Business, Family, And Resource Intermingling Characteristics As Predictors Of Cash Flow Problems In Family-Owned Businesses

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Cash flow problems of 673 family-owned businesses from a nationally representative sample were investigated. The final model of the 3-step hierarchical binary logistic regression was used to predict the probability of the occurrence of cash flow problems in the business, household, and the business and household simultaneously. Business system, family system, and resource intermingling variables contributed to the explanation of cash flow problems in the business, household, or in both entities. Findings indicate that when resources are intermingled across systems, assessing the well-being of one system is incomplete without assessing the other system among family-owned businesses.

Keywords: *Family-owned business, Cash flow problems, Resource intermingling, Family business finances, Cash flow problems in family-owned business*

Introduction

Family-owned businesses account for 60% of total U.S. employment, 78% of all new jobs, more than 50% of the Gross Domestic Product (GDP), and 65% of all paid wages (Hutcheson, 1999). These types of businesses are quite prevalent throughout the U.S. In fact, in 1996 over 8.6 million families in the U.S. (or 1 in 10 households) owned a family business (Heck & Trent, 1999). However, little is known about the cash flow management processes that occur between the family and business systems that are involved in these types of businesses. Without this type of information, households with family businesses may be counseled in the same manner as households without family businesses, which may not be appropriate given the distinctive financial situations of family-owned businesses.

Extant literature on family-owned business finances is mostly descriptive of the financial situation. For example, households with family-owned businesses have substantially higher debts and a higher probability of borrowing from commercial banks and family members compared to those households without a family-owned business (Haynes & Avery, 1996). It also has been established that family businesses extensively blend business and household resources (Haynes, Walker, Rowe & Hong, 1999). However, the impact of this level of debt and blending of resources on the cash flow of the family business system warrants further exploration.

Counseling clients with family-owned businesses is uniquely complex due to the dynamic of separate yet interdependent systems within these businesses. There are varied levels of intermingling of resources (including money) that could potentially be seen as resources or constraints for either the family or business system at any point in time. The investigative and questioning process of financial counselors who encounter family businesses needs to take into consideration and perhaps uncover the complexities of this intermingling of finances across systems. Examining the factors that contribute to cash flow problems in family-owned businesses will provide useful information to financial planners, counselors, and educators concerning the prevention as well as the intervention of these problems.

The purpose of this study is threefold. The first purpose is to determine the differences in selected business system, family system, and resource intermingling characteristics between those family-owned businesses that have cash flow problems and those that do not have cash flow problems. The second purpose is to predict the probability of cash

flow problems with selected business system, family system, and resource intermingling characteristics. The third purpose is to test the influence of family system characteristics over business system characteristics and the influence of resource intermingling over the combination of business and family system characteristics on cash flow problems. Due to the separate yet interdependent systems within family-owned businesses, it is critical to investigate cash flow problems in (a) the business, (b) the household, and (c) both the business and the household simultaneously.

Conceptual Model

The Sustainable Family Business Model (Figure 1), a systems framework, guided this research (Stafford, Duncan, Danes & Winter, 1999). This model emphasizes the sustainability of the family business system and treats the family and business systems equitably. It recognizes each system as a viable social entity by acknowledging both the concrete resources of each system as well as the interpersonal transactions that occur within and between each system. It assumes that both the concrete resources and the interpersonal transactions have an impact on the sustainability of the family business. Thus, an investigation of cash flow problems needs to include unique analyses for those family-owned businesses with cash flow problems within the business, those with cash flow problems within the household, and those with simultaneous cash flow problems within both systems.

A major contribution of the Sustainable Family Business Model is its attention to not only the objective achievements of the family-owned business but also the subjective achievements. Various measures of financial success are the most common objective indicators of business achievements according to most business and economic theories. However, subjective indicators such as motivations (e.g., maintaining personal freedoms), rewards (e.g., meeting challenges), goals (e.g., attaining family security by building the business), and perceptions of success are also important in providing the entire context of family business sustainability (Cooper & Artz, 1995; Cooper, Woo & Dunkelberg, 1988; Stafford et al., 1999). With

a greater understanding of the entire context of how business owners perceive their business success, one can better understand critical business management issues, such as how they choose to invest their resources of time and money between the business and family systems; whether they choose to stay in business; how they work with customers, family employees, and non-family employees; and how they utilize their ability to recognize and solve problems in both the business and family systems. Although recognizing both objective and subjective dimensions is critical to a complete understanding of family business sustainability, these dimensions cannot be used interchangeably (Cooper & Artz, 1995; Cooper et al., 1988).

Additionally, the Sustainable Family Business Model recognizes that each subsystem of the family business system operates in times of stability and times of disruption. It is during times of disruption, such as when family businesses experience cash flow problems, that intermingling of resources often occurs (Danes, Olson, Zuiker, Van Guilder Dik & Lee, 2001; Stafford et al., 1999). The family and business often respond uniquely to changes and disruptions at the interface of the two systems. An implication of this premise for the current study is that when investigating cash flow problems, it is critical to include characteristics of the family system and the business system as well as the intermingling of resources between the two systems.

A variety of forces operate at the intersection of business and family systems during different stages of each system's life cycle and during disruptions in regular transaction patterns (Davis & Tagiuri, 1982; McClendon & Kadis, 1991; Stafford et al., 1999). Recent studies have indicated that a family-owned business survives in troubled economic times, perhaps not necessarily because it is a good business, but because the family supports the business and vice versa (Keough & Forbes, 1991; Winter, Fitzgerald, Heck, Haynes & Danes, 1998). Utilization of the Sustainable Family Business Model (Stafford et al., 1999) will build on this previous work by providing a

Figure 1
Sustainable Family Business Model (Stafford, K., Duncan, K. A., Danes, S. M., & Winter, M., 1999)

systemic analysis of cash flow problems within family-owned businesses.

Review of Literature

Cash flow management has been defined as the process of development, implementation, and assessment involved in how a system allocates its flow of revenue to satisfy financial objectives (DeVaney, Gorham, Bechman & Haldeman, 1996; Godwin, 1990). The goals of cash flow management (whether for the family or business system) are to attain and maintain economic viability and to develop strategies to cope with change (Godwin, 1990; Lown, 1986; Muske & Winter, 1999; Muske & Winter, 2001). Literature exists on finances within a business system and on cash flow management within families who do not own a business, but there is little research on the cash flow management of family-owned businesses. A summary of that literature is reviewed in three sections: cash flow management in the business system, cash flow management in the family system, and the intermingling of resources across systems.

Cash Flow Management in the Business System

According to the business finance literature, a key predictor in the failure of newly founded firms has been cash flow problems; yet, few details are known about determinants of the presence of such problems in family-owned businesses (Laitinen, 1992). It is not just objective financial problems that have an impact on the business system. Konijn and Plantenga (1988) have indicated that when business managers worried about business capital needs, they had less financial success. Furthermore, financial troubles have been shown to have a negative effect on problem-solving dynamics and work productivity in family-owned businesses (Danes & Amarapurkar, 2001; Danes, Fitzgerald & Doll, 2000).

Demographic characteristics of the business owner, such as gender, education level, and minority status, have been observed as factors that explain cash flow problems within family businesses. Women in general have tended to be more risk averse than men, and women also have been more likely to experience credit discrimination and thus acquired less debt than men (Fay & Williams, 1993; Scherr, Sugrue & Ward, 1993). It also has been shown that a critical factor for successful small business entrepreneurship is the benefit the business has received when business owners or employees have invested in additional education or training (Ando, 1988; Robinson & Sexton, 1994).

Additionally, Ando (1988) and Bates (1990) both found that although African-American business owners possessed the same human and financial characteristics as non-minority business owners, they had lower success rates at acquiring bank loans.

Cash Flow Management in the Family System

All families engage in cash flow management with varying degrees of formality, regularity, and effectiveness (Godwin & Koonce, 1992). However, it has been found that few families follow the guidelines financial counselors and planners suggest, such as systematically establishing, following, or recording a written budget or formal spending plan (Beutler & Mason, 1987; Davis & Carr, 1992; Godwin, 1990; Lown, 1986; Muske & Winter, 1999; Muske & Winter, 2001). Efficiency in cash flow management has been shown to be influential to family economic viability, which has been exhibited by families attempting to manage cash flow in simple and convenient ways (Muske & Winter, 1999; Muske & Winter, 2001). The context in which a family system operates (e.g., macroeconomic factors, such as the state of the economy) has been found to be a source of stress as well as a resource for family economic viability (Danes & Rettig, 1995; Lown, 1986). It has been demonstrated that families cope with a change in finances by using savings accounts or credit cards, by taking out consumer loans, by putting off payment of bills, by restructuring debt repayment, and by reducing expenses (Muske & Winter, 1999; Varcoe, 1990). On the other side of the ledger, Livingstone and Lunt (1992) found that families use credit as a means to preserve their savings, to benefit from special opportunities, to balance demands on cash flow, and to manage financial crises or hardships.

Certain patterns of decision-making in family cash flow management have been exhibited through variables of gender, age, education, income level, and number of children in the household. While engaging in joint decision-making, men and women tended to demonstrate differences in responding to financial issues (Danes & Rettig, 1995). Older adults have been found to be less likely to change management practices, to use a written budget, and to report financial problems (Danes & Rettig, 1995; Davis & Carr, 1992; DeVaney et al., 1996; Varcoe, 1990). Whereas, those who were younger were found to be more likely to borrow money, to put off paying bills, to cut down on spending as a coping strategy, and to utilize a written budget (DeVaney et al., 1996;

Livingstone & Lunt, 1992; Varcoe, 1990). It has also been demonstrated that those with more education were more likely than their counterparts to save and to use a budget (Kennickell, Starr-McCluer & Sundén, 1997). High income earners were found to be more likely to save, to have greater debt, and to have a formal budget but were found less likely to report financial problems (DeVaney et al., 1996; Kennickell et al., 1997). Lower income earners were shown to be more supportive of the idea of planning to get ahead in life and were more likely to borrow money, to put off paying bills, to cut down on spending, and to keep financial records (DeVaney et al., 1996; Godwin & Koonce, 1992; Varcoe, 1990). Haynes et al. (1999) suggested that dependent children had the potential to increase the claims on family income.

Intermingling of Resources across Systems
The acknowledgement of the intermingling of business and family resources within the business finance literature is evident. Although banks have been found to represent the most common form of debt financing for small business owners, these business owners may turn to alternative forms of business financing when they face constraints (Ang, 1992; Bates, 1990; Scherr et al., 1993). Those alternative forms might include personal or family savings as well as the accrual of personal credit card debt (Ando, 1988; Cole, Wolken & Woodburn, 1996; Scherr et al., 1993). Cole et al. (1996) reported that 39.2% of small businesses used personal credit card debt for business use. These financial commitments represent the sacrifice of not only the individual manager but also that of the family or household in which the individual resides.

Within family businesses, the family and business systems have been found to compete for time, energy, and financial resources of individual family members and of the family collectively (Rosenblatt, de Mik, Anderson & Johnson, 1985; Stafford et al., 1999). It has been demonstrated that family-owned businesses use strategies that juggle resources of time and money to address needs during high-demand times. Examples of strategies include family members helping in the business without pay, transferring less business income to the family for a short time, or hiring temporary help in either the family or business (Miller, Fitzgerald, Winter & Paul, 1999; Winter, Puspitawati, Heck & Stafford, 1993). Ways that family businesses have been found to survive an economic downturn are to dip into the family's economic resources by using savings and liquidating investments to provide needed capital for the business or by using unpaid family labor in

times of pressure (Keough & Forbes, 1991).

Using data from the 1997 National Family Business Survey, Haynes et al. (1999) investigated the occurrence of transfer of finances from business to family and from family to business. The business to family financial intermingling was more likely to occur when the business was located in a rural or small town as opposed to an urban area, when the business was a borrower, or when it operated as a corporation. On the other hand, the family to business financial intermingling was more likely to occur when the business operated as a sole-proprietorship, when it was a borrower, when the manager was younger, or when the household was without children. Number of employees and age of the business were not significant characteristics found to predict any type of financial intermingling. In addition, business manager characteristics such as race, education, marital status, and household net worth were not significant determinants to predict any type of financial transfer. However, the manner in which the business was legally organized and the credit status of the business were found to be significant in predicting any type of financial intermingling.

The intermingling of financial resources has not always been found to yield positive or clear results. Needs and demands of either system can cause a level of tension that leads to decisions that are good for the short-term but not for the long-term viability of the family business (Kaye, 1991). In addition, destructive conflict between family and business goals has been shown to have an impact on the viability of family businesses (Danes, Leichtentritt, Metz & Huddleston-Casas, 2000; Danes & Rettig, 1993). Assumptions cannot always be drawn from what appears to be clear-cut information about the financial status of the family-owned business without asking further questions. For example, knowing the amount of commercial loans within family-owned businesses is not always a good predictor of business viability because sometimes family-owned businesses borrow money from commercial banks to pay off personal and family debts (Haynes & Avery, 1996).

Hypotheses
There were eight hypotheses tested in this study. The first three address the first purpose of the study. The next three hypotheses address the second purpose of the study. The last two address the third purpose. These hypotheses will be tested with three separate models of cash flow problems: (a) cash flow problems

within the business, (b) cash flow problems within the household, and (c) cash flow problems in both the business and household system simultaneously.

1. Those family-owned businesses with cash flow problems in the business will differ on business system, family system, and resource intermingling characteristics compared to those without cash flow problems in the business.
2. Those family-owned businesses with cash flow problems in the household will differ on business system, family system, and resource intermingling characteristics compared to those without cash flow problems in the household.
3. Those family-owned businesses with simultaneous cash flow problems in the business and household will differ on business system, family system, and resource intermingling characteristics compared to those without cash flow problems in either the business or the household.
4. Business system, family system, and resource intermingling characteristics will influence the probability of having cash flow problems in the business.
5. Business system, family system, and resource intermingling characteristics will influence the probability of having cash flow problems in the household.
6. Business system, family system, and resource intermingling characteristics will influence the probability of having cash flow problems simultaneously in the business and the household.
7. Family system characteristics will increase the probability of predicting cash flow problems in the business, household, and both the business and household simultaneously over and above business system variables.
8. Resource intermingling variables will increase the probability of predicting cash flow problems in the business, household, and both the business and household simultaneously over and above the combination of business and family system variables.

Method
Sample
Data for this study were obtained from the 1997 National Family Business Study (NFBS), a nationally representative sample of 794 family-owned businesses, where detailed data were collected from both the business and the family. The 1997 NFBS data utilized a household sampling frame (for further discussion on the sampling technique, see Winter et al., 1998). In order to be included in this study, the following sample selection criteria were used. The sample was limited to families defined as "…a group of people related by blood, marriage, or adoption who share a common dwelling" (Winter et al., 1998, p. 242) in which at least one person owned or managed a family business. At least one person in each family unit must have owned or managed a family business for at least one year, worked at least 6 hours per week year round or a minimum of 312 hours a year in the business, been involved in its day-to-day management, and resided with another family member.

During 1997, the staff at Iowa State University Statistical Laboratory conducted telephone interviews whereby three types of interviews were collected from each of the family businesses: a screening interview establishing eligibility, an interview with the household manager, and an interview with the business manager. From 1,116 eligible households, 794 participated in the study, resulting in a response rate of 71.1%. Of these 794 participant households, 673 households completed both the business and household interviews, resulting in a 60.3% response rate. This study examines the 673 households with business and household interviews that either had cash flow problems or did not have cash flow problems in the business, in the household, or in both the business and the household.

Variable Measurement
Dependent Variables
This study used three dependent variables: cash flow problems in the business, cash flow problems in the household, and cash flow problems in both the business and the household. Cash flow problems in the business was created using the following question asked of the business manager: "During 1996, how often did the business have a cash flow problem?" Since the responses were nominal, the variable was recoded into a dichotomous variable where "1" indicated that the business had a cash flow problem in 1996. The household cash flow question was asked and recoded in the same manner. Of the 673 family-owned businesses, 54.5% responded that they had a cash flow problem in their business in 1996, and 45.5% indicated that they did not have a cash flow problem in their business (Table 1). Of the 673 family-owned businesses, 60% responded that they had a cash flow problem in their household in 1996, whereas 40% of the family-owned businesses responded that they did not have a cash flow problem in their household in that year.

In order to further clarify the conditions under which

cash flow problems exist, this study compared the differences of those family-owned businesses that had cash flow problems in both the business and the household with those family-owned businesses that did not have cash flow problems in either entity. Cash flow problems in both the business and the household was created by selecting cases where there was a "1" (yes) for both cash flow problems in the business and cash flow problems in the household in 1996. A sub-sample of 466 (the 282 that had cash flow problems in both systems and the 184 that had no cash flow problems in either system) out of the 673 family-owned businesses was used in this equation (Table 2). The 207 family businesses that had cash flow problems in only one system were not used in this analysis.

Table 1
Cash Flow Problems in the Business and in the Household in Family-Owned Businesses

	Business	Household
Yes	367 (54.5%)	404 (60.0%)
No	306 (45.5%)	269 (40.0%)

N=673

Table 2
Cash Flow Problems in Both the Business and the Household in Family-Owned Businesses

Cash Flow Problems	Frequency
Both in the business and in the household	282 (41.9%)[1]
No cash flow problem in either the business or the household	184 (27.3%)[2]
In the business only and not in the household	85 (12.6%)
In the household only and not in the business	122 (18.2%)
Total	673 (100%)

1. Coded as "1" for cash flow problems in both business and household model
2. Coded as "0" for cash flow problems in both business and household model

Independent Variables
The first set of independent variables focused on the characteristics of the family business and its manager, the next set of independent variables focused on the characteristics of the family system, and the last set of independent variables focused on the intermingling of resources between systems. Table 3 outlines the way in which the independent variables were measured. Descriptive statistics are provided in the results section because one of the purposes of the study is to determine differences between those family-owned businesses with cash flow problems and those without them.

Business system characteristics Business managers were asked to use the reference date of December 31, 1996 in answering survey questions. Total assets is an indicator of business size; total liabilities is an indicator of level of financial risk. Five variables describing the business manager were utilized: age, gender, education, hours worked, and business manager working in another business. Business manager working in another business accounts for money generated from another source as an important resource to the business; it is a hedge against risk.

Characteristics of the family business included: business age, number of employees, home-based business, urban influence, perception of business success, and sole proprietorship. Business age is an indicator of the stability of the business and number of employees is an indicator of business size. Urban influence measures where the business was located (in a metro area, adjacent to a metro area, or in a rural area) and was based on the county in which the family business was situated (United States Department of Agriculture, 1993). There are certain times within business cycles or stages when cash flow problems are practically inevitable, so perception of business success was included in the analysis as a check for the phenomenon. It was assumed that if the business manager had cash flow problems that were not appropriate for the business cycle or stage, the manager would report less business success.

Family system characteristics Two variables that provided a view of the family financial situation were household non-business income and cash flow problems in the household. Household non-business income was created by subtracting the amount of money the household received from the family business from the household's total income; this income is considered a hedge against risk. Cash flow problems in the household was included within the analysis to account for the interdependent relationship of the business and household systems.

Two additional family system variables included balance between business needs versus family needs

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and degree of family tensions over business issues (household tensions). Household tensions summed the responses given by the household manager to the following seven statements: "confusion among family members over who does what in the business; confusion over who has the authority to make decisions; unequal ownership of the business by family members; unfair compensation for family members; failure to resolve business conflicts; unfair workloads among family members due to the business; and

competition for resources between family and business." A factor analysis indicated that these seven tension variables were one factor; as a result, a summed scale was computed ranging from 7 to 32 for household managers (Danes, Zuiker, Kean & Arbuthnot, 1999). Variables that indicated the demands on the family system were number of children in the household (under age 18) and marital status of the business manager.

Table 3
Measurement of Independent Variables

Variables	Measurement
Business System Characteristics	
Total assets (log)	Log of total business assets on Dec. 31, 1996
Liabilities (log)	Log of the total liabilities including debt of the business as of Dec. 31, 1996
Age of the business manager	# of years
Gender of the business manager	1 if female, 0 if male
Educational level of business manager	# of years of education
Number of hours worked -business manager	# of hours worked per week the business manager works in the business
Business manager works in another business	1 if yes, 0 if no
Age of the business in 1997	# of years: 1997 minus the year that the business began
Number of employees in business	# of employees including the business manager
Home-based business	Home-based business =1, otherwise=0
Metro (compared to rural)	1 if the business is located in a metro area, otherwise = 0
Adjacent to metro (compared to rural)	1 if the business is located adjacent to a metro area, otherwise = 0.
Perception of business success	1 = Very unsuccessful and 5 = Very successful
Sole proprietorship	1 = Yes and 0 = No
Family System Characteristics	
Household non-business income (log)	Log of household non-business income.
Business needs versus family needs	1 = Business needs come first and 5 = Family needs come first
Household tensions	Composite score ranging from 7 to 32
Number of children in household	# of children in household under the age of 18 years
Marital status of the business manager	1 if married, 0 not married
Intermingling of Resources	
Family members or others help out in the business without pay	1 = Never and 5 = Always
Temporary help is hired either in the business or household	1 = Never and 5 = Always
Business to family intermingling	1 = Yes and 0 = No
Family to business intermingling	1 = Yes and 0 = No

Intermingling of resources Variables included in this section described the types of resource transfers between the household and the business. The first variable determined if the household and the business used family members as non-paid employees to help out in the business and home. This variable was created by factor analysis conducted by Fitzgerald, Winter, Miller, and Paul (2001). The household manager was asked to respond to the following statement: "Family members, other relatives, or friends

who usually do not work in the business help out in the business without pay," whereas the business manager was asked to respond to: "Family members, other relatives, or friends help with the business without pay so you can spend more time with family." In order to create this first variable, the scores (ranging from "1=never" to "5=always") corresponding to each of these statements were averaged.

The second variable determined if the family or the

business hired temporary help for either the home or the business. This variable was also created by factor analysis conducted by Fitzgerald et al. (2001). The household manager was asked to respond to the following statement: "The family hires (paid) temporary help for either business or home," whereas the business manager was asked to respond to: "You hire (paid) temporary help for either home or business." To create this second variable, the scores (ranging from "1=never" to "5=always") corresponding to each of these statements were averaged.

The final two resource intermingling variables included business-to-family intermingling and family-to-business intermingling. These two variables mirrored variable creation by Haynes et al. (1999). For business-to-family intermingling, the business manager was asked a series of three questions regarding whether business real estate or other business financial assets were used to secure loans to finance family needs and if any family members owed money to the business. In addition, the household manager was asked if family cash flow problems were ever met by using business income to meet household needs. If any answers to these four questions were "yes," then business-to-family intermingling was coded as "1."

For family-to-business intermingling, the household manager was asked if the home or other household real estate/property was being used to secure loans to finance the business. The business manager was asked if business cash flow problems were ever met by using household income to meet business needs, if the business was currently indebted to any family members, and if relatives who did not live in the household helped out on an unpaid basis with the business. If any of the answers to these questions were "yes," then family-to-business intermingling was coded as "1."

Analysis Procedures

Preliminary analyses included frequencies, cross tabulations, and correlations on all of the variables. Financial variables were "hotdecked" to impute missing data (for further detail on imputations, see Winter et al., 1998). Pearson Product Moment Correlations indicated that there was no risk of multicollinearity. Since dependent variables were binomial, a logistic regression was used in the analyses. There were three logistic regressions analyzed. The entire sample (n=673) was used in the equations with cash flow problems in the business and the household individually. In the third equation, the

sample size was 466 because the focus was those family-owned business households with cash flow problems in both the business and household. Because the business and family systems are interdependent within family-owned businesses, cash flow problems in the business was included in the equation where cash flow problems in the household was the dependent variable, and cash flow problems in the household was included in the equation where cash flow problems in the business was the dependent variable.

A three-step hierarchical binary logistic regression was used in this study. In the first step, business system variables were analyzed; in the second step, family system variables were added to the model and analyzed; and in the third step, resource intermingling variables were added to the model and analyzed. In the bivariate logistic regression, the amount of chi-square (χ^2) score change, which was the same as -2 log likelihood score change multiplied by (-1), was used to estimate the significance of the model (Pampel, 2000). For this study, a chi-square (χ^2) score change greater than 23.68 and 29.14 with 14 degrees of freedom was considered significant at the .05 and .01 levels, respectively. The increases in the chi-square value from step to step (business system to family system to intermingling of resources) and the decreases in the -2 log likelihood value from step to step indicates improved goodness of fit, which is true for all three models.

Results

Descriptive statistics are shown in Table 4 for the three models: cash flow problems in the business, in the household, and in both the business and the household simultaneously. For continuous variables, a mean, standard deviation, and t-test results are provided; and chi-square results are provided for categorical variables.

Cash Flow Problems in the Business

Businesses with cash flow problems had higher total liabilities than businesses without cash flow problems ($66,467 vs. $43,162, respectively). Business managers who had cash flow problems were younger (44.8 vs. 47.6 years), worked more hours (44.9 vs. 40.4 hours), and were more likely to be located in a metro area (57.2 vs. 56.5%) than those who did not have cash flow problems. Business managers without cash flow problems were more likely to be women (32.4 vs. 24.5%) and have higher perceived business success (4.1 vs. 3.9) than those who did have cash flow problems.

Businesses with cash flow problems were more likely to report cash flow problems in the household (76.8 vs. 39.9%), were less likely to put family needs first over business needs (3.5 vs. 3.8), and had higher levels of

tension over business issues (11.6 vs. 10.0) than were those businesses without cash flow problems.

Table 4
Descriptive Statistics and Differences Between Business and Household Systems With and Without Cash Flow Problems[1]

Variables	Business (n=673)		Household (n=673)		Both (n=466)	
	Cash Flow Problems (n=367)	No Cash Flow Problems (n=306)	Cash Flow Problems (n=404)	No Cash Flow Problems (n=269)	Cash Flow Problems (n=282)	No Cash Flow Problems (n=184)
Business System Characteristics						
Total assets	106,330 (29131)	102,648 (36281)	101,780 (31627)*	108,975 (33616)	104,446 (27909)	107,310 (34184)
Liabilities	66,467 (54946)*[2]	43,162 (54237)	57,424 (54393)	53,536 (57887)	63,438 (54255)*	42,921(55604)
Cash flow problem in business	-----	-----	69.8%*	31.6%	-----	-----
Age of the business manager	44.81 (10.22)*	47.55 (11.91)	43.61 (9.99)*	49.73 (11.67)	43.86 (9.98)*	50.54 (12.13)
Female business manager	24.5% †	32.4%	29.7%	25.7%	27.0%	29.9%
Educational level of business manager	14.20 (2.40)	14.13 (2.34)	14.00* (2.31)	14.42 (2.44)	14.00 (2.38)	14.22 (2.46)
Number of hours worked - business manager	44.94 (14.68)*	40.41 (16.70)	42.12 (16.06)	44.02 (15.30)	44.46 (15.09)	42.85 (16.10)
Business manager works in another business	28.3%	32.0%	35.1%*	22.3%	31.2%	23.9%
Age of the business in 1997	17.49 (20.49)	17.68 (19.58)	16.51 (20.08)	19.17 (19.96)	17.69 (21.56)	20.27 (21.32)
Number of employees in business	8.09 (22.92)	8.96 (33.01)	6.01 (22.07)*	12.20 (34.68)	5.48 (11.17)†	10.09 (30.55)
Home-based business	53.4%	58.8%	57.2%	53.9%	57.1%	59.8%
Urban influence						
Metro area	57.2% †	56.5%	56.7%	57.2%	53.9%	52.2%
Adjacent to metro	12.3%	19.0%	13.3%	17.5%	12.4%	20.1%
Rural	30.5%	24.5%	29.5%	25.3%	33.7%	27.7%
Perception of business success	3.87 (0.79)*	4.13 (0.78)	3.85 (0.80)*	4.19 (0.75)	3.81 (0.79)*	4.25 (0.74)
Sole proprietorship	57.2%	61.8%	62.6%†	54.3%	61.0%	58.7%
Family System Characteristics						
Household non-business income	86,002 (38,361)	90,461 (35,185)	88,138 (35,747)	87,866 (38,851)	85,067 (38,185)	87,295 (38,873)
Cash flow problem in household	76.8%*	39.9%	-----	-----	-----	-----
Business needs versus family needs	3.51 (1.14)*	3.77 (1.19)	3.67 (1.16)	3.57 (1.18)	3.56 (1.16)	3.67 (1.22)
Household tensions	11.63 (4.97)*	10.04 (4.10)	11.65 (4.86)*	9.79 (4.11)	12.08 (5.09)*	9.63 (4.04)
Number of children in household	1.17 (1.29)	1.00 (1.24)	1.37 (1.34)*	0.67 (1.04)	1.33 (1.34)*	0.68 (1.08)
Business Manager married	92.4%	92.5%	92.1%	92.9%	92.2%	92.9%
Intermingling of Resources						
Family members or others help out in the business w/o pay	2.31 (0.98)	2.25 (1.04)	2.35 (0.97) †	2.18 (1.06)	2.43 (0.98)	2.31 (1.11)
Temporary help is hired either in the business or household	2.07 (0.94)	1.95 (0.97)	1.96 (0.91)	2.11 (1.03)	2.03 (0.92)	2.06 (1.03)
Business to family intermingling	41.7%*	20.6%	49.3%*	6.3%	51.4%*	4.9%
Family to business intermingling	63.8%*	28.1%	54.5%*	37.2%	66.0%*	28.3%

1. For continuous variables, a mean and standard deviation are provided, and a t-test was conducted; for dichotomous variables, a chi-square is conducted.
2. Statistical differences are indicated by † p < .05 or * p < .01 and are shown in the cash flow problem column for each group (the business, the household, and both the business and the household).

Furthermore, businesses with cash flow problems were more likely to report intermingling of finances from business to family (41.7 vs. 20.6%) and from family to business (63.8 vs. 28.1%) than were businesses without cash flow problems. Support was found for Hypothesis 1. There were differences in business system, family system, and resource intermingling characteristics between those family-owned businesses with cash flow problems in the business and those without cash flow problems in the business.

Cash Flow Problems in the Household
Households with cash flow problems had fewer total family business assets ($101,780 vs. $108, 975) and were more likely to report cash flow problems in the business (69.8 vs. 31.6%) than were those households without cash flow problems. In households with cash flow problems, business managers were younger in age (43.6 vs. 49.7 years), had fewer years of education (14.0 vs. 14.4 years), and were more likely to work in another business (35.1 vs. 22.3%) than business managers associated with households without cash flow problems. Households with cash flow problems had family businesses with fewer employees (6.0 vs. 12.2), had lower perceived business success (3.9 vs. 4.2), and were more likely to be sole proprietors (62.6 vs. 54.3%) than were households without cash flow problems.

Furthermore, households with cash flow problems were more likely to have higher levels of tension over business issues (11.7 vs. 9.8), have more children in the household (1.4 vs. 0.7), and were more likely to have family members or others help out in the family business without pay (2.35 vs. 2.18) than were their counterparts. Additionally, these households with cash flow problems were more likely to report intermingling of finances from business to family (49.3 vs. 6.3%) and from family to business (54.5 vs. 37.2%) than were households without cash flow problems. Support was found for Hypothesis 2. There were differences in business system, family system, and resource intermingling characteristics between those family-owned businesses with cash flow problems in the household and those without cash flow problems in the household.

Cash Flow Problems in Both Business and Household
Businesses that reported simultaneous cash flow problems in the business and household had higher total liabilities ($63,438 vs. $42,921), had younger business managers (43.9 vs. 50.5 years), had fewer

employees (5.5 vs. 10.1), and had lower perceived business success (3.8 vs. 4.3) than those who reported no cash flow problems in either the business or household. Businesses that reported simultaneous cash flow problems reported higher levels of tension over business issues (12.1 vs. 9.6) and had more children in the household (1.3 vs. 0.7) than did their counterparts. Furthermore, businesses that reported cash flow problems in both the business and household were more likely to report intermingling of finances from business to family (51.4 vs. 4.9%) and from family to business (66.0 vs. 28.3%) than were those without cash flow problems. Support was found for Hypothesis 3. There were differences in business system, family system, and resource intermingling characteristics between those family-owned businesses with cash flow problems in both the business and household and those without cash flow problems in both the business and household.

Logistic Regression
Cash Flow Problems in the Business
Table 5 provides the results for the logistic regression. An odds ratio over 1.00 indicates a positive effect, and an odds ratio under 1.00 indicates a negative effect (Pampel, 2000). Businesses with more liabilities had more cash flow problems in the business. Being a female business manager and working in another business were significantly negatively associated with the log odds of having cash flow problems. The log odds of having cash flow problems in the business were 0.48 lower for female business managers than for male business managers and 0.46 lower for business managers working in another business than business managers only working in the family business. Businesses in a rural county were more likely to have cash flow problems than those adjacent to metro areas. Perceiving their businesses as less successful was a characteristic of business managers who owned businesses experiencing cash flow problems. If the household was experiencing cash flow problems and if the business manager put the business needs over family needs, the odds were that the family business was having cash flow problems. If family members helped out in the business without pay, the odds were that the family business was not experiencing cash flow problems in the business. However, if there was intermingling of resources from the family to the business, the odds were that the family business was experiencing business cash flow problems. Support was received for Hypothesis 4. Business system, family system, and resource intermingling

characteristics influenced the probability of experiencing cash flow problems in the business.

Cash Flow Problems in the Household
If the family business was experiencing cash flow problems, it was also more likely to have cash flow problems in the household. The coefficient of age of the business manager showed that a 1-year increase in age lowered the log odds of having cash flow problems in the household by 0.03, and the coefficient divided by the standard error indicated that the coefficient was significantly different than zero. The coefficient of the

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educational level of the business manager showed that 1 additional year of schooling lowered the log odds of having cash flow problems in the household by 0.12. The business manager working in another business increased the log odds of having cash flow problems in the household. Perceiving their businesses as less successful was a characteristic of business managers who had households experiencing cash flow problems. Having higher levels of tensions over business issues and an additional child in the household increased the odds of having cash flow problems in households of family businesses.

Table 5
Logistic Regression to Predict Cash Flow Problems in the Business, Household, and in Both the Business and Household

Variables	Cash Flow Problems in the Business (n=673)		Cash Flow Problems in the Household (n=673)		Cash Flow Problems in the Business and the Household (n= 466)	
	Beta (SE)	Odds	Beta (SE)	Odds	Beta (SE)	Odds
Business System Characteristics						
Total assets (log)	-0.03 (0.04)	0.97	-0.04 (0.04)	0.96	-0.05 (0.06)	0.95
Liabilities (log)	0.06 (0.02)*	1.06	0.01 (0.02)	1.01	0.08 (0.03)*	1.08
Cash flow problem in business	-----	-----	1.63 (0.24)*	5.09	-----	-----
Age of the business manager	0.01 (0.01)	1.01	-0.03 (0.01)†	0.98	-0.02 (0.02)	0.98
Gender of the business manager	-0.48 (0.23)†	0.62	0.39 (0.26)	1.47	-0.30 (0.32)	0.75
Educational level of business manager	0.05 (0.04)	1.05	-0.12 (0.05)*	0.89	-0.05 (0.06)	0.95
Number of hours worked -business manager	0.01 (0.01)	1.01	-0.01 (0.01)	0.99	0.01 (0.01)	1.01
Business manager works in another business	-0.46 (0.24)†	0.63	0.58 (0.28)†	1.79	0.06 (0.34)	1.07
Age of the business in 1997	-0.01 (0.01)	1.00	0.00 (0.01)	1.00	-0.02 (0.01)	0.98
Number of employees in business	-0.00 (0.00)	1.00	-0.01 (0.00)	1.00	-0.03 (0.01)†	0.98
Home-based business	0.05 (0.22)	1.05	-0.45 (0.25)	0.64	-0.38 (0.31)	0.68
Urban influence						
Metro area (rural: reference group)	0.02 (0.24)	1.02	0.15 (0.27)	1.16	0.44 (0.34)	1.55
Adjacent to metro (rural: reference group)	-0.74 (0.31)†	0.48	-0.30 (0.35)	0.74	-0.76 (0.46)	0.47
Perception of business success	-0.34 (0.13)*	0.71	-0.46 (0.15)*	0.63	-1.02 (0.20)*	0.36
Sole proprietorship	-0.04 (0.22)	0.96	-0.14 (0.25)	0.87	-0.30 (0.31)	0.74
Family System Characteristics						
Household non-business income (log)	-0.01 (0.03)	0.99	0.02 (0.03)	1.02	0.02 (0.04)	1.02
Cash flow problem in household	1.62 (0.23)*	5.07	-----	-----	-----	-----
Business needs versus family needs	-0.23 (0.09)*	0.79	0.11 (0.10)	1.12	-0.26 (0.12)†	0.77
Household tensions	0.01 (0.02)	1.01	0.08 (0.03)*	1.08	0.08 (0.03)†	1.08
Number of children in household	-0.09 (0.09)	0.92	0.41 (0.11)*	1.51	0.30 (0.14)†	1.35
Marital status of business manager	-0.34 (0.37)	0.71	-0.19 (0.41)	0.83	-0.90 (0.53)	0.41
Intermingling of Resources						
Family members or others help out in the business without pay	-0.21 (0.10)†	0.81	0.16 (0.11)	1.18	-0.10 (0.14)	0.91
Temporary help is hired either in the business or household	0.14 (0.11)	1.14	-0.22 (0.12)	0.81	-0.02 (0.15)	0.98
Business to family intermingling	0.43 (0.23)	1.54	2.66 (0.31)*	14.28	3.47 (0.44)*	32.15
Family to business intermingling	1.48 (0.21)*	4.38	-0.26 (0.24)	0.77	1.29 (0.31)*	3.65
Constant	0.25 (1.32)	1.28	2.95 (1.48)†	19.09	6.21 (1.89)*	495.14
-2 Log likelihood	693.15		572.33		354.59	
Chi-square (df)	234.29 (24)*		333.39 (24)*		270.66 (23)*	
Pseudo R-square (Nagelkerke)	0.39		0.53		0.60	

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† $p < .05$; * $p < .01$

Finally, if there was intermingling of resources from the business to the family, the odds were that the household was experiencing cash flow problems. Support was received for Hypothesis 5. Business system, family system, and resource intermingling characteristics influenced the probability of experiencing cash flow problems in the household.

Cash Flow Problems in Both Business and Household
When the business had more liabilities, it was more likely that cash flow problems were experienced in both the business and family. Increasing the number of employees in the family business by 1 lowered the log odds of having cash flow problems in both the family business and household by 0.03. Perceiving their businesses as less successful was a characteristic of business managers who were experiencing cash flow problems in both their business and household.

When the business manager placed business needs over family needs, the odds were that cash flow problems were being experienced simultaneously in both the business and household. Having higher levels of tensions over business issues and an additional child under the age of 18 in the household increased the log odds of having cash flow problems in both the family business and household.

If there was intermingling of resources from the business to the family and from the family to the business, the odds were that both the business and household were experiencing cash flow problems. Support was received for Hypothesis 6. Business system, family system, and resource intermingling characteristics influenced the probability of experiencing cash flow problems in both the business and household.

Hierarchical Logistic Regression
Cash Flow Problems in the Business
Table 6 summarizes the model comparisons of the hierarchical bivariate logistic regression. In the first model, the business system variables χ^2 score was 82.48 with 14 degrees of freedom (p<0.01). In the second step ($\chi^2 = 175.51$, df = 20, p<0.01), the χ^2 increased by 93.03 with 6 degrees of freedom (p<0.01), by including the family system variables. At the third step ($\chi^2 = 234.29$, df = 24, p<0.01), the χ^2 score increased by 58.78 with 4 degrees of freedom (p<0.01), when adding the intermingling of resource variables.

These significant increases of χ^2 at each step indicate that variables from all three components increase the probability of having cash flow problems in the business. The family system variables χ^2 score change was the largest ($\chi^2 = 93.03$), indicating that this step contributed the most to explaining the probability of having cash flow problems in the business. Support was found for Hypothesis 7 but not for Hypothesis 8.

Cash Flow Problems in the Household
The χ^2 score at the first step with the business system variables was 185.80 with 15 degrees of freedom (p<0.01). At the second step ($\chi^2 = 222.95$, df = 20, p<0.01), the χ^2 increased by 37.15 with 5 degrees of freedom (p<0.01), by including the family system variables. At the third step ($\chi^2 = 333.39$, df = 24, p<0.01), the χ^2 score increased by 110.44 with 4 degrees of freedom (p<0.01), by adding the intermingling of resource variables. In this model, the business system variables χ^2 score change was the largest ($\chi^2 = 185.80$), indicating that this step contributed the most to the improvement of the model explaining the probability of having cash flow problems in the household. Based on these findings, both Hypotheses 7 and 8 are rejected for this model.

Cash Flow Problems in Both Business and Household
In explaining the probability of simultaneous cash flow problems in both the business and the household system, the significant increases in χ^2 score at each step indicate that variables from all three components--the business system, family system, and the intermingling of resources variables--improved the explanation of the probability of having both cash flow problems in the business and household simultaneously. In this model, the intermingling of resource variables χ^2 score change was the largest ($\chi^2 = 136.75$), indicating that this step contributed the most to predicting the probability of having both cash flow problems in the business and household. Support was found for both Hypotheses 7 and 8.

Conclusions and Implications
This research contributes information to better understand family-owned businesses that experience cash flow problems within the business, within the household, or within both the family and the business systems simultaneously. The analysis, guided by the Sustainable Family Business Model (Stafford et al., 1999), indicates that all three dimensions--the family

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system, the business system, and the overlap of those two systems--significantly help to explain cash flow problems in the business, the household, and when both entities have cash flow problems. Not only did this analysis confirm the importance of these three dimensions in understanding cash flow problems within family-owned businesses, it helps to distinguish the relative significance of each dimension within the complex dynamic that occurs when there are cash flow problems.

Results of this study showed that there were differences in selected business system, family system, and resource intermingling characteristics between family-owned businesses that have cash flow problems and those that do not in all three models (Hypotheses 1, 2 and 3). The findings from these three hypotheses have some clear implications for the financial counseling process because in 42% of the cases, there were cash flow problems in both the business and household systems. These findings indicate that financial counselors must determine first if there is a family business. If there is a family business, then they need to determine whether there are separate record-keeping systems for the business and the household and how finances have been intermingled between the business and household.

Table 6
Hierarchical Bivariate Logistic Regressions for Cash Flow Problems in the Business, in the Household, and in Both the Business and the Household

Model	Cash Flow Problems in the Business (n=673)			Cash Flow Problems in the Household (n=673)			Cash Flow Problems in the Business and the Household (n= 466)		
	χ^2 (df)	-2Log likelihood	$\Delta\chi^2$ (Δdf)	χ^2 (df)	-2Log likelihood	$\Delta\chi^2$ (Δdf)	χ^2 (df)	-2Log likelihood	$\Delta\chi^2$ (Δdf)
Business system variables	82.48* (14)	844.96	82.48* (14)	185.80* (15)	719.91	185.80* (15)	111.11* (14)	514.14	111.11* (14)
Family system variables	175.51* (20)	751.93	93.03* (6)	222.95* (20)	682.77	37.15* (5)	133.91* (19)	491.34	22.80* (5)
Intermingling variables	234.29* (24)	693.15	58.78* (4)	333.39* (24)	572.33	110.44* (4)	270.66* (23)	354.59	136.75* (4)

A chi-square (χ^2) score change greater than 6.63 with 1 degree of freedom is considered significant at .01 levels.
* p < .01

Also, findings confirmed that business system, family system, and resource intermingling characteristics influenced the probability of having cash flow problems in all three models (Hypotheses 4, 5, and 6). It is important that financial counselors do not assume that it is solely business characteristics that create cash flow problems at any point in time when assisting business-owning families. At the same time questions about the cash flow of the business are being asked, additional questions need to be asked about cash flow problems within the household as well as how resources (both financial and human capital) are allocated between business and family needs.

A paradox evolved when investigating the relative contribution of the three dimensions in explaining the phenomena of family-owned businesses with cash flow problems (Hypotheses 7 and 8). The family system variables contributed the greatest proportion of the explanatory power in illuminating cash flow problems in the business (χ^2 = 93.03), and the business system variables contributed the greatest proportion of explanatory power in identifying cash flow problems in the households that own family businesses (χ^2 = 185.80). Furthermore, the intermingling of finances contributed the greatest proportion of explanatory power in the model where cash flow problems were experienced in both the business and household systems simultaneously. One might have expected that business variables would have best explained the business cash flow problems and likewise for the household, but that did not hold true. These findings

confirmed the statement by Haynes et al. (1999, p. 238), "If resources are intermingled, then any assessment of the well-being of the family (or business) is incomplete without an assessment of the well-being of the business (or family)." The findings also provide support for the theoretical proposition of the Sustainable Family Business Model that a variety of forces operate at the intersection of business and family systems during disruptions in regular transactions such as cash flow problems (Davis & Tagiuri, 1982; McClendon & Kadis, 1991; Stafford et al., 1999).

That variety of forces is reflected within the findings in support of Hypotheses 7 and 8. Financial counselors tend to ask questions about finances only. There were two variables within the group of family characteristics that stood out. One, of course, was the lack of monetary resources; the other, however, reflected concerns about how time and energy of household members (in addition to money) were allocated to address competing demands between the business and household. The financial counselor might begin with questions in this arena first to obtain clues about the competition for resources. This line of questioning would establish a base of understanding. That set of questions might then follow with more specific ones about the financial circumstances of each separate system and the intermingling of resources between the business and the family.

Contributions to Research
In the past, research on family business finances has consisted primarily of descriptive findings about the business system. This research study goes beyond describing and addresses the complexity that is presented by family business finances. It includes factors from both the household and business system simultaneously, and it investigates the various circumstances in which cash flow problems may occur. Although Haynes et al. (1999) have established that family businesses extensively blend business and household resources, this study investigated the impact of the blending of resources on the cash flow of the family business.

The study could have stopped at the point of inclusion of the factors reflecting family system, business system, and intermingling of resources characteristics. However, it contributes even more to the body of research on family business finances by identifying which of these three categories of characteristics contributes the most to the explanation of cash flow

problems in the business system, the household system, and where cash flow problems existed in both the business and family systems.

Implications for Financial Counselors
Financial counselors may utilize this new knowledge as they attempt to address cash flow problems with families who own businesses. The implication for financial counselors is that investigating whether a family owns a family business is crucial in the initial stages of their work. If there is a family business, and the household is experiencing cash flow problems, the study indicates that there is likely a similar cash flow problem within the business, which makes the information gathering stage more complex. For example, Pulvino, Lee, and Pulvino (2002) suggest that counseling with a client progresses through four strategic stages: initiating, exploring, understanding, and acting. During the exploring stage, the financial counselor begins to determine the important issues relating to the client's needs, purposes, or goals. It is here where the financial counselor deciphers whether the presenting concern is the real problem or if there is some other underlying issue that is the actual problem leading to the financial difficulties that stimulated the client to seek assistance (e.g., decisions in the family business that affect household cash flow management or vice versa). Financial counselors who encounter clients with family businesses have a complex situation to unravel throughout the entire counseling progression due to the potential intermingling of finances across the family and business systems. More questions that address the potential intermingling of finances between the two systems need to be asked in the exploring stage so that the financial counselor can begin to move into the understanding stage and assist the client in generating plans for problem solving (Pulvino et al., 2002).

Findings based on this research indicate there may be a different array of financial information needed to properly assess and help a family business and/or the family that owns the business. The questions that might be asked could be outside the usual financial spheres where one would normally garner information. Information indicating the amount of intermingling of resources will help in understanding cash flow problems in the business and the household. For instance, the more families shared financial resources and assets with the business, the higher the probability of business cash flow problems. Accordingly, the more businesses shared financial resources and assets with the family, the higher was the probability of

family cash flow problems. Since these transactions do not show up on balance sheets, this information can easily go unnoticed, resulting in a huge source of debt and family frustration being overlooked.

A financial counselor could ask specific questions to determine if business-to-family financial intermingling is occurring such as: (a) Was business real estate being used to secure loans to finance family needs? (b) Were other business financial assets being used to secure loans to finance family needs? (c) Did you ever meet your family cash flow problems by using business income? and (d) Did any family members owe money to the business? Questions that could be asked to find out if family-to-business intermingling is occurring include: (a) Was your home being used to secure loans to finance the business? (b) Was other household real estate or property being used to secure loans to finance the business? (c) Did you ever meet your business cash flow problems by using family income? (d) Is the business currently indebted to any family members? and (e) Does any family member work for the business without pay?

Future Research

This systemic study of cash flow problems within family-owned businesses utilized cross sectional data, therefore, only associations among variables of interest can be drawn. However, in order to determine causation, longitudinal data would be needed to understand more fully the dynamics of the intermingling of finances between the family and business systems and its impact on cash flow problems within a family-owned business. Furthermore, investigation of the intermingling of finances is needed in order to determine at any "snapshot" in time whether these variables are indicators of a highly efficient use of resources, as proposed by Haynes et al. (1999), or whether they are potential predictors of firm failure. If both interpretations were credible outcomes of the intermingling of finances, then having longitudinal data would create an opportunity for an investigation of a threshold at which the highly efficient use of resources (a constructive outcome) progresses down the more dangerous path of prolonged and serious cash flow problems that could eventually lead to the dissolution of the business. Along with a financially troubled family-owned business usually comes a family that is hurt by not only financial difficulties but also the tension and conflict that often accompanies serious cash flow problems (Danes & Amarapurkar, 2001; Danes, Fitzgerald, et al., 2000; Danes, Leichtentritt, et al., 2000; Danes & Rettig, 1993; Kaye, 1991).

The combination of the financial woes and the conflict that often results in both of the business and family systems can have a negative impact on problem-solving dynamics (Danes, Fitzgerald, et al., 2000). That dynamic could then permeate to the perception of business success as indicated by the findings of this study and potentially affect work productivity within the business (Danes & Amarapurkar, 2001; Danes, Fitzgerald, et al., 2000; Kaye, 1991). And when managers worry about capital needed for their business, they have less financial success (Danes & Amarapurkar, 2001; Konijn & Plantenga, 1988). This complex dynamic within the family system is critical because a key predictor in the failure of newly founded firms is problems with cash flow (Laitinen, 1992). Because the Sustainable Family Business Model (Stafford et al., 1999) addresses this complex dynamic of resources and interpersonal transactions at the intersection of the family and business systems, it is critical that this theoretical model be utilized as the foundation for future research investigating disruptions such as cash flow problems.

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