

Intergenerational differences in financial structure and performance of family firms: a comparison with non-family firms¹

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Abstract

A limited number of previous studies focused on intergenerational differences among family firms. This paper investigates whether the financial structure and performance of first-, second-, and third generation-managed family firms is different. Using a sample of 622 Flemish firms we found evidence that substantial balance structure differences exist between first-, second-, and third generation family firms. However, no distinctions in financial performance could be observed. Based on Ancova techniques we further analyzed the capital structure of 622 family firms in comparison with 118 non-family firms by observing the proportion of retained earnings, short term debt, and long term debt as a percentage of total assets. The most important findings are that third generation family firms have substantially more retained earnings and significantly less short term and long term debt in their balance structure than first generation companies. In comparison with non-family firms, the largest gap is situated between third generation family firms and non-family firms, with the latter having a much lower proportion of retained earnings and a substantial higher amount of short term debt. Again, no significant differences in financial performance could be observed between different generations of family firms and non-family businesses. As such, this paper supports the importance of a “heterogeneity approach” for further research into family firms.

Key Words: family firms, financial structure, pecking order hypothesis, financial performance

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Introduction

Family firms are in most countries a very important engine of the economy. In Western Europe, South and East Asia, the Middle East, Latin America, and Africa, the vast majority of private and publicly traded firms are family controlled. And this statement also applies to Belgium, where more than 70% of all companies are considered as family firms, which altogether generate more than 55% of the total GNP. As a consequence the interest in family business studies has increased rapidly over the years, leading to a distinctive legitimate field of study in organizational research.

An often recurring issue in the discussion of family firms concerns the comparison of their financial structure and financial performance with their non-familial counterparts. Starting from agency theoretical ideas or insights distracted from the pecking order theory, one tries to explain financial behavior differences through the balancing of benefits and costs of debt or the search for an optimal sequential use of financing alternatives (Jalilvand & Harris, 1984; Jensen, 1986; Myers, 1984; Myers & Majluf, 1984).

The aim of this empirical research is to further refine previous insights into the financial structure differences between family and non-family firms. Based on the fact that an increasing number of researchers doubt the homogeneity of family firms (Sharma, 2002; Tsang, 2002) we try to capture this central idea by making a distinction between first-, second- and third generation family firms. In that way this paper contributes to the literature by first looking at generational financial differences within the group of family firms, which makes a comparison with non-family businesses more meaningful.

The paper is structured as follows: the first section starts with a literature review resulting in the formulation of testable hypotheses. The second section provides information on the sample and discusses the statistical methodology. In the third section the empirical results are presented and in the fourth section the results are discussed. Conclusions and recommendations for future research are included in the last section.

Literature review and formulation of hypotheses

Although there has been considerable interest in exploring family businesses' financial structure and performance, research appears to have mainly concentrated on a comparison of family firms considered as a "homogeneous group" and non-family firms. It's beyond doubt that this whole discussion is strongly related to the importance of establishing a clear definition of a family firm. And up till now, considerable effort has been put into this matter, but these efforts mostly define family firms so that they can be distinguished from non-family firms (e.g., Chua, Chrisman, Sharma, 1999; Litz, 1995).

Unarguably these research efforts have improved our understanding of these firms and the way in which they "financially" behave, but one can recently observe that the idea of an either-or scenario is losing ground in empirical research (Tsang, 2002). Instead scholars are trying to find patterns of varying extent and nature of family involvement in a firm leading to various types of family involvement or family firm typologies (Astrachan, Klein, Smyrnios, 2002; Sharma, 2002).

This paper adds to the existing empirical literature by conceptualizing this idea of "heterogeneity" of family firms by first investigating intergenerational differences in financial

structure and performance before making the comparison with non-family controlled businesses.

Examples of previous research that dealt with generational issues in family firms are rather scarce and are usually only a small part of a larger focus on other family firm issues (Beckhard, Dyer, 1983; Davis, Harveston, 1999; Dyer, 1988; Hershon, 1975; Schein, 1983; Poutziouris, Sitorus, 2001).

In their book published in 1997 Gersick et al. describes the development of ownership over time in a family business. According to them a family firm can undergo three general stages of ownership starting with ownership held by the founding owner or couple, after whom second-generation sibling partners may jointly own the firm, and finally ownership passes to a third-generation cousin consortium. Obviously this evolution results in specific characteristics for each of the three stages, with dilution of ownership, an increasing likelihood of passive investors, conflicting goals, and reduced ability to form a majority for decision-making as possible outcomes. The study of McConaughy and Phillips (1999) examines the differences between founder-controlled firms and firms controlled by descendants or relatives of the founder. They observed that founder-controlled firms invest more in capital assets and research and development, but are less profitable than descendant-controlled firms. Other researchers of family firms have pointed out that as these firms move into a subsequent generation, another style of management is employed (Aronoff, 1998; Cole, Wolken, 1995; Coleman, Carsky, 1999; Dyer, 1988; Filbeck, Lee, 2000; Miller, McLeod, Oh, 2001; Schein, 1983). These different characteristics will lead to different investment and financing decisions resulting in different asset and liability positions and profit figures. This brings us to the formulation of the following hypothesis:

H1: First-, second- and third generation family firms will differ in their financial structure and performance.

When comparing the capital structure of family- and non-family firms, researchers often start from the frameworks of agency theory and the “pecking order”. According to Myers (1984) firms have a preferred hierarchy for financing decisions. The highest preference is to use internal financing before resorting to any form of external funds. When a firm must use external funds, the preference is to use the following order of financing sources: debt, convertible securities, preferred stock, and common stock.

Previous research concerning the different sources of capital employed by family firms has apparently revealed a “pecking order” with a clear-cut preference for internal financing, followed by debt and equity financing (Coleman, Carsky, 1999; Romano, Tanewski, Smyrnios, 2000; Poutziouris, 2002; Erikson et al., 2003; Morck, Yeung, 2003). Also in the case of small companies, owners have a clear preference for retained earnings instead of higher levels of indebtedness or the entrance of new shareholders (Barton, Matthews, 1989). Further empirical research revealed that older and larger family firms use more equity financing and less debt financing than younger and smaller family firms (Cole and Wolken, 1995; Coleman and Carsky, 1999). Our second hypothesis is therefore:

H2: First-, second- and third generation family firms, and non-family firms will differ with respect to their proportion of retained earnings in their balance structure.

Next to the pecking order theory, Jensen and Meckling (1976) showed that shareholder-bondholder agency conflicts can arise, due to shareholders’ incentives to expropriate the

bondholders' wealth. Casson (1999) and Chami (1999) propose that this divergence of interests between bondholders and shareholders is less severe in family firms owing to the owner's stress on firm survival and firm value. In that way they anticipate a higher cost of debt for non-family companies.

With respect to debt maturity and agency problems, Barclay and Smith (1995) stated that in small owner-managed firms, which are expected to be faced with a high level of information asymmetry, shortening debt maturity would be a solution for those problems. Also Stohs and Mauer (1996) found some support for the fact that debt maturity is used to control for conflicts of interest between debt holders and equity holders.

Gallo and Vilaseca (1996) found that the debt/equity ratio of family firms is usually lower, due to the fact that banks in the first place assess the personal situation of the owner(s) and take no account of the refunding capacity of the company. Also Lyagoubi (2003) suggested that family businesses to a lesser extent rely on debt. According to his research this can be attributed to the strong desire of family shareholders of having an autonomous right to decide and the fear of losing control to creditors. Finally Poutziouris, Michaelas and Chittenden (1998) found evidence that family firms had lower leverage.

In comparison with previous studies other researchers came to quite opposite results. Menéndez-Requejo (2003) found that small family firms are higher indebted. They depend more extensively on both short-term and long-term debt. Based on research in Thailand and Australia Wiwattanakantang (1999) and Harijono, Ariff, Tanewski (2004) also observed higher levels of leverage among family controlled firms. On the other hand Bork, Jaffe, Jane, Dashew, and Heisler (1996) found that family businesses, and especially first generation ones, are reluctant to use debt financing. Finally, a recent study of Sonfield and Lussier (2004) compared first-, second-, and third generation family firms with respect to some general characteristics. One of their results was the fact that there exist some significant differences in the debt to equity financing of family firms of different generations. This brings us to the formulation of the following hypotheses:

H3a: First-, second- and third generation family firms, and non-family firms will differ with respect to their proportion of short-term debt in their balance structure.

H3b: First-, second- and third generation family firms, and non-family firms will differ with respect to their proportion of long-term debt in their balance structure.

Regarding the financial performance of firms, the study of Jensen and Meckling (1976) shows that as a result of the manager-shareholder agency problem, the larger a firm becomes, the higher its agency costs will be due to the necessary increased monitoring. Family owned businesses however are different because they are characterized by overlapping owner/manager relationships, with reduced agency costs as a consequence (Williamson, 1981). Morck et al. (1988) and McConnell, Servaes, (1990) show that increased managerial ownership leads to improved performance, owing to reduced opportunities for managers to entrench themselves. Gorriz and Fumas (1996) found that family firms show a greater efficiency level (value added per worker) than non-family firms, but no proof was given of any difference concerning profitability. Gallo and Estapé (1992) and Coleman and Carsky (1999), on the other hand, reveal that family firms have a higher ROE, respectively ROA than non-family firms. Finally, in their research of founder versus descendant controlled family firms, McConaughy and Phillips (1999) detected substantial profitability dissimilarities between those two types of companies. According to their study, descendant controlled firms are far more profitable than

founder controlled firms, due to a better cost control or assets management of the former. We therefore propose the following hypothesis:

H4: First-, second- and third generation family firms, and non-family firms will differ with respect to their financial performance.

Data set

In our paper both quantitative and qualitative data will be used in order to investigate intergenerational financial differences within family firms and the extent to which they relate to non-family businesses. The qualitative information was taken from a large-scale written survey sent to the managing directors of 8,367 companies in the Flanders region (northern part of Belgium) of Western Europe. The survey population was constructed along the following lines. Based on size, industry and location characteristics of all Flemish firms that have published financial statements (all companies, private as well as public, with limited liability of the shareholders have to publish their financial statements in Belgium) over the years 1994-1999, a three dimensional matrix was designed. In a second step 10% of that population was chosen at random according to the percentages of the three-dimensional matrix. Within that group of 21,640 companies, those with at least five full time employees received a questionnaire (8,367 companies). This implies that start-ups and micro-firms were excluded from the study. A total of 839 usable responses (10.03%) were received. Most of the respondents described themselves either as managing director (40%), CEO (34%) or financial director (6%). Using chi square tests we compared firm size (employment, assets), industry and location (province) between the responding firms (839) and the original 8,367 firms of the survey population. With respect to all variables, except firm size, the population of respondents had the same characteristics as the original population of 8,367 firms. Respondents were, however, found to be significantly ($p < 1\%$) larger than the original 8,367 firms. Further statistical analyses on the characteristics of the hundred earliest versus the hundred latest respondents did not reveal the existence of a non-response bias.

Besides this survey information quantitative data was gathered for all of the 839 firms using the Bel-first DVD of Bureau Van Dijk, containing detailed financial information on 304.000 Belgian companies. For the period 1994-1999 vertical analysis was used in order to scale each entry of the balance sheet with total assets. In that way a nonsensical comparison between firms based on absolute measures could be avoided. Finally means were computed based on these six year observations for each company.

With regard to identifying family firms within our sample of 839 companies, one can appeal to different definitions used in the literature, covering dimensions such as family management (e.g. Daily, Dollinger, 1992), perception to be a family business (e.g. Binder, Hamlyn, 1994), family ownership (e.g. Cromie et al., 1995) or an intergenerational transfer of ownership (e.g. Churchill, Hatten, 1987). In this paper a firm is classified as a family firm when the family possesses the majority of the shares and the CEO perceives the firm as a family firm. Non-family firms were defined as firms that do not perceive themselves as family firms, and in which a family does not own the majority of the shares. This classification is consistent with Westhead's (1997) definition. Due to mixed ownership/perception patterns however 99 firms from the population of respondents could not be identified as family or non-family firm. Resting on previous definition the sample contained 118 non-family firms and 622 family businesses.

This group of 622 family firms were further categorized as a first-, second- or third generation-managed family firm. For this purpose we relied on the questionnaire that assessed which generation at that moment was actively involved in the management of the firm. The classification was made in such a way that in second or third generation family firms other members of earlier generations could already be retired from the firm or deceased, meaning that not all generations need to be currently participating in the company.

This is completely in line with previous research dealing with this topic (Sonfield, Lussier, 2004; Beckard, Dyer, 1983; Davis, Harveston, 1999; Dyer, 1988; Hershon, 1975; Schein, 1983; Handler, 1989; Kelly, Athanassiou, Crittenden, 2000). Companies of younger generations (above third generation) were categorized under the third generation family firms. For 19 of the 622 family firms there was no information available in the survey on the generation actively involved in the management of the company. Table 1 highlights some of the characteristics of the companies included in our survey.

Table1. Profile of Sample Firms

	1 st generation	Family Firms 2 nd generation	3 rd generation	Non-family firms
Number of firms (total: 721)	203 (28.2%)	254 (35.2%)	146 (20.2%)	118 (16.4%)
Industry: manufacturing (total: 360)	98	122	83	57
trade & services (total: 361)	105	132	63	61
Employment (FTE): 1-5 (total: 23)	7	7	8	1
6-25 (total: 423)	143	161	81	38
26-50 (total: 155)	36	59	31	29
51-100 (total: 57)	10	16	14	17
101-250 (total: 31)	4	7	7	13
> 250 (total: 30)	2	3	5	20
Age (Mean)	24.07	34.68	59.96	33.77
Mean assets (Euro)	9,676,379	14,624,257	24,443,685	321,542,394

Most of the family-controlled businesses are of the second generation and constitute more than 35% of our total sample. On average, they have been in business for almost 35 years, whereas first- and third generation family firms have 24 and 60 years of operation respectively. In each of the three types of family firms, more than 60% of them have total employment that doesn't exceed 25 fulltime equivalents, meaning that we in general are dealing with rather small firms. With respect to the non-family firms, they account for more than 16% in our sample. Their average number of years of operation comes close to that of second generation family firms, but when it comes to size we can clearly observe higher average total assets and a higher number of fulltime employees in comparison with all family firms. Finally, for each of the four types of companies we find a more or less equal distribution between manufacturing firms and firms active in the trade and services industry.

Methodology

In this study we will first of all perform an analysis of variance (ANOVA) to explore differences in the financial structure and financial performance of first-, second- and third generation family firms. Analysis of variance is used to test whether the mean dependent variable scores obtained in various groups differ significantly. This is achieved by determining how much variation in the dependent variable scores is attributable to differences between various values of the independent variable, and comparing this with the error term, which is attributable to variation in the dependent variable scores within each of the groups. As can be derived from our first hypothesis, this test will be applied to each of the balance sheet entries of all the family firms, including some ratio's measuring the liquidity, profitability and solvency position of the company.

In a second phase analysis of covariance (ANCOVA) will be used to detect dissimilarities in the capital structure and financial performance of different generations of family firms and non-family businesses, while controlling for some variables (covariates) which are described below. Analysis of covariance is a logical extension to ANOVA by providing a means to statistically adjust for variation that is thought to influence the dependent variable, but that has not been controlled by the independent variable. The rationale underlying this technique is that the effect of the independent variable on the dependent variable is revealed more accurately when the influence on the dependent variable represented by the covariate(s) is equal across the various groups. Table 2 describes the dependent and independent variables as well as the covariates employed in this study.

Table 2. Variables

Dependent variables: Retained earnings Short-term debt Long-term debt Return on assets (ROA)	Ratio of total retained earnings to total assets Ratio of total short-term debt to total assets Ratio of total long-term debt to total assets Earnings before interest and taxes divided by net operating assets
Independent variable: Type of firm	1 if 1 st generation family firm, 2 if 2 nd generation family firm, 3 if 3 rd or younger generation family firm, 4 if non-family firm
Covariates: Age Employment Industry	Present date – date of formation of company Number of employees in fulltime equivalents 0 if manufacturing, 1 if trade & services

Even though preliminary checks are conducted to ensure that there is no violation of the assumptions underlying a one-way between-groups analysis of (co)variance, we also applied, for completeness, the Kruskal-Wallis statistical test, as the non-parametric alternative to An(c)ova. In addition, when significant differences are found between the four types of firms based on Anova (overall F-ratio is significant), post-hoc comparisons will be executed in order to examine all possible combinations among types. Depending on whether the assumption of homogeneity of variances is met, the Tukey method or the Dunnett's C test (both based on the q-statistic distribution) will be used respectively.

Empirical results

To test our first hypothesis we employed the Anova technique to the group of family-controlled businesses. The results are summarized in table 3. For convenience of comparison only

distinctions in the balance structure and ratio's that appear to be significant at the 5% level were included in the table.

The table clearly confirms our first hypothesis that, depending on the generation actively involved in the company, substantial differences in the financial structure can be recognized. This conclusion does not hold with respect to intangible fixed assets, accounts receivable, cash and financial performance measures like return on assets and return on equity. For all other balance sheet entries, except for the financial fixed assets and provisions, both the F-ratio (Anova) and the chi-square value (Kruskal-Wallis) are indeed significant. A striking observation is that for most of the major balance sheet entries like reserves, both long and short term debt, tangible fixed assets, stocks and trade debts, we find important dissimilarities. Nevertheless, more in-depth investigation, especially into the capital structure, will be necessary to make a comparison with non-family firms meaningful.

Table 3. Summary of Anova-testing (Family firms)

Assets	F	K-W (χ^2)	Liabilities	F	K-W (χ^2)
Tangible fixed assets:	p=.006	p=.017	Capital & reserves:	p=.000	p=.000
Land & buildings	p=.002	p=.050	Retained earnings	p=.000	p=.000
Financial fixed assets:	p=.029	p=.342	Provisions & postponed tax	p=.014	p=.600
Affiliated enterprises	p=.000	p=.004	Total debt	p=.000	p=.000
Stocks: raw mat. & cons.	p=.014	p=.000	Total long term debt:	p=.000	p=.000
Stocks: finished goods	p=.036	p=.000	Financial debts	p=.000	p=.000
Short term investments:	p=.027	p=.013	Total short term debt:	p=.008	p=.002
Other inv. & deposits	p=.030	p=.012	Current portion of LT debts	p=.001	p=.000
			Trade debts	p=.018	p=.001
Fin. charges/added value	p=.013	p=.001	Pers. charges/added value	p=.016	p=.067
Current ratio	p=.009	p=.001	Solvability ratio	p=.000	p=.000

As we have pointed out in the formulation of our hypotheses and in the review of the existing literature, we are particularly interested in capital structure differences and distinctions in the financial performance of firms. We therefore will concentrate our further analysis on the level of indebtedness (both short-term and long-term), the proportion of the retained earnings to total assets, and the return on assets for each of the four types of companies. In a first phase these four dependent variables will be compared using analysis of variance and the Kruskal-Wallis test. The test results, together with the mean values and the standard errors are presented in table 4.

Table 4. Summary of Anova-testing (All firms)

	F	K-W (χ^2)	1st gen		2nd gen		3rd gen		Non-fam	
			mean	std	mean	std	mean	std	mean	std
Retained earnings	p=.000	p=.000	.159	.012	.237	.014	.282	.019	.141	.017
Short-term debt	p=.002	p=.002	.492	.012	.443	.012	.427	.017	.494	.018
Long-term debt	p=.001	p=.000	.190	.011	.163	.010	.123	.011	.148	.015
Return on assets	p=.049	p=.001	8.00	.384	6.87	.344	6.50	.573	8.05	.717

We find for each of the dependent variables significant results, again both based on the F-ratio and the chi-square value. Regarding the average proportion of retained earnings we can observe a significant increase if a company evolves from a first- to a third generation family firm,

with the value for non-family businesses approaching that of first generation family firms. With respect to total short- and long term debt we can almost draw the same conclusion except that here the average proportions of both types of debt are decreasing for family firms evolving from the first to the third generation. Finally, concerning the return on assets the detection of a specific pattern is more difficult.

In order to correct our model for spurious relations, in this second phase a one-way between-groups analysis of covariance is conducted, assuming three covariates (age, industry and employment). For each of them the influence on the dependent variable is tested separately, leading to an overall corrected model which is used as the basis for the analysis of variance technique. If the significance value of a covariate is lower than 0.05, we can conclude that this variable is indeed related to the dependent variable. The result of this test is outlined in table 5.

Table 5. Summary of Ancova testing (All firms)

Dependent variable: Retained Earnings				
<u>Source:</u>	<u>Type,III SoS:</u>	<u>Mean Square:</u>	<u>F:</u>	<u>Sig:</u>
Corrected Model	2.775	.462	11.903	.000
Intercept	3.935	3.935	101.276	.000
Age	.327	.327	8.406	.004
Industry	.137	.137	3.530	.061
Employment	.566	.566	14.578	.000
Type of firm	.894	.298	7.672	.000
Dependent variable: Short-term debt				
<u>Source:</u>	<u>Type,III SoS:</u>	<u>Mean Square:</u>	<u>F:</u>	<u>Sig:</u>
Corrected Model	.967	.161	4.447	.000
Intercept	8.838	8.838	243.788	.000
Age	.004	.004	.102	.749
Industry	.177	.177	4.877	.028
Employment	.340	.340	9.369	.002
Type of firm	.387	.129	3.563	.014
Dependent variable: Long-term debt				
<u>Source:</u>	<u>Type,III SoS:</u>	<u>Mean Square:</u>	<u>F:</u>	<u>Sig:</u>
Corrected Model	.635	.106	4.452	.000
Intercept	1.535	1.535	64.611	.000
Age	.099	.099	4.175	.041
Industry	.108	.108	4.558	.033
Employment	.000	.000	.003	.955
Type of firm	.173	.058	2.427	.064
Dependent variable: Return on Assets				
<u>Source:</u>	<u>Type,III SoS:</u>	<u>Mean Square:</u>	<u>F:</u>	<u>Sig:</u>
Corrected Model	758.483	126.414	3.233	.004
Intercept	4092.888	4092.888	104.681	.000
Age	296.828	296.828	7.592	.006
Industry	77.904	77.904	1.992	.159
Employment	5.987	5.987	.153	.696
Type of firm	152.006	50.669	1.296	.275

As can be observed for both the retained earnings as the short-term debt, the previously found differences among the four types of firms still remains ($p < .05$), even after adjusting for the covariates. With regard to the long-term debt the found dissimilarities are slightly less significant ($p = .064$), and concerning the return on assets the differences apparently disappear.

Additional to the results we just found, post-hoc test can be carried out in order to detect where exactly the differences among the four types of firms occur. Based on either the Tukey method (homogeneity of variances among groups) or the Dunnett's C test (no homogeneity of variances among groups) each type of firm is compared with each of the three remaining types, by calculating the mean differences in scores for all of the dependent variables. Only the results are presented for retained earnings, short-term debt and long-term debt variables because Ancova testing found no overall significant differences in the return on assets among the various types of companies.

As we have shown in table 3, family firms differ significantly in their capital structure. Based on these post-hoc tests (see table 6) we are now able to reveal between which generations of family firms these dissimilarities actually occur.

Table 6. Summary of post-hoc tests

Dependent variable: Retained Earnings		Mean Difference:	Std. Error:
First generation FF	Second generation FF	-.07782*	.01790
	Third generation FF	-.12256*	.02204
	Non-family firm	.01791	.02062
Second generation FF	First generation FF	.07782*	.01790
	Third generation FF	-.04473	.02324
	Non-family firm	.09573*	.02190
Third generation FF	First generation FF	.12256*	.02204
	Second generation FF	.04473	.02324
	Non-family firm	.14046*	.02540
Non-family firm	First generation FF	-.01791	.02062
	Second generation FF	-.09573*	.02190
	Third generation FF	-.14046*	.02540
Dependent variable: Short-term debt		Mean Difference:	Std. Error:
First generation FF	Second generation FF	.04850*	.01717
	Third generation FF	.06509*	.02136
	Non-family firm	-.00179	.02199
Second generation FF	First generation FF	-.04850*	.01717
	Third generation FF	.01659	.02106
	Non-family firm	-.05030	.02169
Third generation FF	First generation FF	-.06509*	.02136
	Second generation FF	-.01659	.02106
	Non-family firm	-.06688*	.02514
Non-family firm	First generation FF	.00179	.02199
	Second generation FF	.05030	.02169
	Third generation FF	.06688*	.02514
Dependent variable: Long-term debt		Mean Difference:	Std. Error:
First generation FF	Second generation FF	.02680	.01447
	Third generation FF	.06690*	.01668
	Non-family firm	.04251	.01780
Second generation FF	First generation FF	-.02680	.01447
	Third generation FF	.04010	.01597
	Non-family firm	.01571	.01713
Third generation FF	First generation FF	-.06690*	.01668
	Second generation FF	-.04010	.01597
	Non-family firm	-.02439	.01903
Non-family firm	First generation FF	-.04251	.01780
	Second generation FF	-.01571	.01713
	Third generation FF	.02439	.01903

*: The mean difference is significant at the .05 level.

With respect to both retained earnings and short-term debt these differences can be observed between first- and second generation family firms, between first- and third generation family firms, but not between second- and third generation family firms. Concerning long term debt only a distinction can be found between first- and third generation family firms. Apparently, the capital structure decisions of second- and third generation family firms are strongly related to each other.

When we include the non-family firms in our tests, only significant differences can be observed with second and/or third generation family firms depending on whether retained earnings or short term debt are considered. Regarding the proportion of retained earnings in their balance structure, non-family firms have much lower amounts in comparison with their familial counterparts. The opposite conclusion holds for the total proportion of short term debt in the capital structure. When taking the long term debt into concern, no further statistical information can be derived from these post hoc tests.

Discussion

The fact that family firms are far from one homogeneous group with equal characteristics has to some extent been proven in this study. Based on our sample this conclusion more specifically holds true with respect to the financial structure of family firms managed by different generations. Although earlier attempts in literature, to compare the total balance structure of these firms, are rather scarce, our result however is consistent with previous studies (partly) dealing with intergenerational differences in firms. McConaughy and Phillips (1999) found significant differences between founder and descendant controlled public family firms in different areas like growth, investments in R&D and capital assets, the way in which the company is managed, etc. Also Gersick et al. (1997) observed different characteristics depending on the ownership stage to which the family firm belongs. As can be expected, and as shown by our study, these structural differences in the end will be reflected in the balance structure of the company. However, an opposite conclusion holds for the financial performance of family firms. We couldn't find any evidence of dissimilarities in performance measurements between first-, second-, and third generation family firms. What's more, no significant differences could be observed in comparison with non-family businesses. In this way, our results are contradictory compared to previous studies as that of Gallo and Estapé (1992), Coleman and Carsky (1999) and McConaughy and Phillips (1999).

Another objective of our study was to look for significant differences in the capital structure of the various types of companies, by observing the proportion of retained earnings, short term debt, and long term debt as a percentage of total assets. Among the family firms, we indeed could find some important dissimilarities. Even after correction for age, size (employment, total assets) and industry, we still observed that third generation family firms had substantially more retained earnings (28.2%) and significantly less short term (42.7%) and long term (12.3%) debt in their balance structure than first generation companies (15.9%, 49.2% and 19% respectively). These differences, except for the proportion of long term debt, could also be identified between first- and second generation family firms. This evidence reveals that family firms in general and third generation family firms in particular, adhere strongly to the Pecking Order philosophy. Referring to previous research our results to a certain extent correspond to those of Cole and Wolken (1995) and Coleman and Carsky (1999). However, opposite results were found in comparison with the study of Sonfield and Lussier (2004), Gersick et al. (1997), Bork et al. (1996).

When comparing the capital structure of the various types of family firms with their non-family counterparts, our findings seem rather consistent with the results of Gallo and Vilaseca (1996), Lyagoubi (2003) and Poutziouris, Michaelas and Chittenden (1998). More specifically, with respect to retained earnings, as an important component of total equity capital, we find significant differences between second- and third generation family firms and non-family businesses. For first generation family firms this means that the proportion of retained earnings is quite similar to that of the non-family businesses (around 15%). When looking at short term debt, the dissimilarity between second generation family firms and non-family businesses apparently disappears. Therefore the largest gap is situated between third generation family firms and non-family businesses. Finally, as we have noted previously, no further statistical information could be derived from the comparison of long term debt among the four types of firms. To conclude, total opposite outcomes were found compared with the study carried out by Bork, Jaffe, Jane, Dashew and Heisler (1996).

Based on these results we support the insights from researchers as Tsang (2002) and Sharma (2002) who advance the proposition of various family firm typologies. Without claiming that this variety basically lies in the intergenerational differences among family firms, we think that this 'generation issue' will play a considerable role in further attempts to categorize family firms into various groups.

Conclusion

The aim of this research was to identify how first-, second-, and third generation-managed family firms can help to explain the differences in observed financial structure and performance. This information about intergenerational differences can make comparisons with non-family firms more meaningful. Based on a sample of 740 randomly chosen Flemish firms, our results provide evidence that the type of generation actively involved in the management of a family firm is not neutral to financing decisions.

Although interesting conclusions could be derived from this study, we nevertheless have to mention a shortcoming comprised in this paper. The fact is that no satisfactory explanations or reasons behind these intergenerational differences could be determined. In that way a further in-depth exploration into this matter could be useful. It would also be interesting to study other elements of the financial structure when making comparisons between family firms of different generations and non-family firms, like working capital needs, as this can also play an important role in assessing a firms' performance, or financial behavior in general. In that way we will be able to little by little unravel the "mysteries" behind family firms and find out why exactly it's favorable to study these companies as a separate research object.

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