearson pairwise correlation coefficients for the data set. The correlation coefficients indicate statistically significant positive associations (at $p < 0.01$ or better, two-tailed) between *lnDSCOR* and the independent variables *NEXECS* and *lnSIZE*. This suggests that large life insurance companies and those with a high preponderance of non-executive directors, tend to have high levels of voluntary disclosure. The positive sign between *lnDSCOR* and *lnSIZE* was consistent with what

Table 6.5

**Upper and Lower Rankings of New Zealand Life Insurance Companies
by Voluntary Disclosure Scores 1988 - 1993**

This table lists the five New Zealand-based life insurance companies with the greatest and the lowest levels of voluntary disclosure for each year in the six-year period 1988 - 1993.

GROUPING	RATING	1988 n=30	1989 n=31	1990 n=32	1991 n=33	1992 n=33	1993 n=34
HIGH DISCLOSERS ("Top Five")	Highest	Tower Prudential Medical Oceanic Fidelity	Tower Sovereign Medical Prudential Oceanic & Fidelity (=)	Sovereign Tower Medical Fidelity Prudential	Sovereign Tower Medical Fidelity Prudential	Sovereign Tower Fidelity Medical Sun Alliance	Sovereign Tower Sun Alliance Medical Fidelity
LOW DISCLOSERS ("Bottom Five")	Lowest	BNZ Southsure Swann National Ins. CICO Am.	BNZ Southsure Swann National Ins. CICO Am.	Swann Southsure National Ins. NBNZ CICO Am.	BNZ Swann Southsure CICO Am. National Ins.	BNZ Swann Southsure. National Ins. CICO Am.	ANZ & CUNA (=) CICO Am.& Swann (=) Southsure Nat. Ins. Regent

Source: Research data

Table 6.6

New Zealand Life Insurance Companies - Correlation Coefficients

This table gives the pairwise Pearson/Spearman rank correlation coefficients between the dependent and independent variables for the pooled firm/year observations of New Zealand-based life insurance companies for 1988-1993 (n = 193).

<i>VARIABLE</i>	<i>lnDSCOR</i>	<i>OFORM</i>	<i>AIP</i>	<i>CONCN</i>	<i>REINS</i>	<i>LOC</i>	<i>NEXECS</i>	<i>lnSIZE</i>
<i>lnDSCOR</i>	-							
<i>OFORM</i>	0.202	-						
<i>AIP</i>	0.031	0.120	-					
<i>CONCN</i>	-0.464**	-0.077	-0.119	-				
<i>REINS</i>	-0.131	-0.163	-0.196	-0.189	-			
<i>LOC</i>	0.040	0.169	0.195	0.027	0.415**	-		
<i>NEXECS</i>	0.377**	-0.025	0.082	-0.305	-0.099	0.172	-	
<i>lnSIZE</i>	0.491**	-0.068	0.027	-0.542**	-0.457**	0.281	0.255	-
<i>DIST</i>	-0.106	-0.102	0.277	0.002	-0.200	0.188	0.029	0.087

Source: Research data

Notes:

1. *lnDSCOR* = aggregate disclosure score (logged); *OFORM* = organisational form - dummy variable, mutual = 0, stock = 1; *AIP* = assets-in-place - market value of fixed assets/property ÷ total market value of assets (NZ\$m); *CONCN* = product concentration - *Herfindahl Index*; *REINS* = reinsurance - annual reinsurance premiums ÷ total annual premiums; *LOC* = localisation of operations - dummy variable, 1 = multinational, 0 = single domicile; *NEXECS* = non-executive directors- proportion of non-executive directors on the board; *lnSIZE* = firm size - log of the market value of total assets; *DIST* = distribution system - annual premiums attributable to exclusive sales agencies ÷ total annual premiums.
2. ** = statistically significant at 0.01 or better (two-tailed).
3. Correlations involving the non-metric variables *OFORM* and *LOC* are computed using the non-parametric Spearman rank test. The remaining correlation coefficients are computed using the Pearson product-moment test.

was previously hypothesised, but the positive association between *lnDSCOR* and *NEXECS* was unexpected, suggesting that the number of non-executives complements rather than substitutes for voluntary disclosure. The negative and statistically significant correlation between *lnDSCOR* and *CONCN* suggests that, as expected, multi-product life insurance companies tend to disclose more information voluntarily in their annual reports than specialist life insurance companies. These results appear to support the discriminant analysis carried out earlier in section 6.2.

A Mann-Whitney U test (one-tailed) was performed to determine whether there was any significant statistical difference between *lnDSCOR* and the independent variables *OFORM* and *LOC*. Consistent with expectations, the statistic computed to test for difference between the disclosure levels of mutuals and stock companies was significant (i.e., $z = 1.617, p \leq 0.10$). A Mann-Whitney U test between *lnDSCOR* and *OFORM* for each of the four of the six years in the pooled data set also produced statistically significant results for most years (at $p \leq 0.10$ in 1990-1993, with 1988 and 1989 not being significant). Therefore, stock companies appear to disclose more information than mutuals, possibly because shareholders (and managers) can reduce their market cost capital and increase the short-term traded value of the firm. However, contrary to what was hypothesised, the difference between *lnDSCOR* and *LOC* was found not to be statistically significant and they had the "wrong" sign (i.e., $z = -0.049, p = 0.480$). A Mann-Whitney U test between *lnDSCOR* and *LOC* on each of the six years individually also supported this conclusion. Therefore, it would appear that multinational life insurance companies do not disclose more information voluntarily than companies restricted solely to the New Zealand market. It is thus plausible that senior executives in parent companies located overseas control the activities of their New Zealand management through internal reporting procedures and restrict their discretion to make voluntary disclosure to protect the corporate brand-name and/or reduce proprietary costs.

Table 6.7

New Zealand Life Insurance Companies - Multivariate Results

This table presents the multivariate results for the pooled firm/year observations of New Zealand-based life insurance companies for 1988-1993 (n = 193).

VARIABLES	PREDICTED SIGN (+/-)	COEFFICIENT ESTIMATE	STANDARD ERROR	STUDENT'S <i>t</i> (one-tailed)
<i>OFORM</i>	+	0.211	0.064	***3.294
<i>AIP</i>	-	0.088	0.213	0.413
<i>CONCN</i>	-	-0.181	0.077	** -2.351
<i>REINS</i>	-	0.186	0.087	*2.137
<i>LOC</i>	+	-0.051	0.060	-0.858
<i>NEXECS</i>	-	0.218	0.077	**2.831
<i>lnSIZE</i>	+	0.179	0.034	***5.265
<i>DIST</i>	-	-0.890	0.475	*-1.874
<i>INTERCEPT</i>	?	-1.062	0.243	-4.370
$F_{46,146} = 16.793$ Probability = 0.0001 (two-tailed)				
$R^2 = 0.647$ Adj $R^2 = 0.535$				

Source: Research data

Notes:

1. The model estimated in this study is:

$$\ln DSCOR_{it} = \beta_0 + \beta_1 OFORM_{it} + \beta_2 AIP_{it} + \beta_3 CONCN_{it} + \beta_4 REINS_{it} + \beta_5 LOC_{it} + \beta_6 NEXECS_{it} + \beta_7 \ln SIZE_{it} + \beta_8 DIST_{it} + \beta_9 YR_{it} + \dots + \beta_{14} YR_{it} + \beta_{15} FIRM_{it} + \dots + \beta_{49} FIRM_{33t} + \varepsilon_{it}$$

where *lnDSCOR* = aggregate disclosure score (logged); *OFORM* = organisational form - dummy variable, mutual = 0, stock = 1; *AIP* = assets-in-place - market value of fixed assets/property ÷ total market value of assets (NZ\$m); *CONCN* = product concentration - *Herfindahl Index*; *REINS* = reinsurance - annual reinsurance premiums ÷ total annual premiums; *LOC* = localisation of operations - dummy variable, 1 = multinational, 0 = single domicile; *NEXECS* = non-executive directors - proportion of non-executive directors on the board; *lnSIZE* = firm size - log of the market value of total assets; *DIST* = distribution system - annual premiums attributable to exclusive sales agencies ÷ total annual premiums.

2. * = statistically significant at 0.05 (one-tailed)

** = statistically significant at 0.01 (one-tailed)

*** = statistically significant at 0.001 or better (one-tailed)

3. The computed White's statistic ($\chi^2 = 9.086$, with eight degrees of freedom) accepted the hypothesis of homoscedastic error terms at the five per cent level of significance. The Jarque-Bera statistic was 5.014 and below the five per cent critical χ^2 value of 5.991 with two degrees of freedom), thus supporting the normality assumption. The Hausman specification test χ^2 statistic = 17.049 (with eight degrees of freedom) rejected the hypothesis of non-contemporaneous correlation between the independent variables at the error term at the five per cent level of significance. Computed variance inflation factors were all less than 10, suggesting that the coefficient estimates are not rendered inefficient by model collinearity. Correlation among adjacent years' residuals was no more/less than -0.039 and not statistically significant. The fixed-effects model thus appears to be an effective means of reducing autocorrelation among adjacent years' residuals.

4. The F-statistic for the joint test of the *YR* and *FIRM* dummies is 5.462 which is significant at $p \leq 0.001$ or better (two-tailed). This result indicates that the dummy variables as a whole are significantly related to the dependent variable. When the *YR* and *FIRM* variable are excluded the model R^2 falls to 0.483 (Adjusted $R^2 = 0.378$) suggesting that much of the explanatory power of the model is captured by the firm and time effects. Consequently, interpretation of the coefficient estimates should be treated cautiously.

5. Five *YR* and 17 *FIRM* dummies are statistically significant at the 10 per cent level or better.

6.2.5. Multivariate results

To supplement the univariate results and control for potential interactions among the variables, a multivariate analysis was carried out. The multivariate results presented in Table 6.7 indicate that with the exception of *AIP* and *LOC*, the independent variables are statistically significant. However, of these, *NEXECS* and *REINS* do not have the predicted sign.

As expected, *OFORM* was statistically significant (at $p \leq 0.001$ or better), indicating that stock life insurance companies disclose more information in their annual reports than mutuals in order to satisfy the short-term performance monitoring requirements of shareholders. Although this finding is supported by the univariate analysis reported in section 6.2.4, it is nevertheless inconsistent with the discriminant analysis which found that organisational form was not a significant determinant of the clusters of industry disclosure scores. Therefore, it is possible that by increasing the number of firm/year observations (and so raising the degrees of freedom) the pooled data gives more efficient statistical estimates of the effect of dichotomous variables such as organisational form on voluntary disclosure behaviour (see section 5.4.1).

As expected, *CONCN* and *lnSIZE* were found to be statistically significant (at $p \leq 0.01$ and $p \leq 0.001$, respectively). Therefore, large and multi-product life insurance companies are likely to disclose more information than small and specialised life insurance companies because of the information asymmetry problem arising from increased size and product diversification. The empirical relationship between high levels of voluntary disclosure and stock companies and large life insurance firms were also supported by the univariate results. Also consistent with what was hypothesised, was the finding that *DIST* was statistically significant and negatively related to *lnDSCOR* ($p \leq 0.05$). New Zealand-based life insurance companies thus appear to disclose more information in their annual report in order to satisfy the monitoring and decision-making requirements of independent sales agents. This observation however was not discernable from the cluster and discriminant analyses, reported earlier in sections 6.2.1 and 6.2.2.

Interestingly, although *NEXECS* and *REINS* were found to be statistically significant (at $p \leq 0.01$ and $p \leq 0.05$, respectively), they were incorrectly signed. Therefore, the number of outside directors in life insurance companies seems to complement rather than substitute for voluntary disclosure, possibly because the release of information in the annual report helps non-executive directors to better control and monitor managerial activities *ex-post*. This feature was also consistent with the discriminant analysis on the 1992 clusters (section 6.2.2) and the univariate results (section 6.2.4). This evidence therefore appears to support the view of some researchers (e.g., Malone *et al.*, 1993) that non-executive directors frequently perform an active role in approving the annual report *ex-ante* and using its contents to monitor managers *ex-post*. The reasoning is that such screening and monitoring activities are commensurate with their responsibilities for corporate governance. In New Zealand, this feature could also have been prompted by non-executive directors anticipating the new legal requirements concerning directors' responsibilities which emerged formally with the passing of the Companies Act 1993 (s. 137). Furthermore, in the absence of alternative credible (i.e., credible) modes of disclosure, managers of New Zealand life insurance companies could make the content of their annual reports more elaborate in

order to adequately inform users such as non-executive directors.

The finding that highly reinsured life insurance companies disclose more information in their annual reports than life insurance companies with less reinsurance suggests that reinsurers could demand public, as well as private information, to assess the financial condition of the direct writer *ex-ante* and monitor managerial activities *ex-post*. However, the statistical relationship between *lnDSCOR* and *REINS* was supported neither by the discriminant analysis nor the univariate results reported in sections 6.2.2 and 6.2.4 of this chapter.

The hypothesised relationship between *lnDSCOR* and *AIP* was not supported by the statistical results. Therefore, life insurance companies with less assets-in-place could mitigate internal incentive problems by means other than voluntary disclosure in the annual report such as reinsurance. In addition, the absence of a statistical relationship between *lnDSCOR* and *LOC* implies that the annual reporting practices in the New Zealand life insurance industry are generally unaffected by the geographical spread of corporate operations.

6.2.6. Diagnostics and sensitivity tests

Formal diagnostic checks were carried out in the manner prescribed by Belsley *et al.* (1980), Judge, Griffiths & Lee (1980), Neter, Wasserman & Kutner (1985), Maddala (1988), and Kennedy (1995) among many others. Homoscedasticity was tested by computing the White's test with cross-terms. The computed statistic ($\chi^2 = 9.086$, with eight degrees of freedom) did not enable the hypothesis of homoscedastic disturbance terms to be rejected at the five per cent level of significance. Normality of the disturbances was tested using the Jarque-Bera statistic. This tests the distribution of the residuals for symmetry and kurtosis. The null hypothesis of normality of the residuals could not be rejected since the computed statistic of 5.014 is less than the five per cent critical χ^2 value of 5.991 (with two degrees of freedom).

The statistically significant correlations between *lnSIZE*, *CONCN* and *REINS*, and *LOC* and *REINS* reported in Table 6.6, raises the possibility that interpretation of the coefficients may be inefficient due to collinearity. However, it was felt that solutions to prospective collinearity problems such as omitting the offending variables, could lead to model mis-specification³³. Moreover, Judge *et al.* (1980), consider that correlation coefficients are only indicative of serious collinearity if they exceed 0.80, and if the regression model employed is associated with both a high R^2 and statistically insignificant *t*-statistics among all of the coefficients. As Table 6.6 shows, these conditions do not apply in this study. However, as multicollinearity can exist between more than two independent variables at the same time, variance inflation factors were computed for the independent variables in order to ascertain the magnitude of "hidden" collinearity (Belsley *et al.* 1980; Bathala & Rao, 1995)³⁴. Since none of the calculated variance inflation values were greater than 10 (Belsley *et al.* 1980), the statistical properties of the coefficient estimates computed in this study are unlikely to be made inefficient by model collinearity. Finally, diagnostic checks on the model's residuals indicate that the correlation among adjacent years' residuals was -0.039 and not statistically significant. This suggests that the fixed-effects model satisfactorily controls for autocorrelation among adjacent years' residuals.

The dummy variables used to represent the firm- and time-effects could account for the relatively higher value of the $R^2 = 0.647$ (and adjusted $R^2 = 0.535$) reported in this study (see Table 6.6). Hence, the model's explanatory power and the significance

³³ When the model was re-run without the variable *lnSIZE*, the R^2 decreased from 0.647 to 0.566 (adjusted R^2 fell from 0.535 to 0.451). This suggests that deleting variables, such as *lnSIZE*, from the model to alleviate collinearity is likely to reduce its explanatory power, and could lead to mis-specification bias (e.g., due to the exclusion of a theoretically motivated variable). Dropping *lnSIZE* did not have any major effect on the statistical significance of the remaining regression coefficients or the direction of their signs.

³⁴ The variance inflation factor is computed as $1/(1 - R^2)$ where R^2 is derived from the regression of the independent variable on all the other explanatory variables.

of the coefficient estimates may be over-stated. Therefore, the model was re-estimated without the *FIRM* and *YR* dummy variables giving a $R^2 = 0.483$ (and adjusted $R^2 = 0.378$), suggesting that the time and firm effects contribute substantially to the model's explanatory power. The statistical significance of the model however was largely unaffected by the omission of the *FIRM* and *YR* dummies ($F = 12.675$, $p \leq 0.0001$). Following Cahan (1992, 1993), the *FIRM* and *YR* variables were also tested jointly with an *F*-test. The computed *F*-statistic of 5.462 was statistically significant at the 0.001 level, which further indicates that the time- and firm-effects taken together were significantly related to *lnDSCOR*, and could thus be influencing the reported results. In addition, an interactive term between the variables *OFORM* and *lnSIZE* was introduced into the model and found to be statistically significant ($p \leq 0.001$). This test suggests that it is firm size in conjunction with organisational form which probably determines the overall level of voluntary disclosure in New Zealand's life insurance industry.

Lang & Lundholm (1993, p. 265) also report that in cases where there is little inter-temporal variation in each firm's dependent and independent variables the significance of the coefficients may be over-stated. As in Lang & Lundholm (1993), this potential problem was tested for by regressing each firm's mean *lnDSCOR* on the mean values of the independent variables thereby including each firm in the value once. In the event, overall conclusions remained unchanged at conventional levels of significance (i.e., at the 0.10 level or beyond), although the results indicated reduced levels of significance for all the independent variables.

Mills *et al.* (1995), Kennedy (1995), among others, further contend that although the two-way fixed-effects model has advantages, it also has some notable shortcomings. For example, the fixed-effects model cannot estimate the influence of time invariant variables and suffers from a loss in degrees of freedom due to the inclusion of the *FIRM* and *YR* dummy variables. Kennedy (1995, pp. 222-223) advocates that in certain circumstances it may be more appropriate to use a random-effects model on pooled data - if for example, the independent variables are uncorrelated with the error

term. To test the null hypothesis of no correlation between the independent variables and the error term, a Hausman specification test was performed in the manner prescribed by Griffiths, Hill & Judge (1993, pp. 462-465). The computed $\chi^2 = 17.049$ (with eight degrees of freedom) rejects the hypothesis of no contemporaneous correlation between the independent variables and the error term at the 0.05 level of significance (i.e., $\chi^2_{crit} = 15.507$). This diagnostic thus suggests that the use of the fixed-effects model on the data set collected in this study is appropriate. However, evidence of contemporaneous correlation between the independent variables and the error term is indicative of a potential endogeneity problem (Kennedy, 1995). Kennedy (1995) also recognises that this feature is common in econometric studies, and argues that in cases where endogeneity is detected, it should be recognised as a limitation and as a result, interpretation of the coefficient estimates should be tempered with caution.

Finally, as recommended by Griffiths *et al.* (1993), Kennedy (1995), Mills *et al.* (1995), and others, a regression specification error test (*RESET*) was performed to examine the functional form of the model used in this study for mis-specification error and/or omitted variable bias. The computed *F*-statistic of 2.864 (one-tailed) indicated that the null hypothesis of no model mis-specification could not be rejected at the five per cent level of significance. That is, model mis-specification does not appear to be problematical in this study. Kennedy (1995, p. 95) reports that the *RESET* is also useful for detecting non-linearities in the data set. The insignificance of the *RESET* thus suggests that, as expected, the functional form of the relationship estimated in this study is approximately linear.

6.3. INTERVIEW EVIDENCE

As mentioned earlier (section 5.2), field-based interviews and document analysis were employed to supplement and complement the statistical results as part of triangulation methodology. This section gives the demographic details of the subjects interviewed in the 12 New Zealand-based life insurance companies visited during the course of this study (Appendix 4). The results derived from a content analysis of the interview

evidence obtained are also presented and summarised at Appendix 5.

6.3.1. Details of interviewees

Demographic details of the 22 subjects interviewed at each company visited are presented at Appendix 4. Appendix 4 indicates that of the 22 subjects interviewed, 8 are executive members of the board of directors, and thus likely to be familiar with the motives behind any corporate disclosure decisions taken. The remaining 14 interviewees are financial managers who are involved directly with the preparation of annual reports. Except in the case of two very small operatives (Companies G and J), at least two subjects were interviewed at each field-site, so that the reliability of responses given to the questions raised could be subsequently verified and reconciled at a later stage, if necessary. Appendix 4 also shows that in general, the subjects interviewed had considerable years experience of the corporate reporting function and of working in the company. For example, 17 out of 22 subjects had spent three years or more in their current positions and 21 out of these subjects had at least 3 years or more work experience in the company.

6.3.2. Analysis of interview evidence

Recall (section 5.5.2) that interviews were carried out with 22 senior executives/financial managers at 12 life insurance companies over the seven months October 1994 to April 1995. To ensure comparability with the statistical results, the focus of the interviews was on events largely pertaining to before the Financial Reporting Act 1993 became effective on 1st July 1994.

The analysis of the interview evidence in this section follows the sequence of the research instrument given at Appendix 3 and the order of the test hypotheses advanced in chapter 4 (section 4.3). As mentioned in chapter 5 (section 5.5.5), the responses relating to the perceived influences on voluntary disclosure (i.e., sections III and IV of Appendix 3) were analysed using content analysis. The salient aspects of the

findings obtained from the analysis of interview evidence are summarised in Appendix 5 and examined in further detail below.

(a) General views on voluntary disclosure

All interviewees (irrespective of whether they worked in an entity that was New Zealand-owned or controlled from overseas) considered voluntary disclosure to relate to the dissemination in the annual report of information which is in excess of the statutory minimum prescribed by New Zealand companies law and the promulgations of the NZSA. However, considerable differences of opinion were recorded concerning the perceived advantages, and the main beneficiaries of voluntary disclosure by life insurance companies. For example, interviewees in large mutuals (e.g., Company A) considered that voluntary disclosure benefited external users (e.g., competitors) rather than internal users (e.g., policyholders). For instance, a manager of Company A stated:

Most of our investors and policyholders do not get much of our annual reports, mainly because they do not understand how we present information and how we arrive at our "bottom-line" profit . . . Probably the main beneficiaries of voluntary disclosure are our competitors. They have the staff with the experience and expertise to analyse our performance, sales strategies and our financial condition. This is why we tend to be very circumspect with what we disclose in the annual report . . .

In contrast, managers in the large stock life insurance companies (e.g., Company H) acknowledged that voluntary disclosure could have important advantages for internal users, particularly in enabling shareholders, and some classes of policyholder (e.g., those with investment-linked policies) to more efficiently monitor and better assess financial performance. However, managers in large stock companies shared the concerns of their counterparts in mutuals regarding the proprietary costs of public disclosure. As one manager in Company H reported:

The annual report can be of some use to shareholders and investors, and to a lesser extent policyholders, as it does help to highlight company performance . . . and [therefore] provide users with an opportunity to assess our market and investment success . . . However, other companies may find such information useful as well . . . and it could lead to competitors emulating our business strategies in order to secure a larger share of the New Zealand market for themselves . . .

Several interviewees also considered other disclosure media such as press releases and insurance policy documents, to be important. Interviewees perceived that such documents tend to present information in a clear and concise manner, and focus specifically on product-market issues (e.g., bonus rates of return and investment performance) which are of direct interest and relevance to policyholders and sales agents. Interviewees in the large mutual companies (e.g., Companies A and D) placed particular emphasis on alternative disclosure media as marketing vehicles, rating them more highly than annual reports. For instance, a respondent in Company D said that:

Certain types of information - for example, the performance of funds relating to single premium bonds - can be disclosed more efficiently to policyholders through brochures, policy documents and so forth, rather than through the annual report. The annual report tends to provide an overview of products sold and investment performance and so on, rather than the fine detail . . .

Managers in small (e.g., Companies B and C) and medium-sized New Zealand-owned companies (e.g., Company J), while not underplaying the importance of alternative methods of voluntary disclosure, almost exclusively perceived the annual report to be the primary disclosure medium for the firm. For example, they considered that the annual report often gives a good overview of the company's activities, which is important not only for the purposes of sales and marketing, but also for promoting the company's public image. Moreover, the statutory requirement for the annual report of New Zealand-based life insurance companies to be audited (currently required by s.15 of the Financial Reporting Act 1993) was seen to enhance the credibility of disclosure in the annual report compared with other disclosure media such as sales and marketing publications. For instance, a senior executive in Company J stated that:

I believe the annual report is the primary document for disclosing the performance of the company . . . One of the reasons is that the financial statements in annual report have to be audited and as such the audit gives credibility to the information reported to the public. The public need to have confidence in the information disclosed in the annual report . . .

The preliminary information obtained from interviewees thus indicates that the annual report is a useful disclosure document, although other media such as policy documents, may be more useful in certain circumstances, for example, where investors and policyholders wish to obtain more detailed information on past performance and projected bonuses. Nevertheless, the fact that the annual report is audited clearly enhances its credibility compared with other media, such as policy documents, which are not subject to audit scrutiny. Furthermore, the tendency for managers to be concerned about the proprietary costs of disclosing too much information to their competitors could help to explain the fairly stable levels of voluntary disclosure in the New Zealand life insurance industry highlighted by the cluster analysis (section 6.2.1) and the descriptive statistics (section 6.2.3).

(b) Organisational form

Appendix 5 shows that in general, the interview evidence indicated that the degree of discretion assigned to managers by owners of life insurance companies was distinguished by organisational form. For example, internal rules and procedures in small mutuals (e.g., Companies B and I) appeared to give their managers very little discretion to disclose information in the annual report compared with stock companies of equivalent size (e.g., Companies C and G). However, in the case of Company B, interviewees recognised that in future managers may be assigned greater discretion over disclosure decisions than has hitherto been the case in order to take better advantage of new investment and marketing opportunities. Interview evidence obtained from managers in the larger mutuals (e.g., Companies A and D) suggested that relatively more discretion exists over the corporate reporting practices of the New Zealand entity when compared with the smaller mutuals. For example, a manager in Company D stated that:

Certainly over the last five years or so, head office has given us more and more discretion to make specific types of information disclosures, particularly disclosures such as our support for New Zealand sports and the community projects. Head office feel that the promotion of such achievements will help us to enhance our corporate profile locally and boost sales . . . However, head office like advanced notice of what we intend to disclose publicly, and can if it wishes, reverse any decision which we make here in New Zealand. But it is very rare for head office to veto disclosure proposals which we put forward to them. I believe that as we are a large operation, head office has confidence in our managers to make sound and prudent judgements. Head office nevertheless closely monitors what we do in terms of voluntary disclosure

. . .

Therefore, greater managerial discretion over disclosure decisions appears to be a manifestation of the more complex organisational structure (e.g., responsibility centres and extensive branch networks) emanating from the larger scale and scope of business activities of the bigger life insurance companies. However, the amount of discretion given to managers in the larger mutuals (e.g., Companies A and D) appeared to be less than that assigned to managers in stock companies of equivalent size (e.g., Company H). One senior executive in Company H said:

For several years head office has given us a free rein in almost all aspects of our corporate reporting activities in New Zealand . . . Naturally, they monitor what we do through the internal reporting process . . . and might ask our directors to justify certain disclosure proposals on occasion, but generally the level of control exercised from head office is relaxed . . .

Therefore, as shown in Appendix 5, the interview evidence tends to support the predictions of the *managerial-discretion hypothesis* concerning the lower degrees of managerial discretion over disclosure decisions in mutuals compared with stock companies. Although this observation was not discernable from the clusters and the discriminant analysis carried out previously (sections 6.2.1 and 6.2.2), it does support the results of the univariate and multivariate tests carried out on the 1988-1993 pooled data (sections 6.2.4 and 6.2.5). Furthermore, the indication that managerial discretion over disclosure decisions may be greater in larger mutuals than in smaller mutuals appears to support the sensitivity test carried out in the multivariate analysis (section 6.2.6), suggesting that it is organisational form in conjunction with firm size, which

determines the overall level of voluntary disclosure in the New Zealand life insurance industry.

(c) Assets-in-place

Appendix 5 indicates that contrary to what is hypothesised, all interviewees reported that the nature and structure of assets held by the entity and the rules governing asset use had either no impact on the level of voluntary disclosure in the annual report or were not relevant to the company (e.g., because the value of tangible assets held were small). A senior executive in Company H summed up the views of respondents when he said:

I do not think that asset maintenance rules or the fact that we have a highly visible office here in Wellington influences what we disclose in our annual report in any shape or form. I believe shareholders, policyholders and others, will rely largely on financial statements relating to the company's solvency position and its general financial and marketing performance in order to make business judgements. . . . Financial statements are subject to actuarial and audit scrutiny and thus have more credibility value than simply relying on the perceived value of the company's tangible assets . . . Such assets have also declined in value since the late 1980s . . . and I believe our investors and policyholders recognise this . . .

The possibility that tangible assets-in-place may provide visible collateral (and hence assurance) to policyholders and shareholders did not therefore appear to influence the corporate reporting function in New Zealand life insurance companies. Although contrary to expectations, this finding was nonetheless consistent with the statistical results reported earlier in this chapter (section 6.2).

(d) Product concentration

Appendix 5 shows that a majority of managers (15 out of 22 interviewed) considered that product diversity has a positive influence on the amount of discretion given to managers to disclose product-market information. This finding supports the prediction

that multi-product life insurance companies will have greater voluntary disclosure than life insurance companies with high product-line specialisation. In multi-product companies, managers are given discretion to disclose product-market information in the annual report in order to inform sales agencies, and to provide a clear, concise and credible (i.e., audited) report of business activities which serves the stewardship requirements of both internal users such as policyholders, and external users such as industry regulators. For example, a manager in Company H expressed the opinion that:

I believe the annual report is a very important marketing device. For a start, it does highlight to existing and potential clients the product-market performance of the company, its key strategies and how it is helping the New Zealand public to address their investment, insurance and retirement needs of today and the future . . .

However, managers in two mutuals (e.g., Companies A and D) suggested that the product-mix structure of the entity is generally neutral in its effect on voluntary disclosure levels. In these cases, managers cited that alternative disclosure media (e.g., policy documents) are more cost-effective devices of informing policyholders of the characteristics of products. For instance, a manager in Company A held the view that:

The generally held opinion amongst accounting and finance staff in this company is that the effectiveness of the annual report as a marketing tool has yet to be proven . . . We have always been a multi-product insurance and investment company and although some people would argue that the annual report helps us to promote our products locally . . . I do not believe that the nature of the products which we sell influences significantly what we disclose publicly . . . I would say the effect of our product-mix on voluntary disclosure is neutral . . .

Subjects interviewed in companies specialising in conventional insurance risk-type products (e.g., Companies G and I) confirmed that managers are not given much discretion to voluntarily disclose product-market information in the annual report. Managers in these companies considered that it is more cost effective - particularly

given the small scale of business operations - to supply relevant information (e.g., on projected bonuses) through standard policy documents rather than to disclose such matters in the annual report. As expected, the interview evidence therefore suggests that in general product diversification does have a positive influence on the level of information voluntarily disclosed in the annual report. This observation was also supported by the statistical results reported previously (section 6.2).

(e) Reinsurance

All companies operating in the New Zealand life insurance industry have reinsurance contracts in place (Adams, 1994c). In negotiating the terms of contracts with reinsurers, information (e.g., on the life insurance firm's risk profile and solvency position) is supplied privately to the negotiators (i.e., senior actuarial staff) rather than disseminated publicly through the annual report. Appendix 5 indicates that the majority of the subjects interviewed (i.e., 20 out of 22 respondents) considered that reinsurers had no interest in, or influence over, the disclosure practices of the direct insurer. The exception was that the two managers interviewed in Company J acknowledged that their international reinsurers took an active interest in their company's annual report, particularly as they considered that positive disclosure concerning their support for the Company J helped to enhance their profile in the New Zealand market³⁵. Apart from this isolated case, the overwhelming body of opinion obtained from the field-site interviews was that reinsurance is not an important determinant of the level of information voluntarily disclosed in the annual report. However, this finding was inconsistent with the multivariate results (section 6.2.5) which supported the view expressed by the managers in Company J that reinsurers

³⁵ Company J is heavily reinsured with three international reinsurance companies (Gerling-Konzern Globale, Cologne Re and Hannover Re) and utilises financial reinsurance (as opposed to risk reinsurance). In addition to covering losses on assumed insurance risk, financial reinsurance helps to relieve the financing strain on new business acquisition in return for the reinsurer taking a stake in future profits plus an agreed share of future annual premium income. In this regard, financial reinsurers can be perceived as holding a residual claim in the firm alongside shareholders.

may actually have a positive influence on the level of voluntary disclosure.

(f) Localisation of operations

Aside from the interviewees in very small life insurance companies (e.g., Companies G and I), the majority of managers interviewed (i.e., 10 persons) acknowledged that developments in overseas accounting (and actuarial) and reporting practices had a neutral impact on the voluntary disclosure policies of the New Zealand entity. Where overseas influences were considered to be important, they tended to relate to issues of accounting treatment (e.g., the use of mark-to-market valuation of investments) rather than with matters of disclosure. For instance, the accounting policies of multinational mutuals (e.g., Companies A and D) are regulated closely by their overseas parent company compared with stock companies of equivalent size (e.g., Company H). One explanation put forward by managers in large overseas-controlled mutuals to explain such behaviour was that senior executives in the parent company like to control the accounting activities of their satellite entities in order to protect the corporate "brand name" in overseas markets. As one manager in Company A put it:

The external influences . . . and issues which interest our head office the most, relate to the accounting and actuarial valuation of items such as investments and policy liabilities, and how to treat transactions such as new business acquisition costs . . . These are topical matters in Australia at the moment as they directly impact on our "bottom-line" profit and [hence] . . . our market profile locally . . . To date, international developments pertaining to increased disclosures have not had much affect on this company . . . but they could in future, particularly with the development of the Australian and New Zealand life insurance accounting standards.

Therefore, voluntary disclosure does not appear to be influenced greatly by whether the activities of life insurance companies are multinational or limited solely to the New Zealand life insurance market. This finding is also consistent with the statistical analyses conducted previously (section 6.2).

(g) Non-executive directors

A large majority of interviewees (i.e., 18 out of 22 managers) considered that non-executive directors help to increase corporate disclosure, particularly through their presence on the audit committee and the board of directors' sub-committee responsible for the approval of the form and content of the annual report. Three main reasons for this opinion were cited by the subjects interviewed. First, non-executive directors could impart a policy of "high" disclosure on the firm because they are frequently directors of other (non-insurance) companies, and thus likely to be exposed to the generally higher levels of disclosure practised in other industries. Second, non-executives could be motivated to be socially responsible monitors of policyholders' and shareholders' interests because they have reputations for independence and integrity to protect and promote. Third, s. 137 of New Zealand's Companies Act 1993 has recently imposed a duty on non-executive directors to exercise due diligence and care in their management of an entity. Non-executive directors reportedly view greater voluntary disclosure as a way of demonstrating due responsibility and diligence under the 1993 Act. Furthermore, managers in some companies (e.g., Company B) expressed the view that for many years non-executive directors had foreseen that corporate governance issues would be included in the companies law reforms and so had changed their behaviour accordingly. For example, one manager in Company B said:

Our non-executive directors have, at least for the last three or four years, recognised that impending companies law reform in New Zealand would impose a duty of due care on them and other members of the board and [as such] encouraged them to advocate for more information disclosure . . . not just through the annual report, but also via other media such as policy documents . . .

There were some exceptions to these opinions in that managers in some companies (e.g., Companies A and F) stated that the influence of non-executive directors on corporate disclosure was largely neutral. However, none of the respondents expressed the view that non-executive directors substituted for voluntary disclosure. The interview evidence was thus found to be largely inconsistent with the predictions of

the *managerial-discretion hypothesis*, but nonetheless supportive of the statistical analyses carried out earlier (section 6.2).

(h) Firm size

Appendix 5 shows that most interviewees (i.e., 14 out of 22 managers) generally agreed that large size increased substantially the need for a greater amount of voluntary disclosure. For instance, a manager in Company H reported that:

I believe that as this company, and indeed the group as a whole, has got bigger, there has been more demand for information through media such as the annual report . . . This is simply because with increased size comes more complexity and a greater need to keep everyone informed. This is particularly the case as our organisation has been involved in several acquisition and mergers . . . and diversifications into areas such as property services . . . which have necessitated that we keep all our employees and customers in the picture about corporate activities . . .

However, six managers interviewed felt neutral as to the influence of firm size on the level of voluntary disclosure. For example, a manager in Company F stated:

Our company has increased in size substantially over the last five to ten years . . . but I cannot say that this has had any noticeable effect on what we disclose in our annual report. I would say that we should be disclosing more . . . but in reality we have not . . . this probably reflects the inertia of senior management more than anything . . .

Those managers interviewed in companies where large company size has had a positive influence on the amount of information voluntarily disclosed in the annual report, also cited that they have been given a reasonable degree of authority to make disclosure decisions in order to better inform policyholders, shareholders and others, as to the overall financial performance of the business. Thus, the interview evidence suggests that firm size is an important factor influencing the level of voluntary disclosure in the annual report, as expected. This observation also supports the statistical analyses reported previously in section 6.2.

(i) Distribution system

Appendix 5 indicates that a majority of managers interviewed (i.e., 15 out of 22 subjects) indicated that voluntary information disclosure in the annual report assisted both non-tied and tied sales agencies to promote the products of the company and impart key information (e.g., on bonuses and investment performance) to prospective policyholders and investors at the point-of-sale. It was the interviewees of companies in which a high proportion of business is sold through non-tied agents or brokers (i.e., Companies C, J and L) who tended to emphasise most strongly the importance of disclosure in the annual report, primarily because, as predicted, it helped them to generate new business through independent distribution channels. Interviewees suggested that independent sales agencies are particularly interested in the disclosure of information such as commissions paid in relation to premiums generated, actual and forecast rates of bonus, dividend payments, and the asset and liability structure of the company. Independent sales agents also use the annual report to analyse the business performance of life insurance companies. For instance, a senior executive in Company J reported:

. . . I guess the annual report is an important means of keeping agents and brokers informed of what is happening in this company . . . and I think that they would use the annual report to advise their clients of this company's financial strengths and operational successes. This is certainly something that the policyholders and investors are interested in . . . It all helps to promote the company name and to sell business . . .

Furthermore, interviewees in companies making extensive use of independent sales agents (e.g., Company C) also cited that sales agents occasionally influenced voluntarily disclosure decisions. However, this influence tended not to be in regard to financial matters, but to aspects which could better highlight business performance from a sales and marketing perspective (e.g., business performance statistics and graphs). Managers interviewed in companies which employed their own sales force or used tied agents (e.g., Companies D and K) indicated that although the disclosure

of product-market information was useful to sales personnel, other disclosure media (e.g., policy documents and information sheets) were more effective marketing tools. Furthermore, in these companies, in-house and tied sales agents are reported to have little or no influence on disclosure policy. This observation is consistent with the multivariate results reported earlier in section 6.2.5 and supports the predictions of the *managerial-discretion hypothesis* put forward in chapter 4 (section 4.3).

(j) Other influences on voluntary disclosure

All interviewees acknowledged that corporate disclosure is motivated by many organisational and institutional factors other than those predicted by the *managerial-discretion hypothesis*. This study thus highlights some of these other factors in order to give a richer picture of the motives for voluntary disclosure and provide a basis for further research inquiry. The key organisational and environmental determinants are summarised in Table 6.8 and discussed further below.

Interviewees in some companies (e.g., Companies F and H) reported that the amount of information disclosed voluntarily by the New Zealand company could be influenced by the reporting practices of entities of the corporate group (other than the parent) operating in other jurisdictions. Respondents considered that organisational culture also plays an important influence on corporate disclosure practices. In particular, managers in both mutuals (e.g., Companies A and K) and the subsidiary of a major trading bank (i.e., Company L), cited conservatism and the traditionally strong influence of actuarial principles which emphasise long-term solvency rather than annual performance, in determining the form and content of corporate reporting. For example, a manager in Company L said:

. . . our annual reporting practices are greatly influenced by the culture of corporate banking . . . which is one of conservatism and a great reluctance to disclose anything other than the statutory minimum . . .

Table 6.8

**Other Important Influences on the Levels of Voluntary Disclosure
made by New Zealand Life Insurance Companies**

This table gives the important organisational and environmental factors which influence the voluntary disclosure practices of New Zealand-based life insurance companies as identified from interviews carried out with 22 managers in 12 companies

KEY INFLUENCES ON CORPORATE VOLUNTARY DISCLOSURE			
ORGANISATIONAL FACTORS	EXAMPLE(S)	ENVIRONMENTAL FACTORS	EXAMPLE(S)
1. The disclosure practices of entities of the corporate group operating in other countries	Company H	1. The state of competition in the local market	Company H
2. A collective corporate view of how disclosure should be practised e.g., company culture & historical antecedents	Companies A & L	2. The disclosure practices of other companies	Companies B & K
3. The wishes of a chief executive, chairperson or other influential member of the board	Company C	3. Life insurance industry guidelines	Company E
4. Desire to expand into overseas markets and secure listing status on the New Zealand stock exchange	Company J	4. International and national accounting standards	Company B
5. Desire to promote the company "brand-name" and its reputation for prudent and successful management	Company K	5. The views of the external auditors/ actuaries	Companies B & C

Source: Research data

Note:

1. Company A = a large overseas-owned mutual; Company B = a small New Zealand-owned mutual; Company C = a medium-sized New Zealand-owned stock company; Company D = a large overseas-owned mutual; Company E = medium size overseas-controlled stock company; Company F = a large overseas-controlled stock company; Company G = a small New Zealand-owned stock company; Company H = a large overseas-owned stock company; Company I = a small New Zealand-owned branch of a mutual building society; Company J = a medium-sized New Zealand-owned stock company; Company K = a large New Zealand-owned mutual; Company L = a medium-sized operation of an overseas-controlled trading bank.

Similarly, a manager in a large overseas-controlled mutual (Company A) stated:

. . . I have been in this company a long time and as such I am aware of the importance of the culture of the organisation in all our activities . . . [that] culture is very much conservative . . . and certainly not one which would engender one to disclose all sorts of "bits and pieces".

The impact of certain influential individuals in the organisation on corporate disclosure policy was also perceived to be important by some of the subjects interviewed. For example, managers in Company C considered that the appointment of a dominant personality (who is also a professionally qualified accountant) as a non-executive director on the board had contributed substantially to the company reporting more information in its annual report in recent years. Furthermore, in Company J the ambition of the joint-managing directors to pursue a strategy of expansion in Australia and achieve listing status on New Zealand's stock exchange had influenced the decision to increase the overall level of information disclosure in the annual report.

One important institutional influence on corporate disclosure highlighted by interviewees was the desire to achieve a competitive edge in a particular segment of the market. It was this goal which partially motivated managers in some companies (e.g., Companies H and J) to disclose product-market information in the annual report, and encouraged managers in other companies (e.g., Companies B and F) to consider seriously the option of additional disclosure in the future. For instance, a senior executive in Company B expressed the opinion that:

. . . Some companies have used their corporate reports as successful marketing instruments . . . their success has led us to review the format, content and style of our annual report . . . There is no doubt in my mind that the use of the annual report for financial and marketing purposes helps to promote the company's profile with the New Zealand public . . .

Additionally, the disclosure practices of other entities (particularly new entrants like Company J) were scrutinised closely by managers in some of the larger companies keen to maintain their dominant positions in segments of the New Zealand life

insurance market. Many of the subjects interviewed (i.e., 15 out of 22 respondents) also stated that external auditors and occasionally, industry regulators (such as the Securities Commission), exerted influence over corporate reporting practices, notably in relation to the disclosure of cash flow statements, movements on reserves and sales commission.

As referred to earlier, managers in some companies (e.g., Companies A and B) also stated that impending legislative and regulatory initiatives could influence corporate reporting practices. For example, anticipation of the statutory requirement to comply with extant accounting standards that came in with the New Zealand Financial Reporting Act 1993 (Clause 4) had in recent years encouraged life insurance companies to routinely publish a statement of cash flows in the annual report, whereas hitherto some companies had not published such a statement because they considered that it was not meaningful to the life insurance business and could confuse and mislead users of their annual accounts (e.g., see Adams, 1994b).

In summary, the interview evidence indicated determinants of voluntary disclosure additional to those factors implied by the *managerial-discretion hypothesis*. The organisational influences included company culture and management inertia, while respondents also stressed environmental factors such as market forces, external auditors and occasionally, the influence of industry regulators. The importance of these other considerations on the voluntary disclosure decisions of life insurance companies are discussed further in the next chapter of this thesis.

6.4. DOCUMENTARY EVIDENCE

Chapter 5 (section 5.5.6) provided details of the corporate documents analysed in this study and explained the reasons for their selection. In essence, a document study was conducted in order ^{to} complement and supplement the empirical evidence obtained from the statistical analyses and interview work. The documents were reviewed in order to identify extracts which appeared to support, or otherwise, the predictions drawn from

the *managerial-discretion hypothesis* (section 4.3). The conclusions emanating from the document study are summarised in Table 6.9 and discussed in further detail in the remainder of this section.

Table 6.9

**Summary of the Key Findings Arising From an Analysis
of Corporate Documents**

This table summarises the main findings arising from the analysis of documents held at the 12 New Zealand life insurance companies visited during the course of the field-based research.

CONSTRUCT	PREDICTION	CONCLUSION	COMMENTS	EVIDENCE SUPPORTING CONCLUSION
1. Organisational form	Stock companies will disclose a greater level of information in their annual reports than mutuals	Supported	Internal financial regulations frequently impose tighter reporting restrictions in mutuals than in stock companies	S.5 of the financial regulations of Company A. S.3 of the financial regulations of Company H.
2. Assets-in-place	Companies with less assets-in-place (more growth options) will disclose a greater level of information in their annual reports than companies with high assets-in-place (few growth options)	Not supported	Investment rules suggest no relationship with corporate disclosure	-
3. Product concentration	Multiproduct companies will disclose a greater level of information in their annual reports than specialised companies	Not supported	Sales and marketing guidelines indicate no relationship with corporate disclosure	-

Table 6.9 contd.

CONSTRUCT	PREDICTION	CONCLUSION	COMMENTS	EVIDENCE SUPPORTING CONCLUSION
4. Reinsurance	Companies with low reinsurance will disclose a greater level of information in their annual reports than highly reinsured companies	Not supported	Reinsurance contracts indicate no relationship with corporate disclosure	-
5. Localisation of operations	Multinational companies will disclose a greater level of information in their annual reports than companies operating in a single domicile	Not supported	Internal financial regulations suggest no relationship between geographical span of operations and corporate disclosure	-
6. Non-executive directors	Companies with a minority of non-executive to executive directors will disclose a greater level of information in their annual reports than companies with a majority of non-executive to executive directors	Contrary supported	Internal policies and procedures appear to encourage non-executive directors to be involved in corporate reporting and disclosure issues	Company A's Audit Committee Regulations (1994)
7. Firm size	Large companies will disclose a greater level of information in their annual reports than small companies	Supported	Financial regulations/ articles of association suggest that managers in large companies have more discretion over accounting and disclosure decisions than their counterparts in small companies	S.5 of financial regulations of Company A
8. Distribution system	Companies using independent sales agents/brokers will disclose a greater level of information in their annual reports than companies using in-house/tied sales agents	Not supported	Sales and marketing guidelines/ financial regulations suggest no relationship with corporate disclosure	-

Source: Research data

As shown in Table 6.9, the analysis of the documentation held by the 12 New Zealand-based life insurance companies visited in the field suggested that financial regulations, and in the case of some companies (e.g., Company C), the articles of association, supported the statistical analyses performed earlier (section 6.2) and interview evidence (section 6.3) by indicating that managers in stock companies had much greater discretion over accounting, actuarial and disclosure practices than their counterparts in mutuals. For example, the financial regulations (s.3) of Company H (a large overseas-controlled stock company) gave managers considerable discretion over corporate reporting matters (e.g., use of financial instruments and taxation methods). In contrast, the financial regulations (s. 5) of Company A (a large overseas-controlled mutual) prescribed that financial statements should in general comply with accounting treatment and disclosure requirements laid down in Australian accounting standards and Australia's Life Insurance Act 1945. However, in some cases, flexibility is given in internal financial regulations to waive this requirement with the prior approval of head office or the New Zealand board of directors, if there is just cause (e.g., to respond to the recommendations of the local auditors or pursue some marketing opportunity).

The available documentary evidence also tended to support the view that managerial discretion over disclosure decisions is greater in large organisations than in small entities. For example, parent company control of the reporting practices of Company L (e.g., with regard to product-market disclosures) was found to be more stringently controlled than in the larger mutual companies such as Companies D and K. Managers in Company L suggested that this situation reflects the relatively limited lines of insurance sold by the company in New Zealand, and the “control conscious” and conservative nature of the culture of the parent banking group headquartered overseas. This documentary evidence appears to further support the interview evidence and statistical work, particularly the sensitivity analysis suggesting a positive relationship with the level of voluntary disclosure and the interaction of organisational form and company size.

Formal written conditions of appointment for non-executives either did not exist (i.e., in nine companies) or were not made available for examination for reasons of confidentiality (i.e., in three companies). However, alternative sources of documentation revealed that non-executive directors perform a complementary rather than substitutive role in the corporate reporting process. For example, s. 3 of Company A's Audit Committee Regulations (1994) states that non-executive directors on the corporate audit committee should make "... personal contact with external and internal auditors and enhance the quality of communication ... [by] enabling a "hands-on" approach to the provision of high quality financial reporting and strengthening its objectivity and credibility ...". Similarly, part D of the 1994 financial regulations of Company K requires non-executive directors to "... review financial statements at intervals during the year and review annual financial statements prior to publication ... and ensure that ... [the company] fulfils its statutory obligations with respect to taxation and financial reporting ...".

However, the analysis of financial regulations, company articles of association, and the other documents (e.g., investment policies, and sales and marketing guidelines) did not provide any tangible support for (or against) the predicted relationship between the level of information voluntarily disclosed in the annual report and other constructs of the *managerial-discretion hypothesis*, namely assets-in-place, product concentration, localisation of operations, reinsurance and distribution system. The reason for this lack of empirical support was due to the fact that sufficient and clear evidence could not be discerned from the documents examined. Also inferences could not be drawn from certain documents (notably the conditions of appointment for non-executive directors) either because they do not exist or they were not made available for examination during the field-site visits for reasons of confidentiality³⁶. This

³⁶ Managers in companies selected for field-site visits were notified by letter of the documents to be examined. However, managers had to obtain the prior permission of superiors (sometimes based overseas) and were thus frequently only in a position to advise as to whether those documents were available or not for inspection on the day of the company visit.

shortcoming therefore represents an unavoidable limitation with the document study.

6.5. CONCLUSION AND SUMMARY

This chapter has presented the empirical results obtained from a statistical analysis of data drawn from the 1988-1993 annual reports of all New Zealand-based life insurance companies. Utilising the data-triangulation methodology reported in Chapter 5, this statistical evidence was supplemented and complemented by data obtained from interviews with 22 financial managers/senior executives in a cross-section of 12 New Zealand-based life insurance companies. The field-based research also included a study of corporate documentation. Consistent with expectations, the statistical results suggest that the level of information voluntarily disclosed by life insurance companies is related to organisational form, firm size, product range, and distribution system. However, contrary to what was hypothesised, non-executive directors appear to complement rather than substitute for voluntary disclosure. The level of voluntary disclosure is also positively related to the amount of reinsurance held by companies. Additionally, variables representing assets-in-place and localisation of operations are found not to be statistically significant. The interview evidence tends to support the statistical evidence with the exception that reinsurance was not generally found to be an important determinant of voluntary disclosure. The document study was to some degree impeded by the unavailability of certain documents, either because managers did not wish to infringe corporate confidentiality rules or the items did not exist. However, sources such as financial regulations and articles of association provided some additional support for the prediction that the level of voluntary disclosure could be a positive function of organisational form and firm size. The extent to which the statistical and the field evidence enables data convergence and construct validity to be attained is evaluated in chapter 7.

CHAPTER 7. ANALYSIS AND EVALUATION OF RESULTS

7.1. INTRODUCTION

Chapter 6 presented the statistical and fieldwork results pertaining to the predictions of the *managerial-discretion hypothesis* and the level of information voluntarily disclosed by life insurance companies in their annual reports. This chapter analyses, synthesises and evaluates the quantitative and qualitative empirical evidence collected in this study. This includes consideration of additional organisational and environmental factors which influence the level of voluntary disclosure in the New Zealand life insurance industry.

7.2. CONVERGENCE ANALYSIS

Jick (1979) acknowledged that it is frequently a delicate exercise to ascertain whether or not the empirical evidence gathered from the application of data-triangulation methodology actually converge, and as a result, derive substantive conclusions regarding the phenomenon under investigation. Jick (1979) held the view that convergence analysis is a two-stage process. First, it is necessary to establish the degree to which data drawn from more than one source are consistent or otherwise with each other (i.e., data convergence). Second, researchers must ascertain whether the conclusions derived from the analysis of data obtained from multiple methods can be reconciled to previously articulated concepts or hypotheses (i.e., construct convergence). However, because of inherent differences in research methods (e.g., as a result of the different research instruments and data measurement issues involved) convergence analysis could prove to be problematical for the researcher. For instance, Patton (1990, p. 466) states that “. . . one ought to expect initial conflicts in findings from qualitative and quantitative data . . .”.

Table 7.1 shows the extent to which there is construct and data convergence between the data obtained from applying three research methods - statistical analyses, interview

work and the study of corporate documents. In this study, convergence was deemed to be “strong” if all three sources of empirical data supported what was hypothesised; “moderate” if two of the research methods provided evidence consistent with expectations; and “weak” if there was only a single source of data which supported the research hypotheses. The convergence of quantitative and qualitative data derived from this study are analysed and evaluated in further detail below.

7.2.1. Strong-supportive convergence

Table 7.1 shows that as hypothesised, strong construct and data convergence exists with respect to organisational form, suggesting that stock companies disclose more information voluntarily in their annual reports than mutuals. Shareholders and other investors in stock companies thus appear to have incentives to demand public disclosure in the annual report in order to more efficiently monitor the performance of managers on dividend payments and maximise the short-term traded value of the firm. In contrast, the economic interests of policyholder-owners in mutuals are concerned primarily with ensuring the solvency of the firm in the long-term, and in preventing dilution in the value of their long-term claims (Mayers & Smith, 1981, 1982a). As a consequence, policyholders are likely to be motivated to demand actuarial-type information (e.g., the adequacy of future reserving levels, business persistency and so on) so that their representatives - the actuaries - can monitor effectively corporate solvency rather than incur the (non-trivial) costs of information disclosure on short-term business performance through the annual report. Incentives for actuarial information production, dissemination and use in life insurance firms, and the extent to which such information substitutes and compliments accounting and other (e.g., marketing) information could be an interesting angle to examine in future research ³⁷. Managers could further bind their utility with the long-term economic

³⁷ Published work on the formulation and analysis of the positive theory of insurance (e.g., Mayers & Smith, 1981, 1982a) tends to understate the role of the actuary and the use of actuarial information to facilitate monitoring and control in insurance firms. This observation probably reflects the fact that most of the early theoretical

interests of policyholders and supply information to actuaries because they have an interest in maintaining their job security and protecting their reputations (and hence the value of their human capital) in the internal and external labour markets (Fama, 1980). Therefore, the prediction that stock companies will disclose more information in their annual reports than mutuals put forward in *Hypothesis 1* is strongly supported in this study.

As Table 7.1 also makes clear, the statistical analyses, interview work and document study strongly supported the prediction of the *managerial-discretion hypothesis* that large life insurance companies disclose more information in their annual report than small life insurance companies (i.e., *Hypothesis 7*). This evidence is also consistent with that reported in several other studies cited in the academic accounting literature (e.g., Chow & Wong-Boren, 1987; Cooke, 1989a, 1989b; Meek & Gray, 1989). Therefore, owners in large life insurance companies appear to have incentive to demand information disclosure in order to monitor more efficiently the behaviour of their managers and mitigate the information asymmetry problem which arises from increased company size (Diamond, 1985). Moreover, activities which reduce the firm's market cost of capital are also likely to enhance the job security of management and enable them to maintain current rates of perquisite consumption (Barnea *et al.*, 1985). Recall that managers in large life insurance firms could also be motivated to supply and disclose information publicly in order to signal that they support the economic interests of owners in order to enhance their promotional prospects in the firm.

In addition, managers and owners in large life insurance companies could disclose more information voluntarily in the annual report than small life insurance companies for other reasons. For example, the marginal cost of voluntary disclosure could be relatively low for large companies because they benefit from economies of scale in the

and empirical work was conducted in the US property-liability insurance market where actuaries play a less prominent function in internal control than they do in the life insurance industry.

generation and processing of information and in its dissemination to the public (Ball & Foster, 1982). Owners and managers in large companies could also be motivated to make voluntary disclosures in order to preserve a dominant position in the market (Lev, 1992) and/or promote a more socially responsible image in the public domain (Belkaoui & Karpik, 1989). As pointed out in chapter 6 of this thesis (section 6.3.3), there was strong and consistent evidence obtained from the interviews carried out in the New Zealand life insurance industry that managers (in acting in the interests of owners of the firm) often disclosed information in the annual report (e.g., investment performance, community sponsorship and so on) to improve the company's market share and its public profile.

7.2.2. Moderate-supportive convergence

Table 7.1 indicates moderate corroboration for the predictions of the *managerial-discretion hypothesis* in respect of product concentration and the distribution system used by life insurance firms. In both cases, the statistical results and interview evidence strongly supported the predicted positive relationships between the level of information voluntarily disclosed in the annual report and multi-product life insurance companies and those entities using non-tied sales agents/independent brokers. The lack of empirical support found for the predictions of the *managerial-discretion hypothesis* in corporate documents is largely attributed to the unavailability of documented sales and marketing policies (i.e., in approximately half the sites visited), and furthermore, where such documents do exist, managers have not always deemed it necessary to establish formal procedures between the sales and marketing functions and corporate reporting activities in the firm (e.g., due to administrative inertia).

Table 7.1

Statistical, Interview and Documentary Evidence: Construct and Data Convergence Analysis

This table summarises the overall conclusions derived from the convergence analysis of the theoretical constructs and various sources of data gathered and analysed from applying data-triangulation methodology in this study. The three sources of evidence used in this research project were statistical analysis, interview evidence and a study of corporate documentation.

EXPLANATORY V A R I A B L E S								
(Predicted Signs (+/-))								
METHODS	OFORM (+)	AIP (-)	CONCN (-)	REINS (-)	LOC (+)	NEXECS (-)	lnSIZE (+)	DIST (-)
STATISTICAL	SUPPORT	NO SUPPORT	SUPPORT	CONTRA	NO SUPPORT	CONTRA	SUPPORT	SUPPORT
INTERVIEWS	SUPPORT	NO SUPPORT	SUPPORT	NO SUPPORT	NO SUPPORT	CONTRA	SUPPORT	SUPPORT
DOCUMENTS	SUPPORT	NO SUPPORT	NO SUPPORT	NO SUPPORT	NO SUPPORT	CONTRA	SUPPORT	NO SUPPORT
CONSTRUCT CONVERGENCE	STRONG - SUPPORTIVE	NONE	MODERATE - SUPPORTIVE	WEAK - CONTRADICTIONARY	NONE	STRONG - CONTRADICTIONARY	STRONG - SUPPORTIVE	MODERATE - SUPPORTIVE
DATA CONVERGENCE	STRONG	STRONG	MODERATE	WEAK	STRONG	MODERATE/ STRONG	STRONG	MODERATE

Source: Research data.

Notes:

1. *OFORM* = organisational form - dummy variable, mutual = 0, stock = 1; *AIP* = assets-in-place - market value of fixed assets/property ÷ total market value of assets (NZ\$m); *CONCN* = product concentration - *Herfindahl Index*; *REINS* = reinsurance - annual reinsurance premiums ÷ total annual premiums; *LOC* = localisation of operations - dummy variable, 1 = multinational, 0 = single domicile; *NEXECS* = non-executive directors- proportion of non-executive directors on the board; *lnSIZE* = firm size - log of the market value of total assets; *DIST* = distribution system - annual premiums attributable to exclusive sales agencies ÷ total annual premiums.

2. Construct and data convergence was determined on whether a “majority” of evidence gathered from data-triangulation supported, or otherwise, prior expectations and the conclusions derived from other data sources.

A positive relationship between the level of information voluntarily disclosed in the annual report and product-mix has been reported in other studies (e.g., Clarkson *et al.*, 1990; Lev, 1992; Gibbins *et al.*, 1990, 1992). One reason for the predicted relationship is that as the firm diversifies its production function, organisational operations become more complex. As a result, voluntary disclosure in the annual report helps to alleviate the information asymmetry problem of serving the information needs of a large and heterogeneous consumer-base. The positive relationship found to exist in this study between multi-product life insurance companies and the level of voluntary disclosure is underscored not only by the product-mix diversity of entities, but also by the view among certain researchers in the insurance field (e.g., Fields, 1988) that consumers of life insurance face severe information asymmetry at the point-of-sale because transactions are both complex and uncertain over the long-term. In such a situation, information disclosure could help policyholder-consumers and investors to better assess product quality *ex-ante* (e.g., with regard to investment flexibility) and monitor contractual obligations *ex-post* (e.g., with regard to verifying investment performance). Additionally, Fama & Jensen (1983, p. 302) argue that firms that deliver products “ . . . demanded by customers at the lowest price, while covering costs, survive . . .”. Therefore, it can be rationalised that the voluntary disclosure of product information assists managers to reduce contracting costs associated with the production and selling of insurance products (e.g., familiarising policyholders of product-types), as well as maximise turnover (e.g., by enticing policyholders to buy products), and so protect their job security. The contention that multi-product life insurance companies will disclose more information in their annual reports than more specialised life insurance companies (i.e., *Hypothesis 3*) is given general (albeit not absolute) support from the analysis of the empirical evidence collected in this study.

The statistical and interview evidence further supported the predictions of *Hypothesis 8* that life insurance companies using independent agents/brokers rather than in-house sales staff/tied agents will disclose more information in their annual reports. The reasoning behind this proposition is that independent sales agents/brokers will examine annual reports to assess the financial and marketing performance of life insurance companies and use the information to determine with which companies they should

do business with. This implies that managers in life insurance companies with non-exclusive sales agencies are likely to have considerable discretion to vary levels of disclosure in the annual report in order to respond to the information needs of independent distributors. This evidence corroborates the views of others writing in the academic literature (e.g., Gibbins *et al.* 1992; Lev, 1992) who argue that product-market considerations are important determinants of corporate disclosure decisions. The lack of documentary support for what was hypothesised from sales and marketing guidelines, financial regulations and so on, was a manifestation of either the absence of such sources or the lack of formally written procedures. Managers in some companies (e.g., Companies C and J) confirmed that their disclosure policies relating to the needs of independent sales agents/brokers had largely been informal and had developed over time as a result of company "custom and practice". However, it was understood from management in these companies that formal guidelines were being drafted in order to better guide company staff in their dealings with independent agents/brokers. Nonetheless, the absence of supportive documentation means that overall it is prudent to conclude moderate-supportive convergence with regard to *Hypothesis 8*.

7.2.3. Strong-contradictory convergence

Table 7.1 shows that contrary to theoretical predictions, there was strong empirical evidence from all three sources of data suggesting a positive relationship between voluntary disclosure and the proportion of non-executive directors on the corporate board. Such empirical evidence is also supported by the findings of several other studies reported in the academic literature (e.g., Leftwich *et al.*, 1981; Chow & Wong-Boren, 1987; Abrahamson & Park, 1994).

Abrahamson & Park (1994) argued that non-affiliated non-executive directors are likely to be more motivated than affiliated executive directors to limit concealment and press for more rather than less information to be disclosed in the annual report, including that of negative outcomes. They proposed that one explanation for this

would be that outside directors have incentives to protect the (human capital) value of their public reputations as surrogate monitors of owners' interests. Additionally, there could be institutional reasons why non-executive directors could be motivated to disclose information publicly in the annual report. For example, Main (1994) suggests that the 1992 *Cadbury Committee Report* on corporate governance has made non-executive directors in UK companies more aware of the importance of annual reports to the economic well-being and public profile of organisations. In the New Zealand context, the responsibilities placed on company directors to act in a diligent manner by s. 137 of the Companies Act 1993 was cited by many of the subjects interviewed to be an important institutional factor explaining the positive relationship found between the proportion of non-executive directors on the board and the level of information voluntarily disclosed in the annual report. It is therefore possible that the anticipation of statutory provisions of the 1993 Act in the run-up to its implementation could have encouraged non-executive directors to press managers in life insurance firms to disclose more information publicly than would otherwise be the case. Non-executive directors could be motivated to take such action in order to mitigate the risk of creditor (i.e., policyholder)-initiated litigation in the event of bankruptcy, as for example, proposed by Trueman (1986) and Lev (1995) from their studies of corporate disclosure practices in the US.

The findings of this study contradict the notion espoused previously by some scholars (e.g., Leftwich *et al.*, 1981; Malone *et al.* 1993) that private monitoring of managers by non-executive directors is likely to be a cost-efficient alternative to disclosing a high level of information publicly through the annual report. In other words, the empirical evidence infers that the direction of the empirical relationship between voluntary disclosure and non-executive directors is opposite to that predicted by *Hypothesis 6* (i.e., complementary rather than substitutive). As argued by Abrahamson & Park (1994), the market value of non-executives directors' human capital as effective surrogate monitors of the interests of owners and others (e.g., customers) could be enhanced by better and more informed corporate reporting. As a consequence, the more non-executive directors that are appointed by life insurance

firms the greater the level of voluntary disclosure they are likely to make in their annual reports, other things being equal. Furthermore, institutional factors such as the imposition of statutory duties on company directors could help to foster a positive relationship between non-executive directors and the level of voluntary disclosure. Arguably, such conclusions provide a *prima facie* case for future research to re-examine and re-evaluate the underlying arguments upon which *Hypothesis 6* was founded.

7.2.4. Weak-contradictory convergence

Contrary to what was predicted in *Hypothesis 4*, the statistical results reported in this study indicate that highly reinsured life insurance companies tend to disclose more information in their annual report than companies with lower amounts of reinsurance. Therefore, it is plausible that reinsurers could be motivated to encourage life insurance companies to make public disclosures because it helps to foster growth in new business premiums, and thus generate net positive future cash flows for them. Managers in one company (Company J) also suggested that reinsurers could accrue a marketing advantage from positive publicity which they receive through the annual report of the direct insurer (e.g., the degree to which they support future solvency). Generally, however, the statistical evidence was not supported by the subjects interviewed nor from the analysis of corporate documents such as reinsurance contracts. The divergence between the statistical and field evidence could be attributed either to chance or to other (more intuitive) explanations such as the secretive (actuarial) nature of reinsurance negotiations which results in a lack of familiarity among financial managers, and supplants the perceived need for formal procedures and documentation. In view of the overall lack of congruency found between the sources of evidence analysed in this study, substantive conclusions regarding the empirical relationship between reinsurance and the level of information voluntarily disclosed in the annual report cannot be drawn. The empirical relationship between reinsurance and voluntary disclosure in the insurance industry thus needs to be subject to more research before definite conclusions can be made.

7.2.5. Non-supportive evidence

No empirical support for two variables - assets-in-place and localisation of operations - could be determined from the statistical results, interview evidence and the analysis of corporate documents. In other words, there was strong consistency among the sources of data, but no indication of construct convergence from the empirical evidence gathered in this study.

The finding that the nature and structure of the assets held by the organisation has no discernable effect on voluntary disclosure is supported by empirical evidence reported in other studies (e.g., Chow & Wong-Boren, 1987; Bradbury, 1991, 1992). The evidence thus suggests that life insurance firms with less assets-in-place may use alternatives to public disclosure such as reinsurance, to mitigate contracting incentives among shareholders, policyholders and managers in life insurance firms. Several other reasons could also explain the lack of supportive evidence. For example, as Christie (1990), Christie *et al.* (1991), and others suggest, the absence of statistical support could be due to the imprecise proxy used in this project (and indeed in other studies) to represent assets-in-place. However, this line of reasoning offers only a partial explanation since it clearly does not explain the unanimous lack of support for the assets-in-place construct identified from the fieldwork conducted in this study. A plausible alternative explanation for the absence of empirical support for the assets-in-place variable could be that the decline in tangible asset values in New Zealand in the late 1980s and early 1990s reduced public confidence in the collateral value of assets-in-place held by life insurance companies. Such an event could have weakened support for the predicted substitutive relationship between assets-in-place and the overall level of voluntary disclosure in the annual report. Therefore, the absence of empirical support for the assets-in-place construct in this and other empirical disclosure studies may warrant a re-examination of the arguments underlying *Hypothesis 2*.

In addition, no empirical relationship was found in this study between localisation of operations and the overall level of voluntary disclosure exhibited by life insurance

companies, put forward in *Hypothesis 5*. That is, multinational life insurance companies do not disclose more information voluntarily than entities operating solely in the domestic market. The absence of a significant relationship between the localisation of operations variable and the level of information voluntarily disclosed in the annual report has also been reported in other studies (e.g., Malone *et al.*, 1993). Several reasons could help to explain why observations do not support that which was hypothesised *a priori*. For instance, some operatives in the New Zealand life insurance industry are branches of overseas (mainly mutual) corporations, and thus there could be less of a requirement for managers in these entities to disclose information voluntarily in the annual report because it is the parent company rather than the capital markets which supplies the financial resources necessary for the entity to finance business activities. Cooke (1989a) espouses a similar line of argument in that he suggests that companies that are reliant on accumulated cash reserves are less likely to disclose information voluntarily in the annual report compared with companies which are heavily reliant on market capital to finance business growth. Furthermore, it is possible that marketing and reputational benefits could accrue to the branches and subsidiaries of multinational corporations from a high level of information disclosed in the group annual report published overseas. This could be sufficient to obviate the need for a large amount of information to be disclosed in the annual report published solely for the local New Zealand market.

In summary, convergence analysis indicates unanimous support for the hypothesised relationship between the overall level of voluntary disclosure exhibited by life insurance companies in their annual reports and two explanatory variables - organisational form and firm size. The statistical and interview evidence decisively supported the predicted relationship between the level of voluntary disclosure and the variables product concentration and distribution system. The absence of documentary support in the case of these two variables is attributed largely to two main factors. First, the documentation was not made available for investigation (e.g., for reasons of confidentiality); and second, written procedures did not exist at the time the field-site visits were conducted (e.g., due to administrative inertia). Contrary to what was

hypothesised, strong empirical support was found for a positive relationship between the number of non-executive directors employed and the level of voluntary disclosure. Also contrary to expectations, the statistical results suggest that reinsurance is positively related to the overall level of information voluntarily disclosed by life insurance companies in their annual reports. However, since the field evidence did not support the statistical results, substantive conclusions regarding the empirical relationship between reinsurance and voluntary disclosure cannot be made.

Finally, all three sources of evidence failed to support the hypothesised relationship between voluntary disclosure and two explanatory variables - assets-in-place and localisation of operations. Therefore, the results of the convergence analysis suggest that the theoretical arguments concerning the relationship between voluntary disclosure and the variables assets-in-place and localisation of operations may need to be re-examined and/or subject to further empirical testing.

7.3. OTHER DETERMINANTS OF VOLUNTARY DISCLOSURE

Interviews carried out with managers in the 12 New Zealand-based life insurance companies visited during the course of this study attest to the complex and multi-dimensional nature of disclosure policy cited by scholars writing in the academic accounting literature (e.g., Gibbins, *et al.*, 1990, 1992; Lev, 1992, 1995). To gain additional insights into the determinants of voluntary disclosure in the life insurance industry, important organisational and environmental factors derived from the fieldwork and reported in chapter 6 (section 6.3.2) are therefore analysed and evaluated in this section. Highlighting other determinants of voluntary disclosure in life insurance firms could also help theory development and provide a tenable basis for future research.

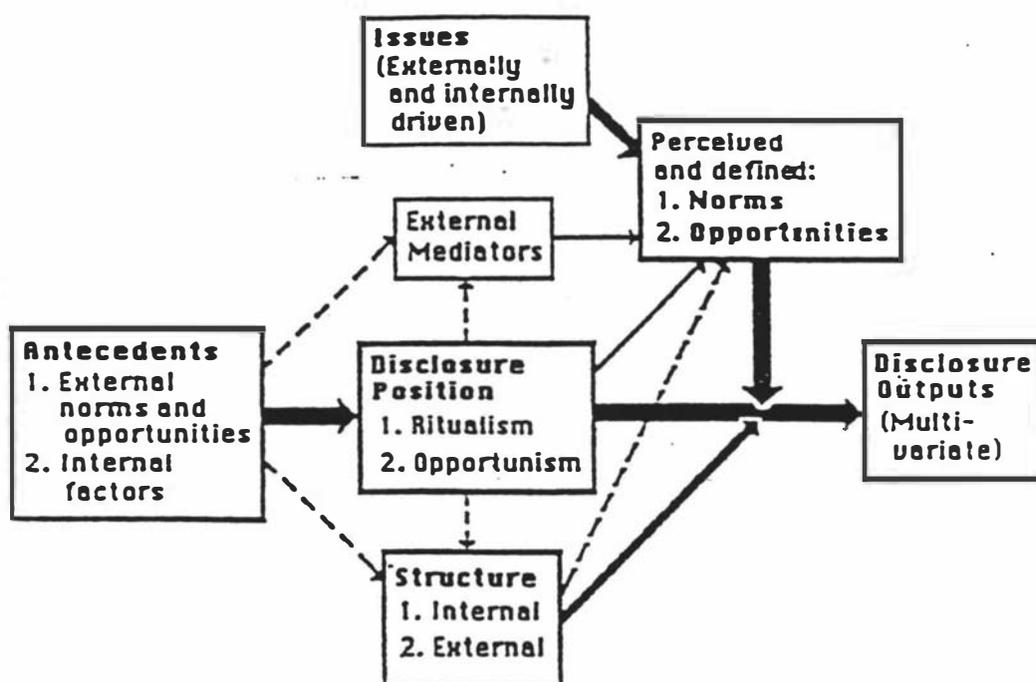
7.3.1. The multi-dimensional nature of voluntary disclosure

In their field-based study of the disclosure practices of 20 Canadian companies, Gibbins *et al.* (1990) proposed a model which helps to explain corporate disclosure practices. Their conceptual framework is summarised in Figure 7.1 and discussed further below.

Figure 7.1

A Framework for the Analysis of the Multi-Dimensional Nature of Corporate Disclosure

This figure represents the relationship between a company's disclosure position and its organisational antecedents (e.g., culture) and environmental influences (e.g., external reporting requirements).



Source: Gibbins *et al.*, 1990 (p. 128)

Gibbins *et al.* (1990) identified two key dimensions of a company's disclosure position which they label, ritualism and opportunism (see Figure 7.1). Gibbins *et al.* (1990, p. 130) define ritualism as the “. . . propensity towards uncritical adherence to prescribed norms for the measurement and disclosure of financial [and non-financial] information . . .”. Collectively, such shared norms and perceptions are synonymous with internal antecedent conditions such as a company's history of reporting practices and the culture of management to make policy change, and external influences on voluntary disclosure such as industry norms of behaviour - conditions mentioned by subjects interviewed during the course of this research project.

The second attribute - opportunism - refers to a manager's “. . . propensity to seek firm specific advantage in the disclosure of financial [and non-financial] information . . .”. (Gibbins *et al.*, 1990, p. 130). Thus, opportunism is generally compatible with both internal conditions such as the political motives of individual managers in the firm, and environmental signalling to investors, consumers and industry regulators in order to achieve a competitive advantage. The impact of ritualism and opportunism on the voluntary disclosure practices of New Zealand-based life insurance companies are considered further below.

7.3.2. Organisational ritualism and opportunism

The interview and documentary evidence regarding other determinants of corporate disclosure obtained during the course of this study fits closely into the conceptual framework espoused by Gibbins *et al.* (1990) and summarised in Figure 7.1. In particular, organisational culture was reported by several managers (particularly in mutuals) to be a major determinant of corporate reporting practices. For example, interviewees suggested that disclosure practices are frequently defined and determined by established rules and procedures, and that inertia among owners and managers tended to produce fairly stable levels of information disclosure in the annual report over the short to medium-term. This point was supported by the longitudinal analyses of statistical data reported in chapter 6 (sections 6.2.1 and 6.2.3). Gibbins *et al.*

(1990, p. 130) emphasise that “. . . the firm's traditions, taken-for-granted ways of doing things, may establish how disclosure is managed . . .”. As the New Zealand life insurance industry is greatly influenced by overseas-controlled corporations, head office characteristics and influences are also likely to affect the form and content of corporate reports published locally. This possibility was confirmed by managers of Company L (an insurance subsidiary of an overseas-controlled trading bank) who stated that the conservative attitudes of managers at head office restricted substantially their authority and ability to disclose information in their New Zealand annual report.

Lev (1992) contends that the level of information voluntarily disclosed in the annual report is unlikely to vary substantially over time because the credibility of management is predicated on how users (e.g., financial analysts) perceive and assess business performance over the long-term. That is, managers are likely to adopt a disclosure strategy which minimises surprises and mitigates adverse long-term effects on the firm's ability to raise market capital and generate new business. The importance of the credibility of a firm's disclosure position is underscored by Gibbins *et al.* (1990, p. 138) when they state that “. . . building a reputation . . . requires consistency in behaviour within the organization and through time. Such consistency is enhanced by having clearly articulated internal policies and by establishing organizational rules and procedures to manage disclosure . . .”. Furthermore, the ritualistic influence of intra-organisational networks (e.g., with other entities of the corporate group) directly affected the voluntary disclosure practices of some of the large and overseas-owned New Zealand life insurance companies (e.g., Company H). Again Gibbins *et al.* (1990, p. 131) report that “. . . such arrangements typically require that each member of the network adopt the same [or similar] reporting structures . . .”.

Gibbins *et al.* (1990) and Forker (1992), among others, also recognise the importance of opportunism in corporate politics and the influence which dominant personalities may have in the corporate reporting process. This view was supported by the empirical evidence gathered in this study. For instance, respondents indicated that in

certain companies (e.g., Company C) the attitude of a dominant person on the board of directors towards the public release of information in the annual report could have a significant influence on the disclosure position of the firm. Furthermore, the desire of owners and managers in Company J to attain listing status on the New Zealand stock exchange, and to expand in the Australian life insurance market, were also reported to be important motives underlying the relatively high levels of information disclosed voluntarily by this relatively small life insurance company. Similar observations of corporate reporting behaviour among small firms (particularly new entrants in the market) have also been reported elsewhere in the academic accounting literature (e.g., Firth, 1980; Mak, 1991).

Baiman (1990) and Abrahamson & Park (1994) contend that a high proportion of accountants employed relative to other staff in the firm could result in a high level of information disclosure in the annual report. This is because professional training, peer pressure, and accounting standards and guidelines, tend to stress the importance of greater transparency in corporate reporting, including the disclosure of negative outcomes. Such scholars also argue that by following the authoritative guidelines of their profession, accountants are able to enhance their professional credibility, and thus increase the value of their human capital (and promotional prospects) in the internal and external job markets. Indeed, subjects interviewed in some medium and large-sized companies (e.g., Companies C and H) cited evidence which supported a positive linkage between the proportion of accountants employed in firms relative to the number of other staff and the level of information disclosed in the annual report. The influence of different professional groups in the firm on the overall level of voluntary disclosure could therefore be an interesting and prospectively fruitful area for further research.

7.3.3. Environmental opportunism and ritualism

Gibbins *et al.* (1990, p. 132) state that “. . . disclosure opportunities are perceptual, not objective . . . [and that] ritualism is [also] activated by the perceived presence of

external norms . . .". In this study, almost all the subjects interviewed, and several of the corporate documents analysed (e.g., financial regulations and company minutes), highlighted the important influence of external auditors (and to a lesser extent, actuarial consultants) on voluntary disclosure. These findings are also consistent with those reported in other empirical disclosure studies (e.g., Singhvi & Desai, 1971; Craswell & Taylor, 1992). The empirical evidence collected in this study indicated that, amongst other things, external auditors provide help and advice to executive and non-executive directors (e.g., with regard to clarification and interpretation of accounting rules), and give credence to the statement of overall business performance reported publicly in the annual report (e.g., as stated by the managers of Company J). In this regard, the process by which managers in New Zealand-based life insurance companies, irrespective of their organisational characteristics, routinely seek and generally follow, the advice of auditors on disclosure matters is considered to be a common ritualistic phenomenon similar to that described by Gibbins *et al.* (1990, 1992).

Some informants stated that an important determinant of the company's disclosure strategy was the perceived effect which the voluntary public release of information in the annual report could have on its competitive position in particular segments of the market. Indeed, concerns over the proprietary costs of voluntary disclosure could help to explain why the financial regulations of some of the larger life insurance companies (e.g., Company A) prescribe that authorisation from the parent company must be obtained prior to disseminating large amounts of information publicly in the New Zealand market. Often the corporate practices of competitors are scrutinised continuously by managers in the larger life insurance companies (e.g., Company K). Indeed, these companies may attempt to emulate the content, presentation and style of the annual reports of their competitors for various reasons such as to protect their current market position. Similar factors motivating corporate reporting practices have also been identified by others writing in the academic literature. For example, Lev (1992) reports that conformity with the accounting and reporting practices of "peer-group" companies helps a company to maximise its value, ensure adequate liquidity

and maintain its market share.

There were several other institutional influences on corporate disclosure of New Zealand-based life insurance companies identified from the field-based research conducted in this study. These determinants include the influence of industry norms (e.g., Companies D and E), suggestions from industry regulators (e.g., Companies C and G), and anticipated changes in the legislative and regulatory environment (e.g., Company B). Gibbins *et al.* (1990) also noted that similar environmental factors frequently influenced the reporting practices of Canadian companies. Therefore, the upper and lower bounds of voluntary corporate disclosure in the New Zealand life insurance industry could be established (at least partially) by economic, social and political institutional norms as well as by internal economic incentives and associated contracting arrangements.

7.4. CONCLUSION AND SUMMARY

This chapter has analysed and evaluated the empirical data collected from statistical sources, interviews and corporate documents which were reported previously in Chapter 6. Overall, the empirical evidence provides mixed support for the predictions of the *managerial-discretion hypothesis* put forward in chapter 4 (section 4.3). As predicted by the *managerial-discretion hypothesis*, organisational form, company size, product concentration and the distribution system appear to be important determinants of the level of information voluntarily disclosed in annual reports. However, contrary to what was hypothesised, non-executive directors were found to complement rather than substitute for voluntary disclosure. These empirical results are also consistent with the vast majority of studies reported in the academic accounting literature. Weak contradictory evidence was found with regard to the reinsurance variable and as such, conclusions in the respect of this variable should be treated with caution. Furthermore, no empirical evidence was found to support the predicted relationship between the level of voluntary disclosure in the annual report and assets-in-place and localisation of operations. Nonetheless, these empirical findings are generally consistent with

those cited in most prior studies.

The study also attests to the view reported by Gibbins *et al.* (1990, 1992) that corporate disclosure decisions are multi-dimensional and complex in nature. In this respect, this chapter has examined some of the important (albeit non-theoretically determined) factors which could influence disclosure decisions in life insurance companies. In certain cases, the relative importance of these organisational and environmental influences on voluntary disclosure are distinguished by the characteristics of life insurance firms such as organisational form and firm size. For instance, policyholder-owners and managers in mutuals tend to be less responsive to corporate disclosure initiatives compared with stock companies, particularly new entrants to the market. The other organisational and institutional factors such as the impact of company culture and management perceptions of proprietary costs, could highlight areas that could be investigated in future research. Conclusions as to the determinants of voluntary disclosure in life insurance firms, and plausible explanations for differences in actual corporate reporting behaviour observed in the New Zealand life insurance industry, are reported in the next and final chapter of this thesis. Chapter 8 also considers in more detail potential areas for future research and the implications emanating from the results of this study.

CHAPTER 8. SUMMARY AND CONCLUSIONS

8.1. INTRODUCTION

This final chapter summarises the research project and presents the main conclusions and implications arising from the study. Additionally, the contribution to knowledge made by this project is assessed and its limitations are highlighted. Prospective areas for further research are also considered, while the final section of this chapter rounds-off the study.

8.2. OVERVIEW OF THE PROJECT

Previous surveys published in the literature cite significant variations in disclosure practices among companies operating in insurance markets in different countries, including New Zealand. Motivated by prior survey work, this research project attempts to isolate those factors which could influence the overall level of information voluntarily disclosed in the annual report of New Zealand-based life insurance companies and so explain differences in actual reporting practices.

New Zealand is a relatively unregulated life insurance market and the data used in this study have the advantage of covering the entire population of companies, giving different organisational structures and a great range of company size and diversity of product-mix. In addition, with the New Zealand life insurance industry being relatively unregulated by international standards, the data are unlikely to suffer distortion from stringent external regulation. Furthermore, as a life insurance industry-specific study carried out in a single country, this research project avoids potentially confounding influences (e.g., due to established industry practices) which might apply to inter-industry and cross-border studies (chapter 2).

The study reviewed critically the positive-descriptive theories and hypotheses which could be utilised to address its stated aim and the *managerial-discretion hypothesis* (Mayers & Smith, 1981, 1982a, 1986, 1988, 1994) was deemed to offer the best prospects for investigating the determinants of voluntary disclosure by life insurance companies because it helps to explain activity decisions in an insurance industry-specific context (chapter 3). Drawing a framework from elements of this meta-hypothesis, the study put forward eight hypotheses regarding the linkages between the level of information voluntarily disclosed in the annual report and the characteristics of life insurance companies such as their organisational form, product-mix and size (chapter 4).

Data-triangulation methodology was employed to test empirically the eight hypotheses derived from the *managerial-discretion hypothesis*. The reasoning was that data-triangulation could help to verify the reliability of evidence and provide a more robust test of the hypotheses (or constructs) drawn from the *managerial-discretion hypothesis*. The research design was outlined in detail in chapter 5 of this thesis.

The empirical results derived from the statistical testing of data obtained from the 1988-1993 annual reports of the full population of 34 New Zealand-based life insurance companies were presented (chapter 6). These results were supplemented by an analysis of the evidence obtained from 22 financial managers/senior executives interviewed in 12 field-sites representing a cross-sectional mix of companies making up the New Zealand life insurance industry. In addition, observations made from the study of corporate documents were also reported. The study then analysed and evaluated the extent to which the different sources of empirical evidence converged and supported, or otherwise, the test hypotheses (chapter 7). Overall, the analysis of the empirical evidence reported in this thesis suggests mixed support for the predictions of the *managerial-discretion hypothesis*. To gain additional insights into the disclosure decision-making process in life insurance firms, other (non-theoretically defined) organisational and institutional factors identified from the field research were also examined.

8.3. MAIN CONCLUSIONS AND IMPLICATIONS

Four main conclusions arise from the analysis of the empirical results obtained in this study. These conclusions and their implications are examined further below.

The first is that, consistent with the observations derived from cross-sectional analyses of corporate disclosure practices made by Schipper (1981) and Gibbins *et al.* (1990; 1992), among many others, this study has demonstrated that firm-specific factors, such as organisational form, company size, and product-mix diversity are important considerations in enhancing our understanding of the voluntary disclosure activities of life insurance companies.

More precisely, the study found evidence that, consistent with what was hypothesised, the level of information voluntarily disclosed by life insurance companies in their annual reports was positively associated with stock companies, large size, product diversity and the use of non-tied sales agents/independent brokers. Therefore, it appears that managers in stock life insurance companies are given greater discretion over disclosure decisions than their counterparts in mutuals so that they can respond efficiently to the short-term performance monitoring needs of shareholders (e.g., regarding annual trends in dividends). Greater voluntary disclosure also helps policyholders and shareholders to mitigate information asymmetry, and thus enable them to better control managerial behaviour in the life insurance firm, particularly as it grows, diversifies and sells proportionately more products through non-tied agencies/independent brokers. Such evidence could prompt life insurance companies to re-assess their corporate disclosure requirements, and increase voluntarily the amount of product-market information they provide for their customers and non-exclusive sales agencies in the annual report in order to increase sales.

A corollary to this first overall conclusion is that voluntary disclosure decisions are bound inextricably to the ownership structure, production function and marketing strategies of life insurance companies (e.g., see Lev, 1992). This implies that it could

be expedient for policymakers such as industry regulators and accounting standard-setters, to introduce disclosure rules which distinguish between life insurance companies based on certain criteria such as their organisational form or size. For example, contrary to the view that smaller companies should be exempt disclosures on cost-benefit grounds (e.g., as embodied in s. 2 of NZ's Financial Reporting Act 1993), the complex and long-term nature of life insurance might dictate that greater disclosure requirements could be imposed on small life insurance companies (e.g., with regard to reserving levels, movements on reserves, level of reinsurance ceded and assumed, and so on). Such information would allow interested parties, such as policyholders and industry regulators, to better assess the long-term financial condition and operational performance of smaller (less capitalised) life insurers and so help them to make better insurance, investment and solvency monitoring decisions.

The second main conclusion is that some of the empirical evidence obtained during the course of this study is inconsistent with what was hypothesised. For instance, contrary to expectations, the empirical evidence collected in this study suggested that non-executive directors complement rather than substitute for the level of information voluntarily disclosed in the annual reports of life insurance companies. One reason for the complementary relationship cited by the subjects interviewed during the course of this study, is that non-executive directors are likely to be motivated to voluntarily disclose information in the annual report in order to preserve and promote their public reputations as independent and credible monitors of the interests of owners and others. Furthermore, there could be other institutional reasons why non-executive directors might press for greater voluntary disclosure, such as legislative requirements (e.g., s. 137 of New Zealand's Companies Act 1993), or obligations arising from membership of a professional body (e.g., if the non-executive director is a professionally qualified accountant). To the extent that the voluntary disclosure of a high level of information in the annual report helps to facilitate more efficient monitoring and control of managerial behaviour in life insurance firms, non-executive directors could be more cost-efficient monitors of policyholders' and shareholders' interests than alternatives such as industry regulators. This could prompt the New

Zealand legislature and other relevant government bodies (e.g., the New Zealand Securities Commission) to encourage life insurance companies to appoint non-executive directors and establish audit committees, rather than impose stringent (and prospectively costly) external regulations (e.g., an appointed actuary regime).

The statistical results also indicated that, contrary to expectations, reinsurance was positively associated with the level of voluntary disclosure. As this finding was not supported by the fieldwork evidence, substantive conclusions regarding the relationship between voluntary disclosure and the amount reinsurance held by life insurance companies could not be made. However, the statistical and fieldwork evidence generated from this research were mutually consistent in offering no empirical support for the predicted relationship between assets-in-place and localisation of operations, and the level of information voluntarily disclosed in the annual report. The lack of empirical support for the assets-in-place variable is nevertheless consistent with those reported by other scholars (e.g., Leftwich *et al.*, 1981; Chow & Wong-Boren, 1987). One possible explanation for this is that users of the annual report may be primarily concerned with the annual operational performance of life insurance firms rather than the current collateral value of their assets and future investment opportunity set. In addition, the absence of evidence substantiating the localisation of operations variable could reflect that many multinational life insurance companies in New Zealand are mutuals and as a result, they may not be concerned with making high voluntary disclosures in their annual reports in order to raise market capital locally. These findings could therefore prompt future research to re-assess and consider modifications to arguments that suggest linkages between voluntary disclosure in life insurance markets and the variables assets-in-place and localisation of operations.

Third, by incorporating explicitly both the contractual (*ex-ante*) and opportunistic (*ex-post*) determinants of activity decisions in life insurance firms, it is considered that the *managerial-discretion hypothesis* has intuitive appeal as a theory of corporate disclosure in insurance markets (despite some inconclusive and contrary results). The

empirical implications arising from the use of this theoretical framework to life insurance firms could thus contribute valuable insights into the motives for voluntary disclosure and provide a basis for the conduct of further research. Indeed, the appeal of applying new theories/hypotheses (such as the *managerial-discretion hypothesis*) to disclosure research has been recognised by Gibbins *et al.* (1990). They remark (p.3) that such initiatives “ . . . will guide the needed empirical research to be more conclusive and explanatory and less purely descriptive than much of it has been to date . . . [and so] better theory should produce better research . . . ”.

Fourth, the interview evidence obtained from this study indicated that organisational attributes, such as the long-held beliefs and perceptions of managers and environmental aspects, such as the state of competition in segments of the local market, could be important determinants of voluntary disclosure in the New Zealand life insurance industry. For instance, some of the large overseas-controlled mutuals (e.g., Company A) have only recently realised the potential sales and marketing advantages of increasing the amount of voluntary disclosure in the annual report, as a result of the rapid rates of new business generated by recent entrants to the New Zealand life insurance industry (e.g., Company J). Therefore, corporate voluntary disclosure in the New Zealand life insurance industry appears to be a complex and multi-dimensional phenomenon that is affected by a multiplicity of organisational and institutional factors, such as company culture and the state of market competition, some of which reside outside the tenets of the *managerial-discretion hypothesis* used in this study. Nevertheless, recognition by scholars of such factors and their influence on the disclosure position of life insurance companies could assist them to better design and operationalise future studies.

8.4. CONTRIBUTION OF THE RESEARCH PROJECT

This research project has provided insights regarding the determinants of voluntary disclosure by life insurance companies and thus helped to explain differences in actual reporting practices identified by prior survey work. In the light of the hypotheses

development, methodology employed and the empirical evidence obtained, six major contributions emerge from this project (see also chapter 1, section 1.3). These contributions - classified as regulatory/policy-making, empirical/theoretical and methodological - are examined below.

(a) Regulatory/Policy-making

First, by highlighting the relationship between the level of information voluntarily disclosed in the annual report and the characteristics of life insurance companies, such as their organisational form and company size, this study could help industry regulators, accounting standard-setters, auditors, and others, to better understand the accounting environment in which life insurance companies operate, and so introduce more efficient and effective policies affecting the industry. For example, the empirical evidence indicating that large life insurance companies voluntarily disclose more information than small life insurance companies in order to facilitate monitoring of managerial performance, and enable better internal control and corporate stewardship, provides a *prima facie* case for a differential reporting regime to be introduced for life insurance companies based on size (e.g., as measured by the market value of total assets). That is, statutory reporting rules could be more stringent for small life insurance companies in certain regards (e.g., with regard to the disclosure of capitalisation ratios and reserving movements) as the prospective costs of bankruptcy could be greater for policyholders and shareholders in these companies compared with their counterparts in larger organisations.

Second, non-executive directors and non-tied sales agents/independent brokers appear to have an important influence on the corporate reporting practices of life insurance companies. As such, their views could be solicited by the accountancy profession during the consultation process involved in the development of accounting standards and disclosure rules relevant to the life insurance industry.

Third, empirical evidence linking the level of voluntary disclosure to firm-specific factors, such as organisational form, firm size and product-mix diversity, could provide a greater level of certainty for policyholders and shareholders as to whether life insurance companies are able to meet their contractual obligations. This would enable policyholders and shareholders to make better informed insurance and investment decisions. Additionally, as large and multi-product life insurance companies appear to voluntarily disclose product-market details in their annual reports largely for sales and marketing reasons, there is arguably less of a need for government regulations to prescribe that information should be disseminated to policyholders by means of other disclosure media such as policy documents.

(b) Empirical/Theoretical

Fourth, by focusing on a single and unregulated industry, the empirical results of this study are not confounded by inter-industry effects (e.g., established norms of behaviour) or the influences of stringent external regulations. Thus, a more robust test of the underlying theory has probably been achieved than would otherwise been the case had the study been carried out in more regulated environments such as those of Australia and the UK.

Fifth, it is believed that this is the first study to test empirically the relationship between the overall level of voluntary disclosure and the characteristics of life insurance companies utilising an insurance industry-specific theoretical framework - the *managerial-discretion hypothesis*. Therefore, insights into the linkages between voluntary disclosure and managerial decision-making discretion in life insurance companies of different organisational form, size, product-mix and so on, have been gained from this study. The results of this study could also help to stimulate developments in the theory of corporate reporting and accounting practice in the insurance industry and so promote further academic research.

(c) Methodological

Sixth, it is considered that the use of data-triangulation methodology in this study has helped to validate the constructs employed and verify the reliability of evidence drawn from different sources. Furthermore, data-triangulation is not often used in positive-descriptive-type studies reported in the academic accounting literature. Therefore, the use of data-triangulation methodology in this project could help others to recognise the advantages of the approach over single-method research designs and so encourage its greater use in future accounting studies.

8.5. LIMITATIONS OF THE STUDY

Conclusions drawn from the results of this study should however be tempered by recognition of some of the limitations inherent in its design. For instance, the statistical analysis carried out in this thesis is limited to the extent that it uses proxies rather than constructs in the operationalisation of test hypotheses. This can result in measurement error that weakens the statistical power of the tests performed. Moreover, if measurement error is correlated with omitted variables (e.g., off-balance sheet items) test statistics may be biased. This limitation is reported to exist in many previous accounting studies reported in the academic literature (e.g., Christie, 1990, Christie *et al.*, 1991). However, the use of triangulation methodology in this study may mitigate the problem of measurement error by enabling empirical results to be verified against different sources of evidence (see chapter 5). Christie *et al.* (1991) also report that many explanatory (independent) variables used in accounting-based research such as firm size and product-mix, could be potentially endogenous. For example, company size could determine the level of voluntary disclosure, but at the same time the level of voluntary disclosure could directly influence the size of the entity (e.g., by promoting the in-flow of capital funds which enable firms to increase in size). Maddala (1988, pp. 325-331) also considers that the endogeneity problem afflicts many econometric analyses and advises that (as in this study) researchers should be primarily guided by theory and be able to justify at least “weak exogeneity”

among the independent variables. Kennedy (1995, p. 89) further argues that although ". . . exogeneity should be tested for, the model [need not] . . . be such that all its explanatory variables are exogenous, however convenient that may be." In chapter 6 of this thesis (section 6.2.6) the endogeneity problem was tested for statistically and found to be an unavoidable limitation with the research design. Moreover, diagnostics and sensitivity tests reported in chapter 6 (section 6.2.6) indicated that interpretation of the statistical results should be tempered by recognition that the introduction of firm and time dummies in the fixed-effects regression model employed could be influencing the explanatory power of the model and the statistical significance of the coefficient estimates.

8.6. AREAS FOR FUTURE RESEARCH

There are several prospective areas for further research highlighted by the results of this study. First, the implications of the *managerial-discretion hypothesis* for explaining voluntary disclosure decisions in life insurance companies could be extended to other corporate sectors (e.g., the short-term (general) insurance industry) which have a similar range of company size and ownership structures as the life insurance industry. Empirical evidence derived from such studies could help to refine (and possibly re-define) the conceptual basis of future research, and so improve our understanding of the mechanisms and processes of corporate reporting in other parts of the financial services sector. For example, studies in the general insurance industry could indicate whether the different contracting incentives of policyholders and shareholders in that industry lead to discernable variations in the levels of voluntary disclosure between mutuals and stock companies as was found in this life insurance industry-based study.

Second, the empirical evidence reported in this study could also provide a useful benchmark against which to measure and evaluate future research conducted in more tightly regulated regimes such as those of Australia and the UK. Additionally, the results of this study could be generalisable to other relatively unregulated insurance

industries such as those emerging in countries of the Asia-Pacific region (e.g., Indonesia) or to more established western insurance markets which are currently being deregulated like Canada. In other words, the research approach adopted in this project could be legitimately applied to other jurisdictions.

Third, it is likely that actuaries play an important role in the production, dissemination and use of information in the life insurance industry. For example, actuaries as professional custodians of policyholders' long-term insurance interests, are primarily concerned with information (e.g., mortality statistics, reserving level information, and so on), which enable them to better value long-term policy liabilities and privately monitor corporate solvency over the long-term. The extent to which the need for long-term actuarial and short-term accounting/operational information substitute or complement each other in life insurance firms could be the subject of future research investigation. The actuarial role in the reinsurance function and the extent to which reinsurers rely on actuarial-type information (e.g., mortality statistics) to supplement and/or substitute for information disclosed in public sources such as annual reports and policy documents, could also provide an interesting area for further study.

Fourth, the fieldwork evidence reported in this study has highlighted the importance of other organisational conditions (e.g., corporate culture) and institutional factors (e.g., the state of market competition and established industry practices) which could also affect voluntary disclosure decisions in life insurance companies. It was found that the fieldwork evidence gathered in this study matches closely with Gibbins *et al.*'s (1990) multi-dimensional model of corporate disclosure. Therefore, this conceptual framework could also provide a useful basis for the conduct of future corporate disclosure research in international life insurance markets.

8.7. FINAL REMARKS

To round-off, this thesis reports that prior survey work has identified considerable diversity in the level of information voluntarily disclosed in the annual report of life insurance companies operating in New Zealand and elsewhere. This study was predicated on the notion that the *managerial-discretion hypothesis* could help to explain the observed differences in the reporting practices of life insurance companies. The implications of this meta-hypothesis for explaining voluntary disclosure decisions in life insurance firms was formulated into eight testable hypotheses in order to direct empirical analysis (chapter 4, section 4.3).

To test empirically the eight hypotheses, data-triangulation methodology was used, and involved applying statistical, interview and document study methods to data gathered from the New Zealand life insurance industry (chapter 5, section 5.2). It is considered that data-triangulation had two important advantages. First, data-triangulation helped to ensure that the study was carefully executed (e.g., by allowing data collected from different sources to be reconciled against each other using convergence analysis). Second, it enabled data to be incisively analysed and evaluated (e.g., by the application of different but complementary techniques).

To sum up, the results of this study provide mixed support for the *managerial-discretion hypothesis*. The level of voluntary disclosure was positively related to organisational form, firm size, product diversity and reliance on non-exclusive sales agents/independent brokers. However, contrary to what was hypothesised, the empirical results revealed that the more non-executive directors employed, the more information voluntarily disclosed by life insurance companies in their annual reports. Reinsurance was found to be significant and positively related to voluntary disclosure in the statistical results, but not an important determinant of voluntary disclosure in the fieldwork. Assets-in-place and localisation of operations were found not to be significant determinants of voluntary disclosure in the statistical results and the analysis of data collected in the field. Interview evidence also identified other

organisational and institutional determinants of voluntary disclosure in the life insurance industry which could provide some useful pointers for future research.

Despite the mixed results, it is considered this research project contributes valuable insights into the determinants of the voluntary disclosure practices of life insurance companies, and in this regard, it offers an important contribution to the accounting literature. It is believed that the results of this study could help policymakers to consider, and perhaps formulate, more cost-efficient corporate reporting rules such as the introduction of a more stringent annual reporting regime for large and small companies and/or mutuals and stock companies. Finally, it is considered that this thesis provides a sound basis for the conduct of further research in insurance markets across different regulatory environments.

REFERENCES

- Abdel-khalik, A.R. & Ajinkya, B.B. (1979). *Empirical research in accounting: A methodological viewpoint*. American Accounting Association, Accounting Education Series Monograph, No. 4., Sarasota, FL., American Accounting Association.
- Abrahamson, E. & Park, C. (1994). Concealment of negative organizational outcomes: An agency theory perspective. *Academy of Management Journal*, 37(5), 1302-1334.
- Adams, M.B. (1994a). *The New Zealand life insurance industry: A survey of accounting and reporting practices*. Price Waterhouse: Wellington.
- Adams, M.B. (1994b). Accounting standards and the New Zealand Life Insurance Industry. *Pacific Accounting Review*, 6(1), 1-19.
- Adams, M.B. (1994c). Some thoughts on the development and structure of the New Zealand life insurance industry. *Journal of the Institute of Actuaries*, 121(480), 573-588.
- Adams, M.B. (1995). Balance sheet structure and the managerial-discretion hypothesis: An exploratory empirical study of New Zealand life insurance companies. *Accounting and Finance*, 35(1), 21-45.
- Adams, M.B. & Scott, C.N.W. (1994). Realistic reporting of life insurance company policy liabilities and profits: Developments in Anglo-American countries. *Journal of the Institute of Actuaries*, 121(479), 441-458.
- Ahmed, K. & Nicholls, D. (1994). The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: The case of Bangladesh. *International Journal of Accounting, Education and Research*, 29(1), 62-77.
- Alchian, A.A. & Woodward, S. (1990). 'The firm is dead; long live the firm'. A review of Oliver E. Williamson's *The Economic Institutions of Capitalism*. *Journal of Economic Literature*, 26(1), 65-79.
- Anderson, D. & Zimmer, I. (1992a). Reactions to regulation of accounting for goodwill. *Accounting and Finance*, 32(2), 27-45.
- Anderson, D. & Zimmer, I. (1992b). Time series analysis of accounting policy choice: Reply. *Accounting and Finance*, 32(2), 57-60.
- Arnold, J., Moizer, P. & Noreen, E. (1984). Investment appraisal methods for financial analysts: A comparative study of US and UK practices. *International Journal of Accounting, Education and Research*, 19(1), 1-18.
- Australian Life Insurance Act 1945*. Canberra: Government Printing House.

- Baiman, S. (1990). Agency research in managerial accounting: A second look. *Accounting Organizations and Society*, 15(4), 341-371.
- Ball, R. (1989). *Accounting, auditing and the nature of the firm*. Managerial Economics Research Studies, Working Paper Series No. 89-03, Bradley Policy Research Center, William E. Simon Graduate School of Business Administration, University of Rochester, NY, USA.
- Ball, R. & Foster, G. (1982). Corporate financial reporting: A methodological review of empirical research. *Journal of Accounting Research*, 20(Supplement), 161-234.
- Barnea, A., Haugen, R.A., & Senbet, L.W. (1985). *Agency problems and financial contracting*. Englewood Cliffs, NJ: Prentice-Hall.
- Bartlett, W.J. (1992). Accounting for life assurance offices. Australia and elsewhere. *Insurance Law Journal*, 5(2), 110-122.
- Bathala, C.T. & Rao, R.P. (1995). The determinants of board composition: An agency theory perspective. *Managerial and Decision Economics*, 16(1), 59-69.
- Bavishi, V.B. (1989). *International accounting trends, Volume 1*. Princeton, NJ: Center for International Financial Analysis and Research.
- Belkaoui, A. & Karpik, P.G. (1989). Determinants of the corporate decision to disclose social information. *Accounting, Auditing and Accountability Journal*, 2(1), 36-51.
- Belsley, D.A., Kuh, E. & Welsch, R.E. (1980). *Regression diagnostics: Identifying influential data and sources of collinearity*. New York: John Wiley.
- Benjamin, S. (1976). Profit and other financial concepts in insurance. *Journal of the Institute of Actuaries*, 103(424), 233-281.
- Berger, L.A., Cummins, J.D. & Tennyson, S. (1992). Reinsurance and the liability insurance crisis. *Journal of Risk and Uncertainty*, 5(2), 253-272.
- Berry, A.J., Capps, T., Cooper, D.J., Ferguson, P., Hopper, T.M. & Lowe, E.A. (1985). Management control in an area of the NCB: Rationales of accounting practices in a public enterprise. *Accounting, Organizations and Society*, 10(1), 3-28.
- Berry, A.J., Laughton, E., & Otley, D.T. (1991). Control in a financial services company (RIF): A case study. *Management Accounting Research*, 2(2), 109-139.
- Birnberg, J.G., Shields, M.D. & Young, S.M. (1990). The case for multiple methods in empirical management accounting research (with an illustration from budget setting). *Journal of Management Accounting Research*, 2(Fall), 33-66.

- Blair, M. & Ramsay, I. (1992). Collective investment schemes: The role of the trustee. *Australian Accounting Review*, 1(3), 10-20.
- Blair R.D. & Herndon, J.B.(1994). A survivor test of the American agency system of distribution property liability insurance. *Journal of the Economics of Business*, 1(3), 283-290.
- Boose, M.A. (1990). Agency theory and alternative predictions for life insurers: An empirical test. *The Journal of Risk and Insurance*, 57(3), 499-518.
- Botosan, C.A, (1995). *The effect of disclosure level on the cost of equity capital*. Unpublished Working Paper, University of Washington, USA.
- Bradbury, M.E. (1991). Characteristics of firms and voluntary interim earnings disclosures: New Zealand Evidence. *Pacific Accounting Review*, 3(1), 3-62.
- Bradbury, M.E. (1992). Voluntary disclosure of financial segment data: New Zealand evidence. *Accounting and Finance*, 32(1), 15-26.
- Bruns, W.J. (1989). Case study research: Design and methods. *Journal of Management Accounting Research*, 1(Fall), 157-163.
- Burrell, G. & Morgan, G, (1979). *Sociological paradigms and organisational analysis*. London: Heinemann Press.
- Burrows, R.P. & Whitehead, G.H. (1987). The determination of life office appraisal values. *Journal of the Institute of Actuaries*, 104(458), 411-444.
- Cahan, S.F. (1992). The effect of the antitrust investigations on discretionary accruals: A refined test of the political-cost hypothesis. *The Accounting Review*, 67(1), 77-95.
- Cahan, S.F. (1993). Electrical utility income in response to the breakdown at the Three Mile Island nuclear power plant and subsequent political events. *Journal of Accounting and Public Policy*, 12(3), 37-63.
- Carew, E. (1987). *New Zealand's money revolution: A comprehensive up-to-date guide to New Zealand's rapidly changing financial system*. Wellington: Allen and Unwin/Port Nicholson Press.
- Child, J. (1975). Managerial and organisational factors associated with company performance - Part II. A contingency analysis. *The Journal of Management Studies*, 12(1), 12-27.
- Chow, C.W. (1982). The demand for external auditing: Size, debt and ownership influences. *The Accounting Review*, 57(2), 272-291.

- Chow, C.W. & Wong-Boren, A. (1987). Voluntary financial disclosure by Mexican corporations. *The Accounting Review*, 62(3), 533-541.
- Christie, A.A. (1990). Aggregation of test statistics. An evaluation of the evidence on contracting and size hypotheses. *Journal of Accounting and Economics*, 12(1-3), 15-36.
- Christie, A.A., Joye, M.P. & Watts, R.L. (1991). *Decentralization of the firm: Theory and evidence*. Managerial Economics Research Studies Working Paper Series no. 91-03, Bradley Policy Research Center, William E. Simon Graduate School of Business Administration, University of Rochester, USA.
- Christenson, C. (1983). The methodology of positive accounting. *The Accounting Review*, 58(1) 1-22.
- Clarkson, P.M., Kao, J.L. & Richardson, G.D. (1994). Voluntary inclusion of forecasts in the MD & A section of annual reports. *Contemporary Accounting Research*, 32(1), 1-30.
- Coase, R.H. (1937). The nature of the firm. *Economica*, 4(November), 386-405.
- Commerce Clearing House. (1991). *Australian and New Zealand insurance reporter: Volume 1*, Canberra: CCH Australia Ltd.
- Cooke, T.E. (1989a). Disclosure in the corporate annual accounts of Swedish companies. *Accounting and Business Research*, 19(74), 113-124.
- Cooke, T.E. (1989b). Voluntary disclosure by Swedish companies. *Journal of International Financial Management and Accounting*, 1(2), 171-195.
- Cooke, T.E. (1991). An assessment of voluntary disclosure in the annual reports of Japanese corporation. *International Journal of Accounting Education and Research* 26(3), 174-189.
- Cooke, T.E. & Wallace, R.S.O. (1990). Financial disclosure regulation and its environment. *Journal of Accounting and Public Policy*, 9(2), 79-110.
- Cowe, R. (1993). *The Guardian guide to the UK's top companies*. London: Cambridge University Press.
- Craswell, A.T. & Taylor, S.L. (1992). Discretionary disclosure of reserves by oil and gas companies: An economic analysis. *Journal of Business Finance and Accountancy*, 19(2), 295-308.
- Creedon, S. (1979). U.S. GAAP - a U.K. actuary's perspective. *Journal of the Institute of Actuaries Students' Society*, 234(4), 125-180.

- Cummins, J.D. (1988). Risk-based premiums for insurance guaranty funds. *Journal of Finance*, 43(4), 823-839.
- Cummins, J.D. & Weiss, M.A. (1991, June). *The structure, conduct, and regulation of the property liability insurance industry*. Paper presented at the Federal Bank of Boston Conference on Insurance, Harwich Port, MA, USA.
- Datta, P. & Doherty, N.A. (1990). The effects of organizational form on capital structure: The case of stock and mutual property-liability insurance firms. In *Risk, information and insurance*, Lonberge, H. (ed.), Norwell, MA: Kluwer Academic Publishers.
- Dempsey, S.J., Hunt, H. & Schroeder, N.W. (1993). Earnings management and corporate ownership structure: An examination of extraordinary item reporting. *Journal of Business Finance and Accountancy*, 20(4), 479-500.
- Demsetz, H. & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155-1177.
- Demski, J.S. (1988). Positive accounting theory: A review. *Accounting, Organizations and Society*, 13(6), 623-629.
- Denzin, N.K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Diamond, D.W. (1985). Optimal release of information by firms. *Journal of Finance*, 40(3), 1071-1094.
- Diamond, D.W. & Verrechia, R.E. (1991), Disclosure, liquidity, and the cost of capital. *Journal of Finance*, 46(3), 1325-1359.
- Dixon, K., Coy, D. & Tower, G.D. (1991). External reporting by New Zealand universities 1985-1989: Improving accountability. *Financial Accountability and Management*, 7(3), 159-178.
- Duke, J.C. & Hunt, H.G. (1990). An empirical examination of debt covenant restrictions and accounting-related debt proxies. *Journal of Accounting and Economics*, 12(1), 45-63.
- Dye, R.A. (1985). Disclosure of nonproprietary information. *Journal of Accounting Research*, 23(1), 123-145.
- Easterby-Smith, M., Thorpe, R. & Lowe A. (1991). *Management research - an introduction*. London: Sage Publications.
- Elliot, R.K. & Jacobson, P.D. (1994). Costs and benefits of business information disclosure. *Accounting Horizons*, 8(4), 80-96.

- Emmanuel, C.R., Otley, D.T. & Merchant, K. (1990). *Accounting for management control*. London: Chapman-Hall.
- Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288-307.
- Fama, E.F. & Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Fama, E.F. & Jensen, M.C. (1985). Organizational forms and investment decisions. *Journal of Financial Economics*, 14(1), 101-119.
- Field, M. (1991). Life profit accounting: An actuary's view. *Journal of Accountancy*, 162(1), 27.
- Fields, J.A. (1988). Expense preference behaviour in mutual life insurers. *Journal of Financial Services Research*, 1(1), 113-129.
- Fields, J.A. & Tirtiroglu, D. (1991). Agency-theory implications for the insurance industry: A review of the theoretical and empirical research. *Quarterly Journal of Business and Economics*, 30(1), 40-61.
- Finsinger, J. (1983). Competition, ownership and control in markets with imperfect information. In Finsinger, J. (ed.) *Economic analysis of regulated markets* (pp. 111-135). London: Macmillan Press.
- Firth, M. (1979). The impact of size, stock market listing, and auditors on voluntary disclosure in corporate annual reports. *Accounting and Business Research*, 9(36), 273-280.
- Firth, M. (1980). Raising finance and firms' corporate reporting policies. *Abacus*, 16(2), 100-115.
- Fishman, M.J. & Haggerty, K.M. (1989). Disclosure decisions by firms and the competition for price efficiency. *Journal of Finance*, 44(3), 633-646.
- Forker, J.J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research*, 22(86), 111-124.
- Foster, G. (1986). *Financial statement analysis*. Englewood-cliffs, NJ: Prentice-Hall.
- Frank, W.G. (1977). An empirical analysis of international accounting principles. *Journal of Accounting Research*, 17(2), 593-605.
- Gable, G.G. (1994). Integrating case study and survey research methods: An example in information systems. *European Journal of Information Systems*, 3(2), 112-126.

- Gibbins, M., Richardson, A. & Waterhouse, J. (1990). The management of corporate financial disclosure: Opportunism, ritualism, policies, and processes. *Journal of Accounting Research*, 28(1), 121-143.
- Gibbins, M., Richardson, A.J. & Waterhouse, J. (1992). *The management of financial disclosure: Theory and perspectives*. Research Monograph, No. 20, The Canadian Certified General Accountants' Research Foundation, Vancouver.
- Gilbert, T. (1991). *The life insurance industry in Canada: Survey of corporate and financial reporting*. Toronto: Peat Marwick Thorne.
- Ginzberg, M.J. (1980). An organisational contingencies view of accounting and information systems' implementation. *Accounting, Organizations and Society*, 5(4), 369-382.
- Gordon, L.A. & Miller, D. (1976). A contingency framework for the design of accounting information systems. *Accounting, Organizations and Society*, 1(1), 56-69.
- Gray, S.J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, 24(1), 1-15.
- Gray, S.J., Meek, G.K. & Roberts, C. (1995). International capital market pressures and voluntary annual report disclosures by U.S. and U.K. multinationals. *Journal of International Financial Management and Accounting*, 6(1), 43-68.
- Greene, W.H. (1991). *Econometric analysis*. New York: Macmillan Publishing Co.
- Griffiths, W.E., Hill, R.C. & Judge, G.G. (1993). *Learning and practising econometrics*. New York: John Wiley.
- Guttentag, J. & Herring, R. (1986). Disclosure policy and international banking. *Journal of Banking and Finance*, 10(1), 75-97.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1987). *Multivariate data analysis with readings*. New York: Macmillan Publishing Co.
- Hambrick, D.C. & Abrahamson, E. (1995). Assessing managerial discretion across industries: A multidimensional approach. *Academy of Management Journal*, 38(5), 1427-1441.
- Hansmann, H. (1985). The organization of insurance companies: Mutual versus stock. *Journal of Law, Economics, and Organization*, 1(1), 125-153.
- Hanushek, E.A. & Jackson, J.E. (1977). *Statistical methods for social scientists*. New York: Harecourt Brace Jovanovich.
- Hay-Davison, I. (1984). Do actuaries need standards? *Journal of the Institute of Actuaries Students' Society*, 28(1), 43-51.

- Healy, P. (1985). The impact of bonus schemes on selection of accounting principles. *Journal of Accounting and Economics*, 7(2), 85-108.
- Hoerger, T.J., Sloan, F.A. & Hassan, M. (1990). Loss volatility, bankruptcy, and the demand for reinsurance. *Journal of Risk and Uncertainty*, 3(3), 221-245.
- Hopper, T. & Powell, A. (1985). Making sense of research into the organisational and social aspects of management accounting. A review of its underlying assumptions. *Journal of Management Studies*, 22(5), 429-465.
- Hoque, Z & Hopper, T. (1994). Rationality, accounting and politics: A case study of management control in a Bangladesh jute mill. *Management Accounting Research*, 5(1), 5-30.
- Horton, J. & Macve, R. (1992, April). *The impact of planned changes in accounting principles for U.K. life insurance companies*. Paper presented at the British Accounting Association Conference, Warwick, U.K.
- Horton, J. & Macve, R. (1994). *Accounting for life insurance: A Discussion Paper*. London: Institute of Chartered Accountants England and Wales.
- Horton, J., Macve, R. & Hoskin, K. (1993). *Changing accounting principles for UK life insurance companies: The role of accounting research*. Accounting and Finance Working Paper, University College of Wales, Aberystwyth.
- Hossain, M. & Adams, M.B. (1995). Voluntary financial disclosure by Australian listed companies. *Australian Accounting Review*, 5(10), 45-55.
- Hossain, M., Tan, L.M. & Adams, M.B. (1994). Voluntary disclosure in an emerging capital market: Some empirical evidence from companies listed on the Kuala Lumpur stock exchange. *International Journal of Accounting, Education and Research*, 29(4), 334-351.
- Hossain, M., Perera, M.H.B. & Rahman, A.R. (1995). Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial Management and Accounting*, 6(1), 69-87.
- Innes, J. & Mitchell, F. (1990). The process of change in management accounting: Some field evidence. *Management Accounting Research*, 1(1), 3-19.
- Jankowicz, A.D. (1991). *Business research projects*. London: Chapman-Hall.
- Jensen, M.C. (1983). Organization theory and methodology. *The Accounting Review*, 58(2), 319-339.

- Jensen, M.C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review: Papers and Proceedings*, 76(2), 323-329.
- Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(3), 305-360.
- Jick, T.D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611.
- Jones, C.S. (1985). An empirical study of the evidence for contingency theories of management accounting systems. *Accounting, Organizations and Society*, 10(3), 303-328.
- Jones, G.R. (1983). Transaction costs property rights, and organizational culture: An exchange perspective. *Administrative Science Quarterly*, 28 (3), 454-467.
- Jones, G.R. (1987). Organization-client transactions and organizational structures. *Academy of Management Journal*, 30(2), 197-218.
- Joskow, P.L. (1973). Cartels, competition, and regulation of the property-liability insurance industry. *The Bell Journal of Economics and Management Science*, 4(3), 375-427.
- Judge, G.G., Griffiths, W.E., Hill, R.C. & Lee, T. (1980). *The theory and practice of econometrics*. New York: John Wiley.
- Kaplan, B. & Duchon, D. (1988). Combining qualitative and quantitative methods in information systems research: A case study. *Management Information Systems Quarterly*, 12(4), 571-586.
- Kennedy, P. (1995). *A guide to econometrics*. Oxford: Blackwell Publishing Co.
- Ketchen, D.J. & Shook, C.J. (1996). The application of cluster analysis in strategic management research: An analysis and critique. *Strategic Management Journal*, 17(6), 441-458.
- Kim, W.J., Mayers, D. & Smith, C.W. (1993). *On the choice of insurance distribution systems*. Bradley Policy Research Center Working Paper No. 93-03, University of Rochester, Rochester, NY, USA.
- King, R., Pownall, G., & Waymire, G. (1990). Expectations adjustments via timely management forecasts: Review, synthesis, and suggestions for future research. *Journal of Accounting Literature*, 9, 113-144.
- Klein, B. & Leffler, K.B. (1981). The rôle of market forces in assuring contractual performance. *Journal of Political Economy*, 89(4), 615-637.

- Klein, B., Crawford, R.G. & Alchian A.A. (1978). Vertical integration, appropriable rents, and the competitive contracting process. *Journal of Law and Economics*, 21(2), 297-326.
- Klumpes, P.J.M. (1995). Voluntary disclosure by financial intermediaries: Evidence from Australian life insurers promoting investment-related contracts. *Accounting and Finance*, 35(1), 1-20.
- Knutson, P. (1992). *Financial reporting in the 1990s and beyond*. New York: Association for Investment Management and Research.
- Kohak (1978). *Idea and experience: Husserl's project of phenomenology in ideas*. Chicago: Chicago University Press.
- KPMG Peat Marwick (1991). *Insurance: A review of 1990 annual reports and discussion of emerging industry issues*. Norwalk, CN: Author.
- KPMG Peat Marwick. (1994). *Economic and social impact of the life insurance and superannuation industry in New Zealand*. Wellington: Author.
- KPMG Peat Marwick McLintock. (1990). *UK principles and presentation: Insurance. A survey of the 1989 accounts of major composites*. London: Author.
- KPMG Peat Marwick McLintock. (1992). *Principles and presentation: Insurance. A survey of the 1991 accounts of major UK composites*. London: Author.
- Krippendorff, K. (1980). *Content analysis: An introduction to its methodology*. Beverley Hill, CA: Sage Publications.
- Lamble, P.J. (1981, June). Insurance accounting - some problems. *The Chartered Accountant in Australia*, 51(11), 71-77.
- Lamble, P.J. & Minehan, L.P. (1987). *Accounting for the general insurance industry*. (Discussion Paper No. 11). Australian Accounting Research Foundation, Melbourne, Australia.
- Lamm-Tennant, J. & Rollins, T. (1994). Incentives for discretionary accounting practices: Ownership structure, earnings, size and taxation. *The Journal of Risk and Insurance*, 61(3), 476-491.
- Lamm-Tennant, J. & Starks, L.T. (1993). Stock versus mutual ownership structures: The risk implications. *Journal of Business*, 66(1), 29-46.
- Lang, M. & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31(2), 246-271.

- Leftwich, R.W., Watts, R.L. & Zimmerman, J.L. (1981). Voluntary corporate disclosure: the case of interim reporting. *Journal of Accounting Research*, 19(Supplement), 50-77.
- Leland, H. & Pyle, D. (1977). Informational asymmetries, financial structure, and financial intermediation. *Journal of Finance*, 32(2), 371-388.
- Lev, B. (1989). On the usefulness of earnings and earnings research. *Journal of Accounting Research*, 27(Supplement), 153-192.
- Lev, B. (1992). Information disclosure strategy. *California Management Review*, 34(4), 9-32.
- Lev, B. (1995). Disclosure and litigation. *California Management Review*, 37(3), 8-28.
- Life Office Association of New Zealand (1993). *Annual Review*. Wellington: Author.
- Lohtia, R., Brooks, C.M & Krapfel, R.E. (1994). What constitutes a transaction-specific asset? An examination of dimensions and types. *Journal of Business Research*, 30(3), 261-270.
- Maddala, G.S. (1988). *Introduction to econometrics*. New York: Macmillan Press.
- Main, B.G.M. (1982a). The firm's insurance decision. Some questions raised by the capital asset pricing model. *Managerial and Decision Economics*, 3(1), 7-15.
- Main, B.G.M. (1982b). Business insurance and large, widely-held corporations. *The Geneva Papers on Risk and Insurance: Issues and practice*, 7(24), 237-247.
- Main, B.G.M. (1994). The economics of organisation, top executive pay and corporate governance. *British Review of Economic Issues*, 16(39), 85-106.
- Mak, Y.T. (1991). Corporate characteristics and the voluntary disclosure of forecast information: A study of New Zealand prospectuses. *British Accounting Review*, 23(4), 305-327.
- Malone, D., Fries, C. & Jones, T. (1993). An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry. *Journal of Accounting, Auditing and Finance*, 8(3), 249-273.
- Manne, H.G. (1965). Mergers and the market for corporate control. *Journal of Political Economy*, 73(1), 110-120.
- Marston, C.L. & Shrides, P.J. (1991). The use of disclosure indices in accounting research: A review article. *British Accounting Review*, 23(3), 195-210.
- Mathews, M.R. & Perera, M.H.B. (1993). *Accounting theory and development*. Victoria Press: Nelson Publishing Co.

- Mayers, D. & Smith C.W. (1981). Contractual provisions, organizational structure and conflict control in insurance markets. *Journal of Business*, 54(3), 407-434.
- Mayers, D. & Smith, C.W. (1982a). *Towards a positive theory of insurance*. Monograph Series in Economics and Finance, Solomon Brothers Center for the Study of Financial Institutions, Graduate School of Business, New York University.
- Mayers, D. & Smith, C.W. (1982b). On the corporate demand for insurance. *Journal of Business*, 55(2), 281-296.
- Mayers, D. & Smith, C.W. (1986). Ownership structure and control: The mutualization of stock life insurance companies. *Journal of Financial Economics*, 16(1), 73-98.
- Mayers, D. & Smith, C.W. (1987). Corporate insurance and the underinvestment problem. *The Journal of Risk and Insurance*, 54(1), 45-54.
- Mayers, D. & Smith C.W. (1988). Ownership structure across lines of property-casualty insurance. *Journal of Law and Economics*, 31(2), 351-378.
- Mayers, D. & Smith, C.W. (1990). On the corporate demand for insurance: Evidence from the reinsurance market. *Journal of Business*, 63(1), 19-40.
- Mayers, D. & Smith, C.W. (1992). Executive compensation in the life insurance industry. *Journal of Business*, 65(1), 51-74.
- Mayers, D. & Smith, C.W. (1994). Managerial discretion, regulation, and stock insurer ownership structure. *The Journal of Risk and Insurance*, 61(4), 638-655.
- McKinnon, J. (1988). Reliability and validity in field research: Some strategies and tactics. *Accounting, Auditing and Accountability Journal*, 1(1), 34-54.
- McKinnon, J.L. & Dalimunthe, L. (1993). Voluntary disclosure of segment information by Australian diversified companies. *Accounting and Finance*, 33(1), 33-50.
- Meek, G.K. & Gray, S.J. (1989). Globalization of stock markets and foreign listing requirements: Voluntary disclosure by continental European companies listed on the London stock exchange. *Journal of International Business Studies*, 20(2), 315-338.
- Merton, R.C. (1987). A simple model of capital market equilibrium with incomplete information. *Journal of Finance*, 42(3), 482-510.
- Mezias, S.J. (1990). An institutional model of organizational practice: Financial reporting at the Fortune 200. *Administrative Science Quarterly*, 35(3), 431-457.
- Miles, S.P. & Gubbay, K. (1987). Realistic reporting. *Transactions of the Institute of Actuaries of Australia*, 2, 704-787.

- Mills, K., Morling, S. & Tease, W. (1995). The influence of financial factors on corporate investment. *The Australian Economic Review*, 2, 50-64.
- Mitchell, J.D., Chia, C.W.L. & Loh, A.S. (1995). Voluntary disclosure of segment information: Further Australian evidence. *Accounting and Finance*, 35(2), 1-16.
- Morris, R. (1984). Corporate disclosure in a substantially unregulated environment. *Abacus*, 20(1), 52-86.
- Msheliza, S. (1990). Strategic planning in insurance. In Diacon, S. (ed.), *A guide to insurance management* (pp. 1-21). London: Macmillan Press.
- Myers, S.C. (1977). The determinants of corporate borrowing. *Journal of Financial Economics*, 5(1), 147-175.
- Nair, R.D. & Frank, W.G. (1980). The impact of disclosure and measurement practices on international accounting classifications. *The Accounting Review*, 5(3), 426-450.
- Nayyar, P.R. & Kazanjian, R.K. (1993). Organizing to attain potential benefits from information asymmetries and economies of scope in related diversified firms. *Academy of Management Review*, 18(4), 735-759.
- Needleman, P.D. & Westall, G. (1993). Demutualisation of a United Kingdom mutual life insurance company. *Transactions of the Faculty of Actuaries*, 43(281), 278-352.
- Neter, J., Wasserman, W. & Kutner, M.H. (1985). *Applied linear statistical models*. Homewood, IL: Irwin Publications.
- New Zealand Companies Accounts (Life Insurance Companies) Exemption Order 1957. Wellington: Government Printer.
- New Zealand Companies (Overseas Companies) Order 1971. Wellington: Government Printer.
- New Zealand Companies Act 1955. Wellington: Government Printer.
- New Zealand Companies Act 1993. Wellington: Government Printer.
- New Zealand Financial Reporting Act 1993. Wellington: Government Printer
- New Zealand Life Insurance Act 1908. Wellington: Government Printer.
- New Zealand Securities Act 1978. Wellington: Government Printer.
- New Zealand Society of Accountants (NZSA). (1994a). Release 4 (August): Accounting for certain life assurance offices. Wellington: Author.

- New Zealand Society of Accountants (NZSA). (1994b). New Zealand Accounting Standards. Wellington: Author.
- Organisation for Economic Cooperation & Development. (1988). Accounting standards harmonization No. 4: Operating results of insurance companies. Current practices in OECD countries. Paris: Author.
- Organisation for Economic Cooperation & Development. (1992). Consumer information about financial services. Paris: Author.
- Ormrod, P. & Cleaver, K.C. (1993). Financial reporting and corporate accountability. Accounting and Business Research, 23(91A), 431-439.
- Otley, D.T. (1980). The contingency theory of management accounting: Achievement and prognosis. Accounting, Organizations and Society, 5(4), 413-428.
- Palepu, K. (1987). The anatomy of an accounting change. In Bruns, W.J. & Kaplan, R.S. (eds.), Accounting and management: Field study perspectives (pp. 73-94). Boston, MA: Harvard Business School Press.
- Pasegian, S. (1985). A test of some of the effects of different property rights structures on managerial behaviour in the life insurance industry. Unpublished Doctoral Thesis, University of Pittsburg, Penn., USA.
- Patton, M.Q. (1990). Qualitative evaluation and research methods. London: Sage Publications.
- Petroni, K.R. (1992). Optimistic reporting in the property-casualty insurance industry. Journal of Accounting and Economics, 15(4), 485-508.
- Pincus, K., Rusbarsky, M. & Wong, J. (1989). Voluntary formation of audit committees among NASDAQ firms. Journal of Accounting and Public Policy, 8(4), 239-265.
- Pindyck, R. & Rubinfeld, D. (1981). Econometric models and forecasts. New York: McGraw-Hill.
- Press, E.G. & Weintrop, J.B. (1990). Accounting-based constraints in public and private debt agreements: Their association with leverage and impact on accounting choice. Journal of Accounting and Economics, 12(2), 65-95.
- Price Waterhouse (1991). Trends in the internationalization of the insurance industry: A research study. New York: Author.
- Rasmusen, E. (1988). Mutual banks and stock banks. Journal of Law and Economics, 31(2), 395-421.

- Reid, C. (1988, October). GAAP accounting for life companies in New Zealand. Paper presented at the New Zealand Society of Actuaries Conference, Wellington, NZ.
- Ries, I. (1992, May, 1). Accounting rules for life businesses needed urgently. Australian Business Review, p. 65.
- Romesburg, C.H. (1984). Cluster analysis. Belmont, CA: Life Learning Publications.
- Ruland, W., Tung, S. & George, N.E. (1990). Factors associated with the disclosure of managers' forecasts. The Accounting Review, 65(3), 710-721.
- Salamon, G.L. & Dhaliwal, D.S. (1980). Company size and financial disclosure requirements with evidence from the segmental reporting issue. Journal of Business Finance and Accountancy, 7(4), 555-567.
- Salmon, I.L. & Fine, A.E.M. (1991). Reflections on a takeover of a United Kingdom insurer: A case study. Journal of the Institute of Actuaries, 118(469), 59-103.
- Saudagaran, S.M. & Biddle, G.C. (1992). Financial disclosure levels and foreign stock exchange listing decisions. Journal of International Financial Management and Accounting, 4(2), 106-148.
- Schipper, K. (1981). Discussion of voluntary corporate disclosure: The case of interim reporting. Journal of Accounting Research, 19(Supplement), 85-88.
- Schweikart, J.A. (1985). Contingency theory as a framework for research in international accounting. International Journal of Accounting, Education and Research, 21(1), 89-98.
- Shapiro, C. & Titman, S. (1985). An integrated approach to corporate risk management. Midland Corporate Financial Journal, 3(1), 41-56.
- Sherris, M. (1987). The role of the actuary and the theory of contracting. Transactions of the Institute of Actuaries in Australia, 2, 1117-1142.
- Shoonhoven, C.B. (1981). Problems with contingency theory: Testing assumptions hidden with the language of contingency theory. Administrative Science Quarterly, 26(3), 349-377.
- Siegal, S. & Castellan, N.J. (1988). Nonparametric statistics for the behavioural sciences. New York: McGraw-Hill.
- Singhvi, S.S. & Desai, H.B. (1971). An empirical analysis of the quality of corporate financial disclosure. The Accounting Review, 46(1), 129-138.
- Skinner, D.J. (1993). The investment opportunity set and accounting procedure choice: Preliminary evidence. Journal of Accounting and Economics, 65(3), 407-445.

- Skinner, D.J. (1994). Why firms voluntarily disclose bad news. *Journal of Accounting Research*, 32(1), 38-60.
- Smart, M. (1985). Life company accounts distorting true picture. *Accountancy*, 100(1099), 141-143.
- Smith, C.W. (1986). On the convergence of insurance and finance research. *The Journal of Risk and Insurance*, 53(4), 693-717.
- Smith, H.W. (1981). *Strategies for social research*. Englewood Cliffs, NJ: Prentice-Hall.
- Smith, P.R. (1973). More informative disclosure of life office affairs. *Journal of the Institute of Actuaries*, 99(414), 249-265.
- Snow, C.C. & Thomas, J.B. (1994). Field research methods in strategic management: Contributions to theory building and testing. *Journal of Management Studies*, 31(4), 457-480.
- Sterling, R.R. (1990). Positive accounting: An assessment. *Abacus*, 26(2), 97-135.
- Taylor, S. (1992). The role of time series analysis in studies of accounting policy choice: A comment. *Accounting and Finance*, 32(2), 51-56.
- Thomas, A.P. (1986). The contingency theory of corporate reporting: Some empirical evidence. *Accounting, Organizations and Society*, 11(3), 253-270.
- Thomas, A.P. (1991). Towards a contingency theory of corporate financial reporting systems. *Accounting, Auditing and Accountability Journal*, 4(4), 40-57.
- Thomson, A. (1994). *Financial reporting of life insurance activities*. Australian Accounting Research Foundation Discussion Paper No. 19, Caulfield, Australia.
- Thorndike, R.M. (1978). *Correlational procedures for research*. New York: Gardner Press.
- Tiessen, P. & Waterhouse, J.H. (1983). Towards a descriptive theory of management accounting. *Accounting, Organizations and Society*, 8(2/3), 251-267.
- Trueman, B. (1986). Why do managers voluntarily release earnings forecasts? *Journal of Accounting and Economics*, 8(1), 53-71.
- United Kingdom Life Assurance Act 1870, London: HMSO.
- Vachon, F.F. (1973). Comments on the financial reporting for life insurance companies, in the Canadian Institute of Chartered Accountants (CICA) (Ed.), *Financial reporting for life insurance companies* (pp. 1-19). Toronto: CICA.

- Van Maanen, J. (1983). *Qualitative methodology*. Beverley Hill, CA: Sage Publications.
- Verrechia, R.E. (1983). Discretionary disclosure. *Journal of Accounting and Economics*, 5(2), 179-194.
- Waterhouse, J.H. & Tiessen, P. (1978). A contingency framework for management accounting systems' research. *Accounting, Organizations and Society*, 3(1), 65-76.
- Watts, R.L. (1977). Corporate financial statements, a product of the market and political processes. *Australian Journal of Management*, 2, 53-75.
- Watts, R.L. (1992). Accounting choice theory and market-based research in accounting. *British Accounting Review*, 24(3), 235-267.
- Watts, R.L. & Zimmerman, J.L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112-134.
- Watts, R.L. & Zimmerman, J.L. (1986). *Positive accounting theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Watts, R.L. & Zimmerman, J.L. (1990). Positive accounting theory: A ten year review. *The Accounting Review*, 65(1), 131-156.
- Whewell, R. (1990). Accounting for life assurance: Truly fair or fairly true? *Accountancy*, 106(1169), 82-87.
- Williamson, O.E. (1981). The modern corporation: Origins, evolution, attributes. *Journal of Economic Literature*, 19(4), 1537-1568.
- Williamson, O.E. (1983a). Credible commitments: Using hostages to support exchange. *American Economic Review*, 73(3), 51-540.
- Williamson, O.E. (1983b). Organizational form, residual claimants, and corporate control. *Journal of Law and Economics*, 26(3), 351-366.
- Williamson, O.E. (1985). *The economic institutions of capitalism*. New York: Free Press.
- Williamson, O.E. (1988). Corporate finance and corporate governance. *Journal of Finance*, 43(3), 567-591.
- Wise, A. (1991, December). *Realistic reporting - the bottom line*. Paper presented at the Ernst and Young seminar on financial reporting in the insurance industry: Current trends and developments, Wellington, NZ.
- Wong, J. (1988). Economic incentives for the voluntary disclosure of current cost financial statements. *Journal of Accounting and Economics*, 10(2), 151-167.

- Wood, D. (1991, December). Accounting practices of life offices in New Zealand. Paper presented at the Ernst and Young seminar on financial reporting in the insurance industry. Current trends and developments, Wellington, NZ.
- Yarri, V. (1993). A taxonomy of disclosure policies. Journal of Economics and Business, 45(5), 361-374.
- Yin, R. (1989). Case study research: Design and methods. Beverley Hills, CA: Sage Publications.
- Zimmerman, J.L. (1983). Taxes and firm size. Journal of Accounting and Economics, 5(2), 119-149.
- Zimmerman, J.L. (1987). Accounting incentives and the lot-sizing decision: A field study. In Bruns, W.J. & Kaplan, R.S. (eds.), Accounting and management: Field study perspectives (pp. 268-292). Boston, MA: Harvard Business School Press.

Appendix 1

New Zealand Life Insurance Companies - Salient Features as at Year-End 1993

This schedule shows the important financial and other business characteristics of the full population (n = 34) of New Zealand-based life insurance companies as at the end of 1993. The information was derived from annual reports, statutory reports and other information obtained directly from companies. The schedule is derived from a similar table reported in Adams (1994a). The schedule is intended to give an indication of the nature and structure of the New Zealand life insurance market.

COMPANY (start of operations in NZ)	OWNERSHIP ¹	RANK (by Total Premium Income) NZ\$ (1993)	RANK (by Total Assets) NZ\$m (1993)	Approx. No. FTE (includes direct sales) (1993)	Approx. No. Branches Outlets in New Zealand (NZ) (1993)	Total Annual Premium Income NZ\$m (1993)	Total Assets NZ\$ (1993)	Product Range (1993)				Main Distribution Channel		
								Life ¹		Superann- uation ¹			Annu- ities	Invest- ment Only
								C	U.L	C.	U.L			
American Life (1981)	USA Life Mutual	24th	25th	20	1	3.19	13.81	•	•					Brokers Direct Mail
AMP (1871)	Australian Composite Mutual	1st	1st	1060	20	431.20	4,774.9	•	•	•	•	•	•	Tied Agents
ANSVAR Life (1987)	Swedish Life Stock	31st	32nd	9	2	0.13	1.11	•						Direct Sales
ANZ Life (1988)	Australian Bank Stock	6th	11th	1 ²	230	70.50	188.31	•					•	Branches, Direct Mail
BNZ Life (1985)	Australian Bank Stock	12th	14th	0 ³	300	41.73	65.36	•			•			Branches, Direct Mail
CIGNA Life (1967)	USA Composite Stock	13th	13th	12	2	34.46	84.37	•					•	Brokers, Direct Mail
Colonial Mutual (1883)	Australian Life Mutual	7th	6th	40	22	66.03	502.71	•	•	•	•	•	•	Brokers, Tied Agents
Combined Ins. Co. America (1964)	USA Composite Mutual ⁴	30th	17th	2	1	0.33	43.26	•						Brokers
Countrywide Life (1985)	UK Bank Stock (Royal Bank of Scotland)	17th	19th	450	84	15.40	26.80	•	•					Branches
CUNA (1966)	USA Life Mutual	29th	29th	18	1	0.81	4.26	•						Credit Unions
Equitable Life (1972)	NZ Life Stock	28th	21st	4	2	0.90	24.3	•	•			•		Brokers

COMPANY (start of operations in NZ)	OWNERSHIP ²	RANK (by Total Premium Income) NZ\$ (1993)	RANK (by Total Assets) NZ\$m (1993)	Approx. No. FTE (includes direct sales) (1993)	Approx. No. Branches Outlets in New Zealand (NZ) (1993)	Total Annual Premium Income NZ\$m (1993)	Total Assets NZ\$ (1993)	Product Range (1993)						Main Distribution Channel		
								Life ¹		Superannuation ¹		Annu- ities	Invest- ment Only			
								C	U.L	C.	U.L					
FAI Metropolitan (1962)	Australian Life Stock	11th	10th	100	20	47.23	247.37	•	•	•	•	•	•	Tied Agents, Direct Mail		
Farmers Mutual (1971)	NZ Composite Mutual	21st	22nd	190	10	3.95	24.11	•	•					Tied Agents		
Fidelity Life (1973)	NZ Life Stock	18th	16th	17	2	14.00	46.41	•	•	•	•	•		Brokers		
Greenwich Life (1974)	NZ Life Stock	32nd	30th	6	1	0.11	2.42	•		•		•		Brokers		
Guardian Assurance (1960)	UK Life Stock	15th	8th	270	20	27.40	397.62	•	•	•	•	•		Brokers, Tied Agents		
Hallmark (1990)	Australian Composite Stock	26th	31st	1	1	1.55	1.88	•						Brokers		
Invincible Life (1971)	NZ Life Stock	27th	26th	6	1	1.21	13.13	•		•		•		Brokers		
Medical Life (1973)	NZ Composite Mutual	22nd	23rd	8	6	3.29	16.56	•	•			•		Direct Sales, Direct Mail		
National Insurance Life (1984)	NZ Composite Mutual	19th	24th	27	17	6.39	14.84	•						Brokers, Tied Agents,		
National Mutual (1879)	Australian Composite Mutual	2nd	2nd	725	23	375.7	3,151.9	•	•	•	•	•	•	Tied Agents		
NBNZ Life (1989)	NZ Bank Stock	20th	27th	5	180	6.24	12.21	•			•			Branches, Direct Mail		
Norwich Union Life (1934)	UK Life Stock ³	10th	7th	258	15	49.62	482.27	•			•	•		Brokers, Tied Agents		
NZI Life (1935)	UK Composite Stock (General Accident)	4th	4th	680	30	174.77	1,079.93	•		•	•	•		Tied Agents, Direct Sales		
Oceanic Life (1917)	Australian Composite Stock	8th	12th	5	1	60.94	132.19	•		•			•	Brokers		
Pacific Life (1973)	NZ Composite Stock	23rd	20th	2	1	3.25	25.75	•		•				Brokers		

COMPANY (start of operations in NZ)	OWNERSHIP ²	RANK (by Total Premium Income) NZ\$ (1993)	RANK (by Total Assets) NZ\$m (1993)	Approx. No. FTE (includes direct sales) (1993)	Approx. No. Branches Outlets in New Zealand (NZ) (1993)	Total Annual Premium Income NZ\$m (1993)	Total Assets NZ\$ (1993)	Product Range (1993)				Main Distribution Channel		
								Life ¹		Superannuation ¹			Annuities	Investment Only
								C	U.L	C.	U.L			
Prudential Assurance (1931)	UK Composite Stock	5th	5th	620	15	152.43	752.11	•	•	•	•	•	•	Brokers, Tied Agents
Regent Insurance (1992)	NZ Building Society Mutual (Southern Cross BS)	33rd	34th	1	100	0.02	0.04	•						Building Societies, Direct Mail
Southsure Assurance (1987)	NZ Life Mutual	25th	28th	2	6	1.99	10.20	•	•					Branches, Direct Mail
Sovereign Assurance (1989)	NZ Life Stock	14th	18th	40	1	28.18	32.14		•		•			Brokers
Sun Alliance Life (1904)	UK Composite Stock	9th	9th	300	25	59.56	347.22	•	•	•	•	•	•	Brokers, Tied Agents, Direct Mail
Swann Life (1989)	Australian Composite Mutual	34th	33rd	0	N/A ⁴	0.01	0.85	•						Tied Agents
Tower Life (1869)	NZ Composite Mutual	3rd	3rd	700	34	290.61	1,714.99	•	•	•	•	•	•	Brokers, Tied Agents
Westpac Life (1986)	Australian Bank Stock	16th	15th	86	182	19.08	60.57	•		•			•	Branches, Direct Mail

Source: Derived from Adams (1994a)

Notes:

- 1 C = Conventional business U.L = Unit-linked business
- 2 Refers to ownership of ultimate parent company.
- 3 Staff are employed by banking group and not directly by life company.
- 4 In February 1992, the CICO America ceased writing new business in New Zealand. Most administrative and service functions have been transferred to Australia.
- 5 Norwich Union (NZ) changed from a branch of its UK mutual parent to a stock subsidiary in late 1992.
- 6 Swann Life reinsures its life insurance business with its parent company, National Mutual. Staff are also directly employed by National Mutual.

Appendix 2

New Zealand Life Insurance Company Voluntary Disclosure Index and Score Sheet

Company Name:

Instructions

Assign a score of 1 if information is present either in the financial statements, accompanying notes or elsewhere in the annual report. A score of 0 should be awarded if the information is absent. Information not applicable (e.g., due to type of organisation) should be marked N/A.

I. Balance Sheet (& Notes)

Fixed Assets

Score
(1 or 0)

- | | | |
|----|--|--------------------------|
| 1. | Costs involved in valuing fixed assets (e.g., valuation fees) | <input type="checkbox"/> |
| 2. | Valuation of fixed assets e.g., book; market | <input type="checkbox"/> |
| 3. | Rate of depreciation charged by fixed asset | <input type="checkbox"/> |
| 4. | Segregation of fixed assets by business line e.g., pensions, life etc. | <input type="checkbox"/> |
| 5. | Disaggregation of fixed assets, e.g., property, equipment etc. | <input type="checkbox"/> |
| 6. | Further disaggregation of fixed assets, e.g., type of property. | <input type="checkbox"/> |
| 7. | Schedule of movement in fixed assets | <input type="checkbox"/> |
| 8. | Proportion (by value) of fixed assets leased | <input type="checkbox"/> |
| 9. | Unexpired useful life of fixed assets | <input type="checkbox"/> |

Investments

- | | | |
|-----|--|--------------------------|
| 10. | Gross/net value of investments | <input type="checkbox"/> |
| 11. | Costs involved in valuation of investments e.g., consultancy fees | <input type="checkbox"/> |
| 12. | Disaggregation of investments e.g., equities; property. | <input type="checkbox"/> |
| 13. | Breakdown of investments by business line e.g., pensions, life | <input type="checkbox"/> |
| 14. | Further disaggregation of investments e.g., type of property - land, buildings | <input type="checkbox"/> |

15. Nature of investments in subsidiaries/associates e.g., property, shares

16. Domestic and Overseas breakdown of investments

Other Non-Current Assets

17. Value by type of capitalised expenditure e.g., R&D

18. Policy adopted for capitalising expenditure

19. Value of amortised deferred assets e.g., deferred acquisition costs

20. Basis of amortisation adopted for deferred assets

21. Basis for valuing intangible assets eg., goodwill

22. Accounting/actuarial policy adopted for capitalisation of goodwill e.g., period of amortisation

23. Present (actuarial) value of future profits on in-force business (embedded value)

24. Present (actuarial) value of future profits on in-force business plus business to be written
(appraisal value)

25. Amounts due from individual group companies

26. Capital commitments e.g., distribution channels

27. Value of agents' loans

28. Recipients of agents' loans

Current Assets

29. Value by type of debtors e.g., trade; reinsurers

30. Nature of debtors e.g., secured/unsecured

31. Ageing schedule

32. Value of bad debt recoveries

33. Amount due from agents

34. Prepayments by type e.g., reinsurance paid, supplies prepaid

35. Deposit/current account details eg., banker

Long-term Funds

- 36. Disaggregation of policyholders' funds e.g., life, pensions
- 37. Actuarial methods employed in policyholders' fund valuation e.g., statutory basis
- 38. Actuarial assumptions employed in policyholders' fund valuation e.g., interest rates
- 39. Proportion of policyholders' fund reinsured
- 40. Names of reinsurer(s)
- 41. Location of reinsurer(s)

Reserves/Provisions

- 42. Reference to 'hidden' reserves
- 43. Type of reserves e.g. undistributed surplus
- 44. Accounting/actuarial policy adopted for setting-up reserves e.g., unexpected interest rate increases
- 45. Type of provisions e.g., contingencies; outstanding claims
- 46. Accounting/actuarial policy adopted for setting-up provisions e.g., claims expected
- 47. Company pension provision
- 48. Basis of establishing company pension provision e.g., actuarial assumptions used
- 49. Number of members in company pension scheme
- 50. Amount of transfers to/from reserves and provisions
- 51. Basis of any transfers e.g., actuarial basis
- 52. Comparison with transfers made in prior years
- 53. Segregation of claims/loss reserves from other actuarial (technical) reserves

Other Long-Term Liabilities

- 54. Breakdown of long-term debt e.g., amounts owed to associated companies

- 55. Maturity/repayment schedule of long-term creditors
- 56. Terms of long-term debt e.g., collateral
- 57. Value of subordinated debt supporting policyholders' funds
- 58. Details of lender of subordinated debt
- 59. Terms of subordinated debt
- 60. Long-term debt by currency
- 61. Impact of foreign currency fluctuations on value of long-term debt

Current Liabilities

- 62. Type and value of creditors e.g. trade; reinsurers
- 63. Amounts due to agents
- 64. Claims incurred but not reported (IBNR)
- 65. Claims notified but not agreed
- 66. Amounts due to reinsurers
- 67. Value of deferred tax liabilities
- 68. Periods when deferred tax liabilities are expected to be discharged
- 69. Discounted rate of deferred tax adopted
- 70. Short-term debt by currency
- 71. Impact of foreign currency fluctuations on value of short-term debt

Shareholders' Funds (Stock Companies only)

- 72. Amount of equity capital per shareholder
- 73. Breakdown of shares into paid and unpaid portions
- 74. Movements in share capital
- 75. Details of major shareholdings (e.g., more than 3 % of total share capital)
- 76. Geographical dispersion of major shareholders
- 77. Stock exchanges where shares are listed

78. Share price trends/behaviour

II. Revenue Account (& Notes)

Premiums

79. Value of gross/net premiums

80. Value of reinsurance premiums ceded

81. Analysis by type of premiums e.g., single; regular

82. Accounting policy regarding recognition of premiums e.g., recognised when due

83. Accounting policy regarding uncollectible premiums

84. Accounting policy regarding ceded reinsurance e.g., recognised when due

85. Type of reinsurance contract used e.g., facultative, treaty

86. Value of unearned premiums

87. Accounting/actuarial policy concerning unearned premiums e.g. measurement basis

88. Breakdown of premiums by revenue and capital streams

Investment Income

89. Value of gross/net investment income

90. Analysis of investment income e.g., by type of investment

91. Accounting policy regarding the treatment of investment income e.g., net of transactions costs

92. Accounting policy regarding recognition of investment income e.g., when due

93. Breakdown between realised and unrealised investment gains/losses

94. Accounting policy regarding treatment of realised gains e.g., difference between original cost and proceeds

95. Accounting policy regarding treatment of unrealised gains e.g., difference between original cost and proceeds

Future Prospects

- 163. Sales forecasts - qualitative
- 164. Sales forecasts - quantitative
- 165. Bonus forecasts - qualitative
- 166. Bonus forecasts - quantitative
- 167. Dividend forecasts - qualitative
- 168. Dividend forecasts - quantitative
- 169. Discussion of future economic conditions
- 170. Discussion of future political, social and technological factors
- 171. Forecast assumptions
- 172. Treatment of forward exchange transactions e.g., spot rate at balance date

Employee Information

- 173. Employee appreciation
- 174. General employment policy e.g., equal opportunities, health and safety
- 175. Breakdown of number of employees by activity e.g., sales, central administration
- 176. Breakdown of employees - full and part time.
- 177. Breakdown of employees by gender
- 178. Breakdown of employees by geographical area
- 179. Corporate policy on staff training e.g., training budget
- 180. Employment position e.g., expansion or contraction in staffing levels
- 181. Pay awards
- 182. Other employee benefits e.g., free insurance
- 183. Impact of employment contracts legislation on company policy

Social Reporting

- 184. Community involvement - qualitative

- 185. Donations to political groups
- 186. Donations to community groups
- 187. Market share of products - quantitative
- 188. Market share of products - qualitative
- 189. Environmental issues - qualitative

Appendix 3

Voluntary Disclosure by New Zealand Life Insurance Companies - Field-Site Interviews Instrument 1994-1995

I. BASIC DETAILS

Company:

Form:

Status:

Nationality:

Interviewee:

Position:

Number of years in current position:

Number of years in company:

Other positions in last 5 years:

.....

.....

Date(s) interviewed:

II. OPENING QUESTIONS

1. Briefly, what does your job entail?
2. Explain what you understand by voluntary information disclosure in the annual report?
3. How do you perceive that advantages arise from the voluntary disclosure of information in the annual report? Who are the beneficiaries of voluntary disclosure?

4. Do you consider that the information needs of the public, particularly policyholders and shareholders, can be satisfied by means other than through the annual report? If so, in which way(s)?

III. INFLUENCES ON VOLUNTARY DISCLOSURE

Organisational Form

1. In which way(s) are financial, or other managers, given discretion to make voluntary information disclosures in the annual report? Why are managers given this authority?
2. How does your company monitor and control what managers disclose in the annual report?

Assets-in Place

3. How do internal investment and financing policies (e.g., asset maintenance rules) affect what financial and other managers voluntarily disclose?
4. Do such policies obviate the need for voluntary disclosure? If so, how?

Product Concentration

5. How does voluntary disclosure in the annual report perform an important marketing function for your company?
6. Are financial, or other managers, given discretion to report product-market information in the annual report? If so, how?

Reinsurance

7. How does the company get reinsurers to commit themselves to a reinsurance agreement?
8. Do reinsurers influence the disclosure practices of the company? If so, in which way(s)?

Localisation of Operations

9. How are the disclosure practices of the New Zealand entity influenced by accounting and reporting practices overseas?
10. How does the parent company influence the disclosure of information in the annual report of the New Zealand entity?

Non-Executive Directors

11. How do non-executive directors influence disclosure policy?
12. How do non-executive directors monitor and control voluntary disclosure practices in your company? Why do you think non-executive directors would have an interest in company disclosure practices?
13. Do non-executive directors reduce the need for comprehensive voluntary disclosure in the annual report? If so, in which way(s)?

Firm Size

14. Has the size of the corporate group influenced the voluntary disclosure practices of the New Zealand entity? If so, in which way(s)?
15. How has increased company size given financial, or other managers, of the New Zealand entity greater discretion over choice of information disclosed in the annual report?

Distribution System

16. How does voluntary information disclosure benefit the activities of non-tied and tied sales personnel?
17. Do non-tied agents influence voluntary disclosure practices? If so, how?

IV. OTHER QUESTIONS

1. How are the voluntary disclosure decisions of managers influenced by other organisational factors?
2. How are the voluntary disclosure decisions of managers influenced by factors outside the organisation?
3. How is the disclosure policy for the annual report of New Zealand entity decided?

Appendix 4

Demographic Details of New Zealand Life Insurance Company Managers Interviewed

This schedule gives the key demographic details of those managers (n = 22)-interviewed at 12 field-sites visited between October 1994 and April 1995.

DETAILS	SUBJECTS INTERVIEWED			Total person years experience	Average person years experience
	1	2	3		
Company A					
Current position	Financial Manager	Financial Accountant	-		
Number of years in current position	2 years	8 years	-	10 years	5 years
Number of years in company	16 years	8 years	-	24 years	12 years
Other company positions held in last 5 years	Group Accountant (Head Office)	-	-		
Positions held in other companies in last 5 years	-	-	-		
Company B					
Current position	General Manager/ Chief Executive	Group Secretary & Financial Manager	-		
Number of years in current position	1 year	7 years	-	8 years	4 years
Number of years in company	1 year	7 years	-	8 years	4 years
Other company positions held in last 5 years	-	-	-		
Positions held in other companies in last 5 years	Marketing Manager Investment Bank	-	-		

Appendix 4 contd.

DETAILS	SUBJECTS INTERVIEWED			Total person years experience	Average person years experience
	1	2	3		
Company C					
Current position	Company Secretary & Financial Manager	General Manager	-		
Number of years in current position	8 years	5 years	-	13 years	6½ years
Number of years in company	8 years	7 years	-	15 years	7½ years
Other company positions held in last 5 years	-	Company Actuary	-		
Positions held in other companies in last 5 years	-	Consultant Actuary	-		
Company D					
Current position	Financial Controller	Accounting Manager	-		
Number of years in current position	1 year	4 years	-	5 years	2½ years
Number of years in company	6 years	9 years	-	15 years	7½ years
Other company positions held in last 5 years	Development Actuary	Accountant	-		
Positions held in other companies in last 5 years	-	-	-		

Appendix 4 contd.

DETAILS	SUBJECTS INTERVIEWED			Total person years experience	Average person years experience
	1	2	3		
Company E					
Current position	Manager Group Finance	Financial Accountant	-		
Number of years in current position	1 year	4 years		5 years	2½ years
Number of years in company	5 years	6 years	-	11 years	5½ years
Other company positions held in last 5 years	Financial Manager	Assistant Accountant	-		
Positions held in other companies in last 5 years	-	-	-		
Company F					
Current position	Financial Controller	Assistant General Manager Finance	-		
Number of years in current position	1 year	4 years	-	5 years	2½ years
Number of years in company	6 years	9 years	-	15 years	7½ years
Other company positions held in last 5 years	Development Actuary; Assistant Manager (Actuarial)	Financial Controller	-		
Positions held in other companies in last 5 years	-	-	-		

Appendix 4 contd.

DETAILS	SUBJECTS INTERVIEWED			Total person years experience	Average person years experience
	1	2	3		
Company G					
Current position	General Manager	-	-		
Number of years in current position	10 years	-	-	10 years	10 years
Number of years in company	15 years	-	-	15 years	15 years
Other company positions held in last 5 years	-	-	-		
Positions held in other companies in last 5 years	-	-	-		
Company H					
Current position	Financial Controller	Finance Director	General Manager		
Number of years in current position	5 years	2 years	2 years	9 years	3 years
Number of years in company	7 years	18 years	5 years	30 years	10 years
Other company positions held in last 5 years	-	Financial Controller (Head Office)	Assistant General Manager		
Positions held in other companies in last 5 years	-	-	-		

Appendix 4 contd.

DETAILS	SUBJECTS INTERVIEWED			Total person years experience	Average person years experience
	1	2	3		
Company I					
Current position	Financial Manager	-	-		
Number of years in current position	7 years	-	-	7 years	7 years
Number of years in company	7 years	-	-	7 years	7 years
Other company positions held in last 5 years	-	-	-		
Positions held in other companies in last 5 years	-	-	-		
Company J					
Current position	Managing Director	Financial Controller	-		
Number of years in current position	6 years	4 years	-	10 years	5 years
Number of years in company	6 years	4 years	-	10 years	5 years
Other company positions held in last 5 years	-	-	-		
Positions held in other companies in last 5 years	-	Accountant - General Insurer	-		

Appendix 4 contd.

DETAILS	SUBJECTS INTERVIEWED			Total person years experience	Average person years experience
	1	2	3		
Company K					
Current position	Company Secretary & Group Accountant	-	-		
Number of years in current position	3 years	-	-	3 years	3 years
Number of years in company	3 years	-	-	3 years	3 years
Other company positions held in last 5 years	-	-	-		
Positions held in other companies in last 5 years	Financial Controller - manufacturer	-	-		
Company L					
Current position	Financial Services Manager	Chief Actuary & Financial Director	-		
Number of years in current position	5 years	7 years	-	12 years	6 years
Number of years in company	5 years	7 years	-	12 years	6 years
Other company positions held in last 5 years	-	-	-		
Positions held in other companies in last 5 years	-	-	-		

Appendix 5
Field-Site Interviews - Summary of Interviewees' Responses Matched
with the Predictions of The Managerial-Discretion Hypothesis

This schedule summarises the responses of those subjects interviewed (n = 22) in 12 New Zealand-based life insurance companies at various dates between October 1994 and April 1995. The responses are matched to eight propositions derived from the *managerial-discretion hypothesis* using content analysis.

APPENDIX 3 SECTION	KEY ARGUMENT	PREDICTION	RESPONSES OF CATEGORY INTERVIEWEES				CONCLUSION	POINTS ARISING FROM INTERVIEWS
			Not Applicable (Code=0)	Response Neutral (Code=1)	Response Contrary (Code=2)	Response Supportive (Code=3)		
III 1 & 2	(a) Organisational form Compared with their counterparts in mutuals, managers in stock companies have greater discretion over disclosure policy to respond to the information needs of shareholders /investors	Stock companies will disclose more information voluntarily than mutuals	-	2	2	18	Prediction supported	<ul style="list-style-type: none"> • Monitoring of disclosure normally takes place through the internal reporting process in both mutuals & stock companies • Disclosure subject to scrutiny by New Zealand board and strict control by overseas-based parent, particularly in mutuals • Some large mutuals give their managers some discretion over disclosure choice in order to promote sales and marketing. Stock companies generally have more discretion than mutuals • Voluntary disclosure may be related to organisational form in conjunction with firm size

Appendix 5 contd.

APPENDIX 3 SECTION	KEY ARGUMENT	PREDICTION	RESPONSES OF CATEGORY INTERVIEWEES				CONCLUSION	POINTS ARISING FROM INTERVIEWS
			N/A (Code=0)	Response Neutral (Code=1)	Response Contrary (Code=2)	Response Supportive (Code=3)		
III 3 & 4	(b) Assets-in-place Assets-in-place reduce the need for managers/owners to disclose information because (unlike growth options) such assets provide “visible” collateral which assures prospective investors and policyholders	Companies with low assets-in-place will disclose more information voluntarily than companies with more growth options	8	14	-	-	Prediction not supported	<ul style="list-style-type: none"> • Investment strategies and asset structure does not appear to influence disclosure decisions
III 5 & 6	(c) Product concentration Managers in multi-product companies have more discretion to disclose information to customers because of the information asymmetry problem emanating from diverse product-mix	Multi-product companies will disclose more information voluntarily than specialised companies	-	2	5	15	Prediction supported	<ul style="list-style-type: none"> • Product-line decisions appeared to be associated with firm size, i.e., small firms tended to specialise • Specialised companies considered other disclosure media (e.g., policy documents) to be more cost-effective means of informing customers

Appendix 5 contd.

APPENDIX 3 SECTION	KEY ARGUMENT	PREDICTION	RESPONSES OF CATEGORY INTERVIEWEES				CONCLUSION	POINTS ARISING FROM INTERVIEWS
			N/A (Code=0)	Response Neutral (Code=1)	Response Contrary (Code=2)	Response Supportive (Code=3)		
III 7 & 8	(d) Reinsurance Reinsurance facilitates efficient risk-bearing and obviates the need for companies to reduce their cost of capital through increased voluntary disclosure	Companies with low reinsurance will disclose more information voluntarily than companies with large amounts of reinsurance	-	20	-	2	Prediction not supported	<ul style="list-style-type: none"> • Reinsurers may influence disclosure to enhance their profile in a new market - but this is rare • In most circumstances reinsurers do not have much, or any, influence on corporate disclosure
III 9 & 10	(e) Localisation of operations Managers in multinational companies voluntarily disclose information which the group may have to produce for statutory authorities elsewhere because the marginal costs of doing so will be small compared with the prospective gains	Multinational companies will disclose more information voluntarily than companies operating in a single domicile	8	10	2	2	Prediction not supported	<ul style="list-style-type: none"> • Parent companies exercise tight control over disclosure choice in some companies, while in others more flexibility exists

Appendix 5 contd.

APPENDIX 3 SECTION	KEY ARGUMENT	PREDICTION	RESPONSES OF CATEGORY INTERVIEWEES				CONCLUSION	POINTS ARISING FROM INTERVIEWS
			N/A (Code=0)	Response Neutral (Code= 1)	Response Contrary (Code=2)	Response Supportive (Code=3)		
III 9 & 10 contd.	(f) Non-executive directors Monitoring by non- executives would obviate the need for control by public disclosure because it is more cost- efficient	Companies with less non- executives directors on the board will disclose more information voluntarily than companies with more non- executives directors on the board	-	4	18	0	Contra to prediction supported	<ul style="list-style-type: none"> • Non-executives directors have taken more interest in monitoring corporate disclosure as a result of their responsibilities under <u>New Zealand's Companies Act 1993</u> • Non-executive directors attempt to increase rather than decrease disclosure because it helps to promote their reputations as responsible guardians of policyholders' & shareholders' interests

Appendix 5 contd.

APPENDIX 3 REF	KEY ARGUMENT	PREDICTION	RESPONSES OF CATEGORY INTERVIEWEES				CONCLUSION	POINTS ARISING FROM INTERVIEWS
			N/A (Code=0)	Response Neutral (Code=1)	Response Contrary (Code=2)	Response Supportive (Code=3)		
III 14 & 15	(g) Firm size Managers in large firms disclose information in order to enhance their credibility with owners. Owners of large firms have incentive to demand more information to alleviate the enhanced information asymmetry problem associated with large size	Large companies will have a greater level of voluntary disclosure than small companies	2	6	-	14	Prediction supported	<ul style="list-style-type: none"> • Large size appears to be associated with more freedom to disclose information because size tends to be associated with greater complexity and operational uncertainty • Managers in larger companies are given more discretion to disclose information by the parent company because intra-corporate confidence in management and their capabilities appear to be greater in larger entities

Appendix 5 contd.

APPENDIX 3 SECTION	KEY ARGUMENT	PREDICTION	RESPONSES OF CATEGORY INTERVIEWEES				CONCLUSION	POINTS ARISING FROM INTERVIEWS
			N/A (Code=0)	Response Neutral (Code=1)	Response Contrary (Code=2)	Response Supportive (Code=3)		
III 16 & 17	(h) Distribution system Managers/owners in companies using non-exclusive sales agencies have incentives to provide these agents with information in order to increase sales	Companies using non-exclusive sales agents will disclose more information voluntarily than companies using exclusive sales agents	-	7	-	15	Prediction supported	<ul style="list-style-type: none"> • The information needs of sales agents, particularly brokers/ non-tied agents, is an important consideration for new entrants • Non-exclusive sales agents are frequently perceived by management as important “stakeholders” in the corporate reporting process. • Exclusive sales agents tend to rely on information contained in other disclosure media (e.g., policy documents)

Source: Research data