

A DISSERTATION

Submitted to
H. Wayne Huizenga School of Business and Entrepreneurship
Nova Southeastern University

in partial fulfillment of the requirements
for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

2006

UMI Number: 3205550

Copyright 2006 by
Whitlock, James M.

All rights reserved.

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform 3205550

Copyright 2006 by ProQuest Information and Learning Company.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

A Dissertation
entitled



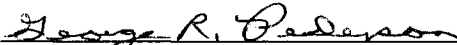
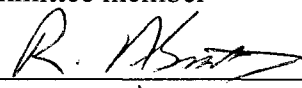

MULTINATIONAL DIVERSIFICATION IN THE PROPERTY AND CASUALTY
SEGMENT OF THE INSURANCE INDUSTRY

By

James M Whitlock

We hereby certify that this Dissertation submitted by James M. Whitlock conforms to acceptable standards, and as such is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Doctor of Business Administration.

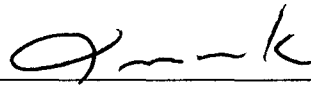
Approved:

 _____ Scott Bailey, Ph.D. Chair	12-17-05 _____ Date
 _____ Barry Barnes, Ph.D. Committee member	1-5-06 _____ Date
 _____ George Pederson, Ph.D. Committee member	19 DEC. 05 _____ Date
 _____ Russell Abratt, Ph.D. Chair, Doctoral Programs	1/9/06 _____ Date
 _____ J. Preston Jones, D.B.A. Associate Dean, H. Wayne Huizenga School of Business and Entrepreneurship	1/10/06 _____ Date

Nova Southeastern University
2005

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writings of another.

Signed 
James M. Whitlock

ABSTRACT

MULTINATIONAL DIVERSIFICATION IN THE PROPERTY AND CASUALTY SEGMENT OF THE INSURANCE INDUSTRY

by

James M. Whitlock

This study will focus on multinational diversification in the property and casualty segment of the insurance industry and will explore the relative advantages and disadvantages that multinational firms may experience. The complexity of multinational firms, with the associated agency problems and information asymmetry problems, should be a disadvantage (Dennis, Dennis, & Yost, 2002). Conversely, multinational firms should experience greater economies of scale, have greater access to capital markets, and benefit from imperfections in international financial markets (Errunza & Senbet, 1981).

ACKNOWLEDGEMENTS

I wish to express my appreciation to my committee members Dr. Scott Bailey, Dr. Barry Barnes, and Dr. George Pederson for their help and encouragement. I appreciate the great amount of time each devoted to this project.

TABLE OF CONTENTS

	Page
List of Tables	viii
List of Figures	ix
I: INTRODUCTION	
Background	1
Statement of problem	3
Insurance segment	4
Theory	6
Objective of study	9
Expected contribution	10
Plan of presentation	10
Summary	10
II: LITERATURE REVIEW	
Introduction	11
Multinational diversification	11
Multinationality and firm performance	23
Insurance sector considerations	41
Summary	45
III: METHODOLOGY	
Introduction	47
Research question	47
Theoretical model	48
Hypotheses and measurements	50
Research design and data collection	56
Variables	57
Reliability and validity	59
Statistical analysis	60
Summary	61
IV: ANALYSIS AND PRESENTATION OF FINDINGS	
Introduction	62
Sample selection	62
Overview of measurements	63
Analysis of data	64
ANOVA summary	81
Mann-Whitney summary	86
Summary	88

V: SUMMARY AND CONCLUSIONS	
Introduction	89
Research overview	89
Summary results.....	91
Information gained from research.....	92
Limitations of the research.....	94
Opportunities for future research	95
Summary	95
APPENDIX A: Listing of firms in sample	97
APPENDIX B: Insurance group data	98
REFERENCES	109

LIST OF TABLES

Table	Title	Page
1	Advantages of multinationality.....	55
2	Disadvantage of multinationality.....	56
3	Summary of sample characteristics	57
4	Summary of all data.....	65
5	Summary of ROR data.....	66
6	Summary of ROA data.....	69
7	Summary of ROE data.....	72
8	Summary of EPS data	75
9	Summary of share value data.....	78
10	Descriptives.....	81
11	Test of homogeneity of variances.....	82
12	ANOVA report.....	82
13	Chi square tests	83
14	Symmetric measures.....	84
15	Descriptive statistics	85
16	Tests of normality	85
17	Descriptive statistics	86
18	Ranking of data.....	87
19	Test statistics.....	87

LIST OF FIGURES

Figures Title	Page
1. MNC ROR histogram	67
2. DNC ROR histogram.....	67
3. MNC ROA histogram.....	70
4. DNC ROA histogram.....	70
5. MNC ROE histogram	73
6. DNC ROE histogram	73
7. MNC EPS histogram.....	76
8. DNC EPS histogram	76
9. MNC share price histogram	79
10. DNC share price histogram.....	80

CHAPTER I
INTRODUCTION

Background

Since the early 1980s, there have been a number of academic studies addressing the consequences of multinational diversification. Modern portfolio theory argues that an internationally diversified portfolio of assets has a lower level of risk for a given level of return than a domestically diversified portfolio. The gains from diversification within a single country are limited to the available industry sectors and are subject to the business cycles unique to a particular country. Greater gains should be possible from cross-country diversification since there should be more business segments and business cycles that are not perfectly correlated (Solnik, 1995). Industrial and geographic diversification has been studied separately and together. The majority of the research focused on the effects of diversification on firm value. The findings of these studies have been somewhat contradictory. Most of the early studies concluded that diversified firms

traded at a discount compared to focused (non-diversified) firms (Dennis, Dennis, & Yost, 2002). Later studies found that after controlling for other factors affecting value, diversification may actually add value to a firm (Villalonga, 2004). Timing has also been considered in some studies indicating that the consequences of diversification are not linear (Contractor & Kundu, 2003). Initially there may be adverse effects, as early inefficiencies and one-time costs are overcome. The firm then achieves efficiencies or achieves its growth objectives and experiences favorable effects of diversification. A third stage may then appear with adverse results due to over investing or improper allocation of capital.

Research is lacking in studying a firm's motivation for diversification. If a firm has valid economic reasons for diversifying that can only be achieved through diversification such as achieving economies of scale or following its customers, the firm's specific characteristics should be considered (Campa & Kedia, 2002).

This study will focus on geographic diversification and will explore the relative advantages and disadvantages that multinational firms may experience. The complexity of multinational firms, with the associated agency problems and information asymmetry problems, should be a disadvantage (Dennis, Dennis, & Yost, 2002). Conversely, multinational firms

should experience greater economies of scale, have greater access to capital markets, and benefit from imperfections in international financial markets (Errunza & Senbet, 1981).

Very little research has been conducted on specific industries. Comparing firms across industries may be a factor in the inconsistent results of previous studies. Separating service industries from manufacturing and distribution industries should reduce the number of variables (Capar & Kotabe, 2003). Focusing on knowledge-based service segments should further reduce the number of variables and provide even greater clarity to a complex issue (Skaggs & Droege, 2004).

Statement of Problem

This study investigates the effects of multinational operations on the performance of firms in the property and casualty segment of the insurance industry. Imperfections in the international financial markets, if they exist, may provide advantages affecting market values for those firms with multinational revenues (Errunza & Senbet, 1981). Selecting the property and casualty segment of the insurance industry rather than a non-service sector such as manufacturing, should allow a clearer evaluation of the impact of multinationality on the firms' performance (Contractor & Kundu, 2003). Service industries, and particularly knowledge-based service industries,

provide the advantage of a generic product that looks much the same in any geographic market, is easily tradable across political boundaries, and has pricing which is affected by exchange rates and government regulation (Johnson & Vahlne, 1990).

There is considerable literature on diversification across multiple lines of business, as well as multinational diversification and the impact on excess value. A search of the current literature found limited research directed at the multinational insurance industry. Focusing research on the multinational insurance industry may provide additional insight into the theoretical relationships among performance, firm value, and international involvement. This research may also provide insight into some of the influences on firm value. Key financial ratios that should impact investor perception of firm value will be evaluated in the context of multinational involvement.

Insurance Segment

As stated earlier, previous studies of multinational diversification have focused on firms across industry segments. This study will focus on firms within the property and casualty insurance segment to eliminate some of the factors that impact performance across industries. The property and casualty

segment may be of interest because the insurance product is generic across firms and labor and technology costs are similar across firms in this industry segment. The generic nature of this insurance product may reduce the impact of imperfections in product and factor markets as a benefit to multinational firms in this segment. Taxation differentials and imperfections in financial markets become more prominent than they would be in a non-service sector, when analyzing performance differences.

There are two commonly stated reasons for multinational diversification within the insurance industry. Firms in this segment distinguish themselves from competing firms on the basis of service and relationship which causes many firms in this industry to follow existing clients into international markets (Skipper, 1987). The other major reason for commercial insurers to expand into international markets is to offset slower growth in domestic markets (Seifert, 2004).

Focusing research on a segment of the insurance industry may provide additional insight into the theoretical relationship between performance and multinational involvement because the generic nature of the product and consistency of performance factors among the firms in this segment allow the impact of multinational diversification to be more clearly observed.

Theory

Prior research has presented theoretical arguments that increased international involvement by firms affects shareholder value. As stated in earlier research, firms may enhance their value through international operations by:

- taking advantage of imperfections in financial markets (Errunza & Senbet, 1981);
- providing individual investors a more cost-effective method of diversifying their portfolios (Rugman, 1979);
- acting as financial intermediaries to overcome barriers among international financial markets (Errunza & Senbet, 1984);
- capitalizing on their operational flexibility including production shifting, tax minimization, transfer pricing, and financial market arbitrage (Agmon & Lessard, 1977); and
- achieving economies of scale through international growth (Contractor & Kundu, 2003).

Conversely, firms may reduce value through increased international involvement because of:

- the complexity of international operations which results in increased costs (Dennis, Dennis, & Yost, 2002),
- the high cost of monitoring international operations (Harris, Kreibal, & Raviv, 1982), and
- the desire of management to reduce risk (Mansi & Reeb, 2002).

A firm's performance is the result of a number of policies and decisions and is reflected in the combined effects of asset, debt, and capital management on operating results.

Profitability ratios are commonly used methods for quantifying performance. Ratio analysis involves comparisons between similar firms or with industry averages. This comparative process is sometimes referred to as benchmarking which allows analysts to evaluate relative performance between firms or within industries (Crum, Brigham, & Houston, 2005).

Determining the relationship between international involvement and a firm's performance becomes more complex when considering the possibility that changes in a firm's performance may not be linear. Performance may initially decline, then gradually improve, and ultimately decline again.

This study attempts to determine if there is a relationship between international involvement and performance in a segment of the insurance industry. Research supporting the belief that international diversification has a favorable impact on the performance of a firm leads to the hypothesis that international diversification in the insurance segment will result in greater performance. Research supporting the belief that international diversification for all firms has an adverse effect on excess value leads to the hypothesis that the same would be true for the insurance segment. Errunza and Senbet (1981) characterize excess value as imperfections in the international financial markets that may provide an advantage to a firm such as the degree of international involvement when all other business characteristics are the same.

A common measure of international diversification is the presence of international revenues (Errunza & Senbet, 1984). Previous studies have also included the number of international operations but the service nature of the insurance sector makes that measurement less meaningful.

Previous research has focused on excess value as the dependent variable. A widely accepted approach to excess value is one using an industry multiplier (Berger & Ofek, 1995).

$$EV = [\text{ACTUAL VALUE} / \text{IMPUTED VALUE}]$$

The actual value is defined as the market value of equity plus the book value of debt. Imputed value is defined as the total of the value of each firm in the industry segment. Berger and Ofek determine the imputed values of each firm by multiplying the industry segment revenues by a market-to-sales ratio. The market-to-sales ratio is calculated by dividing the sum of the individual firm values in the industry segment by total segment revenues.

$$\text{MSR} = [\text{MARKET VALUE OF EQUITY} + \text{BOOK VALUE OF DEBT}] / \text{TOTAL REVENUES}$$

The imputed value of the industry segment assumes the segment is a separate firm and becomes a point of comparison for the actual value of the individual firms in the industry segment.

This study will include Berger and Ofek's (1995) determination of firm value along with key financial ratios that should affect investors' perception of value.

Objective of Study

The goal of the research is to determine if there is a relationship between multinational involvement and performance in this particular industry segment. Multinational involvement will be determined by using multinational revenues. Four widely accepted accounting performance measures will be the proxies for performance in addition to earnings per share.

Expected Contribution

Focusing research on the multinational insurance industry may provide additional insight into the theoretical relationship between performance and international involvement. Previous research has focused on analyzing firms across industries and has supported opposing conclusions. By narrowing the focus of study to a single industry segment in a knowledge-based service sector this research may provide additional support for one of these opposing conclusions.

Plan of Presentation

Chapter II reviews the applicable literature and highlights the conflicting research results. Chapter III provides details of the methodology, the sample, and hypothesis. Chapter IV discusses the results of the data analysis. Chapter V summarizes the findings and offers additional opportunities for future study.

Summary

This chapter has explained the theories related to international diversification and its effect on the value of a firm. Rationale was presented for investigating the effects of international diversification on a segment of the U.S. insurance industry.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Serious investigation of geographic and product diversification has been conducted for a number of years. Research from 1977 through 2004 is cited in this study. Past research has focused almost exclusively on firm value as a test of the effect of diversification and most has not attempted to study individual industry segments.

This literature review will examine first the research directed at multinational diversification, including the theories surrounding the advantages and disadvantages of operating in multiple countries. Then it will investigate the research testing the theories surrounding the effects of multinational diversification on firm value. Finally, it will explore literature directed at the insurance industry and characteristics unique to this industry sub-segment.

Multinational Diversification

This section of the literature review focuses on studies that address advantages and disadvantages of multinational involvement.

Motivating Factors

Gaining competitive and financial advantage is the basis for diversifying across national boundaries. Agency problems and the complexities of cross-border business transactions discourage geographic diversification. The following referenced studies identify motivations for both achieving and avoiding multinational diversification for any industry segment. Subsequent sections that follow will address specific references to the insurance industry.

Financial Market Issues

Firms engage in international operations to gain certain benefits. These benefits include imperfections in product markets, different taxation treatments, and imperfections in the international financial markets (Errunza & Senbet, 1981). Imperfections in the international financial markets may provide an advantage to a firm based on the degree of international involvement when all other business characteristics are the same.

According to Rugman (1979), if international financial markets were perfectly competitive, international diversification by firms would be unnecessary because the international diversification could be duplicated by the individual investor at a cost that is less than the firm's cost.

The existence of imperfections in the international financial markets places the international firm in the role of financial intermediary (Errunza & Senbet, 1984). It should follow that, as the level of imperfection in international financial markets increases, investor valuation of the intermediary role increases.

Agmon and Lessard (1977) assert that the advantages gained by international diversification require more than the presence of financial market imperfections. There must also be greater barriers to the portfolio capital flows than to capital flows. Investors must recognize internationally diversified firms provide opportunities for diversification which are not available to the individual investor. If these barriers were not present investors would diversify their portfolios internationally and the multinationality of the firm would be of no consequence.

Fatemi (1984) states that there are indications that international diversification reduces the degree of systematic risk. The monthly rates of return for firms that are internationally diversified fluctuate less than purely domestic firms and the betas are lower and more stable. To the extent that international diversification depends on diverse economic activity not perfectly correlated to the investor's domestic

economic activity, the risk-return relationship should be superior to purely domestic firms.

Geographic Versus Industry Issues

Separating the effects of country-driven forces from industry-driven forces provides greater insight into the effects of international diversification. A study of 12 European countries over 14 years suggested that country-specific factors, not industry-specific factors were responsible for low intercorrelation of European equity markets. The study concluded that local monetary and fiscal policy, legal systems, and regional economics were responsible for the country-specific variations. Individually, the 12 countries tended to specialize in certain industries, such as banking in Switzerland and energy in the Netherlands (Heston & Rouwenhorst, 1994).

A further analysis of country versus industry effect classifies industries into traded and non-traded groups. An example is the coal industry. Coal is a homogenous product traded internationally. Exchange rate shocks affect the relative price of coal for domestic and foreign producers. This common source of price variation causes share prices of firms in traded-goods industries to be more sensitive to fluctuations in exchange-rates. This in turn implies that firms in traded-goods industries are more sensitive to exchange-rate fluctuations and

therefore tend to have lower industry effects. Griffin and Karolyi (1998) confirmed Heston and Rouwenhorst's (1994) findings that less than four percent of variation in the return of a country index can be explained by industrial composition. They further conclude that traded-goods industries have higher industry effects. This difference would mean that investors should consider different international investment strategies for traded and non-traded-goods industries (Griffin & Karolyo, 1998).

Reeb, Mansi, and Allee (2001) find that firms with greater levels of internationalization, or investments in many countries, have higher credit ratings than those which are domestic. Further they found that debt financing was inversely related to the degree of international involvement beyond that incorporated in credit ratings. The study notes that (1) higher credit ratings are given to multinational firms, (2) there is a negative and significant relationship between the cost of public debt and multinational involvement, (3) credit agencies do not fully incorporate firm multinationality into credit ratings, and (4) changes in the cost of debt are inversely related to the degree of multinationality. This suggests there is a downward bias of rating agencies toward multinational firms, or those with investments in many countries.

Explanations for the lower cost of capital for multinational firms are the opportunities available to multinationals to benefit from imperfections in the international financial markets and the ability to diversify their assets and sources of income (Shapiro, 1978).

Reuer and Leiblein (2000) using options theory find that direct foreign investment and international joint ventures do not have a negative impact on downside risk. They theorize that this may be due to the fact that not all international investments provide significant options and that firms may not manage real options properly. Similarly Das and Uppal (2004) conclude that systematic risk has the effect of reducing gains from diversification and penalizing more leveraged firms.

Reeb, Kwok, and Baek (1998) identify foreign exchange risk, political risk, agency problems, asymmetric information, and self-fulfilling prophecies of management as offsets to the theory that multinational corporations have less systematic risk than domestic corporations.

Risk Reduction Issues

Leahy and Pavelin (2004) studied the relationship between multinational diversification and labor costs when firms choose to locate plants in foreign countries. The study found that choosing to have a foreign plant allowed the multinational firm

to improve its bargaining position with labor and the expansion to a second plant in the same country added more discipline to the labor bargaining process.

A study of Spanish firms found a positive relationship between the availability of intangible assets and the likelihood of expanding multinationally. This study also found that the presence of ample intangible assets increased the firm's strengths in its home markets (Delgado-Gomez, Ramirez-Aleson, & Espitia-Escuer, 2004).

Nachum (2004) examined the link between industrial and geographic diversification of firms in developing countries. While there were significant differences among the various developing countries, this study found a link between performance and diversification and attributed it, in part, to the tendency to expand geographically but not industrially.

Chkir and Cosset (2003) conducted an events study to determine if international diversification led to an increase in leverage. The study found there was an increase in leverage in the first three years immediately after multinational diversification. They did find that an increase in debt financing was also related to profitability and size.

Geringer, Tallman, and Olsen (2000) studied Japanese multinational firms and their evidence indicated that the results of diversification vary greatly over time even if

diversification strategies remain constant. This study suggested that diversification strategies through network relationships needed to be investigated. They concluded that multinational diversification is less valuable in practice than in theory.

A study of Indian multinational manufacturing firms focused on the context-specific nature of diversification and its impact on strategic decisions. This research found that external investors had a greater influence on the decision to expand geographically than internal management including boards of directors (Ramaswamy, Mingfang, and Pettit 2004).

An Australian study compared the rates of return of Australian based multinational firms and purely domestic firms. The study did not find a significant difference in the returns of the two groups of firms. The multinational group did have a higher Beta and were, therefore more risky than the purely domestic group (Wright & McCarthy, 2002).

Deng (2003) identified a number of reasons or motivations for a country such as China to engage in multinational diversification. These reasons include resource-seeking foreign direct investment (FDI), technology-seeking FDI, market-seeking FDI, diversification-seeking FDI, and strategic asset-seeking FDI. A major difference between China and other multinationals is that cost minimization is not important to China. The ample

supply of low-cost labor in China offers no incentive to seek efficiencies in terms of cost through multinational diversification.

Kallapur and Trombley (2001) in a study focused on investment opportunities point out that firm value is the value of the assets in place and the value of options to make future investments. The study indicates that one of the most common causes of loss in value is diversification without synergy resulting in increases in size but not in value.

Saudagaran (2002) reviewed key literature related to internalization, imperfect capital market, and agency costs. He concluded that multinationals exhibit an apparent superiority in value creation. The author suggested that future studies include consideration for the motivations for multinational diversification. If the expansion of home country markets has been exhausted then multinational expansion may offer a greater potential for return than continued investment in the home country market.

A study of China's diversification strategies focused on the relationship between diversification and ownership. Three important conclusions were noted in this study. Subsidiaries having related horizontal or vertical diversification with parent firms outperform those with unrelated strategies. Subsidiaries with majority ownership outperform those with full

or minority ownership. Majority ownership increases the contribution of related diversification to subsidiary performance (Zhao & Yadong, 2002).

Randoy and Dibrell (2002) conducted a study of Norwegian multinational firms operating in Sweden, Germany, the UK, Spain, Poland, Japan, and the US. In contrast to most previous studies, this research concentrated on the ongoing choice of commitment to foreign markets instead of the entry mode decision. The study identified a number of influences that affect the decision to stay in a foreign market and they categorized them as firm-specific, location-specific, transaction-specific, and strategic factors. The authors developed a model that should assist managers in evaluating the resource commitment to specific foreign markets.

A study of knowledge sharing as it relates to diversification hypothesized that corporate profitability improved when firms exploited complementary sets of related knowledge across business units (Tanriverdi & Venkatraman, 2005). A related study of Korean multinational companies found that cultural similarities, the degree of parent's ownership, similarities of products and processes, and the competitive advantages were positively related to the intra-network knowledge sharing. The size of the companies did not affect knowledge sharing (Cho & Lee, 2004). Learning-based theory in a

study by Yeoh (2004) was used to explain performance among newly internationalizing companies and found that technology was key to successful performance.

A number of studies have focused on the effects of diversification over time. Li, Li, and Dalgic (2004) studied small and medium-sized multinationals and found that while there was no systematic planning process in the early stages of internationalism early-stage benefits were expected but not achieved. Thomas and Eden (2004) theorized that the net benefits of multinational diversification were greater over the longer term and that certain performance measures were affected in the early stages while others were affected in the longer term. This study also concluded that there was a nonlinear, three-stage sigmoid relationship between multinationality and performance.

Henisz and Macher (2004) studied the multinational semiconductor industry segment between 1994 and 2002 and found that firms with more advanced technological capabilities were more likely to invest in technologically advanced markets. They also found that the technologically advanced firms avoided politically hazardous markets. A similar study of multinational manufacturing firms found that technological links were one of four factors (demand relationships, technological links, collusion within markets, and collusion across markets) having

the greatest impact on the decision to diversify multinationally (Vannoni, 2004). Miller (2004) in a study of 227 firms that diversified between 1980 and 1992 found that there was a relationship between performance and technological resources. Piscitello (2004) confirmed the concept that there is interconnectedness between a company's technological competencies and performance and that there was particular relevance to multinational diversification.

Low and Chen (2004) studied 232 firms in thirty countries and examined the effects of international and product diversification on capital structure. The results of this study indicated that international diversification is negatively related to financial leverage. The study noted that while this relationship was detected for U.S. firms, it was not detected for non-U.S. firms. The results also indicated that there was a positive relationship between product diversification and financial leverage. They hypothesized that product diversification was viewed as less risky.

Ricart, Enright, Ghemawat, Hart, and Khanna (2004) identified four different perspectives for understanding diversification strategies and why geographic locations differ. These perspectives included cultural differences across borders, differences in the development of intermediary markets, a framework for understanding the geography-strategy link, and an

understanding of the unique advantages of the diversified firm over the domestic firms.

The studies in this section identify reasons that firms decide to diversify geographically. These include overcoming financial market and product market barriers and reducing risk. Studies in this section also identify agency problems caused by geographic diversification. These include the complexities of cross-border transactions and cultural differences. Results from these studies were inconsistent and, in some cases, contradictory. The results indicated both favorable and unfavorable results from geographic diversification. Country-driven versus industry-driven issues were identified as possible reasons for the inconsistencies. This forms the basis to study a specific industry segment. Many of the reasons for and against geographic diversification may apply to a single segment within the insurance industry. The preceding studies will provide a basis for analyzing the effects of multinational involvement in the property and casualty segment of the insurance industry.

Multinationality and Firm Performance (Value)

The research in the previous section focused on reasons for and against geographic diversification. This section addresses the effects of geographic diversification on firm performance

and, ultimately, firm value. As stated earlier, firms diversify internationally to achieve certain advantages. This study will focus on advantages that are manifested in financial performance.

Valuation Issues

According to Baek (2003), multinational firms may add value by capitalizing on operational flexibility. The exploitation of imperfections in financial markets and tax options aids in increasing their efficiencies through the use of production shifting, tax minimization, transfer pricing, and financial market and information arbitrage.

Errunza and Senbet (1981) state those firms engage in international operations to take advantage of imperfections in product markets, different taxation treatments, and imperfections in the international financial markets. Imperfections in the international financial markets may provide an advantage to a firm based on the degree of international involvement when all other business characteristics are the same. Their analysis suggests that the impact of differential taxation on a firm's financing and investment decisions may contribute to excess valuation by investors. They further point out that if international financial markets are integrated and

competitive, diversification at the firm level can be duplicated at the investor level at a lower cost (Errunza & Senbet, 1981).

In a later study Errunza and Senbet (1984) noted that the existence of imperfections in the international financial markets placed the international firm in the role of financial intermediary. They argue that, as the level of imperfection in international financial markets increases, investor valuation of the intermediary role increases. Their quantitative analysis suggested that there is a positive valuation effect associated with the degree of international involvement. Their analysis used excess valuation and a measure of international involvement based on four factors: (1) foreign sales percentage, (2) number of foreign subsidiaries, (3) entropy measure of geographical diversification, and (4) absolute foreign sales. (Errunza & Senbet, 1984)

Villalonga (2004) examined the assumption that diversification destroys value by using econometric techniques for casual inference. The author measured the value effect of diversification by matching diversifying and single-segment firms on their propensity scores. Using three estimators, this research indicated that diversification does not destroy value. The three indicators yielded different estimates of the effect of diversification on firm value but none indicated that diversification destroyed firm value.

Other studies have concluded that an increased degree of international involvement may actually reduce a firm's value (Dennis, Dennis, & Yost, 2002). This research noted theoretical arguments could be made that increased international involvement may increase or decrease firm value. They cited research studying the relative complexity of multinational firms and the additional cost that accompanies complexity (Harris, Kreibal, & Raviv, 1982), the high cost of monitoring complex multinational firms (Bodner, Tang, & Weintrop, 1999), and inefficient cross-subsidization of less profitable businesses (Scharfstein & Stein, 2000).

Dennis, Dennis, and Yost (2002) also point to a number of studies concluding that there are benefits of international diversification. One such study conducted by Mork and Yeung (1991) noted that the valuable information-based assets within the international firm provided synergistic benefits manifested in superior production skills, marketing skills, and management quality.

This research also analyzed the relationship between global and industrial diversification. They found that these two forms of diversification appear to complement each other rather than act as substitutes. The results of their study indicate that both globally diversified and industrially diversified firms trade at a discount. They conclude that the reasons for

diversification discounts may be (1) lower valued firms tend to diversify by purchasing lower valued firms or (2) diversification destroys value. They suggest that diversified firms do not invest efficiently and may reallocate capital to those segments of the firm needing help rather than the segments with the best investment opportunities (Dennis, Dennis, & Yost 2002).

Mansi and Reeb (2002) point out that managers of multinational firms continue to diversify internationally to decrease risk. This reduction in risk reduces firm value. This study used as its basis, the argument that reductions in risk through international diversifications benefited bondholders at the expense of shareholders (Amihud & Baruch, 1981).

Markides and Ittner (1994) identify three shareholder benefits attributed to international diversification. The first is operational benefits that allow multinational firms to exploit intangible firm-specific assets. These assets include marketing skills, patents, management skills, economies of scale, product differentiation, and preferential government treatment. Second is a strategic rationale for international diversification that adds value by diversifying the assets under the firm's control. The third benefit identified in this research is the risk reduction that comes from internationalizing a firm's exposure to a single economy. Since

the economies of different countries are less than perfectly correlated, the shareholders level of risk is reduced.

Morck and Yeung (1991) outline four theories that link multinationality and investment value. The internationalization theory states that direct foreign investment only occurs when a firm can increase its value by internalizing markets for its unique assets. Imperfect world capital markets theory proposes that multinational firms offer shareholders diversification opportunities not available to individual investors. The managerial objectives theory is based on a management preference for international diversification as a way to reduce risk. The tax avoidance and low-cost inputs theory allows firms to minimize tax payments and provide access to lower cost unique to specific foreign markets.

Doukas and Travlos (1988) point out that the value effects of international diversification come from the ability to arbitrage imperfections in international financial markets, information gained in international business, and cost savings gained by economies of scale. As long as multinational corporations are the only way for investors to take advantage of these options, the multinational firm should increase in value.

Operational Performance Issues

Berger and Ofek (1995) studied the effects of diversification on over 16,000 observations and found that

diversification reduced value. This study estimated that the loss in value averaged between 13% and 15% over a six-year sample period by comparing the sum of the imputed stand-alone values of the segments of diversified companies to the actual values of those companies. The major cause of the value loss was overinvestment in lower value segments and cross-subsidization of poorer performing segments. Modest tax-reduction benefit partially offset a portion of the value reduction.

Operating Flexibility Issues

Berger and Ofek (1995) also examined the operating profitability of multinational and single country firms. They used earnings before interest and taxes (EBIT) as a percent of sales and return on assets (ROA) as the financial performance measures. Since this study was across industry segments, the firms were grouped in three size sub-samples. Overall, the financial performance results were consistent with the excess value measurements. While subsequent studies have found different results than Berger and Ofek (1995), the methodology employed in their research has been very durable.

A recent study by Campa and Kedia (2002) suggests that value destruction is more a function of firm-specific characteristics than diversification. They argue that firms

choose to diversify when the benefits of diversifying are greater than the costs of diversifying. Firms that diversify because the benefits outweigh the costs may be discounted for the same reason. Underperforming firms trade at a discount. The same firm may find that diversifying has lower opportunity costs than other strategies and decide to select diversification as the best strategy. Failure to consider this would lead to the conclusion that diversification adversely affected value. This study concluded that diversified firms within an industry were valued higher than firms exiting the industry, but valued lower than non-diversified firms within the industry.

Villalonga (2004) questioned the finding that diversification has an impact on value. This study suggested that value discounting is an artifact of segment data. He pointed out that the use of segment financial reports does not actually reflect the extent of segmentation, the definition of segments in the accounting standards results in inconsistencies across firms, and changes in segment reporting are many times a result of reporting changes rather than operating changes. Using different databases (COMPUSTAT versus BITS) can result in a valuation discount becoming a valuation premium for the same firm.

A study of small and medium sized firms examining the individual and joint effects of multinationality and product

diversification on profitability found that the results were not consistent over time. The results suggested that the relationship is curvilinear between diversification and performance. The relationship was initially positive but continued product or international diversification was associated with declining performance (Qian, 2002).

A study of European chemical firms over a three-year period considered the relationship between accounting measures of performance and the degree of multinational involvement. The authors found a strong relationship between multinational diversification and superior financial performance. The study concluded that multinational firms outperform purely domestic firms. They also suggest that the unification of Europe may have reduced the possibility of exploiting market imperfections, there is still considerable opportunity for synergies that favorably affect financial performance (Mathur, Singh, & Gleason, 2004).

A study of Canadian firms for a four-year period compared financial performance and multinational diversification. This study found that financial performance was negatively correlated to multinationality (Mathur, Singh, & Gleason, 2001)

Girma (2003) studied the domestic performance of UK multinationals from the perspective of their ability to benefit from new acquisitions and their performance relative to non-UK

multinationals. The non-UK multinationals appeared to be much more productive and out performed the UK multinationals.

A five-year study of non-financial Taiwanese firms examined the relationship between the degree of multinationality and financial performance. The authors found an inverted S-shaped relationship between the degree of multinational involvement and financial performance. This implies that there is an initial favorable impact that declines unless the degree of multinationality is substantial (Chiang & Yu, 2005).

Annavarjula and Beldona (2000) who reviewed 26 empirical studies between 1971 and 1998, suggested that the concept of multinationality needs to be redefined and the definition of performance needs to be refined. The authors proposed a three-dimensional definition of multinationality to include operations, orientation, and ownership that provides a comprehensive assessment of an organization's multinational involvement.

A study of Spanish firms between 1991 and 1995 examined the relationship between international diversification and performance. This study measured international diversification by using the global Market Diversification index and the geographical market diversification categories. Performance was measured using accounting measures. This study found a positive

relationship between accounting performance and multinationality (Ramirez-Aleson & Espitia-Escuer, 2001).

A study of 400 U.S. and Korean firms over five years examined the relationship between international diversification and performance. The aggregate results indicated that geographic diversification yielded a strong positive relationship with performance, and a negative relationship between product diversification and performance. When the U.S. and Korean firms are analyzed separately the Korean firms are positively correlated with both product and geographic diversification (Lee, Hall, & Rutherford, 2003)

Spanos, Zaralis, and Lioukas (2004) examined the impact of firm and industry-specific factors on profitability for Greek manufacturing firms. Their findings suggest that firm-specific factors explained more than twice as much profit variability as industry specific factors.

Research into Chinese multinational firms considered the effect of related and unrelated multinational diversification on firm performance. The results indicated that pure related diversification was sub-optimal, pure unrelated diversification was value destroying, and a hybrid strategy of related and unrelated diversification resulted in the greatest performance benefit (Li & Wong, 2003). A study focusing on diversification and excess cash flow reductions around related and unrelated

acquisitions found support for a positive and significant association between excess cash flow declines and excess value loss after the acquisition. The declines were greater for unrelated acquisitions than for related acquisitions (Doukas & Kan, 2004). Research by Mayer and Whittington (2003) of firms in France, Germany, and the U.K. also supported the general model of related-constrained diversification although there were differences in the three countries.

Zu, Yigang, and Beamish (2004) studied two-thousand Japanese international sub-units and found a positive relationship between local partners and performance. This study proposed adding regulative and normative distances as two new measures when evaluating multinationals.

Tan (2003) studied multinational Japanese firms operating in the U.S. and found a positive relationship between performance and the use of expatriates. This study also found that Japanese firms that were geographically diversified experienced higher growth rates.

Research into a sample of Spanish multinational firms suggested that establishment of local partnerships is essential for smaller firms' financial performance. This study also noted that changes in performance over time were related to management changes (Fernandez & Nieto, 2005).

Tongli, Ping, and Chiu (2005) studied multinational diversification affects on performance using several performance measures including accounting-based measures. Using a sample of Singapore multinational firms, their results indicated a negative correlation to all measures of performance for product diversification and a positive correlation for multinational diversification. Firm size was significant in explaining the impact on performance but firm age was not.

A study of 173 Swedish multinationals examined the link between international market entry and performance. The findings indicated that when the local business was related to the core (home-country) business the local business experienced high performance. The study further finds that firms establishing international operations must consider their ability to efficiently reach and service the international customers (Pehrsson, 2004). A similar topic studied by Li and Greenwood (2004) found that intra-industry diversification generated benefits from synergies, economies of scale, benefits of multi-market competition, and market structure efficiencies.

Two studies of the multinational banking indicated that multinational involvement improved financial performance. A study of Italian financial conglomerates indicated improvements in profit performance but not cost efficiencies (Casu & Girardone, 2004). A study of Israeli multinational banking

firms suggested there were gains to diversification (Landskroner, Ruthenburg, & Zaken, 2005). Both of these studies suggested that risk adjusted returns for banking firms benefited from multinational involvement even though multinationals had higher risk profiles than domestic banking firms.

Jandik and Makhija (2005) studied unrelated non-utility diversification by electric utilities between 1980 and 1997. The study found that single-segment electric utilities over-invest compared to diversifying utilities. This resulted in the diversifying firms having valuable alternative investment opportunities compared to the single-segment firms. The diversified firms traded at a premium compared to the single-segment firms.

A study by Fiegenbaum, Dovev, and Shoham (2004) surveyed 406 customers of 104 foreign multinational firms in the Israeli market. This study showed that customer satisfaction was higher for multinationals than domestic firms. The authors conclude that multinationals had greater marketing effectiveness with a higher quality and higher price positioning than domestic firms.

Several studies of Japanese multinationals focused on the keiretsu as a power-dependence system concentrating ownership by Japanese financial institutions. The concentration of ownership affected financial performance in complex ways. The authors found evidence that the financial institutions effectively

monitored management as agency theory would suggest. However, there was also evidence to suggest that the financial institutions did not favor policies of multinational diversification over financial performance (Gedajlovic, Shapiro, & Bogdan, 2003). A study by Kim, Hoskisson, and Wan (2004) found that the benefits of keiretsu varied across firm members. The more powerful firm members were able to place more emphasis on growth while the less powerful emphasized financial performance. A separate study by Lu and Beamish (2004) studied 1,489 Japanese firms over twelve years and found an S-shaped relationship between multinationality and financial performance.

A study of eighty-one multinational German firms in four service industry segments suggested that the relationship between international diversification and financial performance observed in manufacturing firms does not apply to service industry firms. This study hypothesizes that there is a U-shaped curvilinear relationship between multinationality and performance in multinational service firms (Capar & Kotabe, 2003). A related study by Skaggs and Droege (2004) sampled 4,762 firms and found that manufacturers which diversified into services have higher performance and lower variability of performance than do manufacturers that have no service component.

Reichert and Wall (2000) studied diversification as a way to reduce risk in the financial services industry. They found that any financial conglomerate must be at least as profitable as single-country firms. The ability of conglomerates to exploit gains from diversification comes primarily from increasing their investments in the higher return markets. The conglomerate's ability to allocate new capital efficiently is critical to maximizing risk-adjusted returns. A similar study of media conglomerates by Chan-Olmsted (2005) reinforces the linkage between diversification and financial performance.

Majocchi and Zucchella (2003) argue that in an increasingly integrated world market all firms are essentially international even if their business activities do not cross national borders. This argument is especially true in markets that fall within the European Union area. Using a sample of 220 Italian firms, the authors investigated the relationship between internationalism and performance. Their results indicate that performance suffers when small multinationals internationalize by direct foreign investment (acquisitions) but performance improves if the firms internationalize through export activities.

Ruefli and Wiggins (2003) studied the performance of firms included in previous diversification-performance research. Their sample included 1,797 firms over thirteen reporting periods. Fifty-one firms (8%) were superior performers. Of

these, 23% were single-segment firms and 77% were multi-segment firms. Forty-six (3%) of the firms in the sample were inferior performers and 30% of those were single-segment firms while 77% were multi-segment firms.

Research using transaction cost theory revealed that firms using transaction cost-enhanced international entry modes perform better than firms using other modes of entry. Transaction cost entry modes are efficiency-driven, focused on the least cost option. In this study, firms that used the transaction cost-enhanced entry mode choices performed significantly better than firms that did not (Brouthers, Brouthers, & Werner, 2003). Research of a similar topic by Kalra, Stoichev, and Sundaram (2004) examined the effectiveness of international diversification after consideration of transaction cost and found small benefit from diversification.

Goerzen and Beamish (2003) develop the argument that the concept of geographical scope should be separated into international asset dispersion and country environmental diversity. From a sample of 580 large multinational firms, this study found that there is a positive relationship between financial performance and asset dispersion but that country environment diversity is negatively correlated with financial performance. This could be a clue as the mixed findings in the literature.

Gomes and Livdan (2004) developed a model to investigate the relationship between diversification and performance with special emphasis on the diversification discount. The model is based on the theory that diversification allows a firm to take advantage of productivity and economies of scale. The model links diversification strategies of the firm to differences in size and productivity. The results indicate that diversification and performance are consistent with the maximizing of shareholder value.

The relationship of strategy to performance and multinational diversification represents a gap in the literature. Tegarden, Sarason, and Banbury (2003) investigated the relationships between strategic processes and firm performance and found that different strategic processes produced different types of firm performance. Symbolic and rational processes were related to operational performance while transactive and generative processes improved quality and adaptability, but none supported financial performance. Singh, Mathur, and Gleason (2004) suggest that agency issues do not account for firms adopting a specific diversification strategy. Li (2005) examined performance and multinationality in the U.S. service industry and found that U.S. service industry firms exhibit a regional orientation that affects their ability to develop a global multinationality-performance strategy.

This section addressed the effects of geographic diversification on firm performance and value. Firms diversify internationally to achieve certain advantages. Operational flexibility, tax advantages, and arbitrage opportunities were identified as performance drivers. Several studies noted a relationship between geographic and industry diversification. The following section narrows the focus to a single industry segment. The studies in this section indicated that the benefits are inconsistent. Some studies found adverse performance or loss of value from multinational involvement while others indicated favorable results. Country and industry differences may account for some of the inconsistency among the preceding studies. Narrowing the focus to a sub-segment of the insurance industry may reduce some of the "noise" and provide more insight into this unresolved subject

Insurance Sector Considerations

The previous two sections of the literature review focused on the advantages and disadvantages of geographic diversification and the effect on firm performance and value. Most of the research was not industry specific. This section will narrow the focus of the review to the insurance industry and provide a more focused understanding of the relationship between multinational involvement and performance.

Contractor and Kundu (2003), in a study of the multinational service sector, state that initially increasing international exposure may have a negative impact on firm value, but over time the negatives turn positive and firm value increases through (1) spreading overhead, (2) increasing international experience, (3) accessing lower cost sources, (4) improving ability to read competitors, and (5) exploiting arbitrage abilities (Contractor & Kundu, 2003). This study hypothesized that a third stage exists where the firm over-internationalizes and erodes performance.

Contractor and Kundu (2003) also hypothesize that the service sector, and in particular, the knowledge-based service sector, tends to be driven by a "follow-the-client" strategy. Barriers to internationalism for these firms may be less costly than the more capital-intensive sectors. This results in the knowledge-based sector firm's performance turning positive sooner. This study identifies the advantages held by knowledge-based service-sector firms over capital-intensive service sector firms as (1) lower burden of tangible asset investment, (2) clients already established in foreign markets, and (3) recognized global standards.

A study by Johnson and Vahlne (1990) concluded that knowledge-based service industries, such as insurance, experience the positives of internationalization earlier than

capital-intensive segments such as manufacturing. The service sector also reaches the over-internalization stage sooner than manufacturers. The advantage that the knowledge-based firms have in the beginning becomes a disadvantage later as they are more prone to over-expanding to the detriment of financial performance (Johnson & Vahlne, 1990).

As with firms in general, evidence appears mixed as to the benefits of internationalization for the insurance segment. Insurers attempt to achieve economies of scale by increasing their degree of international involvement. Economies of scale are achieved when costs increase at a slower rate than revenues. The complexities of international diversification may be a barrier to achieving economies of scale (Katrishen & Scordis, 1998).

This research also noted that multinational insurers did achieve economies of scale, but only to a point. In their study, Katrishen and Scordis (1998) determined that international insurers with premium income up to \$2.3 billion achieved economies of scale but those with premium income of \$4.9 billion experienced no economies of scale.

Skipper (1987) noted that government regulation significantly increases the cost of international insurance operations. This may partially or completely offset any economies of scale expected from international expansion.

Standard & Poor's Industry Survey's (2004) analysis of the property and casualty insurance industry notes that commercial line insurers are expanding their international operations. This expansion is not from mergers and acquisitions, but rather the establishment of foreign offices. The factor driving globalization is a faster rate of economic growth in areas outside the United States. The major concerns include (1) language and cultural differences, (2) consumer attitudes and customs, (3) fear of corruption in developing countries, and (4) higher than expected costs related to international operations. In 2001, Allstate Corporation, the second largest property and casualty firm in the U.S., sold its European operations stating that, "in spite of the significant opportunities to be found in overseas markets, the company believes that its best opportunities in the immediate term are closer to home" (Standard & Poor's Industry Survey's, 2004, p. 6)

Ma and Pope (2003) studied determinants of international insurers' participation in foreign markets. This study indicates that (1) the global insurance industry is moving toward increased deregulation, (2) market structure is an important factor in determining whether international insurers participate in a market, and (3) countries with higher gross domestic product tend to attract international insurers.

The same study identified obstacles that discourage involvement by non-domestic insurers in particular markets. The obstacles they identified were (1) government regulations, (2) managerial concerns, and (3) characteristics unique to a given country (Ma & Pope, 2003). Bagchi-Sen (1995) also concluded that regulatory factors outweighed economic factors as a deterrent to international insurers entering foreign markets.

Summary

This chapter has reviewed prior research representing theoretical arguments that international involvement by a firm increases or decreases shareholder value. As stated in the review of the literature, firms may enhance their value through international operations by taking advantage of imperfections in financial markets (Errunza & Senbet, 1981); providing individual investors a more cost-effective method of diversifying their portfolios (Rugman, 1979); acting as financial intermediaries to overcome barriers among international financial markets (Errunza & Senbet, 1984); capitalizing on their operational flexibility including shifting production, minimizing taxes, transfer pricing, and financial market arbitrage (Baek, 2003); and achieving economies of scale through international growth (Katrishen & Scordis, 1998).

Conversely, prior research also suggests that firms may reduce value through increased international involvement because of increased cost related to the complexity of international operations (Harris, Kreibal, & Ravin, 1982), cost of monitoring international operations (Bodner, Tang, & Weintrop, 1999), and management's desire to reduce risk (Amihud & Baruch, 1981).

In summary, this chapter has reviewed the research related to the advantages and disadvantages of geographic diversification, the effects on performance and value, and specific multinational diversification research within the insurance industry. Understanding the theoretical motivations for geographic diversification and the results on performance across industries should provide a good basis for testing the effects of multinational diversification within the property and casualty segment of the insurance industry. While this segment's reasons for diversifying may vary from other industries in general, the extensive prior research provides a theoretical basis for analyzing the relationship between multinational involvement and performance in the property and casualty industry. The methodology in the following chapter will be consistent with that used in previous studies such as Berger and Ofek (1995) and Mansi and Reeb (2002).

CHAPTER III

METHODOLOGY

Introduction

Chapter III discusses the methodology to be employed for this study. The methodology is similar to that of Berger and Ofek (1995) and Mansi and Reeb (2002) but is focused on a smaller and much more homogeneous sample. This chapter describes the research question, theoretical model, hypothesis, data collection, variables, and research design. The model was operationalized by using a cross-sectional analysis of financial performance of multinational and domestic firms within the property and casualty insurance segment.

Research Question

This study attempts to answer the following question: is there a relationship between multinational involvement and financial performance in the property and casualty segment of the U.S. based insurance industry? Research supporting the belief that international diversification has a favorable impact on the value of a firm leads to the expectation that international diversification in the insurance segment results in favorable performance. Research supporting the belief that international

diversification for all firms has an adverse effect on value leads to the expectation that the same would be true for the insurance segment.

Theoretical Model

The theoretical basis for the model used in this study was developed by Berger and Ofek (1995) in their study of diversification's impact on firm value. This study used a sample of 6,500 firms across industry segments. While the study primarily focused on excess value, it also looked at profitability as an alternative measure of diversification's effect. A later refinement of this model was used by Mansi and Reeb (2002) to investigate the impact of diversification on a firm's excess value. The refined model considered performance measures as support for validating excess value.

Both of these studies used international revenues as a measure of international diversification. While other studies have also included the number of international operations as a measure, the service nature of the insurance sector makes that measurement less meaningful (Errunza & Senbet, 1984).

This study focused on a single industry segment, property and casualty insurance, to reduce the variables impacting the model. This narrowed focus allowed the study to rely on revenues segmented between domestic sources and multinational

sources. Organizational characteristics, ownership and management patterns, and geographic distribution included in other studies were not considered, because they are not as much of a concern in a service industry as they are in a manufacturing or distribution industry. The service nature of the insurance industry allows greater insights into the way imperfections in the international financial markets may affect the performance of firms within the industry (Griffin & Karolyi, 1998).

Testing the study's research question using data from a single industry sub-sector eliminated the need for estimating a number of industry segment imputed values. For this study, it was only necessary to separate the firms into multinational and domestic categories and compare the performance of each grouping. A single industry segment also eliminates the differences caused by comparing the attributes of manufacturing segments with service segments and enhances the value of the accounting data among firms (Campa & Kedia, 2002). Comparing a domestic property and casualty firm with a multinational property and casualty firm is more valid than comparing a domestic property and casualty firm with a multinational automobile manufacturer or utility provider.

The research question was answered by comparing the performance ratios of firms that have only domestic revenues with those that have domestic and multinational revenues.

Determining appropriate measures of performance was critical to the testing of the data. From an array of available financial data, four widely accepted financial ratios were used in this study:

Return on revenue (ROR)

Return on assets (ROA)

Return on equity (ROE)

Earnings per share (EPS)

Share price was also considered as a measure of performance because the willingness of investors to participate in ownership is a direct measure of performance (Warren, Reeve, & Fess, 2005; Reilly & Brown, 2000).

It should also be noted that this study did not attempt to determine any relationship among the dependent variables. This research focused on the relationship of multinationality and the individual financial performance measures.

Hypotheses and Measurements

Return on Revenues

Return on revenues (ROR) is a measure of how efficiently revenues are converted into profits. This is generally related

to cost controls, economies of scale, or competitive advantage. While it is difficult to separate the factors affecting this performance ratio it is a common method of comparing firms within the same industry. The higher the ratios of profits to revenues, the fewer resources are needed to convert revenues to profits. ROR should detect anything affecting the efficient conversion of revenues to profits including (1) taking advantage of market imperfections, (2) operational flexibility, (3) economies of scale, (4) complexities of international operations, and (5) additional monitoring costs (Warren, Reeve, and Fess, 2005). Therefore, this relationship is reflected in Hypothesis 1 as the following:

Null hypothesis (H1N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by ROR.

Alternate Hypothesis (H1A): There is a significant statistical difference between the financial performance of multinational and domestic property and casualty firms as measured by ROR.

Return on Assets

Return on assets (ROA) measures how effectively a firm is utilizing its assets. While it does not consider the method used to finance the assets, it does indicate whether a firm is employing its assets as effectively as competing firms. A

multinational's ability to overcome international market boundaries, increase operational efficiencies, and experience economies of scale should enhance this measurement. Since shareholder equity is financing only a portion of the assets, maximizing this ratio should have a positive effect on shareholder value. Multinational firms should experience financing advantages and increased leverage as they take advantage of financial market imperfections (Reilly & Brown, 2000). Therefore, this relationship is reflected in Hypothesis 2 as the following:

Null hypothesis (H2N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by ROA.

Alternate hypothesis (H2A): There is a significant statistical difference between the financial performance of multinational and domestic property and casualty firms as measured by ROA.

Return on Equity

Return on equity (ROE) is a measure of the returns on the investments by the shareholders. As stated earlier, the assets are financed by debt and equity therefore the return on shareholder's equity will reflect any advantage from leveraging debt to finance a portion of the assets. Advantages from imperfections in financial markets and overcoming international

market barriers should be reflected in reduced risk, lower financing costs, and increased financing leverage to the advantage of shareholders (Warren, Reeve, and Fess, 2005). Therefore, this relationship is reflected in Hypothesis 3 as the following:

Null hypothesis (H3N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by ROE.

Alternate hypothesis (H3A): There is a significant statistical difference between the financial performance of multinational and domestic property and casualty firms as measured by ROE.

Earnings Per Share

Earnings per share (EPS) measures the profitability of the firm per share of ownership. This often quoted ratio is used as a benchmark by investors and analysts to set goals and targets for short-term expectations. Whatever happens between the top-line revenues and the bottom-line profits is reflected in EPS. Multinationals should certainly be impacted favorably by operational flexibility and economies of scale, and unfavorably by agency costs related to international complexities and monitoring costs. EPS is often used as a forecasting tool to reflect market expectations for quarterly reporting. It is the great common denominator among competitors, and for industry

leaders, it is even an indicator of how analysts and investors view an industry (Reilly & Brown, 2000). Therefore, this relationship is reflected in Hypothesis 4 as the following:

Null Hypothesis (H4N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by EPS.

Alternate hypothesis (H4A): There is a significant statistical difference between the financial performance of multinational and domestic property and casualty firms as measured by EPS.

Share Price

Share price (SP) is a function of risk and return. As an investor's risk changes, the investor's required return will change. If a multinational firm is less risky due to multinational diversification, the expectation of return will be less. A risk premium can be calculated as the difference between the expected return of an investment less the nominal rate of return on a risk-free asset (Reilly & Brown, 2000). Therefore, this relationship is reflected in Hypothesis 5 as the following:

Null hypothesis (H5N): There is no difference between the share prices of domestic and multinational firms in the property and casualty segment of the insurance industry.

Alternate hypothesis (H5A): There is a significant statistical difference between the share prices of domestic and multinational firms in the property and casualty segment of the insurance industry.

Tables 1 and 2 summarize the relationship of the various performance measures and the theoretical advantages and disadvantages. Table 1 shows a matrix of theoretical advantages of multinational involvement and performance measures. Table 2 shows a matrix of theoretical disadvantages of multinational involvement and performance measures. There may not be agreement on every intersection of advantages and disadvantages with performance measures, but these measures are generally accepted as accurate indicators of performance.

Table 1

Advantages of Multinationality	ROR	ROA	ROE	EPS	SP
Advantage of market imperfections	X		X		X
Cost-effective option for investors					X
International market barriers reduced		X	X		X
Operational flexibility	X	X		X	X
Economies of scale	X	X		X	X

Table 2

Disadvantages of Multinationality	ROR	ROA	ROE	EPS	SP
International operations complexity	X			X	
Monitoring costs	X			X	
Risk reduction			X		X

Research Design and Data Collection

This study sought to determine if there was a relationship between international diversification and financial performance of firms in a single sector of the insurance industry.

Financial data from property and casualty insurance firms was collected using the *Compustat* database (see APPENDIX A for a list of firms in the sample). Standard Industry Code (SIC) 6331, which consists of domestic establishments primarily engaged in underwriting fire, marine, and casualty insurance, was selected. These establishments are operated by firms that may be owned by stockholders, policyholders, or other carriers.

SIC 6331 covers 2,454 companies which are largely private firms or subsidiaries of other firms with no published data available. One hundred firms with five years of published data qualified for inclusion in the sample resulting in a total

number of observations of 500 firm/years. The data planned for observation included total revenues, foreign revenues, assets, debt, book equity, and market value of equity over the most recent six years. Revenues ranged from approximately \$10 million to \$4 billion. Assets ranged from \$27 million to approximately \$71 million.

Table 3

Summary of Sample Characteristic

* (\$000 omitted)	All Firms
Observations	500
Revenues*	1,113,305
Assets*	1,052,226
Return on Revenues	10.64
Return on Assets	2.52
Return on Equity	9.87
Earnings per Share	1.90

Variables

The independent variable is premium revenue from non-domestic sources. It is the measure of international involvement and is classified as a categorical variable dividing the sample into two groups. Members of the sample were U.S.

based property and casualty insurance firms. Multinational revenues are reported in the *Compustat* database. Multinational sales ranged from a low of \$4.2 billion in the earliest year to \$21.4 billion in the most recent year. These multinational sales represent approximately ten percent of the multinational group's sales in the earliest year and twenty-three percent in the most recent year.

The dependent variables are financial performance as measured by:

- Return on revenues
- Return on assets
- Return on equity
- Earnings per share
- Share price

All firms in the sample are categorized as domestic (no multinational revenues) or multinational (domestic and multinational revenues).

The results test the hypothesis that there was a relationship between multinationality and firm performance as determined by the performance measure listed above. If there was a significant difference between the two groups, it indicates that there was a performance difference between

multinational and domestic firms in the property and casualty insurance industry.

Reliability and Validity

Reliance on the use of accounting data as a measure of the impact of diversification on a firm is well established in the literature. The financial measures used in this study were reported as part of each firm's regulatory requirements. While there is some inconsistency among firms' reporting conventions, the reported data is consistent with both regulatory and accounting guidelines.

The performance measures are the dependent variables and must be relevant to the firms in the sample. The validity of using accounting data depends on management's disclosure policy and reporting consistency. All of the dependent variables are used by analysts to measure historical performance and future expectations. Bens and Monahan (2004) studied U.S. firms from 1980 through 1996 and the results suggested that disclosure plays a monitoring role in disciplining management's investment decisions. Adding more years to the sample may expose the study to problems related to reporting consistency. Theoretical models of management disclosure decisions have suggested that there may be incentives to misstate segment data to influence financial market perceptions (Newman & Sansing, 1993).

Statistical Analysis

The analysis of the data from the sample firms was performed using one-way analysis of variance (ANOVA). ANOVA tests for differences in a dependent variable among two or more groups. In this study ANOVA tests whether the groups formed by the independent variable (multinationality) were similar (same pattern of dispersion). If the patterns of dispersion were different, then it can be concluded that multinationality had an effect on the performance measures. While this study was primarily interested in testing for differences between the two groups, it may also be necessary to test for correlations between the measures using a multivariate test such as two-way ANOVA (Hair, Anderson, Tatham, & Black, 1998).

ANOVA assumes the dependent variables are normally distributed. A goodness-of-fit test was conducted to determine if the populations are indeed normal (Garson, 2005). A commonly used goodness-fit-test is the Pearson's X^2 which compares expected frequencies to observed frequencies.

ANOVA also assumes homogeneity of variance. Homogeneity of variance is determined by comparing the standard deviation associated with each mean. The dependent variable should have the same variance in each category of the independent variable (Chen, Zhao, & Zhang, 2002).

If normality or homogeneity problems occur, there are several acceptable methods of correction, including trimming and transforming the data, along with using ANOVA corrections, to reduce the degrees of freedom associated with the t test (Maxwell and Delaney 2004).

Summary

This study used data reported in the *Compustat* database using standard Industry Code (SIC) 6331, which consists of domestic establishments primarily engaged in underwriting fire, marine, and casualty insurance underwriting. The sample consisted of one hundred firms in the industry and was divided into multinational and domestic-only groups. The study compared the financial performance of the two groups using financial measures including ROR, ROA, ROE, EPS, and share prices. The statistical applications proposed included descriptives and one-way ANOVA.

CHAPTER IV
ANALYSIS AND PRESENTATION OF FINDINGS

Introduction

Chapter IV discusses the results of the analyses described in the previous chapters of this study. The chapter begins with a review of the rationale behind the sample selection, followed by a brief overview of the measurements used, a presentation of descriptive statistics for the sample of firms used in the research, and the analysis of data.

Sample Selection

Prior research has focused on studies of corporate profitability across industries, within geographic areas, or within specific markets. The results of these studies have been inconclusive and, in some cases, contradictory. Comparing firms across industries may be a contributing factor in the inconsistent results of previous studies. Separating service industries from manufacturing and distribution industries should reduce the cross-industry variables impacting the results (Capar & Kotabe, 2003). Focusing on knowledge-based service segments should provide even greater clarity to a complex issue (Skaggs & Droege, 2004).

The property and casualty segment of the insurance industry provides a product that is both generic and homogenous. Insurance is an international product that is affected by financial market fluctuations such as exchange rates. Prior studies including Griffin and Karoyi (1998) and Heston and Rouenhorst (1994) imply that firms in industries such as property and casualty insurance should be more sensitive to international financial markets. Since a major reason for multinational diversification is to take advantage of imperfections in financial markets, this implication was influential in selecting this industry segment for study.

Overview of Measurements

The five measurements used in this study are widely accepted within the practice of financial analysis. Each measures a different aspect of performance. Return on revenues is a measure of the efficiency of converting revenues to profits. Return on Assets measures how effectively a firm is using its assets to generate returns for shareholders. Return on equity is a measure of the efficient use of shareholder equity in generating returns. Earnings per share measures the proportional return to the shareholders. The share price is an indication of the shareholders' valuation of current and

anticipated performance expectations (Warren, Reeve, & Fess, 2005; Reilly & Brown, 2000).

Analysis of Data

Sample Summary

The sample was limited to property and casualty underwriters included in Standard Industry Code (SIC) 6331. This sector includes 2,454 public and private firms or subsidiaries. The private firms without published comparable data and the firms in this SIC that were not involved in underwriting were eliminated from the sample. One hundred underwriting firms with five years of published data were included in the sample. Five financial measures were tracked resulting in 2,500 possible observations. Revenues ranged from approximately \$10 million to \$4 billion. Assets ranged from \$27 million to approximately \$71 million

Table 4 summarizes the average statistics for the total sample, the multinational (MNC) firms, and the domestic only (DNC) firms. Some conditioning of the data was necessary to eliminate large ratios calculated from small numbers. For instance, if return on revenues calculated as 200% but was based on two dollars of return and one dollar of revenue, the ratio was changed to zero.

Of the 100 firms in the sample, 22 had multinational revenues, 67 had domestic revenues only, and 11 had incomplete data causing them to be eliminated from the analysis. The average revenues for the multinational firms (MNC) were almost three times that of the domestic only (DNC) firms. Average assets of the MNC firms were almost 80% greater than the DNC firms. The average debt of the MNC firms was almost 60% less than the DNC firms, while the average equity for the MNC firms was almost 60% greater than the DNC firms.

Table 4

Summary of Sample Data

* (\$000 omitted)	MNC	DNC	All
Number of Firms	22	67	89
Average Revenues*	4,263	1,491	5,784
Average Assets*	2,961	1,573	4,535
Average Debt*	1,080	2,908	3,989
Average Equity*	2,961	1,894	4,855

Return on Revenues

There were 447 observations of Return on Revenues (ROR) of which 122 were for MNC firms and 325 were for DNC firms. The mean ROR for the entire sample was 4.8548. The mean for the MNC group was 4.8841 while the mean for the DNC group was 4.8438.

The ROR data ranged from negative 92.26 to positive 75.76 for the total sample. The ROR for the MNC firms ranged from negative 9.05 to positive 18.12 while the DNC firms were responsible for the total sample minimum and maximum. Table 5 summarizes the ROR statistics.

Table 5
Summary of ROR Data

	MNC	DNC	All
Number of Firms	22	67	89
Number of Observations	122	325	447
Mean ROR	4.8841	4.8438	4.8548
Range	27.17	168.02	168.02

Note that the range for ROR was less for the MNC group. This may be partially explained by the fact that the MNC firms tend to be larger and possibly less sensitive to both negative and positive short-term market impacts measured by ROR. It is also possible that the benefits of multinational diversification insulate the MNC firms from adverse market actions. Recall that these benefits include taking advantage of market imperfections, capitalizing on operational flexibilities, and achieving economies of scale (Errunza & Senbet, 1981).

The distribution of the sample for the DNC group was a more normal pattern than that of the MNC group (see figures 1 and 2).

Figure 1 MNC

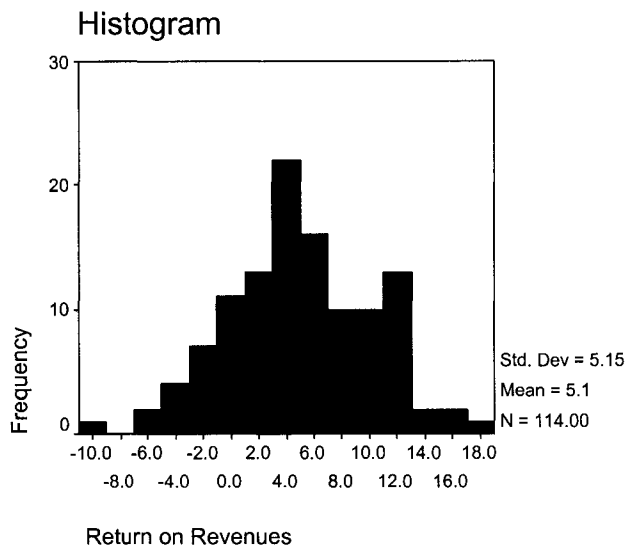
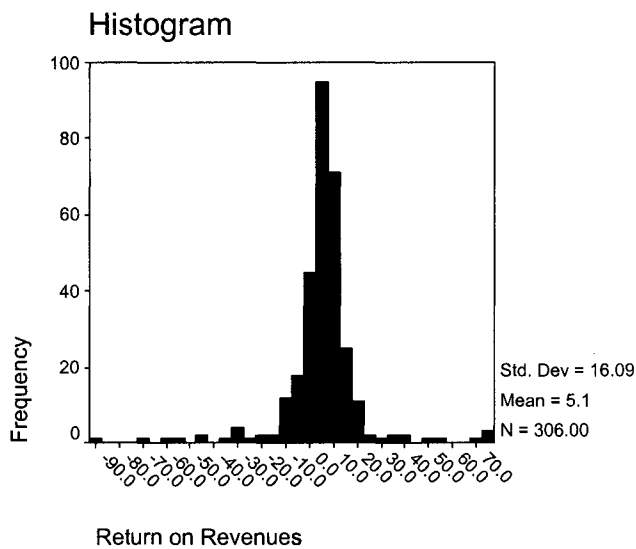


Figure 2 DNC



The one-way analysis of variance (ANOVA) indicated that there was not a significant difference ($p = 0.978$) between the two groups at the 0.95 confidence interval; therefore the null hypothesis (H_0) was not rejected.

Null hypothesis (H1N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by ROR.

Since there is no significant statistical difference between the MNC group and the DNC group as measured by ROR, it appears that MNC firms are no more efficient in converting revenues to profits than are DNC firms.

Return on Assets

There were 447 observations of Return on Assets (ROA) of which 122 were for MNC firms and 325 were for DNC firms. The mean ROA for the entire sample was 1.2383. The mean for the MNC group was 2.0230 while the mean for the DNC group was .9438. The ROA data ranged from negative 81.00 to positive 15.95 for the total sample. The data for the MNC firms ranged from negative 10.20 to positive 14.73 while, as with ROR, the DNC firms were responsible for the total sample minimum and maximum.

Table 6

Summary of ROA Data

	MNC	DNC	All
Number of Firms	22	67	89
Number of Observations	122	325	447
Mean ROA	2.0230	.9438	1.2383
Range	24.93	27.93	27.93

The range for ROA was less for the MNC group than the DNC group, but not as much as the range for ROR. ROA is less sensitive to short-term financial market fluctuations than ROR. Previous studies have also suggested that MNC firms do not invest as efficiently as DNC firms and may subsidize less profitable segments, resulting in lower returns (Dennis, Dennis, & Yost, 2002).

The distribution of the sample for the DNC group is a more normal pattern than that of the MNC group (see figures 3 and 4).

Figure 3 MNC

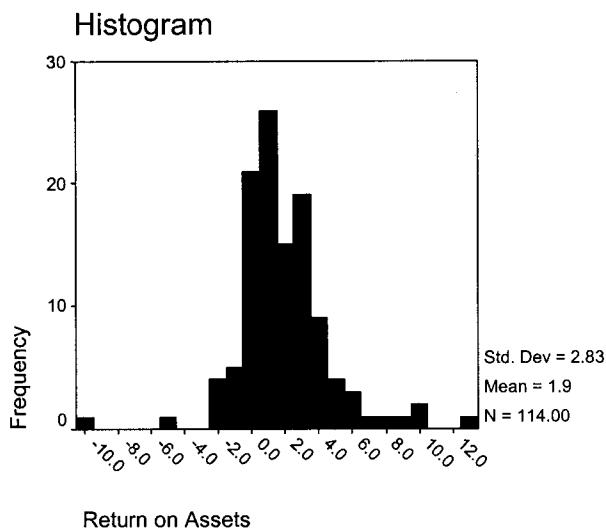
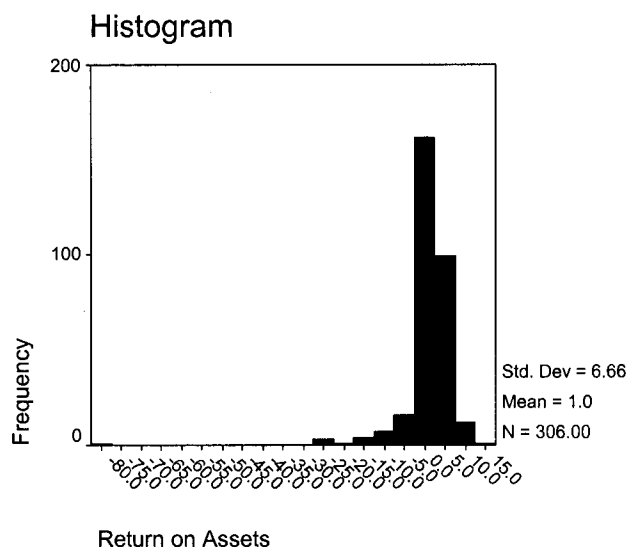


Figure 4 DNC



The one-way analysis of variance (ANOVA) indicated that there was not a significant difference ($p = 0.088$) between the two groups at the 0.95 confidence interval; therefore the null hypothesis (H_2N) was not rejected.

Null hypothesis (H2N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by ROA.

Since there was no significant statistical difference between the MNC firms and the DNC firms as measured by ROA, it appears that the MNC group does not employ their assets any more effectively than the DNC group.

Return on Equity

There were 445 observations of Return on Equity (ROE) of which 122 were for MNC firms and 323 were for DNC firms. The mean ROE for the entire sample was 5.9691. The mean for the MNC group was 5.8334 while the mean for the DNC group was 6.0204. The ROE data ranged from negative 92.20 to positive 63.48 for the total sample. The data for the MNC group ranged from negative 83.10 to positive 26.70 while, as with ROR and ROA, the DNC group was responsible for the total sample minimum and maximum. Note that in earlier discussion the debt for the MNC group is significantly less than the DNC group. It should be expected that the MNC group relies more on equity and less on debt to finance their assets (see table 4). Table 7 summarizes the ROE statistics.

Table 7
Summary of ROE Data

	MNC	DNC	All
Number of Firms	22	67	89
Number of Observations	122	323	445
Mean ROE	5.8334	6.0204	5.9691
Range	109.8	155.68	155.68

This is one of the measurements in which DNC firms outperform MNC firms. As with ROR and ROA, the range for ROE is less for the MNC group than the DNC group. ROE is also less sensitive to short-term market fluctuations than ROR, but is similar to ROA. If MNC firms do not invest as efficiently as DNC firms and subsidize less profitable segments as suggested by Dennis, Dennis, and Yost (2002), this measure will also result in lower returns.

The distribution of the sample for the DNC group was a slightly more normal pattern than that of the MNC group (see figures 5 and 6).

Figure 5 MNC

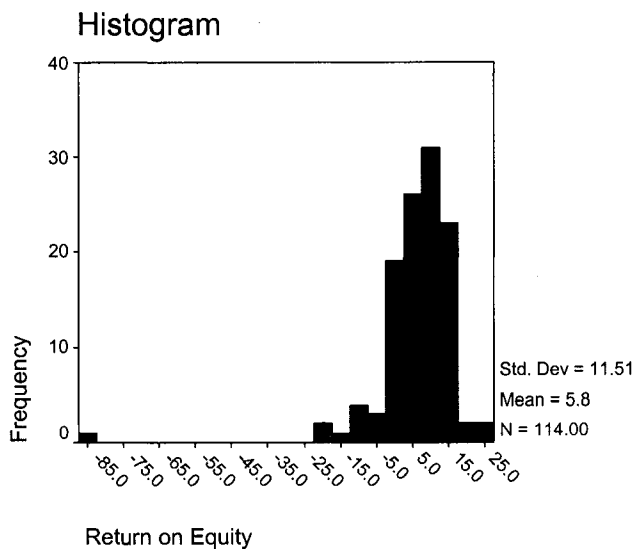
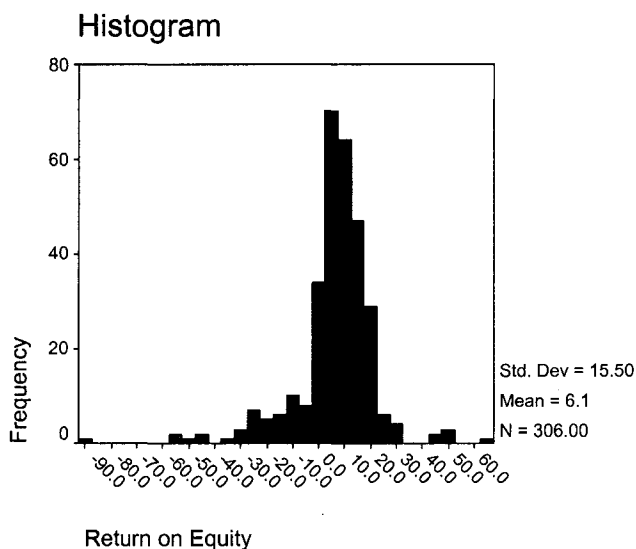


Figure 6 DNC



The one-way analysis of variance (ANOVA) indicated that there was not a significant difference ($p = 0.901$) between the two groups at the 0.95 confidence interval; therefore the null hypothesis (H3N) was not rejected.

Null hypothesis (H3N): There is n difference between the financial performance of multinational and domestic property and casualty firms as measured by ROE.

Since there is no significant statistical difference between the MNC group and the DNC group as measured by ROE, it appears that the MNC group does not leverage their equity any more effectively than the DNC group.

Earnings per Share

There were 431 observations of Earnings per share (EPS) of which 120 were for MNC firms and 311 were for DNC firms. The mean EPS for the entire sample was 1.3979. The mean for the MNC group was 1.3026 while the mean for the DNC group was 1.4346. The EPS data ranged from negative 86.52 to positive 53.08 for the total sample. The MNC firms ranged from negative 17.61 to positive 18.55 while, as with ROR, ROA, and ROE the DNC firms were responsible for the total sample minimum and maximum. Note from earlier discussions that the MNC group does have a greater mix of equity than debt. This may result in greater dilution of earnings (see table 4). Table 8 summarizes the EPS statistics.

Table 8

Summary of EPS Data

	MNC	DNC	All
Number of Firms	22	67	89
Number of Observations	120	311	431
Mean ROE	1.3026	1.4346	1.3979
Range	36.16	139.60	139.60

This is another measure, along with ROE, where DNC firms outperform the MNC firms. As with ROR, ROA, and ROE the range for ROE is less for the MNC group than the DNC. EPS is much more sensitive to short-term events in the market than ROA and ROE and responds similarly to ROR.

The distribution of the sample for the DNC group is a more normal pattern than that of the MNC group (see figures 7 and 8).

Figure 7 MNC

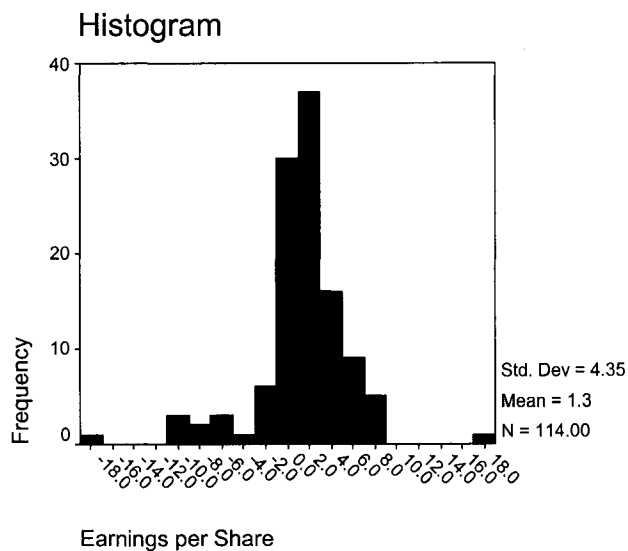
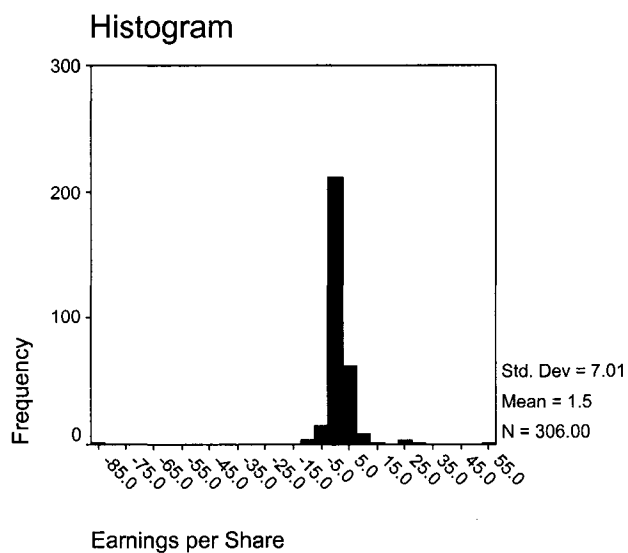


Figure 8 DNC



The one-way analysis of variance indicated that there is not a significant difference ($p = 0.846$) between the two groups at the 0.95 confidence interval; therefore the null hypothesis (H4N) is not rejected.

Null Hypothesis (H4N): There is no difference between the financial performance of multinational and domestic property and casualty firms as measured by EPS.

Since there is no significant statistical difference between MNC firms and DNC firms as measured by EPS, it appears that the MNC group does not enjoy any more economy of scale or efficiencies than the DNC group.

Share Price

There were 437 observations of share price of which 124 were for MNC firms and 313 were for DNC firms. The mean Share price for the entire sample was 31.0654. The mean for the MNC group was 41.1509 while the mean for the DNC group was 27.0699. The EPS data ranged from .01 to 411.00 for the total sample. The data for the MNC group ranged from .02 to 177.01 while the data for the DNC group ranged from .01 to 411.00. Table 9 summarizes the share price statistics.

Table 9
Summary of Share Price Data

	MNC	DNC	All
Number of Firms	22	67	89
Number of Observations	124	313	437
Mean ROE	41.1509	27.0699	31.0654
Range	176.99	410.99	410.99

Share price is somewhat less comparable among firms than are the previous four financial measures. The degree to which a firm finances with equity versus debt affects the overall cost of capital including the price shareholders are willing to pay. The degree to which a firm's shares are traded will have an effect on shareholder value. Closely held firms may be less vulnerable to changes in the financial market than firms whose shares are widely held. Payment of dividends or the expectation of dividend payments can affect share prices. The variety of valuation techniques such as the dividend discount model, present value of cash flows, or the earnings multiplier model are indications of the disparity in share price considerations (Reilly & Brown, 2000). The range for ROE is less for the MNC group than the DNC group.

In an efficient market, share price will reflect the degree of risk for all possible investments. This implies that, for

firms in a similar industry, it is expected that higher share prices are an indication of lower risk. While this does not relate directly to profitability, it is an indication of the risk premium or discount imposed by investors. If multinationality is a factor in the risk assessment of possible investments, it is expected that multinational diversification may affect share prices (Amihud, 1981).

While the distribution of neither sample is normal, the distribution of the sample for DNC group is a more normal pattern than that of the MNC group (see figures 9 and 10).

Figure 9 MNC

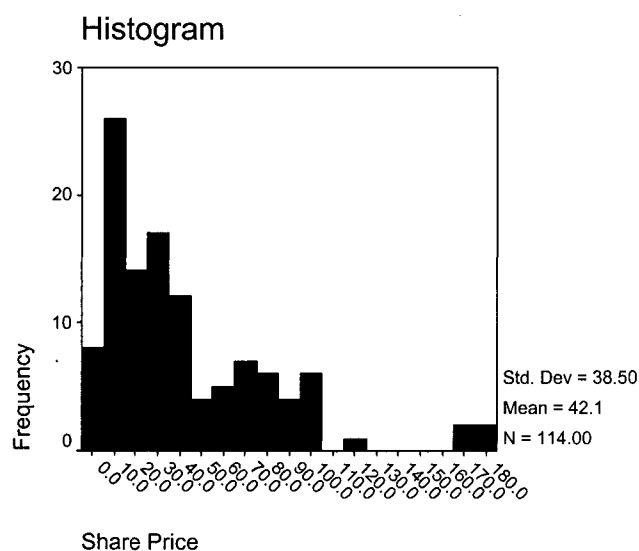
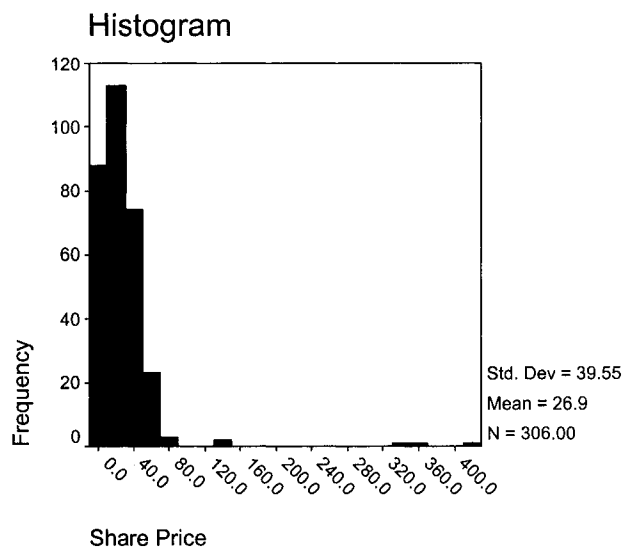


Figure 10 DNC



The one-way analysis of variance indicated that there is a significant difference ($p = 0.001$) between the two groups at the 0.95 confidence interval; therefore the null hypothesis (H5N) is rejected.

Null hypothesis (H5N): There is no difference between the share prices of domestic and multinational firms in the property and casualty segment of the insurance industry.

Since there was a significant statistical difference between MNC firms and DNC firms, as measured by share price, it appears that the MNC group does enjoy a greater perception of value from shareholders than the DNC group. All other things being equal, the higher share price indicates that the investor is willing to pay more for a less risky investment.

ANOVA Summary

The analysis of the data from the sample firms was performed using one-way analysis of variance (ANOVA). Appendix A contains a list of all firms in the sample. Appendix B contains the raw data used to test the hypotheses. Tables 10, 11, and 12 contain the descriptive statistics, the test summary of homogeneity of variances, and the ANOVA statistics. Note that ANOVA does not test for cause and effect but tests only for relationships. ANOVA tests for differences in a dependent variable among two or more groups. If the patterns of dispersion are different, then it can be concluded that there is a relationship between multinationality and the performance measures (Hair, Anderson, Tatham, & Black, 1998).

Table 10

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Return on Revenues	dnc	325	4.8438	15.92012	.88309	3.1064	6.5811	-92.26	75.76
	mnc	122	4.8841	5.09994	.46173	3.9700	5.7982	-9.05	18.12
	Total	447	4.8548	13.82669	.65398	3.5695	6.1400	-92.26	75.76
Return on Assets	dnc	325	.9438	6.66858	.36991	.2160	1.6715	-81.00	15.95
	mnc	122	2.0230	3.26570	.29566	1.4377	2.6084	-10.20	14.73
	Total	447	1.2383	5.95235	.28154	.6850	1.7916	-81.00	15.95
Return on Equity	dnc	323	6.0204	15.14535	.84271	4.3625	7.6783	-92.20	63.48
	mnc	122	5.8334	11.23660	1.01731	3.8194	7.8475	-83.10	26.70
	Total	445	5.9691	14.16931	.67169	4.6491	7.2892	-92.20	63.48
Earnings per Share	dnc	311	1.4346	6.96002	.39467	.6581	2.2112	-86.52	53.08
	mnc	120	1.3026	4.24328	.38736	.5356	2.0696	-17.61	18.55
	Total	431	1.3979	6.31740	.30430	.7998	1.9960	-86.52	53.08
Share Price	dnc	313	27.0699	39.32298	2.22267	22.6966	31.4432	.01	411.00
	mnc	124	41.1509	37.24261	3.34449	34.5307	47.7711	.02	177.01
	Total	437	31.0654	39.21994	1.87614	27.3780	34.7528	.01	411.00

Table 11

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Return on Revenues	13.912	1	445	.000
Return on Assets	2.752	1	445	.098
Return on Equity	5.645	1	443	.018
Earnings per Share	.010	1	429	.920
Share Price	6.985	1	435	.009

Table 12

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Return on Revenues	Between Groups	.144	1	.144	.001	.978
	Within Groups	85265.007	445	191.607		
	Total	85265.152	446			
Return on Assets	Between Groups	103.324	1	103.324	2.929	.088
	Within Groups	15698.688	445	35.278		
	Total	15802.012	446			
Return on Equity	Between Groups	3.095	1	3.095	.015	.901
	Within Groups	89138.478	443	201.216		
	Total	89141.573	444			
Earnings per Share	Between Groups	1.510	1	1.510	.038	.846
	Within Groups	17159.610	429	39.999		
	Total	17161.120	430			
Share Price	Between Groups	17609.642	1	17609.642	11.730	.001
	Within Groups	653047.1	435	1501.258		
	Total	670656.7	436			

The results of the ANOVA tests indicated that there were no statistical differences between groups when testing for the dependent variables ROR, ROA, ROE, and EPS. As a result, the null hypotheses for these four measures were not rejected. While the results for these four performance measures did not

support a significant difference between the two groups, the test did indicate a consistency among the performance measures. The ANOVA test for share price did indicate a statistically significant difference between the two groups and the null hypothesis was rejected.

A test of patterns in the data was run using chi-square to determine whether there is an association between the two categorical variables (MNC and DNC). The chi-square value tests whether the two variables are independent. If the significance is small ($p < 0.05$), the two variables are not independent (Field, 2003). Tables 13 and 14 summarize the chi-square results including a Cramer's V test.

Table 13

Chi Square Tests			
	Value	df	Sig.
ROR	390.216	374	.271
ROA	330.457	316	.277
ROE	387.500	379	.370
EPS	356.522	316	.058
SP	413.714	360	.027

Table 14

Symmetric Measures		
	Cramer's V	Sig.
ROR	.935	.277
ROA	.860	.288
ROE	.934	.380
EPS	.909	.062
SP	.970	.034

From Table 13 the measures for ROR, ROA, ROE, and EPS are not significant ($p > 0.05$), indicating that multinational diversification has no significant effect on those financial performance measures. Share price is significant ($p < 0.05$), indicating multinational diversification has some effect on share price.

From Table 14 the Cramer's V statistic indicates it is unlikely that the data for share price happened by chance ($p < 0.05$) but the same cannot be said for ROR, ROA, ROE, and EPS.

A Kolmogorov-Smirnov test for goodness-of-fit was conducted. This test compares the sets of scores in the sample to a normally distributed set of scores with the same mean and standard deviation. If the test is not significant ($p > 0.05$) it tells us that the distribution of the sample is not significantly different than a normal distribution. If the test is significant ($p < 0.05$) then the distribution is significantly

different from a normal distribution (Field, 2003). Tables 15 and 16 summarize the results of the Kolmogorov-Smirnov test.

Table 15

Descriptive Statistics								
	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
Return on Revenue	447	4.8548	13.82669	-92.26	75.76	1.4700	5.1000	10.1000
Return on Assets	447	1.2383	5.95235	-81.00	15.95	.3000	1.6800	3.3500
Return on Equity	445	5.9691	14.16931	-92.20	63.48	2.0150	7.5000	12.7900
Earnings per Share	431	1.3979	6.31740	-86.52	53.08	.0600	1.2600	2.5300
Share Price	437	31.0654	39.21994	.01	411.00	9.9950	23.0500	38.9400

Table 16

Tests of Normality							
Insurance Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Return on Revenue	dnc	.197	306	.000	.753	306	.000
	mnc	.039	114	.200*	.995	114	.946
Return on Assets	dnc	.250	306	.000	.540	306	.000
	mnc	.120	114	.000	.900	114	.000
Return on Equity	dnc	.184	306	.000	.850	306	.000
	mnc	.154	114	.000	.688	114	.000
Earnings per Share	dnc	.255	306	.000	.423	306	.000
	mnc	.166	114	.000	.884	114	.000
Share Price	dnc	.248	306	.000	.448	306	.000
	mnc	.155	114	.000	.840	114	.000

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From Table 16, note that all of the measures for both groups are significant ($p < 0.05$) except ROR for the MNC group indicating deviation from normality. This is likely the result of the broad range of readings for the financial measures. Since ANOVA assumes normality of distribution a non-parametric (assumption-

free) test was run. The test selected was Mann-Whitney which tests the differences between two means when there are two groups with different members. The results of the Mann-Whitney tests are summarized in tables 17, 18, and 19.

Mann-Whitney Summary

The Mann-Whitney test looks at differences in the ranked positions of the observations for each group.

Table 17

Descriptive Statistics

	N	Percentiles		
		25th	50th (Median)	75th
Return on Revenues	447	1.4700	5.1000	10.1000
Return on Assets	447	.3000	1.6800	3.3500
Return on Equity	445	2.0150	7.5000	12.7900
Earnings per Share	431	.0600	1.2600	2.5300
Share Price	437	9.9950	23.0500	38.9400
Insurance Group	498	.0000	.0000	1.0000

Table 18

Ranks				
	Insurance Group	N	Mean Rank	Sum of Ranks
Return on Revenues	dnc	325	227.47	73927.50
	mnc	122	214.76	26200.50
	Total	447		
Return on Assets	dnc	325	223.60	72669.50
	mnc	122	225.07	27458.50
	Total	447		
Return on Equity	dnc	323	225.39	72801.00
	mnc	122	216.67	26434.00
	Total	445		
Earnings per Share	dnc	311	212.95	66227.50
	mnc	120	223.90	26868.50
	Total	431		
Share Price	dnc	313	202.51	63385.50
	mnc	124	260.63	32317.50
	Total	437		

Table 19

Test Statistics^a					
	Return on Revenues	Return on Assets	Return on Equity	Earnings per Share	Share Price
Mann-Whitney U	18697.500	19694.500	18931.000	17711.500	14244.500
Wilcoxon W	26200.500	72669.500	26434.000	66227.500	63385.500
Z	-.927	-.107	-.638	-.818	-4.337
Asymp. Sig. (2-tailed)	.354	.915	.524	.413	.000

a. Grouping Variable: Insurance Group

Table 17 shows the distribution by quadrants and Table 18 summarizes the data after it has been ranked. Table 19 provides the actual test statistics for the Mann-Whitney test. For each measure there is a *U* statistic, the value of the Wilcoxon *W*

statistic, and the associated z approximation. The significance value of the test gives the two-tailed probability that the magnitude of the test statistic is a chance result (Field, 2003). For the financial measures ROR, ROA, ROE, and EPS are not significant ($p > 0.05$) but share price is significant ($p < 0.05$). From Table 18, note that the MNC group has a higher average rank (260.63) than the DNC group (202.51).

Summary

This chapter presented the results of the analyses conducted, including a review of the rationale behind the sample selection, a brief overview of the measurements used, a presentation of descriptive statistics for the sample of firms used in the research, and the data analysis of the hypotheses testing.

CHAPTER V

DISCUSSION AND CONCLUSION

Introduction

Chapter V presents an overview of the research and a summary of the results. Also in the chapter is a discussion of the information gained from the research, limitations of the research, and possible uses of the information in future research.

Research Overview

This study investigated the effects of multinational operations on the performance of firms in the property and casualty segment of the insurance industry. Imperfections in the international financial markets, if they exist, may provide advantages affecting market values for those firms with multinational revenues (Errunza & Senbet, 1981). The property and casualty segment of the insurance industry was selected to allow a clearer evaluation of the impact of multinationality on the firms' performance by minimizing other variables (Contractor & Kundu, 2003). Service industries, and particularly knowledge-based service industries, provide the advantage of a generic product that looks much the same in any geographic market, is

easily tradable across political boundaries, and has pricing which is affected by exchange rates and government regulation (Johnson & Vahlne, 1990).

The goal of the research was to determine if there was a relationship between multinational involvement and performance in this particular industry segment. Multinational involvement was determined by using multinational revenues. Four widely accepted internal accounting performance measures were the proxies for performance, in addition to share prices.

Financial data from property and casualty insurance firms was collected using the *Compustat* database (see APPENDIX A for a list of firms in the sample). Standard Industry Code (SIC) 6331, which consists of domestic establishments primarily engaged in underwriting fire, marine, and casualty insurance, was selected.

The analysis of the data from the sample firms was performed using one-way analysis of variance (ANOVA). ANOVA tests for differences in a dependent variable among two or more groups. In this study ANOVA tested whether the groups formed by the independent variable (multinationality) had similar financial performance (same pattern of dispersion).

Summary of Results

The results of the ANOVA tests indicated that there were no statistical differences between groups when testing for the dependent variables ROR, ROA, ROE, and EPS. The null hypotheses for ROR, ROA, ROE, and EPS were not rejected. The ANOVA test for share value did indicate a statistically significant difference between the two groups and the null hypothesis for share value was rejected. Appendix B contains the raw data used to test the hypotheses. Appendix C contains the descriptive statistics, test summary of homogeneity of variances, and the ANOVA statistics.

Chi-square and Kolmogorov-Smirnov tests for goodness of fit were run and indicated a normality problem with the data related to four of the measures including ROR, ROA, ROE, and EPS. ANOVA assumes the data is normally distributed but according to Lunney (1970) ANOVA can be quite robust even when the assumption of normality becomes a problem. Field (2003) also points out that, although normality assumptions are important, they are not inflexible in a robust procedure such as ANOVA.

A Mann-Whitney test, which is the nonparametric equivalent of a test of two means and is free of the normality assumption, was run. Mann-Whitney is more powerful than the median test since it uses the ranking of the data. The results showed no

significant differences between the MNC and DNC groups for ROR, ROA, ROE, and EPS measures; but showed a significant difference for share price between the MNC and DNC groups. These results were consistent with the ANOVA results.

Information Gained from the Research

Focusing research on the multinational insurance industry was intended to provide additional insight into the theoretical relationship between performance and international involvement. Previous research has focused on analyzing firms across industries and has supported opposing conclusions. By narrowing the focus of study to a single industry segment in a knowledge-based service sector this research attempted to provide additional support for one of these opposing conclusions.

Even though the ANOVA and Mann-Whitney tests did not support any significant statistical differences between the MNC and DNC groups for ROR, ROA, ROE, and EPS, the consistency of the tests for these four financial performance measures is logical. While each of the four ratios measures a different aspect of performance, the measures are related. ROR and EPS measure short-term performance primarily affecting the income statement and are subject to annual, quarterly, and even monthly fluctuations. ROA and ROE measure long-term performance which includes the income statement and the balance sheet and

considers the most effective employment of assets and capital. The ANOVA test found consistently that the two groups were not statistically different when measured by these financial measures.

The ANOVA and Mann-Whitney tests of share price did indicate a statistical difference between the two groups as measured by share price. This measure is different than ROR, ROA, ROE, and EPS in that share price is an indication of the investor's risk and reward tradeoff. Higher risk is penalized with lower share price and lower risk is rewarded with higher share price.

This may be an indication that while the internal financial performance measures (ROR, ROA, ROE, and EPS) do not indicate significant differences between MNC and DNC firms, investors recognize a difference. Investors may view multinational firms as less risky than purely domestic firms and reward the multinational firm with a higher share price. This supports prior research by Agmon and Lessard (1977) and Fatemi (1984) that multinational firms offer investors the opportunity to diversify internationally and that international diversification reduces risk.

Limitations of the Research

There are several points to consider related to limitations of this research. First, the selection of a single industry sub-segment was intended to limit cross-industry variables but it may have exposed the research to factors unique to the particular industry such as regulatory changes.

While this segment was homogenous with a generic product, it was a small sample and the multinational group was significantly smaller than the domestic only group.

Next, the reliance on accounting data, while well established in the literature, is subject to potential inconsistency among reporting conventions. The financial measures used in this study were reported as part of each firm's regulatory requirements and were consistent with accounting guidelines. The validity of using accounting data is somewhat dependent on management's disclosure policy and reporting consistency. All of the financial measures included in this study are frequently used by analysts to measure historical performance and future expectations of corporations.

Finally, it should be noted that one-way ANOVA and Mann-Whitney only test for relationships between the independent and dependent variables. No conclusions can be drawn regarding cause and effect.

Opportunities for Future Research

Several opportunities for future research should be considered. The first is to consider other dependent variables such as excess value. Excess value has been used in other cross-industry studies with inconsistent results. Isolating a single industry sub-segment for analysis may prove enlightening.

Including publicly held firms listed on national exchanges other than the New York Stock Exchange may result in different results. While this introduces other comparability problems such as currency conversions and reporting conventions, it would enlarge the sample including the relative size of the two groups.

Increasing the sample size by adding more years to the study could possibly improve the results of the analysis. However, this exposes the study to more firms entering and exiting the market with the inherent start-up and exit performance problems. The distribution of the data would most likely have a less normal distribution than in this study.

Summary

Chapter V presented an overview of the research, summary results, a discussion of the information gained from the research, limitations of the research, and possible uses of the information in future research.

While the goal of the research was to determine if there was a relationship between multinational involvement and performance in this particular industry segment, the results were inconclusive. There were no statistical differences between the two groups when testing the internal financial performance measures of ROR, ROA, ROE, or EPS but there was a difference when testing the external measure of share price. This differs from past studies in that comparisons between internal financial performance measures and shareholder perceptions have not been extensively studied. The information gained from this research may provide some additional insight into a complex area that has previously yielded a number of inconclusive and inconsistent research findings.

APPENDIX A

21ST CENTURY HOLDING CO	LOEWS CORP-CONSOLIDATED
21ST CENTURY INS GROUP	MAX RE CAPITAL LTD
ACCEL INTL CORP	MEADOWBROOK INS GROUP INC
ACCEPTANCE INSURANCE COS INC	MERCER INSURANCE GROUP INC
ACE LIMITED	MERCHANTS GROUP INC
AFFIRMATIVE INS HLD INC-REDH	MERCURY GENERAL CORP
ALFA CORP	MIDLAND CO
ALLIANZ AG -ADR	MILLEA HOLDINGS INC -ADR
ALLMERICA FINANCIAL CORP	MONTPELIER RE HOLDINGS
ALLSTATE CORP	NATIONAL SEC GROUP INC
ALPHASTAR INSURANCE GRP LTD	NATIONWIDE INS ENTERPRISES
AMERICAN FAMILY INS GROUP	NAVIGATORS GROUP INC
AMERICAN FINANCIAL CORP	OHIO CASUALTY CORP
AMERICAN FINANCIAL GROUP INC	OLD REPUBLIC INTL CORP
AMERICAN SAFETY INS HLDG LTD	PARTNERRE LTD
ARCH CAPITAL GROUP LTD	PAULA FINANCIAL/DE
ARGONAUT GROUP INC	PENN-AMERICA GROUP INC
ASPEN INSURANCE HOLDINGS LTD	PHILADELPHIA CONS HLDG CORP
ATLANTIC AMERICAN CORP	PLATINUM UNDERWRITERS HLDG
AXIS CAPITAL HOLDINGS	PMA CAPITAL CORP
BALDWIN & LYONS -CL B	PROCENTURY CORP
BANCINSURANCE CORP	PROGRESSIVE CORP-OHIO
BERKLEY (W R) CORP	PXRE GROUP LTD
BRISTOL WEST HOLDINGS INC	QUANTA CAP HLDGS LTD
CHUBB CORP	RELIANCE GROUP HOLDINGS
CINCINNATI FINANCIAL CORP	RENAISSANCERE HOLDINGS LTD
CNA FINANCIAL CORP	RLI CORP
COMMERCE GROUP INC/MA	ROYAL & SUN ALLIANCE -ADR
DIRECT GENERAL CORP	RTW INC
DONEGAL GROUP INC	SAFECO CORP
EMC INSURANCE GROUP INC	SAFETY INSURANCE GROUP
ENDURANCE SPECIALTY HLDGS	SCOR -ADR
EVEREST RE GROUP LTD	SEIBELS BRUCE GROUP INC
FAIRFAX FINANCIAL HLDG	SELECTIVE INS GROUP INC
FIRST ACCEPTANCE CORP	ST PAUL COS
FRONTIER INS GRP INC	ST PAUL TRAVELERS -PROFORMA
GAINSCO INC	ST PAUL TRAVELERS COS INC
GORAN CAPITAL INC	STATE AUTO FINL CORP
HALLMARK FINL SVCS INC	SWISS REINSURANCE CO -ADR
HARLEYSVILLE GROUP INC	SYMONS INTERNATIONAL GRP INC
HARTFORD FINL SVCS GRP INC	TOWER GROUP INC-REDH
HCC INSURANCE HOLDINGS INC	TRANSATLANTIC HOLDINGS INC
HIGHLANDS INSURANCE GRP INC	TRENWICK GROUP LTD
HORACE MANN EDUCATORS CORP	UNICO AMERICAN CORP
INFINITY PROP & CAS CP -OLD	UNITED FIRE & CAS CO
INFINITY PROPERTY & CAS CORP	UNITRIN INC
IPC HOLDINGS LTD	UNIVERSAL INSURANCE HLDGS
KINGSWAY FINANCIAL SVCS INC	VESTA INSURANCE GROUP INC
LIBERTY MUTUAL INS GRP	WHITE MTNS INS GROUP LTD
LOEWS CORP	ZENITH NATIONAL INSURANCE CP

APPENDIX B

Insurance Group Data						
Group	ROR	ROA	ROE	EPS	SVAL	
1.00	2.31	0.22	7.13	0.81		
1.00	3.30	0.70	7.80	1.82	30.30	
1.00	8.20	1.00	9.90	2.11	80.00	
1.00	6.87	2.53	13.57	2.15	9.13	
1.00	15.04	4.95	13.17	2.82	24.52	
1.00	6.80	2.80	15.40	3.44	40.80	
1.00	2.40	0.70	3.30	1.31	78.64	
1.00	4.44	0.71	4.79	1.47	43.44	
1.00	9.09	3.56	10.78	1.99	10.63	
1.00	9.88	3.28	13.33	8.85	32.88	
1.00	-0.31	-0.07	-0.55	-2.16	168.50	
1.00	-2.04	-1.20	4.84	-5.51	7.50	
1.00	6.30	0.60	10.10	4.01	70.24	
1.00	1.58	3.10	12.90	1.70	28.95	
1.00	-3.42	-0.69	-5.00	-2.59	11.00	
1.00	3.33	6.83	8.31		20.19	
1.00	5.38	3.10	16.35	1.94	15.88	
1.00	4.92	2.42	6.67	1.26	9.38	
1.00	11.97	9.59	3.20	7.74	46.79	
1.00	7.12	1.64	3.43	0.68	18.63	
1.00	10.64	2.97	6.21	1.90	12.42	
1.00				-0.45	52.56	
1.00	4.67	1.00	9.19	4.43	95.08	
1.00	6.38	2.40	9.84	3.87	49.96	
1.00	-2.80	-0.34	-2.39	-9.36	31.50	
1.00	-3.25	-0.23	-7.81	-0.01	35.00	
1.00	1.61	0.17	5.65	0.60		
1.00	0.00	0.00	0.00	-0.07	30.75	
1.00	8.80	1.40	12.00	2.10	98.31	
1.00	4.21	1.44	7.78	1.45	4.44	
1.00	18.12	5.90	11.71	2.63	24.81	
1.00	0.00	0.00	0.00	-2.09	38.93	
1.00	1.40	0.40	1.70	0.65	86.63	
1.00	12.23	-2.09	-16.01	-6.58	35.69	
1.00	8.51	3.04	8.77	1.91	7.00	
1.00	10.37	3.36	13.46	7.89	34.00	
1.00	4.74	1.08	9.29	18.55	174.51	
1.00	-2.37	-1.58	-1.18	-5.61	1.13	
1.00	3.60	0.30	6.70	2.31	71.15	
1.00	6.00	1.00	4.70	0.52	29.65	
1.00	0.64	0.14	0.97	-8.06	8.31	

1.00	7.18	14.73	16.61	.	14.75
1.00	3.39	2.35	12.10	1.26	11.34
1.00	7.51	3.56	8.92	1.66	10.00
1.00	10.57	7.71	2.50	5.79	31.29
1.00	2.72	7.11	17.12	6.97	14.88
1.00	4.61	13.18	26.70	8.76	14.44
1.00	.	.	.	1.52	40.31
1.00	-0.26	-0.06	-0.55	-0.21	95.78
1.00	8.80	3.49	12.78	5.79	57.92
1.00	11.18	2.50	10.00	-4.19	15.00
1.00	-4.35	0.80	-8.12	-0.01	32.06
1.00	-1.15	-0.14	-5.67	-0.53	28.10
1.00	0.00	0.00	0.00	-0.80	29.00
1.00	12.30	2.00	15.50	2.43	103.75
1.00	2.00	0.68	3.98	0.52	9.99
1.00	.	.	.	.	.
1.00	2.00	0.70	5.70	0.94	31.75
1.00	9.90	2.90	10.80	4.10	90.25
1.00	2.01	0.40	2.63	1.10	39.83
1.00	5.89	2.39	9.01	1.32	12.20
1.00	9.04	2.34	9.77	4.60	67.90
1.00	1.47	0.33	3.30	4.99	177.01
1.00	5.01	2.85	2.65	-10.86	0.75
1.00	6.60	0.60	15.10	4.42	80.00
1.00	11.90	2.10	11.20	1.11	27.19
1.00	4.30	0.71	5.11	-1.04	3.50
1.00	6.76	10.71	12.23	.	23.05
1.00	4.37	2.66	12.98	1.03	8.65
1.00	2.32	0.89	2.15	0.37	12.09
1.00	7.19	4.92	1.77	3.05	43.68
1.00	2.11	5.22	14.23	4.70	17.40
1.00	4.26	10.31	23.52	5.54	22.88
1.00	.	.	.	0.25	43.65
1.00	-0.49	-0.10	-0.73	-0.34	96.99
1.00	6.47	2.32	8.34	3.24	82.97
1.00	15.07	3.34	10.15	0.21	22.73
1.00	0.77	0.21	1.93	0.00	38.95
1.00	1.69	0.17	5.13	0.60	22.60
1.00	4.40	0.90	9.60	2.46	43.63
1.00	12.40	2.20	16.70	2.18	75.25
1.00	4.06	1.40	6.93	0.87	9.03
1.00	.	.	.	.	.
1.00	0.00	0.00	0.00	-0.90	24.17
1.00	9.20	2.80	10.40	3.70	76.38
1.00	11.99	-2.40	-18.92	-8.16	26.60
1.00	3.14	1.27	4.81	0.65	10.75
1.00	5.50	1.27	5.76	2.14	62.61
1.00	-5.65	-0.98	-10.62	-17.61	177.01

1.00	5.69	3.44	2.78	-10.61	0.32
1.00	6.40	0.50	14.50	3.83	66.44
1.00	7.50	1.20	5.60	0.51	25.13
1.00	-2.62	-0.34	-2.03	0.24	0.02
1.00	-0.03	-0.30	-0.36		31.12
1.00	4.79	2.53	8.37	0.76	12.53
1.00	12.82	4.15	9.20	1.67	14.95
1.00	5.50	3.70	1.27	5.58	59.21
1.00	-9.05	-1.82	-7.63	-1.58	24.15
1.00	3.75	6.27	13.53	8.29	37.00
1.00					34.00
1.00	9.43	2.08	13.02	1.28	101.96
1.00	0.93	0.28	1.02	0.36	87.05
1.00	13.40	3.68	12.74	-0.94	7.97
1.00	-2.26	-10.20	-83.10	-0.21	39.26
1.00	4.51	0.79	9.72	1.32	7.62
1.00	3.10	0.80	7.40	2.04	45.75
1.00	11.30	2.10	14.70	1.91	54.73
1.00	-3.78	-0.66	-2.36	-0.25	7.15
1.00					
1.00	3.70	1.10	5.70	1.21	33.25
1.00	11.20	3.50	12.50	4.27	88.81
1.00	7.78	1.96	12.58	6.61	24.28
1.00	5.28	2.02	7.81	1.02	11.50
1.00	12.59	2.66	11.77	4.06	73.00
1.00	2.22	0.43	4.07	6.28	120.10
1.00	8.75	6.39	5.71	-1.54	0.31
1.00	6.80	0.70	16.20	4.36	60.00
1.00	2.35	4.90	17.90	1.51	23.94
1.00	-4.78	-7.38	-4.52	1.34	
1.00	3.73	6.83	7.91		32.28
1.00	4.79	2.34	10.07	0.54	12.70
1.00	12.72	3.87	8.62	1.84	13.11
1.00	0.68	0.46	1.61	0.63	72.00
1.00	-5.43	-1.38	-4.16	-0.95	20.10
1.00	3.64	8.66	18.15	6.68	44.70
1.00					7.20
1.00	10.20	2.56	15.69	1.23	64.26
1.00	11.14	3.83	11.40	6.09	69.16
1.00	13.91	3.64	12.39	2.99	0.18
1.00	-1.63	-4.95	-21.59	-0.10	26.18
0.00	-17.77	-8.32	-54.47	-2.34	6.88
0.00	6.38	4.73	11.39	-2.34	18.31
0.00	-7.89	-23.61	-35.30	-2.02	2.03
0.00	-0.97	-15.50	44.48	-3.05	15.63
0.00	1.10	0.10	0.80	0.19	44.98
0.00	8.46	4.69	11.90	6.57	16.84
0.00	13.54	4.02	12.94	-0.17	8.56

0.00						
0.00	5.00	1.30	8.50	2.07	41.95	
0.00	-30.07	-1.22	-42.65	-1.59	0.65	
0.00	2.64	1.27	4.30			
0.00	10.21	3.86	14.14	10.04	16.00	
0.00	10.20	2.34	11.90	2.51	26.88	
0.00	2.64	1.07	5.64	0.18	4.38	
0.00	22.45	5.48	15.29	3.24	27.36	
0.00	15.05	3.49	9.28	2.07	16.75	
0.00	7.27	3.37	11.72	0.79	5.25	
0.00	14.88	5.87	18.97	1.99	20.00	
0.00	8.40	1.70	4.10	1.47	47.30	
0.00	11.87	5.94	19.21	6.54	23.19	
0.00	11.22	6.86	22.03	2.44	32.10	
0.00	3.47	1.41	5.77	1.10	11.25	
0.00	20.17	6.80	19.09	5.66	34.20	
0.00	32.56	-81.00	0.82	-0.15	3.63	
0.00	-56.20	-15.60	19.01	-8.18	13.81	
0.00	11.27	3.35	11.84	0.04	4.56	
0.00	9.27	7.09	17.91	0.16	0.44	
0.00	4.94	1.72	7.97	1.56	19.38	
0.00	1.50	0.30	2.30	0.28	24.08	
0.00	10.14	4.96	17.61	4.69	35.20	
0.00	10.14	4.96	17.61	4.69	35.20	
0.00	2.64	-0.98	-5.00			
0.00	5.80	1.30	9.40	4.31	62.30	
0.00	5.80	1.30	9.40	4.31	62.30	
0.00	12.18	3.06	14.27			
0.00	5.20	1.75	8.39	0.48	13.50	
0.00	5.46	1.81	3.25	0.52	13.43	
0.00	5.74	1.44	5.23	1.78	21.88	
0.00	10.73	7.93	19.61	5.25	36.06	
0.00	6.92	3.97	12.55	2.91	12.25	
0.00	4.69	0.84	3.00	2.71	54.81	
0.00	27.59	7.07	13.72	3.84	12.90	
0.00	3.63	0.98	9.12			
0.00	10.16	1.98	10.61	2.77	14.00	
0.00						
0.00	14.30	4.70	13.20	3.26	35.00	
0.00	11.80	3.94	14.69	8.80	37.19	
0.00	5.09	5.07	9.26	0.15	8.56	
0.00	9.88	3.77	12.79	1.14	7.33	
0.00	7.90	3.00	7.90	1.67	48.15	
0.00	5.51	2.48	7.48	1.96	31.10	
0.00	0.30	0.06	0.41	0.06	20.75	
0.00						
0.00						
0.00	-8.01	-1.73	-24.81	-2.21	9.94	

0.00	9.40	2.30	9.10	1.80	30.20
0.00	-9.03	-1.57	-30.89	-5.34	40.82
0.00	16.89	4.51	21.83	1.90	12.50
0.00	4.30	0.90	7.50	2.33	38.00
0.00	7.07	3.73	14.73	2.94	16.34
0.00	11.31	4.58	19.61	0.73	48.75
0.00	3.60	1.50	6.80	1.67	31.48
0.00	2.80	0.60	4.50	1.09	50.60
0.00	2.80	0.60	4.50	1.09	50.60
0.00	2.80	0.60	4.50	1.09	50.60
0.00	10.07	5.44	16.71	2.76	12.25
0.00	-70.51	-23.81	19.71	-3.40	4.81
0.00	8.38	1.83	6.98	1.23	12.00
0.00	9.18	3.29	13.39	1.03	10.63
0.00	12.96	3.07	15.22	3.68	26.00
0.00				-0.12	42.80
0.00	-16.62	-5.38	-92.20	-2.95	5.06
0.00	5.23	1.25	5.82	24.05	149.00
0.00	0.20	0.10	0.30	0.05	32.25
0.00	13.91	7.84	26.10	1.76	5.25
0.00	4.35	3.08	7.65	1.76	22.19
0.00	-4.86	-11.05	-45.24	-1.22	0.69
0.00	-2.65	-3.85	28.83	-1.08	5.13
0.00					
0.00	18.22	6.06	16.81	10.11	16.84
0.00	12.70	3.84	12.29	-0.12	8.50
0.00	0.00	0.00	0.00	0.00	71.75
0.00	4.00	1.10	6.70	1.62	45.90
0.00	-31.13	-1.40	-28.09	-1.69	1.25
0.00	1.13	0.54	1.85		
0.00	11.95	5.01	16.35	10.65	15.00
0.00	14.93	3.94	20.22	4.76	17.88
0.00	3.99	1.54	7.88	0.26	3.31
0.00	34.17	10.29	18.90	3.69	29.28
0.00	18.87	4.33	10.19	2.27	14.80
0.00	5.24	3.27	8.20	0.42	4.00
0.00	9.50	4.31	24.16	1.41	20.00
0.00	7.50	1.40	3.20	1.20	42.93
0.00	9.81	5.09	17.64	5.03	27.13
0.00	13.59	5.74	24.29	2.74	33.10
0.00	5.62	2.26	11.26	1.78	8.00
0.00	21.06	7.62	16.02	4.19	33.55
0.00	75.76	4.30	4.34	-0.09	2.88
0.00	-35.80	-8.85	-29.70	-8.18	0.81
0.00	7.62	1.82	7.41	0.04	5.25
0.00	0.95	0.79	2.41	0.47	0.44
0.00	-5.15	-1.78	-8.32	-1.59	16.88
0.00	3.20	0.60	5.80	0.63	22.40

0.00	7.64	3.06	12.79	2.86	33.05
0.00	7.64	3.06	12.79	2.86	33.05
0.00	3.10	0.93	4.16		
0.00				-2.75	72.50
0.00				-2.75	72.50
0.00	12.81	3.45	14.97		
0.00	4.79	1.46	6.51	0.35	5.38
0.00	1.15	0.33	0.59	0.09	12.55
0.00	5.67	1.60	6.21	2.07	15.19
0.00	8.14	5.91	14.68	3.39	25.50
0.00	3.24	1.97	6.54	1.34	12.50
0.00	5.95	1.19	4.59	2.91	54.75
0.00	52.78	15.95	24.56	6.42	9.51
0.00					
0.00	2.52	0.56	2.65	0.81	8.69
0.00	5.20	2.20	9.00	1.64	16.18
0.00	14.60	4.60	13.30	2.92	31.56
0.00	12.08	4.29	18.03	8.23	37.13
0.00	7.36	7.36	15.26	0.23	2.63
0.00	8.17	3.01	8.97	0.90	6.13
0.00	9.20	3.50	10.00	1.85	41.30
0.00	12.80	5.84	13.57	3.37	30.00
0.00	-7.19	-2.23	-20.18	-2.99	18.88
0.00					
0.00					
0.00	10.54	2.62	25.41	2.89	2.31
0.00	9.80	2.30	9.10	1.54	23.08
0.00	-12.02	-1.83	-25.93	-6.36	29.81
0.00	13.58	3.46	19.67	1.37	8.00
0.00					
0.00	4.81	2.65	10.63	1.87	13.11
0.00	7.62	2.90	22.32	0.54	15.63
0.00	2.50	1.00	4.50	1.07	28.21
0.00					
0.00					
0.00					
0.00	6.11	3.46	11.73	1.62	11.25
0.00	-32.28	-12.62	21.34	-2.96	0.69
0.00	8.41	2.20	48.08	1.37	12.00
0.00	2.09	0.66	2.78	0.19	6.03
0.00	9.69	2.31	12.65	5.06	17.31
0.00	19.30	5.70	21.10	5.64	41.95
0.00	-1.52	-0.48	-4.13	-0.27	5.94
0.00	7.37	1.87	8.84	26.48	141.19
0.00	11.26	6.07	25.25	1.01	2.75
0.00	-1.25	-0.83	-1.87	1.01	18.47
0.00	1.99	6.74	20.88	0.82	0.06
0.00	-0.69	-0.94	-5.74	-0.63	5.00

0.00	10.30	1.70	10.60	2.37	43.94
0.00	16.06	4.61	17.51	14.21	16.84
0.00	12.20	3.81	12.67	0.11	9.83
0.00	6.50	0.60	8.60	3.75	74.25
0.00	7.60	2.20	13.00	2.97	44.75
0.00	-9.44	-0.63	-7.56	-0.68	1.94
0.00	1.96	0.98	3.04		
0.00	7.66	1.84	3.90	2.74	16.75
0.00	19.00	-3.94	-26.55	-4.04	18.10
0.00	2.12	0.85	4.58	0.10	1.80
0.00	41.85	8.99	13.52	1.96	29.28
0.00	11.44	1.92	4.35	1.06	17.38
0.00	7.07	4.75	9.80	0.53	4.82
0.00	3.86	1.82	11.20	0.48	20.00
0.00	5.10	1.00	2.10	0.74	43.31
0.00	2.83	1.49	4.50	1.08	31.95
0.00	14.56	5.45	47.84	27.57	33.10
0.00	4.92	2.39	10.21	1.42	12.30
0.00	24.35	4.97	8.38	1.74	33.55
0.00	74.60	3.79	3.82	0.02	4.00
0.00	-8.79	-1.96	-12.69	-6.65	0.05
0.00	-12.35	-4.09	-20.56	-0.02	1.65
0.00	0.09	0.03	0.27	-0.15	0.55
0.00	5.46	2.00	7.32	1.56	25.51
0.00	2.70	0.50	5.00	0.51	22.19
0.00	6.51	2.97	11.86	2.25	33.05
0.00	6.51	2.97	11.86	2.25	33.05
0.00					
0.00	9.10	2.70	17.70	9.44	52.47
0.00	9.10	2.70	17.70	9.44	52.47
0.00	-1.16	-0.22	-0.97		
0.00	0.83	0.24	1.12	0.08	4.09
0.00	5.26	2.12	6.06		
0.00	2.67	0.94	3.74	1.19	19.80
0.00	3.70	2.50	6.02	1.22	36.60
0.00	3.19	1.86	6.57	1.17	17.75
0.00	4.74	0.89	3.00	1.83	52.15
0.00	40.11	8.29	12.14	2.76	5.95
0.00					
0.00	6.49	1.79	9.57	1.94	17.12
0.00					
0.00	14.40	4.20	12.80	2.49	32.06
0.00	7.13	2.18	9.16	3.37	53.55
0.00	10.24	9.80	18.31	0.23	1.86
0.00	5.37	2.16	6.66	0.70	6.70
0.00	11.20	4.60	17.90	2.53	30.88
0.00	5.62	0.39	0.70	0.15	26.35
0.00	-4.47	-1.17	-8.26	-1.53	17.10

0.00	.	.	.	.	.	.
0.00	.	.	.	.	.	.
0.00	5.07	1.54	18.13	1.52		0.02
0.00	10.90	2.30	9.30	1.46		22.53
0.00	-0.10	-0.02	-0.22	-0.12		33.10
0.00	21.33	6.40	48.03	2.78		3.40
0.00	1.60	0.40	2.50	0.90		35.88
0.00	1.98	1.07	4.27	1.44		7.03
0.00	-21.91	-9.00	-10.46	-1.98		29.00
0.00	2.60	1.00	4.60	1.07		25.88
0.00	11.80	2.50	14.80	4.59		57.00
0.00	11.80	2.50	14.80	4.59		57.00
0.00	11.80	2.50	14.80	4.59		57.00
0.00	3.82	2.32	7.98	0.95		15.05
0.00	-45.77	-24.79	63.48	-6.87		0.41
0.00	8.98	3.03	46.68	1.18		12.00
0.00	-7.01	-2.17	-8.40	-0.59		5.82
0.00	4.07	0.96	5.85	1.76		33.15
0.00	4.70	1.50	5.30	1.32		41.13
0.00	-2.75	-0.56	-3.97	-0.13		9.85
0.00	1.93	0.50	3.08	7.47		346.00
0.00	-6.14	-3.87	-15.33	-0.46		12.00
0.00	-3.01	-2.04	-4.18	-0.46		20.91
0.00	3.71	1.04	6.24	0.34		0.01
0.00	-1.35	-2.99	-17.69	-2.02		4.60
0.00	12.10	1.90	8.90	1.88		35.25
0.00	.	.	.	.	.	.
0.00	12.81	4.12	13.74	-0.14		13.74
0.00	11.00	1.20	14.70	6.27		64.81
0.00	10.10	2.90	16.10	3.40		41.00
0.00	19.48	2.47	16.41	1.63		17.35
0.00	4.96	2.37	6.82			.
0.00	2.98	1.68	2.16	1.71		29.70
0.00	0.99	0.16	0.65	0.13		21.39
0.00	2.20	0.87	4.11	0.10		2.53
0.00	.	.	.	.	.	.
0.00	4.91	0.09	1.87	0.44		18.46
0.00	13.29	8.54	13.73	0.66		5.37
0.00	3.17	1.32	7.95	0.30		20.00
0.00	12.00	2.30	4.60	1.55		42.50
0.00	8.07	4.35	11.46	2.77		39.34
0.00	0.28	0.10	1.22	-0.10		33.10
0.00	-0.71	-0.31	-1.50	-0.19		20.60
0.00	.	.	.	.	.	.
0.00	69.50	3.18	3.20	0.12		4.71
0.00	7.56	1.63	7.12	4.25		0.02
0.00	-92.26	-19.81	-14.30	-0.02		0.14
0.00	-5.14	-1.54	-10.90	-0.10		0.55

0.00	5.25	2.13	7.37	1.49	27.10
0.00	5.70	1.00	9.90	1.08	33.00
0.00	0.98	0.55	1.73	0.48	33.05
0.00	0.98	0.55	1.73	0.48	33.05
0.00					
0.00	2.50	0.70	5.20	2.40	52.25
0.00	2.50	0.70	5.20	2.40	52.25
0.00	0.44	0.12	0.43		15.05
0.00	-2.98	-0.95	-8.11	-0.76	3.85
0.00	9.87	3.40	9.32		
0.00	0.77	0.29	1.20	0.35	24.75
0.00	6.99	4.55	9.85	1.94	48.25
0.00	4.64	2.58	9.33	3.15	23.50
0.00	5.87	1.15	3.62	2.43	42.80
0.00					8.30
0.00					
0.00	2.14	0.52	2.49	0.44	26.35
0.00	5.60	2.30	8.60	1.73	21.69
0.00	10.80	3.20	10.10	1.76	22.75
0.00	-9.94	-2.63	-10.77	-4.16	50.48
0.00	-60.39	-2.37	-49.03	-5.53	0.80
0.00	-3.83	-1.61	-5.21	-0.50	9.50
0.00	9.60	3.50	12.60	1.51	25.50
0.00	-45.57	-27.63			
0.00	0.84	0.19	1.16	0.33	19.24
0.00					
0.00					
0.00	1.56	0.46	7.12	0.41	
0.00	13.90	2.90	10.70	1.55	19.41
0.00	0.52	0.12	1.38	0.43	21.63
0.00	-47.33	-10.44	-15.05	-2.30	2.10
0.00	3.80	0.80	5.10	1.90	46.75
0.00	0.00	0.00	0.02	-0.35	8.88
0.00	-6.96	-2.96	-25.76	-0.99	28.00
0.00	5.50	2.20	9.10	1.98	22.50
0.00	10.30	2.00	11.80	3.37	37.06
0.00	10.30	2.00	11.80	3.37	37.06
0.00	10.30	2.00	11.80	3.37	37.06
0.00	3.31	1.51	5.15	0.53	16.20
0.00	-27.75	-16.17	32.35	-7.78	0.04
0.00					
0.00	-25.81	-8.44	-26.76	-1.97	6.00
0.00	5.09	1.30	8.64	2.40	33.64
0.00	11.10	3.40	11.40	2.76	42.38
0.00	3.15	0.51	3.88	0.76	4.25
0.00	-8.63	-1.64	-18.77	-86.52	355.00
0.00	11.00	3.20	15.40	3.15	26.69
0.00	-1.39	-0.95	-3.50	-0.10	12.11

0.00	1.49	0.97	1.80	-0.10	14.14
0.00	-2.89	-0.80	-7.10	-0.33	.
0.00	.	.	.	.	.
0.00	3.98	8.10	17.70	3.03	43.00
0.00	.	.	.	.	.
0.00	13.09	4.32	14.11	-0.06	12.85
0.00	5.90	0.80	8.30	3.36	75.25
0.00	12.70	3.90	20.10	3.96	52.38
0.00	20.54	3.20	15.63	1.55	24.50
0.00	6.40	2.94	8.28	.	.
0.00	-6.49	-2.71	-2.94	-0.61	37.00
0.00	3.97	-5.32	-16.62	-3.77	12.41
0.00	2.39	0.97	4.36	0.12	2.34
0.00	.	.	.	.	.
0.00	17.56	3.58	6.72	1.58	23.20
0.00	12.44	9.16	15.44	0.64	5.21
0.00	.	.	.	.	.
0.00	11.80	2.30	4.70	1.45	46.92
0.00	12.01	6.36	16.89	3.87	37.40
0.00	.	.	.	.	.
0.00	0.88	0.40	1.57	0.21	18.87
0.00	.	.	.	.	.
0.00	52.20	2.52	2.54	0.11	4.45
0.00	13.14	3.21	14.92	8.50	0.01
0.00	-11.87	-4.12	-15.88	-0.57	0.24
0.00	-0.98	-0.29	-2.03	-0.02	0.80
0.00	6.07	2.41	8.59	1.69	24.46
0.00	10.90	2.00	17.00	1.97	37.63
0.00	-4.51	-2.80	-8.16	-2.46	22.91
0.00	-4.51	-2.80	-8.16	-2.46	22.91
0.00	.	.	.	.	.
0.00	2.20	0.70	4.70	2.03	54.13
0.00	2.20	0.70	4.70	2.03	54.13
0.00	1.93	0.93	2.17	.	15.05
0.00	-8.67	-2.64	-20.32	-2.05	3.00
0.00	.	.	.	.	.
0.00	3.99	1.54	6.19	1.75	21.00
0.00	8.01	5.11	10.59	2.02	47.38
0.00	6.65	3.57	12.52	3.91	22.60
0.00	5.55	1.04	3.16	2.56	36.42
0.00	.	.	.	.	10.88
0.00	.	.	.	.	.
0.00	5.86	1.14	4.90	0.84	25.16
0.00	5.70	1.90	6.30	1.26	25.88
0.00	14.90	4.60	14.50	2.35	32.25
0.00	9.33	2.34	6.82	2.48	53.12
0.00	-17.47	-8.53	-52.86	-3.51	1.27
0.00	2.12	0.94	2.53	0.24	10.80

0.00	14.40	5.30	16.10	1.63	24.50
0.00	-10.70	-5.85	.	.	.
0.00	0.20	0.04	0.30	0.06	9.28
0.00	.	.	.	.	.
0.00	.	.	.	.	.
0.00	3.30	0.96	14.14	0.83	0.01
0.00	16.80	2.90	10.10	1.35	22.81
0.00	.	.	.	.	.
0.00	-11.65	-4.99	-25.06	-0.89	3.57
0.00	5.50	1.20	6.40	2.52	56.00
0.00	4.59	2.31	9.05	22.50	6.12
0.00	-2.82	-0.78	-5.99	-0.31	17.00
0.00	6.40	2.30	9.10	1.88	29.25
0.00	1.00	0.30	1.40	0.33	47.19
0.00	1.00	0.30	1.40	0.33	47.19
0.00	1.00	0.30	1.40	0.33	47.19
0.00	10.31	5.31	12.36	1.24	23.12
0.00	-3.98	-2.53	-23.26	-1.39	0.03
0.00	.	.	.	.	.
0.00	1.15	0.35	0.86	0.07	3.81
0.00	3.69	0.93	6.03	1.55	32.49
0.00	24.50	9.40	30.40	6.55	37.06
0.00	6.45	2.81	12.84	1.34	2.53
0.00	73.87	8.83	29.90	53.08	411.00
0.00	3.00	1.20	5.40	1.12	30.50

References

- Agmon, T., & Lessard, D. R. (1977). Investor recognition of corporate international diversification. *Journal of Finance*, XXXII(4), 1049-1055.
- Amihud, Y., & Baruch, L. (1981). Risk Reduction as a Managerial Motive for Conglomerate Mergers. *Rand Journal of Economics*, 12, 605-618.
- Annavarjula, A., & Beldona, S. (2000). Multinationality-performance relationship: a review and reconceptualization. *International Journal of Organizational Analysis*, 8(1), 48-67.
- Baek, H. Y. (2003). Corporate Diversification and Performance: Evidence on Production Efficiency. *Journal of Multinational Financial Management*, 14, 135-139.
- Bagchi-Sen, S. (1995). *A temporal analysis of foreign direct investment in the finance, insurance, and real estate sectors* (). New York: FDI in US Producer Services Regional Studies.
- Bens, D. A., & Monahan, S. J. (2004). Disclosure quality and the excess value of diversification. *Journal of Accounting Research*, 42(4), 691.
- Berger, P., & Ofek, E. (1995). Diversification's Effect on Firm Value. *Journal of financial Economics*, 37, 39-65.

- Bodner, G. M., Tang, C., & Weintrop, J. (1999). Both Sides of Corporate Diversification: The Value Impacts of Global and Industrial Diversification, Working Paper. *John Hopkins University*.
- Brouthers, K. D., Brouthers, L. E., & Werner, S. (2003). Transaction cost-enhanced entry mode choices and firm performance. *Strategic management Journal*, 24(12), 1239.
- Campa, J. M., & Kedia, S. (2002). Explaining the diversification discount. *Journal of finance*, LVII(4), 1731-1762.
- Capar, N., & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies*, 34, 345-355.
- Casu, B., & Girardone, C. (2004). Financial conglomeration: efficiency, productivity, and strategic drive. *Applied Financial Economics*, 14(10), 687.
- Chan-Olmsted, S. M. (2005). Response to diversification strategy of global media conglomerates: a comment. *Journal of Media Economics*, 18(2), 105.
- Chen, X., Zhao, P. L., & Zhang, J. (2002). *Anova Assumptions*. Retrieved from National Library of Medicine Web Site:
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12185891&dopt=Abstract

- Chiang, Y., & Yu, T. (2005). The relationship between multinationality and the performance of Taiwan firms. *Journal of American Academy of Business*, 6(1), 130-134.
- Chkir, I., & Cosset, J. (2003). The effect of international acquisitions on firm leverage. *Journal of Financial research*, 26(4), 501-510.
- Cho, K. R., & Lee, J. (2004). Firm characteristics and MNC's intra-network knowledge sharing. *Management International Review*, 44(4), 435-455.
- Contractor, F. J., & Kundu, S. K. (2003). A Three-Stage Theory of International Expansion: The link Between Multinationality and Performance in the Service Sector. *Journal of International Business Studies*, 34, 5-6.
- Crum, R. L., Brigham, E. F., & Houston, J. F. (2005). Financial statement analysis. In J Calhoun (Ed.), *Fundamentals of International Finance* (1st ed., pp. 163-169). Mason, Ohio: South-Western.
- Das, S. R., & Uppal, R. (2004). Systematic risk and international portfolio choice. *The Journal of finance*, 59(6), 2809-2834.
- Delgado-Gomez, J. M., Ramirez-Aleson, M., & Espitia-Escuer, M. A. (2004). Intangible resources as a key factor in the internationalization of Spanish firms. *Journal of Economic Behavior & Organizations*, 53(4), 477-479.

- Deng, P. (2003). Foreign investment by multinationals from emerging countries: the case of China. *Journal of Leadership & Organizational Studies*, 10(2), 113.
- Dennis, D. J., Dennis, D. K., & Yost, K. (2002). Global Diversification, Industrial Diversification, and Firm Value. *Journal of Finance*, 62(October), 1951-1955.
- Doukas, J. A., & Kan, O. B. (2004). Excess cash flow and diversification discount. *Financial Management*, 33(2), 71-88.
- Doukas, J., & Travlos, N. G. (1988). The effect of corporate multinationalism on shareholders' wealth: evidence from international acquisitions. *Journal of Finance*, XLIII(6), 1161-1175.
- Errunza, V. R., & Senbet, L. W. (1981). The Effects of International Operations on the Market Value of the Firm: Theory and Evidence. *Journal of Finance*, 36(May), 401-402.
- Errunza, V. R., & Senbet, L. W. (1984). International Corporate Diversification, Market Valuation, and Size-Adjusted Evidence. *Journal of finance*, 39(July), 727-732.
- Fatemi, A. M. (1984). Shareholder benefits from corporate international diversification. *Journal of finance*, XXXIX(5), 1325-1344.

- Fernandez, Z., & Nieto, M. J. (2005). International strategy of small and medium-sized family businesses: some influential factors. *Family Business Review*, 18(1), 77-90.
- Fiegenbaum, A., Dovev, L., & Shoham, A. (2004). The competitive positioning of foreign MNEs in domestic markets: theoretical extensions and evidence from the Israeli market. *Management International Review*, 44(3), 261-284.
- Field, A. (2003). Exploring data. In D. Wright (Ed.), *Discovering statistics using SPSS for Windows* (pp. 49-69). London: SAGE Publications.
- Garson, G. D. (2005). *Quantitative Research in Public Administration*. Retrieved August 1, 2005, from North Carolina State University Web Site:
<http://www2.chass.ncsu.edu/garson/pa765/garson.htm>
- Gedajlovic, E., Shapiro, D. M., & Bogdan, B. (2003). Financial ownership, diversification and firm profitability in Japan. *Journal of Management & Governance*, 7(3), 315-334.
- Geringer, J. M., Tallman, S., & Olsen, D. M. (2000). Product and international diversification among Japanese multinational firms. *Strategic Management Journal*, 21(1), 51.

- Girma, S. (2003). The domestic performance of UK multinational firms. *National Institute Economic Review, July*(185), 78-92.
- Goerzen, A., & Beamish, P. W. (2003). Geographical scope and multinational enterprise performance. *Strategic Management Journal, 24*(13), 1289.
- Gomes, J., & Livdan, D. (2004). Optimal diversification reconciling theory and evidence. *Journal of Finance, 59*(2), 507-536.
- Griffin, J. M., & Karolyi, G. A. (1998). Another look at the role of the industrial structure of markets for international diversification strategies. *Journal of Financial Economics, 50*, 351-373.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate Analysis of Variance. In W. Blake (Ed.), *Multivariate Data Analysis* (5th ed., p. 332-333). Upper Saddle River, New Jersey: Prentice Hall.
- Harris, M., Kreibal, C. D., & Raviv, A. (1982). Asymmetric Information, Incentives, and Intrafirm Resource Allocation. *Management Science, 28*, 604-620.
- Henisz, J. H., & Macher, J. T. (2004). Firm and country-level trade-offs and contingencies in the evaluation of foreign investment: the semiconductor industry, 1994-2002. *Organization Science, 15*(5), 537-554.

- Heston, S. L., & Rouwenhorst, K. G. (1994). Does industrial structure explain the benefits of international diversification? *Journal of Financial Economics*, 36, 3-27.
- Jandik, T., & Makhija, A. K. (2005). Can diversification create value? evidence from the electric utility industry. *Financial Management*, 34(1), 61-93.
- Johnson, J., & Vahlne, J. E. (1990). The Mechanism of Internationalization. *International Market Review*, 7(4), 23-32.
- Kallapur, S., & Trombley, M. A. (2001). The investment opportunity set: determinant, consequences and measurement. *Managerial Finance*, 27(3), 3-16.
- Kalra, R., Stoichev, M., & Sundaram, S. (2004). Diminishing gains from international diversification. *Financial Services Review*, 13(3), 199-213.
- Katrishen, F. A., & Scordis, N. A. (1998). Economies of Scale in Services: A Study of Multinational Insurers. *Journal of International Business Studies*, 29(2), 305-308.
- Kim, H., Hoskisson, R. E., & Wan, W. P. (2004). Power dependence, diversification strategy, and performance in keiretsu member firms. *Strategic Management Journal*, 25(7), 613.

- Landskroner, Y., Ruthenburg, D., & Zaken, D. (2005).
Diversification and performance in banking. *Journal of Financial Services Research*, 27(1), 27.
- Leahy, D., & Pavelin, S. (2004). Divide and rule:
geographical diversification and the multinational
firm. *Open Economies Review*, 15(4), 363.
- Lee, J., Hall, E. H., & Rutherford, M. W. (2003). A
comparative study of U.S. and Korean firms: changes in
diversification and performance. *International Journal
of Commerce & Management*, 13(1), 11-25.
- Li, L. (2005). Is regional strategy more effective than
global strategy in the U.S. services industry?
Management International Review, 45(37), 37-57.
- Li, L., Li, D., & Dalgic, T. (2004). Internationalization
process of small and medium-sized enterprises: toward a
hybrid model of experiential learning and planning.
Management International Review, 44(1), 93.
- Li, M., & Wong, Y. Y. (2003). Diversification and economic
performance: an empirical assessment of Chinese firms.
Asia Pacific Journal of Management, 20(2), 243.
- Li, S. X., & Greenwood, R. (2004). The effect of within-
industry diversification on firm performance: synergy
creation, multi-market contact, and market
structuration. *Strategic Management Journal*, 25(12),
1131-1153.

- Low, P. Y., & Chen, K. H. (2004). Diversification and capital structure: some international evidence. *Review of Quantitative Finance and Accounting*, 23(1), 55.
- Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: the s-curve hypothesis. *Academy of Management Journal*, 47(4), 598.
- Lunney, G. R. (1970). Using analysis of variance with a dichotomous dependent variable: an imperical study. *Journal of Educational Measurement*, 7(4), 263-269.
- MA, Y. L., & Pope, N. (2003). Determinants of international insurers' participation in foreign non-life markets. *Journal of risk and Insurance*, 70(2), 235-248.
- Majocchi, A., & Zucchella, A. (2003). Internationalism and performance. *International Small Business Journal*, 21(3), 249.
- Mansi, S. A., & Reeb, D. M. (2002). Corporate Diversification: What Gets Discounted? *Journal of finance*, 57(October), 2167-2169.
- Markides, C. C., & Ittner, C. D. (1994). Shareholder benefits from corporate international diversification: evidence from U.S. international acquisitions. *Journal of International Business Studies*, Second Quarter, 343-366.

- Mathur, I., Singh, M., & Gleason, K. (2001). The evidence from Canadian firms on multinational diversification and performance. *Quarterly Review of Economics and Finance*, 14(4), 561-565.
- Mathur, I., Singh, M., & Gleason, K. (2004). Multinational diversification and corporate performance: evidence from European firms. *European Financial Management*, 10(3), 439-450.
- Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analysing data* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Mayer, M., & Whittington, R. (2003). Diversification in context: a cross-national and cross-temporal extension. *Strategic Management Journal*, 24(8), 773.
- Miller, D. J. (2004). Firms' technological resources and the performance effects of diversification: a longitudinal study. *Strategic management Journal*, 25(11), 1097-1119.
- Morck, R., & Yeung, B. (1991). Why investors value multinationality. *Journal of Business*, 64(2), 165-187.
- Nachum, L. (2004). Geographic and industrial diversification of developing country firms. *Journal of Management Studies*, 41(2), 273-275.
- Newman, P., & Sansing, R. (1993). Disclosure policies with multiple users. *Journal of Accounting Research*, 31, 92-112.

- Pehrsson, A. (2004). Strategy competence: a successful approach to international market entry. *Management Decision*, 42(5/6), 758.
- Piscitello, L. (2004). Corporate diversification, coherence and economic performance. *Industrial and Corporate Change*, 13(5), 757.
- Qian, G. (2002). Multinationality, product diversification, and profitability of emerging US small and medium-sized enterprises. *Journal of Business Venturing*, 17(6), 611-615.
- Ramaswamy, K., Mingfang, L., & Pettit, B. S. (2004). Who drives unrelated diversifications? A study of Indium manufacturing firms. *Asia Pacific Journal of Management*, 21(4), 403.
- Ramirez-Aleson, M., & Espitia-Escuer, M. A. (2001). The effect of international diversification strategy on the performance of Spanish-based firms during 1991-1995. *Management International Review*, 41(3), 291-315.
- Randoy, T., & Dibrell, C. C. (2002). How and why Norwegian MNCs commit resources abroad: beyond choice of entry mode. *Management International Review*, 42(2), 119-140.
- Reeb, D. M., Kwok, C. Y., & Baek, H. Y. (1998). Systematic risk of the multinational corporation. *Journal of International Business Studies*, 29(2), 263-279.

- Reeb, D. M., Mansi, S. A., & Allee, J. M. (2001). Firm internationalization and the cost of debt financing: evidence from non-provisional publicly traded debt. *Journal of Financial and Quantitative Analysis*, 36(3), 395-414.
- Reichert, A. K., & Wall, L. D. (2000). The potential for portfolio diversification in financial services. *Economic Review-Federal Reserve Bank of Atlanta*, 85(3), 35-51.
- Reilly, F. K., & Brown, K. C. (2000). Computation of financial ratios. In m. Reynolds (Ed.), *Investment Analysis and Portfolio Management* (6th ed., pp. 382-416). Mason, Ohio: South-Western.
- Reuer, J. J., & Leiblein, M. J. (2000). Downside risk implications of multinational and international ventures. *Academy of Management Journal*, 43(2), 203-214.
- Ricart, J. E., Enright, M. J., Ghemawat, P., Hart, S. L., & Khanna, T. (2004). New frontiers in international strategy. *Journal of International business Studies*, 35(3), 175.
- Ruefli, T. W., & Wiggins, R. R. (2003). Industry, corporate, and segment effects and business performance: a non-parametric approach. *Strategic Management Journal*, 24(9), 861.

- Rugman, A. (1979). *International Diversification and the Multinational Enterprise*. Lexington: Lexington Books, D.C. Heath.
- Saudagaran, S. M. (2002). A review of the literature on market valuation of multinational firms. *Managerial Finance*, 28(3), 5-19.
- Scharfstein, D. S., & Stein, J. C. (2000). The Dark Side of Internal Capital Markets: Divisional Rent-Seeking and Inefficient Investment. *Journal of Finance*, 55, 2537-2564.
- Seifert, C. A. (2004, January 22). *Industry Surveys- Insurance: Property-Casualty*. Retrieved July 3, 2004, from Standard & Poor's Web Site:
<http://www.netadavantage/standardandpoors.com>
- Shapiro, A. (1978). Financial structure and the cost of capital in the multinational corporation. *Journal of Financial and Quantitative Analysis*, 13, 211-266.
- Singh, M., Mathur, I., & Gleason, K. C. (2004). Governance and performance implications of diversification strategies: evidence from large U.S. firms. *The Financial Review*, 39(4), 489.
- Skaggs, B. C., & Droege, S. B. (2004). The performance effects of service diversification by manufacturing firms. *Journal of Managerial Issues*, 16(3), 396-407.

- Skipper, H. D. (1987). Protectionism in the provision of international insurance services. *Journal of Risk and Insurance*, 54(1), 55-85.
- Skipper, H. D. (1998). Insurance Operation and Management. In (Ed.), *International Insurance Management* (p. chapter 24). Boston, Mass: Orwin McGraw-Hill.
- Solnik, B. H. (1995). Why not diversify internationally rather than domestically? *Financial Analysts Journal*, 51(1), 89-94.
- Spanos, E. S., Zaralis, G., & Lioukas, S. (2004). Strategy and industry effects on profitability: evidence from Greece. *Strategic Management Journal*, 25(2), 139.
- Standard & Poor's Industry Surveys (2004). *Insurance: property-casualty industry profile* (). New York: Standard & Poor's.
- Tan, D. (2003). The limits of growth of multinational firms in foreign a market. *Managerial and Decision Economics*, 24(8), 569.
- Tanriverdi, H., & Venkatraman, N. (2005). Knowledge relatedness and the performance of multinational firms. *Strategic Management Journal*, 26(2), 97-119.
- Tegarden, L. F., Sarason, Y., & Banbury, C. (2003). Linking strategy processes to performance outcomes in dynamic environments: the need to target multiple bull's eyes. *Journal of Managerial Issues*, 15(2), 133.

- Thomas, D. E., & Eden, L. (2004). What is the shape of the multinationality-performance relationship? *Multinational business Review*, 12(1), 89.
- Tongli, L., Ping, E. J., & Chiu, W. K. (2005). International diversification and performance. *Asia Pacific Journal of Management*, 22(1), 65.
- Vannoni, D. (2004). Causes and affects of multinationality from theory to empirical analysis. *Managerial and Decision Economics*, 25(3), 163.
- Villalonga, B. (2004). Diversification discount or premium? new evidence from the business information tracking series. *Journal of Finance*, LIX(2), 479-506.
- Villalonga, B. (2004). Does diversification cause the diversification discount? *Financial Management*, 33(2), 5-27.
- Warren, C. S., Reeve, J. M., & Fess, P. E. (2005). Financial statement analysis. In J. Calhoun (Ed.), *Accounting* (21 ed., pp. 692-712). Mason, Ohio: South-Western.
- Wright, A., & McCarthy, S. (2002). Does purchasing stock in Australian multinational corporations create international portfolio diversification? *Multinational Business Review*, 10(1), 79-53.
- Yeoh, P. L. (2004). International learning: antecedents and performance applications among newly internationalizing companies in an exporting context. *International Marketing Review*, 21(4/5), 511.

- Zhao, H., & Yadong, L. (2002). Product diversification, ownership, and subsidiary performance in China's dynamic market. *Management International Review*, 42(1), 27-48.
- Zu, D., Yigang, P., & Beamish, P. W. (2004). The effect of regulative and normative distances on MNE ownership and expatriate strategies. *Management International Review*, 44(3), 285-307.

Bibliography

- Agmon, T., & Lessard, D. R. (1977). Investor recognition of corporate international diversification. *Journal of Finance*, XXXII(4), 1049-1055.
- Almeida, P. (1996). Knowledge sourcing in foreign multinationals: patient citation analysis in the U.S. semiconductor industry. *Strategic Management Journal*, 17, 155-165.
- Amihud, Y., & Baruch, L. (1981). Risk Reduction as a Managerial Motive for Conglomerate Mergers. *Rand Journal of Economics*, 12, 605-618.
- Amihud, Y., & Lev, B. (1999). Does corporate ownership structure affect its strategy towards diversification? *Strategic Management Journal*, 20, 1063-1069.
- Annavarjula, A., & Beldona, S. (2000). Multinationality-performance relationship: a review and reconceptualization. *International Journal of Organizational Analysis*, 8(1), 48-67.
- Apostolou, B. A., Hassell, J. M., & Webber, S. A. (2001). Management fraud risks factors: Ratings by forensic experts. *The CPA Journal*, 71(10), 48-52.
- Arnold, D. J., & Quelch, J. A. (1998). New strategies in emerging markets. *Sloan Management Review*, 40(1), 7-20.
- Baek, H. Y. (2003). Corporate Diversification and Performance: Evidence on Production Efficiency. *Journal of Multinational Financial Management*, 14, 135-139.

- Bagchi-Sen, S. (1995). *A temporal analysis of foreign direct investment in the finance, insurance, and real estate sectors* (). New York: FDI in US Producer Services Regional Studies.
- Banham, R. (2001). Sunk by options. *Journal of Accountancy*, 192(4), 443-465.
- Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*, 17, 151-166.
- Bens, D. A., & Monahan, S. J. (2004). Disclosure quality and the excess value of diversification. *Journal of Accounting Research*, 42(4), 691.
- Berger, P., & Ofek, E. (1995). Diversification's Effect on Firm Value. *Journal of financial Economics*, 37, 39-65.
- Bodner, G. M., Tang, C., & Weintrop, J. (1999). Both Sides of Corporate Diversification: The Value Impacts of Global and Industrial Diversification, Working Paper. *John Hopkins University*.
- Brouthers, K. D., Brouthers, L. E., & Werner, S. (2003). Transaction cost-enhanced entry mode choices and firm performance. *Strategic management Journal*, 24(12), 1239.
- Burgman, T. (1996). An imperial examination of multinational capital structure. *Journal of International Business Studies*, 27, 553-570.

- Campa, J. M., & Kedia, S. (2002). Explaining the diversification discount. *Journal of finance*, LVII(4), 1731-1762.
- Capar, N., & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies*, 34, 345-355.
- Carpenter, M. A., & Frederickson, J. W. (2001). Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of Management Journal*, 44, 533-546.
- Casu, B., & Girardone, C. (2004). Financial conglomeration: efficiency, productivity, and strategic drive. *Applied Financial Economics*, 14(10), 687.
- Chan-Olmsted, S. M. (2005). Response to diversification strategy of global media conglomerates: a comment. *Journal of Media Economics*, 18(2), 105.
- Chen, C., Cheng, J., Kim, H., & Kim, J. (1997). An investigation of the relationship between international activities and capital structure. *Journal of International Business Studies*, 28, 563-577.
- Chen, X., Zhao, P. L., & Zhang, J. (2002). *Anova Assumptions*. Retrieved from National Library of Medicine Web Site:
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12185891&dopt=Abstract

- Chiang, Y., & Yu, T. (2005). The relationship between multinationality and the performance of Taiwan firms. *Journal of American Academy of Business*, 6(1), 130-134.
- Chkir, I., & Cosset, J. (2003). The effect of international acquisitions on firm leverage. *Journal of Financial research*, 26(4), 501-510.
- Cho, K. R., & Lee, J. (2004). Firm characteristics and MNC's intra-network knowledge sharing. *Management International Review*, 44(4), 435-455.
- Contractor, F. J., & Kundu, S. K. (2003). A Three-Stage Theory of International Expansion: The link Between Multinationality and Performance in the Service Sector. *Journal of International Business Studies*, 34, 5-6.
- Crum, R. L., Brigham, E. F., & Houston, J. F. (2005). Financial statement analysis. In J Calhoun (Ed.), *Fundamentals of International Finance* (1st ed., pp. 163-169). Mason, Ohio: South-Western.
- Daniels, J. D., & Bracker, J. (1989). Profit performance: Do foreign operations make a difference? *Management International Review*, 29(1), 46-56.
- Das, S. R., & Uppal, R. (2004). Systematic risk and international portfolio choice. *The Journal of finance*, 59(6), 2809-2834.

- Delgado-Gomez, J. M., Ramirez-Aleson, M., & Espitia-Escuer, M. A. (2004). Intangible resources as a key factor in the internationalization of Spanish firms. *Journal of Economic Behavior & Organizations*, 53(4), 477-479.
- Delios, A., & Beamish, P. W. (2001). Survival and profitability: the roles of experience and intangible assets in foreign subsidiary performance. *Academy of Management Journal*, 19, 119-143.
- Deng, P. (2003). Foreign investment by multinationals from emerging countries: the case of China. *Journal of Leadership & Organizational Studies*, 10(2), 113.
- Dennis, D. J., Dennis, D. K., & Yost, K. (2002). Global Diversification, Industrial Diversification, and Firm Value. *Journal of Finance*, 62(October), 1951-1955.
- Doukas, J. A., & Kan, O. B. (2004). Excess cash flow and diversification discount. *Financial Management*, 33(2), 71-88.
- Doukas, J., & Travlos, N. G. (1988). The effect of corporate multinationalism on shareholders' wealth: evidence from international acquisitions. *Journal of Finance*, XLIII(6), 1161-1175.
- Durnev, A., Morck, R., & Yeung, B. (2004). Value enhancing capital budgeting and firm-specific in stock returns variation. *Journal of Finance*, 59(1), 65-105.

- Eilifsen, A., Knechel, W. R., & Wallage, P. (2001).
Application of the business risk application model.
Accounting Horizons, 15(3), 193-207.
- Errunza, V. R., & Senbet, L. W. (1981). The Effects of
International Operations on the Market Value of the
Firm: Theory and Evidence. *Journal of Finance*, 36(May),
401-402.
- Errunza, V. R., & Senbet, L. W. (1984). International
Corporate Diversification, Market Valuation, and Size-
Adjusted Evidence. *Journal of finance*, 39(July), 727-
732.
- Fatemi, A. M. (1984). Shareholder benefits from corporate
international diversification. *Journal of finance*,
XXXIX(5), 1325-1344.
- Fauver, L., Houston, J., & Naranjo, A. (2000). Firm level
evidence on the value of international diversification.
Working paper, University of Florida.
- Fernandez, Z., & Nieto, M. J. (2005). International strategy
of small and medium-sized family businesses: some
influential factors. *Family Business Review*, 18(1), 77-
90.
- Fiegenbaum, A., Dovev, L., & Shoham, A. (2004). The
competitive positioning of foreign MNEs in domestic
markets: theoretical extensions and evidence from the
Israeli market. *Management International Review*, 44(3),
261-284.

- Field, A. (2003). Exploring data. In D. Wright (Ed.), *Discovering statistics using SPSS for Windows* (pp. 49-69). London: SAGE Publications.
- Garson, G. D. (2005). *Quantitative Research in Public Administration*. Retrieved August 1, 2005, from North Carolina State University Web Site:
<http://www2.chass.ncsu.edu/garson/pa765/garson.htm>
- Gedajlovic, E., Shapiro, D. M., & Bogdan, B. (2003). Financial ownership, diversification and firm profitability in Japan. *Journal of Management & Governance*, 7(3), 315-334.
- Geringer, J. M., Tallman, S., & Olsen, D. M. (2000). Product and international diversification among Japanese multinational firms. *Strategic Management Journal*, 21(1), 51.
- Girma, S. (2003). The domestic performance of UK multinational firms. *National Institute Economic Review*, July(185), 78-92.
- Goerzen, A., & Beamish, P. W. (2003). Geographical scope and multinational enterprise performance. *Strategic Management Journal*, 24(13), 1289.
- Gomes, J., & Livdan, D. (2004). Optimal diversification reconciling theory and evidence. *Journal of Finance*, 59(2), 507-536.

- Gomes, L. K., & Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationals and performance. *Journal of International Business Studies*, 30(1), 173-188.
- Gomex, M. L., & Palich, L. (1997). Cultural diversity and the performance of multinational firms. *Journal of International Business Studies*, 28, 309-334.
- Graham, J., Lemmon, M., & Wolf, J. (2002). Does corporate diversification destroy value? *Journal of Finance*, 57, 695-720.
- Griffin, J. M., & Karolyi, G. A. (1998). Another look at the role of the industrial structure of markets for international diversification strategies. *Journal of Financial Economics*, 50, 351-373.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate Analysis of Variance. In W. Blake (Ed.), *Multivariate Data Analysis* (5th ed., p. 332-333). Upper Saddle River, New Jersey: Prentice Hall.
- Han, K., Lee, S., & Suk, D. (1998). Multinationality and firm performance. *Multinational Business Review*, 6(2), 63-70.
- Harris, M., Kreibal, C. D., & Raviv, A. (1982). Asymmetric Information, Incentives, and Intrafirm Resource Allocation. *Management Science*, 28, 604-620.

- Henisz, J. H., & Macher, J. T. (2004). Firm and country-level trade-offs and contingencies in the evaluation of foreign investment: the semiconductor industry, 1994-2002. *Organization Science*, 15(5), 537-554.
- Heston, S. L., & Rouwenhorst, K. G. (1994). Does industrial structure explain the benefits of international diversification? *Journal of Financial Economics*, 36, 3-27.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43, 249-267.
- Hughes, L., Logue, D., & Sweeney, R. (1975). Corporate international diversification and market assigned measures of risk and diversification. *Journal of Financial and Quantitative Analysis*, 10, 627-637.
- Jandik, T., & Makhija, A. K. (2005). Can diversification create value? evidence from the electric utility industry. *Financial Management*, 34(1), 61-93.
- Johnson, J., & Vahlne, J. E. (1990). The Mechanism of Internationalization. *International Market Review*, 7(4), 23-32.
- Jung, Y. (1991). Multinationality and profitability. *Journal of Business Research*, 23, 179-187.
- Kallapur, S., & Trombley, M. A. (2001). The investment opportunity set: determinant, consequences and measurement. *Managerial Finance*, 27(3), 3-16.

- Kalra, R., Stoichev, M., & Sundaram, S. (2004). Diminishing gains from international diversification. *Financial Services Review, 13*(3), 199-213.
- Katobe, M., Srinivasan, S. S., & Aulakh, P. S. (2002). Multinationality and firm performance: the moderating role of R&D and marketing capabilities. *Journal of International Business Studies, 33*(1), 70-98.
- Katrishen, F. A., & Scordis, N. A. (1998). Economies of Scale in Services: A Study of Multinational Insurers. *Journal of International Business Studies, 29*(2), 305-308.
- Khanna, T., & Palepu, K. (2000). In group affiliation profitability in emerging markets: An analysis of Indian diversified business groups. *Journal of Finance, 55*, 869-891.
- Khanna, T., & Palepu, K. (2000). The future of business groups in emerging markets. *Academy of Management Journal, 43*, 268-285.
- Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal, 22*, 45-74.
- Kim, H., Hoskisson, R. E., & Wan, W. P. (2004). Power dependence, diversification strategy, and performance in keiretsu member firms. *Strategic Management Journal, 25*(7), 613.

- Kim, W. C., Hwang, P., & Burgers, W. P. (1989). Global diversification strategy and corporate profit performance. *Strategic Management Journal*, 10(1), 45-57.
- Lamont, O., & Polk, C. (2001). The diversification discount; Cash flows versus returns. *Journal of Finance*, 56, 1693-1721.
- Landskroner, Y., Ruthenburg, D., & Zaken, D. (2005). Diversification and performance in banking. *Journal of Financial Services Research*, 27(1), 27.
- Leahy, D., & Pavelin, S. (2004). Divide and rule: geographical diversification and the multinational firm. *Open Economies Review*, 15(4), 363.
- Lee, C., Lee, K., & Pennings, J. (2001). Internal capabilities, external networks, and performance. *Strategic Management Journal*, 22, 615-640.
- Lee, J., Hall, E. H., & Rutherford, M. W. (2003). A comparative study of U.S. and Korean firms: changes in diversification and performance. *International Journal of Commerce & Management*, 13(1), 11-25.
- Li, L. (2005). Is regional strategy more effective than global strategy in the U.S. services industry? *Management International Review*, 45(37), 37-57.

- Li, L., Li, D., & Dalgic, T. (2004). Internationalization process of small and medium-sized enterprises: toward a hybrid model of experiential learning and planning. *Management International Review*, 44(1), 93.
- Li, M., & Wong, Y. Y. (2003). Diversification and economic performance: an empirical assessment of Chinese firms. *Asia Pacific Journal of Management*, 20(2), 243.
- Li, S. X., & Greenwood, R. (2004). The effect of within-industry diversification on firm performance: synergy creation, multi-market contact, and market structuration. *Strategic Management Journal*, 25(12), 1131-1153.
- Low, P. Y., & Chen, K. H. (2004). Diversification and capital structure: some international evidence. *Review of Quantitative Finance and Accounting*, 23(1), 55.
- Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: the s-curve hypothesis. *Academy of Management Journal*, 47(4), 598.
- Lunney, G. R. (1970). Using analysis of variance with a dichotomous dependent variable: an empirical study. *Journal of Educational Measurement*, 7(4), 263-269.
- Luo, Y. (2000). Dynamic capabilities in international expansion. *Journal of World Business*, 35, 355-378.
- MA, Y. L., & Pope, N. (2003). Determinants of international insurers' participation in foreign non-life markets. *Journal of risk and Insurance*, 70(2), 235-248.

- Majocchi, A., & Zucchella, A. (2003). Internationalism and performance. *International Small Business Journal*, 21(3), 249.
- Maksimovic, V., & Phillips, G. (2002). Do conglomerate firms allocate resources inefficiently across industries? *Journal of Finance*, 57, 721-767.
- Mansi, S. A., & Reeb, D. M. (2002). Corporate Diversification: What Gets Discounted? *Journal of finance*, 57(October), 2167-2169.
- Markides, C. C., & Ittner, C. D. (1994). Shareholder benefits from corporate international diversification: evidence from U.S. international acquisitions. *Journal of International Business Studies*, Second Quarter, 343-366.
- Martin, J. D., & Sayrak, A. (2003). Corporate diversification and shareholder value. *Journal of Corporate Finance*, 9, 37-57.
- Mathur, I., Singh, M., & Gleason, K. (2001). The evidence from Canadian firms on multinational diversification and performance. *Quarterly Review of Economics and Finance*, 14(4), 561-565.
- Mathur, I., Singh, M., & Gleason, K. (2004). Multinational diversification and corporate performance: evidence from European firms. *European Financial Management*, 10(3), 439-450.

- Matsusaka, J. (2001). Corporate diversification, value maximization, and organizational capabilities. *Journal of Business*, 74, 409-431.
- Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analyzing data* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Mayer, M., & Whittington, R. (2003). Diversification in context: a cross-national and cross-temporal extension. *Strategic Management Journal*, 24(8), 773.
- Miller, D. J. (2004). Firms' technological resources and the performance effects of diversification: a longitudinal study. *Strategic management Journal*, 25(11), 1097-1119.
- Moon, H. C., & Roehl, T. W. (2001). Unconventional foreign direct investment. *International Business Review*, 10, 197-215.
- Morck, R., & Yeung, B. (1991). Why investors value multinationality. *Journal of Business*, 64(2), 165-187.
- Moshirian, F. (2001). International investment in financial services. *Journal of Banking and Finance*, 25, 317-337.
- Nachum, L. (2004). Geographic and industrial diversification of developing country firms. *Journal of Management Studies*, 41(2), 273-275.
- Newman, P., & Sansing, R. (1993). Disclosure policies with multiple users. *Journal of Accounting Research*, 31, 92-112.

- Pehrsson, A. (2004). Strategy competence: a successful approach to international market entry. *Management Decision*, 42(5/6), 758.
- Piscitello, L. (2004). Corporate diversification, coherence and economic performance. *Industrial and Corporate Change*, 13(5), 757.
- Qian, G. (2002). Multinationality, product diversification, and profitability of emerging US small and medium-sized enterprises. *Journal of Business Venturing*, 17(6), 611-615.
- Rajin, R., Servaes, H., & Zingales, L. (2000). The cost of diversity: the diversification discount and inefficient investment. *Journal of finance*, 60, 35-80.
- Ramaswamy, K., Mingfang, L., & Pettit, B. S. (2004). Who drives unrelated diversifications? A study of Indian manufacturing firms. *Asia Pacific Journal of Management*, 21(4), 403.
- Ramirez-Aleson, M., & Espitia-Escuer, M. A. (2001). The effect of international diversification strategy on the performance of Spanish-based firms during 1991-1995. *Management International Review*, 41(3), 291-315.
- Randoy, T., & Dibrell, C. C. (2002). How and why Norwegian MNCs commit resources abroad: beyond choice of entry mode. *Management International Review*, 42(2), 119-140.

- Reeb, D. M., Kwok, C. Y., & Baek, H. Y. (1998). Systematic risk of the multinational corporation. *Journal of International Business Studies*, 29(2), 263-279.
- Reeb, D. M., Mansi, S. A., & Allee, J. M. (2001). Firm internationalization and the cost of debt financing: evidence from non-provisional publicly traded debt. *Journal of Financial and Quantitative Analysis*, 36(3), 395-414.
- Reichert, A. K., & Wall, L. D. (2000). The potential for portfolio diversification in financial services. *Economic Review-Federal Reserve Bank of Atlanta*, 85(3), 35-51.
- Reilly, F. K., & Brown, K. C. (2000). Computation of financial ratios. In m. Reynolds (Ed.), *Investment Analysis and Portfolio Management* (6th ed., pp. 382-416). Mason, Ohio: South-Western.
- Reuer, J. J., & Leiblein, M. J. (2000). Downside risk implications of multinational and international ventures. *Academy of Management Journal*, 43(2), 203-214.
- Ricart, J. E., Enright, M. J., Ghemawat, P., Hart, S. L., & Khanna, T. (2004). New frontiers in international strategy. *Journal of International business Studies*, 35(3), 175.

- Rowland, Patrick, & Tesar, L. (1998). Multinationals and the gains from international diversification. *National Bureau of Economic Research Working Paper, 6733*.
- Ruefli, T. W., & Wiggins, R. R. (2003). Industry, corporate, and segment effects and business performance: a non-parametric approach. *Strategic Management Journal, 24(9)*, 861.
- Rugman, A. (1979). *International Diversification and the Multinational Enterprise*. Lexington: Lexington Books, D.C. Heath.
- Saudagaran, S. M. (2002). A review of the literature on market valuation of multinational firms. *Managerial Finance, 28(3)*, 5-19.
- Scharfstein, D. S., & Stein, J. C. (2000). The Dark Side of Internal Capital Markets: Divisional Rent-Seeking and Inefficient Investment. *Journal of Finance, 55*, 2537-2564.
- Schoar, A. S. (2002). Effects of corporate diversification on productivity. *Journal of finance, 57*, 2379-2403.
- Seifert, C. A. (2004, January 22). *Industry Surveys- Insurance: Property-Casualty*. Retrieved July 3, 2004, from Standard & Poor's Web Site:
<http://www.netadavantage/standardandpoors.com>
- Shapiro, A. (1978). Financial structure and the cost of capital in the multinational corporation. *Journal of Financial and Quantitative Analysis, 13*, 211-266.

- Singh, M., Mathur, I., & Gleason, K. C. (2004). Governance and performance implications of diversification strategies: evidence from large U.S. firms. *The Financial Review*, 39(4), 489.
- Skaggs, B. C., & Droege, S. B. (2004). The performance effects of service diversification by manufacturing firms. *Journal of Managerial Issues*, 16(3), 396-407.
- Skipper, H. D. (1987). Protectionism in the provision of international insurance services. *Journal of Risk and Insurance*, 54(1), 55-85.
- Skipper, H. D. (1998). Insurance Operation and Management. In (Ed.), *International Insurance Management* (p. chapter 24). Boston, Mass: Orwin McGraw-Hill.
- Solnik, B. H. (1995). Why not diversify internationally rather than domestically? *Financial Analysts Journal*, 51(1), 89-94.
- Spanos, E. S., Zaralis, G., & Lioukas, S. (2004). Strategy and industry effects on profitability: evidence from Greece. *Strategic Management Journal*, 25(2), 139.
- Standard & Poor's Industry Surveys (2004). *Insurance: property-casualty industry profile* (). New York: Standard & Poor's.
- Stulz, R. (2000). Financial structure, corporate finance, and economic growth. *Working paper Ohio State University*.

- Tan, D. (2003). The limits of growth of multinational firms in foreign a market. *Managerial and Decision Economics*, 24(8), 569.
- Tanriverdi, H., & Venkatraman, N. (2005). Knowledge relatedness and the performance of multinational firms. *Strategic Management Journal*, 26(2), 97-119.
- Tegarden, L. F., Sarason, Y., & Banbury, C. (2003). Linking strategy processes to performance outcomes in dynamic environments: the need to target multiple bull's eyes. *Journal of Managerial Issues*, 15(2), 133.
- Thomas, D. E., & Eden, L. (2004). What is the shape of the multinationality-performance relationship? *Multinational business Review*, 12(1), 89.
- Tongli, L., Ping, E. J., & Chiu, W. K. (2005). International diversification and performance. *Asia Pacific Journal of Management*, 22(1), 65.
- Uhlenbruck, K., & De Castro, J. (2000). Foreign in eastern and central Europe: Outcomes of privatization in transitional economies. *Academy of Management Journal*, 43, 381-402.
- Vannoni, D. (2004). Causes and affects of multinationality from theory to empirical analysis. *Managerial and Decision Economics*, 25(3), 163.
- Villalonga, B. (2004). Diversification discount or premium? new evidence from the business information tracking series. *Journal of Finance*, LIX(2), 479-506.

- Villalonga, B. (2004). Does diversification cause the diversification discount? *Financial Management*, 33(2), 5-27.
- Warren, C. S., Reeve, J. M., & Fess, P. E. (2005). Financial statement analysis. In J. Calhoun (Ed.), *Accounting* (21 ed., pp. 692-712). Mason, Ohio: South-Western.
- Wright, A., & McCarthy, S. (2002). Does purchasing stock in Australian multinational corporations create international portfolio diversification? *Multinational Business Review*, 10(1), 79-53.
- Yeoh, P. L. (2004). International learning: antecedents and performance applications among newly internationalizing companies in an exporting context. *International Marketing Review*, 21(4/5), 511.
- Zhao, H., & Yadong, L. (2002). Product diversification, ownership, and subsidiary performance in China's dynamic market. *Management International Review*, 42(1), 27-48.
- Zimmerman, A. (1999). Effects of trade barrier perception on international services trade: A study of insurance executives. *Journal of Global Marketing*, 12, 79-98.
- Zu, D., Yigang, P., & Beamish, P. W. (2004). The effect of regulative and normative distances on MNE ownership and expatriate strategies. *Management International Review*, 44(3), 285-307.