

Family Involvement and Agency Cost Control Mechanisms in Family Firms

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Abstract

Family firms may experience different agency conflicts to the classical principal-agent conflict, which arise depending on the varying extent of family involvement. Agency cost control mechanisms should be introduced to cope with these conflicts.

The paper focuses on the relationship between family involvement, in governance and in management, and agency cost control mechanisms in family SMEs. The results show that family involvement in management has a positive relationship with the adoption of agency cost control mechanisms, while family involvement in governance has a negative one.

Hypotheses were tested using LISREL on a sample of 146 Italian family SMEs.

Key Words agency cost control mechanisms, family involvement in management, family involvement in governance, strategic planning, management control systems.

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Introduction

According to agency theory, in family firms, the classical conflict between principals and agents does not exist, as principals/shareholders and agents/managers present kinship ties and/or are often the same people (Berle and Means, 1932; Jensen and Meckling, 1976; Fama, 1980). Family members are usually involved not only in ownership, but also both in governance and in management. Consequently, in family firms, agency cost control mechanisms should not be adopted. Nevertheless, in family firms, distinctive agency conflicts arise from different sources, other than from that of the classical principal-agent (Myers, 1977; Smith and Warner, 1979; Morck et al., 1988; Daily and Dollinger, 1993; Schulze et al. 2001, 2003b; Anderson and Reeb, 2003; Chrisman et al., 2003; Anderson et al., 2003; Chrisman et al., 2004; Villalonga and Amit, 2006). Thus, agency cost control mechanisms should also be adopted in family firms.

We propose that the distinctive family firms' agency conflicts relate to a different degree of family involvement, not only in ownership (FIO), but also in governance (FIG) and in management (FIM). Previous research has focused mainly on family involvement and performance¹, mirroring the existence of the opposite effects of family involvement on company results (Sciascia and Mazzola, 2008). FIO, FIG, and FIM can be a benefit or a disadvantage for competitiveness, thus creating unique paradoxical conditions to cope with (Moore and Barrett,

¹ Examples of this research include Daily and Dollinger (1992); Gallo and Vilaseca (1998); Huse (2000); McConaughy et al. (2001); Anderson et al. (2003); Anderson and Reeb (2003); Schulze et al. (2003a); Pedersen and Thomsen (2003); Maury and Pajuste (2005); Carney (2005); Maury (2006); Wang (2006); Lee (2006); Lane et al. (2006); Miller and Le Breton-Miller (2006); Bartholomeusz and Tanewski (2006); Bloom and Van Reenen (2006); Voordeckers et al. (2007); Sciascia and Mazzola (2008).

2003). We intend to advance the understanding of agency conflicts in family firms, relating FIG and FIM to the adoption of agency cost control mechanisms.

We argue that the mainstream literature on family involvement still undermines the potential contribution of the adoption of agency cost control mechanisms in small and medium-sized enterprises (SMEs), even though these companies comprise a very large percentage of total business enterprises (Huse, 2000). More generally, although the family involvement in large family firms is under scrutiny and investigation, research on SMEs has been somewhat rare. Our literature review shows the topic is receiving increasing attention, though the knowledge about the relationship between family involvement and performance in SMEs remains fragmented, and very few contributions focus on agency cost control mechanisms. Nevertheless, these mechanisms can strongly contribute to the success of SMEs (Jensen and Meckling, 1976; Eisenhardt, 1989; Merchant, 1982; Baiman, 1982, 1990; Scapens, 1991). In fact distinctive agency conflicts in family firms are the effect of a poor management control of agency costs. More effective control by agency cost control mechanisms can offer the potential for improved organizational performance in SMEs (Scapens and Macintosh, 1996).

As the possibility of opportunistic behavior is rife in family SMEs and since they have less access to formal agency cost control mechanisms than large firms (Chrisman, Chua, J.H. and Litz, 2004; Scott, 1971), we focus on three categories of bureaucratic agency cost control mechanisms, suitable for SMEs. These mechanisms, that match both agency theory (Jensen and Meckling, 1976; Eisenhardt, 1989) and management control theory (Baiman, 1982, 1990; Merchant, 1982; Scapens, 1991) are as follows: 1) a board of directors; 2) the strategic planning; 3) management control systems (budgeting, managerial reporting, managerial accounting and incentives) (Anthony, 1988; Simons, 2000). Such mechanisms are used to limit managers'

discretion and their opportunistic behavior. They encourage the alignment of interests between managers and owners, reduce information asymmetries, monitor and control performance. Finally, they link performance-based incentives to the principals' desired outcomes. Family business literature has mostly focused on the board and the strategic planning (Schulze et al., 2001, 2003b; Chrisman et al., 2003, 2004; Ward, 1988), while only a few authors have investigated the adoption of management control systems in family firms (Davila and Foster, 2005; Speckbacher and Wentges, 2007; Davila et al., 2009).

Since family firms show distinctive agency conflicts that need to be dealt with, this paper aims to investigate the relationship between family involvement, distinguishing between FIG and FIM, and the adoption of agency cost control mechanisms in family SMEs.

The adoption of these mechanisms may also be related to other factors beyond family involvement, such as environmental and firm complexity (Songini, 2006). According to company growth theory and management control theory, a firm adopts managerial mechanisms to cope with the increased complexity of the environment and the firm (Miller and Friesen, 1984; Moores and Yuen, 2001). The faster the growth and the greater the complexity, the more important the role of such mechanisms is. In this sense, a relationship between these mechanisms does not depend solely on agency considerations, but also on contingency-based ones (Moores and Chenall, 1991; Moores and Mula, 1993). In fact, there is an overall consensus from the literature that the adoption of agency cost control mechanisms are contingent upon the context of the organizational setting in which they operate (Gordon and Miller, 1976; Otley, 1980; Moores and Chenall, 1994). Nevertheless, the presence in family firms of distinctive agency costs represents a uniqueness that leads to consider specific contingency factors, such as FIG and FIM. Moreover, controlling for agency costs is a potential benefit, as is having greater understanding

of environmental opportunities and firm resources and complexity, in order to formulate a strategy that leads to sustainable competitive advantage (Hofer and Schendel, 1978) and to succeed in achieving better performance (Schwenk and Shrader, 1993).

We conducted a deductive design and tested the hypotheses on a sample of 146 manufacturing family SMEs from the Milan province, Italy. Four hypotheses on FIG, FIM and the adoption of agency cost control mechanisms were developed and tested using LISREL. Results show that, on the one hand, FIG relates negatively with agency cost control mechanisms, but, on the other, FIM links positively with them.

The paper makes theoretical as well as empirical and practical contributions to literature. Theoretically, it brings together agency theory, management control theory and literature on family firms. Moreover, it considers bureaucratic management control systems as agency costs control mechanisms. Empirically, it contributes both to a deeper understanding of family involvement in family SMEs and to making a distinction between the existence and the importance of agency cost control mechanisms. Finally, from a practical perspective, it helps family SMEs to design a consistent system of mechanisms with their specific family involvement, accordingly with a contingency perspective (Moore and Chenall, 1991; Moore and Mula, 2000).

This paper is organized as follows. Section I presents the relevant literature. Section II discusses the hypotheses and the theoretical framework. Section III outlines the research design. In Section IV the empirical results are provided. Finally, Section V discusses the research results.

Theoretical background

Agency conflicts and agency costs in family firms

According to agency theory, a company performs better when management and ownership overlap. Consequently, family ownership is effective in coping with agency problems as the shares are in the hands of agents that can minimize them. Family members “have advantages in monitoring and disciplining related decision agents” (Fama and Jensen, 1983: 306). The presence of a family CEO has been assumed to eliminate the conflict between owners and managers (Villalonga and Amit, 2006). Therefore, agency cost control mechanisms are unnecessary. Nevertheless, in family firms, distinctive agency conflicts arise from different sources. The literature outlines the following ones as typical of family firms:

1) *conflicts arising from asymmetric altruism* (Schulze et al., 2001, 2003b; Anderson and Reeb, 2003; Chrisman et al., 2003). Even though altruism can mitigate some agency costs (Wu, 2001), it can also lead to others, such as those arising from the free riding of some family members, from their lack of competence, from the presence of predatory managers and from a tendency for entrenchment (Morck et al., 1988; Gallo and Lacueva, 1989; Bruce and Waldman, 1990; Litz, 1995). According to some authors, entrenchment causes greater problems in family firms than in non-family ones (Gallo and Vilaseca, 1998; Gomez-Mejia et al., 2001; Morck and Yeung, 2003). However, there is no general agreement on altruism as a source of agency conflicts in family firms². According to Chrisman, Chua and Litz (2004: 338), “agency costs are created only when managers pursue their own interests contravening those of the owners. Therefore, if owners wish to divert resources to pursue noneconomic goals and managers conform to such wishes, there may be diminished economic performance but no agency cost”;

² Stewardship theory criticizes agency theory as it ignores the effects of good social relationships that might exist among owners and managers in family firms. Stewardship theory suggests that the coincidence of family and business values and objectives, at least among the first generation, encourages individuals to engage in collaborative and altruistic behaviors, aimed at pursuing company goals (Davis et al., 1997). In some situations, altruism and kinship obligations may mitigate agency problems (Eaton et al., 2002; Salvato, 2002).

2) *conflicts of interest between family members in different roles* (Anderson and Reeb, 2003; Chrisman et al., 2003): when some family members are involved only in ownership, and others in ownership, in governance, and in management, a conflict between principals (family members involved only in ownership) and agents (family members also involved in governance and management) may arise. This situation reduces altruism and efficient collaboration and information exchange (Gallo and Vilaseca, 1998; Gomez-Mejia et al., 2001);

3) *conflicts of interest between family members and non-family members* (Daily and Dollinger, 1993; Chrisman et al, 2004; Villalonga and Amit, 2006): both family and non-family members may be involved in ownership, in governance, and in management with different and contrasting roles, such as owner-manager, owner-board member, owner-not-involved, non-owner-manager, non-owner-board member. According to Chrisman et al. (2004), if an owner-managed firm is co-owned by other shareholders, not managing the business, or if it is co-managed by non-owner managers, agency costs arise from conflicts between the owner-manager and the non-involved owners or between the owner-manager and non-owner managers. In this case, in family firms, the need to promote unity and commitment among family and non-family members emerges and family management may be costly if non-family members, who are typically professionals, are better managers than the family founders and their heirs (Caselli and Gennaioli, 2002; Burkart et al., 2003);

4) *the conflict of interest between dominant (family) and minority (non-family) shareholders*: Morck et al. (1988) recognizes agency costs to minority shareholders from the presence of both an entrenched dominant shareholder and a low shareholder protection. The large shareholder may use his position to extract private benefits at the expense of small shareholders (Myers, 1977; Smith and Warner, 1979; Morck et al., 1988). According to

Villalonga and Amit (2006), family firms with descendants as CEO present a more costly conflict between family and non-family shareholders than the owner-manager conflict in non-family firms;

5) *the conflict of interest between owners and lenders*: founding family firms have incentives structures that reduce agency conflicts between equity and debt claimants, generating significantly lower costs of debt financing than non-family firms (Anderson et al., 2003).

A summary of potential agency conflicts in family firms is reported in Table 1. We consider only the first three agency conflicts described above (see Table 1, bold cells) that actually emerge from a different degree of FIG and FIM, either with or without the simultaneous presence of non-family members in different roles.

INSERT TABLE 1 ABOUT HERE

Since family firms present distinctive agency conflicts, we propose that family firms should consider the adoption of agency cost control mechanisms to deal with them.

Agency cost control mechanisms in family firms

Three main research streams have dealt with agency cost control mechanisms: agency theory, management control theory and literature on family firms.

Agency theory states that agency cost control mechanisms monitor and control the consequences of agents' decisions and actions, not in the interests of principals, and the expenses incurred. Both market-based and bureaucratic control mechanisms (Ouchi, 1979; 1980) may reduce agency problems. Examples of market-based control mechanisms are managerial shareholdings, concentrated shareholdings, the use of debt financing, the labor market for managers, the market for corporate control, and so on. Bureaucratic mechanisms, that may intervene in the managerial discretion of corporate executives, are governance mechanisms,

managerial compensation arrangements, monitoring and other controlling activities. “In practice, it is usually possible, by expending resources, to alter the opportunity the owner-manager has for capturing non pecuniary benefits. These methods include auditing, formal control systems, budget restrictions, the establishment of incentive compensation systems...” (Jensen and Meckling, 1976: 331). Agency theory highlights “an important role of formal information systems, such as budgeting, MBO, and the board of directors ... The implication is that organizations can invest in information systems in order to control agent opportunism...” (Eisenhardt, 1989:64). Bureaucratic agency cost control mechanisms comprise the board and management control systems (budgeting, monitoring and control systems, and incentives).

Also management control theory proposes management control systems as a way to contain agency costs (Baiman, 1982, 1990; Merchant, 1982; Scapens, 1991). “Agency theory seeks to minimize the effects of such behavior by identifying an optimal combination of controls and rewards. ... Thus, agency theory treats goal incongruent behavior as evidence of poor management control and offers the potential for improved organizational performance through more effective management control by an appropriate combination of performance measurement and reward systems” (Scapens and Macintosh, 1996: 13). An appropriate adoption of management control systems is the one that best suits the contextual and operational contingencies that apply (Child, 1977). Moores and Mula (2000: 94) state that “all forms of controls must be internally consistent and considered together in the organizational context in which they are being applied”. Abernethy and Chua (1996:573) have contended that control systems operate “as a package when they are internally consistent—that is, they are designed to achieve similar ends”. Their findings suggest that each control element contributes independently

and directly to goal attainment; internal consistency echoes independent yet goal-consistent design of control elements.

In addition to market-based and bureaucratic control systems advocated by agency theory, management control theory comprises also clan control systems (Ouchi, 1980) as a mean of exercising social control.

Bureaucratic control systems comprise a range of diagnostic systems, such as budgeting, managerial reporting, managerial accounting and incentives (Anthony, 1988; Otley, 1994; Simons, 2000). The budget is a short-term financial plan for implementing the various decisions that management has made. The budgeting process communicates to everyone in the organization the part that they are expected to play in implementing management's decisions (Drury, 2008). Managerial reporting provides feedback about planned and actual company outcomes. According to the Chartered Institute of Management Accountants (CIMA), management or managerial accounting is "the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management to plan, evaluate and control within an entity and to assure appropriate use of and accountability for its resources. Management accounting also comprises the preparation of financial reports for non-management groups such as shareholders, creditors, regulatory agencies and tax authorities" (CIMA Official Terminology). Managerial accounting comprises both cost accounting and responsibility accounting. The first is concerned with cost accumulation for inventory evaluation to meet the requirements of external reporting and internal profit measurement. Responsibility accounting enables accountability for financial results and outcomes to be allocated to individuals throughout the organization. It involves the creation of responsibility centers, which are organization units for whose performance a manager is held

accountable. The incentives aim to reinforce managers' performance evaluation. An incentive is an expectation that encourages people to behave in a certain way. Agency theory predicts that compensation policy will be designed to give managers incentives to select and implement actions that increase shareholder wealth (Jensen and Murphy, 1990).

Clan control systems are also suggested by stewardship theory as substitutes for bureaucratic ones in family firms (Ouchi, 1979; Wilkins and Ouchi, 1983; O'Reilly and Chatman, 1996; Pieper et al., 2008). Accordingly, in these firms social and relational management control mechanisms are more widely adopted than formal and administrative ones (Hopwood, 1974; Galbraith, 1977; Johnson and Kaplan, 1987; Brownell, 1987; Mintzberg, 1994). Social interaction among family members encompass a wide spectrum of relational governance mechanisms based on common values and prevalent kinship ties (Daily and Dollinger, 1992; Geeraerts, 1984; Tagiuri and Davis, 1982; Moores and Mula, 2000; Mustakallio and Autio, 2001).

Nevertheless, as family firms show distinctive agency conflicts, authors call for wider adoption of bureaucratic agency cost control mechanisms (Anderson and Reeb, 2003; Chrisman et al., 2003), such as strategic planning and governance systems that align objectives and reduce information asymmetries (Aram and Cowen, 1990; Astrachan and Kolenko, 1994; Ward, 1997; Chrisman et al., 2004). Formal management control systems may limit opportunistic behavior among agents, as they both define and assign objectives to managers, providing a basis for subsequent monitoring activities, for linking performance-based incentives to the principal's desired outcomes, and for facilitating the alignment of priorities (Schulze et al., 2001).

According to Moores and Mula (2000: 100) "family firms use a combination of clan, bureaucratic, and market controls. But there is more intense use of some forms of clan and

bureaucratic controls than market controls”. So, family firms can be considered “industrial clans”, as they combine both bureaucratic and clan mechanisms of control (Ouchi and Price, 1978). Actually, formal and informal agency cost control mechanisms function as complements (Poppo and Zenger, 2002). In family firms, rather than hindering or substituting for social control, well-specified, appropriate, and internal consistent bureaucratic mechanisms may promote more cooperative, long term trusting ex-change relationships thus reducing the threats for their distinctive agency costs. Therefore, in this paper we focus on bureaucratic and formal agency cost control mechanisms. Even though family business literature has mainly focused on the board and strategic planning (Schulze et al., 2001, 2003b; Chrisman et al., 2004), we consider three categories of organizational agency cost control mechanisms as they match both agency theory and management control theory and they are suitable also for SMEs: 1) a board; 2) the strategic planning; 3) management control systems.

Family involvement in family firms and agency cost control mechanisms

In almost all the definitions of family firms, family involvement is considered a distinctive element. Family involvement is related to the presence of family members in ownership as shareholders (FIO), in governance as members of the board of directors (FIG), and in management as managers (FIM).

Previous research has mainly focused on FIO and performance (Maury, 2006; Wang, 2006; Lee, 2006) and FIO and finance-related topics (McConaughy et al., 2001; Anderson et al., 2003; Anderson and Reeb, 2003; Schulze et al., 2003a; Pedersen and Thomsen, 2003; Maury and Pajuste, 2005). Other studies jointly explored FIO and FIG, focusing on board composition and roles and performance (Huse, 2000; Carney, 2005; Lane et al., 2006; Miller and Le Breton-Miller, 2006; Bartholomeusz and Tanewski, 2006; Voordeckers et al., 2007). Finally, some

authors investigated FIM and performance (Daily and Dollinger, 1992; Gallo and Vilaseca, 1998; Bloom and Van Reenen, 2006; Sciascia and Mazzola, 2008).

Within this research stream, some studies on FIM investigated the involvement of founding family members in managerial roles, mostly the CEO, and performance (Gomez-Mejia et al., 2001; Mishra et al., 2001; Perez-Gonzalez, 2006). Family ownership creates value, especially when a family member (particularly if he/she is the founder) serves as the CEO or as the chairman (Anderson and Reeb, 2003; Villalonga and Amit, 2006).

Different research streams have explored how FIG or FIM generate different effects on the characteristics and performance of family firms. Accordingly, we propose considering different levels of family involvement, distinguishing between governance and management.

On the one hand, FIG implies the adoption of a board. Literature on family firms has related the board mostly to the use of strategic planning and has focused on the role of the CEO and board members (Ward, 1988; Baysinger and Hoskisson, 1990; Schulze et al., 2001; Blumentritt, 2006; Pieper et al., 2008). We assumed that FIG reduces the need for any other agency cost control mechanism, given that the board is itself an agency cost control mechanism.

On the other hand, FIM impacts on the adoption of monitoring and controlling mechanisms, such as management control systems and strategic planning, as in non-family firms. A recent research stream focused on the relationship between managerial roles and the adoption of management control systems (Zimmerman, 2006; Naranjo-Gil et al., 2008), highlighting that ultimately, the top management team takes the decision to adopt formalized management control systems and the CFO is in charge of their formalization, development and operation (Anthony, 1988; Zimmerman, 2006; Naranjo-Gil et al., 2008). Abernethy et al. (2010) found that senior management's leadership style is a significant predictor of use of the planning and control

systems. Speckbacher and Wentges (2007) stated that owner-managed firms – regardless of firm size – are more centralized and they make far less use of formalized management control systems. As soon as external (non-family) managers assume positions on the top management team, more formalized management control systems are adopted.

Contingency research has attempted to explain the adoption of management control systems in terms of a range of contextual factors (Moore and Yuen, 2001). Accordingly, every organization is characterized by a particular configuration of contingencies, as: the external environment, the company's size, the scale and the diversity of operations, the technology applied, the organizational structure, the strategy and the organizational culture. Family firms literature contributed in highlighting some family-related contingencies (Ward and Handy, 1988; Jonovic, 1989; Huse, 1994). F-PEC suggests four main contingency factors: ownership structure, managerial experience, life cycle stage, and culture (Astrachan, Klein and Smyrnios, 2003). In this paper, we consider FIG and FIM as relevant contingency factors impacting on agency cost control mechanisms. Particularly, we adopted two of the three power dimensions suggested by the F-PEC, related to the extent of direct governance control through family board members (FIG) and of direct managerial control through family managers (FIM).

Hypotheses and theoretical model

We consider different levels of family involvement, distinguishing between FIG and FIM, in understanding its relationship with the adoption of agency cost control mechanisms. As previously stated, distinctive agency conflicts are related to different roles of family members in family firms, requiring agency cost control mechanisms to deal with them.

As far as the characterization of the adoption of agency cost control mechanisms is concerned, we propose to explore the dimensions of “existence” and “importance” consistently with previous research on management control systems. This research implemented similar variables to measure existence and/or importance and widely used both, or at least one, dimensions regarding the adoption of management control mechanisms (Chenhall and Langfield-Smith, 1998; Malmi, 1999; Ittner et al., 2003; Naranjo-Gil et al., 2008). We argue that in family SMEs the concrete adoption of each of these mechanisms may follow different temporal patterns with regard to the origin of the need for any of them. As with management control systems research, the importance of a mechanism may show different relationships with its existence (Ittner et al., 2003).

Three main literature streams have been followed in the theoretical discussion: agency theory, management control theory and literature on family firms. Based on these research streams, our conceptual development starts from the assumption that like other types of firms, family firms experience agency conflicts, even though they are distinctive in nature. These distinctive agency conflicts occur for different degrees of family involvement, not only in ownership, but also in governance (i.e. chairman and board members) and in management (i.e. different managerial positions). Therefore, in family firms agency cost control mechanisms also have to be adopted to deal with their distinctive agency conflicts (as in non-family firms). The agency cost control mechanisms, suggested by agency theory are both market-based and bureaucratic control mechanisms. Management control theory proposes management control systems as a way to reduce agency costs. We propose to focus on bureaucratic agency cost control mechanisms that are highlighted both by agency theory and management control theory: the board, strategic planning, and management control systems, while literature on family firms

has focused mostly on the board and strategic planning. We propose to analyze different levels of family involvement, distinguishing between FIG and FIM that previous research considered among the most relevant family-related contingencies. FIG, i.e. a family member appointed as chairman or as a board member, implies the adoption of one of the agency cost control mechanisms (i.e. the board), thus reducing the need for other agency cost control mechanisms. While family business literature links the board mostly with strategic planning, we expect FIG to reduce the need for any other mechanisms (i.e. strategic planning and management control systems), given that the board itself is an agency cost control mechanism. Accordingly, among the agency cost control mechanisms we only consider strategic planning and management control systems.

Based on this first part of our conceptual development, we propose the following hypotheses:

HP 1) The larger the involvement of family members in governance, the smaller the existence of agency cost control mechanisms.

HP 2) The larger the involvement of family members in governance, the smaller the importance of agency cost control mechanisms.

Moreover, in our conceptual development, we argue that by contrast, FIM implies the use of monitoring and control mechanisms, such as management control systems and strategic planning, as management control theory has stated.

While FIM may impact on the presence of monitoring and control mechanisms, as in non-family firms (Zimmerman, 2006; Naranjo-Gil et al., 2008), family business literature has rarely analyzed the mutual influences among agency cost control mechanisms and managers, either professional, non-family members, or family members (Blumentritt, 2006). By contrast, in

accounting and finance literature, managers, and CFOs in particular, are generally considered to be in charge of developing and operating management control systems.

Consequently, we propose our third and fourth hypotheses:

HP 3) The larger the involvement of family members in management, the greater the existence of agency cost control mechanisms.

HP 4) The larger the involvement of family members in management, the greater the importance of agency cost control mechanisms.

Rather than looking into the relationship between FIG and FIM and each single agency cost control mechanism, we considered the link with the complete set of mechanisms, in keeping with previous studies. According to Schulze (2001: 105), “the reality ... is that agency threats tend to become causally and sequentially entwined in a manner that makes their effects difficult, if not impossible, to tease apart. ... While these entwined effects make it nearly impossible to reliably trace a specific agency cost to a specific agency threat, they also make it possible that a given control mechanism, such as pay incentives or strategic planning, can simultaneously mitigate theoretically distinct agency threats ... Firms may therefore end up adopting a set of control mechanisms whose effects on agency costs are complementary and possibly synergistic”.

Research design

We used a quantitative deductive design and tested the hypotheses through a questionnaire survey of 146 family SMEs in Italy. The deductive approach helped us make general inferences beyond the setting of Italian SMEs. In most cases, the company CEO was the respondent.

Several definitions of ‘family firm’ have been proposed in literature, based on a number of dimensions. Corbetta (1995) defined a family firm as a company where one or more families, with family ties, relationships or solid alliances, own the majority of the capital and where family members cover governance and managerial roles. Other authors defined family firms by whether they consider themselves to be family firms (Westhead and Cowling, 1988; Heck and Trent, 1999). Astrachan and Shanker (2003) suggested three dimensions in defining the family firm: family retention of voting control over the strategy of the firm, direct involvement of the family in day-to-day operations, and the involvement of multiple generations in the firm's management. Several studies defined a family firm by the components of FIO, FIG, and FIM. According to Anderson and Reeb (2003), family firms are firms where the family continues to have an equity ownership stake or board seats. They also identified an active family involvement when a family member (the founder or a descendant) holds the CEO position. Villalonga and Amit (2006) proposed three fundamental elements in the definition of family firms: ownership, control and management. We defined family firms as those companies that meet at least one of the following requirements: 1) the majority of the shares is owned by members of one or more families (Astrachan and Shanker, 2003; Sharma, 2004); 2) one or more family members sit on the board or hold the post of chairman (Anderson and Reeb, 2003); 3) family members are in charge of the CEO or other managerial positions (Villalonga and Amit, 2006).

The sample was drawn from the AIDA database (by Bureau Van Dijk Electronic Publishing), that contains: i) balance sheet data of incorporated SMEs, representative of the Italian population and operating both in manufacturing and non-manufacturing industries; ii) data about the ownership structure (shareholders), the governance system (chair and board members) and some information about management (CEO). We used both primary (from

questionnaires) and secondary data³ (from the AIDA database). This approach helped us to avoid from the outset common methods bias related to survey studies.

Sampling frame

The initial sample consisted of 1,122 manufacturing SMEs in the Milan province, Italy, at the four-digit level of the ATECO91 Classification System. We adopted the European definition of SMEs⁴ in use when our data collection procedure took place, which defined SMEs as firms that: i) have fewer than 250 employees; ii) have either an annual turnover not exceeding €40 million, or an annual balance-sheet total not exceeding €27 million; and iii) are independent enterprises⁵. The Milan province assures a high level of internal homogeneity for the sample and it is representative of the Italian population of SMEs in general⁶. The 1,122 companies were articulated by range of turnover, employees, and industry contribution.

Primary Data Collection Procedure

The primary data collection procedure consisted of four phases. First, measurement scales were developed, by completing five on-site interviews with SME CEOs, academics and consultants, and by pre-testing the resulting scales with a group of academics and consultants. Next, a single researcher pre-tested the provisional version of the resulting questionnaire with a number of senior executives of SMEs. These pre-tests led to the revision of some items to improve their clarity, as well as the addition of several new ones. The third stage consisted of on-site interviews with CEOs or executives in ten SMEs, resulting in the final version of the

³ Unfortunately the AIDA data were not available for all the firms in the sample. Therefore, we decided to collect data via a questionnaire on ownership, governance and management, and to check them against the reports available in the AIDA database.

⁴ European Commission Recommendation 96/280/EC.

⁵ Independent enterprises have no more than 25% of the capital or the voting rights owned by an outside enterprise or jointly by several enterprises (European Commission Recommendation 96/280/EC).

⁶ With more than 390,000 firms, incorporated and not incorporated, manufacturing and non-manufacturing, the Milan province holds the first position in the relevant national ranking, with the trade and business services

questionnaire. In the final stage, the survey was mailed to the 1,122 companies included in the sampling frame. Following Dillman (1978), two follow-up letters and one replacement questionnaire were mailed after the initial mailing. A single informant was used for each firm⁷. The key methodological solution in using a single respondent approach is to find the most appropriate one. The questionnaire covering letter requested that it should be filled in either by the CEO or by a senior executive with overall responsibility for strategic management issues and this was checked.

Achieved sample

A total of 166 completed questionnaires were returned. The 15% response rate is comparable with those of large-scale surveys involving executives (Robertson et al., 1995; Powell and Dent-Micallef, 1997), but higher than those normally obtained in Italy (Corbetta and Montemerlo, 1999; Giacomelli and Trento, 2005). It is a reasonable result given the setting of the survey (small firms), firm diversity, the positions of the respondents (CEO or equivalent position), and the sensitivity of the information. After checking to ensure that all of them were family firms, 20 responses were eliminated.

The final data set included 146 family firms. We evaluated non-response biases by conducting chi-square tests between our sample and the initial sample used, finding no significant differences for industries ($\chi^2=0.028681$, $df=5$), for turnover ($\chi^2=0.063891$, $df=4$), and for employees ($\chi^2=0.098418$, $df=3$). We also compared early respondents (first half) with late respondents (second half) (Armstrong and Overton, 1977), finding no significant differences on age of the firm, size (employees and turnover), market conditions or industry characteristics,

industries representing 45% of the entire entrepreneurial sector. This province covers a notable role in the Italian economy, assuring the largest contribution to GDP, with a value over 10%.

⁷ Although the use of multiple respondents would have reduced concerns about potential response biases, respondents had to be knowledgeable about the firm and its competitive environment (Campbell, 1955).

suggesting that non-response bias might not be a problem. The median number of employees was 25. The mean number was 48.2 with a standard deviation of 69.1. The median turnover was €5 million. More than one third of the firms in the sample belonged to the textile industry. The median year of foundation was 1979.

Measures

Table 2 reports descriptive statistics.

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Firms with a family chairman do not necessarily have other family members involved in governance, such as simple board members ($t=1.410$, $\text{sig.}=0.161$). The CEO role represents the most frequent form of FIM. Only in the absence of a family CEO, is there a larger number of family managing directors (mean=0.4, $F=17.734$, $\text{sig.}=0.001$). All the other managerial roles do not vary.

Endogenous variables

The survey and the AIDA database provided the information for independent variables. While self report measures carry some methodological limitations (Dillman, 1978; Rossi et al., 1983), we used some perceptual measures because of the difficulties associated with the use of “objective” ones in assessing agency cost related problems. As stated above, we investigated the adoption of agency cost control mechanisms with two different dimensions: the existence and the importance of strategic planning and management control systems (Malmi, 1999; Chenhall and Langfield-Smith, 1998; Ittner et al., 2003; Naranjo-Gil et al., 2008).

Existence of agency cost control mechanisms. We used six items: strategic planning, budgeting, cost accounting, managerial reporting, responsibility accounting and incentives (Anthony, 1988; Simons, 2000). Strategic planning is the process of deciding on objectives of

the organization, on changes in these objectives, on the resources used to attain these objectives and on the policies that are to govern the acquisition, use and disposition of these resources (Anthony, 1965). The budget is a short-term financial plan for implementing the various decisions that management has made. Managerial reporting provides feedback about planned and actual company outcomes. Management accounting relates to the provision of appropriate information for decision-making, planning, control and performance evaluation. Cost accounting is concerned with cost accumulation for inventory evaluation to meet the requirements of external reporting and internal profit measurement. Responsibility accounting enables accountability for financial results and outcomes to be allocated to individuals throughout the organization. The incentives aim to reinforce managers' performance evaluation. All of them were measured using dummy coding: presence was coded 1, while absence was coded 0 (Cronbach's $\alpha = 0.78$).

Importance of agency cost control mechanisms. We used six items (strategic planning, budgeting, cost accounting, managerial reporting, responsibility accounting and incentives), measured on a five point scale in order to investigate how well each of the mechanisms considered compared to the respondent's concept of an "ideal" system (1 = not at all ideal, to 5 = very close to ideal) in order to perform strategic planning and managerial control (Chenall and Langfield-Smith, 1998; Ittner et al., 2003; Naranjo-Gil et al., 2008) (Cronbach's $\alpha = 0.71$).

Measurement of the existence and the importance of management control systems has provided researchers with difficulties. One of the reasons is uncertainty about whether the existence and importance should be considered dichotomous (i.e. companies either have or have not adopted a mechanism) or should be measured as continuous variables. As far as importance is concerned, an ordinal scale is able to capture differences in the relevance given to various

mechanisms and to avoid many of the psychometric problems associated with the simple yes/no question (Naranjo-Gil et al., 2008).

Exogenous variables

Family involvement in governance. We used a dummy coding on two items (family member as chairman and at least one other family member on the Board of Directors) (Anderson and Reeb, 2003). Presence was coded as 1, absence was coded as 0 (Cronbach's $\alpha = 0.70$).

Family involvement in management. We used seven items⁸ (a family member as the CEO, as the Managing Director, as a Divisional Director, as the CFO, as the Production Director, as the Sales Director and as the Supply Director) (Villalonga and Amit, 2006; Chu, 2009): presence was coded as 1, absence was coded as 0 (Cronbach's $\alpha = 0.73$).

Control variables

In order to account for potential biases, several control variables were adopted in the model: industry, size, strategic diversification, age, and technological intensity of industry.

Industry. Various degrees of relatedness, such as different economic phases, may expose firms belonging to different industries to various impacts on value-creation processes (Miller et al., 1998) and their measuring systems. Industry was measured with a categorical variable (chemicals, food, electronics, textiles, mechanical, and raw material transformation).

Size. The potential to create value also depends upon a firm's size. Agency theory has focused on conflicts of interest in agency relationships, considering firms as a nexus of contracts. According to Ross, examples of agency are universal, regardless of the size of the relationship

⁸ As many SMEs may not have these formal positions in their organizational chart, we actually asked if a family member formally covers one or acts as one of the formal positions indicated. That is, consider a family SME where the entrepreneur has developed all the vertical and the horizontal dimensions of the structure, without formalizing them, but creating an informal managerial hierarchy and actually identifying these responsibilities. As we are aware that the adoption of governance and managerial mechanisms (e.g. the board, strategic planning, and management control systems) may also be related to other factors beyond family involvement, such as the environmental and firm

(Ross, 1973: 134). Nonetheless, studies have been undertaken on the growth of the firm and its impact on the agency relationship (Hill and Snell, 1989). “To increase the size of the firm beyond this point he (the owner) must obtain outside financing to cover the additional investment required, and this means reducing his fractional ownership. When he does this he incurs agency costs, and the lower his ownership fraction, the larger the agency costs he incurs. However, if the investments requiring outside financing are sufficiently profitable his welfare will continue to increase” (Jensen and Meckling, 1976: 328). The latter reasoning leads managers to identify growth strategies. The principal’s objectives require strategies that seek long-term value maximization (Fama, 1980), whereas the agent’s tends to follow strategies that may diverge as the business grows. In this study, firm size was measured by turnover and the number of employees.

Strategic diversification. Strategy, performance, strategic planning and management control systems may be very different in different strategic business areas (SBAs) (Lorange, 1980). Diversification was measured by an ordinal variable: one SBA, from two to three SBAs and more than three SBAs.

Age of the firm. A small firm passes through distinct periods of development (Greiner, 1972; Churchill and Lewis, 1983), until a phase that requires a more professional approach (Perren, et al., 1999; Deakins et al., 2002) and the adoption of agency cost control mechanisms. The age of the firms was measured by the number of years the firm had been in existence.

Technological intensity of industry. Industries with frequent technological changes require shareholders to take more complex decisions on financing needs. The equity structure of family firms usually has low leverage, due to the resistance to seek external funding (Gallo and

complexity (Songini, 2006), from our methodological perspective, we isolated these factors in defining our independent variables and we checked for them with control variables.

Vilaseca, 1998). These circumstances may have an effect on agency conflicts and performance. The technological intensity of the industry (Osborn and Baughn, 1990) was measured by a variable on a three point scale: high technology oriented, somewhat technology oriented and low technology oriented.

Although we considered different sources of sample heterogeneity, due to the need to restrict the length of the questionnaire to achieve its primary purpose, our list of control measures was not as extensive as desired. For example, compared to Schulze et al. (2001), we did not control for capital intensity and industry growth. Although it is impossible to tell how a more extensive set of controls might have affected our results, we do note that aside from the above control variables, the study conducted by Schulze et al. (2001) shows that the additional controls were either insignificant or mixed in their impacts.

Results

In this section, we first report descriptive data. Then we comment on the testing of our hypotheses. We used a structural modeling approach (LISREL). The analysis and interpretation of the structural equation model took place in two stages: (1) assessment of the dimensionality, reliability and consistency of the individual items, and validity of the measurement model; and (2) assessment of the causal relationships.

Descriptive results

Family involvement in governance and agency cost control mechanisms

Table 3 reports the extent of FIG and the presence of agency cost control mechanisms.

INSERT TABLE 3 ABOUT HERE

When family members are simple members of the board, agency cost control mechanisms are more widespread than when only the chairman is a family member. The most widely adopted mechanisms are cost accounting, strategic planning and responsibility accounting.

Family involvement in management and agency cost control mechanisms

Table 4 reports the extent of FIM and the presence of agency cost control mechanisms.

INSERT TABLE 4 ABOUT HERE

All agency cost control mechanisms are more widespread when the CEO is a family member, with a larger adoption of incentives, cost accounting and strategic planning. The presence of a family member in any managerial position relates to a larger incidence of mechanisms than when a non-family member is a manager.

Measurement model results

Consistently with the two-step approach advocated by Anderson and Gerbing (1988), we tested the measurement model prior to examining the structural model relationships. We modeled the four constructs as four correlated first-order factors. We tested them by examining individual item dimensionality, convergent validity, reliability, internal consistency, and discriminant validity. The initial maximum likelihood exploratory factor analysis of 21 items produced four factors with eigenvalues that were higher than one (Conway and Huffcutt, 2003). The four factors collectively accounted for 71.12% of the total variance. The dataset showed that the items loaded significantly on the designated factors. Based on the results of exploratory factor analyses, we decided to keep the entire set of 21 items. Next, we conducted a confirmatory

factor analysis⁹ (CFA) to examine the distinctiveness of the measures using the LISREL 8.53 software and maximum-likelihood estimation. We interpreted goodness of fit using the comparative fit index (CFI), normed fit index (NFI), and standardized root-mean-square residual (SRMR) (Hair et al., 1998; Hu and Bentler, 1999), and we used commonly accepted cutoff values (CFI < .90, NFI < .90, and SRMR < .06) as indicative of poor fit (e.g., Hair et al., 1998; Zhao et al., 2007).

The results for individual item reliability, internal consistency, and discriminant validity are reported in Table 5.

INSERT TABLE 5 ABOUT HERE

All the non-fixed indicator loadings for each construct are significant (Carmines and Zeller, 1979). As reported in Table 5, all scales demonstrate adequate internal consistency (Fornell and Larcker, 1981). All the estimates of the average variance extracted are higher than 0.50 (Fornell and Larcker, 1981) to demonstrate convergent validity. Lastly, we verified that each construct shares more variance with its measures than it shares with other constructs (Fornell and Larcker, 1981). The diagonal elements of the correlation matrix for the constructs (Table 5) report the square roots of the average variance extracted. All of them are significantly greater than the off-diagonal ones. Therefore, our constructs exhibit adequate discriminant validity. Collectively these results suggest that our measures are unidimensional, reliable, and they exhibit convergent and discriminant validity. Moreover, the model fits the data reasonably well.

Structural model results

⁹ We proceeded also to test the CFA. No signs of problems (e.g. non convergence, non positive definite matrices, unreasonable standard errors, etc.). The model is empirically identified as shown by a converged solution and the

We tested the hypotheses with the structural model reported in Figure 1. We also compared the model against some alternative ones¹⁰.

INSERT FIGURE 1 ABOUT HERE

The variance explained by the model is: 11% for the existence of agency cost control mechanisms, and 10% for the importance. The model presents a RMSEA value of 0.044 and RMSR of 0.033. The goodness of fit indices values are: Chi-Square = 1051.39, df=187; CFI=0.37, NFI=0.33. The main results are as it follows:

- *Existence of agency cost control mechanisms.* The FIG has a negative and significant impact (-0.17, t=-2.12), while the FIM has a positive and significant impact (0.27, t=2.89).
- *Importance of agency cost control mechanisms.* The FIG has a negative and significant impact (-0.15, t=-1.89), while the FIM has a positive and significant impact (0.26, t=2.79).

Control for sources of sample heterogeneity

After the introduction into our model of the control variables, our model remained stable. We found a positive and significant relationship between size (number of employees) and the existence of mechanisms (16.31, p<0.01) (Greiner, 1972; Simons, 1990). The number of SBAs and the importance of mechanisms showed a significant positive relationship (0.28, p<0.01). The more a firm faces different strategic issues, the more intense the role of agency cost control mechanisms (Lorange, 1980). We found a negative and significant relationship between age and the importance of mechanisms (-6.69, p<0.01), indicating that older firms consider them less important. We found a positive and significant relationship between the technological intensity

absence of any out-of-bounds or unexpected parameter estimates and the absence of any warning or error message.

¹⁰ We tested a first alternative model that added a causal relationship between FIG and FIM to the hypothesized one (Chi-Square = 1057.31, df=187; CFI=0.37, NFI=0.33) and a second alternative model that added a causal relationship between existence and importance of agency control mechanisms to the hypothesized model (Chi-

of the specific industry and the importance of mechanisms (0.12, $p < 0.01$). Finally, we did not find any significant relationship between the existence and importance of mechanisms and industry.

Discussion and conclusions

This paper aimed to investigate how FIG and FIM affect the adoption of agency cost control mechanisms. We adopted three main literature streams: agency theory, management control theory and the literature on family firms. We stated that family firms experience distinctive agency conflicts. These conflicts relate to a different degree of family involvement, not only in ownership, but also in governance and in management. Therefore, agency cost control mechanisms have to be introduced to cope with them, as in non-family firms. The mechanisms suggested are the board, strategic planning and management control systems. We supposed that FIG implies the adoption of the board, thus reducing the need for other agency cost control mechanisms. On the contrary, FIM asks for the adoption of management control systems and strategic planning. Results demonstrate that, on the one hand, FIG has a negative relationship with agency cost control mechanisms, thus implying lower agency costs. This is consistent with those studies that showed that in family firms the classic owner-manager conflict does not occur. However, this result may be explained by the role of the board in family firms as an agency cost control mechanism that substitutes other systems. In family firms, agency conflicts may occur, but with distinctive features that enable governance systems to overcome them. Therefore our hypotheses 1 and 2 are supported. Our results did not confirm the relationship between the presence of a board and the adoption of strategic planning (Ward, 1988;

Square = 1061.12, $df=186$; CFI=0.54, NFI=0.49). The fits of these models were somewhat poorer than that of the

Schulze et al., 2001). On the other hand, we found a positive relationship between FIM and agency cost control mechanisms, confirming the need to also adopt strategic planning and management control systems for family SMEs. This result validates studies that showed that family firms experience distinctive agency conflicts. It also confirms previous results of management control studies that connect the adoption of managerial mechanisms with managers.

Our original contribution stems from the adoption of agency cost control mechanisms, even in family firms where managers are family members, not outsiders. These results are not consistent with the contribution of Speckbacher and Wentges (2007). Our results also do not confirm the work of Ang et al. (2000). They found that agency costs in small firms are higher with outside managers and vary inversely with managerial ownership. Moreover, unlike Chrisman, Chua and Litz (2004), we considered agency cost control mechanisms not only to be strategic planning and the board, but also management control systems. Finally, research on management control systems deals with either large companies or SMEs, but not with family firms.

This paper makes theoretical as well as empirical and practical contributions to literature. Theoretically, it brings together the three streams of agency theory, management control theory and family business literature. Moreover, it considers management control systems as agency cost control mechanisms, which are rarely investigated in family business literature, and distinguishes between their existence and importance. Finally, it investigates the effect of FIG and FIM separately. This distinction has not been used in previous research on agency cost control mechanisms in family firms. As far as our measures are concerned, following the suggestions from the three different streams of theory and testing for their unidimensionality, reliability, and convergent and discriminant validity, the paper has developed variables that aim

to capture a large spectrum of issues. The paper did not explore the relationships between different types of agency conflicts and different agency cost control mechanisms. Empirically, the paper contributes both to a deeper understanding of family involvement in family SMEs and to a distinction between the existence and the importance of agency cost control mechanisms. From a practitioner point of view, it shows that the adoption of agency cost control mechanisms may also be found in family SMEs that are run using an entrepreneurial approach. Indeed, the use of formal strategic planning and management control systems in family firms does not necessarily pass through the involvement of outside managers, but may be managed by family managers. A practical contribution is that the paper may help family SMEs to design a system of agency cost control mechanisms, consistent with their specific family involvement. The adoption of an articulated set of agency cost control mechanisms is linked to a managerial consciousness that leads to more rational, long-term oriented and effective decision-making processes resource allocation, goal and program definition and performance evaluation.

Although we have presented evidence from a sample of firms in a varied set of industries, the paper presents some limitations that generally apply to cross-sectional survey-based research. First, the cross-sectional nature of the survey limits our ability to examine the dynamic interplay among the constructs studied. The use of a longitudinal survey would help overcome this concern. Second, the fact that our sample is focused on manufacturing firms limits the generalization of our results. Studies including both non-manufacturing firms could extend its findings. Third, although heterogeneity in a sample is a condition for empirical generalization, country-level studies would be useful to validate these results. Moreover, further investigation on the relationship between the importance of agency cost control mechanisms and performance is needed. Besides, it would be interesting to extend the analysis beyond family involvement as a

factor influencing the adoption of agency cost control mechanisms in order to explore how family firms renew and recombine their resources by implementing alternative mechanisms. Such research might consider different ways in which family SMEs change their set of resources. The goal would be to identify systematic influences that lead family firms to choose among these ways of changing and to measure their respective effectiveness on the family firm's ability to change. Finally, following a contingency approach we do not necessarily have to exclude the study of clan agency cost control mechanisms, in order to analyze how social factors interact to effect the adoption of agency cost control mechanisms and consequent outcomes (Roberts and Scapens, 1985).

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TABLE 1
AGENCY CONFLICTS IN FAMILY FIRMS

Agency conflicts in family firms	Non-family member		Family member	
	<i>Owner</i>	<i>Manager</i>	<i>Owner</i>	<i>Manager</i>
Family owner	Conflicts of interest between dominant (family) and minority (non-family) shareholders	Classical agency conflicts between principal and agent		Agency conflicts arising from asymmetric altruism
Family owner-manager	Both: - classical agency conflicts between principal and agent; - conflicts of interest between dominant (family) and minority (non-family) shareholders	Conflicts of interests between family members and non-family members*	Conflicts of interests between family members in different roles	Both: - conflicts of interests between family members in different roles; - conflicts arising from asymmetric altruism

Cells represent the presence in a family firm of a family owner or a family owner-manager with the presence of a non-family member, owner or manager, and/or the presence of another family member, owner or manager.

**Take the simple case of a single manager who is also the owner of the firm. Even in such cases agency costs will only approach but not reach zero because employees may act opportunistically and small firms often lack even the most rudimentary mechanisms to control employee behaviour" (Chrisman et al, 2004: 339).

TABLE 2
Descriptive statistics

Variables	Mean	Median	Std. Dev.
X1 Family Chair	0.8	1.0	0.4
X2 Family Board Members	0.7	1.0	0.5
X3 Family CEO	0.5	0.5	0.5
X4 Family Managing Director	0.2	0.0	0.4
X5 Family Divisional Director	0.1	0.0	0.3
X6 Family CFO	0.2	0.0	0.4
X7 Family Production Director	0.2	0.0	0.4
X8 Family Sales Director	0.2	0.0	0.4
X9 Family Supply Director	0.2	0.0	0.4
Y1 Strategic Planning Existence	0.3	0.0	0.5
Y2 Budgeting Existence	0.7	1.0	0.5
Y3 Cost Accounting Existence	0.5	1.0	0.5
Y4 Managerial Reporting Existence	0.6	1.0	0.5
Y5 Responsibility Accounting Existence	0.3	0.0	0.5
Y6 Incentives Existence	0.2	0.0	0.4
Y7 Strategic Planning Importance	1.6	1.0	1.0
Y8 Budgeting Importance	3.2	3.0	1.3
Y9 Cost Accounting Importance	2.5	3.0	1.4
Y10 Managerial Reporting Importance	2.6	3.0	1.4
Y11 Responsibility Accounting Importance	2.1	1.0	1.4
Y12 Incentives Importance	1.7	1.0	1.2

TABLE 3
FIG VS. AGENCY COST CONTROL MECHANISMS

Variables	X1 Family Chair	X2 Family Board Members
Y1 Strategic Planning Existence	63.6%	79.5%
Y2 Budgeting Existence	73.1%	76.0%
Y3 Cost Accounting Existence	70.7%	80.0%
Y4 Managerial Reporting Existence	70.3%	75.8%
Y5 Responsibility Accounting Existence	67.4%	78.3%
Y6 Incentives Existence	78.1%	71.9%

TABLE 4
FIM VS. AGENCY COST CONTROL MECHANISMS

Variables	X3 Family CEO	X4 Family Managing Director	X5 Family Division Director	X6 Family CFO	X7 Family Production Director	X8 Family Sales Director	X9 Family Supply Director
Y1 Strategic Planning Existence	56.8%	34.1%	18.2%	18.2%	20.5%	20.5%	34.1%
Y2 Budgeting Existence	53.8%	26.0%	11.5%	24.0%	21.2%	24.0%	20.2%
Y3 Cost Accounting Existence	60.0%	26.7%	13.3%	26.7%	21.3%	26.7%	25.3%
Y4 Managerial Reporting Existence	53.8%	29.7%	13.2%	27.5%	20.9%	26.4%	26.4%
Y5 Responsibility Accounting Existence	47.8%	26.1%	19.6%	28.3%	30.4%	26.1%	34.8%
Y6 Incentives Existence	62.5%	37.5%	15.6%	25.0%	18.8%	21.9%	25.0%

TABLE 5
RESULTS OF THE MEASUREMENT MODEL

	Number of Items	Internal consistency	Average variance extracted	Correlations between latent variables (the diagonal reports the square root of the Average Variance Extracted)			
				1	2	3	4
1 - Family involvement in Governance	2	0,914	0,868	0,932			
2 - Family involvement in Management	7	0,974	0,853	-0,080	0,923		
3 - Existence of agency cost control mechanisms	6	0,976	0,892	-0,190	0,280	0,944	
4 - Importance of agency cost control mechanisms	6	0,879	0,644	-0,170	0,270	0,100	0,802

FIGURE 1
STANDARDIZED MODEL RESULTS

