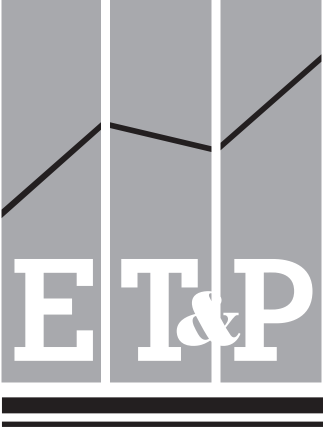

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Managing Resources: Linking Unique Resources, Management, and Wealth Creation in Family Firms

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The appropriate resources are necessary but insufficient to achieve a competitive advantage. Resources must also be managed effectively. Herein, we develop a resource management process model composed of three components that can lead to a competitive advantage. These components include the resource inventory (evaluating, adding, and shedding), resource bundling, and resource leveraging. We examine resource management in family firms and thus explore the unique characteristics of five resources and attributes of family firms that provide potential advantages over nonfamily firms. The resources are human capital, social capital, patient capital, survivability capital, along with the governance structure attribute.

Introduction

Several scholars propose the use of strategic management as an organizing framework in family business research (Sharma, Chrisman, & Chua, 1996). In particular, family business firms must manage resources effectively in order to compete in today's dynamic markets. In so doing, they must identify and exploit opportunities in the market while simultaneously gaining and sustaining a competitive advantage (Hitt, Ireland, Camp, & Sexton, 2001, 2002). The resource-based view (RBV) of the firm, a prominent theory in strategic management, provides the logic to understand how family firms can simultaneously seek opportunities and competitive advantage.

Family firms have several unique resources that have been referred to as the "familiness" of the firm (Cabrera-Suarez, De Saa-Perez, & Garcia-Almeida, 2001; Habbershon & Williams, 1999). Habbershon and Williams (1999) describe familiness as the unique bundle of resources created by the interaction of family and business. Familiness can create both advantages and disadvantages. Herein, we examine several unique resources of family businesses (e.g., familiness) and the effects of resource management, which together can lead to competitive advantage and wealth creation. The resources

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examined are human capital, social capital, patient capital and survivability capital, along with the governance structure attribute. Each can differentiate family from nonfamily firms.

Few scholars have explored how resources are managed to create a competitive advantage. Yet, this missing link is critical for understanding how resources can create value for firms (Barney & Arikan, 2001). Therefore, resource management is an important issue requiring more research. Additionally, family firms' unique attributes affect how resources can be managed to create a competitive advantage; thus research is needed on resource management in the context of family firms. Some family firm attributes provide advantages in the resource management process, while others limit this ability. Specifically, we examine the three components of the proposed resource management process model and the substages within each component. These components include the resource inventory, creating resource bundles, and leveraging resource bundles. Managing resources to create strategic resource bundles followed by the effective leveraging of those bundles creates a competitive advantage. These foci provide a unique contribution to our knowledge of managing family and nonfamily firms.

We begin with a concise review of the RBV of the firm followed by an explanation of the pertinent and unique familiness resources. We then examine how these resources affect the resource management process model in family firms with the purpose of creating a competitive advantage and wealth.

Resource-Based View

In pursuit of answers to the central question of strategic management, "why do some firms perform better than others?" (Barnett, Greve, & Park, 1994, p. 11; Meyer, 1991), strategy scholars have investigated performance from several different vantage points. However, in the 1980s and especially over that last decade, the RBV of the firm has become the dominant perspective (Hitt & Ireland, 1985; Wernerfelt, 1984). This perspective suggests that returns achieved by firms are largely attributable to their resources (Penrose, 1959).

Based on the assumptions that firms can hold heterogeneous and idiosyncratic resources for extended periods, Barney (1991) described four key characteristics necessary for resources to provide a sustained competitive advantage. Resources must be valuable and rare to create a competitive advantage. But, for a resource to produce a sustainable competitive advantage (for a reasonable period), it must also be difficult to imitate and nonsubstitutable.

The relationships between resources and performance suggested by the RBV have largely been supported. For example, Miller and Shamsie (1996) found that different types of resources explained performance in contrasting environments. Hitt, Bierman, Shimizu, and Kochhar (2001) found that human capital has direct and indirect (interaction with strategy) effects on firm performance. Finally, Brush and Artz (1999) found that firm-specific resources and capabilities required by the industry affected performance and could be used to protect a competitive advantage.

However, scholars have recently questioned the predictive power of the RBV without managerial involvement (Priem & Butler, 2001; Barney & Arikan, 2001; Mahoney, 1995). For example, Barney and Arikan state "It is almost as if once a firm is aware of valuable, rare, costly to imitate and nonsubstitutable resources it controls, that the actions it should take to exploit these resources will be self evident" (2001, p. 174). Therefore, while the resource profile of the firm may be important to performance, these resources must also be integrated and deployed effectively (i.e., through an appropriate strategy)

to achieve a competitive advantage (Hitt, Ireland, & Hoskisson, 2001). Thus, we conclude that resources alone are not likely to produce a sustainable competitive advantage. Rather, the resources must be managed appropriately to produce value. Additionally, effective integration and deployment of resource bundles increases the difficulty of competitors in imitating or developing effective substitutes for these resource bundles.

In the following section we examine four major resources and a unique attribute of family firms, which differentiate family from nonfamily firms. We then incorporate the uniqueness of family firms in a process model explaining resource management that involves evaluating, shedding, adding, bundling, and leveraging the resources to achieve a competitive advantage.

Family Businesses and Resources

Definition and Focal Firms

While family firms are complex and vary over a range of characteristics, we adopt Litz's (1995) integrated definition of a family business. Litz suggests that, "a business firm may be considered a family business to the extent that its ownership and management are concentrated within a family unit, and to the extent its members strive to achieve and/or maintain intra-organizational family-based relatedness" (Sharma, Chrisman, & Chua, 1996, p. 185). Further, an entrepreneurial spirit—the desire for growth and wealth creation—characterizes the family firms on which this work focuses. This concentration includes entrepreneurially managed family firms (Davis & Harveston, 2000), and high-performing firms (Sharma, Chrisman, & Chua, 1996). However, these family firms prioritize or rank their goals. Specifically, familiness takes precedence over other goals; these family firms generally will not dilute family ownership to fund growth or create wealth. They are unwilling to include nonfamily investors and thus are limited to firm-generated family resources or funds borrowed from institutions to finance growth. Also, the family firms of focus are not bound by tradition. They are willing to pursue unconventional means to retain intrafamily relatedness while preserving wealth creation. Thus, current family owners/managers are willing to skip generations, birth order, incorporate professional managers, or consider in-laws to preserve the intrafamily relatedness of the firm, while building wealth. As such, the theoretical propositions presented herein generally apply to a bounded set of family firms.

Uniqueness of Family Firms

Family firms' uniqueness arises from the integration of family and business life (Habbershon & Williams, 1999). The integration of the family and business creates several salient and unique characteristics; we focus on five of them that can differentiate family firms from nonfamily firms. They are human capital, social capital, survivability capital, patient capital, and governance structure.

Human Capital

Human capital represents the acquired knowledge, skills, and capabilities of a person that allows for unique and novel actions (Coleman, 1988). Family firms' human capital is complicated by the close proximity of dual relationships. Family members simultaneously participate in both business and family relationships in their personal and professional lives. The duality of these relationships increases their complexity and creates a

unique context for human capital (both positive and negative), compared to nonfamily firms.

There are limits to the quality and quantity of human capital in family firms. Dunn (1995) found that the goal of employing family members could lead to hiring suboptimal employees. Furthermore, family firms frequently have trouble attracting and retaining highly qualified managers. Qualified managers may avoid family firms due to the exclusive succession, limited potential for professional growth, lack of perceived professionalism, and limitations on wealth transfer (Covin, 1994a, 1994b; Burack & Calero, 1981; Donnelley, 1964; Horton, 1986). Fiegener et al. (1996) found that while nonfamily firms emphasized outside work experience and university training in promotion decisions, family firms rarely did so. Thus, family firms may undervalue managers considered well trained by most standards. In total, a family firm's wealth creation may be constrained by the limited number of skilled managers and their demanding roles.

However, positive attributes of family firms' human capital include extraordinary commitment (Donnelley, 1964; Horton, 1986), warm, friendly, and intimate relationships (*Management Review,* 1981; Horton, 1986), and the potential for deep firm-specific tacit knowledge. The potential for the early involvement of children in the family firm can produce deeper levels of firm-specific tacit knowledge. Tacit knowledge, which is difficult to codify, can be transferred through direct exposure and experience (Lane & Lubatkin, 1998), allowing family firms the potential to have deeper levels of firm-specific knowledge than nonfamily firms. Having both negative and positive human capital attributes heightens the importance of the management of human capital to the success of family businesses(Astrachan & Kolenko, 1994).

Social Capital

Whereas human capital focuses on individual attributes, social capital involves relationships between individuals or between organizations (often individual-based relationships as well) (Burt, 1997). Nahapiet and Ghoshal define social capital as the "sum of the actual and potential resources embedded within, available through, and derived from the network" (1998, p. 243). Social capital can affect a number of important firm activities such as interunit and interfirm resource exchange, the creation of intellectual capital, interfirm learning, supplier interactions, product innovation, and entrepreneurship (Adler & Kwon, 2002). In fact, Hitt, Ireland, Camp, & Sexton (2001, 2002) suggested that social capital provides information, technological knowledge, access to markets, and to complimentary resources. As such, social capital is a highly important resource.

Social capital is composed of three dimensions: structural, cognitive, and relational. The structural component is based on network ties and configuration. The cognitive dimension is based on a shared language and narratives, while the relational dimension is based on trust, norms, and obligations. Each of these dimensions is embedded within the family unit and in ties the family firm has with external stakeholders. As the family's social capital increases by connecting these diverse social structures, the firm can build more effective relationships with suppliers, customers, and support organizations (e.g., community financial institutions), while maintaining legitimacy with other important constituencies (Lounsbury & Glynn, 2001). In so doing, family firms garner resources from their constituencies and networks (e.g., knowledge, financial capital, and so forth). Additionally, they can more easily communicate the value of the firm's goods and services to potential customers.

Coleman (1988) suggests that social capital influences the creation of human capital in subsequent generations (p. S109). He argues that genetics inherited by a child may be

irrelevant if strong social capital is not present to help develop the child. Both physical presence and strong relationships are needed for social capital to facilitate effective child development (p. S111). Thus, the family firm with strong social capital may be unusually effective in developing the human capital of the next generation.

Patient Financial Capital

Finances within this work's focal family firms are also unique, having both positive and negative attributes. On the negative side, these family firms have limited sources of external financial capital because they avoid sharing equity with nonfamily members. Also, their size normally does not justify bond issues. As a result, these firms do not have access to the traditional equity or debt markets that are available to many nonfamily firms and to large family firms that have diluted intrafamily ownership.

On the positive side, these family firms provide effective structures to manage financial capital because they generally have a longer time horizon and are not as accountable for short-term results as are many nonfamily firms (Dreux, 1990). Also, the desire to perpetuate the business for future generations provides a special incentive to manage capital effectively (Gallo & Vilaseca, 1996; McConaughy & Phillips, 1999). This generational investment strategy creates desirerable patient capital (Reynolds, 1992).

Patient capital is financial capital that is invested without threat of liquidation for long periods (Dobrzynski, 1993). Thus, patient capital differs from the typical financial capital due to the intended time of investment (Teece, 1992; Dobrzynski, 1993). Many firms try to develop long-term, relationally based investors, but are unable to do so because U.S. markets are not characterized by this investment strategy (Reynolds, 1992). However, firms with patient capital are capable of pursuing more creative and innovative strategies (Kang, 2000; Teece, 1992). As such, patient capital is a valuable asset for family firms.

Survivability Capital

The integration of the unique resources described above provides a significant distinction between family and nonfamily firms. We term this integration of unique resources survivability capital. Survivability capital represents the pooled personal resources that family members are willing to loan, contribute, or share for the benefit of the family business (Haynes et al., 1999; Horton, 1986; Dreux, 1990).

These personal resources can take the form of free labor, loaned labor, additional equity investments, or monetary loans. This pool of external resources is available due to the family members' duality of family and business relationships and the warmth, dedication, and commitment of family members. Survivability capital can help sustain the business during poor economic times or, for example, after an unsuccessful extension or new market venture. This safety net is less likely to occur in nonfamily firms due to the lack of loyalty, strong ties, or long-term commitments on the part of employees.

The value of survivability capital varies with the characteristics of the firm and family. However, the type of family firms on which we focus often have a substantial amount of survivability capital over other types of family firms. First, very large family firms (e.g., Ford or Wal-Mart) have tapped into traditional markets for funding and are beyond dependence on the family's commitment. Additionally, family members in these cases often have significant personal wealth and may expect the markets to discipline and direct management to protect that wealth. In fact, these family members are likely to prefer protecting their wealth through investment diversification. Second, nonwealth or

growth-oriented family firms may not have outside wealth on which to draw, nor could free labor substitute for the lack of business fundamentals that produced the underlying problem.

However, our focal firms are positioned to enjoy more survivability capital. In these firms, the family contributors are rewarded with larger payouts through the continuation of the business. Growing firms generate a larger revenue stream, increasing the probability of wealth creation (firm assets increase in value to external parties/potential investors). Further, as wealth is created, the family members can access institutional borrowing more easily and at increasingly attractive rates. And lastly, the family members are aware of and do not want to experience the costs associated with losing the firm. If the firm fails, it would be more costly to start again than to subsidize the existing firm for the short term. Potential costs of failure include loss of reputation with suppliers and customers, loss of property equity value (to institutional lenders), organization costs, initial capital investment, and time. Thus, the focal firms may create a sustained competitive advantage and enhance wealth creation through proper management of survivability capital.

Governance Structure & Costs

Early agency theorists suggested that family owned and operated firms have highly desirable structures due to the lack of agency costs (Jensen & Meckling, 1976). However, some current scholars argue against this viewpoint (i.e., Lubatkin, Lane, & Schulze, 2001; Gomez-Mejia, Nunez-Nickel, & Gutierrez, 2001). The accuracy of both viewpoints may depend on the type of family firm. For example, Lubatkin, Lane, & Schulze (2001) suggest that family firms' agency costs begin to increase dramatically due to owner/mangers' altruism (p. 245). However, the family firms on which this work is focused have mutually-shared objectives of wealth creation and the maintenance of family relatedness. Additionally, the agency costs may occur unevenly in the life cycle of a firm. For example, during succession of the CEO in the family firm, altruism may grow thereby increasing agency costs. However, succession in these firms is uncommon, with as much as 40 to 50 years between events. Thus, our focal firms enjoy lower governance costs, which can be a source of competitive advantage.

We conclude that these unique resources and attributes can enhance the management (evaluating, shedding, adding, bundling, and leveraging) of family firms' resource profiles. And, the management of these resources differentiates high- and low-performing family firms (Cabrera-Suarez, De Saa-Perez, & Garcia-Almeida, 2001).

Resource Management

As stated earlier, the management of strategic resources is implicit in the RBV (Hitt et al., 1999). Herein, we explicate this process by developing a resource management process model. The model separates resource management stages into three complementary yet interdependent components: resource inventory (evaluating, adding, and shedding), bundling, and leveraging. We suggest that this process is continuous involving feedback. For simplicity purposes, we did not model all potential feedback loops.

Resource Inventory

A dynamic business environment can erode resource values over time if they are not protected or upgraded (Bettis & Hitt, 1995). Therefore, managers must continuously

Table 1

Comparing the Uniqueness of Resources and Attributes of Family Firms

		Focal Family Firms		
Resource	Definition	Positive	Negative	Nonfamily Firms
Human Capital	Acquired knowledge, skills, and capabilities of a person	Extraordinary commitment; warm, friendly, and intimate relationships; potential for deep firm-specific tacit knowledge	Difficult to attract and retain highly qualified managers; path dependencies	Not characterized by the positives, but have fewer limitations
Social Capital	Resources embedded in network, accessed through relationships	Components embedded in family; legitimacy with constituencies enhanced; development of human capital	Limited number of networks accessd; often excluded from elite networks (i.e., Fortune 500 CEOs)	Networks can be more diverse; maybe opportunistic in accessing and leveraging; sometimes used for managers' benefit—agency costs
Patient Financial Capital	Invested financial capital without threat of liquidation	Generational outlook; not accountable to strict short-term results; effective management of capital; allows pursuit of creative and innovative strategies	Nonfamily investors excluded; limited to availability of family's financial capital	Largely do not have the benefits or limitations
Survivability Capital	Pooled personal resources family members loan, contribute, and share with business	Helps sustain the business during poor economic times or redevelopment of the business; safety net	Not all family firms have it	Do not enjoy due to lack of commitment by employees and stakeholders
Governance Structure & Costs	Costs associated with control of firm; examples include incentives, monitoring, and controls	Family owned and operated fims' structures, trust, and family bonds reduce governance costs	Some family firms may not have an effective structure, trust, and strong family bonds, thereby producing greater governance costs	Professional management and capital diversification often increase governance costs

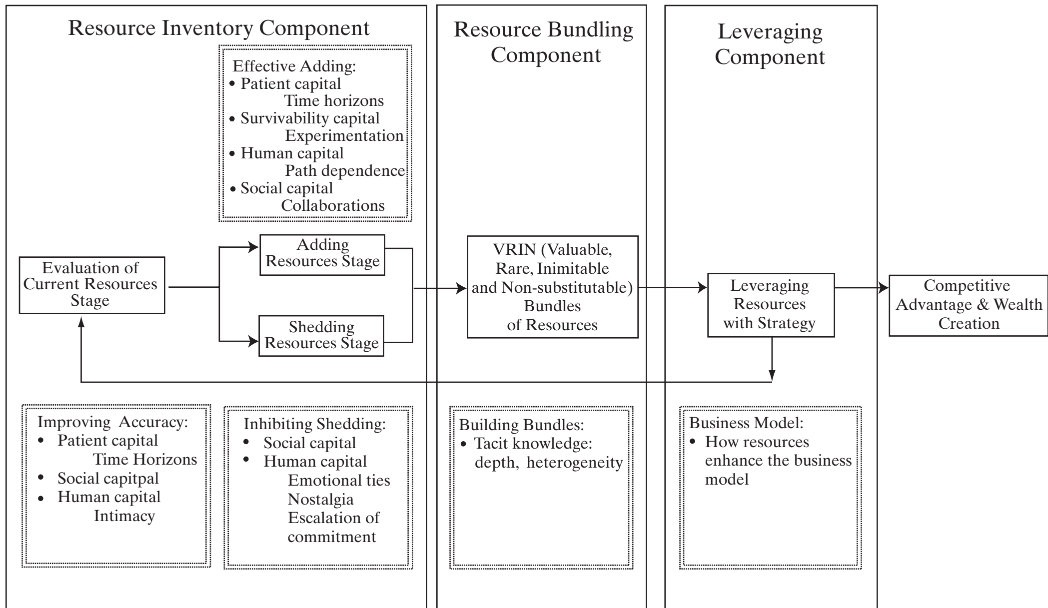
update resources requiring the evaluation, selection, and at times, shedding of resources. It also may require learning in order to revitalize or even build new resources (Lei, Hitt, & Bettis, 1996).

A firm's resource inventory is similar to an inventory of raw materials. Inventories change on a regular basis. Some portions of the inventory are depleted through normal business activities, while other portions become obsolete due to environmental changes. Additionally, the market values of inventories, like resources, fluctuate due to exogenous factors (Priem & Butler, 2001). Therefore, managers can begin the management of a resource inventory in a fashion similar to a raw-material inventory.

There are three stages in managing the resource inventory, evaluation, shedding, and acquisition/development (Makadok, 2001; Mosakowski, 2002). These tasks are continuous and interdependent, but not necessarily sequential. Still, we begin with the evaluation stage.

Figure 1

Managing Resources for Wealth Creation



Stage 1: Resource Evaluation

Family firm managers must vigilantly monitor their resource inventory by evaluating the current resource stocks. The evaluation process enhances the managers' knowledge of the firm's resources. To effectively evaluate current resources, a manager must employ an appropriate time horizon and have an adequate knowledge about the resources. This assumes the existence of a strategy, which provides parameters for the evaluations. However, having a strategy does not increase managers' ability to perform evaluations.

Time horizons for the evaluations of resources are pivotal in accurately estimating values. Artificially imposed time horizons either too short or too long result in less accurate estimations. Time horizons that are too short are likely to produce undervaluations of a resource, while too long time horizons could encourage the holding of resources that have less value in hypercompetitive markets (D'Aveni, 1994). As noted previously, family firms provide an effective structure to manage financial capital because they generally have a longer time horizon; they do not have to respond to inappropriate short-term goals imposed by the capital market (Dreux, 1990). Utilizing patient capital allows family firms to pursue more creative strategies (Kang, 2000). Thus, when family firms engage a resource evaluation process, the freedom to use the most appropriate time horizon, as opposed to one imposed by market forces, allows for more accurate evaluations.

P1: Patient capital is positively related to the employment of an appropriate time horizon for resource evaluation.
P1a: Family firms' managers are more likely to use an appropriate time horizon for resource evaluation than are nonfamily firm managers due to patient capital.

Additionally, family firm managers often possess more complete and appropriate knowledge of the resources they evaluate for several reasons. First, family and business experiences create stronger ties among family members, and increase the family's shared values and norms. Thus, family firms can build high levels of internal social capital by developing the structural, cognitive, and relational dimensions (Nahapiet & Ghoshal, 1998). Second, the intimacy with the employees provides family firm managers with a better understanding of the firms' human capital (Donnelley, 1964; Horton, 1986). This intimate knowledge is particularly useful for assessing intangible resources (Miller & Shamsie, 1996). Additionally, by working with the family firm's managers or founder, children in the family develop firm-specific tacit knowledge pertaining to the firm's evolving strategy, mission, internal resources, and environmental changes. This human capital embedded in both the future and current generation enhances the firm's value. However, these strong connections and history can cloud resource evaluations, especially of human capital. This potential problem is more likely to surface in the decision to shed resources. Thus, managers in family firms can use their intimate knowledge of the firm's resources, particularly human capital, to accurately evaluate a resource's value.

P2: Internal social capital and firm-specific human capital are positively related to knowledge of a firm's resources.
P2a: Family firm managers are more likely to have an appropriate level of knowledge for resource evaluation than nonfamily firm managers due to higher levels of internal social capital and firm-specific human capital.

Stage 2: Resource Shedding

The second stage in managing the resource inventory involves the shedding of non-valuable resources. Resources can, under certain conditions, reduce a firm's value. Mosakowski (2002) and Leonard-Barton (1992) explored the contexts in which resource accumulation has negative effects on a firm's ability to achieve or sustain a competitive advantage (e.g., existence of inertia). Thus, while resource accumulation is important, it must be balanced with resource shedding to avoid potential value reductions.

Shedding resources can be extremely important for resource-constrained firms. The opportunity costs of maintaining and leveraging inferior resources can reduce rather than create wealth. Most family firms have limited resources thereby enhancing the opportunity costs. Shedding resources not only releases financial capital or reduces costs, it can also break path dependencies. Firms must be diligent, flexible, and active in shedding lower-value resources.

Even when the shedding decision is based on objective information and the business environment warrants the action, shedding can be difficult. This difficulty can lead to inertia, especially if the resource in question contributed to prior success. Ironically, a family firm's intimate knowledge of the firm's resource stocks (Bjuggren & Sund, 2001) and its special incentives to effectively manage the firm's financial capital (Gallo & Vilaseca, 1996; McConaughy & Phillips, 1999) can impede the shedding of resources. Managers may experience an escalation of commitment (Ross & Staw, 1993) to resources, particularly human capital. Considering the generational outlook of family firms and the overarching emotional ties between family members/employees, releasing a family member may be extraordinarily difficult. While shedding resources is often a difficult decision, these problems are usually less acute in nonfamily firms. Additionally, changing resources creates uncertainty. Uncertainty can increase the use of low-risk strategies by managers, thereby contributing to inertia (Tripsas & Gavetti, 2000).

However, in managing the firm's resource inventory, family firm managers must focus on building resource bundles that lead to a competitive advantage.

P3: Shedding low-value resources is positively related to the development of advantageous resource bundles.
P3a: Family firms' managers are less likely than nonfamily firms to make appropriate shedding decisions, due to the emotional ties, nostalgia and/or escalation of commitment related to their unique social and human capital.

Stage 3: Adding Resources

Resources can be obtained from the market or created internally, both of which have inherent limitations. But regardless of origin, additional resources are sought that can be integrated to create resource bundles that are valuable, rare, difficult to imitate, and nonsubstitutable, and that can be leveraged by a strategy. In this vein, we concentrate on actions in which the focal family firms can engage and yield either knowledge (learning) or new resource stocks.

Obtaining Resources from the market

Barney (1986) suggests that outside of luck, only firms with unique information can "outsmart" the strategic factor market in acquiring resources below their true value. Unique information allows the resource to be acquired for less than its true market value (Makadok, 2001; Barney, 1986). However, a resource may have an idiosyncratic value when integrated with the acquiring firm's bundles of resources thereby creating additional value. Therefore, even resources obtained for full market value have the potential to create more value when integrated with other existing resources. This is especially true for intangible resources since they are most valuable when bundled with complementary resources (Carpenter, Sanders, & Gregersen, 2001).

Karim and Mitchell (2000) argued that acquisitions allow firms to change their resource stocks. Merger and acquisition activities represent an important avenue for firms to obtain new complementary resource stocks while enhancing learning (Barkema & Vermeulen, 1998; Vermeulen & Barkema, 2001). Although this strategy is often associated with publicly traded firms, our family firms can participate on a limited basis.[1] Therefore, an important differentiation of family firms from nonfamily firms is their effectiveness in absorption.

Effectiveness in absorbing new resource stocks is encouraged by both patient and survivability capital. Both of these resources allow and even encourage long-term, creative strategies (Kang, 2000). During integration, family firms are more likely than nonfamily firms to use both creativity and long-term time horizons to develop the best fit of resources.

P4: Patient capital and survivability capital are positively related to the effective absorption of resource stocks.
P4a: Family firms are likely to absorb new resource stocks more effectively than nonfamily firms due to higher levels of patient and survivability capital.

However, absorption may be hampered by deficiencies in the acquiring firm's human capital. As noted earlier, human capital in family firms can be deficient in comparison to

1. Access to traditional and government subsidized borrowings allows family firms to engage in M&A strategies. Further, buyers and sellers in this market understand the need for seller carried notes to facilitate transactions.

nonfamily firms. Family firm managers may lack experience managing the uncertainty associated with integration of the acquired firm's human capital. The warmth and commitment of personnel is beneficial in this condition, but it is not a substitute for experience and tacit knowledge. Therefore, it is critical that acquiring firm managers tap their social capital to prepare for the integration and remain open to change.

P4b: Deficiency in the family firm's human capital negatively moderates the relationship between patient and survivability capital and absorption of acquired firms.

However, family firms can mitigate human capital deficiencies by increasing the heterogeneity of their human capital. Upper-echelon scholars have successfully demonstrated that top management team (TMT) heterogeneity is important for making effective strategic decisions (Finkelstein & Hambrick, 1990, 1996; Wiersema & Bantel, 1992).

Unfortunately, family firms commonly lack heterogeneity in their management teams. TMT heterogeneity increases the opportunity of competing ideas, a form of healthy conflict. Such conflict enhances decision making by producing a greater set of alternatives and assumptions (Schweiger, Sandberg, & Ragan, 1986). Furthermore, Ahuja and Lampert (2001) suggest that the propensity for producing inventions increases as firms remove traps that reduce creativity. TMT heterogeneity can help avoid such traps.

Family firms can increase their heterogeneity by family members gaining experience in nonfamily firms and by recruiting nonfamily managers. Encouraging family members to work for other firms increases heterogeneity of the experiences and tacit-knowledge bases of managers within these firms. Secondly, hiring nonfamily managers increases heterogeneity specifically by adding perspectives not dominated by the family's experiences.

P4c: Increasing the heterogeneity of family firms' management reduces potential deficiencies in their human capital.

A firm's social capital affects its ability to acquire resources. For example, a firm's relationship with suppliers affects its access to valuable external resources (e.g., raw materials, capital). A firm's social capital contributes to its legitimacy with the firm's constituencies, an attribute of particular importance for smaller and entrepreneurial firms (Lounsbury & Glynn, 2001). Thus, we can conclude that social capital facilitates collaboration between firms (Dyer & Singh, 1998).

Alliances between firms are a prime vehicle to gain access to resources including knowledge (Gulati, 1998; Hitt et al., 2000). As such, alliances provide opportunities for the partners to learn (Sarkar, Echambadi, & Harrison, 2001; Cooper, 2002). These alliances provide several types of resources to the partners. For example, they can provide access to information, managerial capabilities, technology, and markets (Hitt et al., 2000; Ireland et al., 2001). Glaister and Buckley (1996) found that firms formed alliances to gain access to complementary resources. So, family firms can use alliances to overcome resource shortcomings by selecting partners with complementary resources. Social capital also contributes to the management of these relationships (Ireland, Hitt, & Vaidyanath, 2002).

Alliances can be formal, such as joint ventures and nonequity ventures, or informal, especially for family firms. Regardless of their form, alliances provide the potential for learning (Inkpen, 2000; Khanna, Gulati, & Nohria, 1998), although learning is maximized only when both partners' relative absorptive capacities overlap (Lane & Lubatkin, 1998).

Transferring rich knowledge may require long time frames and significant efforts. The generational outlook and patient capital of family firms allow them to devote the proper time to cultivating the necessary relationships that facilitate rich knowledge transfer. Effective relationships require that the alliances be managed (Ireland, Hitt, &

Vaidyanath, 2002). Trust must be developed; relationships built over time entailing trust represent social capital to the firms involved. This social capital facilitates alliances and the transfer of tacit knowledge.

P5: Social capital is positively related to the utility of alliances.

P5a: Family firms are likely to gain more value from alliances than nonfamily firms, due to the richer social capital derived from their generational outlook and their patient capital.

Managing a firm's resources includes the effective development of internal resources (Makadok, 2001; Teece, Pisano, & Shuen, 1997). A cornerstone of building capabilities is learning (Lei, Hitt, & Bettis, 1996). Learning and knowledge creation rely heavily on the existence of sufficient human capital in the context of strong social capital (Coleman, 1988). Family firms' opportunity to involve the next generation of managers at an early age increases their ability to build deeper firm-specific tacit knowledge among the next generation of managers. This learning fosters the ability to create new resources through resource recombination (Galunic & Rodan, 1998). Experimentally recombining resources is encouraged by patient capital and survivability capital.

Additionally, McGrath (1995, 1999) argues that entrepreneurial failures provide new knowledge that could not be developed without the cost of failing. However, family firms may develop this knowledge without the expense of failing, which includes not only financial losses, but also loss of social capital. Instead, near failure experiences can become invaluable knowledge for future use due to the family firm's survivability capital. As a result, such deep tacit knowledge does not require the complete failure of the firm and as such is not as "expensive" to acquire. This is less true for most nonfamily firms; when their financial capital has been depleted, they inevitably fail.

P6: Survivability capital is positively related to firm survival and resource development, especially that of knowledge.

P6a: Family firms are more likely to survive and develop deep tacit-knowledge resources than are nonfamily firms, due to survivability capital.

Resource Bundling and Leveraging

Having the necessary resources to develop a competitive advantage is critical for a firm to create wealth; however, it is insufficient to guarantee survival or success. In addition, those resources must be configured into bundles and then leveraged to achieve a competitive advantage. History has demonstrated that firms with substantially more resources can lose competitive battles to firms with seemingly lesser resources. Amit et al. (2002) refer to these "Davids" who slay the "Goliaths" as the "new winners." Managers have to configure their resources into bundles. Managers then use these resource bundles to formulate a strategy that exploits opportunities and creates a competitive advantage. In this way, managers leverage the firm's resources to create wealth.

Venkataraman and Sarasvathy (2001) refer to the above process as effectuation and suggest that it explains the differentiation among firms, even among successful ones. They argue that the different outcomes achieved by IBM and Apple in the computer market were the result not of differences in their resource bases, but rather of differences in how they configured and leveraged their resources. Karim and Mitchell (2000) suggest that firms must configure their resources to create and market new products. Later, they must import or develop new resources or reconfigure the existing resources to extend their product lines or change the firm's product portfolio. These actions are necessary to remain competitive in the marketplace. Thus, resource configuration is a continuous

process. This process likely involves the integration of resources (i.e., capabilities) from various units in the organization (Burgelman & Doz, 2001). As a result, managers must ensure effective coordination among those units to achieve the desired integration (Holbrook et al., 2000). Such coordination creates governance costs (Karim & Mitchell, 2000) in the form of incentive structures, monitoring actions, control systems, and organizational culture. To the extent that trust and a strong family bond characterize family firms, the governance costs are likely to be lower than for most nonfamily firms.

Barney and Arikan (2001) suggest that the process of configuring and leveraging resources to appropriate rents is creative and entrepreneurial. Others refer to the process as similar to the application of a skilled craft (i.e., Priem & Cycyota, 2001). These comments suggest that the process of configuring and leveraging resources requires substantial firm-specific tacit knowledge that is commonly embedded in human capital. Thus, configuring and leveraging resources effectively requires considerable experience, a primary source of tacit knowledge. Family firms may have an advantage in this regard, assuming that they involve family members in the management process much earlier than is possible in most nonfamily firms. However, given the dynamic competitive landscape in which most firms must operate, a variety of experiences is also helpful. Family managers are less likely to have a variety of experiences in configuring different sets and types of resources (and in leveraging them as well).

Leidtke (2001) argues that configuring and leveraging resources to develop and implement the best strategy requires managers to have "metacapabilities." Such capabilities include linking groups across silos and continuous learning. In addition to coordinative skills, coordination is likely to require considerable relational skills and an ability to persuade others regarding the importance of cooperation (a form of relational capital). In fact, she suggests that collaboration can contribute to learning. The ability to learn is important in producing inventions (new ideas of all types, not limited to new products) and adaptation to changes in a firm's competitive landscape. As a result, such learning is critical in a highly dynamic landscape. However, family firms run the risk of path-dependent capabilities and knowledge assets (Priem & Cycyota, 2001) because of their reliance on family members to accept managerial positions.

Family firms' patient capital allows them to focus on the long term. This focus allows the realization of returns through the configuration and leveraging of resources. However, the need for substantial (deep and heterogeneous) tacit knowledge to configure and leverage resources effectively—especially in a dynamic competitive environment—can place family firms at a disadvantage, partly because of a deficit in managerial capabilities coupled with the higher probability of path-dependent knowledge assets (potentially deep but lacking in heterogeneity). Because of the tendency of family firms' knowledge assets to become path dependent, acquiring new resources may be especially important to their success and even their survival. Earlier we discussed how firms develop internally or acquire from external sources new resources. The use of alliances with or acquisitions of other firms may be particularly useful to family firms for gaining access to and learning new resource configuration skills. While alliances and networks are quite feasible, especially for family firms with significant social capital, acquisitions may not be feasible without substantial financial capital. These arguments lead to the following proposition.

P7: Human capital and patient capital are positively related to the bundling and leveraging of resources.

P7a: Family firms are capable of bundling and leveraging resources better than nonfamily firms, due to human capital and patient capital, but only if they have developed both deep and heterogeneous managerial tacit knowledge.

P7b: Family firms with deep but not heterogeneous managerial tacit knowledge are capable of leveraging resources better than nonfamily firms in stable environments.

According to McGrath and MacMillan (2000), leveraging resources and capabilities requires that managers develop a strategy leading to a competitive advantage. Amit and Zott (2001) suggest that leveraging resources and capabilities requires the integration of entrepreneurial and strategic management perspectives to develop and implement an effective business model. Effective business models have four distinct characteristics: efficiency, complementarities, novelty, and lock-in. Efficiency entails minimizing costs, such as search and transactions, as well as maximizing speed in accomplishing the tasks. Maximizing complementarities between products and services, between technologies applied, and between activities is critical for the business model to be successful. Novelty emphasizes the importance of innovation (in all types of markets). Lastly, the business model should be designed to achieve lock-in by building high switching costs for customers (e.g., loyalty programs, trust, customization) and developing positive networks. The business model defines how resources and capabilities are used to implement the firm's competitive strategy. This implementation, according to McGrath and MacMillan (2000), requires that managers mobilize the whole organization so that "everyone plays." In other words, all employees must be encouraged and motivated to implement the strategy and accomplish the firm's goals.

In summary, after developing resources and capabilities, they must be leveraged through a competitive strategy designed to achieve a competitive advantage. As such, the strategy is based on the firm's resources. To do this effectively, family firm managers must integrate opportunity and advantage-seeking behaviors in order to develop an appropriate business model, which utilizes their resources effectively and creates wealth.

Summary and Conclusions

The competitive landscape of the twenty-first century is highly dynamic and uncertain, which requires innovation for survival (Hamel, 2000). Therefore, similar to other entrepreneurial and established firms, family firms must develop an entrepreneurial mindset that allows them to identify and exploit opportunities present in uncertainty (Shane & Venkataraman, 2002; Smith & DeGregorio, 2002). Managing resources is critical to gaining and maintaining competitive advantages. Lee, Lee, and Pennings (2001) found that a new venture's resources (technological, financial, and managerial capabilities—entrepreneurial orientation) were primary predictors of the venture's performance. In general, the most important resource to a family firm is its human capital. Relying on human capital (e.g., knowledge) provides opportunities for these firms because intangible resources are the most likely to lead to a competitive advantage; intangible resources are socially complex and difficult to imitate (Barney, 1991; Hitt, Bierman, Shimizu & Kochar, 2001). Alternatively, family firms' human capital is also constrained because of the inaccessibility of substantial human capital outside the family. This characteristic heightens the need for effective management of family firms' resources, in order to be competitive.

As a result, family business firms must evaluate, acquire, and shed resources effectively. They must also continuously build their resource bundles and leverage them to achieve a competitive advantage and to create wealth. They enjoy some advantages in these activities, as well as some limitations. Based on the unique characteristics of family business firms, we offered several research propositions as a basis for future research.

Similar to most other firms, particularly smaller and younger entrepreneurial firms, family business firms rarely have all of the resources they need to compete effectively.

They must compensate for this deficit by developing their capabilities or by gaining access to the necessary resources in other ways. A common approach to access complementary resources is through alliances. Alliances provide access to or learning of new capabilities. Lane and Lubatkin (1998) argue that strategic alliances often allow partners to get close enough to transfer even tacit knowledge. In support of this contention, Rothaermel (2001) found that incumbent industry firms were able to enhance their technological capabilities through alliances with a partner who developed a new technology. To be effective in the transfer of knowledge or to integrate complementary resources requires careful and effective management of the collaboration and relationships in the alliance. Such capabilities may not naturally reside in family firms but this limitation may be overcome with higher social capital, patient capital, and survivability capital than enjoyed by many nonfamily firms.

To be certain, family businesses enjoy special niches in the competitive landscape. They have idiosyncratic advantages and simultaneous disadvantages in trying to gain a competitive advantage. We have explored these characteristics in the context of managing the firm's resources. Effective management of their resources can lead to value creation for the business and the family as owners.

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