IESE Business School
University of Navarra

Working Paper

WP No 406

January, 2000

COMPARISON OF FAMILY AND NON-FAMILY BUSINESS: FINANCIAL LOGIC AND PERSONAL PREFERENCES

Miguel A. Gallo*
Josep Tàpies*
Kristin Cappuyns**

Revised January 2004

Published by the Chair of Family Business

* Professor of General Management, IESE
** Research Associate, IESE

IESE Business School - Universidad de Navarra
Avda. Pearson, 21 - 08034 Barcelona. Tel.: (+34) 93 253 42 00 Fax: (+34) 93 253 43 43
Camino del Cerro del Águila, 3 (Ctra. de Castilla, km. 5,180) - 28023 Madrid. Tel.: (+34) 91 357 08 09 Fax: (+34) 91 357 29 13

COMPARISON OF FAMILY AND NON-FAMILY BUSINESS: FINANCIAL LOGIC AND PERSONAL PREFERENCES

Abstract

This paper documents an investigation carried out by the "Family Business Chair" at IESE using a sample of 305 businesses: 204 non-family businesses (NFBs) and 101 family businesses (FBs).

The fact that the FBs in our sample were among the top Spanish FBs and that their financial directors had similar characteristics to those of NFBs leads us to believe that the peculiarities of the "financial logic of FBs" brought to light in this paper are due not to any lack of knowledge or technical financial skills but to the personal preferences of the FBs' financial directors or other powerful family members.

The major results indicate that aversion to risk and fear of losing control of the business lead many family businesses to seriously limit their growth potential by not adopting generally accepted financial management policies.

COMPARISON OF FAMILY AND NON-FAMILY BUSINESS: FINANCIAL LOGIC AND PERSONAL PREFERENCES

1. Introduction

Identifying differences between Family Businesses (FBs) and Non-Family Businesses (NFBs) and understanding the medium and long-term consequences of FBs' strategic behavior is one of the basic fields of FB research.

Recent research has taken important steps towards these goals. However, the differences between FBs and NFBs have not always been sufficiently explained.

This can be seen in the case of "life expectancy" and "development processes". Alcorn (1982) states that the life expectancy of FBs is 24 years, and Gallo, Cappuyns and Estapé (1995) observe that FBs have difficulties in sustaining growth, in getting into certain business sectors, and in going international (Gallo and García Pont, 1989). Yet in none of these studies are these characteristics explained.

Lately, research into succession procedures (Gallo, 1998; Gersick et al., 1997), governance structures and procedures (Neubauer and Lank, 1998), and the specific characteristics of first, second and third-generation FBs (Gersick et al., 1997) has intensified. Scholars have found marked differences between FBs and NFBs, and have also proposed new and more appropriate business policies for FBs.

In the field of financial structure and policies, and in that of economic results, the following research is worth mentioning:

- Daily and Dollinger (1992), working with a sample of 186 manufacturing businesses in Indiana (USA) with fewer than 500 employees and sales of less than 30 million dollars per year, found that, between 1986 and 1988, FBs outperformed NFBs in sales turnover, profit growth, and a composite measure that reflected a comparison of each business with its main competitor on four counts.

- Gallo and Vilaseca (1996 and 1998), using a sample of 104 Spanish FBs with average 1997 sales of 33.98 millions euros (at 2001 equivalency), found that the smaller FBs used less complex financial practices and had very low debt ratios. They failed to identify statistically significant differences in "resource

profitability". These characteristics were dependent on whether or not the financial director was a family member. The only exception was in cases where the financial director was not only a high level manager but also a non-family member.

- Mahérault (1998), comparing "investment functions" (debt, profit and liquidity) among 49 French FBs listed on the stock market and 46 French FBs which were not actively listed over several years, found that one out of three businesses preferred to forego development rather than lose their independence. This confirms the fact that classical Financial Theory cannot be applied to FBs because they do business using "different financial logic".

- Poutziouris, Michaelas and Chittenden (1998), with a sample of 350 FBs and NFBs with fewer than 200 employees in the United Kingdom, studied the extent to which the concentration of capital had an influence on financing structure during the years 1994-1996. They found that FBs had lower leverage, a higher proportion of "property assets to total assets", lower "asset-turnover", lower investment in intangible assets and lower return on investment. These findings lead the authors to state that NFBs are more market-oriented and tend more towards growth, whereas FBs flail about in a struggle between the desire for higher profits and the desire to retain family control.

- Smyrnios, Romano and Tanewshi (1998), with a sample of about 1,000 FBs from the 5,000 largest businesses in Australia, found that the growth and size of FBs, combined with the proportion of capital in the family's hands, were determining factors in the type of financing FBs used, be they capital gains, business savings or loans from the family and financial institutions.

- Coleman and Carsky, (1999), working with a sample of small businesses in the USA with under 500 employees, gathered a total of 4637 valid responses. Of these, 3,774 (88.4%) were FBs. Their study revealed that FBs were as likely to use debt as NFBs. And the authors suggest that the difference in the use of debt can be attributed more to the firm's age than to family ownership versus non-family ownership.

This paper documents an investigation carried out by the "Family Business Chair" at IESE using a sample of 305 businesses. The major results indicate that aversion to risk and fear of losing control of the business lead many family businesses to seriously limit their growth potential by not adopting generally accepted financial management policies.

2. The sample

The information was obtained by means of a questionnaire sent to the 4,200 Spanish businesses which, according to Dun & Bradstreet data (1995), had sales of over 21.92 millions euros in 1995 (at 2001 equivalency) and more than 150 employees (1). Of the 337

(1) It must be noted that, of the participating businesses, only 5 claim sales of less than 21.92 millions euros (in 2001), while 105 claim to have fewer than 150 employees. This second fact is not surprising since many companies, when giving information about personnel, consider their permanent employees differently to the others.

questionnaires returned, 32 were discarded for various reasons, leaving a sample of 305 businesses – which corresponds to 7.26% of the Total Sample (1).

Table 1. Comparison of the sample with the Dun & Bradstreet database

Sales (In millions of euros 2001)	D& B 1995		Sample	
	n	Percentage	n	Percentage
21.92 – 36.54	2,455	52.66	100	32.79
36.54 – 73.08	1,076	23.08	76	24.92
> 73.08	1,131	24.26	129	42.29
Total	4,662	100	305	100

Whether a particular business was to be classified as "family" or "non-family" was left to the judgment of the person answering the questionnaire, as is becoming common in studies of this nature, given the range of definitions used for FBs. Of the 305 businesses in the sample, 204 (66.9%) classified themselves as NFBs and 101 (33.1%) as FBs. The breakdown of these two subgroups, FBs and NFBs, according to sales is shown in Table 2.

Table 2. Breakdown of the sample according to sales

Sales (In millions of euros 2001)	FB		NFB	
	n	Percentage	n	Percentage
21.92 – 36.54	47	46.53	56	27.45
36.54 – 73.08	20	19.81	55	26.96
> 73.08	34	33,.66	93	45.59
Total	101	100	204	100

Considering, first, that in 1992 23% of the 1,000 largest businesses in Spain were FBs (Gallo, Cappuyns & Estapé, 1995) whereas among the firms in our sample with over 73.08 millions euros (at 2001 equivalency) in sales FBs represent 34%; and considering, secondly, that of all Spanish companies with sales of more than 21.92 millions euros in 1987 (at 2001 equivalency) 66% were FBs (Gallo and García Pont, 1989): then we can see that the sample does not reflect the actual situation in Spain. It contains a smaller proportion (33.1%) of comparatively larger FBs.

(1) Of the 32 questionnaires that were discarded, 21 contained errors in the "Financial ratios" section, 4 gave no response to important questions, and 7 were from businesses with a multiplicity of dimensions ("outlier businesses") that produced considerable distortions when comparing data to the average values.

3. Comparison of some basic data on the FBs and NFBs in the sample

Using information from the first part of the questionnaire we can compare the characteristics of the two groups and identify the main similarities and differences.

This research, unlike other studies, apart from analyzing average values, will examine the histograms corresponding to the breakdown of the dimensions over 4 intervals and their normal distribution. If only average values are compared, a very incomplete synthesis is obtained. The FBs, as will be noted later, cover a wide spectrum and are present in practically all intervals, although less in some than in others.

The statistical analysis was carried out using relatively simple tools. This was because, in addition to the general objectives of the research, in our study of the correlations between all the dimensions of the FBs, the only statistically significant relations we found were size in terms of "Sales" and "Number of employees", and the logic between financial ratios of a similar nature and those directly linked together because they are growth indicators (1).

As Table 3 shows, the FBs in this sample are on average older than the NFBs. This statistically significant 8-year difference, and the fact that the percentage of both types of businesses situated at the top of their industry is similar, illustrates the well-known phenomenon that FBs grow more slowly than NFBs. It is also worth investigating the real underpinnings of this slower growth.

Table 3. Age and industry position

	FBs		NFBs	
	Average	**Standard deviation**	**Average**	**Standard deviation**
Year founded*	1956	36.3	1964	14.14
Position in industry	1 – 10	0.74	1 – 10	0
No. of businesses	101	–	204	–

* The difference of means is statistically significant with a degree of confidence $p<0.01$.

(1) Analysis of the same correlations in the NFB subgroup revealed 8 other significant relationships in addition to those found in the FBs. Setting aside the relationship between investment growth and the number of "permanent full-time" workers, the rest seem to reflect a logic of continuity in the company's development in the coming years (increase in resources, sales and investment growth, profit and dividend percentages).

Position in the industry

Position in the industry	FBs		NFBs	
	n	Percentage	n	Percentage
Among the top 10	75	74.26	143	70.09
Between 10th and 50th	15	14.85	46	22.55
Between 50th and 100th	9	8.91	9	4.42
Over 100th	2	1.98	6	2.94
Total	101	100	204	100

Information on "Sales", "Total number of employees" and "Sales per employee" (average and standard deviation) is shown in Table 4, and in the corresponding histograms by categories and normal distributions.

Table 4. Sales and Total employment

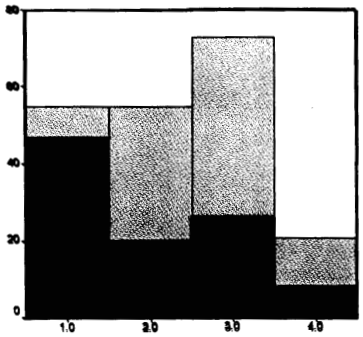
	FBs		NFBs	
	Average	Standard deviation	Average	Standard deviation
Sales in mill. euros 2001*	91.17	124.54	164.94	269.22
Total employees	426	666	625	1020
Sales/Employee*	0.21	0.19	0.26	0.26

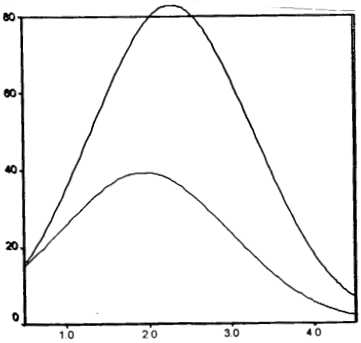
* The difference of means is statistically significant with a degree of confidence $p<0.01$.

** The difference of means is statistically significant with a degree of confidence $p<0.05$.

Sales*

Sales	No. of firms	Standard deviation	Average
FB	101	1.02	2.0
NFB	204	0.98	2.3



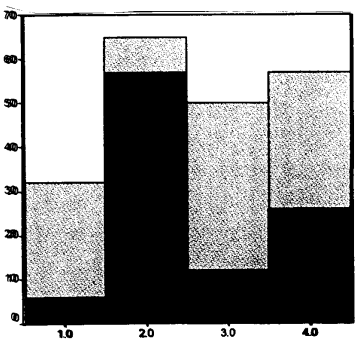


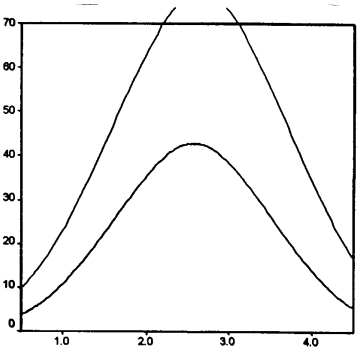
Sales in millions of euros 2001	**<36.54**	**36.54 – 73.08**	**73.08 – 365.41**	**>365.41**
	1	2	3	4

*In each of these tables, non-family businesses will be represented using the following color NFB and family businesses using FB . The graphs represent data grouped together in four intervals. The graphs represent data converted into categories (1 to 4) by frequency and normal distribution. The average value of each group is the average of the data by category.

Number of employees

Employees	No. of firms	Standard deviation	Average
FB	101	0.94	2.6
NFB	204	1.05	2.6

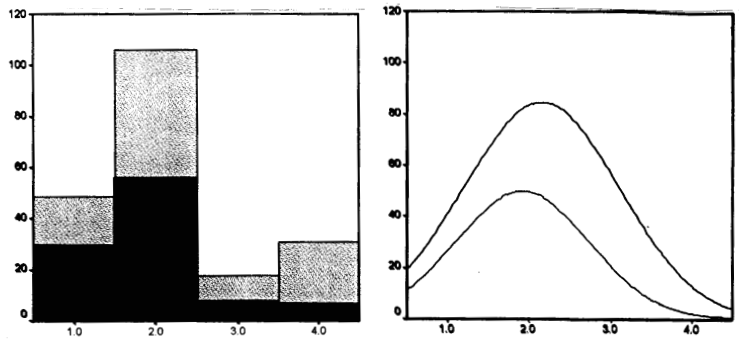




	< 50	**50 – 250**	**250 – 500**	**>500**
Employees	1	2	3	4

Sales/employee

Sales/ Employee	No. of firms	Standard deviation	Average
FB	101	0.81	1.9
NFB	204	0.96	2.2



	0 – 0.20	0.20 – 0.70	0.70 – 1.25	>125
Sales/ Employee	1	2	3	4

As can be seen, the average "Sales" of FBs is substantially less than that of NFBs (by 44%)–a difference that proves to be statistically significant. A similar result appears in average "Sales per employee" (65%) – also a statistically significant figure. The difference in average "Total number of employees", in addition to being quite a bit lower (25%), is not statistically significant.

These data confirm previous research which has found that:

– In proportion to NFBs, the number of FBs decreases as sales increase (Gallo and García Pont, 1989).

– FBs are more employment "intensive" than NFBs and so have lower sales per employee (Gallo and Estapé, 1992).

However, as can be seen in the normal distribution of these three dimensions, where no substantial average changes are found, FBs are "present" at all levels. This shows that when they are grouped together in the same way as the NFBs, many of them reach the highest levels in the dimension in question. This calls for research into why there should be these differences, suggesting that, in addition to the aforementioned "resistance" to growth, there must be a tendency for FBs to survive in business areas where, at least at present, companies do not have to be large to be among the leaders or to compete successfully.

One important point that has not been studied until now is the differences in the type of employment contracts used by FBs and NFBs. According to Table 5, which refers to the

total number of people employed by the businesses in the sample, FBs tend to use a larger proportion of the less risky types of contracts in terms of labor rigidity, such as "permanent part-time", "internship", "temporary", etc.

Table 5. Types of contracts
(Total number of persons)

Type of contract	FB		NFB	
	Number of employees	Percentage	Number of employees	Percentage
Permanent	30,577	70.90	100,550	87.20
Perm. Part time	5,328	12.30	3,730	3.20
Others	7,240	16.80	11,079	9.60
Total	43,145	100	115,359	100

* The difference of % means is statistically significant with a degree of confidence p<0.01.
** The diferrence of % means in statistically significant with a degree of confidence p<0.05.

According to the data in Table 6 and the information given by the histograms and distributions, the difference in the average number of people with a "permanent contract" is worth noting: 25% less in FBs—a statistically significant difference. This occurs mostly in the larger FBs. Likewise, it can be seen that the smaller FBs tend to use a greater proportion of "permanent part-time" contracts (1).

Table 6. Types of Contracts
(Persons per business)

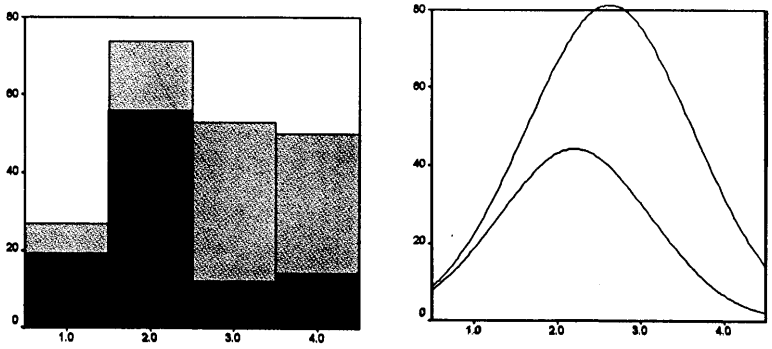
Type of contract	FB		NFB	
	Average	Percentage	Average	Percentage
Permanent*	315	55	526	73.7
Perm. Part time	140	24	86	12.1
Others	119	21	101	14.2

* The difference of % means is statistically significant with a degree of confidence p<0.01.

(1) It would have been interesting to know what industry each of these firms belonged to. Unfortunately, most of those that answered the questionnaire did not use a correct code from those listed in Dun and Bradstreet.

Permanent full-time contract

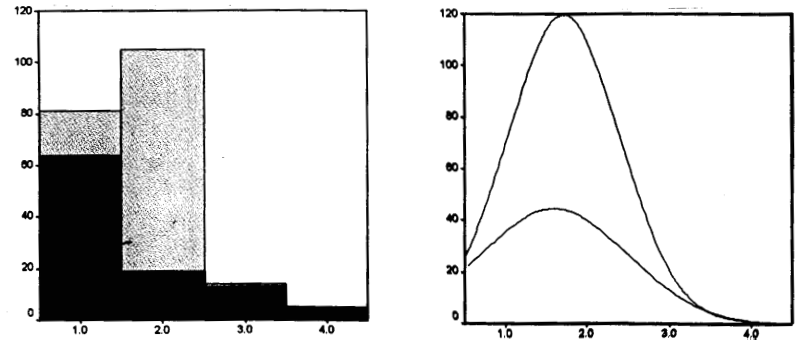
Full-time Contract	No. of firms	Standard deviation	Average
FB	101	0.91	2.2
NFB	204	1.00	2.6



	< 50	50 – 250	250 – 500	>500
Full-time Contract	1	2	3	4

Permanent part-time contract

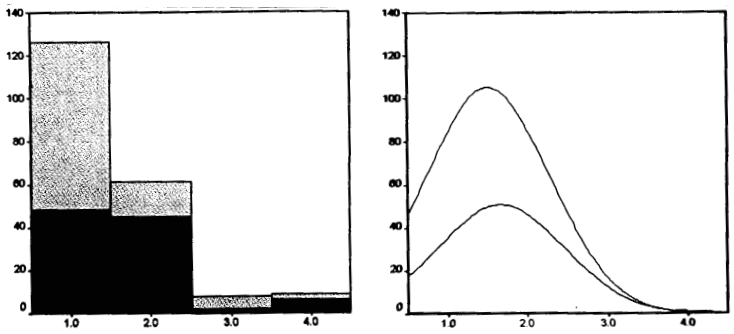
Part-time Contract	No. of firms	Standard deviation	Average
FB	101	0.90	1.6
NFB	204	0.68	1.7



	< 50	50 – 250	250 – 500	>500
Part-time Contract	1	2	3	4

Other contracts

Other Contracts	No. of firms	Standard deviation	Average
FB	101	0.79	1.7
NFB	204	0.77	1.5



	< 50	50 – 250	250 – 500	>500
Other Contracts	1	2	3	4

These differences may be due to various reasons. One, because FBs are more often involved in seasonal industries, such as tourism, agriculture and textiles. This would help to explain the greater use of "permanent part-time" contracts by smaller FBs. The same would apply if the FB was the third or fourth link in the supply chain of a large manufacturer, as might be the case in the automobile industry.

However, in trying to better understand FBs' development processes one has to consider that another reason could be FBs' aversion to growth. It is worth noting, for example, that offering "permanent full-time contracts" involves a risk, given that labor laws in Spain are so strict.

As can be seen in Table 7 below, the FBs and NFBs in the sample differ greatly in size and capital structure. First of all, the average share capital of the FBs is far smaller (65% smaller) than that of the NFBs, a statistically significant difference. Many factors could account for this difference. For example, as we said before, the set of FBs in this sample is smaller than that of the NFBs. Also, in structuring their assets and liabilities, FBs generally separate "Equipment-related machinery" businesses from "Real estate" businesses. What's more, they tend to operate in less "capital-intensive" industries. However, apart from all these reasons, we cannot ignore the owners' reluctance to open up their capital to third parties, with the effect that this can have on capital growth, leaving the company without the economic resources to undertake important development projects and implement them quickly.

Secondly, as might be expected, the average number of shareholders is considerably (39%) lower in FBs than in NFBs. The large number of NFBs (147) in the sample with only 1 to 10 shareholders is probably due to the fact that they are part of a holding company or are subsidiaries of two or more large enterprises with multiple shareholders.

Table 7. Size and structure of the equity

	FB		NFB	
	Average	**Standard deviation**	**Average**	**Standard deviation**
Company capital* (in mill. of euros 2001)	9.22	24.94	26.57	54.82
Number of shareholders*	19		31	

Number of shareholders	**Number of responses**	**Percentage**	**Number of responses**	**Percentage**
1 to 10	71	70.3	147	72.1
11 to 20	12	11.9	4	2.0
21 to 50	7	6.9	5	2.5
51 to 100	1	1.0	6	2.9
>100	10	9.9	42	20.5
Total	101	100	204	100

* The difference of % means is statistically significant with a degree of confidence $p<0.01$.

Information on the characteristics of shareholders in the two types of businesses is shown in Table 8. As can be seen, very few FBs have financial partners compared to NFBs. Also, the stake owned by these financial partners is between 7% and 25% in FBs, while in NFBs it is usually over 50%. Naturally, the proportion of FBs whose capital is owned by the board of directors is far greater. This is a statistically significant difference with respect to NFBs. In addition, as can be seen in the histogram, board members own a majority of the capital in 80-90% of the FBs in our sample. Thus, it is only natural to conclude that the influence of the board is fundamental in the development of FBs.

As can also be seen in Table 8, only 8 of the FBs in our sample are listed on the stock market. All of the French listed FBs studied by Mahérault (1998) have more than 500 employees. Of our sample of Spanish FBs 26 have more than 500 employees. This provides further evidence to support the statement made by various researchers (Smyrnios, Romano and Tanewski, 1998; Poutziouris, Chittenden and Michaelas, 1998) concerning FBs' resistance to going public (1).

(1) Furthermore, the trading volume of Spanish listed FBs is negligible, which suggests that they use the stock market for other purposes (e.g. fiscal, setting the stock price).

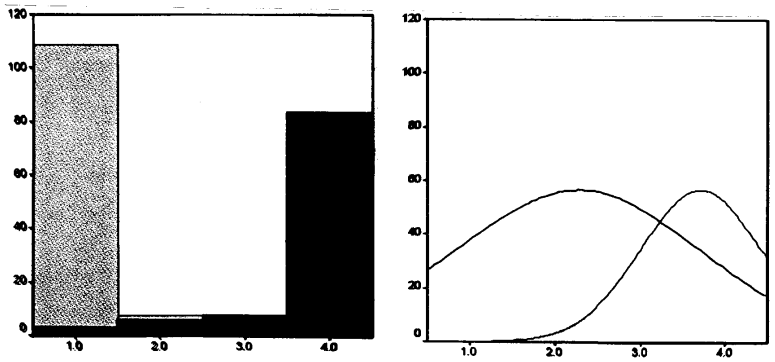
Table 8. Type of shareholders

Type of shareholders	**FB** **Number of businesses** (percentage)	**NFB** **Number of businesses** (percentage)
1. Financial partners		
1.1 Banks	4	17
2.2 Financial*	2	5
institution	2	12
2. Members of BD	91	59
3. Other managers	14	9
4. Listed on stock market	8	10

* The difference of % means is statistically significant with a degree of confidence p<0.01.

Ownership by the Board of Directors

BD Ownership	**No. of firms**	**Standard deviation**	**Average**
FB	101	0.71	3.7
NFB	204	1.43	2.3



BD Ownership*	**0 – 25**	**25 – 50**	**50 – 75**	**75 – 100**
	1	2	3	4

* BD = Board of Directors.

As can be seen in Table 9 and in the corresponding histograms and distribution charts, the FBs have far higher levels of capital turnover, and at the same time generate a higher level of employment in relation to this capital. This information, though very significant in terms of job creation, should not be interpreted without considering some of the aforementioned facts. For example, FBs tend to operate in less capital-intensive sectors and usually structure their assets and liabilities by separating "Equipment-related machinery" businesses from "Real estate" ones. This means they can do business with less capital.

Table 9. Sales and employment in relation to capital

	FB	**NFB**
$\frac{\text{Sales*}}{\text{Capital*}}$	$\frac{105.86}{9.22} = 11.48$	$\frac{175.08}{33.93} = 5.16$
$\frac{\text{Capital*}}{\text{Employment}}$	$\frac{9.22}{469} = 0.019$	$\frac{33.93}{622} = 0.055$
$\frac{\text{Employment}}{\text{Capital*}}$	$\frac{469}{9.22} = 50.86$	$\frac{622}{33.93} = 18.33$

* Numbers in millions of euros, 2001.

The internationalization of FBs has not been very thoroughly researched to date (Gallo and Cappuyns, 1998). However, it does play an increasingly important role now, given the focus on globalization and Spain's integration in the European Union. The information shown in Table 10 gives further evidence to supplement that found in previous research (Gallo and García Pont, 1993), in that the export level of FBs is similar to that of NFBs.

At the same time, it can be seen that, in this sample, the percentages of total investment outside of Spain are similar. Also, the allocation of these investments to "distribution" or "operations" (see histograms and distribution) is similar, given that the differences observed in Table 10 are not statistically significant.

However, considering that the sample consists of large businesses, the possibility should not be ignored that in 1995 some of the NFBs may have been controlled by larger multinational parent organizations that gave them the exclusive task of serving the Spanish market.

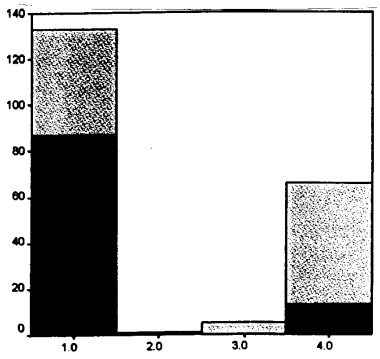
Table 10. Internationalization
(To December 31st, 1995)

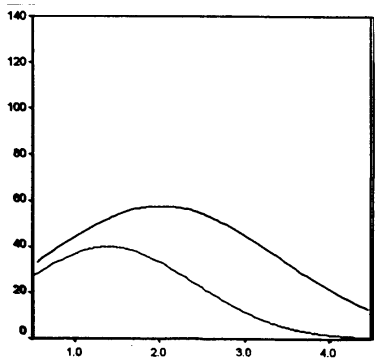
	FB (Percentage)	**NFB** (Percentage)
Percentage of sales outside Spain	17	18
Percentage of total investment in businesses outside Spain	4.4	4

Investment	**FB** (Percentage)	**NFB** (Percentage)
"Logistics" only	37.5	45.7
"Manufacturing"	37.5	34.3
Mixed "Manufacturing" and "Logistics"	25	20

Investment in manufacturing

Investment manufacturing	**No. of firms**	**Standard deviation**	**Average**
FB	101	1.01	1.4
NFB	204	1.41	2.0

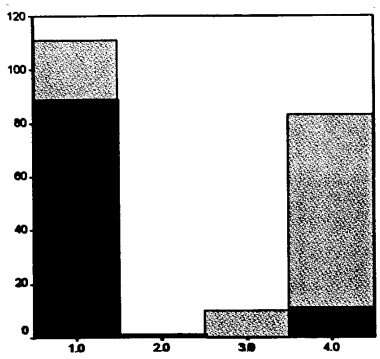


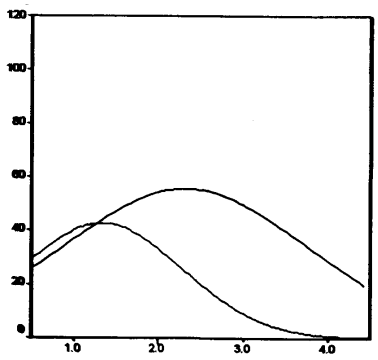


	0 – 25	**25 – 50**	**50 – 75**	**75 – 100**
Investment manufacturing	1	2	3	4

Investment in logistics

Investment logistics	No. of firms	Standard deviation	Average
FB	101	0.94	1.3
NFB	204	1.46	2.3





	0 – 25	25 – 50	50 – 75	75 – 100
Investment logistics	1	2	3	4

4. Comparison of the financial ratios of the FBs and NFBs in the sample

Having analysed “Age”, “Sales”, “Employment”, “Capital” and “Internationalization”, and having commented on the main differences between FBs and NFBs, in this section we shall compare “Policies and financial results”. Again, our intention is to better understand the reasons behind the way FBs do business.

Table 11 shows the average value and the standard deviation values of some important financial ratios. Given the frequency with which FBs contribute property to other “Real estate” enterprises –at least in the years immediately preceding 1995– the questionnaire explicitly indicated that the ratios be calculated incorporating real estate assets. Also, it was indicated that assets be considered at unadjusted accounting value and that the “other liabilities” figure not be incorporated with “accounts receivable”.

.

Table 11. Financial ratios

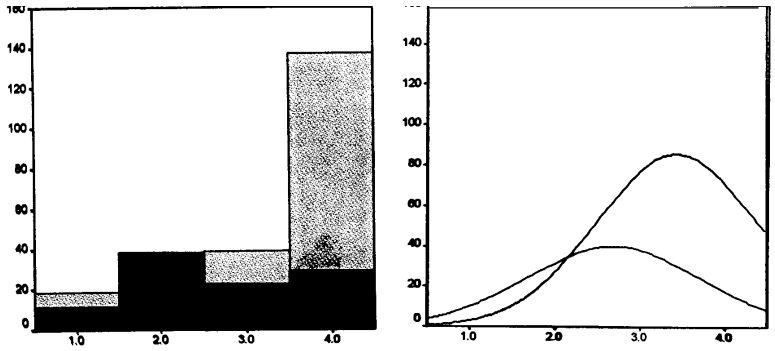
	FB		NFB	
	Average	**Standard deviation**	**Average**	**Standard deviation**
Return on Equity ROE (Pre-Tax Profit/Equity)	18.90	15.62	23.40	31.72
Return on Sales ROS (Pre-Tax Profit/Total sales)	5.24	4.81	6.30	8.84
Leverage Ratio (Total Assets/Equity)**	3.71	2.99	7.20	16.40
Sales/Total Assets*	2.31	3.92	1.64	1.46
Interest coverage ratio (EBIT/Total interest)	6.96	14.01	7.70	16.09
Debt Ratio (LT & ST Liabilities/Equity)*	1.55	1.89	2.93	5.52
Accumulated Depreciation/Fixed Assets	4.19	12.14	5.50	14.55
Dividends = % profit**	9.71	18.46	19.17	33.75
Dividends = % profit*	10.65	17.23	20.29	30.02
Dividends = % profit**	13.34	18.98	21.80	29.54

* The difference of means is statistically significant with a degree of confidence $p<0.01$.
** The difference of means is statistically significant with a degree of confidence $p<0.05$.

The average of "Pre-Tax Profit/Equity" or "Return on Equity" turns out to be higher for NFBs and, although the difference in the averages is not statistically significant (1), as can be observed in the histogram and in the corresponding distribution, there is a greater number of NFBs in the interval of greatest profitability. It is worth pointing out that this profitability is crucial to attract permanent resources and so finance growth projects.

Pre-Tax Profit/Equity

Pre-Tax Profit /Equity	**No. of firms**	**Standard deviation**	**Average**
FB	101	1.01	2.7
NFB	204	0.95	3.4



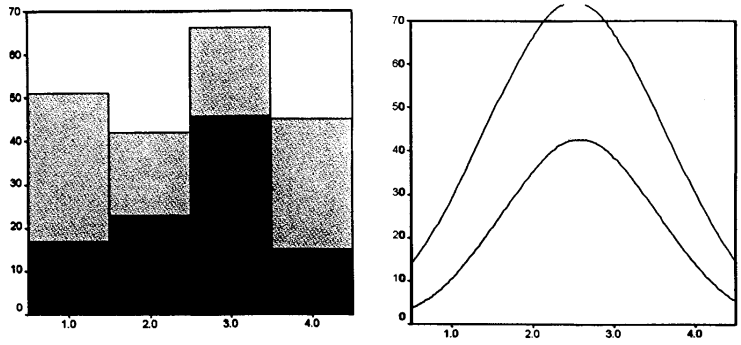
Pre-Tax Profit /Equity	**< 5**	**5 – 15**	**15 – 25**	**25<**
	1	2	3	4

(1) This difference is significant in the research carried out by Poutziouris, Chittenden and Michaelas (1998).

Likewise, "Pre-Tax Profit/Sales" or "Return on Sales", also calculated before taxes, turns out to be practically the same for both types of companies – both in average figures and in distribution.

Pre-Tax Profit /Sales

Pre-Tax Profit /Sales	No. of firms	Standard deviation	Average
FB	101	0.94	2.6
NFB	204	1.09	2.5



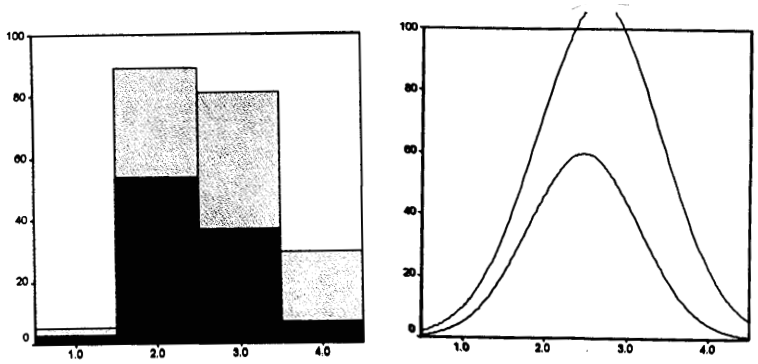
Pre-Tax Profit Sales	< 1	1 – 3	3 – 10	>10
	1	2	3	4

Average "Leverage" or "Total Assets to Equity" is considerably less in FBs (by 35%), which is statistically significant. Logically, given the close relation between "Leverage" (Total Assets to Equity) and "Debt" (Outside resources without receivables to Equity), the average of this second ratio is also considerably less in FBs (by 47%), and again statistically significant.

However, analysis of the histograms and distributions, in which the differences between FBs and NFBs are not that striking, leads us to insist once more on the need to investigate the groups in which the percentage differences between FBs and NFBs are greatest (i.e. the groups "over 10", and "less than 1"). This may help us to understand the characteristics of these businesses and, in the case of those with high ratios, why FBs have difficulty in being part of them. We may also identify some of the characteristics of FBs that lead them to take on less debt, such as age, generation, equity structure, governance structure, etc.

Total Assets/Equity

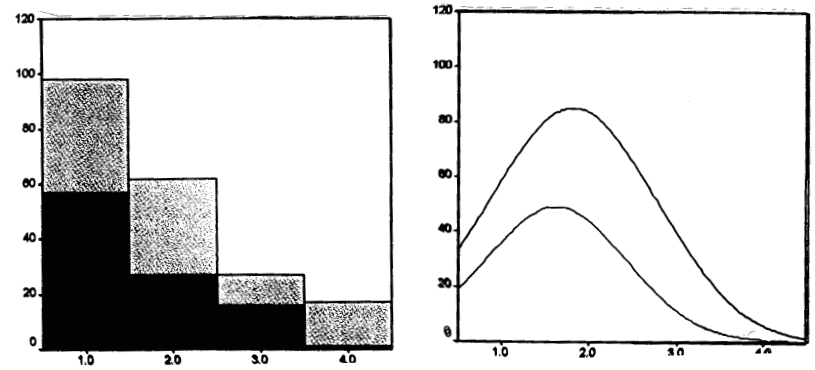
Total Assets /Equity	No. of firms	Standard deviation	Average
FB	101	0.67	2.5
NFB	204	0.75	2.7



	< 1	1 – 3	3 – 10	>10
Total Assets /Equity	1	2	3	4

Long and Short Term Liabilities/Equity

LT & ST Liabilities /Equity	No. of firms	Standard deviation	Average
FB	101	0.79	1.6
NFB	204	0.96	1.8

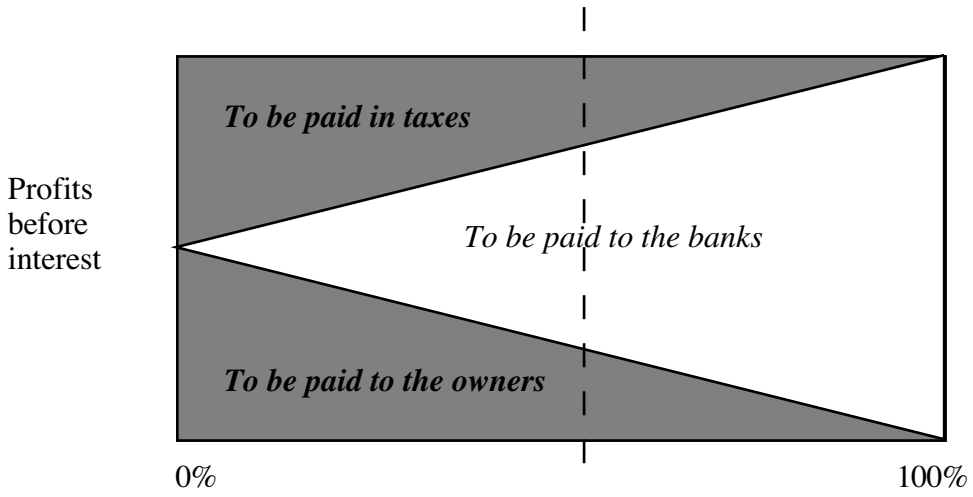


	< 1	1 – 3	3 – 10	>10
LT & ST Liabilities /Equity	1	2	3	4

The lower level of debt among FBs, as we said in our Introduction, has been identified on several occasions, and among FBs of different nationalities. Among the most frequent explanations are the aversion to "financial risk", the owners' reluctance to take

on debts with banks, and the recommendations of prudence –that is, "do not get into any more debt"– given them by the financial institutions that lend them money, as well as, on some occasions, the banks' resistance to granting credit to certain types of FBs.

In addition, the decision to go further into debt is very much influenced by the person who makes the decision. A non-family manager and an owner-manager may behave very differently when faced with leverage decisions.



Total interest as % of the profit before taxes and interest

There are also likely to be differences with regard to bank debt between owners who differ widely in age, education and work experience (Poutziouris, Chittenden and Michaelas, 1998).

However, the usefulness of an appropriate level of debt leverage is well known. Leverage helps improve the Return on Equity (Pre-Tax Profits/Equity) since debt costs less than the use of equity, as less risk is assumed. It is also tax-deductible, which makes it a more attractive way of financing operations.

However, when it comes to making the decision to go into debt, one has to consider the effect it may have on at least the following two aspects:

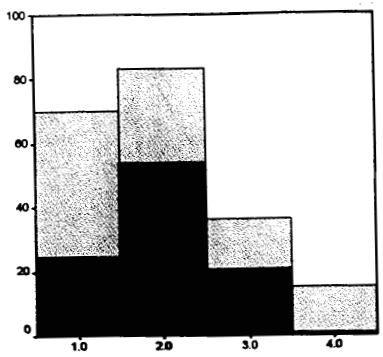
The first is the financial risk incurred, which can be measured by means of the interest coverage ratio (EBIT/ Total interest). The obligation to repay the principal must also be taken into account.

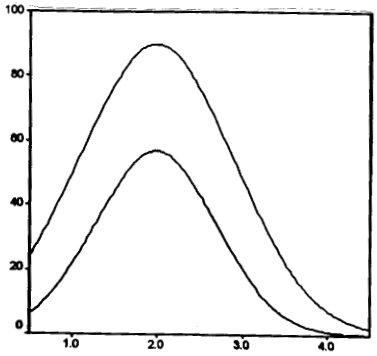
The second aspect is the possibility of losing the freedom to dictate business policies, which may be restricted by conditions imposed by the lending banks. The flexibility of the resulting financial structure must be considered since excessive levels of debt could seriously limit access to future financing sources.

The average ratio of "Sales" to "Total Assets", also calculated before taxes, proves to be far less in NFBs (by 29%), a statistically significant difference (Table 11). At first glance, this could lead one to think that FBs are more efficient than NFBs, i.e. that they manage to achieve a higher volume of sales with a smaller volume of assets, given that their ratio average of "Return on Sales" is similar to that of NFBs and their "Return on Equity" is less. However, this must be due to other reasons, such as the fact that FBs tend to have a lower level of backward vertical integration than NFBs that operate in the same sector. Also, they tend to be in sectors requiring a lower volume of assets because of their investments in Fixed Assets or Current Assets. In addition, FBs have a lower level of sectorial diversification and concentrate on one or a few businesses.

Sales/Total Assets

Sales/ Total Assets	**No. of firms**	**Standard deviation**	**Average**
FB	101	0.71	2.0
NFB	204	0.90	2.0



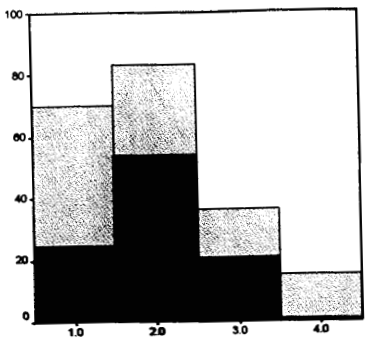


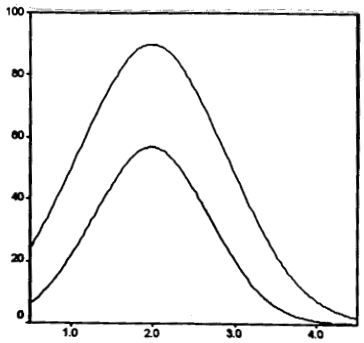
	< 1	**1 – 2**	**2 – 4**	**>4**
Sales/ Total Assets	1	2	3	4

The coverage ratio, "EBIT/ Total Interest", is very similar in the two types of businesses, both in averages and in the histograms and distributions. This again suggests that if the FBs wanted to get into debt –because they had good projects to invest in– to the same degree as NFBs, then they would earn higher profits on equity.

Earnings Before Interest and Tax (EBIT)/ Total Interest

EBIT/ Total Interest	No. of firms	Standard deviation	Average
FB	101	0.90	2.5
NFB	204	1.09	2.5



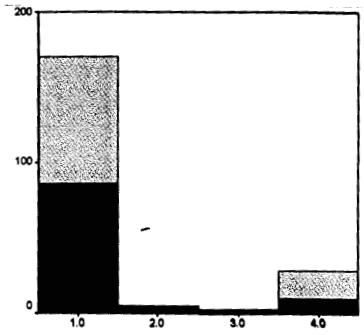


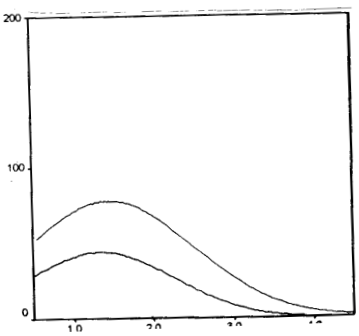
	< 1	1 – 3	3 – 10	>10
EBIT/ Total Interest	1	2	3	4

The ratio of age of assets to "Accumulated Depreciation/Fixed Assets" is very similar in the two types of businesses, both in averages and in histograms and distributions.

Accumulated Depreciation/Fixed Assets

Accum. Depr./ Fixed Assets	No. of firms	Standard deviation	Average
FB	101	0.91	1.3
NFB	204	1.05	1.5





	< 1	1 – 3	3 – 10	>10
Accum. Deprec. /Fixed Assets	1	2	3	4

With regard to dividends, as can be observed in Table 11, the average pay-out ratio is clearly different in each type of business (49% less in FBs in 1993, 48% less in 1994 and 33% less in 1995) – statistically significant differences.

As with "debt", it is worth delving into the characteristics of the FBs that pay less dividends. This way of doing business, which may be appropriate in times when growth funds are a necessity, may make FBs less attractive to family members who do not work in them. As a result, the owners may end up creating one of the most serious problems that can affect FBs: disunity and in-fighting within the family. Likewise, the low dividend policy can make FBs less attractive to potential financial partners or other types of partners who would be reluctant to take a minority stake in a company whose policy is to pay out only a small portion of profits as dividends.

It should not be ignored that in FBs with one or a few owners it is often the lending banks themselves who advise them not to pay dividends and adopt "prudent" business policies and moderate development (1). Generally speaking, it is fair to say that if FBs follow this advice, the banks will not incur as much risk of not getting their money back. Yet many of these FBs will end up without debt but operating mature businesses that are less attractive to potential partners. This makes it more difficult for them to survive and evolve.

In comparing the percentage averages of the main income statement items (see Table 12 below), we find statistically significant differences between FBs and NFBs with regard to "General expenses" and "Depreciation".

Table 12. Income statement

	FB		NFB	
	Average	**Standard deviation**	**Average**	**Standard deviation**
Consumption Expenses (raw materials and energy)	58.30	23.16	57.65	28.70
General Expenses** (excluding salaries)	14.8	10.40	17.64	66.08
Staff Expenses (Wages, salaries & staff welfare)	28.31	131.68	23.32	59.23
Depreciation**	2.81	2.37	4.93	13.02
Interest	2.46	2.13	5.61	26.42

** The difference of means is statistically significant with a degree of confidence $p<0.05$.

However, the information on "General expenses on sales" given in Table 13 indicates an average of less than 16% in FBs. The breakdown shows "General Expenses" as a percentage of sales for both types of businesses and illustrates how senseless statements of the kind "FBs have lower general expenses" are. It also prompts us to analyze this point in

(1) Smyrnios, Romano and Tanewski (1998) found a significant correlation between not paying dividends and company growth.

more depth in groups where FBs and NFBs are truly comparable because of their business characteristics.

Table 13. General expenses on sales
(Percentage of total sample in each group)

General Expenses Level	FB	NFB
<5	16	23
5 – 9.9	20	26
10 – 19.9	36	33
20 – 49.9	27	14
> 50	1	4

Given that the questionnaire asked respondents to exclude all types of wage expenses from "General Expenses", and, additionally, the question directed to FBs about "what % of the General Expenses can be considered the cost of 'advantages' enjoyed by the shareholders", gives an average of 1.63%, the smaller "real" average (1) of the percentage of general expenses is probably due to other factors, such as less asset rental, less third-party research and development, less advertising, fewer consulting fees, etc. So long as this does not weaken the business, assuming that these expenditures are not really necessary, containing "General Expenses" will not harm FBs. But, if they are not unnecessary, "reducing" them will limit FBs' ability to evolve and develop. This will mean having to make considerable investments in the future to get up-to-date in marketing, information technology, etc.

With regard to "Depreciation", FBs display an average of less than 43%. Table 14 shows the percentage of both types of businesses at different levels of "Depreciation". At the "more than 5%" level of depreciation, there are considerably more NFBs than FBs. The lower depreciation averages of FBs may be due to the fact that they are less vertically integrated and operate in less capital-intensive industries.

Table 14. Depreciation Level
(Percentage of businesses in the sample)

Depreciation Level	FB	NFB
<1	24	22
1 – 2.9	32	32
3 – 4.9	25	17
>5	19	29

(1) General expenses 17.64% (NFBs) – 14.80% (FBs) + 1.63% ("advantages" in FBs) = 4.47%.

One last comment on the financial ratios, concerning the possible influence of the firm's financial director: according to Table 15, this influence cannot be considered important since the only statistically significant difference in the "Characteristics of the Financial Director" is one of age. It is not surprising that it should be slightly higher in FBs (13%), given the greater age of the FBs in the sample.

The other characteristics –"Level of education", "Position in the organizational structure" and "Influence on strategic decisions"– prove to be similar in both types of businesses. This similarity is not surprising given that in both cases we are dealing with large businesses and, in addition, only 19% of the FBs have a financial director who is a family member.

Table 15. Characteristics of the financial director

Level of Education	FB	NFB
High School	3.2	3.4
Associate Degree	19.4	17.6
University Degree	61.3	60.2
Graduate Degree	16.1	18.8
Total	199	199

Level in Organization	FB	NFB
First	14.74	14.10
Second	60	58.10
Third	25.26	27.80
Total	100	100

Influence on decision-making

Influence on decision-making	FB	NFB
Low	2.10	3.60
Medium	25.53	22.60
High	51.10	48.70
Very high	21.27	25.10
Total	100	100

5. Comparison of actual and forecasted growth

The last two sections of the questionnaire were meant to compare the real growth –in international and national business– obtained by each type of business in 1994 and 1995, as well as the forecasted growth for the following two periods (1996 and 1997), both domestically and internationally.

Table 16 shows actual growth in 1994 and 1995. Though not statistically significant (1), this information provides further evidence that FBs have less growth in domestic and international "Sales" and in "Equity".

Table 16. Actual growth: 1994 and 1995
(1993 = 100)

1 – Domestic business

Domestic	FB Average	NFB Average	FB/NFB
Sales 1994	112.08	113.32	1.01
Assets 1994	106.96	112.60	1.05
Equity 1994	109.25	149.30	1.37
Profits 1994	206.02	241.53	1.17
Sales 1995	128.04	135.99	1.06
Assets 1995	117.82	119.39	1.01
Equity 1995	128.21	153.29	1.20
Profits 1995	288.79	298.35	1.03

2 – International business

International	FB Average	NFB Average	FB/NFB
Sales 1994	124.01	154.76	1.25
Assets 1994	100.25	100.30	1.00
Equity 1994**	107.73	79.50	0.74
Profits 1994	269.52	122.57	0.45
Sales 1995	159.98	179.90	1.12
Assets 1995	120.48	132.58	1.10
Equity 1995	155.73	93.40	0.60
Profits 1995	103.66	151.35	1.46

** The difference of means is statistically significant with a degree of confidence $p < 0.05$.

(1) The only statistically significant difference is in "Equity growth" in international business in 1994.

Table 17 shows forecasted growth for 1996 and 1997. While not statistically significant, the information shows similar tendencies, even though we can see a greater attempt at internationalization in FBs in the medium term. This is not surprising given the deadlines for total market implementation imposed by the European Union, and the NFB characteristics mentioned above in the "Internationalization" dimension.

Table 17. Forecasted growth: 1996 and 1997
(1993= 100)

1 – Domestic business

Domestic	FB Average	NFB Average	FB/NFB
Sales 1996	128.65	141.89	1.10
Assets 1996	123.34	130.58	1.06
Equity 1996	151.96	173.16	1.14
Profits 1996	377.91	367.27	0.97
Sales 1997	139.95	150.60	1.08
Assets 1997	129.87	132.18	1.02
Equity 1997	170.77	166.43	0.97
Profits 1997	408.22	398.84	0.98

2 – International business

International	FB Average	NFB Average	FB/NFB
Sales 1996	175.42	190.55	1.09
Assets 1996	134.79	156.19	1.16
Equity1996	185.14	116.53	0.63
Profits 1996	131.93	178.89	1.36
Sales 1997	334.97	240.62	0.72
Assets 1997	207.93	184.82	0.89
Equity 1997	270.86	115.78	0.43
Profits 1997	172.50	221.27	1.28

Table 18 shows actual (1994 and 1995) and forecasted (1996 and 1997) "Investment" as a percentage of sales. While not statistically significant, the differences lead us to suspect that if FBs have lower sales growth and invest a smaller proportion of sales than NFBs, the final investment will be less in absolute terms. As a result, the difference in sales will tend to increase rather than decrease.

This corroborates data obtained in a study of 1000 large Spanish businesses in 1972, 1982 and 1992 (Gallo, Cappuyns and Estapé, 1995). In this study it was found that the average size of FBs in 1972 was 49% that of NFBs, while in 1992 it had decreased to 45%.

Table 18. Investment as a percentage of sales
(1993 = 100)

Investments		FB Average (percentage)	Standard deviation	NFB Average (percentage)	Standard deviation
Actual	Investments 1994	125.93	109.60	134.14	742
	Investments 1995**	157.17	207.80	159.43	1,324.41
Forecasted	Investments 1996	140.40	95.25	173.39	1,628.47
	Investments 1997	151.39	135.22	156.48	729.03

6. Final comments: "the financial logic of FBs and its consequences"

The above analysis leads us to think that there is some truth in the notion that FBs have a special "financial logic" of their own.

According to generally accepted principles of financial management, the ultimate mission of the financial function is to maximize the value of the company's stock. The literature recommends that this be measured in terms of the market price. In FBs, however, the "value" of the stock is not only its price, but includes other considerations such as passing on a "tradition", offering job opportunities to family members, and staying in power for long periods of time.

The fact that the FBs in our sample were among the top Spanish FBs and that their financial directors had similar characteristics to those of NFBs leads us to believe that the peculiarities of the "financial logic of FBs" are due not to any lack of knowledge or technical financial skills but to the personal preferences of the FBs' financial directors or other powerful family members.

In addition, the fact that we found no statistically significant correlations in a large number of dimensions (industry position, characteristics of financial director, capital structure, internationalization, financial ratios, income statement, growth and investment forecasts) suggests that many of these FBs do business in the way that the personal characteristics of their founders dictate. The founders' influence is direct if they are still alive, or continues indirectly through the tradition carried on by their successors (1). This contrasts with what could be called "generally accepted and recommended" patterns of strategic and financial behavior aimed at quickly achieving an adequate level of development and successfully surviving in an evolving market.

On the other hand, as we have seen more than once, while there are many FBs that follow this "peculiar financial logic", many others follow the same logic as NFBs and

(1) Poutziouris, Chittenden and Michaelas (1998) claim that attitude changes are not observed in the financial management of FBs over generations. This is not surprising when the change is from first to second generation since this type of change does not usually involve more than 2 or 3 owners, who, apart from being siblings, are usually about 50 years old, so their personal preferences have been thoroughly molded by the first generation.

achieve results comparable to theirs, even surpassing them in some of the behavioral dimensions we have analyzed.

While the following comments reflect current realities, they are not in any way meant to apply to all FBs. Indeed, many FBs are to be commended for their "excellence". The statement "FBs must become more professional", applied to some large FBs, must be understood as referring to the evolution of certain personal preferences of family members who wield power in the company or are significant owners. In other words, it refers to a particular style of reasoning which is governed by personal vested interests more than it should be. It is a style of reasoning that prevents those responsible from fully appreciating the opportunities, threats, strengths and weaknesses of the business. It thus prevents them from generating greater economic wherewithal and adopting certain practices that are generally accepted in the financial management of businesses.

The differences we found in our analysis of the various dimensions indicate that personal preferences concerning "Growth", "Risk" and "Ownership control" are the driving forces behind the "peculiar financial logic" of FBs.

As is well known, the financial resources needed to develop a business come from two sources: self-financing (profit) and the stock market.

As we pointed out in relation to "Growth", FBs are on average older than NFBs yet have lower sales. In other words, some of them grow more slowly, or do not want to grow as much as they could if they used all the available resources. Also, it seems that FBs devote a smaller proportion of sales revenue to their own mid- and long-term development.

In relation to "Risk", FBs showed a certain amount of resistance. This is apparent in their more restricted use of permanent full-time personnel and in their considerably lower level of debt compared to NFBs.

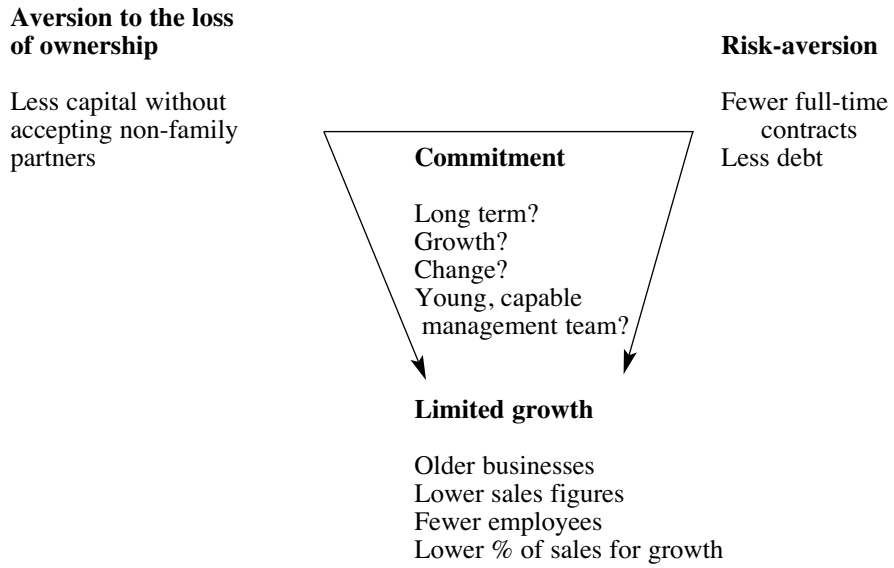
With respect to "Ownership control", we have seen that FBs have a lower average share capital and tend not to accept partners such as financial institutions or stock market investors who, obviously, are not family members.

Related to the above points, and very possibly a consequence of some and a cause of others, is the fact that many FBs do not pay dividends and have a lower return on equity. This makes them less attractive to third parties, and even to family members who do not work in the business–a group that generally increases in size with each successive generation.

FBs cannot be said to have a genuine "long-term" business policy, as is so often claimed, without making a distinction between those that do actually have one and those that do not show it by their actions – since the "financial logic" they apply will hardly get them out of the "small business" category. There is no doubting their commitment to "tradition", quality and service, which they regard as an "obligation" because "the family name is on the door", but they have no commitment to growth and evolution. That is to say, they are not committed to taking the risk of embarking on a path of development which will enable them to compete successfully in the medium and long-term future and allow them to maintain a team of young (1) and highly competent managers.

---

(1) Without growth, it is difficult to imagine a company having a large number of young employees.



One may ask: Why the aversion to losing control of ownership and to risk which leads FBs to seriously restrict their growth potential?

If the answer is that their manager-owners "do not want to answer to anybody" or "do not want to be controlled", or that they want to be able to "do as they please with what is theirs", or that they are not in a position to "show" the company's real situation, or that they have not had any new business ideas for a long time, then these FBs, with their "peculiar financial logic", are slowly spoiling their chances of being able to compete in the future. At least, this will be true in industries that require continuous growth and development or large investments.

After a vigorous start that made them strong and enabled them to survive for a long period of time, these FBs seem to have entered into a gradual decline that will make it difficult for them to survive the next generational change.

Statistical analyses cannot tell us the real reasons behind this "peculiar financial logic", since it originates in the managers' and owners' personal preferences. We therefore need to carry out clinical studies of FBs and the individuals that run them.

This type of clinical studies will enable us to identify several factors with a greater degree of accuracy:

- Which of the large and successful FBs have the "risk aversion germ" and the fear of partial loss of ownership festering within them?
- What generation, what type of family, what shareholder structure, what management styles etc. tend to produce this aversion?
- What complex causes best explain its existence?
- And, perhaps most important of all, how have the great number of FBs of excellent standing tackled this issue, and what solutions have they adopted – since, as we have seen, they have managed to overcome these problems?

7. Bibliography

Alcorn, P.B. *Success and survival in the family owned business,* McGraw-Hill, 1982.

Coleman, S. and Carsky, M. "Sources of Capital for Small Family-Owned Businesses: Evidence from the National Survey of Small Business Finances", *Family Business Review,* Vol. XII, No. 1, March 1999.

Daily, C.M. and Dollinger, M.J. "An empirical examination of ownership structure in family and professionally managed firms", *Family Business Review,* Vol. V, No. 2, 1992.

Gallo, M.A. and Vilaseca, A. "A Financial Perspective on Structure, Conduct, and Performance in the Family Firm: An Empirical Study", *Family Business Review,* Vol. XI, No. 1, 1998.

Gallo, M.A. "La sucesión en la empresa familiar", Servicio de estudios de la Caixa, 1998.

Gallo, M.A. and Cappuyns, K. "Los órganos de gobierno en la empresa familiar", Research Paper No. 346, IESE, 1996.

Gallo, M.A.; Cappuyns, K. and Estapé M.J. "La continuidad de las empresas familiares." Research Paper No. 290, IESE, 1995.

Gallo, M.A. and Vilaseca, A. "Finance in Family Business", *Family Business Review,* Vol. IX, No. 4, 1996.

Gallo, M.A. and Estapé, M.J. "La empresa familiar entre las 1000 mayores empresas de España.", Research Paper No. 231, IESE, 1992.

Gallo, M.A. and García Pont, C. "La empresa familiar en la economía española." Papeles de Economia Española, 1989.

Gersick, K.; Davis, J.; McCollan, M. and Lansberg, I. *Generation to generation,* Harvard Business School Press, 1992.

Mahérault, L. "Fonction d'investissement des P.M.E. familiales: l'influence de la cotation", paper presented at the Family Business Network 9th World Conference, Paris, 1998.

Neubauer, F. and Lank, A. *Family business: Its governance for sustainability,* MacMillan, 1998.

Smyrnios, K.; Romano, C. and Tanewski, A. "An Exploratory Investigation into the Financing Determinants of FBs", paper presented at the Family Business Network 9th World Conference, Paris, 1998.

Poutziouris, P.; Chittenden, F. and Michaelas, N. "The Financial Affairs of Private Companies", paper presented at the Family Business Network 9th World Conference, Paris, 1998.

Tápies, J. "Buy out con participación de un socio financiero. Un análisis de la situación española 1989-1997", Research Paper No. 334, IESE, 1997.

Ward, John L. *Creating Effective Boards for Private Enterprises,* Jossey-Bass, 1991.□