EUROPEAN JOURNAL OF FAMILY BUSINESS

http://www.revistas.uma.es/index.php/ejfb

Comparative analysis of the financial results-equity in family firms and non-family firms: the case of the service sector in Malaga (Spain)

Noemí García Palomo [a], José Roberto Vila Oblitas[a]

[a] *Departamento de Economía y Administración de Empresas. Universidad de Málaga (Spain).*

Abstract This research explores the differences between the main economic financial ratios of family firms and non-family firms. The analysis has been carried out on a total of 335 firms from within the province of Malaga, of which 154 are of familiar type, with the remaining 181 being unfamiliar. The sector that is the subject of this study is the tertiary sector: choosing bars, cafes and wholesale providers of these type of businesses due to their evident importance to the service sector in the province. Among main results, significant differences are highlighted in all the ratios analysed between the two groups of firms studied, as well as a greater distribution of profits to its shareholders by family firms (FF) versus non-family firms (NFF). Results show NFF have relatively higher economic return, although the variation of this ratio is greater than in a family firm.

.

Análisis comparativo del resultado económico-patrimonial en empresa familiar y no familiar: el caso del sector servicios en Málaga (España)
Resumen El presente trabajo refleja un análisis comparativo en los principales ratios económicos-financieros de las empresas familiares y no familiares, se ha realizado sobre un total de 335 empresas de la provincia de Málaga, de las cuales 154 son familiares y otras 181 no familiares. El sector que se ha estudiado es el terciario, escogiendo bares, cafeterías y los proveedores al por mayor de este tipo de comercios por su evidente importancia del sector servicios en esta provincia. Entre los principales resultados destacan las diferencias significativas en todos los ratios analizados entre los dos grupos de empresas estudiados, el mayor reparto de beneficios a sus accionistas por parte de las empresas no familiares frente a las no familiares. Las empresas no familiares obtienen mayor rentabilidad económica relativamente, aunque la variación de este ratio es mayor que en las familiares. Diversas son las aplicaciones prácticas de los resultados del estudio para el sector terciario.

Introduction

The importance of comparative studies on family enterprises has been described extensively by diverse studies (Casillas and Acid, 2007; Chrisman, J. J., Kellermanns, Chan and Liano, 2010; Benavides-Velasco, Quintana-García and Guzmán-Parra, 2013). There are a lot of notable studies where this topic is highlighted within the actual environmental analysis of family firms (Casillas, Navarrese and Menéndez, 2013; Omaña and Briceño, 2013 to Occur rarely, Gemar and Guerrero-Murillo, 2017).

Furthermore, various studies look at family enterprises from a financial perspective, which is also a topic that continues to interest investigators at present by highlighting some examples, we can indicate work like that of Arosa, Iturralde and Maseda (2010); Aparicio, Basco, Iturralde and Maseda, (2017); Di Pietro, Palacín-Sánchez and Roldán (2018) or Rakotoarivelo, Zaraté and Kilgour (2018).

The work will be structured the following way: first of all we will define the family enterprise concept; secondly we will speak about the fiscal policies and the financing of the family enterprise; then move onto the methodology section, after which we will highlight and discuss the results and conclusions.

Fiscal Policies and financing in the family firm

Onaña and Briceño (2013) propose the following criteria to discern between family business and non-family business:

"The property or the control of the company: it is defined from the percentage of participation of the family in the capital of the company or the fact of which a relative admits that it controls its company."

"The power that the family exercises over the company: it is defined from the work redeemed in the company by some members of the family. In many cases it refers to that the proprietary family redeems executive functions in the company or to that the director-general of the company is a member of the proprietary family".

"The intention of transferring the company to future generations: it is defined as regards the desire to maintain in the future the participation of the family in the company, to the number of generations of the proprietary family who intervene in the same one or to the fact of which the direct progeny of the founder has the control on the management or property of the company."

According to Casillas (2015), family enterprises represent 57 % of the Spanish GDP, generating 67 % of the employment deprived in our Country. To date there are 1,1 million family enterprises that represent 89 % of the total number of companies in Spain.

The objective of the fiscal policies is to facilitate and to encourage an ideal performance of the national economy to achieve stable levels of growth, unemployment, inflation, etc.

According to Garrido and Miralles (2017) a company that is constantly improving its fiscal capabilities is a company that is in reality, paying less taxes, although this depends on the characteristics that the company possesses in terms of size, professionalization and internationalization.

According to Palomino (2009), financing can be defined as "the means for which the natural or moral persons do to themselves to come financial resources in its process of operation, creation or expansion, in the internal or external thing, too short, medium-sized and long term, he is met like financing sources."

Methodology

The aim of this particular study is to undertake a comparative analysis of the family enterprises and non-family businesses within Malaga's service sector from an economic / financial perspective. An exploratory and descriptive type of study has been carried out which aims to underline and explain the the differences and resemblances in the family enterprises with respect to financing, fiscal policies and internationalization.

The main hypothesis will be:

H0: There is no significant difference between the ratios raised in the family enterprises and non-family enterprises.

H1: There is significant difference between the ratios raised in the family enterprises and non-family enterprises.

The following economic data has been extracted from the database SABI (System of Analysis of Iberian Balances, 2017).

According to Rojo, Diéguez and López (2011) has been used the database SABI (System of Analysis of Iberian Balances, 2017) there being selected the following parameters that appear in the table 1 for the purpose of rejecting the information that are not necessary for our study.

Table. 1

Two groups	Family Business and non Family business
Country	Spain
Number of employees	More than 10 employees.
Analysed period	2015 and 2016
IAE	612, 671 and 672.

The database extracted a total of 335 companies, of which 154 are of family business type, and the remaining 181 being of a non-family entity.

This discrimination has been done using the indicator of dependence BvD that presents us with the database SABI (System of Analysis of Iberian Balances, 2017).

According to the total number population (335), at a level of significance of 5 %, and therefore 95 % of confidence, the study has the recommended random sample of 180 companies, using 90 familiy enterprises for the study and 90 non-family enterprises regarding the criteria of Rojo, Diéguez and López (2011).

Results are divided into five groups, inside which we are going to analyze the following variables:

Table 2. Variables analyzed in the study
Return on average total assets (ROA) (%)
Results ratio
Financial profitability (ROE) (%)
Debt ratio
Liquidity ratio

1st Group: Results ratio

- Economic profitability (ROA) (%):
 I am of benefit before Interests / Activate
This ratio represents the benefit that the company will obtain for every 100€ invested, independently of the one who finances it.
- Financial profitability (GNAW) (%):
 Result of the exercise / Clear Patrimony
This ratio indicates the profitability that the shareholder will obtain for every 100€ that the company invests.
The hypotheses of this group would be:
H0: There is no significant difference between the ROA of of family and non-family enterprises.
H1: There is significant difference between the ROA of family and non-family enterprises.

2nd Group: Indebtedness ratios

- Indebtedness ratio: Debit Exigible/PN
 This ratio reports of the existing relation between the foreign resources and the proper ones.
For this group we would have the following hypotheses:
H0: There is no significant difference between the ratio of indebtedness between the family and non-family enterprises.
 H1: There is significant difference between the ratio of indebtedness between the family and non-family enterprises.

3rd Group: Liquidity ratio

- Liquidity ratio:
 Current asset / Current Debit
This ratio indicates the availability of liquidity that the company possesses at the time of covering its financings.
For the ratio group of liquidity we would have these hypotheses:
H0 exists significant difference between the ratios of liquidity of the family and non-family enterprises.
H1 exists significant difference between the ratios of liquidity of the family and non-family enterprises.

4th Group: Ratios of Balance

Working capital (€):
Current asset - Current Debit
This result can be a positive - the part of the Current assets that is being financed by permanent funds; or negative - the part of non current Assets that are being financed by the current debit.
 Ratio working capital (%):
Working capital (€) / Assets
With this ratio we can observe the weight that the working capital has fund with regard to the Assets of the company.
 Ratio of Soundness (%):
Proper Funds / non-current assets
With this ratio we can see the proportion of non current assets that are being financed by the company's own funds.
 Average period of cashing (days):
(((Commercial Debtors and other accounts to be received)) / ((clear Amount business number))) ×360
With this ratio it is possible to measure the average time that our clients take in paying us back.
 Average period of payment (days)
 (((Acreed.comerc.y other ctas to pagar+Deuda with emp.del group and asoc to c/p)) / ((Aprovisionamientos+Otros operating expenses))) ×360
The higher the average would indicate that the company is financed by its providers.
We would depart from these hypotheses:
H0, significant difference between the ratio exists working capital of non-family business and the family business.
H1, significant difference between the ratio exists working capital of non-family business and the family business.

5th Group: Ratio of Solvency

 Ratio of Guarantee or or solvency: Entire assets / Current Debit + P.No Corriente

This ratio is the capacity that the company possesses when its financial commitments expire, so that a result near to 2, indicates safety for which the creditors will receive their debts.

With a result less than 1, the company may not expire with its obligations to a third party, thereby compelling one to think about 'countable and furthermore supporting the view that 'it fails over a distance.

Results

Group1. Results ratio

In this group we would verify the following hypotheses.

H0 there are no significant differences between the ROA of both corporative groups.

H1 There are significant differences between the ROA of both corporative groups.

As for the 1st group in the results ratios, the statistician T-Student has been used to compare the ratio of economic profitability (ROA).

Table 3. T-Student. ROA

Paired two-sample t-test		
	Variable 1	*Variable 2*
Mean	0,005215889	0,035344667
Variance	0,036557657	0,032657003
Pearson correlation coefficient	90	90
Pearson correlation coefficient	0,057290653	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	-1,118906631	
P(T<=t) one tale	0,133095403	
T critical value (one tail)	1,662155326	
P(T<=t) two tales	0,266190806	
T critical value (two tails)	1,986978657	

The probability obtained in both coexpert is 0,266190806, to being major that 0,05 pushes the H0 back and therefore the alternative hypothesis is accepted, which means that significant differences exists in the economic result of both groups.

In the case of the financial profitability ratio:

Table 4. T-Student. ROE

Paired two-sample t-test		
	Variable 1	*Variable 2*
Mean	0,325228	0,200823
Variance	0,6812092	0,61342416

Data	90	90
Pearson correlation coefficient	0,00285065	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	1,03873493	
P(T<=t) one tale	0,15087092	
T critical value (one tal)i	1,66215533	
P(T<=t) two tales	0,30174184	
T critical value (two tails)	1,98697866	

In the Group 1 we raise the hypotheses of the study.

H0: There is no significant difference between IT GNAWS of the family and non-family enterprises.

H1: There is significant difference between IT GNAWS of the family and non-family enterprises.

In the case of the financial profitability IT (GNAWS), it is possible to see that there are significant differences between both corporate groups exists, therefore the H1 is accepted, since the probability is < 0,05.

In this ratio the family enterprises possess more financial profitability than non-family. It further indicates that the family enterprises distribute more benefits for the euros invested to its shareholders than non-family.

Also the family enterprises tend to be more volatile in their distribution of these benefits than non-family.

2nd group indebtedness ratio

According to the analysis realized with the statistical test T-Student, the result obtained through the comparison between the debt ratios is:

Table 5 T-Student. debt ratio

Paired two-sample t-test		
	Variable 1	*Variable 2*
Mean	0,438045333	0,634647
Variance	0,297273181	0,726337282
Data	90	90
Pearson correlation coefficient	0,017567581	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	-1,858371159	
P(T<=t) one tale	0,033210951	
T critical value (one tail)	1,662155326	
P(T<=t) two tales	0,066421901	
T critical value (two tails)	1,986978657	

As for group 2, the debt_ratio results that bring to light the confirmed hypotheses are:
- H0: There is no significant difference between the debt ratio and the family/non-family enterprises.
- H1: There is significant difference between the debt ratio and the family/non-family enterprises.
Results show a probability of 0.066421901>0.05 so the alternative hypothesis is accepted.

3rd group Ratio of Liquidity

The result thrown by the test T-Student, are reflected in the following table.

Table. 6 T-Student. liquidity ratio

Paired two-sample t-test		
	Variable 1	*Variable 2*
Mean	1,953417222	5,36762756
Variance	11,50827982	1177,86727
Data	90	90
Pearson correlation coefficient	-0,04887807	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	-0,934725228	
P(T<=t) one tale	0,176229569	
T critical value (one tail)	1,662155326	
P(T<=t) two tales	0,352459138	
T critical value (two tails)	1,986978657	

In group 3, regarding the liquidity ratios, it is possible to see that non family business possess much more liquidity availability to cover its financings, than the average family business. Although the variance of these is much bigger than that of the relatives.
The probability this test illustrates and by which the void hypothesis is pushed back, is 0,352459 >0,05, so we can conclude that there are many apparent differences between liquidity ratios within both family and non-family run businesses.

4th group Ratio of Balance

In this group we have studied two ratios, the Ratio working capital in which according to the results, there is no real difference and therefore H1 can be accepted, there are significant discrepancies between the working capital ratios in both family and non-family contexts.

Table 7. T-Student. Working Capital Ratio

paired two-sample t-test		
	Variable 1	*Variable 2*
Mean	-0,000591889	-0,00281
Variance	3,96301E-05	0,000119642
Data	90	90
Pearson correlation coefficient	0,225710679	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	1,858578922	
P(T<=t) one tale	0,033196051	
T critical value (one tail)	1,662155326	
P(T<=t) two tales	0,066392103	
T critical value (two tails)	1,986978657	

The Ratio working capital in which according to the raised hypotheses, is there pushed back the void hypothesis of which significant difference does not exist therefore is accepted H1, significant difference between the ratio exists working capital of not familiar firms and the relatives. Although not as in the ratios previously raised, in this ratio a major stability exists between both groups, this can be due to the fact that both corporative groups of the same sector, most of the assets of the balance it corresponds to the being to current asset, therefore its balances are more balanced.

Table. 8 T-Student. debt-equity ratio

Paired two-sample t-test		
	Variable 1	*Variable 2*
Mean	0,016107	-0,001444
Variance	0,004517225	0,006273416
Data	90	90
Pearson correlation coefficient	-0,018971017	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	1,588080439	
P(T<=t) one tale	0,057907311	
T critical value (one tail)	1,662155326	
P(T<=t) two tales	0,115814621	
T critical value (two tails)	1,986978657	

The hypotheses raised for the debt-equity ratio shows a probability of 0.11581462>0.05, again the H0 is rejected and hence, accept H1. There is a significant difference between the ratios of liquidity of both corporate groups.

García Palomo, N.. and Vila-Oblitas, J.R. (2018). Comparative analysis of the financial results-equity in family firm and non family: the case of the services sector in Malaga (Spain). *European Journal of Family Business*, 8(1), 81-87.

The family firms of the sample possess, on average, a major debt-equity ratio than non-family firms and less changes in its results.

The average collection period, on average, of the family enterprises is 11.51 days as opposed to 55.84 days in non-family firms, this assumes that the family enterprises receive their clients' debts much earlier than non-family firms would receive theirs.

As for the average payment period, the family enterprises, on average, pay back its providers every 160 days while non-family this takes up to 170, therefore we can confirm that both are financed by its providers, but the most profitable in this aspect are non-family firms.

5th group solvency ratio

Main results of the test are presented in table 9

Table 9. T -Student. solvency ratio

paired two-sample t-test		
	Variable 1	Variable 2
Mean	0,019529556	0,053671222
Variance	0,001150824	0,117786741
Data	90	90
Pearson correlation coefficient	-0,04888591	
Hypothetical mean difference	0	
Degrees of freedom	89	
T Stadistic	-0,934712532	
P(T<=t) one tale	0,176232823	
T critical value (one tail)	1,662155326	
P(T<=t) two tales	0,352465646	
T critical value (two tails)	1,986978657	

The obtained result is 0.352465, which leads us to push the void hypothesis back and therefore we accept the alternative hypothesis. There are significant differences between both corporate groups in this ratio.

Conclusions.

Results show the several differences in some key variables such as the ROA between family and non-family businesses. According to Mazzi (2011), results support that the differences between FF and non NFF is a highly complex issue that needs further research.

This paper has highlighted significant differences are in all the ratios analysed between the two groups of firms studied, as well as a greater distribution of profits to its shareholders by FF

versus NFF. NFF have relatively higher economic return, although the variation of this ratio is greater than in FF.

 The research has some limitations, for example:

- We have analysed some variables: profitability, its liquidity, debt, etc. without bearing in mind factors like for example, an analysis of balance a profit, loss and balance analysis.

- Its juridical form is limited to corporations, without including cooperatives or group firms.

Future studies may continue with this investigation line on the study of the economic-financial variables, allowing for a greater period of time, or analysing other countries and sectors.

Bibliography

Aparicio, G., Basco, R., Iturralde, T., & Maseda, A. (2017). An exploratory study of firm goals in the context of family firms: An institutional logics perspective. Journal of Family Business Strategy, 8(3), 157-169.

Arosa, B., Iturralde, T., & Maseda, A. (2010). Ownership structure and firm performance in non-listed firms: Evidence from Spain. Journal of Family Business Strategy, 1(2), 88-96.

Benavides-Velasco, C. A., Quintana-García, C., & Guzmán-Parra, V. F. (2013). Trends in family business research. Small business economics, 40(1), 41-57.

Di Pietro, F., Palacín-Sánchez, M. J., & Roldán, J. L. (2018). Regional development and capital structure of SMEs. Cuadernos de Gestión, 18(1), 37-60.

Casillas, J. C. (2015). La empresa familiar en España (2015). Instituto de la Empresa Familiar.

Casillas, J., & Acedo, F. (2007). Evolution of the intellectual structure of family business literature: A bibliometric study of FBR. Family Business Review, 20(2), 141-162.

Casillas, J. C., Navarro, J. L. B., & Menéndez, A. M. M. (2013). Reestructuración y tipo de propiedad en empresas en crisis. Diferencias entre empresas familiar y no familiares. Revista de Empresa Familiar, 3(1), 7.

Chrisman, J. J., Kellermanns, F. W., Chan, K. C., & Liano, K. (2010). Intellectual foundations of current research in family business: An identification and review of 25 influential articles. Family Business Review, 23(1), 9-26.

Garrido Miralles, P., Íñiguez Sánchez, R. (2017). Análisis de estados contables: Elaboración e interpretación de la información financiera, Pirámide, Madrid

Mazzi, C. (2011). Family business and financial performance: Cur- rent state of knowledge and future research challenges. Journal of Family Business Strategy, 2(3), 166-181.

Nayibeth, P (2009). Financiamiento interno de las empresas. Editorial El Cid Editor.

Omaña, L.M. y Briceño, M.A. (2013). "Gerencia de las empresas familiares y no familiares: análisis

comparativo." Estudios Gerenciales, 29. Pag. 293-294.

Rakotoarivelo, J. B., Zaraté, P., & Kilgour, D. M. (2018). Future Risk Analysis for Bank Investments using PROMETHEE. Estudios de Economía Aplicada, 36(1), 207-216.

Rojo, A., Diéguez, J., & López, P. (2011). Importancia del concepto de Empresa Familiar en investigación: utilización de la base de datos SABI para su clasificación. Revista de Empresa Familiar, 1(1), 53-67.

SABI (Sistema de Análisis de Balances Ibéricos), (2017). Database. Disponible en: https://sabi.bvdinfo.com.

Soler, I. P., Gemar, G., & Guerrero-Murillo, R. (2017). Family and non-family business behaviour in the wine sector: A comparative study. European Journal of Family Business, 7(1-2), 65-73.

Vazquez, A.L., Carbajo, D., López, F. (2010). Manual para la financiación de la pyme. Editorial Ediciones Experiencia.