Antecedents and Outcomes of the Investment in Internal Auditing and the Moderating Role of Family Business Culture

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ANTECEDENTS AND OUTCOMES OF THE INVESTMENT IN INTERNAL AUDITING AND THE MODERATING ROLE OF FAMILY BUSINESS CULTURE

by

Debra J. Lasher

A Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree of Doctor of Business Administration In the Coles College of Business Kennesaw State University

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CHAPTER 1
ANTECEDENTS AND OUTCOMES OF THE INVESTMENT IN INTERNAL AUDITING AND THE MODERATING ROLE OF FAMILY BUSINESS CULTURE

Summary of Research

Despite the recent attention and the apparent benefits of the internal auditing function (IAF), the antecedents that lead a company to voluntarily invest in an IAF are relatively little understood. Further, there is little research focused on the outcomes of the investment in an IAF. In addition, most IAF research that has been conducted so far has focused on large, publicly traded firms. However, privately held family businesses are the major contributors to economic wealth and job creation in the United States. This segment of the business environment provides a new and important context in which to investigate the antecedents and outcomes of the investment in an IAF. Another critical aspect lacking research is the impact of the culture of the family on the existence of an IAF. The blending of family culture with organizational culture in the family business is a key aspect that is not only different from nonfamily businesses, but also differs across family businesses. Both essays include family business culture as a moderating variable to provide a more detailed analysis of the differences between family businesses, as opposed to dichotomously comparing family businesses to nonfamily businesses.

ESSAY #1: Family Involvement, the Internal Auditing Function, and the Moderating Role of Family Business Culture

1
Essay #1 extends agency theory into the area of the IAF in privately held family businesses. The study examines the level of family involvement in ownership, top management, and on the board of directors as antecedents to the existence of an IAF. There are anticipated to be unique family and/or business characteristics and dynamics that will likely result in differences as to the existence of an IAF at a business. However, the identification and understanding of these differences is limited in extant literature. A negative relationship is hypothesized between each of the family involvement variables and the existence of an IAF. In addition, the strength of the negative relationship is anticipated to strengthen as family business culture increases. This study provides privately held family businesses with information that can be used to evaluate their decision of whether or not to have an IAF, relative to the same decision in other family businesses. Also, the study provides additional research results to the ongoing controversy of agency costs in family businesses.

ESSAY #2: Investment in Internal Auditing, Family Business Outcomes, and the Moderating Role of Family Business Culture

Essay #2 extends the knowledge of the existence of an IAF gained in Essay #1 to examine the relationship between different levels of investment in an IAF and family business outcomes associated with the investment. While research has indicated that investment in an IAF leads to beneficial outcomes in publicly traded companies, it remains an open question as to what outcomes might exist in privately held family businesses. Several dimensions of family business outcomes are explored: (1) objective and subjective financial performance, (2) trust in the business and in trust in top management, and (3) affective commitment. An integration of two theories provides the
theoretical foundation for this study. An agency theory framework is used to examine the relationship between the investment in an IAF and financial performance. Social exchange theory is used to investigate potential impacts of the investment in an IAF on trust in the business, trust in top management, and affective commitment. A positive relationship is posited between the investment in an IAF and the outcome measures. In addition, the strength of the positive relationships is anticipated to weaken as family culture increases.

This research contributes to a better understanding of the outcomes of an IAF in privately held family businesses, which are more prototypical of the prevalent type of business in the United States and most areas of the world, unlike the large publicly traded firms usually used in this type of research.

An electronic survey was developed to collect the data for both studies. The survey was completed by the Chief Financial Officer (or individual in an equivalent position) of the business.
CHAPTER 2

FAMILY INVOLVEMENT, THE INTERNAL AUDITING FUNCTION AND THE MODERATING ROLE OF FAMILY BUSINESS CULTURE

ABSTRACT

This essay extends agency theory into the area of privately held family businesses to add to the extant, conflicting research concerning family involvement and related agency costs. This research examines three unique characteristics of privately held family businesses that could influence the existence of an internal auditing function (IAF); family involvement in ownership, in top management and on the board. Statistical significance was identified in the association with family involvement on the board and the existence of an IAF, however the association was positive as opposed to negative.

The study also develops a family business culture construct and investigates the potential moderating effect of the construct in these relationships. Results indicate that the control variables of the existence of an audit committee and having an external audit conducted within the last two fiscal years have more influence than family involvement on the existence of an IAF. In addition, family business culture was not determined to moderate the relationships between family involvement in these three unique areas of family businesses and the existence of an IAF. This research is the first step in gaining more knowledge of the influence of family involvement and the impact of that influence on the desire for a governance mechanism, such as an IAF.
INTRODUCTION

The Institute of Internal Auditors (IIA, 1999) defines internal auditing as, “An independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.” Since 2001 and the highly publicized financial reporting fraud cases of companies such as Enron and WorldCom, the internal auditing function (IAF) has increased in prominence. One lesson to be learned from these publicized company collapses is that knowledge of a company’s culture, operations, and risk profile is essential to company success and longevity (IIA, 2010).

The primary role of the IAF is to provide this crucial information to an organization and those with oversight responsibility and therefore represents a valuable resource for the business (IIA, 2010). Beginning in 2004, the New York Stock Exchange (NYSE) requires all listed companies to have an IAF (Harrington, 2004). Also, the NASDAQ stock exchange encourages an IAF as a best practice (Harrington, 2004), further emphasizing the importance of the function. In addition, the implementation of Section 404 of the Sarbanes-Oxley Act has resulted in companies placing more emphasis on internal controls and the internal auditing function (Prawitt, Smith, & Wood, 2009).

Despite the recent attention and apparent benefits of an IAF, the factors leading a company to decide to voluntarily invest in an IAF are little understood (Anderson, Christ, Johnstone, & Rittenbery, 2012; Barua, Rama, & Sharma, 2010; Carcello, Hermanson, & Raghunandan, 2005; Carey, Simnett, & Tanewski, 2000; Debicki, Matherne III,
Kellermanns, & Chrisman, 2009; Trotman & Trotman, 2010). Carey et al. (2000) examined factors associated with the existence of external and internal audits in family businesses in Australia. The research revealed that internal audit was more prevalent than external audit. The agency variables of the proportion of nonfamily management and the proportion of nonfamily board member provided support for the existence of external audit, but not for the existence of internal audit (Carey et al. 2000) leaving unanswered questions related to family involvement.

While there has been some research on large, publicly traded companies, the antecedents leading a privately held business, particularly a privately held family business, to invest in an IAF have not been examined in great detail. This gap in our current understanding is problematic given that family businesses play a leading role in global economic production and employment, totaling 65 to 80 percent of businesses worldwide (Burkart, Panunzi, & Shleifer, 2003; IFERA, 2003; Mandl, 2008). Research in the United States has shown that family businesses generate approximately 60% of the country’s employment (Astrachan & Shanker, 2003) and account for 50% of gross domestic product and 78% of new job creation (Perman, 2006).

Privately held family businesses represent a new and important context in which to investigate the IAF. Even though privately held family businesses are not required to have an IAF, some make the decision to invest in the function. It is anticipated that differences in the decision are due to unique family and/or businesses characteristics. However, the identification and understanding of these characteristics as antecedents to the decision to invest in an IAF is limited in extant literature. This study examines three unique family involvement characteristics of privately held family businesses – namely,
family involvement in ownership, in top management, and on the board of directors – as antecedents that are posited to influence the existence of an IAF, while controlling for agency related variables found to be significant predictors in prior research.

Kotter & Heskett (1992) suggest that culture refers to values (i.e., what is considered important) that are shared by members of a group and tend to persist over time, even when the members of the group change. Family businesses are in a unique situation of combining the culture of the family with the culture of the organization (business). Family culture exerts powerful influences over what family business members do and how they interpret and respond to environmental challenges (Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008).

Prior literature has suggested both positive (Denison, Lief, & Ward, 2004; Miller & Le Breton-Miller, 2005; Zahra et al. 2008) and negative (Burkart et al. 2003; Gomez-Mejia, Nunez-Nickel, & Gutierrez, 2001; Schulze, Lubatkin, Dino, & Buchholtz, 2001) consequences from family involvement in the business. The conflicting results from prior research related to family involvement could be due to the potential moderating effect of the unique culture of the family, a variable often overlooked in research (Dyer, 2003; Vallejo, 2011). The nature of family culture may create advantages by providing a highly committed workforce with shared goals and values (Dyer, 2003).

Therefore, it is suggested that family business research, where findings are apt to be influenced by variations in goals, core values, and relationships, should include the culture of the family among the variables of interest (Dyer, 2003; Vallejo, 2011). The shared histories and identities of the family provide a foundation of core values and standards of behavior that have potentially led to conflicting prior research results. In the
context of this study, the culture of the family is anticipated to strengthen the relationship between family involvement in the business and the existence of an IAF resulting in family businesses making different decisions as to whether to invest in an IAF function.

This research combines the culture of the family with the culture of the organization (business) to form a single variable titled family business culture. Inclusion of family business culture in the study will enable the analysis of how different levels of culture affect the strength of the relationship between family involvement and the existence of an IAF. Denison et al. (2004, p. 63) state of family firms, “this cultural uniqueness, if understood and nurtured, can be one of a corporation’s greatest advantages.”

Agency theory has provided a framework for prior research related to the IAF (Adams, 1994; Carcello et al. 2005; Carey et al. 2000; Wallace & Kreutzfeldt, 1991) and will be used here as well. Jensen & Meckling (1976) posited that agency costs do not apply when a wholly owned firm is managed by the owner because the owner will make decisions that maximize the utility of the business and the owner. However, within the complex environment of family businesses there have been conflicting research results using the Jensen & Meckling (1976) view. Research results have indicated that family involvement actually creates situations of agency costs rather than negating them (Bartholomeusz & Tanewski, 2006; Schulze, Lubatkin, & Dino, 2003b; Schulze et al. 2001). On the other side of the debate, researchers have found evidence that family involvement allows leaders to be freer and more motivated to act for the good of the organization and its clients in the long run (Eddleston & Kellermanns, 2007; Hoopes & Miller, 2006; Miller & Le Breton-Miller, 2003; Ouchi, 1980).
Agency theory suggests that varying combinations of family involvement in the key areas of ownership, management, and the board of directors would result in varying levels of the desire for governance processes, such as the existence of an IAF (Carey et al. 2000). However, this proposition has not been empirically tested in privately held family businesses (Salvato & Moores, 2010; Trotman & Trotman, 2010), as prior research has frequently neglected family dynamics when studying family businesses (Dyer, 2003; Vallejo, 2011). This neglect has resulted in extant literature not providing an analysis of the potential moderating effect of family culture related to governance mechanisms, such as the decision to invest in an IAF.

This study analyzes the relationships between three aspects of family involvement in the business and the existence of an IAF and investigates how family business culture moderates the strength of these relationships. By extending agency theory into the area of the IAF in privately held family businesses, several gaps in the literature will be addressed. First, as recommended by Astrachan (2010), Trotman & Trotman (2010), Debicki et al. (2009), and Carey et al. (2000), this study will investigate if less separation between ownership and management results in less likelihood of the existence of an IAF, as is predicted by agency theory. Second, the study will use the unique element of family business culture as a moderator to examine more closely the dynamics within and across privately held family businesses. This approach extends prior research, as the majority of extant research has compared family businesses to nonfamily businesses (Allouche, Amann, Jaussaud, & Kurashina, 2008; Anderson, Mansi, & Reeb, 2003; Anderson & Reeb, 2003; Chrisman, Chua, & Litz, 2004; Sharma, 2004). Finally, the research will provide privately held family businesses with previously unavailable information.
concerning the decision to invest in an IAF for various levels of family involvement and family business culture.

The remainder of the paper is composed of three sections. The next section provides the background, reviews the relevant literature, and develops the hypotheses. The following section describes the research methods to be employed, details of the data collection, analysis processes, and the results. The final section discusses the implications of the results, the limitations of the study and provides recommendations for future research.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The Internal Auditing Function

Recent studies have consistently found that the IAF can have a positive influence on corporate governance, including reporting quality and firm performance (Gramling, Maletta, Schneider, & Church, 2004). While the corporate collapses of the past and subsequent requirements for an IAF mentioned earlier are related to publicly traded companies, one lesson to be learned for all businesses is that knowledge of a company’s culture, operations, and risk profile is essential to company success and longevity (IIA, 2010). The primary role of the IAF is to provide this crucial information to an organization and those with oversight responsibilities, and therefore the IAF represents a valuable resource for the business (IIA, 2010). Presumably these benefits would extend to family businesses.

Despite all the recent attention and benefits of the IAF, extant research on factors influencing a business’s decision to invest in an IAF is scarce (Anderson et al. 2012;
Barua et al. 2010; Carcello et al. 2005; Carey et al. 2000; Debicki et al. 2009; Trotman & Trotman, 2010). Prior research has focused primarily on the factors associated with the existence or size (measured by the number of internal auditing staff) of the IAF (Carey et al. 2000; Goodwin-Stewart & Kent, 2006). Carcello et al. (2005) is the only study to examine factors associated with the investment in an IAF. Carcello et al. (2005) analyzed the internal auditing budgets for a sample of 217 mid-sized U.S. public companies. The authors found evidence that internal audit budgets are positively related to several antecedents including company risk, the ability to pay for monitoring, and specific characteristics of the audit mechanisms (i.e., internal audit budget review by the audit committee, amount of outsourcing of the IAF, and the relationship with external audit fees).

While little is known about the role of the IAF in privately held family businesses, the following situations offer opportunities for benefits from investing in an IAF. For example, the desire to employ a family member may result in hiring an employee lacking the appropriate skill set for the position (Dyer, 1986). A quality IAF could assist in these situations by ensuring that management understands and appropriately mitigates risks related to this adverse selection. Also, if family involvement decreases or ownership becomes more dispersed, agency theory suggests that some form of agency costs will be incurred. Daily & Dollinger (1992) found that the desire to maintain close control leads family businesses to use significantly fewer formal internal control systems, instead opting for more social methods of control. Unlike an external auditing function, the IAF allows the family business to provide an auditing function and keep the family business information inside the business.
Agency Theory

While extant literature on agency theory is vast, this review of the theory will be limited to the IAF and situations of ownership and management in family businesses. Agency theory has provided a framework for most prior research related to the investment in an IAF (Adams, 1994; Carcello et al. 2005; Carey et al. 2000; Wallace & Kreutzfeldt, 1991). Studies in various countries around the world including Hong Kong (Ng, 2005), Indonesia (Achmad, Neilson, & Tower, 2009), Australia (Bartholomeusz & Tanewski, 2006), Lebanon (Fahed-Sreih & Djoundourian, 2006), Germany (Pieper, Klein, & Jaskiewicz, 2008), and the United States (Anderson & Reeb, 2003; Daily & Dollinger, 1992; James, 1999b; Wang, 2006) have linked family business ownership and governance structure to agency issues and performance.

Jensen & Meckling (1976) state that firms are merely a series of complex contractual relationships between various stakeholders. An agency relationship occurs when the principal (usually the owner) contracts with another party, known as the agent (Jensen & Meckling, 1976). The contract involves the principal delegating some decision-making authority to the agent. This delegation makes it possible for the agent to have more information and the opportunity to implement decisions that could benefit the agent but contribute to the detriment of the business and the owner (Jensen & Meckling, 1976).

Agency theory is based on the premise that principals have less information than agents, and this fact adversely affects the principals’ ability to monitor effectively if, in fact, the agents are appropriately serving the interests of the principals (Adams, 1994). This gap widens as more agents assume decision-making roles. In response to this threat,
the principal often imposes some form of monitoring device(s), which is implemented and maintained at a cost, therefore incurring agency costs (Jensen & Meckling, 1976). Jensen & Meckling (1976, p. 308) define agency costs as the sum of: “(1) the monitoring expenditures by the principal, (2) the bonding expenditures of the agent, and (3) the residual loss.”

In addition, Jensen & Meckling (1976) posited that agency costs do not apply when a wholly owned firm is managed by the owner because the owner will make decisions that maximize the utility of the business and the owner. However, within the complex environment of family businesses, extant research does not always support the Jensen & Meckling (1976) view. Research results have indicated that family involvement actually creates situations of agency costs rather than negating them (Bartholomeusz & Tanewski, 2006; Schulze et al. 2003b; Schulze et al. 2001).

On the other side of the debate, researchers have found evidence that family involvement allows leaders to be freer and more motivated to act for the good of the organization and its clients in the long run (Eddleston & Kellermanns, 2007; Hoopes & Miller, 2006; Miller & Le Breton-Miller, 2003; Ouchi, 1980). Opposing research findings could point to a potential moderator impacting the strength of the relationship between family involvement and various outcomes. This research posits that family business culture has the potential to impact the findings across family businesses, producing varying research results. However, extant research examining this potential moderator in privately held family businesses is limited.

Privately held firms do not have the disciplinary mechanism of public stock markets and share trading prices to provide feedback related to firm performance
The lack of these external monitoring mechanisms results in these firms having heightened exposure to problems created by owners who have the opportunity to harm themselves and the ones around them (Schulze, Lubatkin, & Dino, 2002). Two types of agency problems in family business can be distinguished. Type I agency problems arise from the separation of ownership and management. Family firms face less severe Type I agency problems because of the ability of the owners to directly monitor managers (Ali, Chen, & Radhakrishnan, 2007; Demsetz & Lehn, 1985; Villalonga & Amit, 2006). Type II agency problems occur when a majority shareholder uses his/her controlling position in the business to expropriate benefits at the expense of minority owners. Because of the family’s significant ownership and control over the board of directors, family businesses often face more severe Type II agency problems (Ali et al. 2007; Anderson & Reeb, 2003, 2004; Villalonga & Amit, 2006).

Prior research has also examined agency issues in the two categories of adverse selection and moral hazard (Chrisman et al. 2004; Schulze et al. 2001). Adverse selection occurs when the principal contracts with an agent who does not have the appropriate skill, commitment, motivation, or ethics to fulfill the responsibilities of the position. To control for this issue principals need to incur higher search and verification costs (Chrisman et al. 2004). Moral hazard involves the commission or omission of actions that benefit the agent at the detriment of the principal (Gomez-Mejia et al. 2001; Schulze et al. 2001). Issues of adverse selection and moral hazard result in the need for principals to use a combination of incentives, punishments, bonding, and managerial processes to ensure alignment of interests with the agent and to monitor the agents’ actions (Chrisman et al. 2004). Chrisman et al. (2004) refer to the processes, systems,
and structures, set up for the purpose of monitoring and aligning interests as agency cost
control mechanisms. The IAF serves the role of such a control mechanism.

Family Involvement

*In Ownership*

For the purposes of this research family involvement in ownership is measured in percentages from 0 to 100. This allows the research to examine family involvement on a continuous scale and between family businesses, rather than dichotomously distinguishing between family and nonfamily firms (Astrachan, Klein, & Smyrnios, 2002). The differing levels of family involvement in ownership will increase the variability in the research results and also allow for analyses across family businesses.

Given their private ownership structure, the family businesses utilized in this research are free from the scrutiny and discipline imposed by capital markets. Because the majority of privately held family businesses operate outside of standard capital markets and consequently outside of the standard markets for corporate control, external governance cannot limit forms of owner opportunism (Schulze et al. 2001).

However, owners of a privately held family business who are not actively involved in the business need to have confidence that management is capable of running the business and adapting to changing business and environmental situations so that the business can succeed (Sundaramurthy, 2008). Owners of a privately held family business have incentives to adopt and enforce governance practices to prevent self-control problems of other owners and management from undermining the viability of the firm (Schulze et al. 2001). Shleifer & Vishny (1997) suggest large, unaffiliated (non-family) owners have strong incentives to monitor managers. As the percentage of owners not
involved in the business increases, there is a growing concern that the managers could depart from maximizing shareholder wealth (Chow, 1982) and instead pursue self-interested goals. The increase of owners not involved in the business could be the result of the need to raise capital from outside the business which could diversify ownership (Carey et al. 2000). The increase of uninvolved owners could also occur due to the death of an involved owner who has deeded his/her ownership to a less involved individual.

In addition, as family members retire or subsequent generations are not interested in pursuing the family business, the business may move closer to a market model of fewer active family members, resulting in the need for appropriate control mechanisms to sustain the business (Lane, Astrachan, Keyt, & McMillan, 2006). An IAF can provide monitoring and therefore transparency to any potential bias in management’s decision making (Prawitt et al. 2009).

Based on agency theory the following hypothesis is proposed:

H1: The percentage of business ownership held by members of the owning family will be negatively related to the existence of an IAF

In Top Management

In a study of Spanish newspapers over a 27 year period, Gomez-Mejia et al. (2001) found that the organizational consequences of CEO dismissal are more favorable when the CEO being replaced was a member of the family owning the firm. The implication is that family business owners are less willing to monitor and discipline family CEOs. Reluctance to monitor and discipline family members can result in managerial entrenchment where family managers remain in their positions even though they are no longer effective (Gomez-Mejia et al. 2001). When managerial entrenchment
occurs, the possibility exists that a professional outside manager would provide greater value to the family business.

Schulze et al. (2001) infer that agency problems may be more pronounced in family-managed firms due to self-control or other agency threats engendered by the unselfish concern for the welfare of others, such as altruism. Schulze et al. (2001) conclude that it is essential that family-managed firms invest in similar internal control mechanisms as those that are deemed necessary for widely held firms. In addition, research has shown that, in the act of self-preservation, managers will try to neutralize internal control mechanisms that might uncover any negative decisions (Walsh & Seward, 1990). This could be especially true in the situation of entrenchment by a manager in a privately held family business (Gomez-Mejia et al. 2001).

However, other research results are more in agreement with agency theory. Agency theory would suggest that a family CEO can possibly eliminate the Type I agency conflicts that could occur between owners and nonfamily managers (Anderson & Reeb, 2003; Le Breton-Miller & Miller, 2006; Villalonga & Amit, 2006) because of the ability of the owners to directly monitor managers. In addition, family managers have been shown to reduce uncertainty about future cash flows and therefore have longer performance and investment horizons (James, 1999a; Laverty, 1996). The following hypothesis is proposed:

H2: The percentage of top management positions held by members of the owning family will be negatively related to the existence of an IAF
On the Board of Directors

Research has yielded conflicting results when examining the potential benefits of family versus nonfamily members on the board of directors. Insider board members can provide rich firm-specific knowledge and strong commitment to the firm (Sundaramurthy & Lewis, 2003). Bartholomeusz & Tanewski (2006) suggest that the mere presence of nonfamily owners on the board of directors creates tension that will ultimately result in reduced performance. Lane et al. (2006) state that outsider board members can be influenced by financial incentives or recognition and therefore do not necessarily guarantee objectivity.

On the other hand, boards comprised primarily of insiders (current or former managers/employees of the firm) or dependent outsiders (directors who have business relationships with the firm and/or family or social ties with the CEO) may be perceived as less effective at monitoring others (Lynall, Golden, & Hillman, 2003). Schwartz & Barnes (1991) argue that an active board of directors with nonfamily outsiders can offer access to information, expertise, and networks from outside the business. Sundaramurthy (2008) states that including nonfamily members on the board of directors can assist family businesses in drawing boundaries between the family and business systems, enhance the quality of strategic decisions, provide a system of checks and balances, and provide access to competencies to compete in a changing market-place.

Outside board members are able to better monitor, discipline, and even dismiss managers since they are not beholden to the firm or the CEO for their livelihood (Finkelstein & D'Aveni, 1994; Walsh & Seward, 1990). Well-governed family businesses exhibit higher overall levels of outsider representation on the board of
directors than poorly governed family businesses (Schulze et al. 2001). Based on the previous discussion, agency theory would suggest the following hypothesis:

H3: The percentage of board positions held by members of the owning family will be negatively related to the existence of an IAF

Family Business Culture

Kotter & Heskett (1992) suggest that culture refers to values (what is considered important) that are shared by members of a group and tend to persist overtime, even when the members of the group change. Family businesses are in a unique situation of combining the culture of the family with the culture of the organization. For this research, the culture of the organization (business) was combined with the culture of the family to form a construct titled family business culture. Prior to discussing the relevance of this new construct in the context of an IAF, each of the two constituting components is addressed separately in the following sections.

Organizational Culture

Organizational culture has been defined in numerous ways. However, a common theme is that organizational culture refers to a system of shared meaning held by organizational members that distinguishes the organization from all other organizations (Becker, 1982). It may be viewed as “the pattern of shared values and beliefs that help individuals understand the organizational functioning and thus provide them with the norms for behavior in the organization” (Deshpande & Webster, 1989, p. 4). The importance of values in organizational culture is fundamentally linked to the process of identity formation in which individuals seek a social connection and use this identification to define themselves (Ashforth & Mael, 1989). Past research has found
that one key element of organizational culture is the person-organization fit in which aspects of both the individual and the situation combine to influence an individual’s response to a given situation (O'Reilly, Chatman, & Caldwell, 1991). When people belong to the same organization and share perceptions about beliefs and values, they tend to act in similar ways (Sorensen, 2002). For example, characteristics of organizational culture, such as innovation and risk-taking, attention to detail, team orientation, stability, and outcome orientation, strongly influence employee behaviors (Chatman & Jehn, 1994; O'Reilly et al. 1991).

Strong organizational cultures exist when employees and management respond to situations because of their alignment with organizational values (Deal & Kennedy, 1982). Nemeth (1997) suggested that an unanticipated consequence of strong organizational culture companies is the stifling of employee creativity and innovation through an intense commitment to a set of ideas, a form of groupthink (Janis, 1972, 1982) In addition, strong culture firms tend to excel at incremental change levels, but encounter difficulties in more volatile environments (Sorensen, 2002).

On the other hand, Deal & Kennedy (1982) state that strong organizational cultures can positively affect performance by instilling within employees a clear sense of purpose and expectation that can result in increased organizational commitment, employee motivation, and efficiency. Also, one could assume the stronger an organizational culture, the less the need for internal controls such as an IAF. This substitution could be the case because organizational culture reduces variability in performance, promotes a high level of commitment to an established way of understanding the world, and avoids the costs of disagreement surrounding organizational
goals and the means to achieve them (Sorensen, 2002). In a study of top performing companies, Peters & Waterman (1982) found that the stronger the culture, and the more directed at the marketplace, the less the need for policy manuals, organizational charts, or detailed procedures and rules. “In these companies, people way down the line know what they are supposed to do in most situations because the handful of guiding values is crystal clear” (Peters & Waterman, 1982, pp. 75-76).

**Family Culture**

Families vary greatly in their nature, composition, beliefs, and orientations, resulting in widely varying family cultures. Family cultures exert powerful influences over what family business members do and how they interpret and respond to environmental challenges (Zahra et al. 2008). Family culture serves as the foundation for the culture of the family business (Heck, 2004). In addition, Dyer (1988) indicates that the culture of the family business plays an important role in whether the firm continues beyond the first generation.

Culture has been empirically shown to have a significant influence on key strategic decisions of family firms, i.e., promoting entrepreneurship and enhancing the distinctiveness of the firm’s products, goods, and services (Zahra, Hayton, & Salvato, 2004). Vallejo (2008) conducted a comparative analysis of the culture of family businesses and nonfamily businesses in the automobile distributor sector in Spain. The research results implied that family businesses have a stronger culture based on the fact that they present greater commitment, greater organizational harmony, and a more long-term oriented management.
A number of prior studies have focused on the negative attributes of family culture on the family business. Lack of professionalization (Hall & Nordqvist, 2008), non-reciprocal altruism (Schulze et al. 2002; Schulze et al. 2001), shirking (Gomez-Mejia et al. 2001; Schulze et al. 2001), over-concern with wealth preservation (Carney, 2005) and adverse selection (Burkart et al. 2003; Schulze et al. 2002) are a few of the issues that have been researched.

Contrasting research has identified numerous positive effects of family culture in the business. Families with strong personal ties, and identifying more closely with the family business, create an environment enabling the firm to react to the environmental shifts, as opposed to being passive, stagnant, or risk-averse (Miller & Le Breton-Miller, 2006; Zahra et al. 2008). Families have a devotion and passion for the business that stems more from substantive missions and values than desire for short-term profits (Miller & Le Breton-Miller, 2003). Employees of family businesses are often guided more by common values than by immediate pecuniary incentives or hierarchical controls (Ouchi, 1980).

“The literature shows consistently that family owned businesses are more value or culture driven, more concerned with indoctrination, more apt to be caring of and loyal to their employees, and more preoccupied with getting the full potential out of their staff” (Miller & Le Breton-Miller, 2003, p. 130). Miller & Le Breton-Miller (2003) continue by stating that being driven by values or culture helps establish a virtuous circle where employees sense they are in a reciprocal, encompassing relationship with the business. This allows mutual loyalty and commitment to grow. Sharing common values, beliefs, and culture can provide the harmony of interests that reduces the potential of
opportunistic behavior (Ouchi, 1980). Auditing of performance is unnecessary in this condition, because no member will attempt to depart from organizational goals (Ouchi, 1980). In a case study of a second generation family business, McCollom (1988, p. 414) reported that “family ties were so strong that they allowed the business to continue to rely on informal coordination mechanisms even as the company grew rapidly.” The above research results relating to the strength of the family business culture lead to the following hypotheses:

**H4:** Family business culture will moderate the negative relationship between the percentage of business ownership held by members of the owning family and the existence of an IAF such that the negative relationship will strengthen as the level of family business culture increases

**H5:** Family business culture will moderate the negative relationship between the percentage of top management positions held by members of the owning family and the existence of an IAF such that the negative relationship will strengthen as the level of family business culture increases

**H6:** Family business culture will moderate the negative relationship between the percentage of board positions held by members of the owning family and the existence of an IAF such that the negative relationship will strengthen as the level of family business culture increases

Figure 1 displays the conceptual model operationalized.
FIGURE 1

Conceptual Model Operationalized

Family Business Culture
Second-Order Factor Analysis (16 items)
   a) F-PEC Culture Subscale
   b) Denison Organizational Culture Survey

Family Involvement in Ownership
F-PEC Power Subscale (4 items)

Family Involvement in Top Management
Number of positions and number that are held by family (2 items)

Family Involvement on the Board of Directors
F-PEC Power Subscale (2 items)

Existence of an IAF
Yes or No

+H4
+H5
+H6

-H1
-H2
-H3

Control Variables: Audit committee, firm size, external audit, and ownership dispersion
METHODOLOGY

Sample and Data Collection

This research uses primary data collected via an electronic survey. The use of surveys is consistent with prior studies investigating family businesses (Chrisman, Gatewood, & Donlevy, 2002; Eddleston, Kellermanns, & Sarathy, 2008; Schulze, Lubatkin, & Dino, 2003a). The survey was pretested utilizing family businesses that were members of a family business center in the southeastern region of the United States. The pretest provided the opportunity to verify the appropriateness and clarity of the approach and the questions in the survey (Hair, Money, Samouel, & Page, 2007). The pretest participants’ feedback was also used to determine the appropriate ranges and scales for the responses.

It remains extremely challenging to gather financial or business process information from privately held family businesses (Handler, 1989). There are no public disclosure requirements for these businesses, resulting in the nonexistence of secondary or archival data. In addition, privacy and confidentiality of their information is a high priority to these businesses. For these reasons, a private research company was retained to gather the responses. Qualtrics (Clear Voice Research), a 100% market research only panel, with census representation to reach hard to source groups, was utilized to gather the responses from their panel members. This company and method of using panel data has been utilized in prior academic research (Strauss, Griffin, & Parker, in press).

The company has approximately 540,000 panelists who respond at an average rate of 20%. When the requested respondent pool is a hard-to-reach segment, this company employs partnerships with other companies to reach the desired respondents, as was the
of respondents including: (1) verification of all postal addresses, (2) the use of flash
cookies, and (3) the tracking of internet protocol (IP) addresses. In addition, the
company pulls a sample in quota group formats. Then simple randomization is used to
give a representative sample of new and old members within the quota groups. Panelists
are limited to one completed survey every 10 days with the research company
maintaining full records on panelist activity. Survey respondents receive a cash value
reward based on the length of the survey and the target audience requested. The reward
is credited to their member account. Once the respondent’s account value exceeds
$10.00, the respondent may redeem his/her rewards for a choice of debit cards or gift
certificates.

Respondents were asked if their business is privately held or publicly traded. For
the businesses that stated they were privately held, their responses to the questions
regarding the number of owning family members involved in ownership, in top
management, and on the board were assessed to determine if the business was a family
business. A sample of 257 respondents was obtained after the data was screened for
missing and invalid responses. The electronic survey was completed by the Chief
Financial Officer or an individual in an equivalent position in a privately held family
business that could provide financial and business structure information. The data
received from the research company was anonymous with no information linking to the
identification of the business or the respondent.
Demographics

The demographics of the 257 respondents are presented in Table 1. The majority of respondents were members of the owning family and have educational levels beyond that of high school and technical college. One fourth are licensed CPAs and one half have been with the business between five to fifteen years. Approximately half of the businesses have had an external audit during the last two fiscal years. Additional demographic information is presented in Table 1.

Dependent Variable

The dependent variable, the existence of an IAF, was defined as $1 = \text{Yes having an IAF}$ and $0$ otherwise. This dichotomous dependent variable was selected due to the focus of the research to determine the influence of family involvement on the existence of an IAF. Considering the sensitivity of business information for privately held family businesses, this approach allowed a privately held family business to provide the requested data while maintaining a certain level of confidentiality.

Independent Variable

The three independent variables of family involvement in ownership, family involvement in top management, and family involvement on the board of directors were measured by utilizing statements adapted from the power subscale of the Family – Power, Experience, Culture (F-PEC) scale (Astrachan, Klein, & Smyrnios, 2002; Holt, Rutherford, & Kuratko, 2010; Klein, Astrachan, & Smyrnios, 2005). The 18-item F-PEC power subscale measures the extent of family influence in the ownership, top management, and the board of directors of the business.

The subscale assesses the degree of influence or power held by the family and
TABLE 1

Demographics

<table>
<thead>
<tr>
<th>Panel A - Respondent Demographics</th>
<th>With IAF (n = 122)</th>
<th>Without IAF (n = 135)</th>
<th>Total (n = 257)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>80</td>
<td>65</td>
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</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>70</td>
<td>112</td>
</tr>
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<td>Family Member</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>92</td>
<td>115</td>
<td>207</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Age (In years)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>30 – 39</td>
<td>45</td>
<td>27</td>
<td>72</td>
</tr>
<tr>
<td>40 – 49</td>
<td>38</td>
<td>32</td>
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<tr>
<td>50 – 59</td>
<td>24</td>
<td>34</td>
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<tr>
<td>60 and Over</td>
<td>15</td>
<td>31</td>
<td>46</td>
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<tr>
<td>Highest Education</td>
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</tr>
<tr>
<td>High School</td>
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<td>21</td>
<td>27</td>
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<tr>
<td>Technical College</td>
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<td>17</td>
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<tr>
<td>College Degree</td>
<td>71</td>
<td>80</td>
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</tr>
<tr>
<td>Advanced Degree</td>
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<td>17</td>
<td>53</td>
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<tr>
<td>CPA</td>
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<tr>
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<td>61</td>
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<tr>
<td>No</td>
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<td>115</td>
<td>196</td>
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<tr>
<td>Number of Years with the Business</td>
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<tr>
<td>&lt; 5</td>
<td>15</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>5 - 10</td>
<td>49</td>
<td>40</td>
<td>89</td>
</tr>
<tr>
<td>11 - 15</td>
<td>28</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>&gt; 16</td>
<td>30</td>
<td>36</td>
<td>66</td>
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TABLE 1 (Continued)

Demographics

<table>
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<tr>
<th>Panel B - Business Demographics</th>
<th>With IAF (n = 122)</th>
<th>Without IAF (n = 135)</th>
<th>Total (n = 257)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
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<td></td>
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</tr>
<tr>
<td>Retail</td>
<td>18</td>
<td>25</td>
<td>43</td>
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<tr>
<td>Services</td>
<td>44</td>
<td>46</td>
<td>90</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>19</td>
<td>18</td>
<td>37</td>
</tr>
<tr>
<td>Wholesale</td>
<td>11</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Construction</td>
<td>14</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>Age of the Internal Auditing Function (In years)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>37</td>
<td></td>
<td>37</td>
</tr>
<tr>
<td>5 - 15</td>
<td>67</td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>18</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>External Audit - Performed by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 119)</td>
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<td></td>
<td></td>
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<tr>
<td>International Firm</td>
<td>22</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>National Firm</td>
<td>24</td>
<td>11</td>
<td>35</td>
</tr>
<tr>
<td>Regional Firm</td>
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<td>6</td>
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<tr>
<td>Local Firm</td>
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<td>34</td>
</tr>
<tr>
<td>No External Audit</td>
<td>41</td>
<td>97</td>
<td>138</td>
</tr>
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<td>Audit Committee</td>
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</tr>
<tr>
<td>Yes</td>
<td>57</td>
<td>12</td>
<td>69</td>
</tr>
<tr>
<td>No</td>
<td>65</td>
<td>123</td>
<td>188</td>
</tr>
</tbody>
</table>
provides scores that can be used as independent, dependent, mediating, or moderating variables (Astrachan et al. 2002; Klein et al. 2005). Cronbach’s alpha was $\alpha = .75$ for past studies utilizing the power subscale (Klein et al. 2005). For this study, the power subscale was adapted to eliminate questions that were not applicable to family businesses in the United States and to add statements related to the number of top management positions. The final adapted subscale included a total of eight questions: (a) four questions related to ownership, (b) two questions related to top management, and (c) two questions related to the board of directors.

The involvement of the family in ownership was asked as the percentage of voting and controlling rights held by owning family members. The involvement of the family in top management was a calculation of the total number of top management positions currently held by members of the owning family divided by the total number of top management positions. In addition, the involvement of the family on the board of directors was a calculation of the total number of board members who were members of the owning family divided by the total number of board members. Following the F-PEC scale guidelines, family was defined as offspring of a couple (no matter what generation), their in-laws, and any legally adopted children (Astrachan et al. 2002).

Moderating Variable

The 12 item F-PEC culture subscale (Astrachan et al. 2002) was used as one part of the process of collecting the data to determine the moderating influence of family business culture on the relationship between family involvement and the existence of an IAF. The F-PEC culture subscale has been utilized in prior research to assess the extent to which family and business values overlap and employees are committed to the
business (e.g., Klein et al. 2005; Zahra et al. 2008). In the original scale a five-point Likert-type scale anchored by 1 (Not at all) and 5 (To a large extent) was used for the three statements. The other nine statements were measured on a five-point Likert-type scale anchored by 1 (Strongly disagree) and 5 (Strongly agree). Cronbach’s alpha of $\alpha = .93$ from prior research suggests sound levels of internal consistency (Klein et al. 2005). For this study, the original scales were expanded to an eleven-point Likert-type scale anchored by 0 (Not at all) and 10 (To a large extent) to increase variability and precision of the measurement (Hair et al. 2007). One double-barrelled statement was split into two statements and one triple-barrelled statement was split into three statements, for a total of 15 items.

The Denison Organizational Culture Survey (Denison & Mishra, 1995) assesses the organizational culture of the business in the areas of involvement, consistency, adaptability, and mission. This survey was the starting point for the second measurement of culture to be included in family business culture. The Denison Organizational Culture Survey is an established, globally recognized measurement of organizational culture (Denison, Haaland, & Goelzer, 2003; Denison & Mishra, 1995; Fey & Denison, 2003; Yilmaz & Ergun, 2008). In addition, the survey has been used in prior research on recognizing and leveraging the unique strengths of family culture (Denison et al. 2004).

Although organizational culture has many aspects, the extent to which family members in the family business have shared goals and values is anticipated to moderate the strength of the relationship between family involvement and the existence of an IAF. Therefore, for this study the measurement of organizational culture focused on two subsets, core values and goals and objectives, of the Denison Organization Culture
Survey. Each of the following subsets of the original scale is comprised of five items and uses a five-point Likert-type scale with response categories anchored by 1 (Strongly disagree) and 5 (Strongly agree). For this study the scale was revised to a seven-point Likert-type scale with the same anchors. The expanded scale allowed for greater variability and precision of the measurement (Hair et al. 2007).

Core Values (subset of Consistency) measures shared core values and the ethical code of the family as literature has repeatedly shown that family businesses are value or culture driven (Astrachan et al. 2002; Denison et al. 2004; Vallejo, 2011). Two statements were determined to be double-barrelled and were revised for purposes of this study. In addition, one statement from Agreement (another subset of Consistency), “There is a strong culture” in this organization was included as an overall measurement of the perception of the strength of the organizational culture. The Cronbach’s alpha for all 15 original statements of the Consistency index, including the five statements for the Core Values subset, was $\alpha = .79$ in prior research (Denison & Mishra, 1995).

Goals and Objectives (subset of Mission) examines if goals and objectives are understood, agreed upon, and tracked in the business. According to previous research, lack of understanding or disagreement of the goals of the business and the goals of the family can impair the sustainability of the business (Mahto, Davis, Pearce, & Robinson, 2010; Sharma, Chrisman, & Chua, 1997). The original 15 statements of the Mission index, including the five statements from the Goals and Objectives subset, have exhibited a Cronbach’s alpha of $\alpha = .81$ in extant research (Denison & Mishra, 1995).
Control Variables

*Audit Committee* – An Audit Committee may perform as a substitute governance mechanism for an IAF or serve as a oversight entity for the internal audit and/or external audit activities (Barua et al. 2010; Carcello et al. 2005). There are implications for the existence of an IAF in either situation. The respondents were asked if their business had an audit committee with a Yes/No answer.

*Firm Size* – Consistent with prior research the traditional characteristic of firm size was included as a control variable (Abdel-Khalik, 1993; Anderson, Francis, & Stokes, 1993; Carcello et al. 2005; Chow, 1982; Daily & Dollinger, 1992). Firm size was measured by the natural log of full time employees (Carey et al. 2000; Eddleston & Kellermanns, 2007; Mahto et al. 2010).

*Firm Age* – Prior research has supported that as firms mature and grow, more monitoring processes are often needed (Carcello et al. 2005; Casillas, Moreno, & Barbero, 2010; Chrisman et al. 2004; Schulze et al. 2001). Firm age was measured using the number of years since the inception of the business (Carey et al. 2000; Lindow, Stubner, & Wulf, 2010; Sorenson, Goodpaster, Hedberg, & Yu, 2009).

*Industry* – Industry was utilized as a control variable (Chrisman et al. 2004; Schulze et al. 2001). Five categories of retail, service, manufacturing, wholesale, and construction were used to identify the industry sectors in which the responding firms compete. Respondents were also permitted to indicate a category of Other to enable the measurement of the five primary industry categories without over-specification (Casillas et al. 2010; Lindow et al. 2010; O’Boyle, Rutherford, & Pollack, 2010). Financial
institutions were excluded as the industry is highly regulated and may have compliance
risks that mandate an IAF.

*External Audit* – External audit may be a substitute or complementary activity to an IAF (Carey et al. 2000) and therefore, impact the existence of an IAF. Participants were asked how many external audits the business had completed within its last two fiscal years. Six responses were available from which to select; (1) None, (2) 1, (3) 2, (4) 3, (5) 4, or (6) > 4. In addition, the respondents were asked to indicate the category of the firm performing the majority of the external audits: (1) International, (2) National, (3) Regional, or (4) Local.

*Ownership Dispersion* – Ownership dispersion was measured by asking for the ownership percentage of the three largest owners. Prior research shows that large, majority owners are more involved in the business and therefore, more knowledgeable about the business resulting in a reduced desire for monitoring processes (Burkart et al. 2003; Hoopes & Miller, 2006; Jensen & Meckling, 1976; Schulze et al. 2003a). This could affect the decision to invest in an IAF (Sarens & Abdolmohammadi, 2011). Dispersion was calculated as 100 percent minus the percentage of ownership of the three largest owners. For example, a business with the largest owner with 50 percent, the second largest owner with 10 percent and the third largest owner with 5 percent was considered to be 35 percent dispersed (100 - 50 - 10 - 5 = 35).

**RESULTS**

Descriptive Statistics and Correlations

The summary statistics for the full sample (n = 257) and for the sub-samples of businesses with and without an IAF are presented in Table 2. The means of family
TABLE 2

*Descriptive Statistics of Businesses With and Without an Internal Auditing Function*

<table>
<thead>
<tr>
<th></th>
<th>Full Sample (n=257)</th>
<th>Group 0: Without an IAF (n=135)</th>
<th>Group 1: With an IAF (n=122)</th>
<th>t-statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Involvement in Ownership</td>
<td>71.30</td>
<td>75.111</td>
<td>67.074</td>
<td>1.855</td>
</tr>
<tr>
<td>Family Involvement in Top Management</td>
<td>71.91</td>
<td>79.363</td>
<td>63.664</td>
<td>3.918***</td>
</tr>
<tr>
<td>Family Involvement on the Board</td>
<td>17.70</td>
<td>10.037</td>
<td>26.189</td>
<td>-4.348***</td>
</tr>
<tr>
<td><strong>Moderator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture</td>
<td>8.02</td>
<td>7.951</td>
<td>8.099</td>
<td>-1.070</td>
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<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Committee (0=No, 1=Yes)</td>
<td>.27</td>
<td>.090</td>
<td>.470</td>
<td>-7.525***</td>
</tr>
<tr>
<td>Firm Size (ln)</td>
<td>2.84</td>
<td>2.091</td>
<td>3.671</td>
<td>-5.011***</td>
</tr>
<tr>
<td>External Audit (0=No, 1=Yes)</td>
<td>.46</td>
<td>.280</td>
<td>.660</td>
<td>-6.621***</td>
</tr>
<tr>
<td>Ownership Dispersion</td>
<td>10.51</td>
<td>8.874</td>
<td>12.320</td>
<td>-1.506</td>
</tr>
</tbody>
</table>

*** = p < .001
See TABLE 3 for variable definitions
involvement in ownership and top management is higher for businesses without an IAF. For all other variables the means were higher for businesses with an IAF. The mean differences between the groups reached statistical significance for family involvement in top management, family involvement on the board, and three of the four control variables. The higher means for businesses without an IAF for family involvement in ownership and in top management are consistent with Hypotheses 1 and 2. The mean for family involvement on the board is higher for businesses with an IAF which is inconsistent with Hypothesis 3.

Table 3 displays the results of the Pearson correlation matrix. The significant negative correlation between ownership dispersion and family involvement in ownership is understandable given that as the three largest owners control more, the amount of ownership dispersed would be less. The only other correlations greater than .500 were related to firm size and were anticipated.

Moderating Variable – Family Business Culture

An exploratory factor analysis (EFA) was performed on the 26 items (15 F-PEC items and 11 Denison items) to analyze the correlations among the items. A VARIMAX orthogonal rotation method was employed to simplify the columns of the factor analysis and give a clear separation of the factors. Factor loadings were considered significant at .35 with a sample size of 257 (Hair, Babin, & Anderson, 2010). Three iterations of factor analysis resulted in the removal of three items from the Denison Organizational Culture Survey. The remaining 23 items loaded into three factors. The three factors had communalities greater than .500. The overall and individual item measures of sampling
### TABLE 3

**Pearson Correlation Matrix**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existence of an IAF (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Audit Committee (b)</td>
<td>.43**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Firm Size (c)</td>
<td>.30**</td>
<td>.45**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. External Audit (d)</td>
<td>.38**</td>
<td>.44**</td>
<td>.58**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ownership Dispersion (e)</td>
<td>.09</td>
<td>.29**</td>
<td>.62**</td>
<td>.45**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Family Involvement In Ownership (f)</td>
<td></td>
<td>-12</td>
<td>-.41**</td>
<td>-.55**</td>
<td>-.42**</td>
<td>-.55**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Family Involvement In Top Management (g)</td>
<td>-.24**</td>
<td>-.40**</td>
<td>-.59**</td>
<td>-.41**</td>
<td>-.38**</td>
<td>-.47**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Family Involvement On the Board (h)</td>
<td>.26**</td>
<td>.29**</td>
<td>.21**</td>
<td>.26**</td>
<td>.05</td>
<td>-.07</td>
<td>-.13*</td>
<td></td>
</tr>
<tr>
<td>9. Family Business Culture (i)</td>
<td>.07</td>
<td>.04</td>
<td>-.09</td>
<td>-.07</td>
<td>-.02</td>
<td>.08</td>
<td>.18**</td>
<td>-.03</td>
</tr>
</tbody>
</table>

n = 257, * = p < .05; ** = p < .01

(a) Does the business an IAF? 0 = No (n = 135) or 1 = Yes (n = 122)
(b) Does the business have an Audit Committee? 0 = No (n = 188) or 1 = Yes (n = 69)
(c) Natural log of full time employees
(d) Has the business had an external audit during the last 2 fiscal years? 0 = No (n = 138) or 1 = Yes (n = 119)
(e) 100% minus the percentage of ownership of the three largest owners
(f) The percentage of voting/controlling family members
(g) The percentage of top management positions currently held by family members
(h) The percentage of board members that are members of the owning family
(i) New construct – See Appendices A and B for more detail

Note: Family member is defined as offspring of a couple (no matter what generation), their in-laws, and any legally adopted children.
adequacy were greater than .500, and the three factors explained 71.93 percent of the total variance. A Cronbach’s alpha was used as a diagnostic measure to assess the consistency of the factors. Cronbach’s alphas of $\hat{\alpha} = .95$, $\hat{\alpha} = .95$, and $\hat{\alpha} = .80$ provided evidence of high internal consistency within the three factors.

A second-order confirmatory factor analysis (CFA) was utilized as the next step in developing the Family Business Culture construct. The second-order factor model involves two layers of latent constructs and is similar to a first-order model in that the first-order constructs are viewed as indicators (Hair et al. 2010). Theoretically, the F-PEC culture subscale items and the sub-sets of culture selected from the Denison Organizational Culture Survey items share the same general level of abstraction. Therefore, the first-order model meets the first requirement of theoretical justification. Secondly, the three factors developed in the first-order factor analysis are expected to influence other related constructs in the same way. And finally, at least three first-order constructs can be used in order to meet the minimum conditions for identification and good measurement practice (Hair et al. 2010).

The second-order factor analysis was conducted in AMOS 17.0. The model with the best fit was developed by reviewing the Modification Indices (Standardized Regression Weights, known as factor loadings in SPSS) and removing the variables with the largest amounts in order to improve the model fit. Seven iterations were completed with an item removed in each stage. The final model consisted of 16 items, had a Root Mean Square Error of Approximation (RMSEA) of .079, a normed Chi-Square
(CMIN/DF) of 2.6, and a Comparative Fit Index (CFI) of .96 indicating acceptable model fit (Hair et al. 2010).

Convergent validity, the extent to which indicators of a construct converge or share variance, was tested by assessing the loading estimates. Three loadings, Standardized Regression Weights, did have amounts slightly below the .700 recommended amount, but were still above the .50 acceptable amount (Hair et al. 2010). Internal reliability was verified by a Cronbach’s alpha of $\alpha = .94$. Appendix A displays the final CFA model. The rectangle boxes on Appendix A include the Statement numbers that refer to the complete Statements in the Statement # column in Appendix B. For example, box S23_3 on Appendix A refers to S23_3 in the Statement # column of Appendix B. Appendix B includes: (1) the original scale statements, (2) the revised statements that were included in this survey, (3) the iterations completed in the EFA and second-order CFA, and (4) the final loadings.

The average summated score was calculated for the remaining 16 items of the Family Business Culture construct, resulting in an average level of Family Business Culture for each respondent.

Statistical Analysis

The model consists of a dichotomous dependent variable (1 = Yes if the existence of IAF and 0 otherwise), three independent variables (family involvement in ownership, in top management, and on the board), one moderator variable (family business culture), three interactions (each independent variable * the moderator variable) and four control variables. The dichotomous nature of the dependent variable leads to logistical regression as the preferred statistical method for testing the proposed relationships (Hair
et al. 2010). Unlike multiple regression and discriminant analysis, which rely on the assumptions of normality, logistic regression is more robust when these assumptions are not met (Hair et al. 2010). This method is designed to predict the probability of an event occurring and can easily incorporate both metric and nonmetric independent and control variables (Hair et al. 2010).

The total sample of 257 responses was randomly divided into an analysis sample of n=130 and a holdout sample of n=127. The number in each sample is similar to ensure the recommended minimum number of 10 observations per estimated parameter in both samples (Hair et al. 2010). Three approaches were used to assess the overall fit of both the logistic regression samples; (1) statistical measures, (2) pseudo $R^2$ measures, and (3) classification accuracy as expressed by the hit ratio.

*Analysis Sample*

A null model without any independent variables was calculated to serve as a baseline for evaluating improvements to model fit. The independent variables, control variables, the moderator variable, and three interaction terms were then added to the analysis model and the statistical significance of the -2 Log likelihood (-2LL) was assessed. The difference between the initial -2LL and the final -2LL was equal to the model chi-square statistic used in the test of overall statistical significance of the model. In this model the -2LL was statistical significant at chi-square 53.886 (p < .001) indicating that the variables were significant in improving the model estimation fit. Two pseudo $R^2$ measures, based on the reduction in -2LL, were calculated. The Cox and Snell $R^2$ value equaled .339 and the Nagelkerke $R^2$ value equaled .457. These values indicate good model fit when compared to $R^2$ values found in multiple regression. The final
analysis model reduced the significance level of the Hosmer and Lemeshow test to .694 n.s. This nonsignificant value indicates that the analysis model fit is acceptable.

The initial hit ratio of 58.5 percent in the analysis model improved to 78.5 percent in the final model for an increase of greater than 25 percent (58.5 * 1.25 = 73.13). The proportional chance criterion was derived by calculating the proportion of observations for each group based on the number of observations in each group in the Classification Table at Block 0 and then squaring and summing the proportion of cases in each group. The formula is

$$C_{PRO} = p^2 + (1 - p)^2$$

where

- $p$ = proportion of observations in group 1
- $1 - p$ = proportion of observations in group 2

The calculation for the analysis sample results in 51.43 percent ($.5846^2 + (1 - .5846)^2 = .34178 + .17254$). In addition, the classification accuracy should be at least 25 percent greater than that achieved by chance (Hair et al. 2010). The analysis sample actual prediction accuracy of 78.50 percent is more than 25 percent greater than the percent proportional chance criterion indicating internal validity (51.43 * 1.25 = 64.29). The prediction accuracy of 78.50 percent is also 25 percent greater than the maximum chance criterion for the analysis sample calculated at 50.00 percent (65/130 = .5000).

**Holdout Sample**

The holdout sample of 127 observations was tested next following the same steps listed above for the analysis sample. The -2LL reduction was once again statistically significant with a chi-square of 50.572 ($p < .001$). The Cox & Snell $R^2$ value equaled .328 and the Nagelkerke $R^2$ equaled .439 accounting for 33 percent and 44 percent of the
variation in the dependent measure. The Hosmer and Lemeshow significance level was reduced to .426 n.s. for the holdout model indicating that model fit is acceptable.

The final hit ratio of 74.80 percent was more than 25 percent greater than the initial hit ratio of 53.50 percent (53.50 * 1.25 = 66.88). In addition, the 74.80 percent hit ratio was also 25 percent greater than the proportional chance criterion of 50.25 percent (50.25 * 1.25 = 62.81). Once again, the final hit ratio is 25 percent greater than the maximum chance criterion of 41.73 (53/127 = 41.73) indicating validity of the model.

**Hypotheses Testing**

Neither Hypothesis 1 predicting a negative association between family involvement in ownership and the existence of an IAF, nor Hypothesis 2 predicting a negative association between family involvement in top management and the existence of an IAF were supported. Statistical significance was identified in the association with family involvement on the board and the existence of an IAF; however the association was positive as opposed to negative as predicted by Hypothesis 3. The results of Hypothesis 3 indicate that a one unit increase in family involvement on the board increases the likelihood, on average, by 2 percent (Exp(B) = 1.020, (1.020-1.0)*100 = 2 percent) of the existence of an IAF.

Neither the moderator nor interaction effects revealed statistical significance resulting in Hypotheses 4, 5, and 6 not being supported. The existence of an audit committee and having had an external audit during the last two fiscal years are better predictors of the existence of an IAF than involvement of the family. With the reference points for the dichotomous variables set at 1 = Yes, calculating the percentage change in odds reveals that businesses without an audit committee are 79.8%, on average, less
likely to have an IAF (Exp(B) = .202, (.202 – 1.0) * 100) than businesses with an audit committee. In addition, businesses that have not had an external audit during the last two fiscal years are 67%, on average, less likely to have an IAF (Exp(B) = .330, (.330 – 1.0) * 100) than businesses not having had an external audit during the last two fiscal years. The results of the logistic regression are included in Table 4.

Additional Validation

The discriminatory power of the analysis sample compared to a holdout sample was statistically tested using Press’s $Q$ statistic. The statistic compares the number of correct classifications with the total sample size and the number of groups using the following formula:

$$\frac{\left[N - (nK)\right]^2}{N(K - 1)}$$

where:

- $N =$ Total sample size
- $n =$ number of observations correctly classified
- $K =$ number of groups

Press’s $Q$ analysis sample = $\frac{\left[130 - (102 \times 2)\right]^2}{130 - (2 - 1)} = 42.12$

Press’s $Q$ holdout sample = $\frac{\left[127 - (95 \times 2)\right]^2}{127 - (2 - 1)} = 31.25$

If the calculated Press’s $Q$ value exceeds the critical value, then the classification can be recognized as statistically better than chance. The critical value is defined as the chi-square value for one degree of freedom at the desired confidence level. The critical value at a significance level of .01 equals 6.63. Therefore, the hit ratios for both the analysis and holdout samples exceed the all comparison standards and exhibit internal and external validity.
TABLE 4

*Logistic Regression*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig</th>
<th>Exp(B)</th>
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<td><strong>Independent Variables</strong></td>
<td></td>
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<td>Family Involvement in Ownership</td>
<td>.007</td>
<td>.009</td>
<td>.578</td>
<td>.447</td>
<td>1.007</td>
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<td>Family Involvement in Top Mgt</td>
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<td>.010</td>
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<td>.135</td>
<td>.986</td>
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<td>Family Involvement on the Board</td>
<td>.020</td>
<td>.008</td>
<td>5.919*</td>
<td>.015</td>
<td>1.020</td>
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<td><strong>Moderator</strong></td>
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<tr>
<td>Family Business Culture</td>
<td>.170</td>
<td>.228</td>
<td>.556</td>
<td>.456</td>
<td>1.185</td>
</tr>
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<td><strong>Interactions</strong></td>
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<td></td>
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</tr>
<tr>
<td>Family Involvement in Ownership</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x Family Business Culture</td>
<td>-.002</td>
<td>.007</td>
<td>.066</td>
<td>.797</td>
<td>.998</td>
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<tr>
<td>Family Involvement in Top Mgt</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x Family Business Culture</td>
<td>.002</td>
<td>.006</td>
<td>.143</td>
<td>.705</td>
<td>1.002</td>
</tr>
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<td>Family Involvement on the Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x Family Business Culture</td>
<td>.005</td>
<td>.006</td>
<td>.652</td>
<td>.419</td>
<td>1.005</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
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<td></td>
</tr>
<tr>
<td>Audit Committee (0=No, 1=Yes)</td>
<td>-1.600</td>
<td>.692</td>
<td>5.345*</td>
<td>.021</td>
<td>.202</td>
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<td>.194</td>
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<td>External Audit (0=No, 1=Yes)</td>
<td>-1.107</td>
<td>.559</td>
<td>3.928*</td>
<td>.047</td>
<td>.330</td>
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<td>.019</td>
<td>3.578</td>
<td>.059</td>
<td>.964</td>
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<td>Chi-Square</td>
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<td></td>
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<tr>
<td>Cox and Snell R²</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nagelkerke R²</td>
<td>.386</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hit Ratio</td>
<td>76.7%</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

n = 257, * = p < .05; *** = p < .001
See TABLE 3 for variable definitions
Additional Sensitivity Tests

Multicollinearity was tested by examining the standard errors for the B coefficients. No standard errors were larger than 2.0 indicating that multicollinearity was not an issue (Hair et al. 2010).¹

Common method bias was controlled through the design of the survey tool and statistical procedures (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). Although the measurement of the independent variable (family involvement) and the dependent variable (the existence of an IAF) were collected from a single respondent, the measurements were reported as numbers, percentages, and yes/no as opposed to perceptions. The measurement statements for the moderator variable, the perception variable, were from established, validated scales. The scales were adapted slightly to eliminate double-barrelled, vague, or outdated statements and to yield more variability. The two sets of moderator statements consisted of different scale endpoints to reduce method bias caused by commonalities in scale endpoints and anchoring effects.

In addition, common method bias was tested as suggested by Podsakoff et al. (2003). The independent, moderator, and control variables were entered into a factor analysis. Three factors were extracted with eigenvalues >1.0, which accounted for 59 percent of the variance. The first factor accounted for 30 percent of the variance with the other variables accounting for 19 and 10 percent, respectively. Common method bias was not considered to be an issue because the individual factors separated cleanly and no single factor accounted for the majority of the variance.

¹ Logistic regression does not require specific distributions of the independent variables and therefore heteroscedasticity is not an issue.
Two additional analyses of the moderator of family business culture were conducted to further examine the possible influence of the moderator. First, the independent variables and the moderator were centered before calculating the product term to test the interaction (Aiken & West, 1991). This analysis did not reveal a significant influence of family business culture. Second, a dummy variable was created for family business culture consisting of 0 = low culture and 1 = high culture. An analysis of variance (ANOVA) was conducted to determine any differences between the two groups. Once again, family business culture was not found to have a significant moderating influence.

DISCUSSION

Findings and Implications

The limited, and sometimes contradictory, research on the IAF in family businesses has left many questions unanswered. Carey et al. (2000) found a positive association between the separation of ownership and control and the demand for external audit in medium sized family businesses in Australia. However, the same relationship for internal auditing was not supported in the Carey et al. (2000) study. This research is the first step in gaining more knowledge of the antecedents of an IAF in privately held family businesses and the impact that family involvement in the three critical areas of ownership, top management and on the board might have on the need for such accountability systems.

Agency theory suggests that as the gap between the agent and the principal/owner expands, (i.e., less involvement of the family in this study), the need for monitoring
systems would increase (Jensen & Meckling, 1976). This would result in a negative relationship between family involvement in ownership, top management, and on the board of directors and the existence of an IAF. However, this study found no significant relationship, neither positive nor negative, between family involvement in ownership or in top management and the existence of an IAF. With regards to family involvement on the board, a significant relationship was identified, but positive, contrary to the predicted negative relationship. Perhaps Type II agency problems apply in that as family involvement on the board increases other owners, either nonfamily owners or minority family owners, insist on governance mechanisms, such as an IAF.

Thus, while this study does not produce the predicted results, the study adds interesting information to the ongoing debate of the applicability of agency theory to family businesses. On one side of the controversy, the significant positive results related to family involvement on the board is in agreement with Bartholomeusz & Tanewski (2006) who argue that in the area of corporate governance, family control creates, rather than negates, agency costs. This result is also interesting because it refers to Type II agency problems and suggests that an IAF could be a method that privately held family businesses are utilizing to address this issue. On the other side of the applicability of agency issues in family businesses, the association between family involvement in ownership and in top management and the IAF was not statistical significant, indicating no influence on agency costs with differing levels of family involvement in these areas.

Interestingly, in contrast to research aligning family business decisions with family control and involvement, this study suggests that the existence of an audit committee and the existence of an external audit are better predictors of the existence of
an IAF than family involvement in ownership, in top management, or on the board of directors.

The study developed the new family business culture construct as a replicable measure of the influence of the combined cultures of the family and of the business interacting within family businesses. With an internal reliability score in the excellent range, the construct provides a new measure to better research family and business dynamics. One potential explanation for the lack of the new construct to moderate the relationships in this study might be that business processes are less susceptible to the influence of culture, dictated instead by best practice decisions. This is one of the first studies to examine a business process, such as an IAF, in privately held family businesses in the United States and much remains to be explored in this area.

Limitations and Future Research

A limitation of the study, although managed with survey design and statistical tests, was the fact of a single respondent from each business. In addition, the respondents were all in positions of financial responsibility at their business. While this was the appropriate person to provide the financial and ownership data for the survey, future research could provide more robust analysis for the family business culture construct by obtaining multiple responses from the same business at different organizational levels and in different responsibility areas.

The unexpected results surface some interesting questions related to the power of the board in privately held family businesses. One aspect influencing the results might be the fact that the board could be the main decision making body in the business. In that role, the board represents the ownership group and gives direction to top management,
therefore dominating the other two independent variables of family involvement. More information on the interaction between these three groups could provide valuable insights to decisions involving business processes, controls, and accountability.

The results of this study suggest that family involvement in ownership and in top management is not a determining factor in the existence of an IAF in a privately held family business. However, at the board level, family involvement does matter. The explanatory power of the traditional agency variables used in this study is relatively weak in these businesses. Additional research should address other potential reasons for the decision to invest in an IAF. What characteristics of the business or the family have an impact on that decision? And are there benefits to be gained from investing in the function, as evidenced in publically traded companies?

In addition, future research is needed to further validate the new family business culture construct. Family business research in any areas that have the potential to be influenced by variations in goals, core values, and relationships could benefit from including the construct in their study. The new construct could provide an additional measure to assist in gaining more understanding in areas that may have had conflicting results in the past.

Privately held family businesses, a predominant form of business structure in the United States and globally, remain a fertile area for research inquiry. This research has taken the first step of applying agency theory to the area of the IAF in these businesses; an area not yet researched in the United States.
References


CHAPTER 3
INVESTMENT IN INTERNAL AUDITING, FAMILY BUSINESS OUTCOMES, AND THE MODERATING ROLE OF FAMILY BUSINESS CULTURE

ABSTRACT

Research has indicated that an internal auditing function (IAF) can have a positive influence on corporate governance and firm performance in publicly traded companies. However, it remains an open question if similar benefits of an IAF are experienced in privately held family businesses. Understanding the impact of the investment in an IAF on family business outcomes can help family businesses to increase economic growth and sustainability. This research explores the relationship between the investment in an IAF and the family business outcomes of objective and subjective financial performance, trust in the business and in top management, and affective commitment. Agency theory is used to investigate the potential influence of the investment in an IAF on objective and subjective financial performance measures. Social exchange theory is employed to assess the potential impact of the IAF on trust and affective commitment. The study also develops a family business culture construct and investigates the potential moderating effect of the construct on the analysis. The results do not reveal significant relationships with the level of dollar investment in an IAF, nor indicate a moderating influence of family business culture. However, additional analysis does reveal a positive relationship between the existence of an IAF and objective and subjective performance.
INTRODUCTION

Internal auditing is defined by the Institute of Internal Auditors as “An independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes” (IIA, 1999). The internal auditing function (IAF) has been shown to have a positive influence on corporate governance, reporting quality, and firm performance in publicly traded companies (Gordon & Smith, 1992; Gramling, Maletta, Schneider, & Church, 2004). The purpose of this research is to investigate whether there are similar benefits of an IAF in privately held family businesses.

While the IAF has been studied extensively in the realm of large, publicly traded firms, relatively little is known about the function and related outcomes among privately held family businesses. However, family businesses (publicly traded and privately held) play a leading role in global economic production and employment, totaling 65 to 80 percent of business worldwide (Burkart, Panunzi, & Shleifer, 2003; IFERA, 2003; Mandl, 2008). Research in the United States has shown that family businesses generate approximately 60% of the country’s employment (Astrachan & Shanker, 2003) and account for 50% of gross domestic product and 78% of new job creation (Perman, 2006).

Anderson & Reeb (2003) found that family ownership was prevalent and substantial in Standard & Poor’s 500 firms, with family businesses comprising 35% of the listed companies. In the United States, the majority of research related to family business performance typically uses archival data from large, publicly traded family
businesses (Anderson & Reeb, 2003, 2004; McConaugby, Matthews, & Fialko, 2001; Miller, Le Breton-Miller, Lester, & Cannella, 2007; Villalonga & Amit, 2006). This has resulted in a vast section of the U.S. economy, primarily comprised of privately held family businesses, remaining unexplored.

While the possible outcome variables that could be measured are numerous, for the purposes of this study, three family business outcomes were measured and examined: (1) financial performance (objective and subjective), (2) trust (in the business and in top management), and (3) affective commitment.

Privately held family businesses provide a new context in which to investigate the impact of a form of governance mechanism, an IAF, on firm performance. Debicki, Matherne, Kellermanns, & Chrisman (2009) analyzed 291 family business research articles published in 30 management journals during the period of 2001 to 2007. One of the three main gaps identified in the Debicki et al. (2009) research was the impact of governance of the family, and of the firm, on family business performance. Basco & Rodriguez (2009) suggest that the research on family business performance will improve when equal attention is given to the governance of both the family and the business. Following this suggestion, the present research addresses both domains by measuring the influence of an IAF on family business outcomes, moderated by family business culture.

Prior research has acknowledged that privately held family businesses employ measures of performance that may be different from traditional financial measures. Family independence and employment (Chrisman, Chua, & Litz, 2004; Kuratko, Hornsby, & Naffziger, 1997), family reputation (Chen, Chen, & Cheng, 2008; Gomez-Majia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007), family satisfaction
(Gimeno, Folta, Cooper, & Woo, 1997), and family activities and products are often valued at least as much as, if not more than, profits, return on assets or other financial results (Astrachan, 2010; Chua, Chrisman, & Steier, 2003). When family business outcomes fail to meet the family’s goals, the family members’ motivation to continue the investment and involvement in the business may be reduced (Kuratko et al. 1997). Therefore, understanding the relationship of variables, such as an IAF, with family business outcomes could help family business managers prolong the life of their business and increase economic growth and sustainability (Aronoff & Ward, 1991).

Research on family business performance has produced ambiguous results. Some studies have found that strong personal ties and close identification with the family create an element of responsiveness to environmental shifts (Miller & Le Breton-Miller, 2003; Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008) that may result in improved firm performance. Denison, Lief, & Ward (2004) indicated that family businesses have distinct performance-enhancing cultures. However, other studies have indicated an array of detrimental effects of family influence such as expropriation of wealth from minority shareholders (Bartholomeusz & Tanewski, 2006; Schulze, Lubatkin, & Dino, 2003a), lack of professionalism (Hall & Nordqvist, 2008), non-reciprocal altruism (Schulze, Lubatkin, & Dino, 2002; Schulze, Lubatkin, Dino, & Buchholtz, 2001), shirking (Dyer, 2006; Gomez-Mejia, Nunez-Nickel, & Gutierrez, 2001; Schulze et al. 2001), excessive concern with wealth preservation (Carney, 2005), entrenchment (Burkart et al. 2003), and adverse selection (Dyer, 2006), all of which may decrease firm performance.

One potential reason for the conflicting results could be diverse definitions of family businesses and problems inherent in measuring family business performance.
(Astrachan, 2010; Holt, Rutherford, & Kuratko, 2010; Sharma, 2004). Another potential reason could be the moderating effect of the unique and dynamic culture of the family, a variable often overlooked in empirical research (Dyer, 2003, 2006; Vallejo, 2011).

Family businesses are in the unique and complex situation of combining the culture of the family with the culture of the organization. Family culture exerts powerful influences over what family business members do and how they interpret and respond to environmental challenges (Zahra et al. 2008). Therefore, researchers have suggested including the culture of the family as a variable in future studies (Dyer, 2003, 2006; Vallejo, 2011). Following this suggestion, this research combines the culture of the family with the culture of the organization to form a single, comprehensive measure of culture, referred to as “family business culture”. Family business culture enables an analysis of the impact of differing levels of culture on the relationship between an IAF and three specific family business outcomes.

While gaining knowledge of the impact of an IAF on financial performance is important, trust and affective commitment are also key outcomes in a family business. Scholars across time and disciplines agree that trust is highly beneficial to the functioning of organizations (see Dirks & Ferrin (2001) for a summary). Trust results in more positive attitudes, higher levels of workplace behavior, and superior levels of performance (Dirks & Ferrin, 2001). In addition, trust serves as a lens to interpret behaviors and serves as a basis for a person’s decision regarding whether, and how to, interact with others (Dirks, Lewicki, & Zaheer, 2009). Research suggests that family businesses may be unique in their ability to capitalize on trust (Cruz, Gomez-Mejia, & Becerra, 2010; Steier, 2001; Sundaramurthy, 2008). Hence, trust is a construct of
particular relevance in family businesses (Eddleston, Chrisman, Steier, & Chua, 2010) and is therefore an outcome measure in this study. The decision to implement and maintain an IAF could have been made by top management or by the organization. Therefore, trust in top management and trust in the organization will be measured to evaluate if the investment in an IAF influences trust at either of these two levels.

Individuals with high levels of affective commitment have a strong alignment with the organization’s goals (Allen & Meyer, 1990; Sharma & Irving, 2005). High levels of affective commitment can result in behaviors that go above and beyond the call of duty to the business (Sharma & Irving, 2005; Shore & Wayne, 1993; Van Dyne, Graham, & Dienesch, 1994). These discretionary behaviors have been found to be critical for effective organizational functioning and firm performance (Van Dyne et al. 1994). The existence of high levels of commitment is frequently regarded as one of the advantages of family businesses compared to nonfamily businesses (Poutziouris, 2001; Tagiuri & Davis, 1996). In addition, Vallejo (2009) found that the affective commitment dimension in family businesses had the strongest positive effect on the level of identification of nonfamily employees. These findings indicate that affective commitment is a key dimension influencing efforts toward the profitability and continuity of the family business.

In summary, high levels of trust and affective commitment can enhance organizational responsiveness to the identification and rapid exploitation of profitable opportunities, possibly leading to a source of competitive advantage and sustainability of the business (Huff & Kelley, 2003; Kellermanns & Eddleston, 2004; Zahra et al. 2008).
Therefore, it is important to research managerial actions, such as the investment in an IAF, that might foster or damage trust and affective commitment.

An integration of two theories provides the theoretical foundation for this study. Consistent with prior research related to an IAF, agency theory is used to examine the relationship between the investment in a governance mechanism, an IAF, and financial performance. Adams (1994) stated that agency theory can help explain the existence, role and responsibilities of an IAF. Agency theory suggests that the IAF, in conjunction with other mechanisms like financial reporting and external auditing, helps to maintain cost-efficient contracting between owners and managers (Sherer & Kent, 1983). In addition, Sherer & Kent (1983) argue that the information provided by the IAF to management provides the opportunity to remedy weaknesses in procedures before they have a significant effect on the overall financial condition of the organization. Cost savings can be achieved as a result of the internal auditor’s specific industry and business knowledge, increasing the bottom line.

The second theory, social exchange theory (Blau, 1964), with its basis in the norm of reciprocity (Gouldner, 1960), has long been utilized by organizational researchers to examine the motivation for employee behaviors and formation of employee attitudes (Levinson, 1965; March & Simon, 1958). Social exchange theory is among the most influential concepts for understanding workplace behavior (Cropanzano & Mitchell, 2005; Settoon, Bennett, & Liden, 1996). However, the theory has rarely been used in the context of an IAF.

Social exchange theory suggests that trust and organizational commitment reflect an individual’s perceptions about the exchange and reciprocal nature of the relationship
that exists between the organization and themselves. In other words, individuals’ perceptions of an IAF may affect their levels of trust (Coletti, Sedatole, & Towry, 2005; Das & Bing-Sheng, 1998; Tenbrunsel & Messick, 1999) and organizational commitment (Angle & Perry, 1981; Buchanan, 1974; Heinsman, de Hoogh, Koopman, & van Muijen, 2006). An entity devoted to assessing internal control, such as an IAF, can establish expectations and reliability, leading to predictability and an environment conducive to a beneficial exchange between employees and the business. When employees perceive that the IAF is a tool to support their efforts, they may reciprocate with increased levels of trust and affective organizational commitment.

Social exchange theory is particularly applicable to the family business environment, as social exchange relationships are characterized by a long-term orientation (Emerson, 1976), which is commonly found in some family businesses (Le Breton-Miller & Miller, 2006). This relates to the exchange of both tangible and intangible resources, including trust and commitment (Emerson, 1981). In addition, extant literature indicates that attitudes and values of family members, particularly commitment to the business, can be beneficial contributors to family business outcomes and performance (Eddleston, Kellermanns, & Sarathy, 2008).

This research expands family business research in several areas. First, measuring financial and nonfinancial aspects of performance allows the inclusion of idiosyncratic goals of the owning family (Astrachan, 2010). Second, this study provides knowledge related to the impact of an IAF on various outcomes across family businesses. Finally, organizational culture is combined with family culture to form a single construct referred to as family business culture. This variable is utilized as a moderator of the strength of
the relationship between the investment in an IAF and family business outcomes. This approach enables an analysis across family businesses, as opposed to the majority of extant research that has dichotomously compared family businesses to nonfamily businesses (Klein, Astrachan, & Smyrnios, 2005).

Several questions are critical to explore. Is the investment in an IAF associated with family business outcomes, and if so, which outcomes? Does family business culture influence the relationship between investment in an IAF and family business outcomes? Is the influence different for financial and nonfinancial outcomes? The purpose of this study is to provide answers to these questions and address the identified gaps in the literature related to the IAF in privately held family businesses. This knowledge can be used to determine to what extent an IAF is, or would be, a beneficial governance mechanism in privately held family businesses.

The remainder of the paper consists of three sections. The following section provides the theoretical background and introduces the hypotheses to be tested. The subsequent section explains the sample selection, data collection, and the analytical methods utilized. The final section discusses the implications of the research, identifies limitations and makes suggestions for future research.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The Internal Auditing Function (IAF) in Privately Held Family Businesses

The IAF is one of the internal controls acknowledged by the internationally recognized Committee of Sponsoring Organizations (COSO, 1992). Internal controls are structures, activities, processes, and systems which assist management in effectively
mitigating risks to an organization’s achievement of its objectives (IIA, 1999). Internal controls, such as systems of monitoring, sanctioning, and rewarding, are used to mitigate risks by changing the incentives for opportunistic behavior (Coletti et al. 2005; Seal, Cullen, Dunlop, Berry, & Ahmed, 1999). Over the last decade the role of the IAF has increased in prominence.

The Institute of Internal Auditors (2010) states that the IAF can serve “as an organization’s safety net for compliance with rules, regulations, and overall best practices.” Knowledge of a company’s culture, operations, and risk profile is essential to company success and longevity (IIA, 2010). The primary role of an IAF is to provide this crucial information to an organization and its oversight entities and therefore serve as a valuable resource for the business (IIA, 2010).

Despite the recent attention and benefits of an IAF, research on the relationship between an IAF and business outcomes is limited (Debicki et al. 2009; Trotman & Trotman, 2010). The majority of prior research has focused on the quality of the IAF, the decision making processes of the internal auditor, or the relationships between the internal auditor and other stakeholders (Gramling et al. 2004). Other research has examined factors associated with the existence (Carey, Simnett, & Tanewski, 2000), size (Anderson, Christ, Johnston, & Rittenberg, 2012; Goodwin-Stewart & Kent, 2006) and budget (Barua, Rama, & Sharma, 2010; Carcello, Hermanson, & Raghunandan, 2005) of an IAF.

However, research examining the relationship of an IAF to business outcomes is scarce, particularly in the context of family businesses (Carey et al. 2000; Debicki et al. 2009; Trotman & Trotman, 2010). This paucity has resulted in a vast section of the
economy, comprised primarily of privately held family businesses, remaining unexplored. The importance of examining the relationship between a governance mechanism, such as an IAF, and family business outcomes has the potential of providing information concerning influences on economic growth and sustainability of the business. Questions arise as to what effects such governance mechanisms will have on desired employee behaviors such as motivation to participate and perform (Frankema & Koopman, 2004; Garretty, 2008; March & Simon, 1958) and, ultimately, family business outcomes. Therefore, a better understanding of governance mechanisms, such as IAF, that could potentially impact family business outcomes is critical.

Family Business Outcomes

Financial Performance Measures and the IAF

From a theoretical perspective, agency theory has provided the framework for most of the prior research related to a firm’s utilization of an IAF (Adams, 1994; Carcello et al. 2005; Carey et al. 2000; Goodwin-Stewart & Kent, 2006; Wallace & Kreutzfeldt, 1991). In their seminal article, Jensen & Meckling (1976) posited that agency costs do not apply when a wholly owned firm is managed by the owner because the owner will make decisions that maximize the utility of the business and the owner.

Other researchers, however, have suggested that family control actually creates situations of agency costs rather than negating them. Expropriation of wealth from minority shareholders (Bartholomeusz & Tanewski, 2006; Schulze et al. 2003a), non-reciprocal altruism (Schulze, Lubatkin, & Dino, 2003b), adverse selection (Dyer, 2006), entrenchment (Burkart et al. 2003), and shirking (Dyer, 2006; Gomez-Mejia et al. 2001; Schulze et al. 2001) are some of the key agency issues that can arise in family businesses.
In other words, family involvement in the business has the potential to increase or decrease financial performance due to agency costs (Chrisman et al. 2004).

In researching family business financial performance, Bartholomeusz & Tanewski (2006) compared family businesses to nonfamily businesses listed on the Australian Stock Exchange. The researchers found that in order to improve financial firm performance and maximize firm value, family owners needed to adopt more transparent corporate governance structures and be subject to a greater discipline of independent monitoring. In research of a sample of 1,376 privately held U.S. family businesses, Schulze et al. (2001) found family businesses that utilized internal control mechanisms similar to those of widely held firms (e.g., strategic planning and pay incentives), performed significantly better financially than those family businesses without such controls. The authors concluded that it is essential that family businesses invest in internal controls that are deemed necessary for widely held firms.

One role of an IAF is to examine past events with the intention of improving future performance (Penini & Carmeli, 2009). Extant research in publicly traded businesses has suggested that an IAF can have a positive influence in many areas including firm performance (Gordon & Smith, 1992; Gramling et al. 2004). Penini & Carmeli (2009) state that audit results can be the basis for adjusting policies, priorities, structures and processes, and creating more effective and cost-beneficial activities. Based on the extant literature related to the benefits of an IAF to publicly traded businesses, the following hypotheses are proposed:

H1a: The investment in an IAF will be positively related to objective financial performance measures in privately held family businesses
H1b: The investment in an IAF will be positively related to subjective financial performance measures in privately held family businesses

Nonfinancial Performance Measures and the IAF

Performance, broadly defined, relates to efficiencies in utilizing resources as well as the accomplishment of organizational goals (Steers, 1976). Performance in family businesses is multi-faceted, as these businesses have goals that are both financial and nonfinancial (Astrachan, 2010; Astrachan & Zellweger, 2008; Basco & Rodríguez, 2009; Chua et al. 2003; Hienerth & Kessler, 2006). Some past family business research may have inaccurately defined performance as primarily related to financial profits (Westhead & Cowling, 1997).

However, families have a devotion and passion for the business that stems more from substantive missions and values than any desire for quick profits (Miller & Le Breton-Miller, 2003). Stafford, Duncan, Dane, & Winter (1999) observed that family businesses have the opportunity to define success on their own terms, and often look beyond profitability to goals such as the ability to live and operate the business according to personal values or to pass the business to the next generation. For example, family independence and satisfaction (Chrisman et al. 2004; Kuratko et al. 1997; Sorenson, 1999), pursuit of market opportunities based upon family values, and respect in the community (Eddleston et al. 2008; Miller, Le Breton-Miller, & Scholnick, 2008; Sorenson, 1999) are possible goals resulting from a unique family culture.

The theory of social exchange (Blau, 1964), with its basis in the norm of reciprocity (Gouldner, 1960), has long been utilized by organizational researchers to examine the motivation for employee behaviors and formation of employee attitudes.
Social exchange theory is among the most influential concepts for understanding workplace behavior (Cropanzano & Mitchell, 2005). One of the basic tenets of social exchange theory is that parties abide by certain rules or interactions of exchange (Cropanzano & Mitchell, 2005). These interactions are usually seen as interdependent and contingent on the actions of another person (Blau, 1964).

Social exchange theory suggests there is an expectation of an unspecified future return, which is based on an individual trusting that the other parties to the exchange will discharge their obligations fairly in the long run (Blau, 1968). Blau (1964) argues that unlike economic exchange, social exchange tends to engender feelings of personal obligations, gratitude, and trust that cannot be obtained by bargaining. These feelings equate to a sign of mutual support and investment in the relationship. Social exchange occurs within structures of mutual dependence whereby individuals and the organization are dependent upon each other for valued outcomes (Molm, Takahashi, & Peterson, 2000).

Trust

Rousseau, Sitkin, Burt, & Camerer (1998, p. 395) define trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another.” Trust, as a social construct, is a critical element at the center of relationships, influencing each party’s behavior toward the other (Blau, 1968; Deutsch, 1960; Neves & Caetano, 2006). Extant literature has recognized trust as an identifiable outcome of
favorable social exchanges (Blau, 1964; Cropanzano & Mitchell, 2005; Neves & Caetano, 2006).

Trust is not only a quality of individuals, but it is also a function of the qualities of the relationship between employees and firms and the institutional context in which those relationships are incorporated (Shapiro, 1987; Zucker, 1986). Businesses are challenged as they attempt to identify beneficial levels of internal controls, such as an IAF, while simultaneously considering the impact of the governance mechanism on trust (Coletti et al. 2005). However, trust has not been fully integrated into the governance literature, which has primarily focused on agency theory to explain behavior and controls in firms (Bijlsma & Koopman, 2003).

Organizational scholars have posited that control (Arrow, 1974; Ouchi, 1980) is built on a foundation of trust. Controls are seen as a “process by which the elements of a system are made more predictable through the establishment of standards in the pursuit of some desired objective or state” (Leifer & Mills, 1996, p. 117). A great amount of disagreement exists in the research that has been conducted on the relationship between controls and trust (Bijlsma & Koopman, 2003; Das & Bing-Sheng, 1998). Controls have been interpreted as implying that one party does not trust the other (Das & Bing-Sheng, 1998), resulting in decision makers perceiving other collaborators as less trustworthy (Tenbrunsel & Messick, 1999). In addition, control oriented management may overlook the impact of employees’ perception of trust on the resulting employee behaviors (Davis, Schoorman, & Donaldson, 1997; Kelman, 1958).
In contrast, other studies have found that a strong control system enhances the level of trust in collaborative situations (Coletti et al. 2005; Cruz et al. 2010). If used properly, internal controls may help to build trust (Bijlsma-Frankema & Costa, 2005; Goold & Campbell, 1987) and predict or produce trust (Sheppard & Sherman, 1998; Sitkin & George, 2005). The discussion in support of the trust building benefits of internal controls is that they establish expectations, predictability, a track record, and an objective evaluation process (Das & Bing-Sheng, 1998; Goold & Campbell, 1987; Sheppard & Sherman, 1998). This creates an environment that is conducive to nurturing and strengthening trust (Das & Bing-Sheng, 1998). Sitkin & Roth (1993) further suggest that internal controls can promote trust through reliability in several ways. Fostering coordination, ensuring that employees are treated uniformly and their rights are protected, and minimizing resentment and concern are several ways of promoting trust through reliability (Sitkin & Roth, 1993).

While the majority of extant research has focused on various types of internal controls and governance mechanisms, and not specifically an IAF, it is anticipated that the relationships would also hold for this type of internal control. In summary, prior research leads to the following hypotheses:

**H2a**: The investment in an IAF is positively related to trust in the business in privately held family businesses.

Existing literature on trust in organizations suggests that managers who invoke and draw attention to their appropriate use of a variety of controls can engender greater trust (Dirks & Ferrin, 2001, Rousseau et al. 1998). Sitkin & George (2005) indicated that when there are perceived threats to trust in
management, the consistent use of formal controls and reduced use of informal
controls produced better results at maintaining the trust. Bijlsma-Frankema &
Costa, 2005 argue that subordinates’ trust in management is positively related to
monitoring their performance, indicating that trust and control are positively
related, and leading to the following hypothesis:

H2b: The investment in an IAF is positively related to trust in top
management in privately held family businesses

Affective Commitment to an Organization

Organizational commitment is defined as “the strength of an individual’s
identification with and involvement in a particular organization” (Porter, Steers,
Mowday, & Boulian, 1974, p. 604). The authors state that such commitment can
generally be characterized by the following factors: “(a) a strong belief in and acceptance
of the organization’s goals and values; (b) a willingness to exert considerable effort on
behalf of the organization; and (c) a definite desire to maintain organizational
membership” (Porter et al. 1974, p. 604). Social exchange theory has provided a
framework to study organizational commitment (Blau, 1964; Masterson, Lewis,
Goldman, & Taylor, 2000). Social exchange theorists have proposed that employees are
prone to exchange their commitment for an employer’s support (Eisenberger, Fasolo, &
Davis-LaMastro, 1990).

Settoon et al. (1996) examined the relative contribution of different exchange
relationships to important employee outcome variables. Organizational commitment was
selected as one of the dependent variables in the Settoon et al. (1996) research for several
reasons. First, empirical research has found organizational commitment to be associated
with actions on the part of the organization and its representatives that seemingly demand reciprocity. Second, reciprocity, the basis for social exchange, is a mechanism underlying commitment. Finally, employees have been found to view organizational commitment as an acceptable commodity for exchange.

Research examining the relationship between internal controls and organizational commitment is scarce (Argyris, 1985; Koopman, 1991). Internal controls can help synchronize tasks, limit variance in individual behaviors, and increase predictability. However, the perception of limiting the autonomy of the individual may have an unfavorable effect on his or her commitment to the organization (Koopman, 1991). Increasing controls by adding more rules and procedures, can increase the tension between control and commitment and may be answered with creative opposition from employees (Argyris, 1985; Koopman, 1991).

Research in the fields of sociology (Etzioni, 1965) and social psychology (Kelman, 1958) has observed that various forms of evaluations and controls can result in differing individual levels of commitment to, or alienation from, the organization and its objectives. At one extreme, an internal control that depends heavily on monitoring, evaluating, and correcting in an explicit manner is likely to offend an individual’s sense of autonomy and self-control. This could result in an unenthusiastic, purely compliant response (Argyris, 1957; Ouchi, 1979). At the other extreme, Ouchi (1979) emphasizes the crucial task of having the right individuals in place. When individuals share the values and goals of the organization, higher levels of commitment can be the result.

Social exchange theory proposes that repeated, positive exchanges over time reduce uncertainty and produce commitment. The long-term orientation of family
businesses (Le Breton-Miller & Miller, 2006) is especially conducive to favorable reciprocal exchanges. These favorable exchanges can produce better working relationships and permit individuals to be more committed to, and trusting of, one another (Blau, 1964; Molm et al. 2000).

Allen & Meyer (1990) identified a model consisting of three distinct dimensions of organizational commitment; affective commitment, continuance commitment, and normative commitment. The Allen & Meyer (1990) model has become the dominant model for the study of workplace commitment in empirical research (Fu, Bolander, & Jones, 2009; S. Jaros, 2007; Sharma & Irving, 2005).

More specifically, affective commitment has been the most prevalent approach to measuring organizational commitment (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). In extant family business literature the typical usage of the term commitment is consistent with the definition of affective commitment (Sharma & Irving, 2005). Vallejo (2009) found that of the three dimensions of the Allen & Meyer (1990) model, the affective dimension had the strongest positive effect on the level of identification of nonfamily employees in family businesses. For these reasons, affective commitment is the dimension of organizational commitment utilized for this study.

Affective commitment is the attachment an individual has to an organization based upon identification with the organization and agreement with the goals and values of the organization (Allen & Meyer, 1990). This attachment describes an employee’s bond to the organization which includes emotional feelings such as belongingness and loyalty (Jaros, Jermier, Koehler, & Sincich, 1993). Affective commitment is demonstrative of “wanting to be here” behavior related to organizational commitment
decisions, such as to remain with the organization and to participate (Allen & Meyer, 1990; March & Simon, 1958). An individual with high levels of affective commitment has a strong alignment with the organization’s goals (Allen & Meyer, 1990; Sharma & Irving, 2005). This commitment leads to the belief that the individual feels that his or her career aspirations can be satisfied in the context of the organization (Sharma & Irving, 2005).

Zahra et al. (2008) offer several reasons why a strong commitment to the business, on the part of employees who are family business members, can create a similar affective response among other nonfamily employees. First, experimental research has shown that affect and motivation are contagious within a group, influencing outcomes such as cooperation and performance (Barsade, 2002). Second, the importance of the affective commitment and the resulting “tone” of the leader has an important effect on subsequent coordination and efforts on behalf of the followers (Sy, Cote, & Saavedra, 2005). Lastly, research on employee-organization relationships proposes that the strongest influencers of employee affect are the organization’s leaders (Rhoades & Eisenberger, 2002), i.e., in family businesses, the founders and owners (Zahra et al. 2008).

Zahra et al. (2008, p. 1038) conclude that “overall these results support the social contagion of affect: when one member of a group experiences and behaves in a committed fashion, it increases the probability that other group members will also experience identity and commitment to the organization.” The relationship of individuals with high levels of affective commitment to the business is perceived as being based on open-ended, long-term exchanges rather than a transactional contract (Morrison, 1994).
Family businesses in particular are characterized by long-term relationships and employee loyalty, which are conducive to building affective commitment (Miller & Le Breton-Miller, 2006; Vallejo, 2008). Based on these findings, the following hypothesis can be formulated:

H3: The investment in an IAF is positively related to the measure of affective commitment in privately held family businesses

Family Business Culture as a Moderating Construct

Kotter & Heskett (1992) suggest that culture refers to values (what is considered important) that are shared by members of a group and tend to persist overtime, even when the members of the group change. Family businesses are in a unique situation of combining the culture of the family with the culture of the organization. For this study, organizational culture (the culture of the business) is combined with family culture, to form a new construct referred to as family business culture. Prior to discussing the relevance of this newly created construct in the context of an IAF, each of the two constituting components are addressed separately in the following sections.

Organizational Culture

Organizational culture has been defined in numerous ways. However, a common theme is that it refers to a system of shared meaning held by organizational members that distinguishes the organization from all other organizations (Becker, 1982). It may be viewed as “the pattern of shared values and beliefs that help individuals understand the organizational functioning and thus provide them with the norms for behavior in the organization” (Deshpande & Webster, 1989, p. 4). The importance of values in organizational culture is fundamentally linked to the process of identity formation in
which individuals seek a social connection and use this identification to define themselves (Ashforth & Mael, 1989).

Past research has found that one key element of organizational culture is the person-organization fit, in which aspects of both the individual and the situation combine to influence an individual’s response to a given situation (O'Reilly, Chatman, & Caldwell, 1991). When people belong to the same organization and share perceptions about beliefs and values, they tend to act in similar ways (Sorensen, 2002). For example, characteristics of organizational culture, such as innovation and risk-taking, attention to detail, team orientation, stability, and outcome orientation, strongly influence employee behaviors (Chatman & Jehn, 1994; O'Reilly et al. 1991).

Strong organizational cultures exist when employees and management respond to situations because of their alignment with organizational values. However, the strength of organizational cultures being positively related to organizational performance has yielded mixed results (Gelfand, Nishii, & Raver, 2006; Lee & Yu, 2004; Nemeth, 1997; Sorensen, 2002). Nemeth (1997) suggests that an unanticipated consequence of strong organizational culture companies is the stifling of employee creativity and innovation through an intense commitment to a set of ideas, a form of groupthink (Janis, 1972, 1982). In addition, strong culture firms tend to excel at incremental change levels, but encounter difficulties in more volatile environments (Lee & Yu, 2004; Sorensen, 2002).

On the other hand, strong organizational cultures can positively affect performance by instilling within employees a clear sense of purpose and expectations that can result in increased organizational commitment (Deal & Kennedy, 1982). This outcome could be the case because a strong organizational culture reduces variability in
performance, promotes a high level of commitment to an established way of understanding the world, and avoids the costs of disagreement surrounding organizational goals and the means to achieve them (Deal & Kennedy, 1982; Sorensen, 2002). Peters & Waterman (1982) found that the stronger the culture the less the need for policy manuals, organizational charts, or detailed procedures and rules. “In these companies, people way down the line know what they are supposed to do in most situations because the handful of guiding values is crystal clear” (Peters & Waterman, 1982, pp. 75-76).

**Family Culture**

Families vary greatly in their nature, composition, beliefs, and orientations, resulting in widely varying family cultures. Family cultures exert powerful influences over what family business members do and how they interpret and respond to environmental challenges (Zahra et al. 2008) and serve as the foundation for the culture of the family business (Heck, 2004). Dyer (1988) indicates that the culture found on the business side of the family business plays an important role in whether the firm continues beyond the first generation. In addition, family culture has been empirically proven to have a significant influence on key strategic decisions of the family business, i.e., promoting entrepreneurship and enhancing the distinctiveness of the firm’s products, goods, and services (Zahra, Hayton, & Salvato, 2004).

Vallejo (2008) conducted a comparative analysis of the culture of family businesses and nonfamily businesses in the automobile distributor sector in Spain. The research results implied that family businesses have a stronger culture based on the fact that they have greater organizational commitment, greater organizational harmony, and a more long-term oriented management. Families with strong personal ties and identifying
more closely with the family business create an environment enabling the firm to react faster to environmental shifts (Miller & Le Breton-Miller, 2006; Zahra et al. 2008).

*Family Business Culture and the IAF*

Prior research has suggested that family businesses perform better because of who they are (Denison et al. 2004). Results have indicated that family businesses have a distinct performance enhancing culture (Denison et al. 2004). “The literature shows consistently that family businesses are more value or culture driven, more concerned with indoctrination, more apt to be caring of and loyal to their employees, and more preoccupied with getting the full potential out of their staff” (Miller & Le Breton-Miller, 2003, p. 130). Miller & Le Breton-Miller (2003) continue by suggesting that being driven by values or culture helps establish a virtuous circle where employees sense they are in a reciprocal, encompassing relationship with the business. This is an environment conducive to positive, long-term exchanges.

Research has not been conducted to determine how levels of family culture would impact the relationship between a governance mechanism, such as an IAF, and financial and nonfinancial outcomes. However, as the family grows, matures, and experiences possible leadership changes, the need for a governance mechanism, such as an IAF, may develop. Employees could perceive the IAF as a method of management providing support, reliability, consistency, and known expectations for them in performing their responsibilities. The result could be a positive exchange and either no influence or a positive influence on family business outcomes (Coletti et al. 2005). On the other hand, if the employees perceive the IAF as a method of monitoring their work, the control system can have detrimental effects on outcomes. The governance mechanism could
undermine the sense of value congruence, and threaten the monitored individual’s sense of competence and autonomy (Sitkin & George, 2005).

Family business literature argues that the secret of family business can be the family culture of the business, which opens communication, streamlines decision making, and creates a context of strong, understood norms and values (Chua et al. 2003; Eddleston & Kellermanns, 2007; Hoopes & Miller, 2006; Miller & Le Breton-Miller, 2006). The above research results relating to the uniqueness and importance of family business culture leads to the potential that family business culture will moderate the proposed relationships as follows:

H4a: Family business culture will moderate the positive relationship between the investment in an IAF and the objective financial performance of privately held family businesses, such that the positive relationship will weaken as the level of family business culture increases

H4b: Family business culture will moderate the positive relationship between the investment in an IAF and the subjective financial performance of privately held family businesses, such that the positive relationship will weaken as the level of family business culture increases

H5a: Family business culture will moderate the positive relationship between the investment in an IAF and trust in the business at privately held family businesses, such that the positive relationship will weaken as the level of family business culture increases

H5b: Family business culture will moderate the positive relationship between the investment in an IAF and trust in top management at privately held
family businesses, such that the positive relationship will weaken as the level of family business culture increases

H6: Family business culture will moderate the positive relationship between the investment in an IAF and affective commitment at privately held family businesses, such that the positive relationship will weaken as the level of family business culture increases

The conceptual model operationalized is presented in Figure 1.

METHODOLOGY

Sample and Data Collection

Data were collected for this research via an electronic survey. The use of surveys to gather primary data is consistent with other empirical studies investigating family businesses (e.g. Chrisman, Gatewood, & Donlevy, 2002; Eddleston et al. 2008; Schulze et al. 2003a). A pretest of the survey was conducted using family business members of a family business center in the southeastern region of the United States. The pretest was used to verify the appropriateness and clarity of the approach and questions contained in the survey (Hair, Money, Samouel, & page, 2007). In addition, the pretest was used to determine the appropriate scales for responses based on respondents’ feedback. The electronic survey was completed by the Chief Financial Officer or an individual in an equivalent position in a privately held family business that could provide financial and business structure information.

Privately held family businesses do not have any public disclosure requirements resulting in the need to collect primary data for the research because of the lack of
FIGURE 1

Conceptual Model Operationalized

**Family Business Culture**
Second-Order Factor Analysis
   a) F-PEC Culture Subscale (15 Items)
   b) Denison Organizational Culture Survey (11 Items)

**Investment in the Internal Auditing Function**
Percentage of expenditures for the IAF compared to total operating expenditures for the last fiscal year

**Objective Financial Performance** (3 Items)

**Subjective Financial Performance** (7 Items)

Trust in Top Mgt (Shockley-Zalabak – 6 Items)

Trust in Business (Huff & Kelley – 4 Items)

Affective Commitment (Meyer & Allen – 4 Items)

Control Variables: Firm size, firm age, age of the IAF, education level of the respondent and prior work experience with an IAF
secondary or archival data. Gathering data from these businesses remains extremely challenging due to the importance they place on maintaining their privacy and confidentiality (Handler, 1989). A private research company was determined to be the best method of obtaining responses. Qualtrics (Clear Voice Research) is a market research company with census representation to reach hard to source groups. This company and their panel respondents have been used in prior academic research (e.g., Strauss, Griffin, & Parker, in press).

Qualtrics has approximately 540,000 panelists who respond at an average rate of 20%. In studies like this one, where the respondent pool was a hard-to-reach segment, the company employs partnerships with other companies to obtain the responses. In addition, several checks are in place to confirm the identity of the respondents. Verification of postal addresses, flash cookies, and internet protocol (IP) addresses are utilized to identify respondents. The company pulls samples in quota group formats. Then simple randomization is used to give a representative sample of new and old members within the groups. Respondents are limited to one completed survey every 10 days with the research company maintaining full records on panelist activity. Respondents receive a cash value reward based on the length of the survey and the target audience requested. The reward is credited to their member account and is available to be redeemed in debit cards or gift certificates once his/her account exceeds $10.00.

Respondents were asked if their business is privately held or publicly traded. For the privately held businesses an analysis was conducted of their responses to the questions related to owning family involvement in ownership, in top management, and on the board to verify that the business was a family business. After screening the data for
missing and invalid responses, a sample of 257 respondents was obtained. The surveys were anonymous in the data received from the research company with no information linking to the identification of the business or the respondent.

Demographics

Table 1 displays the demographics for the 257 respondents. The majority of respondents were members of the owning family and have education beyond that of high school and technical college. Approximately one half of the businesses (122 of 257) have an IAF with the average age of the IAF being 4.44 years. Forty-one of the respondents did not have any experience working with a business with an IAF. Additional demographics for all the respondents are presented in Table 1.

Dependent Variables

*Family Business Outcomes – Financial Performance*

Consistent with extant family business literature, financial performance was measured using both objective and subjective measures (e.g., Daily & Dollinger, 1992; Lindow, Stubner, & Wulf, 2010; Rutherford, Kuratko, & Holt, 2008). Obtaining at least two measures is preferred for several reasons. First, it is difficult to accurately interpret financial performance for privately held family businesses due to potential owner and industry specific factors (Westhead & Howorth, 2006). Second, information must be obtained directly from family businesses, which are known to be hesitant to release objective performance figures (Eddleston & Kellermanns, 2007; Love, Priem, & Lumpkin, 2002). Finally, privately held family businesses often have short-term and long-term objectives that would be difficult to recognize with purely objective financial measures.
TABLE 1

Demographics

<table>
<thead>
<tr>
<th>Panel A – Respondent Demographics</th>
<th>With IAF (n = 122)</th>
<th>Without IAF (n = 135)</th>
<th>Total (n = 257)</th>
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<td>Gender</td>
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<td>115</td>
<td>207</td>
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<td>11</td>
</tr>
<tr>
<td>30 – 39</td>
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<tr>
<td>40 – 49</td>
<td>38</td>
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<td>70</td>
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<tr>
<td>50 – 59</td>
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</tr>
<tr>
<td>60 and Over</td>
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<td>16</td>
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<tr>
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<tr>
<td>&lt; 5</td>
<td>15</td>
<td>31</td>
<td>46</td>
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<tr>
<td>5 – 10</td>
<td>49</td>
<td>40</td>
<td>89</td>
</tr>
<tr>
<td>11 – 15</td>
<td>28</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>&gt; 16</td>
<td>30</td>
<td>36</td>
<td>66</td>
</tr>
<tr>
<td>Number of Years experience with an IAF (In years)</td>
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<td></td>
</tr>
<tr>
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<td>0</td>
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<td>41</td>
</tr>
<tr>
<td>1 – 10</td>
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</tr>
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<td>11 – 20</td>
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<td>21 – 30</td>
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<tr>
<td>&gt; 30</td>
<td>5</td>
<td>4</td>
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TABLE 1 (Continued)

Demographics

<table>
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<tr>
<th>Panel B - Business Demographics</th>
<th>With IAF (n = 122)</th>
<th>Without IAF (n = 135)</th>
<th>Total (n = 257)</th>
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<td>Industry</td>
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<td>Services</td>
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<td>Manufacturing</td>
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<td>37</td>
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<td>Wholesale</td>
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<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Construction</td>
<td>14</td>
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</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>Age of the Internal Auditing Function (In years)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>37</td>
<td></td>
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<td>5 – 9</td>
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<td>&gt; 9</td>
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</tr>
<tr>
<td>International Firm</td>
<td>22</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>National Firm</td>
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<td>6</td>
<td>19</td>
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<tr>
<td>Local Firm</td>
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<td>12</td>
<td>34</td>
</tr>
<tr>
<td>No External Audit</td>
<td>41</td>
<td>97</td>
<td>119</td>
</tr>
<tr>
<td>Audit Committee</td>
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</tr>
<tr>
<td>Yes</td>
<td>57</td>
<td>12</td>
<td>69</td>
</tr>
<tr>
<td>No</td>
<td>65</td>
<td>123</td>
<td>188</td>
</tr>
</tbody>
</table>
(Geringer & Herbert, 1991) and may not reflect the achievement of the noneconomic
goals of the business (Astrachan, 2010).

The objective financial performance measures of return on assets (ROA), return
on equity (ROE) and return on sales (ROS) for the last fiscal year were used to measure
objective financial performance. These measures are among the most widely used
financial performance measures for unlisted family businesses (Zellweger & Nason,
2008). The respondents were asked to select the appropriate range on a scale of 1 to 12
with anchors between > - 50% and > 50%.

Subjective financial performance was assessed through seven performance related
questions regarding sales, market share, net income, return on equity, return on assets, the
ability to fund growth, and overall performance (Eddleston & Kellermanns, 2007). For
each of the seven items, respondents indicated on a 100-point sliding scale anchored by 0
(Very dissatisfied) and 100 (Very satisfied) their satisfaction with their business’s
performance for the last fiscal year. Past research has shown that this method correlates
with objective financial performance data (Dess, Ireland, & Hitt, 1990; Eddleston &

The three objective financial indicators and the seven subjective financial
indicators were totaled in their separate groups to form two overall financial performance
scores with higher values equating to higher performance (Dess et al. 1990; Eddleston &
Kellermanns, 2007).

Family Business Outcomes – Trust

Trust was measured at two levels, trust in the business and trust in top
management. Those are the anticipated levels at which the decision to implement and
support an IAF is likely made. Therefore, the decision to invest in an IAF will likely affect the trust in individuals at these levels. Trust was measured with two established and validated scales from prior research (Dietz & Den Hartog, 2006). Overall trust in the business was measured utilizing four statements from Huff & Kelley (2003). A seven-point Likert-type scale anchored by 1 (Strongly disagree) and 7 (Strongly agree) asked respondents to indicate the extent to which they disagreed or agreed with the four statements. Cronbach’s alpha for research conducted in the United States with these four statements was .83 (Huff & Kelley, 2003).

Trust in top management used six statements adapted from Shockley-Zalabak, Ellis, & Winograd (2000). While the original survey instrument used a five-point scale, respondents in this study were asked to indicate the extent to which a statement described top management based on an eleven-point Likert-type scale anchored by 0 (Strongly disagree) and 10 (Strongly agree). Cronbach’s alpha was .94 in past studies for the original five-point scale (Ellis & Shockley-Zalabak, 2001). Enlarging the range of the scale allowed for greater variability and precision of the measurement (Hair et al. 2007).

**Family Business Outcomes – Affective Commitment**

The Allen & Meyer (1990) Affective Organizational Commitment scale was utilized to measure commitment. Affective commitment has been the most prevalent approach to measuring organizational commitment in extant literature (Colquitt et al. 2001). In addition, in prior family business literature the typical usage of the term commitment is consistent with the definition of affective commitment (Sharma & Irving, 2005). The original scale contained eight statements with responses made on a seven-point Likert-type scale anchored by 1 (Strongly disagree) and 7 (Strongly agree). For this
study, the statements were adapted slightly by reversing two of the four negatively worded statements. Also, one statement was removed because of the possibility of causing confusion in the family business setting and two new statements, more applicable to the family business setting, were added. This adaptation resulted in a total of nine statements. The Cronbach’s alpha of the original scale was .87 in prior research. Appendix C includes a listing of the scale items and reliabilities for all the dependent variables.

Independent Variable - Investment in an IAF

The investment in an IAF was defined as the percentage of dollars expended for the IAF compared to total operating expenditures for the last fiscal year. This categorical variable was used in order to analyze the relationship at differing levels of investment in the IAF. Due to the sensitivity of business information for privately held family businesses, this question included a range of percentages of expenditures. This approach allowed the businesses to provide the requested data and maintain a certain level of confidentiality. The ranges were determined during the pretest of the survey and included seven choices from (1) = < 1 percent to (7) = > 10 percent.

Moderating Variable - Family Business Culture

The 12-item culture subscale of the Family – Power, Experience, Culture (F-PEC) scale (Astrachan, Klein, & Smyrnios, 2002) was used as one part of the process of collecting the data necessary to measure the construct of family business culture. The F-PEC culture subscale has been utilized in prior research to assess the extent to which family and business values overlap and employees are committed to the business (Astrachan et al. 2002; Holt et al. 2010; Klein et al. 2005). In the original scale three
statements were measured on a five-point Likert-type scale anchored by 1 (Not at all) and 5 (To a large extent) and nine statements were measured on a five-point Likert-type scale anchored by 1 (Strongly disagree) and 5 (Strongly agree). The original scales were adapted to an eleven-point Likert-type scale anchored by 0 (Strongly disagree) and 10 (Strongly agree). The scales were expanded to increase the variability and precision of the measurement (Hair et al. 2007). One double-barrelled statement was split into two statements for a total of 13 statements. Cronbach’s alpha of .93 from prior research suggests sound levels of internal consistency (Klein et al. 2005).

The Denison Organizational Culture Survey (Denison et al. 2004) assesses the organizational culture of the business in the areas of involvement, consistency, adaptability, and mission. This survey was the starting point for the second measurement of culture to be included in the new family business culture construct (Denison et al. 2004). The survey is an established, globally recognized measurement of organizational culture (Denison, Haaland, & Goelzer, 2003; Denison & Mishra, 1995; Fey & Denison, 2003; Yilmaz & Ergun, 2008). In addition, the survey has been used in prior research related to recognizing and leveraging the unique strengths of family culture (Denison et al. 2004).

Although organizational culture has many aspects, the extent to which members of a privately held family business have shared goals and values is anticipated to moderate the strength of the relationship between the investment in an IAF and family business outcomes. Therefore, for this study the measurement of organizational culture focused on two subsets of the Denison Organizational Culture Survey that examines these characteristics; (1) core values and (2) goals and objectives. Each subset of the original
scale was comprised of five items and used a five-point Likert-type scale anchored by 1 (Strongly disagree) and 5 (Strongly agree). The scale was adapted to a seven-point Likert-type scale with the same anchors to allow for greater precision of the measurement (Hair et al. 2007).

*Core Values (subset of Consistency)* utilizes five statements to measure the shared core values and the ethical code of the family as literature has repeatedly shown that family businesses are value or culture driven (e.g. Astrachan et al. 2002; Denison et al. 2004; Vallejo, 2011). Three statements were determined to be double-barrelled and were revised for purposes of this research. In addition, one statement from *Agreement (subset of Consistency)*, “There is a strong culture” in this organization was included as an overall measure of the perception of the strength of the organizational culture. The Cronbach’s alpha for all 15 original statements of the Consistency index, including the five statements from the Core Values subset, was .79 in prior research (Denison & Mishra, 1995).

*Goals and Objectives (subset of Mission)* includes five statements to examine if goals and objectives are understood, agreed upon, and tracked in the business. Lack of understanding or disagreement of the goals of the business and the goals of the family can impair the sustainability of the business (Mahto, Davis, Pearce, & Robinson, 2010; Sharma, Chrisman, & Chua, 1997). The original 15 statements of the Mission index, including the five statements from the Goals and Objectives subset, have exhibited a Cronbach’s alpha of .81 in extant research (Denison & Mishra, 1995).
Control Variables

Firm Size – Consistent with prior research the characteristic of firm size was included as a control variable as larger firms are more apt to have an IAF (e.g., Abdel-Khalik, 1993; Anderson, Francis, & Stokes, 1993; Carcello et al. 2005; Daily & Dollinger, 1992). Firm size was measured by the natural log of the number of full-time employees (Carey et al. 2000; Eddleston & Kellermanns, 2007; Mahto et al. 2010).

Firm Age (from inception) – Prior research has supported that as firms mature and grow, more monitoring processes are often needed (e.g., Carcello et al. 2005; Casillas, Moreno, & Barbero, 2010; Chrisman et al. 2004; Schulze et al. 2001). Firm age was measured using the number of years the business has been in existence (Carey et al. 2000; Lindow et al. 2010; Sorenson, Goodpaster, Hedberg, & Yu, 2009).

Age of the IAF – The length of time in years that the IAF has been in operation was included in the survey to differentiate between start up IAFs and more mature IAFs. As the IAF and the business mature, the IAF may have experienced changes in structure or extent. In addition, recently implemented IAFs may have stronger impacts on employee perceptions of family business outcomes than IAFs that have been in place for a period of time.

Industry – Five categorical variables of retail, service, manufacturing, wholesale, and construction were utilized in order to identify the industry sectors in which the responding businesses compete. Respondents were permitted to indicate a category of Other that enabled the measurement of the five primary industry categories without over-specification (Casillas et al. 2010; Lindow et al. 2010; O'Boyle, Rutherford, & Pollack,
Financial services institutions were excluded from the data analysis since the industry is highly regulated and may have compliance risks that mandate an IAF.

*Education* – The higher the level of education of respondents, the more understanding, reasoning, and cognitive abilities they should possess, thus significantly impacting the way the respondents perceive internal controls, such as an IAF (Hater & Bass, 1988). The highest level of completed formal education was measured using the following scale: (1) high school education, (2) technical college, (3) college graduate, and (4) advanced degree (Davis, Allen, & Hayes, 2010).

*Prior Work Experience* – Respondents with prior work experience at an organization with an IAF may consider the function more expected and commonplace. Therefore, they may be less impacted than other employees. Respondents were asked the number of years of experience that they have working for an organization with an IAF.

**RESULTS**

Descriptive Statistics and Correlations

The means, standard deviations, and correlations of all the variables are displayed in Table 2. A correlation matrix was used to examine multicollinearity. Three correlations greater than .5 were identified between the dependent variables. Multicollinearity would indicate that the independent variables have a substantial amount of shared variance (Hair, Black, Babin, & Anderson, 2010). This would decrease the ability to assess the influence of each independent variable in predicting the dependent variables.

---

2 Industry was initially included as a control variable. The regression results revealed it was not significant and it was removed from the model.
### TABLE 2

**Descriptive Statistics and Correlations**

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<td>1. Objective Financial Performance (a)</td>
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<td>3.05</td>
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</tr>
<tr>
<td>2. Subjective Financial Performance (b)</td>
<td>67.50</td>
<td>21.36</td>
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<tr>
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<td>0.85</td>
<td>.17</td>
<td>**</td>
<td>.34</td>
<td>**</td>
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<td></td>
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<tr>
<td>4. Trust in Top Management (c)</td>
<td>9.84</td>
<td>1.69</td>
<td>.19</td>
<td>**</td>
<td>.24</td>
<td>**</td>
<td>.72</td>
<td>**</td>
<td></td>
<td></td>
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<td>5. Affective Commitment</td>
<td>6.17</td>
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<td>.22</td>
<td>**</td>
<td>.25</td>
<td>**</td>
<td>.69</td>
<td>**</td>
<td>.65</td>
<td>**</td>
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<td></td>
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<td>6. Firm Size (d)</td>
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<td>2.64</td>
<td>-.08</td>
<td>**</td>
<td>.32</td>
<td>**</td>
<td>-0.4</td>
<td>-12</td>
<td>-0.9</td>
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<td>7. Firm Age</td>
<td>17.49</td>
<td>14.68</td>
<td>-.08</td>
<td>*</td>
<td>.14</td>
<td>.03</td>
<td>.04</td>
<td>.04</td>
<td>.13</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Age of the IAF (e)</td>
<td>4.44</td>
<td>7.37</td>
<td>-.05</td>
<td>**</td>
<td>.20</td>
<td>**</td>
<td>.04</td>
<td>.04</td>
<td>.03</td>
<td>**</td>
<td>.16</td>
<td>*</td>
<td>.27</td>
</tr>
<tr>
<td>9. Education (f)</td>
<td>2.89</td>
<td>0.85</td>
<td>.08</td>
<td>*</td>
<td>.15</td>
<td>.01</td>
<td>-.01</td>
<td>.12</td>
<td>.41</td>
<td>**</td>
<td>.13</td>
<td>*</td>
<td>.23</td>
</tr>
<tr>
<td>10. Prior Work Experience with an IAF (g)</td>
<td>11.36</td>
<td>9.56</td>
<td>.01</td>
<td>.08</td>
<td>-.02</td>
<td>.15</td>
<td>.07</td>
<td>.01</td>
<td>.32</td>
<td>**</td>
<td>.44</td>
<td>**</td>
<td>.08</td>
</tr>
<tr>
<td>11. Investment in IAF (h)</td>
<td>1.45</td>
<td>1.91</td>
<td>-.02</td>
<td>**</td>
<td>.26</td>
<td>**</td>
<td>-.07</td>
<td>-.01</td>
<td>.04</td>
<td>.44</td>
<td>**</td>
<td>.11</td>
<td>.43</td>
</tr>
<tr>
<td>12. Family Business Culture (i)</td>
<td>8.02</td>
<td>1.11</td>
<td>.20</td>
<td>**</td>
<td>.31</td>
<td>**</td>
<td>.82</td>
<td>**</td>
<td>.71</td>
<td>**</td>
<td>-.09</td>
<td>.01</td>
<td>.02</td>
</tr>
</tbody>
</table>

n = 257, * = p < .05;  ** = p < .01

Scales are (1) Strongly Disagree to (7) Strongly Agree unless otherwise indicated

(a) Scale of (1) > -50% to (12) > 50%
(b) Scale of (0) Very Dissatisfied to (100) Very Satisfied
(c) Scale of (0) Strongly Disagree to (10) Strongly Agree
(d) Full-time Employees (natural log)
(e) In years
(f) (1) High school, (2) Tech college, (3) College, or (4) Advanced
(g) In years
(h) n = 135 with 0 Investment, and n = 122: (1) < 1% = 32, (2) 1% - 2% = 21, (3) 3% - 4% =14, (4) 5% - 6% = 29, (5) 7% - 8% = 17,
(6) 9% - 10% = 8, and (7) > 10% = 1
(i) New construct - See Appendices A and B for more information
variable. The results of the correlation matrix and the fact that the research model has one independent variable and will examine the dependent variables separately resulted in multicollinearity not presenting a problem.

**Dependent Variables**

An exploratory factor analysis (EFA) was conducted for each of the five dependent variables with the following results. The variables of objective financial performance (\( \alpha = .94 \)), trust in the business (\( \alpha = .80 \)), and trust in top management (\( \alpha = .98 \)) loaded cleanly into individual factors with the indicated Cronbach’s alpha scores. Affective commitment initially loaded into three factors requiring five iterations to result in a final single factor (\( \alpha = .79 \)). Appendix C displays the statements used to measure the dependent variables, the factor loadings, and Cronbach’s alpha for each item.

**Moderating Variable – Family Business Culture**

An EFA was also performed on the 26 items of family business culture (15 F-PEC items and 11 Denison items) to analyze the correlations among the items. A VARIMAX orthogonal rotation method was used to simplify the columns of the factor analysis and give a clear separation of the factors. Factor loadings were considered significant at .35 with the sample size of 257 (Hair et al. 2010). Three iterations of factor analysis resulted in the removal of three Denison items. The remaining 23 items loaded into three factors. The three factors had communalities at greater than .500, overall and individual item measures of sampling adequacy of greater than .500, and 71.93 percent of the variance explained. A Cronbach’s alpha was used as a diagnostic measure to assess the consistency of the factors. Cronbach’s alphas of \( \alpha = .95 \), \( \alpha = .95 \), and \( \alpha = .80 \) were evidence of high internal consistency within the three factors.
Next, a second-order confirmatory factor analysis (CFA) was utilized to develop the family business culture construct. The second-order factor model involves two layers of latent constructs where the first-order constructs are viewed as indicators. Theoretically, the F-PEC culture subscale items and the sub-sets of culture selected from the Denison Organizational Culture Survey items share the same general level of abstraction. Therefore, the first-order model meets the first requirement of theoretical justification. Secondly, the three factors developed in the first-order factor analysis are anticipated to influence other related constructs in the same way. And last, at least three first-order constructs can be used in order to meet the minimum conditions for identification and good measurement practice (Hair et al. 2010).

AMOS 17.0 was used to conduct the second-order factor analysis. The modification indices (Standardized Regression Weights known as factor loadings in SPSS) were reviewed and variables with the largest amounts were removed in order to improve the model fit. Seven iterations were completed with an item removed in each stage. The final model consisted of 16 items, had a Root Mean Square Error of Approximation (RMSEA) of .079, a normed Chi-Square (CMIN/DF) of 2.6, and a Comparative Fit Index (CFI) of .96 indicating acceptable model fit (Hair et al. 2010).

Convergent validity, the extent to which indicators of a construct converge or share variance, was tested by assessing the loading estimates. Three loadings, Standardized Regression Weights, did have amounts slightly below the .70 recommended amount, but were still above the .50 acceptable amount (Hair et al. 2010). Internal reliability was verified by a Cronbach’s alpha of \( \alpha = .94 \). Appendix A displays the final second-order CFA. The rectangle boxes on Appendix A include the Statement numbers.
that refer to the complete Statements in the Statement # column in Appendix B. For example, box S23_3 on Appendix A refers to S23_3 in the Statement # column of Appendix B.

Appendix B includes (1) the original scale statements, (2) the revised statements that were included in this survey, (3) the iterations completed in the EFA and second-order CFA, and (4) the final loadings.

The average summated score was calculated for the remaining 16 items of the family business culture construct, resulting in an average level of family business culture for each respondent.

Hypotheses Tests

The conceptual model includes one nominal independent variable, one interval moderator variable, five control variables and five interval dependent variables. This structure indicates that multiple regression is the appropriate statistical tool (Hair et al. 2010). A test of skewness revealed that the average summated scale of family business culture was negatively skewed. The variable was reflected by subtracting every observation from the largest value of the variable plus one. The square root of each observation was then calculated to achieve an acceptable level of skewness.

The moderating variable of family business culture was centered by subtracting the mean from each observed data point. This shifts the scale and is beneficial in calculating the interaction term. Centering reduces the correlation with the original variables and helps interpretation of the regression coefficients. Centering the continuous variables is recommended when calculating the interaction term to test for moderation.
The five dependent variables were tested separately as the objective was to
examine the individual relationships between the independent variable and each
dependent variable, including any moderating influence. The results for each of the five
dependent variable models are displayed in the following tables. The moderation effect
of family business culture was tested consistent with the approach outlined by Cohen &
Cohen (1983) and Baron & Kenny (1986).

Model 1 of each table includes the results of testing the control variables, Model 2
includes the results for the main effects hypotheses tests, Model 3 displays the results for
the moderation and related hypotheses, and Model 4 includes all the variables and the
interaction term.

Table 3 indicates that the control variable of education level is significantly
related to objective financial performance ($\beta = .52, p < .05$). However, Hypothesis 1a is
not supported as the investment in an IAF was excluded from the model by the regression
analysis. Family business culture is statistically significant at $\beta = 1.70, p < .01$, and the
overall model remains significant at $F = 2.65, p < .05$. However, the interaction term is
not significant indicating no moderating effect and lack of support for Hypothesis 4a.

The results for subjective financial performance are included in Table 4. Firm
size and the age of the IAF are significant control variables, but once again the main
effect, Hypothesis 2b, was excluded from the regression model and not supported. The
moderator and interaction results are similar to objective financial performance and do
not provide support for Hypothesis 4b.
### TABLE 3

**Regression Analysis - Objective Financial Performance**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size (ln # Employees)</td>
<td>-.15</td>
<td>-.15</td>
<td>-.11</td>
<td>-.12</td>
</tr>
<tr>
<td>Firm Age</td>
<td>-.02</td>
<td>-.02</td>
<td>-.02</td>
<td>-.02</td>
</tr>
<tr>
<td>Age of the IAF</td>
<td>-.03</td>
<td>-.03</td>
<td>-.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Education of the Respondent</td>
<td>.55 *</td>
<td>.55 *</td>
<td>.52 *</td>
<td>.52 *</td>
</tr>
<tr>
<td>Prior Work Experience with an IAF</td>
<td>.02</td>
<td>.02</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Model 2: Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$IAF$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 3: Moderator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture</td>
<td>1.71 **</td>
<td>1.70 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 4: Interaction</strong></td>
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<td></td>
</tr>
<tr>
<td>Family Business Culture x $IAF$</td>
<td></td>
<td></td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
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<td>.03</td>
<td>.07</td>
<td>.07</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
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<td>.01</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>$F$</td>
<td>1.70</td>
<td>1.70</td>
<td>3.10 **</td>
<td>2.65 *</td>
</tr>
</tbody>
</table>

$n = 257, * = p < .05;  ** = p < .01, *** = p < .001.$

Notes:

1. Unstandardized coefficient betas are reported (Standardized betas for variables excluded from the analysis by the stepwise regression are not reported)
2. Refer to Table 2 for complete variable descriptions
### TABLE 4

**Regression Analysis - Subjective Financial Performance**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size (ln # Employees)</td>
<td>2.40 ***</td>
<td>2.40 ***</td>
<td>2.80 ***</td>
<td>2.80 ***</td>
</tr>
<tr>
<td>Firm Age</td>
<td>.10</td>
<td>.10</td>
<td>.12</td>
<td>.12</td>
</tr>
<tr>
<td>Age of the IAF</td>
<td>.40 *</td>
<td>.40 *</td>
<td>.41 *</td>
<td>.41 *</td>
</tr>
<tr>
<td>Education of the Respondent</td>
<td>-3.71</td>
<td>-3.71</td>
<td>-.71</td>
<td>-.71</td>
</tr>
<tr>
<td>Prior Work Experience with an IAF</td>
<td>-.01</td>
<td>-.01</td>
<td>-.10</td>
<td>-.10</td>
</tr>
<tr>
<td><strong>Model 2: Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 3: Moderator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture</td>
<td></td>
<td></td>
<td>21.96 ***</td>
<td>21.96 ***</td>
</tr>
<tr>
<td><strong>Model 4: Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture x $ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| R²                  | .13     | .13     | .25     | .25     |
| Adjusted R²         | .11     | .11     | .24     | .24     |
| F                   | 7.51 *** | 7.51 *** | 14.12 *** | 14.12 *** |

n = 257, * = p < .05; ** = p < .01, *** = p < .001.

Notes:

1. Unstandardized coefficient betas are reported (Standardized betas for variables excluded from the analysis by the stepwise regression are not reported).
2. Refer to Table 2 for complete variable descriptions.
Tables 5 through 7\(^3\) display similar results for the remaining three dependent variables of trust in the business, trust in top management, and affective commitment. The overall models are significant at F = 80.26, p < .001, F = 82.67, p < .001, and F = 50.16, p < .001, respectively, and the moderator of family business culture is significant in all three models. However, the main effect of Hypotheses 2a, 2b, and 3 and the moderation Hypotheses of 5a, 5b, and 6 are not supported.

An additional analysis was conducted to test for significant differences between the means of the groups with an IAF (n = 122) and without an IAF (n = 135). A one-way Analysis of Variance (ANOVA) revealed higher means for the respondents with an IAF for all the dependent variables.

An analysis was also performed utilizing the independent variable of Yes = 1 having an IAF and 0 otherwise. Using this dichotomous independent variable resulted in a statistically significant relationship between having an IAF and objective performance (β = 1.02, p < .05) and having an IAF and subjective performance (β = 6.44, p < .05). The interaction, once again, was not significant. In addition, the 122 business with an IAF were separated from the full sample and the regression was run on just those businesses with an IAF. The results did not reveal any statistical differences.

As a final test, the age of the IAF was divided into three dummy variables of (1) less than 5 years, (2) between 5 and 9 years, and (3) more than 9 years. A one-way ANOVA was used to determine if there was a statistically significant difference between the means of the three groups. The businesses with an IAF in place for 5 to 9 years had

\(^3\) To analyze trust in top management the percentage of top management positions currently occupied by members of the owning family was used as an additional control variable.
TABLE 5

Regression Analysis - Trust in the Business

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size (ln # Employees)</td>
<td>-.02</td>
<td>-.02</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Firm Age</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Age of the IAF</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Education of the Respondent</td>
<td>.02</td>
<td>.02</td>
<td>-.02</td>
<td>-.02</td>
</tr>
<tr>
<td>Prior Work Experience with an IAF</td>
<td>-.01</td>
<td>-.01</td>
<td>-.01 ***</td>
<td>-.01 ***</td>
</tr>
<tr>
<td><strong>Model 2: Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 3: Moderator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture</td>
<td></td>
<td></td>
<td>2.07 ***</td>
<td>2.07 ***</td>
</tr>
<tr>
<td><strong>Model 4: Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture x $ IAF</td>
<td></td>
<td></td>
<td>.02</td>
<td></td>
</tr>
</tbody>
</table>

| R²                     | .01     | .01     | .69     | .69     |
| Adjusted R²            | -.01    | -.01    | .68     | .68     |
| F                      | .36     | .36     | 93.46 ***| 80.26 ***|

n = 257, * = p < .05; ** = p < .01, *** = p < .001.

Notes:

(1) Unstandardized coefficient betas are reported (Standardized betas for variables excluded from the analysis by the stepwise regression are not reported)

(2) Refer to Table 2 for complete variable descriptions
### TABLE 6

**Regression Analysis - Trust in Top Management**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size (ln # Employees)</td>
<td>-.09</td>
<td>-.09</td>
<td>-.02</td>
<td>-.02</td>
</tr>
<tr>
<td>Firm Age</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Age of the IAF</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Education of the Respondent</td>
<td>.07</td>
<td>.07</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Prior Work Experience with an IAF</td>
<td>.03 *</td>
<td>.03 *</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Model 2: Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 3: Moderator</strong></td>
<td></td>
<td></td>
<td>3.92 ***</td>
<td>3.92 ***</td>
</tr>
<tr>
<td>Family Business Culture</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 4: Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture x $ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.04</td>
<td>.04</td>
<td>.67</td>
<td>.67</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.02</td>
<td>.02</td>
<td>.66</td>
<td>.66</td>
</tr>
<tr>
<td>F</td>
<td>1.96</td>
<td>1.96</td>
<td>82.67 ***</td>
<td>82.67 ***</td>
</tr>
</tbody>
</table>

n = 257, * = p < 0.05; ** = p < 0.01, *** = p < 0.001.

Notes:
1. Unstandardized coefficient betas are reported (Standardized betas for variables excluded from the analysis by the stepwise regression are not reported)
2. Refer to Table 2 for complete variable descriptions
TABLE 7

Regression Analysis - Affective Commitment

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size (ln # Employees)</td>
<td>-.04 *</td>
<td>-.04 *</td>
<td>-.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Firm Age</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Age of the IAF</td>
<td>-.01</td>
<td>-.01</td>
<td>-.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Education of the Respondent</td>
<td>.17 **</td>
<td>.17 **</td>
<td>.14 **</td>
<td>.14 **</td>
</tr>
<tr>
<td>Prior Work Experience with an IAF</td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td><strong>Model 2: Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 3: Moderator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture</td>
<td></td>
<td></td>
<td>1.52 ***</td>
<td>1.52 ***</td>
</tr>
<tr>
<td><strong>Model 4: Interaction</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Family Business Culture x $ IAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| R²                           | .05     | .05     | .55     | .55     |
| Adjusted R²                  | .03     | .03     | .54     | .54     |
| F                             | 2.40 *  | 2.40 *  | 50.16 ***| 50.16 ***|

n = 257, * = p < .05; ** = p < .01, *** = p < .001.

Notes:

(1) Unstandardized coefficient betas are reported (Standardized betas for variables excluded from the analysis by the stepwise regression are not reported)

(2) Refer to Table 2 for complete variable descriptions
the greater mean for all the dependent variables except subjective financial performance. Group 3, businesses with an IAF of more than 9 years had the lowest means except in the areas of subjective financial performance and trust in top management.

Additional Sensitivity Tests

Tests of normality, skewness, and kurtosis revealed acceptable ranges other than the negative skewness of family business culture that was mentioned earlier. The influence of outliers was determined by standardizing the scores of the variables. The standard scores were calculated by subtracting the mean and dividing by the standard deviation for each variable (Hair et al. 2010). Six observations were identified that exceeded the threshold value of 4 for larger sample sizes (n > 80). The six observations were excluded and the regression models were rerun. Outliers were not considered to impact the results as the coefficient amounts had minor adjustments with no changes to overall results or significance.

The design of the survey tool and statistical procedures were used to control for common method bias (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). Although, the independent and dependent variables were collected from a single respondent, the independent variable was reported as a range of percentages of expenditures and was less open to perception bias. In addition, the measurement statements for the moderating variable and the dependent variables were from established validated scales. The scales were adapted slightly to eliminate vague, double-barrelled, or outdated statements or terms. The endpoints and anchoring effects were extended to increase variability in responses and further reduce common method bias (Hair et al.
For example, Likert-type scales were used with anchors of 1 to 7 and 0 to 10. Sliding scales were also used with anchors of 0 to 100.

Common methods bias was also tested by entering the independent, dependent, and moderator variables in a factor analysis (Podsakoff et al. 2003). Three factors were extracted with eigenvalues > 1.0 and a total of 59.76 percent of the total variance explained. The first variable accounted for 28.42 percent, the second variable 16.96 percent, and the third 14.39 percent of the total variance explained. The factors loaded cleanly and no single factor accounted for the majority of the variance indicating that common method bias was not considered to be an issue.

DISCUSSION

Findings and Implications

Research related to the outcomes of an IAF has been limited to date. This is especially true in the area of privately held family businesses. Unlike their publicly traded competitors, privately held family businesses are not bound by mandatory reporting or auditing procedures. Even without a requirement to do so, some privately held family businesses invest at differing levels in an IAF. This research takes the first step in examining the outcomes of that investment.

Prior research suggests that some family businesses derive a competitive advantage due their high levels of trust and organizational commitment (Eddleston et al. 2010; Vallejo, 2009). Research has indicated that family businesses often rely on trust and organizational commitment as substitutes for other governance mechanisms, such as an IAF. This poses the question of the benefits of an IAF to these businesses. An IAF
can establish expectations, reliability, predictability and an environment conductive to a beneficial exchange between employees and the business. The other side of the issue suggests that if applied inappropriately the IAF can imply distrust and the need to monitor.

The new construct of family business culture developed in this study is a replicable measure of the influence of the combined cultures of the family and of the business interacting within the business. The new construct has an internal reliability score in the excellent range and provides a new method of measurement to conduct research of family and business dynamics across family businesses. In addition, the new construct of family business culture was a strong influence in all the models, but was not significant as a moderating variable.

The results of this study reflect that the level of investment in IAF does not have a significant influence on the outcomes of objective financial performance, subjective financial performance, trust in the business, trust in top management, or affective commitment.

Limitations and Future Research

The survey was designed, and statistical tests conducted, to manage the issue of common method bias. However, the fact that survey data was gathered from a single respondent is identified as a limitation of the study. The respondent needed to be someone at a level to provide the financial information concerning the dollar investment in an IAF and also the ranges of the three objective financial performance variables. While this was the appropriate person for the financial information, the respondent could have bias when responding to the perception statements in the scales. Multiple
respondents from the same firm, at different organization levels and in different responsibility areas could provide a more robust analysis in future research.

In addition, future research is needed to examine and validate the new construct of family business culture. Although the construct did not reach the significance level in this study related to the IAF, there are numerous opportunities to test the construct in areas outside of governance mechanisms. The construct provides a measurement tool that could be used to revisit prior research that has produced conflicting results. Research in areas that have the potential to be influenced by variations in goals, core values, and relationships could be prime beneficiaries of the construct.

Although the expected results were not obtained, this study has taken a first step at examining the outcomes of the IAF in privately held family businesses. Prior research has indicated that trust and affective commitment can create a competitive advantage for family businesses. Therefore, identifying business processes and/or governance mechanisms that can increase objective and subjective performance, and have a positive impact on trust and affective commitment, could provide critical information to owners and management. These businesses remain the predominant form of business structure in the United States and globally and are largely unexplored research wise.
References


APPENDIX A

SECOND-ORDER CONFIRMATORY FACTOR ANALYSIS FOR
FAMILY BUSINESS CULTURE
APPENDIX A - Second-Order Confirmatory Factor Analysis for Family Business Culture
(See Appendix B for a listing of the Statements – S Codes in the rectangles)
APPENDIX B

DEVELOPING THE FAMILY BUSINESS CULTURE CONSTRUCT
## APPENDIX B - Developing the Family Business Culture Construct

<table>
<thead>
<tr>
<th>Original Statements</th>
<th>Statement #</th>
<th>Revised Statements</th>
<th>EFA</th>
<th>CFA</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denison Organizational Culture</td>
<td></td>
<td>In this business........</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The leaders and managers “practice what they preach”</td>
<td>S20</td>
<td>Top management practices what they preach</td>
<td></td>
<td></td>
<td>.768</td>
</tr>
<tr>
<td>There is a characteristic management style and a distinct set of management practices</td>
<td>S15</td>
<td>There is a distinct set of management practices (Double barrelled was revised)</td>
<td></td>
<td>Removed in Step 7</td>
<td></td>
</tr>
<tr>
<td>There is a clear and consistent set of values that govern the way we do business</td>
<td>S26</td>
<td>There is a clear set of values that governs the way we do business</td>
<td></td>
<td></td>
<td>.873</td>
</tr>
<tr>
<td>Ignoring core values will get you in trouble</td>
<td>S42</td>
<td>Ignoring core values will get you in trouble</td>
<td></td>
<td>Removed in Step 1</td>
<td></td>
</tr>
<tr>
<td>There is an ethical code that guides our behavior and tells us right from wrong</td>
<td>S21</td>
<td>There is an ethical code that guides our behavior and tells us right from wrong</td>
<td></td>
<td></td>
<td>.876</td>
</tr>
<tr>
<td>There is widespread agreement about goals</td>
<td>S32</td>
<td>There is widespread agreement about goals</td>
<td></td>
<td>Removed in Step 2</td>
<td></td>
</tr>
<tr>
<td>Leaders set goals that are ambitious, but realistic</td>
<td>S41</td>
<td>Top management sets goals that are ambitious, but realistic</td>
<td></td>
<td></td>
<td>.620</td>
</tr>
<tr>
<td>The leadership has “gone on the record” about the objective we are trying to meet</td>
<td>S47</td>
<td>Top management has gone on record about the objectives we are trying to meet</td>
<td></td>
<td></td>
<td>.573</td>
</tr>
<tr>
<td>We continuously track our progress against our stated goals</td>
<td>S17</td>
<td>We continuously track our progress against our stated goals</td>
<td></td>
<td>Removed in Step 1</td>
<td></td>
</tr>
<tr>
<td>People understand what needs to be done for us to succeed in the long run</td>
<td>S16</td>
<td>People understand what needs to be done we can succeed in the long run</td>
<td></td>
<td>Removed in Step 6</td>
<td></td>
</tr>
<tr>
<td>There is a “strong” culture</td>
<td>S31</td>
<td>There is a strong culture in this business</td>
<td></td>
<td>Removed in Step 3</td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX B - Developing the Family Business Culture Construct (continued)

<table>
<thead>
<tr>
<th>Original Statements</th>
<th>Statement #</th>
<th>Revised Statements</th>
<th>EFA</th>
<th>CFA</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F-PEC Culture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your family has influence on your business</td>
<td>S28_4</td>
<td>The owning family has a strong influence on the business</td>
<td></td>
<td></td>
<td>.790</td>
</tr>
<tr>
<td>Your family and business share similar values</td>
<td>S18_3</td>
<td>The owning family members and the business share similar values</td>
<td></td>
<td></td>
<td>.877</td>
</tr>
<tr>
<td>Your family members share similar values</td>
<td>S23_6</td>
<td>The owning family members share similar values</td>
<td></td>
<td></td>
<td>.891</td>
</tr>
<tr>
<td>Family members support the family business in discussions with friends, employees, and other family members</td>
<td>S18_9</td>
<td>Employees support the family business in discussions with others</td>
<td></td>
<td></td>
<td>.858</td>
</tr>
<tr>
<td>Family members feel loyalty to the family business</td>
<td>S23_2</td>
<td>Employees feel loyalty to the family business</td>
<td></td>
<td></td>
<td>.938</td>
</tr>
<tr>
<td>Family members are proud to tell others that we are part of the family business</td>
<td>S23_4</td>
<td>Employees are proud to tell others that they are part of the family business</td>
<td></td>
<td></td>
<td>.860</td>
</tr>
<tr>
<td>There is so much to be gained by participating with the family business on a long-term basis</td>
<td>S23_1</td>
<td>There is much to be gained by participating with the family business on a long-term basis</td>
<td></td>
<td></td>
<td>.799</td>
</tr>
<tr>
<td>Family members agree with the family business goals, plans, and policies</td>
<td>S28_2</td>
<td>Employees agree with the family business plans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Triple Barrelled statement above was divided into 3 separate statements.</em></td>
<td>S18_1</td>
<td>Employees agree with the family business policies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S23_5</td>
<td>Employees agree with the family business goals</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX B - Developing the Family Business Culture Construct (continued)

<table>
<thead>
<tr>
<th>Original Statements</th>
<th>Statement #</th>
<th>Revised Statements</th>
<th>EFA</th>
<th>CFA</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members really care about the fate of the family business</td>
<td>S18_2</td>
<td>Employees really care about the fate of the family business</td>
<td></td>
<td></td>
<td>.584</td>
</tr>
<tr>
<td>Deciding to be involved with the family business has a positive influence on my life</td>
<td>S18_4</td>
<td>Deciding to be involved with the family business has a positive influence on my life</td>
<td></td>
<td></td>
<td>.832</td>
</tr>
<tr>
<td>I understand and support my family’s decisions regarding the future of the family business</td>
<td>S18_8</td>
<td>I understand the owning family’s decisions regarding the future of the family business</td>
<td></td>
<td>Removed in Step 5</td>
<td></td>
</tr>
<tr>
<td><strong>Double Barrelled statement above was divided into 2 separate statements.</strong></td>
<td>S23_3</td>
<td>I support the owning family’s decisions regarding the future of the family business</td>
<td></td>
<td></td>
<td>.938</td>
</tr>
<tr>
<td>Family members are willing to put in a great deal of effort beyond that normally expected to help the family business be successful</td>
<td>S28_1</td>
<td>Employees are willing to put in a great deal of effort beyond that normally expected to help the family business be successful</td>
<td></td>
<td></td>
<td>.869</td>
</tr>
</tbody>
</table>
APPENDIX C

SCALE ITEMS AND RELIABILITIES
## APPENDIX C - Scale Items and Reliabilities

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Loadings</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Performance</td>
<td>12 point scale ( \Rightarrow (50%) ) to ( \Rightarrow 50% )</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on Assets</td>
<td>.969</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on Equity</td>
<td>.949</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on Sales</td>
<td>.916</td>
<td></td>
</tr>
<tr>
<td>Subjective Performance</td>
<td>Sliding Scale = 0 to 100</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>.847</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market Share</td>
<td>.813</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Net Income</td>
<td>.893</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on Equity</td>
<td>.901</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on Assets</td>
<td>.895</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Ability to Fund Growth</td>
<td>.850</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall Performance</td>
<td>.741</td>
<td></td>
</tr>
<tr>
<td>Trust in the Business</td>
<td>7 point scale</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In this business managers trust their subordinates to make good decisions</td>
<td>.660</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In this business if someone makes a promise, others within the business will almost always trust that the person will do his or her best to keep the promise</td>
<td>.857</td>
<td></td>
</tr>
<tr>
<td></td>
<td>There is a very high level of trust throughout this business</td>
<td>.831</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In this business subordinates have a great deal of trust for managers</td>
<td>.861</td>
<td></td>
</tr>
<tr>
<td>Trust in Top Management:</td>
<td>11 point scale</td>
<td>.98</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>In your opinion, top management:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is sincere in their efforts to communicate with employees</td>
<td>.946</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Listens to employees’ concerns</td>
<td>.943</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Keeps their commitments to employees</td>
<td>.964</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is concerned about employees’ well being</td>
<td>.949</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Keeps their word to employees</td>
<td>.969</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Has my trust</td>
<td>.855</td>
<td></td>
</tr>
<tr>
<td>Construct</td>
<td>Items</td>
<td>Loadings</td>
<td>( \alpha )</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>Affective Commitment</td>
<td>7 point scale</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This business has a great deal of personal meaning for me</td>
<td>.642</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I really feel as if this business’s problems are my own</td>
<td>.817</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I would be happy to spend the rest of my career with this business</td>
<td>.783</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel emotionally attached to this business</td>
<td>.888</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

ENHANCING FAMILY BUSINESS SUCCESS SURVEY
Q1 Dear Family Business Associate, Your responses to this brief, confidential survey will provide valuable information for your owners and managers to consider when looking for options to improve the success of the business. This research will provide previously unavailable information that can be used by your business as a benchmark when assessing future changes. The Chief Financial Officer (or similarly titled position that can provide ownership structure and process information) should complete the survey. The estimated time for completion of the Chief Financial Officer survey is 20 to 25. When answering questions containing the terms 'we' or 'our' please assume you are taking the perspective of the employees in the company. If you are interrupted and need to step away, just close the survey. When you click the link to reopen the survey, the survey will open at the question you were answering. The research is completely confidential. Individual and business names will not be maintained, nor released, at any point. Thank you for your participation! Your responses by December 15, 2011 are greatly appreciated!

Q2 Note - Your participation is voluntary and may be withdrawn without penalty. The research has no risks to the respondents. By completing this survey you are agreeing to participation in the research process. Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board.

Q3 Note - Question or problems regarding these activities should be addressed to Dr. Christine Ziegler, Chairperson of the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #2202, Kennesaw, GA 30144, (770) 423-6407.)

Q4 What is your gender?

☐ Male
☐ Female

Q5 How many years have you been with this business?

Q6 Are you a member of the owning family? (Family member is defined as offspring of a couple, no matter what generation, their in-laws, and any legally adopted children.)

☐ Yes
☐ No
Q7 Which of the following best describes your relationship?

☐ Founder
☐ Descendent of Founder
☐ In-law
☐ Legally Adopted
☐ Other - Please specify _________________

Q8 Which generation do you represent?

☐ 1st
☐ 2nd
☐ 3rd
☐ 4th
☐ >4th

Q9 What is your position in the business? (Please check all that apply.)

☐ Owner
☐ Chairman
☐ Board Member
☐ President
☐ Chief Executive Officer
☐ Chief Operating Officer
☐ Chief Financial Officer
☐ Controller
☐ Supervisor
☐ Non-Supervisor
☐ Internal Auditor
☐ Other - Please Specify _________________
Q10 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q11 I believe in this business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q12 This business has a great deal of personal meaning for me:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q13 In this business managers trust their subordinates to make good decisions:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q14 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q15 In this business there is a distinct set of management practices:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q16 In this business people understand what needs to be done so we can succeed in the long run:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q17 In this business we continuously track our progress against stated goals:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q18 In your opinion, please rate the extent to which you agree with the following statements:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 0</td>
<td>= 1</td>
</tr>
</tbody>
</table>

Employees agree with the family business policies  
Employees really care about the fate of the family business  
The owning family members and the business share similar values  
Deciding to be involved with the family business has a positive influence on my life  
I understand the owning family’s decisions regarding the future of the family business  
Employees support the family business in discussions with others
Q19 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q20 In this business top management “practices what they preach”:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q21 In this business there is an ethical code that guides our behavior and tells us right from wrong:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q22 I believe in the mission of the business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q23 In your opinion, please rate the extent to which you agree with the following statements:

<table>
<thead>
<tr>
<th>Strongly Disagree = 0</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>7</th>
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<tr>
<td>Strongly Agree = 1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is much to be gained by participating with the family business on a long-term basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees feel loyalty to the family business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support the owning family's decisions regarding the future of the family business</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are proud to tell others that they are part of the family business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees agree with the family business goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The owning family members share similar values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q24 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q25 In this business if someone makes a promise, others within the business will almost always trust that the person will do his or her best to keep the promise:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q26 In this business there is a clear set of values that governs the way we do business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q27 I really feel as if this business’s problems are my own:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q28  In your opinion, please rate the extent to which you agree with the following statements:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Employees are willing to put in a great deal of effort beyond that normally expected to help the family business be successful</th>
<th>Employees agree with the family business plans</th>
<th>I support the owning family's decisions regarding the future of the family business</th>
<th>The owning family has a strong influence on the business</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>1</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>2</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>3</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>4</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>5</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>6</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>7</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>8</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<td>9</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>10</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>
Q29 In your opinion, please rate the extent to which the following factors influence your commitment to the business: (Slide the Blue Bar to, or click on, the desired point on the scale. Not moving the Blue Bar will record your answer as 0.)

- Family Members of the Business
- Business Goals
- Personal Goals
- Values of the Business
- Personal Values

Q30 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q31 There is a “strong” culture in this business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q32 In this business there is widespread agreement about goals:

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q33 I think that I could easily become as attached to another business as I am to this one:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q34 Please indicate your satisfaction with the business’s performance in the following areas for the Last Fiscal Year. (Slide the Blue Bar to, or click on, the desired point on the scale. Not moving the Blue Bar will record your answer as 0.)

______ Sales
______ Market Share
______ Net Income
______ Return on Equity
______ Return on Assets
______ The Ability to Fund Growth
______ Overall Performance
Q35 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q36 I enjoy discussing the business with people outside of the business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q37 I do not feel a strong sense of belonging to the business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q38 There is a very high level of trust throughout this business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q39  In your opinion, indicate the extent to which the following statements describe top management within your family business:

<table>
<thead>
<tr>
<th>Strongly Disagree = 0</th>
<th>Strongly Agree = 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management is sincere in their efforts to communicate with employees</td>
<td>![10]</td>
</tr>
<tr>
<td>Top management listens to employees' concerns</td>
<td>![10]</td>
</tr>
<tr>
<td>Top management keeps their commitments to employees</td>
<td>![10]</td>
</tr>
<tr>
<td>Top management is concerned about employees' well being</td>
<td>![10]</td>
</tr>
<tr>
<td>Top management keeps their word to employees</td>
<td>![10]</td>
</tr>
<tr>
<td>Top management has my trust</td>
<td>![10]</td>
</tr>
</tbody>
</table>
Q40 For the following questions, please select the answer that best describes your personal opinion of your business environment.

Q41 In this business top management sets goals that are ambitious, but realistic:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q42 In this business ignoring core values will get you in trouble:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q43 I would be very happy to spend the rest of my career with this business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q44 Please place a 1 for Most Important, 2 for Second Most Important, and 3 for Third Most Important in the boxes provided below to indicate the top 3 items of importance, to you personally, for the business to accomplish:

- ______ Financial Performance
- ______ Employment of Family Members
- ______ Family Satisfaction
- ______ Family Independence
- ______ Respect of the Business in the Community
- ______ Write-in
- ______ Write-in

Q45 For the following questions, please select the answer that best describes your personal opinion of your business environment:

Q46 In this business subordinates have a great deal of trust for managers:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q47 In this business top management has “gone on record” about the objectives we are trying to meet:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Q48 I feel “emotionally attached” to this business:

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Q49 How many years experience do you have working for an organization with an Internal Auditing Function?

Q50 What is your age?

Q51 Please indicate your highest completed level of formal education:

- High School
- Tech College
- College
- Advanced

Q52 Are you the Chief Financial Officer (or a position having similar responsibilities) that would be the appropriate person to provide information on the ownership structure and performance of the business?

- Yes
- No

Q53 Please supply the following basic information:

- What year was the business established?
- Current number of full-time employees

Q54 The business is:

- Privately Held
- Publically Traded

Q55 What is the primary industry of the business?

- Retail
- Service
- Manufacturing
- Wholesale
- Construction
- Other - Please specify ____________________

Q56 What is the total number of top management positions in your business?

Q57 How many top management positions in the business are currently occupied by family members? (Family member is defined as offspring of a couple, no matter what generation, their in-laws, and any legally adopted children.)
Q58 Please provide the following information concerning the structure of the business. Please indicate the proportion of share ownership held by family members and non-family members: (The total must equal 100%). (Family is defined as a group of persons including those who are either offspring of a couple, no matter what generation, and their in-laws, as well as their legally adopted children).

<table>
<thead>
<tr>
<th>Proportion of Shares</th>
<th>Family: Voting/Controlling Shares (%)</th>
<th>Family: Non-Voting/Controlling Shares (%)</th>
<th>Non-Family: Voting/Controlling Shares (%)</th>
<th>Non-Family: Non-Voting/Controlling Shares (%)</th>
</tr>
</thead>
</table>

Q59 Please indicate the percentages of ownership of the 5 largest owners: (If you do not know exact percentages, please estimate.)

<table>
<thead>
<tr>
<th>Largest Owner</th>
<th>Percentage of Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Largest Owner</td>
<td></td>
</tr>
<tr>
<td>Third Largest Owner</td>
<td></td>
</tr>
<tr>
<td>Fourth Largest Owner</td>
<td></td>
</tr>
<tr>
<td>Fifth Largest Owner</td>
<td></td>
</tr>
</tbody>
</table>

Q60 Please check all boxes that apply:

<table>
<thead>
<tr>
<th>Which generation(s) owns the business?</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Greater than 4th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Which generation(s) manage(s) the business?</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Greater than 4th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q61 Does the business have a Board of Directors/Advisory Board?

☐ Yes
☐ No

Q62 Please provide the following information concerning members of the Board of Directors/Advisory Board at this business: (Independent is defined as nonfamily, nonemployee, and no business relationship with your business.) (Family member is defined as offspring of a couple, no matter what generation, their in-laws, and any legally adopted children.)

_____ Number of Family Members
_____ Number of Independent Members

Q63 How many members of the Board of Directors/Advisory Board are Female?

Q64 Please check all boxes that apply:

<table>
<thead>
<tr>
<th>Which generation(s) serve(s) on the Board of Directors?</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Greater than 4th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q65 How would you rate the Board of Directors/Advisory Board’s level of contribution to the business’s success? (Slide the Blue Bar to, or click on, the desired point on the scale. Not moving the Blue Bar will record your answer as 0.)

_____ Level of Contribution

Q66 Does the business have an Audit Committee?

☐ Yes
☐ No

Q68 How many members of the Audit Committee are Female?
Q69 Please check all boxes that apply:

<table>
<thead>
<tr>
<th>Which generation(s) serve(s) on the Audit Committee</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Greater than 4th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

Q70 How would you rate the Audit Committee’s level of contribution to the business’s success? (Slide the Blue Bar to, or click on, the desired point on the scale. Not moving the Blue Bar will record your answer as 0.)

______ Level of Contribution

Q71 How many external audits has the business had completed within the last 2 fiscal years?

- None
- 1
- 2
- 3
- 4
- >4

Q72 Please check the category of firm performing the majority of the external audit(s):

- International
- National
- Regional
- Local

Q73 Does your business have an Internal Auditing Function?

- Yes
- No

Q74 How long has the Internal Auditing Function been in place? (Please write in the number of years.)

Q75 To whom does the Internal Auditing Function report? (Please check all that apply.)

- President
- CEO
- CFO
Board of Directors
Audit Committee
Other - Please specify ____________________

Q76 What percentage of the Internal Auditing Function work is performed internally or outsourced? (The total must equal 100%.)

______ Internally
______ Outsourced

Q77 For the percentage of the Internal Auditing Function work that is performed internally, please indicate the number of internal staff in the Internal Auditing Function:

Q78 For the percentage of the Internal Auditing Function work that is performed internally, how many of the Internal Auditing Function staff members are family members? (Family member is defined as offspring of a couple, no matter what generation, their in-laws, and any legally adopted children.)

Q79 Please indicate the dollar amount expended for the Internal Auditing Function as a percentage of total operating expenditures for the Last Fiscal Year:

○ < 1%
○ 1% - 2%
○ 3% - 4%
○ 5% - 6%
○ 7% - 8%
○ 9% - 10%
○ > 10%

Q80 For each of the following, select the one description that is most similar to your Internal Auditing Function:

Q81 The style of our Internal Auditing Function would be described by our stakeholders as:

○ Corporate police
○ Supportive
○ Advisor

Q82 The perspective of our Internal Auditing Function is focused primarily on the:

○ Past (retrospective look at what happened)
○ Present
○ Future (proactive approach to risk mitigation & control development)
Q83 The responsibility of our Internal Auditing Function is to:

☑ Audit for compliance
☑ Audit and suggest
☑ Audit and consult

Q84 How would you rate the Internal Auditing Function’s level of contribution to the business’s success? (Slide the Blue Bar to, or click on, the desired point on the scale. Not moving the Blue Bar will record your answer as 0.)

_____ Level of Contribution

Q85 How likely is the business to implement an Internal Auditing Function within the next 5 years? (Slide the Blue Bar to, or click on, the desired point on the scale. Not moving the Blue Bar will record your answer as 0.)

_____ Likelihood of Implementing an Internal Auditing Function within the next 5 years

Q86 How many adult family members participate actively in the business? (Participate actively is defined as serves on the board, works in the business, and/or attends the majority of meetings held by the business.)

Q87 How many family members do not participate actively in the business but are interested?

Q88 How many family members are not (yet) interested at all?
Q89 Please check one box for each performance item to indicate the appropriate range (in %’s) for the Last Fiscal Year:

<table>
<thead>
<tr>
<th>In %’s</th>
<th>&gt;50</th>
<th>50 to 40</th>
<th>40 to 30</th>
<th>30 to 20</th>
<th>20 to 10</th>
<th>10 to 0</th>
<th>11 to 20</th>
<th>21 to 30</th>
<th>31 to 40</th>
<th>41 to 50</th>
<th>&gt;50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Assets</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Return on Equity</td>
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<tr>
<td>Return on Sales</td>
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</tr>
</tbody>
</table>

Q90 Please indicate if you are a licensed Certified Public Accountant?

☐ Yes
☐ No

Q91 Is your business a member of a Family Business Center at a college or university?

☐ Yes
☐ No

Q92 All the responses from your business are greatly appreciated! Please click the next arrow one final time to submit your completed survey.