The Role of Corporate Controls, Size, and Corporate Headquarters in the Effect of Corporate-Level Strategy on Business-Level Strategy and Business-Level Performance

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A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Philosophy

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THE ROLE OF CORPORATE CONTROLS, SIZE, AND CORPORATE HEADQUARTERS IN THE EFFECT OF CORPORATE-LEVEL STRATEGY ON BUSINESS-LEVEL STRATEGY AND BUSINESS-LEVEL PERFORMANCE

(Thesis Format: Monograph)

by

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A thesis submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT

The aim of this thesis is to re-examine the relationship between corporate strategy and business unit strategy. Past research has often failed to deconstruct the notion of corporate effects to properly assess the role of corporate strategy in the behaviour and performance of business units. As a result, conflicting findings have led to researchers disagreeing on the significance of corporate effects and corporate strategy. Through this thesis, I have taken steps to clarify the misunderstood significance of corporate strategy to business-unit-level strategy and performance. This dissertation has drawn on the literature from agency theory, information processing theory, and upper echelons theory, as well as the economic logic that underlies value creation in corporations. Through this dissertation, I deconstruct the notion of corporate effects to theoretically redefine the role of controls as the mediator between corporate strategy and business unit strategy to respond to the research question, “How does corporate strategy influence business unit performance?” In addition, I deconstruct business unit effects to examine the impact of business strategy on business unit performance. Finally, I consider business unit strategy to be an exogenous factor.

To explore the effect of corporate strategy on business-unit-level strategy and performance, I conducted a quantitative analysis of data corresponding to over 2,500 business units from 193 corporations. Building on a proprietary dataset made accessible for this research, I tested the theoretical model for this thesis using previously collected data from each of the studied business units and the corporate headquarters of their corporate parents. The dataset comprises objective measures of business unit financial performance, objective characteristics of corporate headquarters and structure, and more subjective and behavioural data based on surveys
that focus on control mechanisms to which business units are subject and the strategic orientation
they pursue. The quantitative analysis was undertaken after performing steps for validation of the
measures used and in compliance with measures and techniques used in past research.

I find support in my analysis for a partial mediating role of controls in the relationship
between corporate strategy and business-unit-level strategy. The results from the analysis
demonstrate that the strategic orientations of business units are endogenous to the corporate
strategy through the mechanism of controls to which each business unit is subject. I also find
support for the moderating effect of certain factors at the corporate level, such as size of
corporate headquarters, number of business units managed by the corporation, and the corporate
CEO’s background in the relationship between corporate strategy and controls.

The findings of this thesis re-establish the role of corporate strategy in our understanding
of business-unit-level strategy and performance. Contrary to past research, I have theorized
business-unit-level strategy to be endogenous to corporate strategy. I have also developed the
controls construct and have measured it for each business unit studied in order to test my
theoretical model. My findings in this thesis take a step towards enhancing our understanding of
how corporate strategy influences strategy and performance at the business unit level.

**Keywords:** Corporate Strategy, Business Unit Strategy, Corporate Controls, Business Unit
Performance
DEDICATIONS

To my family

My wife, Isar Kiani, without whom I feel incomplete;

My father, Dr. Hossein Seifzadeh, my hero in life and my inspiration to achieve;

My mother, Shamsafagh Yavari, my very first teacher of love and life;

My sister, Shamim Seifzadeh, from whom I learn resilience;

My grandfather, Dr. Fathollah Yavari, my symbol of determination;

…and my little Soren, who brings me joy every day.
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Success in the completion of a PhD can prove a difficult burden without the support of others. During my years at Ivey, I have found myself fortunate to benefit from the support of so many wonderful individuals, without whom this academic journey would not have been the rewarding experience I cherish today.

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My deep gratitude goes to the numerous Ivey faculty members who supported me through the years of my PhD studies. I am especially grateful to Dr. Tima Bansal, who had an undeniable role in giving me the opportunity to be a part of Ivey’s community, and to Dr. Paul Beamish, whose support throughout the years gave me confidence and strengthened my sense of
community. I also must show my appreciation to Dr. David Loree, Dr. Chris Higgins, Dr. Deborah Compeau, and Dr. June Cotte, who enriched my Ivey experience through their PhD seminars.

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The PhD program at Ivey also allowed me to form relationships that have gone beyond simple friendships. My two dearest friends and brothers, Samer Abdelnour and Dr. Akbar Saeed, provided me with a level of unconditional support that was beyond my expectations. In particular, I greatly benefited from Samer’s valuable insights on research and many other aspects of social life during our countless conversations.

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Without family, my PhD experience would have not been as successful and meaningful to me as it is today. I cannot thank my wonderful parents, Dr. Hossein Seifzadeh and Shamsafagh Yavari, enough for their unconditional support and constant motivation. Without
their positivity, I would not have been able to overcome many of the outside challenges I faced during my studies. Also, my amazing sister, Shamim Seifzadeh, has provided me with inspiration to push harder and to try to achieve what seems impossible. Her selflessness and constructive attitude along with her unconditional love have never left my mind. I have also been fortunate to have the world’s most wonderful extended family. My wife’s parents, Dr. Reza Kiani and Dr. Fariba Latifi, have shown me a level of support that is difficult to imagine. Not only were they instrumental in my transition to the field of management, but they provided me and my family with peace of mind and guidance through their support and wisdom. I should also thank my wife’s wonderful sister, Azadeh Kiani, who went beyond her abilities and resources, particularly during my first year of studies, to ensure that my transition to Canada would be as pleasant as possible. Her hospitality during my frequent visits to Toronto gave me the feeling of having a home.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

During the past two centuries, the world of business has witnessed a gradual change where the domination of small and family-owned businesses has been replaced by corporations with multiple businesses in different product markets. The corporations that have evolved follow different logics that justify their operations in multiple businesses. This trend has become even more dominant during the past century, and in some markets the majority of firms pursue diversification of one kind or another (Rumelt, 1974). While the trend of diversification is more evident in some geographical locations, it has gradually become a trend in most countries.

During the latter half of the 20th century, diversification as a strategy grew significantly in the majority of industrialized countries (Hoskisson and Hitt, 1990). For instance, from 1950 to 1974, the percentage of U.S. firms on the Fortune 500 list that pursued diversification strategies grew from 30.1% to 63% (Rumelt, 1974, 1982). Studying a sample of 44,288 U.S. firms between 1984 and 1997, Denis, Denis, and Yost (2002) reported an increase in the rate of diversification of 29% to 45%. Firms that diversified achieved this objective through their own organic growth or through mergers and acquisitions — a trend that became more dominant during the last quarter of the past century (Porter, 1987). Despite the reversal trend of deconglomeration and divestiture during the 1970s and 1980s (Hoskisson and Turk, 1990; Ravencraft and Scherer, 1987), diversification still remains the dominant logic among most large businesses in the industrialized world (Hoskisson and Hitt, 1990; Denis, Denis, and Yost, 2002).
The aforementioned trends in diversification have also resulted in significant changes to the traditional ways in which businesses are managed. Unlike in the past, when a firm was operating in a single product market, corporations are now facing issues that arise from multiple product markets that have industry-specific idiosyncrasies. From an agency theory perspective, complexities inherent in the separation of ownership and control have become even more complicated as multiple layers of principals have emerged due to diversification at the corporate level.

The main question in corporations has become, “How can the corporation ensure that its business units operate in a manner that creates the highest value for the corporation and its shareholders as a whole?” To respond to this question, researchers have conducted extensive conceptual and empirical research, and corporations have designed and employed various mechanisms to realize the economic expectations associated with the logic of pursuing a corporate-level strategy of different levels of diversification.

Reviewing the literature that focuses on corporate strategy, I was intrigued to see whether and how the issue of corporate strategy would be addressed in practical terms within corporations. My main interest was drawn to instances where business units failed to deliver the value that was expected by their corporate parents — a phenomenon that requires an examination of the control mechanisms put in place by corporate headquarters.

While many of the institutions that face financial challenges are diversified, I found that there was little attention placed on the issue of corporate controls and the corporate parent–business unit relationship. There is very little research by scholars and practitioners that addresses the issue of corporate controls within the context of corporate strategy from any
dimension other than that of CEO compensation. Instead, most emphasis has been placed on business unit CEOs and strategies pursued by business units. This has inspired me to conduct research on the role that corporate controls play in the creation of value (i.e., exceeding the aggregate performance of business units, if they operate independent from the corporation) in the relationship between corporations and their business units.

Most past research focusing on the corporate parent–business unit relationship has limited itself to the broad influence of corporate effects (e.g., McGahan and Porter, 1997) and business unit effects. In reality, corporate effects include corporate strategy, corporate structure, corporate controls and corporate rewards. What has not been considered in the research on corporate effects is the possibility of countervailing, neutralizing, or negating effects among strategy, structure, controls, and rewards at the corporate level. In addition, this research has used business-unit-level effects without disaggregating at least the effect of business-unit-level strategy. Moreover, little has been done to understand the relationship between strategy at the corporate parent and business unit levels.

The aim of this dissertation is to unpack from the concept of corporate effects the impact of corporate strategy and corporate controls; to unpack business unit strategy from the concept of business effects; and to re-examine the relationship between corporate strategy and business unit strategy and, ultimately, business unit performance. Therefore, this dissertation makes an attempt to provide a more clear understanding of the antecedents of business unit performance. My review of the existing literature has led me to conclude that the notion of corporate controls has largely been understudied in the performance of business units. The objective of this dissertation is to re-establish the relationship between corporate strategy and business strategy through theorizing the role of corporate controls as a mediating factor. In doing so, this dissertation
challenges business-unit-level strategy as an exogenous variable and emphasizes the influence of corporate strategy on the performance of business units in diversified firms. Consequently, this dissertation challenges conclusions drawn from previous empirical findings on the basis of their ambiguity in defining corporate effects and their theoretical representation of business unit effects in the presence of a corporate parent.

1.2 Overview

The influences of corporate-level factors or corporate effects on the performance of business units and corporations have generated much interest among researchers during the past several decades. However, much of past literature has fallen short of deconstructing corporate effects and understanding their constituent parts and roles. This has led research findings to examine the relationship between corporate effects and various business unit levels and corporate-level factors.

In this dissertation, I aim to take a step towards the deconstruction of corporate effects and business unit effects. The broad definitions that exist for corporate effects often omit that different constituents of corporate effects may counter one another and that their misalignment may have an attenuating influence on the measurement of corporate effects. As a result, findings based on corporate effects may lead to misinterpretations based on small observed effects. Therefore, I make the attempt to avoid such misinterpretations and focus on corporate strategy and corporate controls as two constituents of the corporate effects variable.

My review of past literature on corporate strategy points to yet another shortcoming. Similar to corporate-level analysis, business-level analysis suffers from undermining the role of
business unit strategy and instead focusing on business or segment effects when comparing corporate-level and business-unit-level influences on the performance of business units (e.g., McGahan and Porter 1997). Consequently, a solid understanding of the influence of business unit strategy compared to corporate strategy on business unit performance still remains out of reach. In this dissertation, I build on the existing literature to distinguish business unit strategy as a constituent of business effects and to measure its influence on business unit performance.

Corporate strategy has been considered an important research topic in the area of strategic management, and its relationship to performance has been a focus of interest for academics and practitioners alike (Palepu, 1985). When focusing on corporate strategy, most researchers have tended to show a higher degree of interest in corporate diversification. Much of this interest has been generated as the result of the observation that many American businesses have engaged in multiple lines of business (Baysinger and Hoskisson, 1989; Ravencraft and Scherer, 1987). Some researchers have found the tendency of organizations to engage in multiple lines of business to have interesting practical and theoretical implications (Michel and Hambrick, 1992). The interest in corporate strategy and corporate effects has resulted in many researchers investigating the influence of corporate effects and corporate strategy on the performance of single business units as well as corporations’ overall performance. However, the findings of past research in this area have generally demonstrated conflicting results. The range of propositions and findings from previous research includes corporate effects being a significant determinant of performance in business units (Rumelt, 1974; Bowman and Helfat, 2001), and corporate effects having little to no significant influence at all (Rumelt, 1982; McGahan and Porter, 1997). As a result of these findings, corporate influences on the performance of business units remains a controversial area for research and one in which very little consensus among researchers exists.
Past research has mentioned methodological differences as the significant contributing factor to the existing differences in findings that have related corporate strategy and/or corporate effects to business unit performance (Bowman and Helfat, 2003). Also, little has been done to provide a better understanding of the differences that exist between business unit performance and overall corporate performance, either theoretically or in practice. This has resulted in differences in the conceptual perception of performance in strategic management research.

Another shortcoming in past research on corporate effects/strategy has been a lack of depth in studying the mechanism through which corporate effects/strategy gets translated into performance — either corporate performance or business unit performance. Most research that has investigated the relationship between corporate-level factors and performance (e.g., Gort, 1962; Arnould, 1969; Rumelt, 1974, 1982; McGahan and Porter, 1997, 1999) has done little to unpack corporate strategy from corporate effects and to investigate the link between corporate strategy and business-level strategy. Instead, much attention has been focused on how corporate-level effects lead to business-level or corporate-level performance. As a result, corporate strategy has remained overlooked and, when referred to, business-level strategy and corporate-level strategy has been implicitly assumed as mutually independent, with business-level effects and strategy treated as an exogenous variable.

Research analyzing studies using variance decomposition techniques (Bowman and Helfat, 2001) has also fallen short of explaining the antecedents of performance when corporate effects exist. In addition, and more importantly, research has fallen short of unpacking corporate effects, leading to a theoretical omission of the causal relationship between corporate strategy and business-level strategy (e.g., McGahan and Porter, 1997; Rumelt, 1982). Consequently, while past findings have attempted to understand the significance of the role of corporate effects
in business unit and corporate-level performance, the effect of corporate strategy on business unit performance still remains underappreciated.

Drawing on literature from agency theory (Jensen and Meckling, 1976), the upper echelons perspective (Michel and Hambrick, 1994), and the notion of information processing capacity (Hoskisson and Hitt, 1990), this dissertation aims to unpack what has been previously studied as corporate effects and shed new light on the link between corporate strategy and the performance of business units. In particular, this dissertation attempts to provide an answer to the following research question, “How does corporate strategy influence business unit performance?” In doing so, a reassessment of the relationship between corporate strategy and business strategy is undertaken. An important contribution of this dissertation is to unpack what is commonly referred to as “corporate effects” and emphasize the role of controls from corporate headquarters on strategic orientation at the business unit level. The findings of this dissertation address the constraints that are associated with corporate strategy and how such constraints influence corporate controls that are exercised and, subsequently, the strategic direction of the business units of corporations. Afterwards, this dissertation proceeds with the link between business-level strategy and each business unit’s subsequent performance, establishing the indirect effect of corporate strategy on business unit performance. The theoretical model that has been proposed in this dissertation and which is tested empirically is illustrated in Figure 1.1. This model will be briefly explained in the remaining sections of this chapter.
1.3 Level of Analysis

Much of the literature in the area of corporate effects/strategy has focused on whether corporate effects influence business performance (e.g., Rumelt, 1974, 1982, 1991; McGahan and Porter, 1997; Hoskisson and Hitt, 1990; Bowman and Helfat, 2001). Therefore, much of past research applies a multilevel approach when conducting the analysis. The main reason for applying a multilevel approach is often based on considering business effects to be partly nested within the effects at the corporate level, without proper deconstruction of the effects (Hough, 2006; Misangyi, Elms, Greckhamer, and Lepine, 2006). Therefore, to decompose the variance, multilevel analysis has been used. However, this dissertation has taken a different approach in that it is based on its conceptualization of the relationship between corporate strategy and business unit strategy.

Figure 1.1: Schematic Representation of the Proposed Theoretical Model
There are three dependent variables of interest that are included in this dissertation: corporate controls, business-level strategy, and business-level performance. All of the dependent variables of this dissertation are analyzed at the business level. The independent variable of this dissertation — corporate strategy — is measured at the level of the corporation and is also used for analysis of its effect at the business level. Therefore, in contrast to previous studies, this study focuses its level of analysis at two levels: the corporate level and the business level. Corporate strategy and three moderator variables are measured at the corporate level, while corporate controls are measured for each business unit and based on the responses of managers at each business unit. Business unit performance and business unit strategy are also measured at the business unit level.

1.4 Corporate Strategy

The independent and exogenous variable of interest in this study is corporate strategy. The main objective of the research being proposed is to establish the relationship between corporate strategy and the strategic orientation and performance of business units. The concept of corporate strategy as a construct and the variables that represent it in the theoretical model are introduced in Chapter 2.

In Chapter 2, the literature on corporate diversification and its theoretical underpinnings is reviewed extensively and the contrasts between various theoretical perspectives are illustrated. This review contains the trends in diversification among firms and within the literature of strategy and the incentives and motives that exist for firms to diversify. Then, the literature on related and unrelated diversification as two of the major categories of corporate strategy is
reviewed. Chapter 2 concludes with reviewing the literature that has focused on the relationship between diversification and performance.

1.5 Corporate Controls

The corporate headquarters is responsible for ensuring that performance of individual business units aggregates to the highest overall performance for the corporation and that decisions and actions at the business unit level are aligned with the best interests of the corporation. Therefore, the design and implementation of controls on business units to achieve this objective also forms an important responsibility for corporate headquarters. Corporations design control mechanisms to ensure that the strategic direction and operational output of business units is in line with those of the corporation’s objectives and that expected synergies, if any, are realized.

In Chapter 3, I focus on controls as one of the main constructs of interest in this dissertation. First, I conduct a review of the different types of controls that can be employed by corporations. In line with past research (Hoskisson and Hitt, 1990, 1994), controls are distinguished on the basis of their reliance on accounting measures and/or subjective criteria. Building on theoretical conceptualizations in past research and on the literature that makes the distinction between the nature of expected generated values in related and unrelated diversification, and considering resource constraints, it is argued that related diversified firms and unrelated diversified firms differ in how they control their business units; related diversified corporations are expected to rely on both strategic controls and financial controls with more of an emphasis on strategic, while unrelated diversified corporations are expected to put stronger
emphasis on implementing financial controls as their primary control mechanism. Although similarities with past research exist on these propositions, and the conceptualization of controls as endogenous to corporate strategy is not entirely new, factors that moderate the relationship between corporate strategy and controls have either not been included explicitly, or have been neglected entirely in past research. Three of these factors that are related to the ability of corporate headquarters to process information are size of headquarters, relative experience of the corporate CEO, and the number of business units controlled by the corporation (Hoskisson, Hitt, and Hill, 1991; Hoskisson, Hill, and Kim, 1993).

1.5.1 Size of Headquarters

Chapter 3 of this dissertation focuses on the controls of corporations and their relationship to the strategic direction that is taken at the corporate level. In order for corporations to effectively monitor the actions and performances of their business units, the corporate headquarters should possess effective monitoring capabilities. However, when the number of staff at corporate headquarters is limited, the ability of a corporation to allocate the appropriate amount of time and attention to each business unit will diminish. Consequently, corporate headquarters will resort to less time-consuming and less demanding mechanisms, which will in turn influence the type of controls that can be implemented (Hoskisson, Hill, and Kim, 1993). Thus, in the relationship between corporate strategy and corporate controls, the moderating role of the size (i.e., number of staff) of corporate headquarters has been included in the theoretical model that is proposed. Past research has mostly focused on the size of the board of directors, theorizing the role of board size on the ability of the board to be vigilant (Kroll, Walters, and Wright, 2008). Since the responsibility to process information relevant to business units resides
significantly with the staff of the corporate headquarters and not with the board of directors, this
dissertation takes a different approach from past studies and uses the size of staff at corporate
headquarters. By doing so, this dissertation accounts for the effect of the size of the corporate
headquarters on its ability to remain vigilant as the moderator of the relationship between
corporate strategy with the controls that are put in place for each business unit. This is more
appropriate than the size of the board, because the responsibility of monitoring business units
and processing information relevant to their operations rests mainly with the corporate staff, not
with the board of directors.

1.5.2 Relative Experience of the Corporate CEO

In a corporation, the ultimate responsibility for decision-making rests with the
corporation’s top management and, above all, its CEO (Adner and Helfat, 2003). The upper
echelons perspective emphasizes the role of the CEO’s cognitive capacity in delivering
organizational outcomes (Hambrick and Mason, 1984). The ability of the corporate CEO to be
effective in evaluating the quality of decisions and actions of business units and to make
appropriate decisions regarding these decisions and actions rests with his or her level of
knowledge and expertise with respect to each business unit and the industry in which the
business unit operates. Without necessary expertise and/or knowledge, the corporate CEO will be
forced to make his/her evaluations and decisions on the basis of quantitative factors such as
accounting and financial indicators (Kroll, Walters, and Wright, 2008) without regard for
subjective, qualitative indicators. Therefore, the ability of corporations to control their business
units will depend on the level of expertise of the corporate CEO relative to each business unit. In
this dissertation, the relative expertise of the corporate CEO has been theorized as a moderating
variable. The moderating role of the corporate CEO’s experience is discussed in detail in Chapter 3.

1.5.3 Number of Business Units and Headquarters’ Effectiveness

Besides differences in the size of the corporate headquarters and CEO expertise, there is another factor that influences the ability of managers to effectively monitor and control all the operations within business units. The greater the number of business units, the more time and information processing capacity is required at the corporate level in order to effectively control them. Therefore, given the level of information processing capacity that has been developed within corporate headquarters, a larger number of business units means that less attention can be dedicated to monitor each individual business unit (Hoskisson, Hitt, and Hill, 1991). The moderating role of the number of business units on the relationship between corporate strategy and corporate controls is discussed in Chapter 3.

1.6 Business Unit Strategy

Chapter 4 of this dissertation investigates the relationship between strategies that are pursued by business units and the controls that are put in place by their corporate parent. Prior research has mostly used business unit effects and considered business strategy to be an exogenous variable (e.g., McGahan and Porter, 1997) and independent from either corporate effects or corporate strategy. Therefore, little has been done to understand how controls influence the strategy that is pursued by business units. This dissertation draws on agency theory to
propose that the type of controls that are designed and implemented by corporations has a significant role in determining the strategies that business units pursue.

In Chapter 4, different categorizations of business strategy and their relationship to exploration and exploitation are discussed. Then, drawing on agency theory, it is argued that business unit executives conform to the corporate controls that they are subject to and pursue strategies that align with these corporate control systems.

1.7 Performance

The objective of economic enterprise is to create economic value for its principals. Firms that yield the highest economic value in the short term and long term are considered to be those with the highest performance. Therefore, performance has become a very important construct in the literature of strategic management. There is extensive literature in the area of strategic management that has established the relationship between corporate effects and business unit performance (e.g., Bowman and Helfat, 2001) or business unit strategy and business unit performance (e.g., Thornhill and White, 2007). These findings have often used either financial indicators or, sometimes, composite measures that entail different dimensions of business unit performance. In this dissertation, each dimension of performance is utilized as a unique construct. Chapter 5, which focuses on performance, examines the existing literature on performance and mainly focuses on two dimensions: financial performance and growth in market share. Then, it draws from literature on “fit” (Rowe and Wright, 1997; White, 1986) to introduce the importance of fit between controls and business-unit-level strategy to achieve desirable performance at the business unit level.
1.7.1 Financial Performance

Financial performance is considered to be the simplest of performance measures that are employed by researchers and practitioners in evaluating whether a business unit is achieving its desirable objectives. In Chapter 5, a review of the validity and types of measurements of financial performance is provided.

1.7.2 Growth in Market Share

Unlike financial measures as the only way to measure financial performance, there are a variety of methods that have been used to measure market performance. Understanding and assessing market performance often uses both subjective and objective criteria, which requires greater depth on the part of corporate directors. Market performance has also been found to be associated with strategic directions that are not necessarily associated with short-term financial performance. Growth in market share represents one dimension of market performance in past research. This research has used growth in sales of a business unit as a proxy to measure its growth in market share (e.g., White, 1986), and this dissertation takes a similar approach. Chapter 5 of this dissertation discusses the variety of market performance measures that have been adopted in past research and examines the relationship between growth in market share and the strategy that is pursued by business units.

1.7.3 Fit Between Business Strategy and Controls

In order for business strategy to be successfully executed and to yield desirable subsequent performance, there is the need for a “fit” to exist between different organizational
factors (Rowe and Wright, 1997; White, 1986). As such, business units that have a better fit between their strategic direction and the requirements inherent within the corporate controls that they consider they are subject to are expected to be more successful performers. Chapter 5 also examines the concept of “fit” in past literature and argues for its extension to the interaction between corporate controls and business-level strategy, and its subsequent interactive effect on business units’ growth in sales and financial performance.

1.8 Methodology and Data

To test the hypotheses that are presented in this dissertation, existing methodological approaches for the measurement of constructs have been used, and several steps have been taken in proposing the development and implementation of methods for the measurement of certain constructs. In Chapter 6, the variables corresponding to each construct and the measures that operationalize those variables are discussed.

This dissertation relies on quantitative methods. For some variables, pre-existing quantified and validated content analysis approaches are used (e.g., Thornhill and White, 2007). The required panel data for this dissertation was collected from data that has been archived by the Industrial Development and Renovation Organization of Iran (IDRO) from Iranian corporations that either operate under IDRO’s umbrella or subscribe to its services and licenses. IDRO, which operates as a government-owned industrial hub, has overseen the operations of all Iranian industrial facilities since its inception in 1967. The data used for this dissertation includes archived data on 193 corporations and their 2,704 business units between the years 1999 and 2004. The analysis of the data is conducted through the use of regression analysis.
1.9 Summary

The early research on corporate diversification dates back five decades (e.g., Gort, 1962; Arnould, 1969), but the significance of corporate strategy to the performance of business units still remains an issue on which there is little consensus among researchers. Past research has reported a wide range of conclusions for this relationship and debate still continues (e.g., Rumelt, 1974, 1982; McGahan and Porter, 1997; Bowman and Helfat, 2001). Some of these differences have been attributed to the use of different measures, or underdeveloped methodological approaches (Montgomery, 1982; Palepu, 1985). But for the most part, past research has failed to unpack corporate effects and properly establish the relationship between corporate strategy and business unit strategy and performance.

In this dissertation, the theoretical foundations of corporate strategy have been revisited. In unpacking corporate effects, drawing from the literature on agency theory, and signifying the bounded rationality resulting from information processing capacity, corporate controls are emphasized as an important variable that has often been omitted in the existing theoretical models. Accordingly, this dissertation provides several conceptual and methodological contributions to the literature on corporate strategy.

First, the model in this dissertation represents corporate controls as a mediating variable in the relationship between corporate strategy and business unit strategy. Second, it introduces the business unit strategy of wholly owned business units as a factor that is endogenous to controls, and not as the exogenous independent variable that has been assumed in past research (e.g., McGahan and Porter, 1997; Bowman and Helfat, 2001).
The research also provides several methodological contributions. First, it introduces a method for the transformation of the measure of diversification into a continuous variable that entails both the dimension of related diversification and that of unrelated diversification. Second, drawing on agency theory as the cornerstone for corporate controls, it employs a method for measuring strategic controls with a stronger connection to theory. The method for measuring financial controls that are more objective follows a similar approach to methods employed in past research.

This research also has implications for practice. These implications provide corporations with a better understanding of prerequisites to implement strategic and financial controls that should exist within corporate headquarters. Furthermore, this dissertation emphasizes the need to pay attention to the fit between corporate controls and their business unit factors.
CHAPTER 2: CORPORATE STRATEGY

2.1 Introduction

The scope of diversification has been of interest to researchers in strategic management. With the growth of organizations and the emergence of multiproduct firms, multilevel strategic issues have also become prominent. During the latter half of the 20th century, the dominance of businesses that operated within one single product market has evolved into the dominance of larger businesses operating in multiple industries. Many of the former businesses experienced institutional and environmental pressures as well as internal incentives to diversify their product and service offerings from a single industry to multiple industries. Consequently, by the end of the past century, the majority of U.S. firms and those in other industrialized nations were involved in some kind of diversification (Rumelt, 1974; Berry, 1975; Chang and Choi, 1988; Channon, 1973; Chenall, 1979; Denis, Denis, and Yost, 2002; Dyas and Thanheiser, 1976; Franko, 1974; McDougall and Round, 1984; Suzuki, 1980; Hoskisson and Hitt, 1990); this trend was even faster among top-performing firms (Rumelt, 1982).

With the emergence of diversified firms, the complexities in their management in order to achieve higher performance became evident. The difference in economic logic for value creation in diversified firms (Teece, 1980, 1982) required understanding strategy at the corporate level, which was different from that at the business unit level. While earlier studies tended to neglect the role of strategy at the corporate level, focusing on diversification per se (e.g., Gort, 1962; Arnould, 1969), later studies focused on different diversification strategies and their influence on performance at both the corporate level and the business unit level (Rumelt, 1974, 1982, 1991).
Past literature in strategic management has made a distinction between corporate-level and business-unit-level strategy (Bowman and Helfat, 2001). This distinction has often been attributed to the focus of interest. While the primary focus in business unit strategy is to achieve success among a group of competitors in a product market through the allocation of resources and other strategic decisions (Barney, 2002; Dundas and Richardson, 1980), corporate strategy deals with the questions of what, and how many, product markets a firm should be operating in (Grant, 1995). It also deals with the following question: How does a firm manage the business units operating in multiple product markets to achieve overall success (Dundas and Richardson, 1980)? Corporate strategy has been defined as actions that are taken by firms in order to achieve competitive advantage through managing a diverse group of businesses that compete in different industries and product markets (Grant, 1995; Hitt, Hoskisson, Ireland, Rowe, and Sheppard, 2006). Just as with the diversified firm’s business-level strategies, corporate strategy is expected to help the firm earn above-average returns by creating value; the extra value created exceeds the costs associated with having a corporate head office. In other words, corporate strategy can be considered to be the choice between pursuing different types of growth through diversification (Collis and Montgomery, 1998) to synergistically create more value than the combined value of all business units if each business unit was a standalone business.

Past research at the corporate level of the firm has focused on diversification. This focus was further sharpened when diversification became a major trend worldwide (Berry, 1975; Chang and Choi, 1988; Channon, 1973; Chenall, 1979; Dyas and Thanheiser, 1976; Franko, 1974; Hoskisson and Hitt, 1990; McDougall and Round, 1984; Rumelt, 1974; Suzuki, 1980). The interest in diversification among researchers became particularly strong in the 1970s and 1980s, when firms showed more interest in entering multiple product markets. For example,
from the 1950s until the mid-1970s, the percentage of firms on the Fortune 500 list that pursued some type of diversification strategy grew from 30.1% to 63% (Rumelt, 1974, 1982), a trend that persisted as the past century came to an end (Denis, Denis, and Yost, 2002). While the latter half of the 1970s and most of the 1980s witnessed trends towards firms exiting from unrelated product markets through divestiture (Hoskisson and Turk, 1990; Ravenscraft and Scherer, 1987; Williams, Paez, and Sanders, 1988), most of the larger firms remained quite diversified (Hoskisson and Hitt, 1990).

In this chapter, the aim is to introduce corporate strategy as a construct of interest within the proposed theoretical model of this dissertation. To achieve this purpose, a review is conducted of the existing literature on corporate effects, diversification, and the different diversification corporate strategies that can be pursued by corporations. Furthermore, the findings in past research that have investigated the relationship between corporate effects, corporate strategy, and business unit performance are reviewed and the conflicting results are discussed.

2.2 Diversification

Diversification is pursued by firms to increase performance through simultaneous operation in multiple product or service markets. Research on firm diversification has been at the heart of scholarly work focusing on the corporate level. Generally, diversification research has fallen into one of two streams, industrial organization and strategic management; the latter focuses mostly on the impact of diversification on profitability (Palepu, 1985). This interest in diversification has resulted in extensive research being conducted on the link between
diversification and performance at the business unit level and corporate level alike (e.g., Gort, 1962; Arnould, 1969; Markham, 1973; Rumelt, 1974, 1982, 1991; Berry, 1975; Christensen and Montgomery, 1981; Bettis and Hall, 1981; Montgomery, 1982; Palepu, 1985; Schmalansee, 1985; Lubatkin, 1987; Wernerfelt and Montgomery, 1988; Amit and Livant, 1988; Ramanujam and Varadarajan, 1989; Rumelt, 1991; McGahan and Porter, 1997, 1998; Bowman and Helfat, 2001). Such research has focused on diversification, corporate effects, and corporate strategy to understand their effect on business unit and corporate-level performance. As a result of the use of different independent variables, the findings of such studies have resulted in conflicting results ranging from showing a significant effect (e.g., Rumelt, 1974, 1982; Christensen and Montgomery, 1981; Montgomery, 1982; Bowman and Helfat, 2001) to showing a trivial or insignificant effect (e.g., Gort, 1962; Arnould, 1969; Markham, 1973; Berry, 1975; Lubatkin, 1987; McGahan and Porter, 1997, 1998).

Unfortunately, corporate effects and corporate strategy have remained undistinguished in research, and their inclusion within an integrated theoretical model has been overlooked. Corporate effects include various dimensions that stem from the corporate level. Such dimensions could include corporate controls, HR practices, corporate structure, management preferences, and compensation and reward mechanisms, in addition to corporate strategy, which is mainly concerned with how a corporation chooses to diversify. Most existing literature has chosen to focus on corporate effects — as a broad construct — when investigating the relationship between corporate-level and business-level factors in corporations. Consequently, there is a need for research to deconstruct and unpack corporate effects in corporations in order to better explain the link between corporate strategy and business unit performance.
Corporate strategy involves the choice that firms make to pursue diversification into related product markets or into product markets that are unrelated to one another. A main distinguishing factor in the pursuit of different corporate strategies is the need for firms to acquire new skills, techniques, and facilities (Ansoff, 1965). Without the necessary resources, the economic feasibility of each type of corporate strategy is in doubt (Penrose, 1959; Teece, 1982; Wernerfelt, 1984). Financial assets, either considered as tangible (Porter, 1985) or intangible (Chatterjee and Wernerfelt, 1988), are considered by some researchers as an important resource that facilitates diversification (Porter, 1985; Jensen, 1986; Chatterjee and Wernerfelt, 1988).

The easy redeployment of financial assets provides a higher degree of flexibility in diversifying into different product markets. When financial assets are not the main available resource that a firm possesses, it is often excess capacity that drives diversification (Porter, 1985). Lower flexibility in mobility and redeployment of such resources as excess capacities plays a constraining role in the ability of firms to diversify. Firms that rely on their physical and non-financial assets for diversification are often more successful when diversifying into product markets that have some degree of relatedness to their existing product markets, particularly in the area of production technology (Hoskisson and Hitt, 1990).

2.3 Theoretical Perspectives on Diversification

Research on diversification is based on diverse theoretical underpinnings. Some of these fundamental theoretical differences have resulted in differences in the conceptualization of the topic and inferences that have been drawn from empirical findings. Research on diversification mainly agrees that under conditions of perfect competition, firms are unlikely to pursue
diversification (Hoskisson and Hitt, 1990). When firms are assumed to exist within markets with relatively homogeneous factor markets (Scherer, 1980), only very limited diversification can be expected (Hoskisson and Hitt, 1990).

Based on past literature on diversification, Hoskisson and Hitt (1990) have identified three main theoretical perspectives that have influenced research in the area of corporate strategy. The first perspective focuses on firms as single product entities, the second looks into market imperfections and firm idiosyncrasies, and the third investigates the role of personal incentives and interests in the choice of diversification.

The first approach assumes firms to be single-product firms operating in homogeneous factor markets (Scherer, 1980). This approach, which is derived from neoclassical economic assumptions and the structure–conduct–performance paradigm, considers firm performance to be largely dependent on market actions rather than firm actions (Schmalansee, 1989). These assumptions leave little incentive for diversification (Hoskisson and Hitt, 1990). The limited role that managers are assumed to have in the success or failure of firms is not much different from the assumptions in population ecology (Bourgeois, 1984; Hitt and Tyler, 1989; Hoskisson and Hitt, 1990). Also, based on assumptions in neoclassical economics where resource mobility is not limited, firms are assumed to have unlimited access to resources they need, which leaves little justification for diversification to acquire resources. Under such assumptions, leasing resources is more in accordance with this perspective (Hoskisson and Hitt, 1990).

A second perspective, which has been driven largely by the dominance of markets by multi-product firms (Karnani and Wernerfelt, 1985), assumes that idiosyncrasies and imperfections within markets and firms that cause firm heterogeneity (Barney, 1986). This
approach also gives rise to the concept of fit from contingency theory (Venkatraman, 1989) and emphasizes the role of managerial decisions in a firm’s subsequent performance (Hoskisson and Hitt, 1990). Since this theoretical perspective assumes resources to not be as perfectly mobile (Wernerfelt, 1984), the accessibility of resources will not become possible in some cases unless they are acquired. Consequently, the role of managers in making the decision is significant, even in the presence of market influences that exist to some extent (Hitt and Tyler, 1989).

Rooted in agency theory and the pursuit of self-interest by managers of firms (Jensen and Meckling, 1976), the third theoretical perspective has focused on the personal incentives of managers to grow firms through diversification. The literature based on this theoretical perspective, while assuming that market imperfections exist, mostly studies governance mechanisms that are designed and implemented by firms’ owners to ensure that the owners suffer minimize losses as a result of managers’ actions.

2.4 Corporate Strategy: Types of Diversification

Firms pursue diversification in different ways. Firms diversify from single-product firms to limited diversification, related diversification, or unrelated diversification (Barney, 2002). Perhaps the most widely accepted categorization for diversified firms has been presented by Rumelt (1974). Rumelt’s classification places diversified firms under one of these groups: unrelated, related linked, related constrained, and vertically integrated. Also, based on this classification, firms with low levels of diversification fall into the “single business” type, where more than 95% of the firm’s revenues are generated from one business, or the “dominant business” type, where a single business constitutes between 70% and 95% of a firm’s revenues.
Combined, these are described and recognized as limited diversified firms, and while they have been of interest to researchers who have studied strategy at the business unit level, they have been of little interest to corporate strategy researchers.

The second level of diversification that concerns firms is the moderate level of diversification that has been categorized as related constrained and related linked (Hitt, Ireland, Hoskisson, Rowe, and Sheppard, 2006). When less than 70% of a firm’s revenue comes from its dominant business and many technological, product, and/or distribution linkages exist among all businesses of the firm, then the firm is considered to be following a related constrained diversification strategy. On the other hand, when the technological, product, and/or distribution linkages among businesses are limited, then the firm is considered to be pursuing a hybrid strategy between related and unrelated diversification — or, as Rumelt (1974) has stated, a related linked diversification strategy (Hitt, Ireland, Hoskisson, Rowe, and Sheppard, 2006).

The highest level of diversification belongs to firms when less than 70% of total revenues come from the corporation’s dominant business unit and linkages between business units are non-existent (Rumelt, 1974). While existing trends indicate that the number of firms following this unrelated diversification strategy is declining, there are still successful examples of firms operating as highly diversified firms (Hitt, Ireland, Hoskisson, Rowe, and Sheppard, 2006).

The emphasis of this dissertation is mainly placed on two types of diversification, also known as corporate strategies: related diversification and unrelated diversification. After defining these concepts, I review the literature on related and unrelated diversification. Then, comparative studies of the strategic direction of corporations with regards to the extent of relatedness among their business units are reviewed and analyzed.
2.4.1 Related Diversification

Firms that have diversified into multiple businesses are considered to be pursuing a related diversification strategy when any one of their business units accounts for less than 70% of all the revenues and when linkages between business units in terms of production, technology, or distribution exist (Rumelt, 1974). Related diversification has often been considered a corporate strategy that enables firms to better exploit a core set of capabilities in order to achieve higher performance through creating economies of scope (Teece, 1982; Palepu, 1985). Several researchers have considered this to be the primary advantage that firms gain through diversification (Rumelt, 1974; Salter and Weinhold, 1978). Firms that pursue a related diversification corporate strategy intend to benefit from the created economies of scope and subsequent revenue and cost advantages. Such economies of scope are often created through synergies that can be made through sharing knowledge across products and markets (sales synergy) or skills possessed by management across business units (management synergies) (Ansoff, 1965; Hoskisson, 1987), as well as optimizing the utilization of facilities and capacities (Hill, Hitt, and Hoskisson, 1992). A similarity between the operations and markets of business units allow for the skills and knowledge of managers at one business unit to be redeployed in resolving issues and enhancing performance in others (Salter and Weinhold, 1978).

The ability to redeploy resources from one business unit to another depends on two dimensions of relatedness within a corporation: operational relatedness and corporate relatedness (Hitt, Ireland, and Hoskisson, 2004). Operational relatedness exists within a corporation when business units are able to share activities among themselves. When skills and knowledge are the resources shared across business units, then corporate relatedness exists. Corporations that pursue a related diversification strategy tend to build on the aforementioned two dimensions of
relatedness in their growth. Subsequently, this allows corporations with related diversification to better respond to the needs of their business units and to economize on the costs of developing skills and on the time required to effectively respond to those needs.

Pursuing related diversification is often supported by capabilities that exist within a firm’s core businesses. Factors like excess capacity in tangible resources such as the sales force have been suggested to be strong drivers of related diversification (Hoskisson and Hitt, 1990). However, not all resources support related diversification to the same degree. Resources with more flexibility in their redeployment can be better utilized and exploited when a firm pursues diversification. In particular, when a firm pursues a strategy of related diversification, tangible resources can more easily be shared than financial assets to support interrelationships between production, sales, marketing, technological, and procurement activities across businesses (Porter, 1987).

Support in pursuing related diversification is not limited only to tangible resources. It has also been suggested that intangible resources play an important role in inducing related diversification (Hoskisson and Hitt, 1990). Rumelt’s (1974) research found intangible knowledge-based core competencies to be the most common basis for diversification in related constrained firms. Porter (1985: p. 351) summarized the distinctive essence between tangible and intangible resources as based on “whether an activity is shared in some way on an ongoing basis, and whether know-how is shared between essentially separate activities.” While intangible resources have been favoured by researchers as significant contributors to related diversification, their flexibility in being utilized has been the issue of some debate.
There is a consensus in the literature of corporate strategy that not all skills can be equally transferred across business units. Some skills and intangible resources are considered to be more mobile when it comes to redeployment. For instance, marketing and customer skills have been found to be more flexible to transfer, and to yield better results when a firm pursues some degree of diversification (Capon, Hulert, Farley, and Martin, 1988). However, as Markides and Williamson (1996) have suggested, the mobility of many resources and skills can be overestimated and many of them can end up being “trapped” in business units without being utilized elsewhere.

When a firm pursues a diversification strategy where business units are highly related (related constrained), its main objective is to ensure that practices, skills, and resources that are core to its business units are shared appropriately and that their diffusion supports the firm’s network of internal interdependencies (Michel and Hambrick, 1992). Subsequently, the corporate-level management of the firm faces a situation of reciprocal interdependence (Thompson, 1967), where gathering essential information and resources and disseminating them becomes the main focus (Michel and Hambrick, 1992).

However, the existence of relationships among the businesses of a related diversified firm will not necessarily result in the creation of synergies and economies of scope. In order for firms to achieve economies of scope when pursuing related diversification, it is necessary for business units to cooperate with each other (Hitt, Hill, and Hoskisson, 1992). The economic justification for related diversification is not realized completely unless firms coordinate shared operations and monitor the interrelationships of their otherwise independent business units to ensure the creation and persistence of economies of scope (Porter, 1985). Therefore, based on earlier findings (Sloan, 1963; Berg, 1973; Pitts, 1977), some researchers have suggested a degree of
centralization to be necessary in order for firms to achieve their expected benefits from related diversification (Child, 1984). Such centralization is often encouraged for activities that are common and shared across business units and which form the basis of interdependences within the firm (Mintzberg, 1983; Hitt, Hill, and Hoskisson, 1992). Moreover, to make sure that effective interrelationships between business units exist and are maintained, corporations employ strategic control mechanisms, which are discussed in more detail in Chapter 3.

### 2.4.2 Unrelated Diversification

A firm is pursuing unrelated diversification when any one business unit accounts for less than 70% of a firm’s revenues and no linkages exist among business units (Rumelt, 1974). Business units of unrelated diversified firms feel the least interdependence and share practically none of their resources (Michel and Hambrick, 1992). Some researchers have suggested that the business units of unrelated diversified firms have a “pooled interdependence” (Thompson, 1967), where direct effects on one another are minimal (Michel and Hambrick, 1992). Therefore, the business units of firms pursuing unrelated diversification can be considered as independent from one another (Hoskisson, 1987).

Firms that pursue unrelated diversification are often confined to financial capital and liquid assets as the main resource to persist in their growth. Unlike related diversified firms that can benefit from sharing their resources across their multiple connected businesses, a lack of commonality among resources means that unrelated diversified firms should primarily rely on more financial resources. Some researchers have suggested that short-term liquid assets and long-term debt capacity are the most common resources exploited by unrelated diversified firms.
(Chatterjee and Wernerfelt, 1988). Similar propositions by other researchers have also emphasized the significance of financial assets and free cash flows in firms’ ability to pursue unrelated diversification (Penrose, 1959; Jensen, 1986).

The advantages of pursuing unrelated diversification have been debated by several researchers. While compliance to imposed regulatory pressures was a main driver in the 1960s and 1970s for firms to diversify into unrelated product markets (Hoskisson and Hitt, 1990), advantages such as capturing market power (Palepu, 1985) and/or reducing risk (Lubatkin and O’Neil, 1987) have been proposed as other supporting logics to pursue unrelated diversification. However, there has been a general consensus that, unlike firms that pursue related diversification, firms that have diversified into unrelated businesses do not seek to benefit from the economies of scope that are created as a result of interrelationships among business units (Hoskisson, 1987). Since each business unit of an unrelated diversified firm operates as a standalone business and does not share any linkages with other business units, the expectation of synergies is quite unrealistic. Consequently, financial markets in many cases have failed to recognize unrelated diversification as beneficial (Lubatkin and O’Neil, 1987), which has resulted in a lower allocation of capital to unrelated diversified firms (Hoskisson and Hitt, 1990).

However, unrelated diversified firms are often considered to benefit from other advantages that result from their multi-business approach. Some researchers have suggested “governance economies” to be the source of success in firms that pursue unrelated diversification (Williamson, 1975; Dundas and Richardson, 1982; Jones and Hill, 1988; Hitt, Hill, and Hoskisson, 1992). Economies of governance are often created as a result of unrelated diversified firms’ access to financial and other liquid assets, which enables them to allocate financial resources more efficiently across business units and to ensure that their performances meet those
of their competition in their relevant product markets. Therefore, the more successful unrelated diversified firms are those that focus their attention on creating and operating internal capital markets and the efficient allocation of capital to their business units (Hoskisson, 1987).

In unrelated diversified firms, the mutual independence of business units from one another and the lack of cooperative linkages among them indicate that an approach to controlling business units that is different than that for related diversified firms is required at the corporate level. Much of the focus on successful unrelated diversified firms has been placed on establishing internal “market-like resource allocation mechanisms,” which are often accompanied by financial controls in the evaluation of business units’ performances (Hoskisson, 1987). Unrelated diversified firms, similar to holding companies, have been found to give considerable autonomy to their business units, avoid “horizontal strategies” (Porter, 1985) that seek coordination between business units, and refrain from direct intervention (Michel and Hambrick, 1992). Instead, they mostly focus their attention on the allocation of financial resources among their business units in more efficient ways than traditional holding companies typically do (Dundas and Richardson, 1982). Conversely, emphasizing the integration of operations at the business unit level and limiting the autonomy of business units has been found to result in poor performance and inefficiency of the internal capital market in unrelated diversified firms (Lorsch and Allen, 1973).

2.5 Diversification and Performance

Most scholarly work on diversification has been focused on its link with firm performance, both at the corporate and business unit levels. This focus has been in line with the
predominant interest in the literature of strategic management, which focuses on the performance consequences of firms’ strategic decisions and actions. Much of the past literature has used various theoretical lenses to investigate and find empirical support for the linkage between industry influences, idiosyncratic business factors, top management cognitive abilities, and corporate effects on the performance of single business units and corporations (Bowman and Helfat, 2001).

While support for some of these theoretical perspectives has been strong, others have met more conflicting results. The link between corporate strategy and performance has been one such area and there is yet to be substantive support for corporate strategy’s effect on the performance of the firm at the corporate level. This has resulted in a general confusion regarding the nature of the diversification–performance relationship (Reed and Luffman, 1986). Subsequently, some have pointed to the uselessness of research in this area, considering it a waste of time (Bowman and Helfat, 2001). However, most past literature suggests moderate diversification (i.e., related) to be more optimal than unrelated diversification (Hoskisson and Hitt, 1990).

A stream of research that has studied the link between diversification and performance has built on the structure–conduct–performance paradigm of the industrial organization literature, which assumes industry effects and market factors to be primarily responsible for business unit performance (Schmalansee, 1985). The theoretical perspective that favours industrial organization economics posits that diversification can positively influence corporate or business unit performance through increasing market power (Markham, 1973). Based on this theoretical perspective, some theorists have proposed cross-subsidization, raising barriers to entry, predatory pricing, and reciprocity in buying and selling as competitive practices that can be exercised as the result of market power gained subsequent to pursuing diversification (Palepu,
Furthermore, it has been argued that more diversified firms are better able to conceal the profitability of their business units from competitors as the result of “information loss” that occurs during consolidated reporting, increasing chances of extracting supernormal profits (Palepu, 1985). However, most of the literature that is rooted in the industrial organization economics perspective assumes the homogeneity of firms and factor markets as well as relative market perfection, resulting in very similar substitute products. The limited role of resource heterogeneity in this Industrial Organization (I/O) perspective leaves little rational incentive for firms to diversify into other product markets, as their performance is very unlikely to be positively affected (Hoskisson and Hitt, 1990).

Contrary to the industrial organization perspective, there is a theoretical approach that assumes heterogeneity to drive firms to pursue diversification. Based on this theoretical perspective, firms can achieve supernormal profitability when they build on their core competencies to grow or acquire external resources through the acquisition of other businesses (Barney, 1986; Peteraf, 1993). Proponents of this theoretical perspective posit that firms are able to achieve higher levels of performance through exploiting synergies that are created as a result of economies of scope. Therefore, most literature from this perspective assumes that firms pursue diversification to maximize firm value (Salter and Weinhold, 1978) through organic growth or acquiring firms with some degree of relatedness to reap synergistic efficiencies (Hoskisson and Hitt, 1990) that can result in market power over competitors (Bradley, Desai, and Kim, 1983; Eckbo, 1985).

The theoretical work on the link between diversification and performance at the corporate and business unit levels has been followed by much empirical research (e.g., Amit and Livnat, 1988; Bettis and Hall, 1981; Christensen and Montgomery, 1981; Montgomery, 1985; Rumelt,
1974, 1982, 1991; Wernerfelt and Montgomery, 1988; Hill, Hitt, and Hoskisson, 1992; McGahan and Porter, 1997, 1999; Bowman and Helfat, 2001). The conflicting results in past research have led to an unresolved debate on whether corporate strategy does in fact matter in determining corporate and business unit performance (Ramanujam and Varadarajan, 1989). Based on the literature of industrial organization, early studies by Gort (1962), Arnould (1969), and Markham (1973) have found no significant support for the cross-sectional relationship between total diversification and corporate performance. The non-significant cross-sectional analysis was also supported by a later study conducted by Palepu (1985). Subsequent findings by Rumelt (1991) and later by McGahan and Porter (1997, 1999) suggested business-unit-level factors to be the strongest predictor of business unit performance, followed by influences from industry. Such findings have led many other researchers to postulate corporate effects, including corporate strategy, to be very insignificant to non-existent (Carroll, 1993; Ghemawat and Ricart Costa, 1993; Hoskisson, Hill, and Kim, 1993; Ghemawat, 1994). The literature in finance has also found personal portfolio diversification to be more related to value creation than diversification pursued by firms at the corporate level (Reid, 1968; Watson and Mansinghka, 1971; Watson, Smith, and Sherives, 1972; Melicher and Rush, 1973; Smith and Watson, 1977).

Conversely, many empirical studies have found diversification and other corporate effects to significantly influence business unit performance. One of the earliest and most cited studies (Rumelt, 1974) found significant performance differences across seven of the nine diversification strategy categories that were identified. Later research also found subsequent performance for firms with different levels of diversification to be more or less different (Bettis and Hall, 1981; Stubbart, 1983; Montgomery and Singh, 1984; Palepu, 1985; Hoskisson, 1987; Lubatkin and Rogers, 1987; Lubatkin and O’Neil, 1987; Varadarajan and Ramanujam, 1987;
Barton, 1988; Wernerfelt and Montgomery, 1988), lending further support to Rumelt’s (1974, 1982) findings. Later, Bowman and Helfat (2001) found significant support for the influence of corporate effects on firms’ subsequent performance. However, they came short of unpacking corporate effects to truly test for the significance of corporate strategy on business unit performance.

2.6 Corporate Strategy and Performance

While there is a large body of literature that argues for and against the role of corporate effects on business unit and corporate-level performance, the corporate strategy pursued has also been discussed as an influencing factor on business unit performance. In some cases, related diversified firms have been suggested to perform better than unrelated diversified firms (Rumelt, 1974, 1982; Christensen and Montgomery, 1981; Palepu, 1985). Rumelt (1974) conducted a study on differences in performance across firms pursuing constrained diversification strategies (dominant constrained and related constrained) and those pursuing less constrained diversification strategies (e.g., related linked, single business, unrelated businesses). His findings showed that firms pursuing more constrained diversification strategies outperformed firms pursuing the other types — findings that were also confirmed in subsequent studies by other researchers (e.g., Bettis and Hall, 1981; Hoskisson, 1987; Lubatkin and O’Neil, 1987; Montgomery and Singh, 1984; Palepu, 1985; Stubbart, 1983; Varadarajan and Ramanujam, 1987; Wernerfelt and Montgomery, 1988). These results have also been found to hold for firms’ profit performance and their risk and return in the market (Barton, 1988; Lubatkin and O’Neil, 1987; Lubatkin and Rogers, 1987; Montgomery and Singh, 1984).
The superiority in performance of related diversified firms has been found not to be limited to cross-sectional points in time, but also to be present over extended time periods. For example, Palepu (1985) found that corporations following related diversification achieved significantly higher performance over extended periods of time than unrelated diversified corporations. However, to achieve this higher level of performance, diversification most likely needs to be achieved through means of organic growth. Diversification through acquisition can create value for the acquiring firm only if the target and acquiring firms share common “private and uniquely” or “inimitable” value cash flows (Barney, 1988; Hoskisson and Hitt, 1990). It is commonly assumed by strategy researchers that acquisitions take place by firms in order to maximize their own value (Salter and Weinhold, 1978) through creating synergies that arise as a result of efficiencies achieved through combining their own resources and those of the acquired firms (Hoskisson and Hitt, 1990). Synergies that result from efficiencies provide firms with the ability to exert market power over their direct and indirect competitors (Bradley, Desai, and Kim, 1983; Eckbo, 1985; Hoskisson and Hitt, 1990). Hence, this position assumes an acquisition to yield above-average performance when it results in some form of relatedness.

Firms that diversify through the acquisition of other firms, even when the acquired firm is operating in a related field, often fail to benefit from the same levels of higher performance as firms who have diversified as the result of organic growth (Singh and Montgomery, 1987). This position has been disputed by some researchers who have noted difficulties associated with transferring and combining resources and capabilities within different parts of the firm, citing them as “trapped” within firm structure (Markides and Williamson, 1996).

Despite the existence of a relatively large body of literature that emphasizes the superiority of related diversification over unrelated diversification in regards to performance,
there are studies that have disagreed with this conclusion. For instance, studies conducted by Michel and Shaked (1984), Johnson and Thomas (1987), and Lubatkin (1987) have not found a significant difference in performance for firms that pursue related or unrelated diversification. As a result, a consensus on this issue is yet to be achieved on the basis of existing empirical evidence.

Later research has shown significant progress in regards to making the distinction between related and unrelated diversification, and also in distinguishing between the levels of diversification that are pursued by firms. However, Rumelt’s (1974, 1982) studies, although making the distinction between different types of diversification, used cross-sectional data and often employed dichotomous measures and failed to recognize differences in the levels of diversification pursued by firms. Likewise, Palepu’s (1985) study, while accounting for the level of diversification and extending the timeframe to account for growth in performance, overlooked corporations’ internal structure or controls. This shortcoming is also evident in the works of those who have argued against (McGahan and Porter, 1997, 1998) or for (Helfat and Bowman, 2003) the significance of corporate effects on performance. This has resulted in the role of “controls” being understudied in empirical research that has focused on the relationship between corporate strategy and performance at the corporate and business unit level.

2.7 Summary

Corporate strategy focuses on the orientation that firms can take in pursuing diversification into other product markets as well as the manner in which such orientation influences their value-creation mechanism. Despite a variety of categorical approaches that have
been proposed in the past to determine the types of corporate strategy, the dominant approach has been to understand diversification strategies as related and unrelated diversification. While both these approaches are similar in that they require firms’ presence in multiple product markets, they differ significantly on the logic of how they create value. Where related diversification relies largely on the creation and extraction of synergistic value that results from the interrelationships of business units, unrelated diversification follows the dominant logic that exists at undiversified businesses, where each business unit is responsible for its own performance and the aggregate performance of the business is not synergistic in nature.

Past research has made attempts to understand how influences from the corporate level affect the performance of business units. Such research has studied the relationships between diversification, corporate effects, and corporate strategy with the performances of business units and the corporation. However, such research mainly falls short of establishing the quality of the relationship between corporate strategy and business unit performance and, more specifically, the mechanism through which corporate strategy influences business unit strategy. Moreover, corporate effects need to be deconstructed so that the aforementioned relationship can be truly understood.

In this chapter, the theoretical foundations for corporate strategy, as a construct of interest in the theoretical model that is proposed, have been established. To achieve this objective, a review of the literature in the area of diversification and corporate strategy has been conducted and the contrasts between findings and propositions have been identified. In the following chapters, the relationship between corporate strategy and other constructs that are included in the model are discussed and corresponding hypotheses are proposed.
CHAPTER 3: CONTROLS

3.1 Introduction

Although the effect of corporate strategy on business unit and corporate performance and vice versa has been of interest to many strategic management researchers, the effect that strategies at the corporate level might have on the strategic orientation of business units and their subsequent success or failure in the execution of those strategies has not been investigated in depth. A main objective of this dissertation is to understand whether business unit strategy is influenced and constrained by corporate strategy and to provide empirical evidence to support the hypotheses that point to the existence of such an effect. Therefore, the role of controls as perhaps the most important mechanism that connects a business unit to its corporate parent is of particular interest.

With separation of ownership and management in the modern organization (Smith, 1776), several theoretical perspectives have emerged that have focused on the relationship between principals and agents. According to agency theory, the principal–agent relationship is formed when one party acts on behalf of the other (Shapiro, 2004). Therefore, agency theory has a special interest in understanding the causes and consequences of the incongruence in goals that arises between the goals of agents and those of principal owners (Barney and Hesterly, 1996). Agency theory assumes that individuals are self-interested, risk-averse, bounded by rationality, and exploitative of existing information asymmetries to their advantage, at the expense of principal owners, in order to maximize their own — the managers’ — utility (Eisenhardt, 1988, 1989; Fama and Jensen, 1983; Williamson, 1988). Therefore, to ensure that decisions made and
actions taken by executives (agents) do not diverge from those that yield the highest performance and prioritize the interests of principal owners, monitoring mechanisms should be put in place to monitor both the behaviour of executives and the outcomes of their actions at the business unit level (Eisenhardt, 1988, 1989). A logical consequence of agency theory is the design and implementation of control mechanisms to ensure alignment in the interests of principals and agents (Carpenter and Sanders, 2002) and to transfer potential negative consequences of agency problems from owners to decision makers (Eisenhardt, 1989; Jensen and Meckling, 1976). In corporations, agents (i.e., CEOs of wholly owned business units) whose performances and behaviours are or are not perceived to be in the best interests of the corporation will be compensated or punished by existing control mechanisms. Such mechanisms may target financial benefits or continuation of tenure (Eisenhardt, 1989).

Differences in corporate strategy pursued by firms have resulted in different sources for the creation of value at the corporate level. For example, firms that pursue a corporate strategy of related diversification have been suggested to extract their value mostly from economies of scope, whereas the governance of economies has been proposed as the main source for value creation within unrelated diversified corporations (Hill, Hitt, and Hoskisson, 1992). The distinctions inherent in each type of corporate strategy require controls that can properly distinguish between sources of value creation and can ensure that the interests of the principals are met.
3.2 Types of Corporate Controls

Controls are mechanisms that are put in place by the corporate headquarters in order to evaluate the performance of business units and ensure that the decisions made and actions taken by business unit senior executives are aligned with the best interests of the corporation. Corporate headquarters might use financial controls, strategic controls, or a hybrid of strategic and financial controls for this purpose. However, while different types of controls are generally employed for the same objective, they employ distinctive processes and have implications that could be quite different.

3.2.1 Financial Controls

Financial controls are considered to be those that rely primarily on financial and accounting evaluations of firm performance, regardless of the processes through which such performance has been achieved. Such performance, which is generally reported through annual and quarterly reports, consists of such indicators as return on assets (ROA), return on investments (ROI), and earnings per share (EPS) (for holding companies). The generic nature of such controls makes them applicable to a wide array of businesses and they can be employed with or without limited knowledge or expertise regarding the business when they are the sole method of performance evaluation.

Since financial controls rely heavily on accounting information, any internal actions, decisions, or external factors that could affect the bottom line negatively at a given time could result in firm performance being perceived as inferior when financial controls are the only source of performance evaluation. Moreover, since financial controls rest on indicators that are updated
and presented annually or at the end of each quarter, comparisons are made on an annual or quarterly basis. Executives of businesses that are controlled on the basis of financials are more constrained in making decisions that have expected results beyond financial milestones. When corporations rely only on financial controls and do not take into consideration the strategic and long-term implications of decisions made at the business unit level, the justification of decisions with negative impacts on financial and accounting indicators becomes irrelevant, and business unit senior executives receive better assessments when their decisions are associated with the least negative short-term financial performance. Consequently, the tendency of such business unit managers is to avoid actions or decisions with prospects that diverge from any of the financial and accounting milestones.

Financial controls are usually employed as the sole control mechanism when the corporate headquarters is incapable of putting in place strategic controls due to a lack of resources or expertise, or when environmental conditions and industry characteristics represent high levels of stability, where minimal strategic decisions at the business unit level are required. The generic nature of financial controls and the similarity of assessment of financial and accounting indicators across different types of businesses provide the corporate headquarters with the ability to evaluate each business unit within the context of its industry, with limited knowledge about the nature of the business and without requiring it to monitor actions or decisions that have led to such performance.

The generic nature of financial controls and the transferability of the knowledge required to implement such controls across different businesses implies that a lower level of information processing capacity at the corporate headquarters will be required. Executives at the corporate headquarters will be able to readily employ and redeploy the same controlling capabilities to
make assessments of business-level performance, which will allow for more unused information processing capacity to be allocated elsewhere. Also, the absence of relevant knowledge or expertise will not be considered a problem when financial controls are the only method of monitoring business unit performance.

While financial controls seem to allow more flexibility for the business unit executives to make strategic decisions and take actions in accordance with what they perceive to be best for the success of their business unit, they are also associated with implicit constraints to make decisions that satisfy the financial expectations of the corporate headquarters from one quarter to another. Under such controls, it would be difficult to justify decisions of investments that are expected to yield results only in the long run. Therefore, the initial perception of latitude under financial controls would diminish under the pressures and expectations of the corporate headquarters.

3.2.2 Strategic Controls

Strategic controls are those that focus on the quality of the decisions made and the long-term strategic implications of any actions taken (Rowe and Wright, 1997). Strategic controls are qualitative, subjective, and evaluative. They also focus on the effect that decisions and actions at the business unit level have on other business units and the fit of strategic decisions of each business unit with the strategies of the corporation as a whole. The relationships between business units and the quality and nature of those relationships are other dimensions of business unit performance that are included in the strategic evaluation of performance for each business unit.
When implementing strategic controls, corporations often hesitate to completely neglect the financial performance of business units. In most instances, strategic and financial controls are often implemented simultaneously, which enables the corporate headquarters to take the strategic implications of business unit performance in its evaluations into consideration. However, when both strategic controls and financial controls are implemented, the emphasis should be on strategic controls, since strategic actions may not necessarily have short-term positive influence on the financial performance of a business unit.

However, implementing strategic controls, unlike financial controls, requires the corporate headquarters to possess considerable knowledge and expertise in the field in which the business unit is operating (Hoskisson and Hitt, 1994). Such expertise is required for conducting in-depth analysis of the actions and strategic decisions made by executives at the business unit level and to understand the implications that such actions and decisions might carry. Unless such expertise exists, the qualitative monitoring of processes and the actions of businesses are unlikely to yield valuable results, and therefore strategic controls will not be put in place properly and the corporate headquarters will be forced to rely on the immediate financial implications of business unit actions.

When corporations diversify, an important intent of implementing strategic controls is to monitor the interrelationships of different business units and to ensure that the economies of scope that are expected from synergies between business units are realized. However, such interrelationships can often affect business units’ short-term financial performance. Putting in place strategic controls enables corporations to integrate the strategic implications of business unit actions into their performance evaluation and ensure business unit executives that the potential lower subsequent financial performance may be justifiable by their strategic actions.
Therefore, executives at the business unit level will be more likely to have latitude in pursuing strategies that ensure higher long-term business performance and will be less pressured to make decisions solely on their short-term performance outcomes. However, their latitude in strategic decision making will also be limited by strategic decisions that are made at the corporate level, and they might be forced to make decisions that would contribute more to the performance of other business units of the corporation and, as a result, the corporation as a whole.

Similar to other types of diagnostic control systems, strategic controls are developed and implemented to allow for effective resource allocation, define goals, provide motivation, establish guidelines for correct action, allow for ex-post evaluation, and free scarce management attention (Simons, 1994). Financial controls employ objective measures and assessments of performance, while strategic controls rely on more qualitative and subjective evaluations. The distinctive embodiment of strategic controls in organizations can often involve frequent meetings between the business unit manager and the corporate staff in order to further facilitate the corporate headquarters’ understanding of the decisions that are made at the business unit level. As such, business units that are more subject to strategic controls can be expected to become subject to evaluation methods that encourage interrelationships between them and other business units of their corporate parent and to exercise greater autonomy in their actions (Vancil, 1979; White, 1986). Consequently, a positive attitude towards taking risky actions such as R&D spending can also be expected to characterize strategically controlled business units.
3.3 Controls and Diversification Strategy

As mentioned previously, corporations employ different types of controls in order to ensure that their business units perform in accordance with the best interests of the corporation and its shareholders. Corporations that pursue different strategies create value through mechanisms that are different. Economies of scope, which are fundamental to achieving superior performance in related diversified corporations, become non-existent when firms pursue unrelated diversification. Therefore, differences also exist in the control mechanisms that are put in place in corporations pursuing different corporate-level strategies.

As mentioned earlier, corporations that pursue related diversification seek to benefit from synergies that evolve as a result of shared practices or inputs that exist between business units, which in turn results in economies of scope and market power over competitors (Bradley, Desai, and Kim, 1983; Eckbo, 1985). The realization of performance that is expected to be associated with related diversification requires corporate headquarters to exercise controls over business units to ensure that coordination among them is retained and that their interdependencies on common functions remain intact (Mintzberg, 1983). Therefore, the performance of business units in such corporations needs to be evaluated based not only on their individual profitability, but also on their alignment with other business units of the corporation and their contribution to the overall corporate performance. As a result, the evaluation of performance of such business units, in most cases, is not solely based on objective financial evaluation measures, but also on subjective methods that allow for business units’ performances to be more fairly evaluated (Kerr, 1985).
Hence, to realize benefits from related diversification, besides simple financial controls, the corporate headquarters of corporations also rely on more complex controls that consider more thoroughly the strategic implications of actions of the business units, thus minimizing value-destroying internal competition among business units and emphasizing corporate synergistic value creation in performance assessments. Since in related diversified corporations performance is enhanced through synergies created from the relationships of several business units, the strategic control and monitoring of the firm not only encompasses strategic decisions and actions taken in each individual business unit, but also relationships between business units, to ensure that necessary conditions for creating and maintaining synergies are met.

Furthermore, it has been suggested that the corporate headquarters of related diversified corporations primarily rely more on strategic controls instead of only financial controls (Baysinger and Hoskisson, 1989). However, employing strategic controls will not be beneficial for corporations unless they result in superior financial performance. Therefore, in related diversified corporations, strategic controls need to be accompanied with appropriate financial controls to ensure that strategic performance will eventually yield desirable financial results.

While strategic controls require in-depth monitoring of decisions and actions taken by each business unit, the relatedness of activities or resources of business units of related diversified corporations means that the corporate headquarters possesses a higher competency in redeploying existing knowledge or expertise that relates one business to another business unit for control purposes. As a result, the depth of knowledge in one area can be redeployed and utilized for monitoring another area of activity.
Employing strategic controls requires a more in-depth understanding and monitoring of decisions within each business unit in order to act as a mechanism to prevent intra-corporation competition between various business units.

Unlike firms that pursue related diversification, unrelated diversified firms do not seek to benefit from economies of scope. The non-existence of operational synergies between business units (Palepu, 1985) means that such firms are unable to transfer their expertise and knowledge from one business unit to another and, therefore, each business unit is responsible for its own performance. Consequently, to monitor each of the business units thoroughly, a separate set of skills and know-how is required. Moreover, because each business unit in an unrelated diversified corporation does not share resources or activities with other business units of the corporation, unlike in the case of related diversified corporations, its performance is not expected to have a direct or indirect positive or negative effect on any other business unit of the corporation. As a result, its contribution to the overall performance of the corporation will be its own individual performance. Therefore, the strategic monitoring of business units in such corporations is based solely on strategic actions and decisions that yield optimal performance for the same business unit. Hence, most unrelated diversified firms follow control structures similar to what has been proposed in Williamson’s (1975) M-form, where divisional performance receives the main emphasis (Hoskisson, 1987). This approach has resulted in firms pursuing unrelated diversification to employ stock-market-like resource-allocation mechanisms, such as transfer pricing, and to primarily rely on simple financial controls and divisional incentives in order to ensure and maintain the performance of each business unit (Hoskisson, 1987).

The methods for control in unrelated diversified firms mostly rely on highly quantitative systems and rarely scrutinize actions and decisions qualitatively (Dundas and Richardson, 1982;
Michel and Hambrick, 1992). Past research has found that successful cases of implementation of financial controls have often been accompanied by considerable autonomy in managing operations at each divisional unit (Dundas and Richardson, 1982).

With an increase in the diversity of business that an unrelated diversified firm is engaged in, the expertise and capability of corporate headquarters to exercise monitoring requirements that are sufficient for strategic control is stretched. In an unrelated diversified corporation, when the range of activities pursued by different business units exceeds the range of expertise possessed by the corporate CEO and corporate staff, its ability to process information regarding the strategic actions of each business unit and to make appropriate decisions is stretched beyond the capacity of the corporate headquarters to process information. Consequently, the benefits of establishing and exercising strategic controls suffer tremendously.

Since the CEO of the corporation serves as the ultimate decision maker, their lack of necessary know-how or expertise to effectively oversee strategic controls leads them to depend on controlling and monitoring mechanisms that rely on such requirements to a lesser degree. As a result, the performance of business units is more likely to be assessed based on their quarterly and/or annual financial and accounting performance reports. Furthermore, increasing the number of unrelated business units that need to be controlled suggests that the corporate CEO needs to spend more of his or her available information processing capacity to remain effective. Under such circumstances, the tendency is to employ financial and accounting controls instead of strategic controls (Hill and Hoskisson, 1987). As a result, the performance of such business units is more likely to be assessed based on their quarterly and/or annual financial and accounting performance reports. Hence:
Hypothesis 1: Corporations that pursue related diversification are likely to put a stronger emphasis on strategic controls versus financial controls as their primary mechanism of controlling their business units. Conversely, corporations that pursue unrelated diversification are likely to put a stronger emphasis on financial controls versus strategic controls as their primary mechanism of controlling their business units.

3.4 Corporate Headquarters

Diversification has been suggested to have major impacts on a firm’s performance, investment in R&D, commitment of business-level management to innovation, risk taking of business unit executives, and interrelationships between business units (Hoskisson, 1987; Baysinger and Hoskisson, 1989; Hitt, Hoskisson, and Ireland, 1991; Hill, Hitt, and Hoskisson, 1992). To realize the benefits that are associated with such impacts, corporations need to put in place controls that are designed at the headquarters of the corporation (Rowe and Wright, 1997). With the emergence of diversified firms that have adopted the M-form structure, a main advantage has been the ability of the diversified firm to centralize financial and decision control mechanisms within a corporate headquarters (Williamson, 1975).

The role of the corporate headquarters — i.e., the corporate CEO and corporate staff — is mainly to oversee the operations of business units and ensure that their performance yields results that are aligned with the best interests of the corporation, thus providing grounds for the highest overall corporate-level performance to be achieved. Therefore, corporate headquarters are mainly focused on designing and implementing control mechanisms that ensure that
corporate objectives are realized. However, while the ability of the corporate headquarters to implement controls is influenced by the corporation’s strategic orientation (i.e., related diversification versus unrelated diversification), this relationship is also moderated by other factors that are rooted in the capacity of the corporate headquarters to process information.

### 3.4.1 Information Processing Capacity

The ability of the corporate headquarters to appropriately exercise its responsibility in monitoring and controlling the decisions and actions taken by business units rests on the ability of the corporate staff to process the information that relates to each business unit (Hill and Hoskisson, 1987). The limitations arising from the bounded rationality of individuals that work in the corporate office (Simon, 1957), in turn, result in the information processing capability of the corporate headquarters being limited (March and Simon, 1958). Subsequently, there is a limit to the amount of information that can be successfully monitored at the corporate level. There are, however, several factors that can influence the ability of those within a corporate office to be effective at processing information. Such factors include the size of the corporate office, the related expertise of the corporate CEO, and the number of businesses that are owned by the corporation.

### 3.4.2 Size of Corporate Headquarters

The responsibility of monitoring performance at the business unit level and controlling actions and decisions made by business unit executives is held within the domain of the corporate headquarters (Rowe and Wright, 1997). The ability of the corporate headquarters to
properly monitor the performance of business units is tied to the aggregate ability of individuals at the corporate headquarters to receive, process, and analyze information coming from each business unit. Any limitation in this regard means that the corporation will be less capable of making in-depth assessments of actions taken or decisions made by senior managers at business units (March and Simon, 1958).

When the corporation headquarters’ staff have limitations in evaluating the quality of strategic decisions at the business unit level, it is more inclined to put in place controls that have lower requirements for monitoring activity. The ability of the corporate headquarters to handle the strategic control of business units is tied to the aggregate capability of individuals and the synergies they create through their internal interactions. Therefore, corporate headquarters that are smaller in size will likely be capable of processing less information, if all other things are equal.

As mentioned previously, the ability of the corporate headquarters to process information related to each business unit plays an important role in its ability to implement controls on the business unit. When this ability is limited, the corporate headquarters will have to rely on types of controls that are more conformable to its resources. For corporations that pursue unrelated diversification, their capacity to process information about each of their business units will be further engaged with the addition of each new business unit. Unless a corporate headquarters takes actions to create additional capacity for monitoring business units, it will be limited to implementing financial controls as the corporation increases in diversity.
Related diversified corporations encounter similar obstacles in implementing their preferred strategic controls as the number of their business units increases. However, existing interrelationships between business units in related diversified corporations mean that the capacity of corporate headquarters to process information will diminish at an exponential rate compared to that of unrelated diversified corporations (see Figure 3.1). To process the information relevant to their business units, corporate headquarters rely on the capabilities and performance of their (corporate headquarters’) staff, which may or may not be organized into specialized units. While organizational differences in corporate headquarters may influence the capacity to process information, the number of staff, regardless of task specialization, still plays an important role in defining the extent to which a corporate headquarters can competently and effectively process information. Therefore, under conditions resulting from related diversification where more information must be processed, corporations with more staff in their headquarters will be in a position of advantage in terms of available information processing capacity; a larger number of staff in headquarters allows them to better emphasize strategic controls. Hence:
Hypothesis 2: The size of the corporate office (i.e., the number of corporate staff) moderates the relationship between corporate strategy and corporate controls; under the condition of a larger corporate office, there will be a stronger effect between a corporate strategy of related diversification and the emphasis on strategic controls, while under the condition of smaller corporate offices there will be a weaker effect.

3.4.3 Relevant Expertise of the Corporate CEO

As previously mentioned, the corporate CEO’s ability to process and analyze information related to the corporation’s business units is an important determinant of their ability to implement strategic controls, since the ultimate decision-making authority lies with the corporate CEO. Therefore, under different conditions of the expertise and related knowledge of the corporate CEO, the impact of corporate-level strategy on corporate-level controls will be different.

When a corporate CEO possesses prior expertise, knowledge, or experience in areas identical or similar to those of certain business units, they have a higher capability than those CEOs without such a background to understand and evaluate information regarding decisions made or actions taken by senior executives at the business unit level. This will put such a CEO in a better position to make qualitative assessments of business-level performance and make appropriate decisions, and will in turn increase the ability to implement and exercise strategic control. In contrast, a corporate CEO without any relevant background on their corporation’s business units will find it more difficult to properly evaluate the quality of decisions made by
business unit managers and their impact on the business units’ and corporation’s competitiveness and long-term performance. Therefore, they will tend to rely on types of controls that are less demanding in terms of strategic expertise and are more financial in nature.

As argued before, the expertise that the corporate CEO possesses and the quality of vigilance that they can provide moderate the ability of the corporation to emphasize strategic controls when related diversification is pursued as the corporate-level strategy. In other words, the more qualified the CEO is, the more likely the pursuit of related diversification will lead to a stronger emphasis on implementing and exercising strategic controls. Likewise, even when a corporation is pursuing related diversification, the lack of or deficiency of relevant expertise by the corporate CEO will attenuate the corporation’s emphasis on strategic controls. Consequently, pursuing related diversification will be less effective in increasing the emphasis and maintenance of exercising strategic controls by corporate headquarters and there will be less emphasis on strategic controls and more reliance on financial controls. Therefore:

*Hypothesis 3: The corporate CEO’s relevance of past experience relative to a business unit moderates the relationship between corporate strategy and corporate controls; in the presence of a corporate CEO who possesses relevant expertise related to a business unit, there will be a stronger relationship between related diversification and emphasis on strategic control.*
3.4.4 Number of Business Units and Headquarters’ Effectiveness

The number of business units owned by a corporation also moderates the effect of corporate strategy on the monitoring and control mechanism emphasized for the business units. Past research has suggested that the information processing capability of corporations is a constant factor in the short term and that the effectiveness of a corporate headquarters to monitor and control each business unit will decrease as the number of business units increases. Therefore, it has been suggested that corporations with a larger number of business units tend to rely on less demanding financial controls (Rowe and Wright, 1997).

Corporate headquarters are not unlimited in their capacity to process information. With the increase in the number of business units in corporations, whether they are related or unrelated, corporations experience a shortage of information processing capacity unless they take steps to address this issue. Therefore, when pursuing related diversification, the ability of corporations to emphasize strategic control will be affected when they grow the number of their business units. With a larger number of business units, corporations will fail to effectively exercise strategic controls unless they take appropriate steps to increase the information processing capacity of their corporate headquarters. Therefore:

Hypothesis 4: The number of business units owned by a corporation moderates the relationship between corporate strategy and corporate controls; the positive relationship between related diversification and emphasizing strategic controls will be weaker when the number of business units is greater.
3.5 Summary

Controls are important mechanisms that enable corporations to ensure that their economic justifications for existence are being realized through alignment between action at the business unit level and corporate objectives. Therefore, understanding the relationship between corporate strategy and controls is very important for understanding the effect that corporate strategy has on the performance of business units. Corporate controls have often been considered to fall into one of two categories: the more qualitative strategic controls, and the more objective and quantitative financial controls (Hoskisson and Hitt, 1987).

Corporations that pursue related diversification are those that expect to benefit from the economic value that is created as a result of synergies that exist between their various business units. In order for such objectives to be realized, the role of the corporate headquarters is to ensure that the interrelationships between business units are maintained and that overall performance is achieved. Therefore, the assessment of the performance of business units in such corporations should be based not only on their standalone financial performance, but on the degree to which they fit into the overall strategy of the corporation.

Consequently, this dissertation has hypothesized that related diversified corporations are more likely to rely on strategic controls in addition to financial controls. In contrast, since business units in unrelated diversified corporations are not expected to create synergies, the corporate headquarters will tend to rely on financial controls. Therefore, this dissertation has argued that in such corporations, financial controls are more likely to be the primary mechanism of control.
On the other hand, the ability of a corporate headquarters in implementing any control mechanisms relies on its ability to process information. Therefore, this dissertation has argued for the moderating roles of the size of the corporate headquarters, the related expertise of the CEO, and the number of business units owned by the corporation, on the relationship between corporation strategy and corporate controls.
CHAPTER 4: BUSINESS STRATEGY

4.1 Introduction

Understanding strategy at the level of business units has been the centre of much research in strategy literature. This interest has resulted in attempts by strategic management scholars to identify and propose different typological perspectives in order to better distinguish between strategies pursued by different businesses. Since the initial presentation of Miles and Snow’s (1978) prospector, defender, analyzer, and reactor strategy categories, several other strategy typologies have been presented, the most widely accepted and cited of them being Porter’s (1980) generic strategies of cost leadership, product differentiation, and focus. Also, taking a more process-oriented approach, March (1991) and Levinthal and March (1993) proposed a new typology for the strategic approach of firms: exploration and exploitation. There have been several attempts made by researchers in the past to focus on similarities and distinctions that exist between these strategy typologies. Also, some researchers have conducted empirical research to find the relationship between these strategy typologies and firm performance (Uotila, Maula, Keil, and Zahra, 2009; Thornhill and White, 2007).

Discounting some exceptions (Hill, 1988), there is a general consensus on the idea that “cost leadership” and “product differentiation” (Porter, 1980) are strategies at different ends of a continuum and that firms trying to pursue both simultaneously will end up in a stuck-in-the-middle position where performance is lowest — a consensus that has been further supported by empirical findings on strategy purity (Thornhill and White, 2007). On the other hand, researchers focusing on exploration and exploitation have found the simultaneous pursuance of exploration and exploitation to be associated with higher performance (Uotila, Maula, Keil, and Zahra, 2009).
and that these two approaches could be considered to be orthogonal and not necessarily two ends of a continuum (Gupta, Smith, and Shalley, 2006).

While there is an extensive body of research on business-level strategy, the connection between strategy at the corporate level and business unit level still remains unclear. Most past research has failed to either deconstruct business effects to distinguish business strategy, or to consider how business unit strategy is developed in the context of a corporation. Moreover, past research that has studied the influence of business unit strategy and corporate-level strategy on business unit performance has either simply identified business unit strategy as an exogenous (i.e., independent) variable, or has focused on corporate effects and business unit effects, without deconstructing either properly. Consequently, corporate effects have been understood to have a homogeneous influence across all business units. This has further clouded the understanding of the effect that corporate strategy might have on the strategy pursued by each individual business unit.

This chapter aims to take a more in-depth look into strategies that are pursued at the business unit level. Furthermore, based on existing literature related to agency theory, this chapter will explore and establish the link between business unit strategy and corporate controls as its antecedent. In this chapter, while noting the differences between March’s (1991) notion of exploration and exploitation, and Porter’s (1980) generic strategies, their similarities will be emphasized as different strategic directions that business units can pursue. The proposed theoretical arguments in this chapter will posit business unit strategy not to be an independent factor, but one endogenous to controls that are put in place by the corporate headquarters.
4.2 Business-level Strategy

Business-level strategy refers to the competitive actions pursued by business units in order to create differences in the competitive position of one business relative to its direct or indirect competitors (Porter, 1988). To achieve this objective, businesses have to make a series of decisions regarding their resource-allocation procedures in order to improve the competitive position of their business unit within their relative product market (Dundas and Richardson, 1980). Such decisions mostly revolve around performing certain activities differently, or performing activities that are fundamentally different, relative to other competitors (Porter, 1996). Making decisions and executing them requires a degree of deliberation on the part of business unit managers and a willingness to create unique value through executing well on primary and support activities throughout the value chain. In corporations with multiple business units, these decisions and actions are often made at the level of the business unit, and the main concern at the corporate headquarters is to ensure that the results are aligned with the best interests of the business unit and the corporation.

The concept of business-level strategy is one that gained prominence during the 1960s through the works of Learned, Christensen, Andrews and Guth (1965) and Andrews (1965). Since then, the body of literature on the subject has grown tremendously, turning it arguably into one of the most attractive topics in management literature. This interest has resulted in many scholars pursuing classifications and categorizations of different strategies that can be pursued at the level of a business unit and linking them to the success or failure of firms. While some studies have found a strong connection between performance and strategy (e.g., Thornhill and White, 2007), it has been suggested that business-level strategy is not effective unless a fit
between the strategies, external environmental conditions, and internal resources and capabilities of the business unit exists (Hitt et al., 2006; White, 1986).

Much past research has considered strategy as categorical, where each business unit’s strategy could be considered to fall into one of the typology categories (Thornhill and White, 2007). In 1978, Miles and Snow suggested organization strategies to fall into the three main domains of administrative, entrepreneurial, and technical. Based on these three domains, Miles and Snow proposed four strategy typologies: a) prospector strategy, through which organizations add to or change the products and services they offer; b) defender strategy, which refers to maintaining a relatively stable subset of services; c) analyzer strategy, which represents maintaining a stable subset while making periodical switches to new areas; and d) reactor strategy, which was defined as lacking a consistent strategy (Shortell and Zajac, 1990). An important conceptual position in Miles and Snow’s (1978) typology is the assumption that firms are unable to be successful at simultaneously pursuing both the prospector and defender strategies and that strategic inconsistency results in firms following the reactor strategy typology, where performance is expected to be the lowest. However, Miles and Snow (1978) contend that firms will be able to switch their strategy from prospector to defender and vice versa according to their perception of the strategy that results in their best interests.

4.2.1 Generic Strategy Typologies

Porter (1980) proposed three generic strategies of which two (cost leadership and product differentiation) targeted a broad market scope and the other (focus) corresponded to low target market breadth. While it has been suggested that the integration of cost leadership and product
differentiation strategies is possible to an extent (Porter, 1985, 1998) and sometimes even necessary (Hill, 1988), the inherent limiting factors associated with each strategy often result in business units pursuing variants of one of the two strategic directions. Porter (1980) has suggested that cost leadership and product differentiation draw on assets and capabilities that are contradictory and that this makes it very difficult to pursue both simultaneously at the business unit level. Where cost leadership strategy “requires aggressive construction of efficient-scale facilities, vigorous pursuit of cost reduction from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like R&D, service sales force, and advertising” (Porter 1980: p. 35), product differentiation inherently faces trade-offs with cost reduction in most areas. Most conceptual literature including the works of Porter (1980, 1985) suggest that firms that attempt to pursue both cost leadership and differentiation simultaneously will find themselves in a “stuck-in-the-middle” position where lower performance is to be expected (Thornhill and White, 2007).

There have been conflicting findings in empirical research focusing on the link between generic strategies and firm performance; some studies have found total commitment to one of the generic strategies (purity) to be a source of higher performance, and some have found similar results for hybrid strategies (Thornhill and White, 2007). Most theories have argued for strategic purity to be associated with higher firm performance. There has been empirical support for this claim when it comes to Porter’s proposed typologies. Thornhill and White (2007) found that in three different industry types, firms that pursued strategic purity outperformed, or at least equalled in performance, firms that followed a hybrid strategy. Some researchers have found that the complexity of hybrid strategies and the difficulty of setting priorities when pursuing hybrid strategies results in confusion and loss of direction, which in turn explains lower performance
findings attributed to them (March, 1991; Treacy and Wiersema, 1995). This is a complexity that some researchers have suggested to be manageable only through the adoption of matrix-like structures that are both costly and difficult to manage (Miles and Snow, 1978).

### 4.2.2 Similarities and Distinctions of Strategy Typologies

There are broad similarities in general between most strategy typologies that have been proposed by strategy researchers (Campbell-Hunt, 2000; Thornhill and White, 2007). For example, “the central elements of an operational excellence, exploitation, defender, or cost leadership strategy are cost, efficiency, reliability, refinement, and execution” (Thornhill and White, 2007). However, the typologies that place more emphasis on learning or innovation such as product leadership/customer intimacy (Tracey and Wiersema, 1997), exploration (March, 1991), prospector (Miles and Snow, 1978), and differentiation/non-price buyer value (Porter, 1980) have less convergence, while still sharing significant commonalities (Thornhill and White, 2007).

A major distinction between different typologies could be made on their position on hybrid strategies or the ability of the same firm — at the business unit level — to pursue distinctive strategy typologies. There is more similarity between typologies presented by more process-oriented theorists such as March (1991) and Miles and Snow (1978), who have considered the possibility of firms pursuing exploration and exploitation in sequence (March, 1991), or the analyzer type firms, which sequentially pursues prospector and defender strategies (Miles and Snow, 1978). Process-oriented theories, however, note the scarcity of resources and limitations in firms’ capabilities as factors impeding them in pursuing hybrid strategies. An
important point in Miles and Snow’s (1978) approach is that they argue for balance through a combination of the capabilities of two of the strategy typologies (prospector and defender) to achieve the state where the analyzer strategy can be successfully pursued. However, Miles and Snow (1978) have acknowledged the need for management’s close vigilance to maintain the “delicate balance” that is required for firms to pursue the analyzer strategy type (Thornhill and White, 2007). While the analyzer strategy type requires the firm to simultaneously possess the capabilities of prospector and defender firms, Miles and Snow (1978) hesitate to argue for the simultaneous pursuance of prospector and defender typologies, proposing only the sequential approach to be feasible.

Several researchers have pointed to the similarities between Miles and Snow’s (1978) proposed strategies and other strategy typologies. Other than Thornhill and White (2007), who have suggested similarities between prospector strategy (Miles and Snow, 1978), differentiation strategy (Porter, 1980), and exploration (March, 1991) and defender strategy (Miles and Snow, 1978), cost leadership (Porter, 1980), and exploitation (March, 1991), Menguc and Auh (2007) have also suggested that firms pursuing a prospector strategy are also pursuing exploration, while firms pursuing a defender strategy are also pursuing exploitation.

While there are similarities between different strategy typologies, they should not be assumed to be entirely the same. Some of the differences between strategy categorizations have revealed themselves through conflicting empirical findings. For example, while purity in pursuing Porter’s generic strategies has been found to be associated with higher performance for standalone business units (Thronhill and White, 2007), maintaining a balance between exploration and exploitation has been found to have a similar effect for some types of businesses (Uotila, Maula, Keil, and Zahra, 2009). The latter findings further emphasize previous theoretical
propositions of the essential co-dependence of exploration and exploitation for one another, despite their competition for scarce resources within organizations (March, 1963). Therefore, while maintaining a degree of balance between exploration and exploitation, corporate business units need to determine their intensity in following each approach. For instance, they need to make decisions to either allocate resources more intensely to exploitative approaches resulting in pursuing strategies of an operational excellence nature, or to maintain a more balanced approach, taking a more creative path that could be more costly but could result in subsequent differentiation from other competitors.

4.2.3 Operational Excellence

As mentioned earlier, a group of proposed typologies for business-level strategy can be categorized under those that emphasize operational excellence in the business unit. Despite some differences, strategic approaches such as cost leadership (Porter, 1980), defender (Miles and Snow, 1978), and exploitation (March, 1963, 1991) can be considered to fit under the same theoretical umbrella.

For the purpose of this dissertation, the emphasis has been placed on decisions made or actions taken at the business unit level that are more in line with Porter’s (1980) cost leadership strategy. Firms that pursue such a strategy are those that have a heavier emphasis on actions and decisions that exploit the business unit’s existing resources and capabilities in order to achieve a better competitive position relative to their rivals.

Firms that pursue exploitation to a higher degree and spend less of their resources on exploration (i.e., cost leaders) are those that emphasize efficiency, reliability, refinement, and
execution (Thornhill and White, 2007). This emphasis results in developing capabilities that allow business units to produce and market their comparable products at efficiency levels higher than their direct competitors (Porter, 1990). However, an excessive emphasis on exploitation could result in the obsolescence of a business unit (March, 1991), while it should maintain a certain degree of exploration to maintain competitive product quality in order to survive (Porter, 1990; Hill, 1988).

4.2.4 Product Leadership

Another group of business strategy typologies are those that emphasize achieving superior performance through offering products or services to the market that are superior to those of competitors. Product differentiators (Porter, 1980) and prospectors (Miles and Snow, 1978) are those that explore (March, 1991; Menguc and Auh, 2007) new ways to provide superior products or services with more value to their customers (Porter, 1980). However, businesses that pursue exploration often pursue exploitation to some degree in order to extract rents that are generated as the result of their endeavours. Therefore, product leaders are also those that take a more balanced approach when pursuing exploratory and exploitative strategies (Gupta, Smith, and Shalley, 2003).

Exploration of new possibilities is often associated with experimentation and taking risks (March, 1991), which in turn can result in concerted learning, innovation, and acquisition of new sources of knowledge that are valuable (Baum, Li, and Usher, 2000; Gupta, Smith, and Shalley, 2006). The inherent risks that are associated with the exploratory activities necessary for product leadership mean that higher costs and lower levels of efficiency will follow. The payoffs of
pursuing exploration are often uncertain and results are yielded over extended periods of time (Uotila et al., 2009). However, when successful, exploration can yield substantial competitive advantages that provide opportunities for exploitation (Rothaermel and Deeds, 2004). This allows firms to better encounter dynamism within their industries (Uotila et al., 2009), which is particularly suited for businesses within high-technology industries (Brown and Eisenhardt, 1997).

4.3 Agency and Business Strategy

Strategic directions in businesses largely rely on the decisions that are made by the executives in charge. In most businesses, this responsibility falls on the shoulders of the business unit CEOs. In corporations, the corporate headquarters’ objective is to ensure that each business unit’s strategic direction serves the best interests of the corporations. Therefore, control mechanisms are put in place to ensure that the business unit achieves the objectives that are desired by the corporation, and to compensate the business unit executives in charge on that basis. While this approach has strong roots in the literature of agency theory (Jensen and Meckling, 1976; Eisenhardt, 1989), it can also result in outcomes that are contrary to the expectations of corporations. Failure to exercise appropriate control mechanisms can result in business unit CEOs taking strategic directions and making decisions that do not necessarily serve the best interests of the corporation. Therefore, the self-interest of the agent can also influence the strategy pursued by business units.
4.4 Business Strategy and Business Effects in Corporate Strategy Literature

While understanding the role of business strategy in business unit performance is essential and has been of some interest to researchers, there is very little evidence that it has been properly investigated in past research, and most researchers have focused on business effects instead (e.g., McGahan and Porter, 1997; Bowman and Helfat, 2001). Also, where business strategy has been the focus, corporate-level influences other than controls have been included (e.g., White, 1986). While business strategy focuses on the strategic orientation of a business unit — namely, cost leadership or product differentiation — business effects include other explained or unexplained factors as well. Some of these include business unit structure, control systems, and reward systems. Therefore, to understand the influence of business strategy in business unit performance, similar to the confusion surrounding the notions of corporate effects and corporate strategy, there is the need to deconstruct the business effects variable and to distinguish business strategy as one of its constituents.

The main reason for this gap resides in the limitations in acquiring empirical evidence that simultaneously includes corporate-level and business-level factors. In addition, the task to deconstruct either corporate effects and/or business effects often requires access to empirical evidence that goes beyond data available in many publicly available sources. As a result, the literature on strategic management lacks studies that focus on corporate strategy and business strategy and often resorts to comparing the influence of corporate effects and business effects and treating business effects exogenously.
4.5 Corporate Controls and Business Strategy

As mentioned previously, there is a wide consensus among strategic management researchers that business strategies that focus on capturing broader markets tend to vary along the two generic types of product differentiation and cost leadership (Thornhill and White, 2007). Also, as discussed earlier, the fundamental capabilities and resources that are required to pursue any such strategies are assumed to be different to such a degree that it is believed that the simultaneous pursuit of both strategies is not likely and that any attempt to join practices corresponding to each type of strategy will result in firms ending up in a situation where they will be “stuck in the middle,” failing to reap the performance advantages associated with any of the strategies (Porter, 1980; Miles and Snow, 1978; Thornhill and White, 2007).

However, while the choice of business-level strategy has been attributed to many factors such as industry effects, firm capabilities, and other idiosyncratic specifications, the effects carried over from the parent corporation have often been neglected. This has resulted in some research findings linking the performance of business units to strategies without considering the precedence of corporate effect through implemented controls, and ruling out the significance of corporate strategy or arguing for the effect to be extremely small (i.e., Bowman and Helfat, 2001; Schmalansee, 1985; McGahan and Porter, 1997).

Operational excellence strategies are those that focus on reducing all costs that relate to the production or any other processes that a business unit is engaged with in order to increase firm utility through an increase in the difference between the market value and production value of the end product (Porter, 1990). Successful pursuance of a cost leadership strategy requires the business to eliminate costs that are considered to be unnecessary and insignificant to the basic
utility that the product is meant to provide the end user. Therefore, a cost leadership strategy is often considered to be associated with a cost-cutting approach and increasing efficiencies in production or any other process that exists before the product reaches the market (Thornhill and White, 2007). Businesses that pursue cost leadership strategies are often capable of passing on a portion of costs saved to the end users, which in turn enables them to capture larger segments of the market that are more driven by price in making a product or service-selection decision. To maintain the ability to reduce costs and remain competitive in the market, businesses tend to build on the economies of scale that result from their larger market segments and which allow them to reduce the costs of their own inputs (Hill, 1988). Also, such businesses tend to show interest in innovation that would allow them to modify or alter their processes in such a manner that results in lower costs of production and the maintenance of their position in the market as a cost leader.

On the other hand, product leaders tend to create and capture value through producing products or offering services that are distinctive when compared to other similar products or services offered by their competitors in the market (Porter, 1980, 1990). Pursuing a product differentiation strategy requires firms to create and develop distinctive features for their products and services and to protect that distinctiveness through any existing mechanisms, or to explore paths that lead to new distinctive features (March, 1991; Porter, 1980). To remain competitive in the market, product differentiators tend to rely on their ability to innovate or incorporate innovations into their products or services. Therefore, such companies will be more likely to actively invest in R&D, knowledge acquisition, and any other type of investment that would support their product distinctiveness in one way or another.
The economic logic behind the product differentiation strategy allows firms to exploit the additional value created for customers through charging a premium based on end users’ willingness to pay more for that additional value (Porter, 1980). Therefore, unlike cost leaders, product differentiators tend not to be overly concerned with controlling their costs of production but instead focus on their ability to create additional value and offering it to the market. To pursue a product differentiation strategy successfully, incurring costs and making investments that enable the firm to pursue and maintain an innovative mode through the exploration of new opportunities is critical (Uotila et al., 2009). The inability of a product differentiator to maintain its product or service distinctiveness or to create or find new ways to achieve another distinctive position means that its offered product or service will start losing value, which will result in lower competitiveness and subsequent lower performance (March, 1991).

In a multi-business firm, the corporate-level performance is prioritized over business unit performance and therefore the CEO of each business unit is expected to make decisions or take strategic actions that are in accordance with expectations at the corporate level. This expectation at the corporate level is often driven by the individual performance of the business unit or, in some cases, the contribution that the business unit makes to the overall corporate performance. Corporate headquarters often make attempts to monitor the performance of senior managers at their business units and design and implement mechanisms to ensure that expectations at the corporate level are fulfilled by business unit managers or that the direction of decisions or actions at the business unit level is aligned with such expectations. Control mechanisms employed by corporate headquarters can entail compensation, limiting or extending latitude in decision making, or in some cases removal of senior business unit managers from their positions.
Therefore, strategic decisions and actions at the level of business units are influenced by control mechanisms that have been put in place by the corporate headquarters. Consequently:

_Hypothesis 5: The influence of corporate strategy on business strategy is mediated through corporate controls._

The adoption of strategic controls requires the corporate headquarters to have qualitative and in-depth assessments of the performance of the business unit CEO in order to properly analyze decisions and actions and understand the underlying reasons behind each of them (Rowe and Wright, 1997). Also, to implement strategic control mechanisms, the corporate headquarters needs to consider the long-term impact of each decision and action and evaluate the effect of each such action or decision on firm competitiveness and long-term performance. When a business unit is subject to strategic monitoring and control from the corporate headquarters, decisions or actions made at the business unit level are evaluated based on the different aspects of their performance. This means that the business unit CEO will not be evaluated simply on the basis of decisions or actions with immediate effect, but also based on the impact of those decisions or actions on the business unit’s long-term performance and the effect that they may have on the competitiveness of the business unit in its industry. However, this could also mean that in some cases a business unit may not be considered as a simple profit or loss centre but as part of the corporation that contributes to overall corporate performance through strategic actions such as cross-subsidizing other business units and/or R&D activities.
The nature of strategic controls allows business unit managers to make decisions or take actions that could ensure firm competitiveness without the fear of potential variations in short-term performance affecting their own individual interests (Hoskisson and Hitt, 1994). As mentioned previously, success in certain types of strategy such as product differentiation is very unlikely unless the business is committed to making investments that lead to innovation or distinctiveness of products or services compared to competitors. However, such investments that seem critically necessary to the success of such a strategy will often appear to have negative short-term effects on financial reports, as their objectives tend to take time before becoming realized. While costs such as R&D, capital investment, and hiring a highly skilled and knowledgeable workforce can negatively impact business units’ immediate financial performance, executives of strategically controlled business units are more inclined to make such decisions if they are certain of their long-term returns. The in-depth and qualitative monitoring mechanism of strategic controls allows business unit managers to provide justifications for their strategic decisions and actions without risking their personal individual interests. Similarly, they will be able to make decisions to pursue cost leadership strategies should they see that this strategy best fits with their business units’ highest long-term performance.

While strategic controls provide the senior management of business units with the latitude of choice to pick the best strategies that they see for business unit long-term and short-term performance, they also constrain the possibility of decisions that are not aligned with overall corporate objectives to be made. The compensation mechanisms that are based on strategic controls often seek to ensure business unit performance according to corporate expectations through creating an alignment between the individual interests of the business unit’s senior management and those of the corporation (Eisenhardt, 1985). The detailed and in-depth
monitoring that is complementary to strategic controls allows for business unit senior management to go beyond merely superficial financial and accounting indicators to justify actions or decisions in the business unit without compromising their own interests.

On the other hand, business units that are subject to financial controls are those where the corporate headquarters does not have the necessary means or capabilities to conduct qualitative and in-depth analysis of the decisions and actions by the senior management business units or those that belong to industries where the lack of environmental dynamism and static conditions calls for very little, if any, strategic enactment (Hill and Hoskisson, 1987). When a corporate headquarters fails or is unwilling to make qualitative assessments of the decisions or actions of business unit senior managers and their underlying justifications, strategic implications, or long-term effects, and instead relies on numbers of financial indicators and accounting measures, then the performance of the business unit senior management will be evaluated mostly on the basis of immediate and short-term proxies of firm performance. In that case, senior management will be evaluated on accounting measures that are incapable of demonstrating the strategic position of the firm and how the firm will be performing over a more extended time period. Therefore, business unit senior managers will be under pressure from corporate headquarters to make decisions for actions that comply with the expectations of evaluation measures at the corporate level.

As mentioned before, financial controls are often associated with the evaluation of financial and accounting indicators compared to existing averages of the industry and historical performance of the business unit. When financial controls are the dominant form of control that is employed by a corporate headquarters, it is very likely that the senior management of a business unit makes decisions that have the least negative impact on the performance measures.
that are most immediately affected as a result. The accounting and financial indicators that are ordinarily the primary reference for financial controls are most positively affected when decisions prior to the time of the report result in the elimination of costs and an increase in sales. On the other hand, decisions that increase costs in the short run, regardless of their long-term effects, will be displayed negatively on conventional financial reports.

When a senior manager is evaluated and subsequently compensated on the basis of financial indicators, he or she will be receiving incentives to make decisions that avoid investments with long-run payoffs in order to minimize damaging self-interest (Eisenhardt, 1985). Therefore, investments in R&D, capital, or knowledge acquisition through different mechanisms that attenuate business units’ short-term financial performance will most likely be avoided. Moreover, corporate headquarters that tend to rely on financial controls do not have the means or desire to implement strategic controls that would provide justification for any such investment. Conversely, these business unit senior managers are encouraged to pursue strategies that are associated with cost control, cost cutting, quality control, efficient production, or any such strategy that would positively affect business unit performance in the short term.

As mentioned previously, cost leadership strategy is often considered to be an operational excellence strategy, associated with cost control, refinement, or any type of process innovation that would increase efficiency (Porter, 1980; March, 1991). Business units that are controlled through financial controls are often constrained from pursuing product differentiation strategies, since they require significant investments in innovation, where returns are not necessarily observable over shorter periods of time. However, as mentioned before, strategies that are similar to cost leadership are more likely to be aligned with managerial preferences and corporate expectations. Hence:
Hypothesis 6: Business units that are subject to a stronger emphasis on strategic controls are more likely to pursue product leadership strategies than business units that are subject to a stronger emphasis on financial controls, while business units that are subject to a stronger emphasis on financial controls are more likely to pursue operational excellence strategies than business units that are subject to a stronger emphasis on strategic controls.

4.6 Summary

Business strategy is perhaps the most central topic to the literature in the area of strategic management, as it has been directly linked to performance, which is considered the focus of interest of this area. To understand business strategy as a construct, many different categorizations have been presented with differences in their economic theoretical foundations. Most of these categorizations converge on similarities in their focus, which often fall into one of two categories: operational excellence and product leadership.

The link between corporate strategy and business strategy has also been of interest to researchers, although little consensus has been reached on its nature. While a degree of ambiguity exists around the relationship, the relative significance of each level of strategy on the performance of business units has been studied and often suggests that business unit strategy is the more effective of the two in determining business unit performance. However, the role of controls in linking the two levels of strategy has largely been ignored.

This chapter contends that the business unit strategy of wholly owned business units is endogenous to strategies at the corporate level through the mediation of corporate controls.
Drawing on the literature of agency theory, the arguments and hypotheses in this chapter suggest that the exercise of strategic controls by corporations results in a higher tendency on the part of business units to pursue product leadership strategies, while the exercise of financial controls by corporate headquarters triggers the tendency in business units to pursue strategies of operational excellence.
CHAPTER 5: BUSINESS UNIT PERFORMANCE

5.1 Introduction

One of the aims of strategic management is to explore and understand the foundations of business units’ superior performance over competitors within their related product markets. Therefore, performance has revealed itself as perhaps the most significant and ultimate dependent variable in most scholarly work in this area (Glick, Washburn, and Miller, 2005; Rowe and Morrow, 1999). Corporations and businesses alike seek to maximize their performance and fulfill the economic justification for their existence. However, to measure performance as a dependent variable there is a need to fully appreciate it as a unique construct, or perhaps multiple interdependent constructs. This chapter’s aim is to provide a better understanding of the construct of performance in order to properly establish its relationship with business-level strategy. Also, drawing on past literature, in this section the role of controls that are put in place by corporate headquarters in business units’ performance is investigated and corresponding relationships are hypothesized.

Although performance has perhaps been the most widely accepted dependent variable in the strategy literature, there is yet to be consensus among researchers on its nature. Many conceptualizations of performance, although similar on the surface, differ in terms of time horizon, stability, types of returns, focus on absolute versus expected versus relative returns, unit of analysis, attributions to the firm versus industry versus luck, and so on (Glick, Washburn, and Miller, 2005). However, theoretical perspectives that dominate the field of strategic management (Barney, 1991; Porter, 1980) still emphasize performance as businesses’ ultimate objective and
therefore it is still considered to be the “time test” of the success or failure of strategies that are pursued (Schendel and Hofer, 1979).

In what follows, the attempt is made to provide a clearer theoretical understanding of performance as a construct of interest in this dissertation. First, a review of the literature on performance as a general construct is made. Subsequently, the similarities and distinctions in the literature between short-term versus long-term performance and financial versus market performance are examined. Once a clear understanding of the scope and nature of different dimensions of performance has been reached, I proceed with a review of the existing literature on the established links between strategy at the corporate level and the business unit level with different dimensions of performance. The final section of this chapter focuses on establishing the role of corporate controls in the successful execution of business unit strategies. Similar to the concept of “fit” between macro controls and diversification, which has been proposed earlier in the literature (Baysinger and Hoskisson, 1989), this dissertation emphasizes the significance of “fit” between controls that are put in place by corporate headquarters and the strategies that are pursued by executives at the business unit level and the effect of this “fit” on business unit performance.

5.2 Performance as a Construct

Most literature in the area of strategic management has conceptualized firm performance as one of three alternatives: uni-dimensional, multi-dimensional, and a collection of multiple constructs covering a broad domain of empirically related and unrelated firm outcomes; although the uni-dimensional approach has often been rejected by scholars as too simplistic (Glick,
Washburn, and Miller, 2005). However, despite the consensus on the rejection of one alternative, scholarship is yet to reach convergence over one form of conceptualization of the construct.

While performance has been a source of much debate, there has been little disagreement over its connection to firm effectiveness (Glunk and Wilderon, 1996), which re-emphasizes the multidimensional nature of firm performance. Such multiple dimensions have been suggested to relate to a firm’s stakeholders, its competitive position, and the temporal frame of assessment of performance in a business unit (Devinney, Richard, Yip, and Johnson, 2005). However, a generally acceptable conceptualization of the construct has not been made, despite urgings by some researchers in this area (Glick, Washburn, and Miller, 2005).

Past research has identified three conceptually distinct types of performance dimensions as financial and other accounting reports, market valuations, and key informant descriptions (Hoskisson, Hitt, Johnson, and Moesel, 1993). Furthermore, Rowe and Morrow (1999) have identified the firm performance dimensions as reputation, market dimension, and financial dimension. However, despite the recognition of performance as a multidimensional construct and the identification of several corresponding dimensions, most strategy researchers take firm financial performance as the core of the domain of possible dimensions (Venkatraman and Ramanujam, 1986).

5.2.1 Financial Performance

In most literature on the construct of performance to date, the emphasis has been on the financial and accounting performance of firms. Accounting reports dominated early research on firm performance, with market-based performance becoming more popular by the mid-1980s
Most criticism that has been directed towards the dominance of financial performance measures has related to its failure to predict future firm performance. This has been the reason why in the past decades more and more researchers have become interested in considering the other dimensions of firm performance as being as important as the financial dimension. For example, Meyer (2005) has criticized the use of cash flow as a measure of efficiency when economic performance should in fact involve anticipation and promise. This shortcoming in the financial dimension of firm performance is most evident in stock markets, when “the buy- and sell-side analysts are surprised when stock prices show a persistent enhancement following a firm’s announcement of intentions to buy back stock regardless of the firm’s subsequent failure to follow through” (Westphal and Zajac, 1998) or “when researchers show that stock prices are sensitive to the particular framing of adverse earnings announcements” (Hutton, Miller, and Skinner, 2003).

Another criticism on placing too much importance on the accounting and financial dimension of firm performance has been directed towards the nature of the accounting reports themselves. This criticism has stated that accounting data are not straightforward, as demonstrated by Arthur Andersen, Canary Capital Partners, and SEC regulators tracking mutual fund breakpoint discounts (Glick, Washburn, and Miller, 2005).

The operationalization of performance by strategic management researchers has typically been done in terms of existing accounting ratios (e.g., ROA, ROS, ROE, ROI) or market-based measures such as Sharpe’s measure, Treynor’s measure, Jensen’s alpha, and Tobin’s q (Rowe
and Morrow, 1999; Venkatraman and Ramanujam, 1986). To estimate the level of financial performance of a firm, both types of performance measures — financial and market — have been used in past research (Rowe and Morrow, 1999). This has led some researchers to suggest an “implicit consensus” between researchers on market performance and accounting performance for the two dimensions of a firm’s financial performance (Rowe and Morrow, 1999).

There have also been some attempts to use subjective measures when operationalizing firm financial performance (Rowe and Morrow, 1999; Cannella and Hambrick, 1993; Dess and Robinson, 1984; Fryxell and Wang, 1994) as a possible third dimension.

Accounting-based measures of firm financial performance are the most popular in the strategic management literature (Barney, 1997). The pros and cons of the popularity of accounting-based measures give reasons for their popularity among strategy researchers. According to Rowe and Morrow (1999), while cynics would suggest that the reason for the popularity of accounting measures is that the data is easily available for publicly traded firms, others contend that accounting numbers are important because managers use them when making strategic decisions, and because they actually provide insights into economic rates of return (Horowitz, 1984; Jacobson, 1987; Long and Ravenscraft, 1984). Rowe and Morrow (1999) further suggest that the use of accounting-based measures is related to the relationship between independent and dependent variables in firm performance. Moreover, it has been suggested that accounting-based measures are most suitable to measure firms’ short-term performance, as they refer to the current financial state of the firm (Rowe and Morrow, 1999).
The use of accounting measures for firm performance has proven to be very acceptable among strategy researchers in measuring firm performance. In studies that have focused on retrenchment, which refers to the practice of eliminating unnecessary costs and assets that are not productive (Lim, Celly, Morse, and Rowe, 2013), it has been noted that accounting measures have been widely used by firms to measure whether the turnaround has been successful (Rowe and Morrow, 1999). Some researchers have taken this as support for the validity of accounting-based measures as the measurement for firms’ short-term performance, particularly since retrenchment has generally been found to yield short-lived effects (Rowe and Morrow, 1999; Morrow, Busenitz, and Johnson, 1997).

5.2.2 Market Performance

Another dimension of the performance of a firm is the market value associated with the organization. Although widely accepted as one of the dimensions of firm financial performance, market value has not been as popular as accounting-based measures. This has been the case particularly with market analysts, who have taken issue with market value as a measure of performance that has roots in both the present and the future (Glick, Washburn, and Miller, 2005), making identification of its sources and the significance of those sources very difficult.

Since the 1980s there has been an increasing tendency towards using market-based dimensions as a more appropriate dimension of a firm’s performance. This can be seen in the work of many strategy researchers in later years, as strategy researchers have begun to rely on market-based measures of performance, either alone or in conjunction with accounting-based
measures, when assessing a firm’s financial performance (Rowe and Morrow, 1999; Hoskisson, Hitt, Johnson, and Moesel, 1993; Hoskisson, Johnson, and Moesel, 1994).

The appropriateness of market value as a strong dimension of firm financial performance has also been a subject for debate. This is due to its reliance on information other than archival sources, which are not entirely objective. Therefore, some researchers have suggested a firm’s market value to be only appropriate as a starting point, but not an entirely reliable measure to go forward on (Glick, Washburn, and Miller, 2005).

Rowe and Morrow (1999), based on the research done by Bentson (1982), Fisher and McGowan (1983), and Watts and Zimmerman (1978 and 1990), concluded that the increase in the use of market-based measures of firm performance was partly in response to micro-computers becoming more available, making calculations of market-based measures easier, and partly because of the criticisms that have been voiced toward the excessive use of accounting-based measures. The theoretical basis of this approach was also suggested to be the result of market-based measures’ higher ability to reflect a firm’s current and future financial performance (Rowe and Morrow, 1999).

Seth (1990) has noted that there is a major difference between the accounting-based measure and the market-based measures. He notes that “market-based measures are intrinsically different from accounting-based measures because market-based measures focus on the present value of future streams of income, whereas accounting-based measures focus on past performance.”

While sales and growth in sales have generally been understood as accounting measures for performance, they do not represent the profitability of a firm. Firms with higher costs of
production and lower price offerings are able to extract less value from the market (Barney and Peteraf, 1993). However, growth in sales, under certain conditions, can also represent a relative gain in market share, which has been considered as a dimension of market performance. Therefore, past research has focused on growth in sales as an indication of firm market performance (White, 1986).

5.3 Corporate Performance and Business Performance

Corporate performance is assessed on the basis of the value that is created as the result of the operations of a firm’s multiple business units and as a consequence of their aggregate performance. With the emergence of corporations with multiple businesses, the assessment of performance at the corporate level and the business unit level has become of interest to many researchers (Bowman and Helfat, 2001). However, differences in strategies that are pursued at the corporate level have resulted in differences in value-creation mechanisms. While related diversified corporations make every attempt to leverage economies of scope that result from shared activities to create synergistic value (Teece, 1982; Hoskisson, 1987), unrelated diversified firms should count on the individual performance of each of their business units.

The presence of corporations in multiple product markets has made it extremely difficult for strategy researchers to make performance assessments at the corporate level using dimensions other than financial performance. This can be found in the overwhelming tendency to measure performance at the business level when conducting research on the relationship between corporate strategy and performance (e.g., Rumelt, 1974, 1991; McGahan and Porter, 1997;
Bowman and Helfat, 2001). This dissertation takes a similar approach, conducting performance analysis at the business unit level.

5.4 Business Strategy and Business Performance

The relationship between business strategy and business performance is one of the best-established relationships in the strategic management literature. Past theoretical work has suggested that firms can achieve superior competitive positions over their direct rivals through committing themselves to pursuing certain strategic orientations (Porter, 1980). There have been different positions taken by researchers on the feasibility of combining more than one strategic orientation in order to achieve a competitive advantage. While some have argued for this possibility (Miles and Snow, 1978; Hill, 1988), others have taken strong positions against it (Porter, 1980).

Past empirical research has often made attempts to measure the business-related effects compared to other existing effects that influence business-level performance (Bowman and Helfat, 2001). Most studies have shown business-level effects, industry effects, and corporate effects to be the most influential in defining the success or failure of a single business unit (Rumelt, 1991; Carroll, 1993; Ghemawat, 1994; Ghemawat and Ricart Costa, 1993; Hoskisson, Kim, and Hill, 1993; McGahan and Porter, 1997). Later empirical studies have found certain categories of strategy to be mutually exclusive (Thornhill and White, 2007), and others to be strongly dependent on one another in generating superior performance (Uotila et al., 2009). However, while there has been much done to establish the link between business-level strategy and business-level performance, there has been little done to understand the role that corporate
controls play in defining the relationship. This shortcoming partly relates to the negligence of controls in defining business-level strategy and the consideration of business unit strategy as an exogenous factor. Therefore, the significance of a “fit” between the controls implemented by the corporation on business units and business unit strategy remains mainly unexplored.

5.5 Fit Between Business Strategy and Corporate Controls

Performance at the business level of a business unit not only depends on the strategic orientation of the business unit, but also on the “fit” between different organizational factors that can have effects on business unit performance. The concept of “fit,” which was initially developed in behavioural organizational research (Venkatraman, 1989), has also been used to explain the relationship between corporate controls and the practices that are exercised at the micro level of business units (Rowe and Wright, 1997; White, 1986). Such arguments suggest that in order to maintain efficiency in business units and achieve superior performance, micro-level practices must conform to the requirements of controls at the macro level. This results in the relationship between a corporate headquarters and a business unit affecting the business unit’s subsequent performance. Past research has found a fit between business unit strategy and the internal organization of the corporation to influence business unit performance, where higher business unit autonomy leads to market performance (i.e., growth in sales) and less autonomy, and tighter controls leads to higher short-term financial performance (White, 1986).

When a business unit is subject to financial controls, divergence from practices that have a fit with an operational excellence strategy can result in the occurrence of a misfit between corporate controls and practices at the business level (Baysinger and Hoskisson, 1989; Rowe and
Wright, 1997; White, 1986). Such divergence, in turn, can result in the initiation of a conflict between the business unit and its corporate parent. The resulting conflict can often be an antecedent to variations in a firm’s financial performance during a shorter time period and the inability of mutual communication of decision justification between the business unit and the corporate headquarters. This lack of communication could subsequently affect the willingness of the corporate headquarters to allocate additional resources or to leverage its corporate resources to the advantage of the business unit.

Also, when a firm is pursuing a product differentiation strategy, its costs can often be reduced through synergies that are created as a result of economies of scope within the corporation. In unrelated diversified corporations, where financial controls are the primary means of managing business units (Baysinger and Hoskisson, 1989; Goold, Campbell, and Alexander, 1994), the lack of existence of such relationships can result in a misfit between micro-level practices and macro-level controls (Baysinger and Hoskisson, 1989). Such a misfit can often result in less competitiveness at the business unit level and subsequent lower business unit performance. Therefore, business unit performance subsequent to the choice of strategy can also be affected by controls associated with different corporate strategies. Hence:

*Hypothesis 7a: The interaction between the strategic direction of a business unit and the corporate controls that it is subject to influences its subsequent financial performance; business units pursuing operational excellence strategies will exhibit higher financial performance when subject to a stronger emphasis on financial controls, and business units pursuing product leadership strategies*
will exhibit higher financial performance when subject to a stronger emphasis on strategic controls.

Hypothesis 7b: The interaction between the strategic direction of a business unit and the corporate controls that it is subject to influences its subsequent market share performance; business units pursuing operational excellence strategies will exhibit higher market share performance when subject to a stronger emphasis on financial controls, and business units pursuing product leadership strategies will exhibit higher market share performance when subject to a stronger emphasis on strategic controls.

5.6 Summary

Performance has often been the dependent variable of interest in the literature of strategic management. Much research has been conducted to determine the relationships between various organizational factors and business unit performance. The influence of corporate effects on business performance, however, has largely remained unclear and subject to debate. Meanwhile, differences in business unit strategy have been found to explain a significant part of variance in business unit performance (e.g., Thornhill and White, 2007; McGahan and Porter, 1997).

The role of “fit,” however, between corporate factors and business strategy has not fully been addressed in past literature. Despite some researchers pointing to fit between other organizational factors (Rowe and Wright, 1997), this notion has not been considered for business strategy. In this chapter, it has been argued that the performance of a business unit has a strong connection to the fit between corporate controls and business unit strategy. This means
that businesses pursuing product leadership strategies have a better chance of achieving superior performance if they are subject to strategic controls, instead of financial ones.

In this chapter, a review of the literature on performance was conducted. Since this construct has often been questioned on validity, different perspectives on two main dimensions of this construct — financial performance and market performance — have been reviewed. Subsequently, arguments to support the proposed hypotheses were advanced.
CHAPTER 6: METHODOLOGY AND DATA

6.1 Theoretical and Methodological Approach

Understanding the effect of corporate strategy on business unit performance has been found to be more complex than initially expected. Hence, methodological differences in assessing the relationship have been diverse, resulting in findings that have been conflicting at times (e.g., Rumelt, 1974, 1991; McGahan and Porter, 1997; Bowman and Helfat, 2001). Some of the differences in results have stemmed from differences in the conceptualization of the relationship, while others have been founded on methodological dissimilarities (Hoskisson and Hitt, 1990).

This dissertation has made an attempt to address the relationship at both levels. The theoretical model that has been proposed in previous chapters puts forward a new theoretical conceptualization of the relationship between corporate strategy — instead of corporate effects — and business strategy, and subsequently business unit performance. The proposed model of this dissertation posits that corporate strategy influences strategy at each business unit through controls that are implemented for each business unit. Therefore, this dissertation conceptualizes business unit strategy not as nested within corporate effects or as separate from corporate effects, but as influenced by corporate strategy. This dissertation also unpacks the corporate effects construct, theorizing the indirect link between corporate strategy — as part of the corporate effect’s construct — and business unit strategy. In doing so, the theoretical representation of the relationship acknowledges the mediating role of corporate controls within the proposed relationship, while accounting for the moderating effects of three corporate variables: number of business units, size of corporate headquarters staff, and background of the corporation’s CEO.
However, the contributions of this dissertation are not limited to the conceptualization of this phenomenon, but also include measurements of corporate controls, which had remained a theoretical concept without operationalization in previous research.

The philosophical approach in this study is one that is deductive, where the theoretical conceptualization of the phenomenon has been conducted by the researcher and the data is collected and analyzed in order to ensure the falsifiability of the proposed theory. The result of this dissertation is a theoretical perspective that extends previous theoretical conceptualizations of the phenomenon of the influence of corporate strategy on business unit strategy, which was still falsifiable and could be subject to further empirical testing.

6.2 Quantitative Sample and Data Collection

As mentioned earlier in this chapter, this dissertation entails analysis of quantitative data collected through archival secondary sources. Therefore, an important component of this dissertation and its findings rely on measures that are used to operationalize the variables that are included within the theoretical model. Previous methodological approaches in research on corporate strategy have often resulted in the utilization of dichotomous variables, which have resulted in misconceptions, particularly where boundary conditions within categories were present (e.g., Hoskisson and Hitt, 1988; Hough, 2006; Rumelt, 1974). The methodological approach that has been applied in this dissertation has made every attempt to transform existing categorical variables into ones that are continuous without violating previous conceptualizations, while maintaining validity (Schwab, 1980) and relevance (Nagle, 1953). Such variables include those that are used to determine the corporate strategy pursued by the corporations; corporate
controls that are designed and implemented by the corporate headquarters and at the business level; and strategies that are pursued at the level of the business unit. Using continuous variables, the statistical analysis is conducted through ordinary least squares (OLS) regression (Cohen and Cohen, 1983; Cohen, Cohen, West, and Aiken, 2003). In what follows, the methodological approach to measure and utilize each of the variables included in the model is reviewed in brief.

The data that is used for this dissertation comes from reports that have been developed by the Industrial Development and Renovation Organization of Iran (IDRO). IDRO, which was established in 1967, serves as the responsible entity that oversees industrial development in Iranian organizations. IDRO provides services to many Iranian private and public sector organizations. As of 2009, it has also owned and operated 290 major Iranian corporations, after having privatized over 140 other corporations in the preceding years. It still remains Iran’s largest and most influential industrial entity. This study uses data from 193 corporations under IDRO’s umbrella, either owned by IDRO itself or subscribing to its services. The dataset also includes data from 2,704 business units or divisions that operate under these 193 corporations. To ensure that the effect of exogenous influences on observed variables remains minimal, data from the years 1998 to 2000 have been included in the sample. This decision ensures that the period falls within one single presidential administration period following the 1997 election. The decision to limit the data to 2000 was to avoid possible influences resulting from consequences of terrorist events of September 2001 on the observed performance variables.
6.2.1 Corporate Strategy

To study the effect of corporate strategy on other organizational factors, it is necessary to present appropriate measures for the variable. In Chapter 2 of this dissertation, a comprehensive review of the literature on corporate strategy was conducted. The concept of corporate strategy that is discussed in this dissertation revolves around the approaches that corporations have towards diversification. In this section, measures that are used for the purpose of this dissertation are briefly discussed.

Traditional approaches in research on corporate strategy have often utilized Standard Industrial Classification (SIC) codes to measure the corporate strategy that is pursued (Hoskisson and Hitt, 1990). However, research on the subject evolved to adopt categorical approaches in determining corporate strategy, assuming market structure to be a more salient factor in influencing firm performance than the strategies that are pursued at a corporate level (Hoskisson and Hitt, 1990).

As mentioned earlier, the measurement of diversification strategy that is pursued by corporations has evolved a great deal over time. One of the earliest measurement approaches used a simple count of industries that corporations operated in, their specialization ratio, and an interaction between these two factors to develop a measure of diversification (Gort, 1962). Further developing this approach, Arnould (1969) also accounted for the share of corporations’ output within each of the industries in which they had a presence, as well as the concentration measure of each industry. However, the uni-dimensionality inherent within such measurements of diversification resulted in the development of other measures for diversification in corporations. Most notable of such measures has been Rumelt’s (1974) categorical approach
towards diversification, which extends Wrigly’s (1970) initial classification, proposing nine and later seven categories for diversification.

It has been suggested that the main difference between Rumelt’s (1974) operationalization and previously developed measures (e.g., Gort, 1962; Arnould, 1969) exists in the categorical approach taken by Rumelt. This approach uses careful conceptualization of the phenomenon, operationalizing corporate strategy through subjective and objective observations and data instead of the continuous measures used by others (e.g., Gort, 1962; Arnould, 1969), where simple objective and uni-dimensional information is used (Montgomery, 1982). However, despite minor relative advantages over one another and under certain circumstances, empirical findings of research using each of these different approaches have often yielded similar results (Hoskisson and Hitt, 1990).

While past measures of diversification did serve the objective of measuring the degree of diversification, they did not distinguish between different diversification strategies that are pursued by firms. Most notably, they failed to measure the variation in relatedness, or unrelatedness, of business units across corporations. To address this shortcoming, Jacquemin and Berry (1979) developed an entropy measure for diversification.

The entropy measure of diversification not only measures the degree of diversification, but also the degree to which the business units are related. The entropy measure provides its output in the form of three separate indices: index of related diversification (DR), index of unrelated diversification (DU), and index of total diversification (DT=DR+DU) (Palepu, 1985). Since this approach provides the researcher with the ability to make the distinction between
corporate strategies, it is used in this dissertation with certain modifications in order to accommodate this dissertation’s methodological approach.

As indicated, the entropy measure for diversification provides three separate indices that are often used by researchers as dichotomous variables, when analyzing the data. This often results in the loss of valuable information in the presence of boundary conditions. To avoid this loss and to provide a continuous measure for the analysis of data in this dissertation, consistent with the approach validated and used in past research (Markides, 1995; Hoskisson and Johnson, 1992), a new measure is defined by dividing the related diversification index (DR) by the total diversification index (DT). Since DT is the sum of DR and DU, it implicitly carries the value of DU. Therefore, the new measure provides a measure that not only incorporates DR, but also DU. Subsequently, to make comparison possible, the Z-scores for the newly developed variable are utilized, after summation of a constant to avoid the possibility of negative values. The new measure (DRZ) is then used as the continuous measure for corporate strategy in this dissertation, with lower DRZ being unrelated diversification and higher DRZ being related diversification.

6.2.2 Span of Corporation

As discussed in Chapter 4, the ability of a corporation to implement its corporate controls in business units is moderated by the number of businesses or product segments that its business units are involved in. Earlier measures of diversification have often used simple counts of business units in order to determine the level of firms’ diversification (e.g., Gort, 1962). To measure the span of a corporation, a similar approach is taken in this dissertation and after appropriate controls that are discussed later, the number of business units — i.e., wholly owned
subsidiaries of the corporation with distinct legal and organizational identities and with profit and loss reporting mechanisms — that form the corporation is used as the measure for this variable.

6.2.3 Relevant Experience of the CEO

As previously argued, the CEO of a parent company is considered to hold primary responsibility for corporate performance. Therefore, the CEO has the role of the ultimate decision maker within a corporation. Building on findings of the upper echelons theory (Hambrick and Mason, 1984), this dissertation also measures parent companies’ CEOs’ expertise on the basis of past involvement as directors of businesses with industry classifications similar to those of the focal corporations. In addition, the educational background of each individual CEO is assessed to understand if it is relevant to each of the business units of the corporation.

To collect data for this measure, existing data from the CEO backgrounds of Iranian corporations that subscribe to the services of Industrial Development and Renovation Organization of Iran is used. The data, which has been provided through organizational archives, is based on the educational backgrounds and employment histories of CEOs that manage IDRO-sponsored corporations.

To operationalize this variable, a measure has been developed for each business unit of the corporation. For each business unit, individual CEOs of the corporation with experience and/or educational history relevant to the industry of the business unit are coded as “1,” while those with no prior experience or education related to that business unit are coded as “0.”
6.2.4 Size of Corporate Headquarters

As one of the moderating variables of the theoretical model of this dissertation refers to the size of the corporate headquarters, a similar approach to that taken by Kroll, Walters, and Wright (2008) is adopted, where a simple count of the number of staff that forms the corporate headquarters is used.

6.2.5 Corporate Controls

Corporate controls are put in place by corporations in order to ensure that the decisions made and actions taken at the level of business units are in line with what is perceived to be in the best interests of the corporation. The best interests of the corporation, as explained earlier in this dissertation, are assessed on the basis of meeting short-term and long-term economic objectives. The main responsibility for making decisions at the level of a business unit largely lies with the highest-ranking executive in that business unit. Therefore, it is logical to assume that corporate controls are one of the most effective tools employed by corporate headquarters to influence the behaviour of their business units’ CEOs.

Corporate controls are important means for organizations to ensure that the performance of business units are in accordance with predefined expectations. Past research has focused on the level of autonomy that has been provided to different organizational units (e.g., White, 1986; Vancil, 1979) or to the organizational levers that facilitate control (Simons, 1994). The degree of autonomy represents the degree to which an organization allows for latitude in decisions to be made in a more decentralized manner by executives in charge of different business units. However, unless methods of evaluating performance are identified, the degree of autonomy alone is not indicative of the type of control that is exercised in a corporation. An implication of
the performance of business units as the focal point of interest by practitioners and researchers is
the prominence of diagnostic systems in conducting evaluations. Building on past research, this
study uses data from business units of Iranian corporations to capture characteristics such as
autonomy, horizontal interaction between business units, locus of decision making, and focus of
performance evaluation.

To operationalize the measure for corporate controls, retrospective data collected by
IDRO on Iranian corporations subscribing to its services and licensing is used for the years
between 1998 and 2000. The data, which are retrospective in nature, have been collected through
surveys using a 7-point Likert scale from business unit managers. The surveys contain items
such as “level of interaction between divisions,” “level of interaction between business units and
the corporate headquarters,” “degree of resource sharing between business units and divisions,”
“degree of capability sharing and transfer among divisions,” “level of information sharing,”
“level of knowledge by corporate managers regarding processes of business units,” “willingness
to accept risk in favour of long-term performance,” “spending on R&D, employee training,
capital and equipment, and market research,” “level of emphasis on monitoring
market/operational/financial data,” “degree of openness in communication between corporate
and division managers,” “method of performance evaluation for employees,” “level of emphasis
on cost reduction,” “use of financial data as the criterion for performance,” “degree of
competition among divisions,” and “degree of focus on short-term ROI, cash flow, revenue
growth, and market share as the criteria for evaluating performance” (Hitt, Ireland, Hoskisson,
Rowe, and Sheppard, 2006). This data captures different aspects of corporate controls such as
autonomy, diagnostics, and ongoing processes within a corporation, which is consistent with
dimensions previously identified and proposed in past literature (e.g., Gonvidarajan and Fisher, 1990; Hoskisson and Hitt, 1988; White, 1986; Vancil, 1979).

In order to validate the measure for corporate controls, the data from business units is split in half and exploratory factor analysis (EFA) is conducted on one half of the data to identify emerging factors. Since the sample size is larger than 300, factor loadings greater than 0.4 are considered as acceptable. As expected, survey items emphasizing approaches such as “interaction among business units,” “interaction with corporate headquarters,” and “resource sharing with other business units” load highly on the strategic controls factor. Those with emphasis on approaches such as “risk avoidance” and “financial evaluation of performance” load higher on the financial controls factor. Then, the items for emerging factors are checked against existing definitions for each type of control such as strategic controls and financial controls. The averages of items are then used to develop new measures for strategic controls and financial controls.

To develop a unique variable that captures both types of controls, the ratio of the developed measures is used; the measure for strategic controls is divided by the measure of financial controls. The ratio is standardized and centred before being used. The developed measure captures both types of controls. Higher values indicate a stronger emphasis on strategic controls and lower values signal a stronger emphasis on financial controls. This variable is measured for every business unit, and varies for each of the business units within a corporation. The summary of factor loadings for items measuring controls has been included in Table 6.1.

As mentioned, the sums of items from emerging factors are used to construct two new factors: strategic controls and financial controls. The alpha value for strategic controls is 0.71
and for financial controls is 0.76. Confirmatory factor analysis (CFA) is then performed to test for distinctiveness and uni-dimensionality of the factors, which reveals a GFI=0.941 and a Chi-square value of 925.51. Convergent validity is checked (CV>0.5) for with CV (\(\xi_{\text{Strategic Controls}}\))=0.502 and CV (\(\xi_{\text{Financial Controls}}\))=0.56. The discriminant validity of the controls variable is also checked. With covariance set at 1, the analysis reveals a worsening in fit, which demonstrates that the unconstrained model has a better fit. This fulfills the discriminant validity criterion for controls.
Table 6.1: Factor Loadings for Controls

<table>
<thead>
<tr>
<th>Item</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strategic Controls</td>
</tr>
<tr>
<td>Interaction among divisions</td>
<td>0.639</td>
</tr>
<tr>
<td>Interaction with corporate HQ</td>
<td>0.631</td>
</tr>
<tr>
<td>Sharing resources among divisions</td>
<td>0.612</td>
</tr>
<tr>
<td>Transfer of core competencies among divisions</td>
<td>0.402</td>
</tr>
<tr>
<td>Information sharing among divisions</td>
<td>0.399</td>
</tr>
<tr>
<td>R&amp;D expenditures</td>
<td>0.384</td>
</tr>
<tr>
<td>Management training</td>
<td>0.327</td>
</tr>
<tr>
<td>Market research</td>
<td>0.295</td>
</tr>
<tr>
<td>Open communication between corporate and division</td>
<td>0.139</td>
</tr>
<tr>
<td>Employee evaluation based on financial results</td>
<td>0.073</td>
</tr>
<tr>
<td>Least cost behaviour</td>
<td>-0.037</td>
</tr>
<tr>
<td>Risk avoidance</td>
<td>0.043</td>
</tr>
<tr>
<td>Competition among divisions</td>
<td>-0.114</td>
</tr>
<tr>
<td>Focus on ROI</td>
<td>-0.002</td>
</tr>
<tr>
<td>Capital channelled to higher financial performers</td>
<td>-0.024</td>
</tr>
</tbody>
</table>

Note: Items in bold have been used to construct the corporate controls measure.
6.2.6 Business Strategy

There have been many methods proposed for determining or measuring business-level strategies. To measure business unit strategy, this dissertation builds on Thornhill and White’s (2007) research. Using the data collected by IDRO on organizations that have subscribed to its services and licensing, this dissertation uses the 14 items that have been used to distinguish business strategy for each of the business units.

The data collected by IDRO was collected using surveys with responses provided by business unit managers. The 14 items on the survey are similar to those on the Canadian Workplace and Employee Survey (WES) and include items such as “undertaking research and development,” “developing new products/services,” “developing new production/operating techniques,” “expanding into new geographic markets,” “total quality management,” “improving product/service quality,” “reducing labour costs,” “using more part-time, temporary, or contract workers,” “reducing other operating costs,” “reorganizing the work process,” “enhancing labour management cooperation,” “increasing employees’ skills,” “increasing employees’ involvement/participation,” “improving coordination with customers and suppliers,” and “improving measures of performance.”

Similar to the method pursued by Thornhill and White (2007), exploratory factor analysis, followed by confirmatory factor analysis, is conducted to identify distinct strategy factors for one half of the data set, and to construct two factors using the sum of values for their items. Since the sample size is larger than 300, factor loadings greater than 0.4 are considered acceptable. The alpha values for the two constructed factors — product leadership and operational excellence — are 0.79 and 0.70, respectively. As expected, items focusing on dimensions such as “R&D investment” and “development of new products or services” load
highly on the product leadership factor, while items emphasizing “reducing operating costs,” “reducing labour costs,” or “improving production techniques” load highly on operational excellence. The summary of factor loadings for the items used to measure business unit strategy has been included in Table 6.2.

Confirmatory factor analysis is undertaken to identify the factors as distinct. The analysis also reveals that both operation excellence and product leadership meet the requirements for convergent validity (CV>0.5), with CV (ξ_{Operational Excellence})=0.51 and CV (ξ_{Product Leadership})=0.69. The discriminant validity of the business unit strategy variable is also checked. With covariance set at 1, the analysis reveals a worsening in fit, which demonstrates the unconstrained model to have a better fit. This fulfills the discriminant validity criterion for business unit strategy.
Table 6.2 Factor Loadings for Business Unit Strategy

<table>
<thead>
<tr>
<th>Item</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Operational Excellence</td>
</tr>
<tr>
<td>Undertaking R&amp;D</td>
<td>-0.287</td>
</tr>
<tr>
<td>Developing new products/services</td>
<td>-0.332</td>
</tr>
<tr>
<td>Developing new production/operating techniques</td>
<td><strong>0.811</strong></td>
</tr>
<tr>
<td>Expanding into new geographic markets</td>
<td>0.103</td>
</tr>
<tr>
<td>Total quality management</td>
<td>0.423</td>
</tr>
<tr>
<td>Improving product/service quality</td>
<td>0.029</td>
</tr>
<tr>
<td>Reducing labour costs</td>
<td><strong>0.831</strong></td>
</tr>
<tr>
<td>Using more part-time, temporary contract workers</td>
<td><strong>0.545</strong></td>
</tr>
<tr>
<td>Reducing other operating costs</td>
<td><strong>0.752</strong></td>
</tr>
<tr>
<td>Reorganizing the work process</td>
<td>0.354</td>
</tr>
<tr>
<td>Enhancing labour management cooperation</td>
<td>0.072</td>
</tr>
<tr>
<td>Increasing employee skills</td>
<td>-0.125</td>
</tr>
<tr>
<td>Increasing employee involvement/participation</td>
<td>0.223</td>
</tr>
<tr>
<td>Improving coordination with customers and suppliers</td>
<td>0.312</td>
</tr>
<tr>
<td><strong>Improving measures of performance</strong></td>
<td><strong>0.451</strong></td>
</tr>
</tbody>
</table>

Note: Items in bold have been used to construct the business unit strategy measure.
6.2.7 Financial Performance

The measurement of financial performance in the majority of past research has been done through financial and accounting indicators. The most commonly used measures for financial performance in past research have been ROA, ROE, and ROI (Glick, Washburn, and Miller, 2005). In line with past research, I also adopt a similar approach, using ROI as the measure for financial performance of the firm. The reason to choose ROI over ROA and ROE is solely based on the availability of data. The calculation of ROI, expressed as a percentage, is done internally within IDRO and is based on the following ratio:

$$ROI = \frac{\text{Net profit after interest and tax}}{\text{Total investment assets}}$$

To account for the temporal element in the relationship between business strategy and firm financial performance, the accounting measures from the subsequent year to the measurement of business strategy are employed. The data that is required for this variable is collected through the sections of annual reports of the IDRO-sponsored corporations that explicate annual ROI for each business unit.

6.2.8 Market Performance

Unlike the case for financial performance, measuring market performance is not as simple for wholly owned business units. There have been different measures proposed for the measurement of market performance in past literature. Such measures have included Sharp’s
measure, Treynor’s measure, the appraisal ratio (Alexander and Francis, 1986; Bodie, Kane, and Marcus, 1993; Hoskisson et al., 1994; Rowe and Morrow, 1999), and Tobin’s Q (Devinney et al., 2005).

However, due to limitations on obtaining data on market indicators that relate to wholly owned business units, it is difficult to estimate their market performance through any of the market performance measures that are available. Therefore, in line with past research (White, 1986), growth in sales is used to measure the market performance of each business unit. To obtain this measure, the revenue of each business unit is assessed compared to the total revenues generated in the subsequent year, and the ratio from t-1 to t (the subsequent year to measuring business strategy) is used to measure the market performance of the firm.

6.2.9 Control Variables

Several variables have been controlled for during data analysis for this dissertation. The control variables include those at both the corporate and the business levels. In what follows, a description of the control variables and the justification for their selection are provided.

6.2.9.1 Business-level Control Variables

Size of Business Units

Business units that are too small in size are controlled, since they do not engage much of the information processing capacity of the corporate headquarters and would only inflate the ability of the corporate directors to monitor their business units. To operationalize this control,
two steps are taken. First, consistent with the European Union’s (EU) definition of small businesses, business units with less than 50 members are eliminated from the dataset. The selection of the EU standard is made due to its acceptance as an appropriate definition by IDRO. For the remaining business units, the logarithm of the number of employees from each business unit is used.

**Industry Effects**

Industry effects have also been controlled. Industry effects refer to industry-level influences that lead to explained or unexplained business-unit-level effects. Industry effects may have complex effects on the performance of business units and on the logic through which they operate. As a result, industry effects are controlled for to avoid complications in the validity of my findings. To complete this dissertation, industry effects (i.e., the membership of business units in their respective industry sectors) have been controlled for for each of the business units of corporations. The dataset used in this dissertation consists of business units that belong to 33 different industries.

To operationalize the control of industry effects, dummy variables corresponding to the number of industries are used. To include industry effects within the correlation matrix, the structural model for this dissertation is constructed within the SmartPLS environment and a latent variable for industry effects is created. Then, the influence of industry effects on other dependent variables is included in order to operationalize the control variable. The resulting effect is included in the correlation matrix.
6.2.9.2 Corporate-level Control Variables

Family Structure

Another variable that is controlled in this study is corporations with family structures. Although many such corporations experience similarities in issues related to the management and control of their businesses, they undermine some of the underlying logic within agency theory literature (Zahra, 2003; Davis, Schoorman, and Donaldson, 1997) which stands as an important theoretical foundation of this dissertation. Therefore, every attempt is made to control for such corporations in the analysis of the data. To operationalize family structure as a control variable, a dummy variable is used (1=non-family structure and 0=family structure). Corporations with boards of directors consisting of 50% or more first-degree (i.e., parents and grandparents; brothers and sisters) or second-degree relatives (i.e., first and second cousins; in-laws) are identified as corporations with family structures. The data for this variable is provided by IDRO within the dataset.

IDRO Ownership

While the majority of corporations included in this study are only subscribers to IDRO’s licensing and services, there are instances where IDRO takes the role of the institutional owner of the corporation and its business units. Although IDRO-owned corporations are still operated and evaluated based on profit or loss, the nature of their interactions with IDRO and their ownership structure result in complexities that go beyond what is generally the case for private or public companies. Therefore, to eliminate the threat of effects from such complexities, IDRO
ownership is controlled for throughout the dataset. A dummy variable is used to capture ownership of the corporation by IDRO (1=non-IDRO ownership and 0=IDRO ownership).

**Geographic Dispersion**

Corporations with business units in different countries are controlled for to avoid possible influences that exist because of the limitations of the corporate parent to implement and execute its desirable controls. To operationalize geographic dispersion as a control variable, a dummy variable is included in the dataset, which indicates if a corporation owns and operates a business unit with over 50 employees outside of Iran’s borders (0=international expansion and 1=non-international expansion).

**Corporate Effects**

To avoid complications resulting from corporate-level influences other than corporate strategy, corporate effects have been included as a control variable. Corporate effects include factors such as structure and reward systems, among other less identified corporate-level factors. Therefore, to avoid positive or negative influences on business-unit-level variables, which could affect the validity of findings, corporate effects have been controlled for in this study. To operationalize corporate effects as a control variable, a similar approach to industry effects is used: 193 dummy variables, which corresponds to the number of corporations, are used to connect each business unit to its corporate parent. To include corporate effects within the correlation matrix, the structural model for this dissertation is constructed within the SmartPLS
environment and a latent variable for corporate effects is created. Then, the influence of corporate effects on other dependent variables is included in order to operationalize the control variable. The resulting effect is included in the correlation matrix.

6.3 Summary

In this chapter, a detailed description was provided of the methodology used for the measurement of variables included in this dissertation’s theoretical model. The sources for data used in this research were also explained and discussed in detail. In addition to the main variables, control variables were also discussed for justification. In what follows in Chapter 7, the results and findings from analysis of the hypothesized relationships will be presented. Then, findings from Chapter 7 will be discussed in Chapter 8.
CHAPTER 7: DATA ANALYSIS AND RESULTS

7.1 Introduction

In this chapter, the results of the statistical analysis of the dataset used for this dissertation are presented. To maintain clarity of the process, the results have been presented on a hypothesis-to-hypothesis basis. The methods used for the analysis consist of linear regression and analysis of variance (ANOVA) techniques. For the analysis related to each hypothesis, the quantitative findings have been presented first. In the sections that follow, each hypothesis has been tested twice, using different techniques in order to ensure the robustness of the results. In addition to the hypothesized relationships, the direct relationships between variables used in this study are also measured for further robustness. The presentation of quantitative findings of each section is then accompanied with a description of the findings. In addition to the findings that directly relate to the hypothesized relationships, several exploratory statistical tests are conducted. The results of these exploratory tests are included in the final section of this chapter and are discussed thoroughly in Chapter 8.

To test the hypotheses, in each case the dependent variable is regressed on the independent variable using linear regression techniques. To test for moderation, the interaction effect between independent and moderator variables is used for the regression. In each step, all necessary controls including the direct relationship between the moderator and the dependent variable are taken into consideration. To test for mediation, the method used in this study follows the three-step approach proposed by Barron and Kenny (1986).
The findings of this dissertation have been presented in the following format: First, the different approaches for data analysis have been explained. Second, I have proceeded by providing descriptive statistics of the data, followed by preliminary testing of the data consistent with past research (e.g., Thornhill and White, 2007). Third, the analysis of data has been conducted using ordinary least squares (OLS) regression for the hypothesized relationships. Finally, the summary of results has been presented, before a discussion of findings in Chapter 8.

7.2 Preliminary Analysis

To test the hypotheses, two different methods are used. First, I conduct the statistical analysis using ordinary least squares (OLS) regression in SPSS. While the data consists of two levels, limitations within group sample size (i.e., number of business units corresponding to each corporation) inhibit the use of hierarchical linear modeling (HLM), which requires a minimum of 25 subjects at each level, as the statistical method for data analysis. Therefore, all corporate-level factors are disaggregated to the business unit level. Subsequently, all corporate effects are (through inclusion of corporate parent information) regressed onto all dependent variables in the model. Prior to conducting the statistical analysis, a series of statistical tests are conducted in order to determine the factors that are to be used in the analysis. These factors are particularly important to the measurement of business unit strategy, since the survey used in the study contains various items that are related to each business unit strategy type. In order to determine the items used in the study, an approach consistent with the one used in previous research (Thornhill and White, 2007) is used. An exploratory factor analysis (EFA), followed by a confirmatory factor analysis (CFA), is conducted on 18 of the factors that were listed in the “Strategy” section in the survey. As a result, the items from the two emerging factors (each with
eigenvalues greater than 1) are used to construct a new measure for each type of business unit strategy. Since the survey used a similar 5-point Likert scale, the new measure is constructed through averaging the responses to the survey and to the specified items.

As explained in Chapter 6, a similar approach to measurement of business unit strategy is used for measurement of controls implemented by corporate headquarters on each of the investigated business units. The factor analysis leads to two emerging factors. A review of the factors reveals similarities to the definitions provided for strategic and financial controls. Similar to the approach taken to measure business unit strategy, the ratio for the average of items for emerging factors is used to construct a new measure that focuses on controls implemented by corporate headquarters on each of the business units.
Table 7.1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Span</td>
<td>2704</td>
<td>18.34</td>
<td>9.096</td>
<td>3</td>
<td>41</td>
</tr>
<tr>
<td>DR</td>
<td>2704</td>
<td>0.6559</td>
<td>0.2977</td>
<td>0.16</td>
<td>1.39</td>
</tr>
<tr>
<td>DU</td>
<td>2704</td>
<td>0.8798</td>
<td>0.5531</td>
<td>0.23</td>
<td>2</td>
</tr>
<tr>
<td>DT</td>
<td>2704</td>
<td>1.5358</td>
<td>0.3839</td>
<td>0.61</td>
<td>2.24</td>
</tr>
<tr>
<td>HQ Size</td>
<td>2704</td>
<td>35.90</td>
<td>21.37</td>
<td>6</td>
<td>89</td>
</tr>
<tr>
<td>BU Strategy Ratio</td>
<td>2704</td>
<td>1.25</td>
<td>0.8774</td>
<td>0.2</td>
<td>4.5</td>
</tr>
<tr>
<td>Controls Ratio</td>
<td>2704</td>
<td>0.974</td>
<td>0.0092</td>
<td>0.5</td>
<td>4.143</td>
</tr>
</tbody>
</table>
Table 7.2: Correlations Among All Corporate-level Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Corporate Strategy</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Controls</td>
<td>0.217</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Span</td>
<td>0.067</td>
<td>-0.216</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. HQ Size</td>
<td>0.115</td>
<td>-0.203</td>
<td>0.456</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. CEO Experience</td>
<td>0.043</td>
<td>0.024</td>
<td>-0.012</td>
<td>0.005</td>
<td>1</td>
</tr>
</tbody>
</table>

*a Standardized coefficients are reported

N=2704 (corporate strategy, span, HQ size, and CEO experience are measured for a total of 193 corporations. Controls are measured for each individual subsidiary for a total of 2,704).

* $p<.05$

** $p<.01$

*** $p<.001$
### Table 7.3: Correlations Among All Subsidiary-level Variables *

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Controls</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Business Unit Strategy</strong></td>
<td>0.033**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Financial Performance</strong></td>
<td>-0.024</td>
<td>0.033**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>4. Market Performance</strong></td>
<td>0.113**</td>
<td>-0.024</td>
<td>0.318**</td>
<td>1</td>
</tr>
</tbody>
</table>

*a Standardized coefficients are reported

N=2704 subsidiaries (business units)

* $p<.05$

** $p<.01$

*** $p<.001$
7.3 Ordinary Least Squares Regressions in SPSS

Table 7.1 summarizes the descriptive statistics for the dataset and the variables included in the proposed theoretical model. Using the Correlate function in SPSS, the correlation matrix for the variables included in the model, including the interaction terms, is generated. The detailed correlation matrix can be found in Table 7.2 and Table 7.3.

7.3.1 Test of Hypothesis 1

The first hypothesis (H1) of this study predicts that related diversified corporations are more likely to employ strategic controls as their primary mechanism of control on their business units. On the other hand, Hypothesis 1 also predicts that unrelated diversified corporations are more likely to emphasize the use of financial controls as their primary control mechanism.

To test this hypothesis, I conduct OLS regression between the variables “corporate strategy” and “controls.” The SPSS statistical analysis yields the results indicated in Table 7.4.

On account of the way that the controls variable has been operationalized in this study (i.e., the use of a ratio that captures both financial controls and strategic controls with higher values indicating a stronger emphasis on strategic controls), a positive and significant relationship between the two variables (corporate strategy and controls) should lend support to the hypothesized relationship.

With an adjusted $R^2$ of 0.24, the results indicate a significant relationship (P<0.05) to exist between the diversification strategy pursued by corporations and the controls that have been
implemented by investigated corporations on their business units. The analysis also demonstrates a positive standardized B coefficient that is equivalent to 0.047 (see Model 2, Table 7.4).

Based on these values, we can conclude that the hypothesized positive relationship between corporate strategy and corporate controls (Hypothesis 1) has been supported, based on the statistical analysis of the data.

7.3.2 Test of Hypothesis 2

Hypothesis 2 of this study focuses on the positive moderating effect of the size of corporate headquarters (HQ size) on the relationship between corporate strategy and the type of controls that corporations implement on their business units. Based on the hypothesized relationship, ceteris paribus, larger corporate headquarters should increase the likelihood of corporations pursuing related diversification employing strategic controls, while smaller corporate headquarters should minimize the likelihood. This hypothesis suggests that while related diversified corporations are expected to put stronger emphasis on strategic controls compared to unrelated diversified corporations (H1), those related diversified corporations with larger staff in their corporate headquarters are likely to put even stronger emphasis on strategic controls relative to related diversified corporations with smaller staff in their corporate headquarters.

To test this hypothesis, the OLS regression from SPSS is used to conduct the statistical analysis of the effect of the interaction between HQ size and corporate strategy on controls. Table 7.4 summarizes the results of the regression analysis.
The results of the analysis lend support to the hypothesized relationship (p<0.05) with a B coefficient of 0.09 (Table 7.4, Model 4). Therefore, we can conclude that the hypothesized relationship has been supported by the data. To interpret the results, I use the approach proposed by Aiken and West (1991) to plot the significant interactions. For Hypothesis 2, Figure 7.1 shows stronger emphasis on financial controls relative to strategic controls in corporations with smaller corporate headquarters staff compared to corporations with larger corporate headquarters staff. In addition, for corporations pursuing related diversification there is a stronger emphasis on strategic controls when there is a larger number of staff at corporate headquarters.

**Figure 7.1: Effect of Interaction Between Size of HQ and Corporate Strategy on Controls**
Table 7.4: Results of Regression Analysis of the Relationship Between Corporate Strategy and Controls and the Moderation of the Relationship by Span, CEO Background, and Size of HQ Staff

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Effects</td>
<td>0.13*</td>
<td>0.13*</td>
<td>0.13*</td>
<td>0.13*</td>
</tr>
<tr>
<td>Size of Business Unit</td>
<td>0.12*</td>
<td>0.12*</td>
<td>0.12*</td>
<td>0.12*</td>
</tr>
<tr>
<td>Family Structure</td>
<td>0.03*</td>
<td>0.03*</td>
<td>0.03*</td>
<td>0.03*</td>
</tr>
<tr>
<td>IDRO Ownership</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Industry Effects</td>
<td>-0.04*</td>
<td>-0.04*</td>
<td>-0.04*</td>
<td>-0.04*</td>
</tr>
<tr>
<td>Geographic Dispersion</td>
<td>0.07*</td>
<td>0.07*</td>
<td>0.07*</td>
<td>0.07*</td>
</tr>
<tr>
<td>Effect of Corporate Strategy on Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Strategy</td>
<td>0.047*</td>
<td>0.049*</td>
<td>0.065*</td>
<td></td>
</tr>
<tr>
<td>Moderators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Business Units (Span)</td>
<td>-0.15*</td>
<td>-0.23*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of HQ Staff</td>
<td>-0.02*</td>
<td>0.03*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Background</td>
<td>0.07</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Span × Corporate Strategy</td>
<td>-0.08*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of HQ Staff × Corporate Strategy</td>
<td></td>
<td></td>
<td>0.09*</td>
<td></td>
</tr>
<tr>
<td>CEO Background × Corporate Strategy</td>
<td></td>
<td></td>
<td>0.06*</td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.22</td>
<td>0.24</td>
<td>0.28</td>
<td>0.31</td>
</tr>
<tr>
<td>( \Delta R^2 )</td>
<td>0.02</td>
<td>0.04</td>
<td>0.03</td>
<td></td>
</tr>
</tbody>
</table>

* Standardized coefficients are reported

N= 2704 (corporate strategy, span, HQ size, corporate effects, family structure, IDRO ownership, geographic dispersion, and CEO experience are measured for a total of 193 corporations. Controls are measured for each individual subsidiary for a total of 2,704).

* p < .05
** p < .01
7.3.3 Test of Hypothesis 3

Hypothesis 3 of this dissertation suggests a positive moderating role for the expertise and/or background of the corporate CEO on the relationship between corporate strategy and controls. This means that business units that are operating in an industry within the area of expertise of the corporate CEO (i.e., CEOs with relevance of educational background or prior work experience in the area) are more likely to implement and exercise strategic controls. The moderating role of CEO expertise is tested using the interaction term between the independent variable, corporate strategy, and relevance of the CEO’s background and work experience to the area in which each business unit is performing. As a result of choosing this approach, different business units of the same corporation can receive different evaluations based on the degree to which they are aligned with their corporate parent’s CEO’s background and expertise.

The results indicate that the interaction between CEO expertise and corporate strategy significantly influences the controls that are implemented by corporations on their business units (P<0.05). With an R$^2$ of 0.31, the statistical analysis also reveals a B coefficient of 0.06 (Table 7.4, Model 4).

Following Aiken and West’s (1991) approach, I have plotted the significant interaction for Hypothesis 3 in Figure 7.2. The plot shows a stronger emphasis on financial controls relative to strategic controls when the corporate CEO lacks expertise or background relative to the industry to which a business unit belongs. In contrast, when the CEO possesses expertise or background in the area of a business unit’s operation, strategic controls become more prominent. However, Figure 7.2 also shows CEO expertise and background to be less utilized when corporations increase diversification into unrelated businesses and more utilized when business units are more related. Based on findings from the statistical analysis, I conclude by finding
support for the hypothesized moderating effect of CEO expertise on the relationship between corporate strategy and corporate controls.

Figure 7.2: Effect of Interaction Between CEO Expertise and Corporate Strategy on Controls

![Graph showing the effect of CEO Expertise and Corporate Strategy on Controls](image)

**7.3.4 Tests for Hypothesis 4**

Through Hypothesis 4, this study has suggested that the number of business units controlled by a corporation has a negative moderating effect on the ability of corporations to implement strategic controls. In such cases, corporations tend to lean towards a stronger emphasis on financial controls relative to strategic controls. Based on this hypothesis, corporations with a smaller number of business units (smaller span) are more likely to have a stronger emphasis on strategic controls versus financial controls, when compared to corporations with a larger number of business units (greater span), ceteris paribus.
To test this hypothesis, the effect of the interaction of the number of business units (span) with corporate strategy has been tested on corporate controls that have been implemented on each of the business units. After controlling for the effect of other moderating variables, the statistical significance of the moderating effect is tested using SPSS. With those results, the statistical analysis is conducted. The results can be observed in Table 7.4, Model 4.

Aiken and West’s (1991) approach has been followed to plot the results from this moderating effect in Figure 7.3. The plot shows that the association of relatedness and emphasis of strategic controls is stronger when the corporation manages a smaller set of business units. In contrast, corporations with a larger number of business units demonstrate a weaker emphasis on strategic controls compared to corporations with a smaller number of business units.

Accounting for the control variables, the results indicate that the number of business units owned and operated by each corporation has a significant and negative moderating effect on the relationship between corporate strategy and corporate controls (P<0.05, B=-0.08).
7.3.5 Tests for Hypotheses 5 and 6

A main objective of this study has been to reconceptualize strategy at the business unit level as endogenous to corporate strategy. Hypothesis 5 of this dissertation suggests that controls mediate the relationship between corporate strategy and business unit strategy. Hypothesis 6 suggests that a stronger emphasis on strategic controls relative to financial controls by the corporate headquarters as the primary control mechanism increases the likelihood of business units pursuing product leadership as the business-unit-level strategy. Also, Hypothesis 6 suggests stronger emphasis on financial controls relative to strategic controls to be associated with a higher likelihood of pursuing operational excellence as the business-unit-level strategy. In order to test Hypothesis 5, the four-step approach proposed by Barron and Kenny (1986) is used.
For the first step of the analysis, the direct relationship between corporate controls and business unit strategy (mediator and dependent variables) has been investigated. The results of the analysis, which have been included in Table 7.5, Model 2, indicate a significant relationship ($p<.01, B=0.16$), which satisfies the first requirement for Barron and Kenny’s (1986) mediation analysis, while lending support to Hypothesis 6.

To complete my test of Hypothesis 5, another step is taken to test the direct relationship between corporate strategy and business unit strategy (independent and dependent variables). The results from Model 3 in Table 7.5 also indicate a significant relationship between corporate strategy and business unit strategy ($p<.05, B=0.29$). My previous analysis for Hypotheses 1 (the relationship between the independent and mediator variables in the mediation relationship) based on Table 7.4 (Model 2) has demonstrated a significant relationship between corporate strategy and controls ($p<0.05, B=0.047$), which satisfies another step for the mediation analysis. Therefore, I proceed to the final step of the mediation analysis, which tests the simultaneous effects of corporate strategy and controls on business unit strategy. The results, which have been included in Table 7.5, Model 4, demonstrate that both variables (corporate strategy and controls) have significant effects on business unit strategy, simultaneously ($p<.05, B=0.21$ for corporate strategy and $p<.05, B=0.14$ for controls), which supports a partial mediation hypothesis and, therefore, Hypothesis 5.
Table 7.5: Results of Regression Analysis of the Relationship Between Controls and Business Unit Strategy

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Effects</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
</tr>
<tr>
<td>Size of Business Unit</td>
<td>0.17*</td>
<td>0.16*</td>
<td>0.16*</td>
<td>0.16*</td>
</tr>
<tr>
<td>Family Structure</td>
<td>0.21*</td>
<td>0.19*</td>
<td>0.19*</td>
<td>0.19*</td>
</tr>
<tr>
<td>IDRO Ownership</td>
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<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Industry Effects</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Geographic Dispersion</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Effect of Controls on Business Unit Strategy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td>0.16*</td>
<td></td>
<td></td>
<td>0.14*</td>
</tr>
<tr>
<td><strong>Effect of Corporate Strategy on Business Unit Strategy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Strategy</td>
<td></td>
<td></td>
<td>0.29**</td>
<td>0.21*</td>
</tr>
</tbody>
</table>

**R²**
- Model 1: 0.122
- Model 2: 0.123
- Model 3: 0.13
- Model 4: 0.15

**Δ R²**
- Model 2: 0.001
- Model 3: 0.01
- Model 4: 0.02

*a Standardized coefficients are reported

N= 2704 (corporate strategy, span, HQ size, corporate effects, family structure, IDRO ownership, geographic dispersion, and CEO experience are measured for a total of 193 corporations. Controls are measured for each individual subsidiary for a total of 2,704).

* p<.05
** p<.01
*** p<.001
For robustness, I also conduct the Sobel test to evaluate the mediation effect (Preacher and Hayes, 2004). The Sobel test derives a t-statistic based on the comparison between the magnitude of the indirect effect and its standard error of measurement (Sobel, 1982) using the following relationships:

\[ t = \frac{\alpha\beta}{\text{Standard Error}} \]

and

\[ \text{Standard Error} = \sqrt{\alpha^2 \sigma^2 + \beta^2 \sigma^2} \]

Based on the t values for the relationship between corporate strategy and controls (t=21.563) and the simultaneous effect of corporate strategy and controls on business unit strategy (t=3.294), the Sobel test supports the mediation relationship (p<0.05). Interpreting these results, and consistent with Barron and Kenny (1986) and Sobel (1982), I can conclude that I find support for partial mediation of the relationship between corporate strategy and business unit strategy by controls that have been implemented on business units. Therefore, I find additional support for the hypothesized relationship in Hypothesis 5.

7.3.6 Test of Hypothesis 7a and 7b

Hypotheses 7a and 7b of this study suggest the fit between business unit strategy and the type of controls to which each business unit is subject influence financial performance and market performance at the business unit level. According to these hypotheses, business units that
are subject to financial controls are more likely to demonstrate higher financial performance and market performance if they pursue strategies in line with operational excellence. On the other hand, if pursuing product leadership as the business unit strategy, higher financial performance and market performance will be more likely if the business unit is subject to strategic controls.

To test these hypotheses, OLS regression is used to measure the influence of the interaction between controls and business unit strategy on the financial performance and market performance of the business units. The results corresponding to the analysis can be found in Table 7.6 (Model 4) and Table 7.7 (Model 4).

The results included in Table 7.6 and Table 7.7 indicate a significant moderating role for controls in the relationship between business strategy and financial performance (p<0.05, B=0.09) and a marginally significant moderating role for controls in the relationship between business unit strategy and market performance (p<0.1, B=0.02). To further evaluate the significance of the tested hypotheses, I proceed to examine the plots for the hypothesized moderation relationship.

Aiken and West’s (1991) approach has been followed to plot the results of the analysis for the moderation effects hypothesized in H7a and H7b in Figure 7.4 and Figure 7.5. The plot in Figure 7.4 demonstrates the importance of the fit between business unit strategy and controls implemented over business units to the subsequent financial performance of business units. Figure 7.4 shows that business units pursuing product leadership achieve higher financial performance when they are subject to a stronger emphasis on strategic controls. However, the plot does not show a significant difference to exist in financial performance for business units that pursue operational excellence strategies. Interestingly, an examination of the plot in Figure
7.4 shows that subject to a stronger emphasis on strategic controls, business units that pursue operational excellence strategies exhibit a marginally higher financial performance compared to those that are subject to stronger emphasis on financial controls, which counters the prediction of the hypothesis. Therefore, only partial support can be reported for H7a.

Similar to steps taken for H7a, moderation plots are used to further examine the findings of the test for H7b. While the statistical analysis for H7b shows marginal support for the hypothesized relationship, an examination of Figure 7.5 yields interesting results. The findings show that the difference between market share performance is larger for business units pursuing operational excellence strategies compared to those that pursue product leadership. The results show that, counter to the hypothesized relationship, being subject to strategic controls is associated with marginally higher performance for business units that pursue operational excellence.
excellence. Therefore, and based on an examination of Figure 7.5, it can be concluded that although interesting findings are revealed, no support can be given to H7b.

**Figure 7.5: Effect of Fit Between Controls and Business Unit Strategy on Market Performance**

![Graph showing the effect of fit between controls and business unit strategy on market performance.](image)

**7.4 Summary**

Chapter 7 contains the statistical tests for this dissertation’s hypotheses. The findings lend support to most of the hypotheses. However, the analysis reveals the mediation relationship in Hypothesis 5 to be partial and not full. Also, of the two hypotheses relating business unit strategy to performance, one is not supported and the other is partially supported. All other hypotheses have been supported. Additionally, my analysis reveals controls to be a partial mediator in the relationship between corporate strategy and business unit strategy. The summary of hypotheses and results can be found in Table 7.8.
**Table 7.6: Results of Regression Analysis of the Relationship Between Business Unit Strategy and Financial Performance and the Moderation of the Relationship by Controls**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Effects</td>
<td>0.06*</td>
<td>0.05*</td>
<td>0.05*</td>
<td>0.05*</td>
</tr>
<tr>
<td>Size of Business Unit</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Family Structure</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>IDRO Ownership</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
</tr>
<tr>
<td>Industry Effects</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Geographic Dispersion</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Effect of Business Unit Strategy on Financial Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Unit Strategy</td>
<td>0.11*</td>
<td>0.14*</td>
<td>0.16*</td>
<td></td>
</tr>
<tr>
<td><strong>Moderator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td>0.06</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls × Business Unit Strategy</td>
<td></td>
<td></td>
<td></td>
<td>0.09*</td>
</tr>
</tbody>
</table>

| R²          | 0.06 | 0.07 | 0.09 | 0.12 |
| ΔR²         | 0.01 | 0.02 | 0.03 |      |

*Standardized coefficients are reported

N= 2704 (corporate strategy, span, HQ size, corporate effects, family structure, IDRO ownership, geographic dispersion, and CEO experience are measured for a total of 193 corporations. Controls are measured for each individual subsidiary for a total of 2,704).

* p<.05
** p<.01
*** p<.001
Table 7.7: Results of Regression Analysis of the Relationship Between Business Unit Strategy and Market Performance and the Moderation of the Relationship by Controls

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Effects</td>
<td>0.05*</td>
<td>0.03*</td>
<td>0.03*</td>
<td>0.03*</td>
</tr>
<tr>
<td>Size of Business Unit</td>
<td>0.07*</td>
<td>0.06*</td>
<td>0.04*</td>
<td>0.04*</td>
</tr>
<tr>
<td>Family Structure</td>
<td>0.06*</td>
<td>0.04*</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>IDRO Ownership</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Industry Effects</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Geographic Dispersion</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Effect of Business Unit Strategy on Market Share Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Unit Strategy</td>
<td>0.36*</td>
<td>0.36*</td>
<td>0.30*</td>
<td></td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td>0.14*</td>
<td>0.08*</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls × Business Unit Strategy</td>
<td></td>
<td></td>
<td></td>
<td>0.02 □</td>
</tr>
<tr>
<td>R²</td>
<td>0.03</td>
<td>0.11</td>
<td>0.11</td>
<td>0.12</td>
</tr>
<tr>
<td>Δ R²</td>
<td></td>
<td>0.08</td>
<td>0.00</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Standardized coefficients are reported

N= 2704 (corporate strategy, span, HQ size, corporate effects, family structure, IDRO ownership, geographic dispersion, and CEO experience are measured for a total of 193 corporations. Controls are measured for each individual subsidiary for a total of 2,704).

□ p<0.1
* p<.05
** p<.01
*** p<.001
### Table 7.8: Summary of Tests of Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Corporations that pursue related diversification are likely to put a stronger emphasis on strategic controls versus financial controls as their primary mechanism of controlling their business units. Conversely, corporations that pursue unrelated diversification are likely to put a stronger emphasis on financial controls versus strategic controls as their primary mechanism of controlling their business units.</td>
<td>p&lt;0.05</td>
<td>Support</td>
</tr>
<tr>
<td>H2: The size of the corporate office (i.e., the number of corporate staff) moderates the relationship between corporate strategy and corporate controls; under the condition of a larger corporate office, there will be a stronger effect between a corporate strategy of related diversification and the emphasis on strategic controls, while under the condition of smaller corporate offices there will be a weaker effect.</td>
<td>p&lt;0.05</td>
<td>Support</td>
</tr>
<tr>
<td>H3: The corporate CEO’s relevance of past experience relative to a business unit moderates the relationship between corporate strategy and corporate controls; in the presence of a corporate CEO who possesses relevant expertise related to a business unit, there will be a stronger relationship between related diversification and emphasis on strategic control.</td>
<td>p&lt;0.05</td>
<td>Support</td>
</tr>
<tr>
<td>H4: The number of business units owned by a corporation moderates the relationship between corporate strategy and corporate controls; the positive relationship between related diversification and emphasizing strategic control will be weaker when the number of business units is greater.</td>
<td>p&lt;0.05</td>
<td>Support</td>
</tr>
<tr>
<td>H5: The influence of corporate strategy on business strategy is mediated through corporate controls.</td>
<td>p&lt;0.05 for all paths</td>
<td>Support for Partial Mediation</td>
</tr>
<tr>
<td>H6: Business units that are subject to a stronger emphasis on strategic controls are more likely to pursue product leadership strategies than business units that are subject to a stronger emphasis on financial controls, while business units that are subject to a stronger emphasis on financial controls are more likely to pursue operational excellence strategies than business units that are subject to a stronger emphasis on strategic controls.</td>
<td>p&lt;0.05</td>
<td>Support</td>
</tr>
<tr>
<td>H7a: The interaction between the strategic direction of a business unit and the corporate controls that it is subject to influences its subsequent financial performance; business units pursuing operational excellence strategies will exhibit higher financial performance when subject to a stronger emphasis on financial controls and business units pursuing product leadership strategies will exhibit higher financial performance when subject to a stronger emphasis on strategic controls.</td>
<td>P&lt;0.05</td>
<td>Partial Support</td>
</tr>
<tr>
<td>H7b: The interaction between the strategic direction of a business unit and the corporate controls that it is subject to influences its subsequent market share performance; business units pursuing operational excellence strategies will exhibit higher market share performance when subject to a stronger emphasis on financial controls and business units pursuing product leadership strategies will exhibit higher market share performance when subject to a stronger emphasis on strategic controls.</td>
<td>--</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
CHAPTER 8: DISCUSSION

8.1 Introduction

Corporate strategy and its influence on the performance of business units has been the focus of many researchers during past decades. However, its role and significance have often been found to be trivial when aggregated within the corporate effects construct, particularly when compared to the business unit effects construct. Therefore, I developed a theoretical model to reconceptualize the mechanism through which corporate strategy influences business unit strategy. Through this dissertation, I disaggregated the corporate strategy and corporate control variables from the corporate effects variable normally used, and I disaggregated the business unit strategy variable from the business unit effects construct. In addition, I suggested and tested hypotheses that conceptualize business unit strategy as endogenous to corporate strategy through the mechanism of controls implemented on each of them by the corporation.

In my arguments, which build on past research (e.g., Hoskisson, Hill, and Kim, 1993; Hoskisson and Hitt, 1994), I proposed that corporations’ ability to implement different control structures on their business units rests on their available capacity to process information. Therefore, corporations with higher capacities are capable of enforcing controls that are more in-depth and comprehensive than simple and objective financial controls. To capture information processing capacity in corporations, I focused on factors such as corporate strategy, span (i.e., number of business units controlled by the corporation), CEO experience (i.e., relevant experience and/or education of the corporate CEO in regards to the industry in which each business unit operates), and HQ size (i.e., the number of staff that form the corporate headquarters).
Further, I proposed and tested relationships to establish the link between controls implemented by the corporation and business unit strategy (i.e., strategy pursued by each of the various business units of the corporation). I argued that in cases where a stronger emphasis of financial controls relative to strategic controls exists, business units are more likely to adopt business unit strategies that are in line with operational excellence. In contrast, I argued that business units subject to a stronger emphasis of strategic controls are more likely to emphasize business unit strategies that fall into the product leadership category.

In this dissertation, I developed and tested a theoretical model of relationships that define the influence of corporate strategy on the performance of business units. The graphical presentation of the findings for these tests of the theoretical model has been summarized in Figure 8.1.

8.2 Discussion of Analysis

This dissertation has set out to reassess the importance of corporate strategy in the performance of business units. To complete this study, the relationships between corporate strategy, corporate controls, business unit strategy, and business unit performance and the relationship between corporate strategy and corporate controls moderated by span, HQ size, and CEO experience were investigated. In sections that follow, I provide a brief review of each of the variables included within the model and the discussion of findings related to each of the tested relationships involving them.
Figure 8.1: Summary of Findings

S: Supported
NS: Not Supported
PS: Partial Support
*: Support for partial mediation found
8.2.1 Corporate Strategy

The main aim of this dissertation is to revisit corporate strategy and to investigate its influence and role in the performance of business units. A review of past literature shows conflicting results, leading to different conclusions on the importance of corporate strategy, especially when this construct is aggregated with the corporate effects construct (e.g., Rumelt, 1982, 1974; McGahan and Porter, 1997; Bowman and Helfat, 2001). Therefore, I considered that there was a need to revisit the concept and to reconceptualize and examine the role of corporate strategy within corporations.

To achieve this objective, I constructed my theoretical model such that corporate strategy and business unit strategy are not independent factors, but rather one where corporate strategy influences business unit strategy. However, there was the need to conceptualize a mechanism that can properly explain and predict such relationships. Building on work from the area of agency theory (Jensen and Meckling, 1994, 1976; Macey, 1997), I theorized a substantial role for controls in the relationship between corporate strategy and business unit strategy. To establish the relationship between corporate strategy and corporate controls, I built on the literature about information processing capacity in organizations (e.g., Hoskisson, Hill, and Kim, 1993; Hoskisson and Hitt, 1994).

The majority of past research focusing on corporate strategy has faced challenges in the measurement of the construct. Although the development of the entropy measure (Palepu, 1985; Jacquemin and Berry, 1979) introduced a significant leap forward in that regard, it resulted in the
adoption of the same categorical approach that was used by earlier studies. To resolve such challenges, and to avoid the loss of valuable explanatory power in the boundary points of each category, and consistent with approaches in past research (Markides, 1995), I developed a ratio that measures the degree of related diversification relative to total diversification. As all components of this new variable had already been validated (Hoskisson et al., 1993), it did not face any challenges from the point of validity. This variable was later used in linear regression techniques to measure the strength and significance of the hypothesized relationships concerning corporate strategy.

8.2.2 Corporate Controls

The notion of corporate controls has been repeatedly identified as a main concern for corporate headquarters. However, the difficulty of measurement of controls has led to its exclusion from most empirical studies. The access of this study to a proprietary dataset provided the unique opportunity to develop a measure that captures many elements that could be defined as characteristics of financial controls and strategic controls. Exploratory factor analysis (EFA) was conducted on one half of the dataset, and the items for emerging factors were used in a confirmatory factor analysis (CFA) on the other half of the dataset and, once confirmed, were compared against definitions from literature and then used to construct a continuous variable that represents the emphasis of one type of control relative to the other. This measure was then used
to test the hypotheses that relate corporate controls to corporate strategy, business unit strategy, and business unit performance.

The ability to measure corporate controls allows this study to take a further step in unpacking the notion of corporate effects as studied in much past literature. Corporations employ various mechanisms to ensure that their business units perform in line with corporate expectations and meet designated overall objectives. Corporations may subscribe to more subjective and in-depth assessments of processes, decisions, and strategies of their business units, or may put their emphasis on more objective quarterly or annual financial reports. Any mechanism employed by corporate headquarters follows the objective of ensuring that the best interest of the corporation is not compromised. However, corporations are not without constraints in pursuing their objectives. A main constraint for corporate headquarters that inhibits the depth of their corporate controls results from their ability to process information required to efficiently perform this task.

The main objective of this dissertation is to investigate the effect of corporate strategy on business unit strategy through corporate controls. Therefore, corporate controls have been theorized to have a mediating role in the relationship between the two aforementioned variables. However, this study has also proposed moderating roles for other factors such as span, CEO experience, and HQ size in the first part of the mediation relationship. The second part of the mediation model focuses on the effect of controls on business unit strategy.
8.2.3 Business Unit Strategy

Much of the past literature in strategic management has focused on the importance of business unit strategy and its effect on business unit performance (e.g., Uotila et al., 2009; Thornhill and White, 2007; Hill, 1988). Business unit strategy has been recognized as one of the most important determinants of performance alongside industry-level factors and influences. When compared to business unit strategy, most past research has focused on corporate effects instead of corporate strategy, and has identified the influence of corporate effects to be trivial. Not only has past research failed to deconstruct the notion of corporate effects and to distinguish corporate strategy, it has also followed a common thread in conceptualizing business unit strategy as a factor independent from corporate-level influences (e.g., McGahan and Porter, 1997; Bowman and Helfat, 2001).

One of the main contributions of this dissertation has been to reconceptualize business unit strategy as endogenous to corporate strategy. To achieve this objective, as described earlier, corporate controls was hypothesized to mediate the relationship between corporate strategy and business unit strategy. Therefore, this study sets out to unpack our understanding of corporate effects and better explain the mechanism through which corporate-level factors influence strategy and performance at the business unit level.

To measure business unit strategy, an approach consistent with previous studies was selected, where a new measure was constructed from items of distinctive factors of an exploratory analysis. The items of the measure were compared carefully against definitions that
distinguish each category of strategy. Subsequently, the ratio measure was developed for use in the analysis.

8.2.4 Effect of Corporate Strategy on Controls

The analysis of the direct relationship between corporate strategy and corporate controls showed support for the hypothesized relationship. In the sample, corporations that were more relatedly diversified (i.e., higher ratio of related diversification to total diversification measures) demonstrated a tendency to implement corporate controls, with a stronger emphasis on strategic controls (i.e., higher ratio of strategic controls to financial controls ratio). In my arguments throughout this study, I suggested that corporate controls other than sole financial controls are required to realize the advantages associated with related diversification. Thus, my supported the hypothesis that corporations emphasize strategic controls to ensure that cost and other efficiencies can be realized when they pursue related diversification.

The findings of this dissertation also supported the other side of the previous argument. The significant relationship found suggests that corporations pursuing higher levels of unrelated diversification put stronger emphasis on financial controls. However, this relationship was moderated by span. As the number of business units increased, corporations demonstrated the tendency to put a stronger emphasis on financial controls and to lessen their exercise of strategic controls. Conversely, ceteris paribus, corporations with fewer business units demonstrated that they are likely to put a stronger emphasis on strategic controls than those with more business
units. In addition, there was a stronger emphasis on strategic controls relative to financial controls when the corporation was pursuing related diversification and less of an emphasis on strategic controls relative to financial controls when pursuing unrelated diversification. Interestingly, the balance of controls favoured strategic controls over financial controls, whether the corporation was pursuing related or unrelated diversification (see Figure 7.3). This finding suggests that business unit managers in corporations supervised and/or owned by IDRO perceive that their corporate parents favour a slighter emphasis on strategic controls relative to financial controls and that this emphasis is accentuated for corporations pursuing related diversification.

The effect of corporate strategy on corporate controls was also moderated by the size of the staff that constituted the corporate headquarters (HQ size). The statistical analysis showed a significant and positive moderating role for HQ size. This meant that, ceteris paribus, a larger HQ size increased the tendency of corporations to emphasize strategic controls, while a smaller HQ size led to more corporations emphasizing financial controls. This finding is also consistent with the hypothesized relationship and the supporting arguments. This effect is accentuated for corporations pursuing related diversification (see Figure 7.1)

In my arguments, I suggested that a larger number of staff in corporate headquarters can increase the capacity of the corporate headquarters to process information. As a result, when HQ size is larger, the ability of the corporate headquarters to process information is greater. This further increases the ability of the corporation to implement strategic controls. Not surprisingly, this finding was supported by the analysis.
While the corporate headquarters and their staff are instrumental to the processing of information, the ultimate task of decision making rests with the corporate CEO. As argued in previous chapters, corporate CEOs are more likely to pay attention to details of operational activities in business units that perform within industries compatible with their education and/or work experience. The findings from the analysis also support these arguments — business units operating within industries related to the background and/or experience of the corporate CEO were more likely to be subject to greater emphasis on strategic controls. In contrast, when the corporate CEO had no expertise related to the industry of the business unit, the likelihood of implementation of financial controls increased. This moderating effect was amplified when the corporation was pursuing related diversification (see Figure 7.2).

The findings of this dissertation provide strong support for the arguments proposed. Higher levels of information processing capacity can be achieved through more populous corporate headquarters and/or having a corporate CEO who has industry expertise take charge. On the other hand, the increased span of a corporation can lead to more of the information processing capacity of corporate headquarters being utilized. The findings also confirm that the availability or unavailability of information processing capacity is a crucial factor in selecting the control systems used to control business units.

8.2.5 Effect of Corporate Controls on Business Unit Strategy

Corporate controls represent the mechanisms through which corporations ensure that the operations of business units and decisions made by their directors remain fully aligned with the
expectations set at the corporate level. They also ensure that the overall best interests of the corporation receive full primacy. In this study, I argued and hypothesized that corporate controls also influence the decisions of business unit managers to select one type of strategy over another. The findings of this study generally support the hypothesized relationships. My findings indicate that business units that are subject to financial controls demonstrate a higher likelihood of pursuing strategies that are in general considered to fall into the operational excellence category. At the other end of the spectrum, business units subject to strategic controls are more likely to adopt strategic orientations that resonate well with product leadership.

My findings are also an affirmation of predictions made by agency theorists. Managers at the business unit level show the tendency to comply with requirements set by corporate headquarters. While not investigated in this study, one can argue that motives for such compliance stem from managers’ interest in preserving their own best interests. While not surprising, the context of findings provides us with a better understanding of the underlying processes of business unit strategy.

8.2.6 Mediating Role of Controls

While the effect of corporate strategy on corporate controls and the effect of these controls on business unit strategy were tested separately, I also tested to see whether full or partial mediation exists. As suggested throughout this dissertation, an important contribution has been to conceptualize the effect of corporate strategy on business unit strategy through the
mechanism of corporate controls. Investigating this relationship is not possible unless a mediating role is considered for these controls.

The results of the analysis for mediation generally support the hypothesized relationship. I found not only a direct and significant relationship between corporate strategy and business unit strategy, but also an indirect and significant effect that takes place through corporate controls. Therefore, the findings of this dissertation take a desired step in explaining the dimensions of corporate effects that influence business unit strategy and performance.

While the partial mediation found in this dissertation is supportive of the hypothesized relationship, it would be interesting to understand the mechanism behind the direct influence of corporate strategy on business strategy, which has led to the observed partial mediation. One explanation could reside in the fact that business unit managers normally have prior membership within the corporate headquarters. This, in turn, could lead to an alignment of the strategic directions of the corporation and the business unit, even when control mechanisms are not fully developed. Another possible explanation for a partial mediation effect is that I only disaggregated corporate strategy and controls from the corporate effects construct. This still leaves corporate structure and corporate rewards aggregated with corporate effects.

8.2.7 Fit Between Controls and Business Unit Strategy

Although this study proposes business unit strategy to be influenced by corporate strategy through controls, business unit managers can still exercise their judgement of appropriate action
and pursue strategies that are not in line with the controls to which they are subject. However, as I hypothesized, it is more likely for business units that ensure the fit between controls and business unit strategy to achieve higher performance. The findings of this study lend partial support to one of these hypotheses, and no support to the others.

My findings reveal that while the fit between business unit strategy and corporate controls has a significant effect on business unit financial performance, it does not have a similar effect on market performance. To further examine the effect of fit on market performance, I allowed for a lagged measurement of market performance twice, each time for one year. While the results were not significant, they demonstrated improvement. Therefore, the observed results could be attributed to the limited time frame (five years) of the data.

An interesting point in my findings for the importance of fit reveals the superior role of strategic controls compared to financial controls in subsequent business unit performance. While the hypothesized relationship predicted a better fit for operational excellence strategies than financial controls, further examination of my findings demonstrated that when business unit managers perceive that they are subject to a balance of strategic and financial controls with a slightly greater emphasis on strategic controls, then business units have higher financial and market performance, although the difference in financial performance is not significant (see Figures 7.4 and 7.5).
8.3 Summary

The findings of this section stress the importance of fit between business unit strategy and controls in business units. Business units that pursue a business unit strategy that does not fit with the corporate controls that they are subject to can suffer in their financial performance, especially if they are pursuing product leadership (see Figure 7.4). Such negative outcomes can result from conflicts between the business unit and corporate parent, or from the lack of support for strategic decisions made at the business unit level.
CHAPTER 9: LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

9.1 Introduction

As is the case for all research, this dissertation is not without limitations. The limitations of this dissertation are mainly the result of the characteristics of the dataset and the methodological approach selected for data analysis. Throughout this dissertation, I have made the attempt to minimize the effects from these limitations on the validity of my findings. While, in my opinion, I have met success in achieving this objective, there still remains much room for improvement should access to data with less limitations be made possible. In what follows, I provide a list of limitations along with proper justifications and suggestions for improvement.

In addition to limitations, I also suggest improvements for this dissertation that can be completed by future researchers. As will be discussed in this chapter, most limitations are the result of limitations in the dataset. However, the unique nature of the dataset itself provided a degree of richness that distinguishes this dissertation from previous research. My aim is to identify opportunities to make improvements without compromising the value of this dissertation.
9.2 Limitations

One limitation is that the dataset used for testing the hypotheses was limited to corporations with wholly owned business units and therefore did not include holding companies. While there is little business-unit-level research on the differences between holding companies and corporations, it seems logical to assume that the ownership stakes in business units would be the source of various differences at the level of business units, particularly in the area of corporate controls, as perceived by business unit managers. This dissertation, therefore, fails to capture the differences when the business unit is not a wholly owned business unit.

The other limitation of this dissertation is its reliance on data that entirely belongs to companies within Iran. Due to the private nature of wholly owned business units, access to their financial and other data is very difficult in most parts of the world. There are very limited sources that grant researchers access to data on the business units of corporations. However, when access is possible, it is often impossible to trace business units back to their corporate parents.

In addition, during the time that this dissertation was in progress, PIMS database, one of the main sources of business-unit-level data that had been used for research in the past (e.g., White, 1986), was completely unavailable. The IDRO data used in this study, although belonging to Iranian industries, provided one major advantage over other available databases: it allowed access to very detailed and comprehensive data at the corporate and business unit levels.
In addition, it provided proprietary access to survey data that evaluated the relationship between each business unit and its corporate parent.

Another limitation of this research, which is rooted in the limitation just addressed above, is the use of cross-sectional analysis instead of a longitudinal study. While I agree that a longitudinal study would normally provide more valid conclusions for research such as this, as mentioned before, the constraints posed by the structure of the Iranian economy would lend little value, if any, to the validity of the findings in this dissertation. To minimize the limitation of the cross-sectional approach, I used data from different years and lagged performance outcomes to account for strategic decisions taking effect.

The approach used for the measurement of business unit strategy and corporate controls is also the source of another limitation of this research. As mentioned throughout this dissertation, I followed an approach in past research (Thornhill and White, 2007) to measure business unit strategy. I also replicated the same steps to measure corporate controls. For both measurements, I relied on data that had been collected through surveys completed by business unit managers. A limitation of this approach is that it is based less on objective measures found in archival data and, instead, relies more on retrospective data, which could raise questions of reliability. To minimize the effect of this limitation, whenever possible, I used proxy variables such as the number of meetings between corporate directors and business unit directors, the number of correspondences throughout the year, and content analysis of some of the correspondences. I then compared findings from these investigations with the results of the
surveys. In the investigated cases, a higher interaction between the corporate headquarters and the business unit, which signals a stronger emphasis on strategic controls, was associated with similar findings in the surveys. These comparisons have shown convergence and have provided further assurance regarding the reliability of the survey data.

9.3 Directions for Future Research

The limitations of this research also open up opportunities for future research. As mentioned earlier, a main limitation of this dissertation is its reliance on data that belongs to corporations from Iran. While the limitation of single-country data has existed in much past research, the specification and characteristics of Iran’s economic structure may raise questions of external validity. Therefore, one avenue proposed for future research is replication of this study in countries with economic structures that are more compatible with market economy conditions. However, such a task may prove to be very challenging, as access to data similar to what has been used in this dissertation will be extremely difficult in the less centralized economies of North America, Europe, and Southeast Asia.

When completing this dissertation, I encountered many instances of unique institutional pressures that defined economic dynamics within Iran. While my intention has been to develop and test a more generalizable theory on how corporate strategy influences business unit strategy and business unit performance, there are many opportunities to investigate the Iranian setting on the basis of its unique institutional arrangements. For institutional theorists, this provides a
unique opportunity to build on data that has been collected for this research and to provide a better look into the differences in institutional logics and their precursors. This approach will also allow for a better understanding of the nature of the corporate parent–business unit relationship and the logic through which the corporation and its business units operate. Consequently, this approach could allow one to redefine outcome variables such as performance to better fit with the objectives of managers in other contexts.

A main construct of interest in this dissertation is corporate controls. To develop the corporate controls variable, I used survey data that was made available through IDRO. The surveys, which were completed by managers of business units, however, could be subject to limitations that can be addressed in future research. Firstly, although I tried to validate surveys through triangulation methods (e.g., comparing with meeting notes, content analysis of correspondences), they still lack the richness that can be achieved through face-to-face interviews. The surveys include many aspects of financial controls and strategic controls that have already been discussed in past literature, but because of the more subjective nature of strategic controls it is possible that they may not encompass the notion of strategic controls completely. Therefore, a study that builds on qualitative data from face-to-face interviews may prove to be more suitable for this purpose. Secondly, while the pressure of corporate controls is felt mostly by business unit managers, their development and implementation are done through corporate headquarters. In this dissertation, I managed to include only one side of the story — that of the business unit managers. Therefore, the study in this dissertation could benefit from improvements in research designs that also capture the perspective of the corporate headquarters.
CHAPTER 10: CONTRIBUTIONS

10.1 Introduction

This dissertation explores the influence of corporate strategy on business unit performance through investigating the relationship between corporate-level strategy and business unit strategy. Through its findings, this dissertation provides several theoretical contributions to the field of corporate strategy. Additionally, the methodological approach used in this dissertation provides contributions through better construct measurement. While the theoretical contributions will help redefine the previously theorized relationships, the methodological contributions will allow future researchers to apply measures that are better rooted in theory and more relevant to the topic of interest.

Besides contributions to theory and methodology, the findings of this dissertation have implications for practice. The discussion of findings provides practitioners with a better understanding of factors critical to the success of the implementation and execution of corporate strategy and the design of corporate structure. This is especially true for the corporate headquarters that implements corporate strategy. In what follows, I provide a more detailed elaboration of the contributions made by this dissertation.
10.2 Contributions to Theory

The vast literature on corporate strategy is overwhelmed with conflicting findings that stress or undermine the significance of corporate strategy on business unit performance. Much of this discrepancy has arisen from confusion due to the interchangeable use of corporate strategy/corporate effects and business strategy/business effects. This confusion has in part resulted from the lack of consensus on an adequate and universally accepted definition of corporate strategy as a construct. As a result, studies comparing influences from the corporate level and the business level lack enough common ground which make a proper comparative assessment of their findings not possible.

In this dissertation, I have made an attempt to clarify corporate strategy as a construct of interest before approaching empirical evidence. Through an extensive review of past and contemporary literature, I have defined corporate strategy as a construct. Building on the works of Dundas and Richardson, (1988), Grant (1995), and Collis and Montgomery (1998), I define corporate strategy as a corporation’s choice for value creation through related or unrelated diversification. Subsequently, I have distinguished between studies building on findings resulting from measurement of corporate effects and those that have used corporate strategy as their construct of interest.

Besides the interchangeable use of effects and strategy — whether at the corporate level or business level — past research has often failed to establish the relationship between corporate-level and business-level factors and has instead focused on comparing their effects on business-
level outcome variables such as performance (e.g., Bowman and Helfat, 2001; McGahan and Porter, 1997; Rumelt, 1982). Such studies have often conceptualized corporate-level factors and business-level factors as independent from one another, which has resulted in the attenuation of the effects of factors from one level (the corporate level) and exaggeration of influences from the other (the business level).

Consequently, much confusion has resulted in the corporate strategy literature regarding the modest significance of corporate strategy because of the conceptualization of business-level strategy and corporate strategy as exogenous variables that are comparable. As explained earlier, the confusion has increased because corporate strategy has not properly been distinguished from corporate effects and its constituents such as strategy, structure, control, and reward systems.

In this dissertation, I have taken the step of distinguishing corporate strategy as a constituent of corporate effects and business strategy as a constituent of business effects. In addition, I have conceptualized the role of corporate controls in the effect of corporate strategy on business unit strategy.

As explained earlier, in this dissertation I have conceptualized the role of corporate controls in the influence of corporate strategy on business unit strategy. While some researchers have pointed to the significance of corporate controls in the management of corporations (e.g., Hoskisson and Hitt, 1994; Hoskisson, Hill, and Kim, 1993), the mechanism through which corporate controls plays such a role has remained ambiguous.
In this dissertation, I have built on research related to agency theory and information processing theory to conceptualize a mediating role for controls in the relationship between corporate strategy and business strategy. The statistical analysis that has been conducted in this dissertation lends further support to this conceptualization. As a consequence of this approach, I have also made a contribution to the area of research on corporate strategy through confirming its role as a significant determinant of business-unit-level performance.

This dissertation also contributes to our understanding of the role of information processing capacity (IPC) in the management and performance of corporations. While it has been generally accepted that IPC is important, there has been very little work done to conceptualize the mechanism through which it exerts its influence. In this dissertation, I have focused on IPC in corporate headquarters and its interactive effect with corporate strategy on corporate controls mechanisms developed and selected. While I focus only on three aspects that influence IPC, it is an initial step towards establishing IPC as a constituent of theoretical frameworks in future corporate strategy research.

10.3 Contributions to Methodology

There are also several methodological contributions offered by this dissertation. Firstly, following the steps taken by Hoskisson and Johnson (1992) and Markides (1995), this dissertation has taken the approach of transforming the indices for diversification that are provided by the entropy measure (Jacquemin and Berry, 1979; Palepu, 1985) into a continuous
variable that encompasses both dimensions of related and unrelated diversification. While the approach itself is not novel, it has further enhanced the aforementioned works through the use of DT instead of DU in the denominator to capture the full extent of diversification in the developed measure. Additionally, this dissertation also takes a step towards making full use of the developed continuous measure instead of the categorical approach used in past research (e.g., Markides, 1995).

Secondly, and perhaps most importantly, this dissertation has proposed a new measurement for corporate controls. While the notion of corporate controls has been present in much of the corporate strategy literature, measurement challenges have inhibited researchers from measuring them. As a result, corporate controls have remained as a conceptual notion in most studies. I have utilized IDRO’s dataset to develop a corporate controls measure that is consistent with aspects of strategic controls and financial controls identified in past research. To conduct the measurement, I have followed the steps taken by Thornhill and White (2007) for the measurement of business strategy on the basis of a survey. This approach has allowed me to construct an instrument to measure corporate controls and to utilize it for testing the hypotheses of this dissertation.

10.4 Implications for Practice

The findings of this dissertation also have implications that could contribute to the practice of corporate strategy. The main contribution of this dissertation is in providing insight
into the importance of information processing capacity in the ability of corporations to effectively control performance at the level of their business units. Based on the propositions in this dissertation, corporations can increase their control capabilities through increasing the level of expertise in their headquarters, or increasing the number of staff that form the headquarters. However, this dissertation acknowledges that its findings may be more relevant to unrelated diversified corporations than to those that are related diversified.

Another contribution in this dissertation for practice is the significance of the role of “fit” between a firm’s corporate controls and business unit strategy in the performance of its business units. The implication of the propositions in this dissertation might discourage corporations with tight financial control from engaging in the acquisition of businesses in industries where exploration is vital to their performance, or in businesses that are considered to be the product leaders in their relative product markets. This dissertation suggests that the misfit between corporate controls and business strategies in such cases could negatively affect the performance of the business unit. However, this research also contributes to a better understanding of the importance of strategic controls to the successful performance of business units. My findings show that while the fit between controls and strategy is most critical for achieving financial performance in business units that pursue product leadership, strategic controls play a more prominent role than financial controls in achieving higher financial or market share performance for all business units.
CHAPTER 11: CONCLUSION

Since 1962, when Gort presented the earliest measure for diversification, many attempts have been made by scholars to investigate the significance of the effect of diversification on the performance of business units. Up until 1974, when Rumelt presented a categorical approach to distinguish between various types of diversification, the measures lacked the necessary richness that would account for differences in the diversification approach pursued by corporations. An example of this shortcoming would be corporate strategy. To respond to the question of whether corporate strategy does or does not matter, past research has witnessed an evolution in the research methodologies employed. At the same time, we have continued to witness conflicting findings by researchers. This has resulted in the significance of corporate strategy in business performance remaining ambiguous.

While methodological techniques in the measurement of corporate strategy have evolved, little focus has been put on the conceptualization of the relationship between corporate strategy and business unit strategy. Interestingly, the role of corporate controls that connect the business units to their corporate parents has been very little investigated. Consequently, only the role of corporate effects as a homogeneous influence on business unit performance has been studied.

This dissertation has aimed to take a more curious look into corporate effects, unpacking the construct in order to understand the role of corporate controls and respond to the research question, “How does corporate strategy influence business unit performance?”
In order to respond to the aforementioned question, this dissertation has revisited the theoretical foundations that underlie the corporate controls literature. Most notably, it has drawn from the literature on agency theory to re-conceptualize corporate controls and theorize it into a model that relates corporate strategy to business unit strategy in corporations.

The theoretical arguments in this dissertation provide several sets of hypotheses. The first set of hypotheses establishes the link between corporate strategy and business unit strategy. To formulate these hypotheses, the economic logic for value creation in each type of corporate strategy has been built on. Also, the notion of bounded rationality, resulting from limitations in information processing capacity, has been used to hypothesize the moderating effects on the previously hypothesized relationships.

The second set of hypotheses establishes the link between controls and business unit strategy, built on the foundations of agency theory, information processing theory, and the upper echelons perspective. The arguments preceding these hypotheses, assuming the role of the business unit CEO as the responsible individual for determining the business unit strategic orientation, suggest that CEOs tend to pursue the business strategy that conforms best to the controls mechanisms put in place by their corporate parent.

Finally, this dissertation concludes with hypotheses that examine the requirement of “fit” between business strategy and corporate controls in order for the business unit to demonstrate the desirable performance. Once again, drawing on the existing literature on controls, it has been
suggested that conflict between strategic orientation and corporate controls could result in business units’ underperforming.
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CURRICULUM VITAE

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EDUCATION

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<tr>
<th>Degree</th>
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<td>PhD</td>
<td>Western University</td>
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REFEREED PUBLICATIONS

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