# THE IMPACT OF OWNERSHIP STRUCTURE ON FIRM PERFORMANCE: THE ROLE OF CHAIRMAN AND CEO IN PORTUGAL

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# Abstract

This analysis investigates how family ownership structure affects the corporate performance of Portuguese listed firms using a panel data set covering the period from 2006 to 2014. Three characteristics of family firms (such as active management, active founder or heir and second blockholder) were examined with respect to the corporate performance. The main finding is that family firms over perform non-family in term productivity and profitability. This indicates that companies that have total family control are more productive and profitable than those market favour firms that the family does not have total ownership. Specifically, family firms with active founders perform better whereas those with active heirs significantly outperform compared to family firms with passive owners or heirs. Family firms with a family member in the company as either CEO or Chairman create more value and are more profitable than nonfamily firms. Family firms with descendant as CEO perform better meanwhile family firms with the founder as CEO significantly outperform family firms with Outside CEO for corporate performance. Lastly, the presence of a second blockholder who owns between 5-10% of the voting right enhances the corporate performance of the family firms as it counterbalances the controlling shareholder from unnecessary behaviours.

**Keywords:** Family, Ownership Structure, Founder, Descendant, Market and Accounting Performance

# **1. INTRODUCTION**

Ownership structure has been debated by prior research that it enhances the performance. Some classical research argue that ownership structure in widely held firm create opportunities for the conflict of interest between managers and shareholders. This can reduce the value of the firm since managers of such firms are more concerned about the maximization of private benefits at the expense of the owner of the firms (Agency Cost of Type I) (Jensen, 1986; Jensen and Meckling, 1976). Another school of thought claim that the most suitable instrument to correct the action of such sulphurous managerial behaviour is through concentrated ownership. However, as ownership gets more concentrated the corporate governance strategy of resolving agency cost of type I results to a type II. Agency cost of type II is when controlling shareholder can engage in undesired behaviour at the expense of the minority shareholders. The extraction of private benefits by the majority shareholder can negatively affect the value of the firms. Thus, introducing a second blockholder with majority share is thought as an important corporate governance strategy to counterbalance the agency cost of type II. However, if the percentage of ownership of the second blockholder is too small, the power will not be able to counterbalance the family blockholder, too large will resolve to a war which might negatively affect the good functioning of the family firm. In the light of the above, this study compares the corporate performance of family ownership structure and non-family.

According to the most conservative estimates, between 65% and 80% of companies worldwide are owned by one or more families, or directed by them (Miller et al., 2007; Villalonga and Amit, 2009). They



estimate that about 70%-90% of GDP and 50-80% of jobs, annually, are created by family ownership (Peres and Lluch, 2015; Pison et al., 2014). Moreover, 85% of start-up companies worldwide have a family background origin (European Family Businesses, peculiarity 2012). Thus, understanding the surrounding the characteristic of family ownership lay the foundation for the changing economy phenomenon provoke by family firms around the globe. Recent studies on the family ownership literature have compared the characteristics and performance of family firms to those of non-family firms due to the classical agency problem. Other studies contribute to the existing body of knowledge by illustrating that a large number of listed firms do not have a widely dispersed ownership structure in most financial markets. And that these firms have in general individual or collective ownership that can be classified as families, other industrial or financial companies or the states. Related to this view, family firms tend to be more dominant ownership among the other type of ownership. According to Demsetz (1983) and Himmelberg et al. (1999); Demsetz and Villalonga (2001) and Ntoung et al. (2016) companies' choice on the level of ownership are based on minimizing agency cost rather than the influencing the firm value. Thus, this perspective on ownership structure provokes a critical analysis on the impact of family ownership structure on corporate performance.

Some empirical authors argue that families that have strong ties to the firms; the firm is managed with a much longer time horizon, are more profitable and have a higher market value than nonfamily companies. Jensen and Meckling (1976) claim that the family ownership might be a way to resolve the issue of agency problem arising between shareholder and their managers, because, the controlling shareholder who is the founder monitor work better (and managers worker harder) as the fractional stake increase when they get to keep more of the fruits of their labour. The presence of the controlling shareholder minimizes the possibility of a classical conflict of interest between the founder and the managers, and thus reduces agency costs. As oppose to non-family firm or widely held firm which is entitled to a manager with the interest to maximize his own private benefits. However, as ownership becomes more concentrated, controlling shareholder may engage in undesirable behaviour at the expense of the minority shareholders. This attitude of controlling shareholder can lead to agency cost of type II.

In most cases, investors will prefer taking minority ownership in countries where shareholders' rights are protected, contrary to a country where the legal framework fails to provide sufficient shareholders' protection, investors will prefer to act as controlling shareholders in the firms. With respect to the above mentioned, the setting of ownership structure remains uncertain as to whether a greater control right of the controlling shareholder to exhibit undesirable behaviour at the expense of the minority shareholders or the manager's ability to maximize his own private utility at the expense of the shareholders is more preferable. Moreover, research evidence over the years using sale growth, productivity and profitability as common measures for performance in both family and non-family ownership have

demonstrated very different results. Specifically, non-family ownership has higher performance than family business in term of sales growth and productivity, contrary in term of profitability (Binder and Hamlyn 1994). Similarly, Westhead and Cowling (1997) used the same variables and they found no statistically significant relationship with performance, meanwhile, the very little statistically difference was found significant between performance and sale growth (Stoy Centre for Family Business, 1997).

The aim of this study is to address above theoretical question by providing an empirical analysis on how family ownership structure affects the corporate performance of Portuguese listed Firms over the period 2006 to 2014. Based on some specific characteristic of Portuguese firms, we incorporate the influence of active management by the founder himself or descendants. We further consider the presence of other blockholders in the family ownership and their contributions to the corporate performance. The sample period firms that change their investigates family ownership structure from family firm to non-family and check if such changes were due to low performance. Owners of family firms cannot sell their firms just because it is not doing well over a small horizon.

Our results support the Hypothesis 1, thus firms with family ownership structure have better corporate performance than non-family firms. This indicates that companies that family have total control are more productive and profitable than those market favour firms that the family does not ownership. Furthermore, have total three characteristics of family firms (such as active management, founder or heir active and second blockholder) were examined with respect to the corporate performance, relating to Hypotheses 2 and 3. The findings reject Hypotheses 2 and 3, thus family firms with active founders perform better whereas those with active heirs significantly outperform compared to family firms with passive. Meanwhile, Family firms with family members in the company as either CEO or Chairman create more value and are more profitable than non-family firms. Family firms with descendant as CEO perform better meanwhile family firms with the founder as CEO significantly outperform family firms with Outside CEO for corporate performance. Lastly, the presence of a second blockholder who owns between 5-10% of the voting right enhances the corporate performance of the family firms as it counterbalances the controlling shareholder from unnecessarv behaviours. Lastly, we control for endogeneity issue by applying an instrumental variable 2SLS regression and for econometric issues, we apply the pooled (average) regressions instead of fixed effects regressions.

This article is structured as follows: in the second section, we review the literature of family business performance and ownership structure in the family business, as, at the same time, some testable hypotheses are formulated. The third section provides information about the sample and discusses the methodology used in this article. In the fourth section, the empirical results and further discussion on the test for robustness are presented. In the fifth section, we present conclusions of the research study.

# 2. LITERATURE REVIEW

Empirical studies in the field of ownership structure have attained a significant number of articles in which performance of family firms is compared with those of non-family. The focus of most studies measured performance by using ratios such as Tobin's Q, return on assets, productive and return on equity; whereas ownership structure of firms are based on the percentages of voting rights of the various parties, founders or descendants being active in the firm, the presence of other blockholder in the family and whether the founder or descendants are CEO or Chairman of the firm. The genesis of ownership structure can be traced back to Jensen and Meckling (1976).

Jensen and Meckling (1976) claim that separation between ownership and control can incur important costs and problems to shareholders. Their classical agency problem suggests that one way to resolve the conflict of interest between shareholders and managers is to increase the proportion of share in the hand of the controlling shareholder. In the light of the above, minority shareholders are victimised as ownership becomes more concentrated, controlling shareholders tend to engage in undesirable behaviours. In a similar way, Schulze et al. (2001) examine the consequences of altruism concept and pay of incentives by controlling shareholder, and their influence in the level family firm's performance. They affirm that family firms with concentrated ownership are more exposed to agency danger. Chrisman et al. (2004) conclude that agency cost affect the performance of the family business. Researches in Austria, Italy and Portugal show a positive and significant relationship between incentive and performance (Bryson et al 2011).

Demsetz (1983) use a sample of 50 US listed firms from the Fortune 500 over the period 193 and 1974 conclude that companies' choice of ownership concentration is to minimize the agency cost and that concentration ownership does not have an influence on firm value. La Porta et al (1999) add that the mean ownership of the controlling shareholder is approximately 46% over the sample of 49 countries. Meanwhile, over the sample of 27 world richest countries at 10% cut-off ownership rate, 52% of medium firms are owned by individual or families (as opposed to 10% dispersed ownership). Also, Anderson and Reeb (2003) provide evidence that the ownership of firms in the S&P 500 is predominantly family of approximately 35% of dispersed ownership as opposed to the widely accepted view of other researchers. They conclude that family business in the first generation in the hands of the founder is most efficient due to the fact higher profit and higher market value is common characteristics of such company unlike the case for non-family.

Villalonga and Amit (2006) extend the research done by Anderson and Reeb (2003) and theirs results suggest that firms with the active founder as CEO or Chairman outperform family firms with descendants as CEO or Chairman. They claim that firms' performances are mostly affected negatively by ownership and control mechanisms such as cross-holdings, pyramidal structure or dual-class share. Finally, their findings suggest that these characteristics of family firms do influence their performance. In Europe, Barontini and Caprio (2006) and Ntoung et al. (2016) provide similar evidence to those of Villalonga and Amit. According to them, family firms with founder or descendants as CEO or Chairman outperform other firms; however, family firms with the founder as CEO outperform family firms with descendants as CEO. Also, if no member of the family is involved in the management (passive), and then the firms perform worse.

Corresponding to Sraer and Thesmar (2007), two third of the firms in the French stock exchange over the period 1994 to 2000 are a family held. Using ROA, ROE and growth in sales as accounting measure of performance they conclude that family firms outperform non-family firms. They argue that the over-performance of the family firms over all the various management is due to the fact that founders simply have larger productivity. Binder and Hamlyn (1994) analysed the sale growth, productivity and profitability as common measures for performance in both family and non-family business. Specifically, their results show that non-family firms have higher performance than non-family firms in term of sales growth and productivity; however, in terms of profitability, the result shows no significant effect on performance for both family and non-family business. With respect to the size of the firms, using small size firms, Daily and Dollinger (1992) conclude small family businesses have that better performance to small non-family businesses, in term of sales growth and profitability. Meanwhile, Leach and Leahy (1991) apply similar study on large firms and found that a greater degree of control by the family has a positive effect on performance. Thus, larger companies with a greater proportion of ownership by the family have better financial ratios, particularly with regard to sales growth, asset growth, profits as well as the rate of return to shareholders. Ganderrio (2002) contrasts the hypothesis of a better long-term performance of family businesses using financial ratios such as return on equity (ROE), thus, obtaining higher equity/debt ratio, and lower equity to assets ratio, meaning that these results stem from the fact that non-family businesses more easily access the market.

Specifically, family businesses in Portugal have been the major contributor to the gross national product. Regojo et al. (1998) argue that 45% of the 1000 largest firms in Portugal are family businesses. Portugal has one of the highest rates of marriages and lowest divorce rates in Europe, indicating that traditional family systems may be more predominant and, on average, family sizes are greater than those in the UK and North America (Howortb and Assaraf Ali, 2001). However, research on family firms in Portugal is virtually non-existent. Lastly, we argue that Portuguese family firms are of great interest, due to the fact that very little empirical evidence has been provided about the ownership structure and corporate performance of family firms.

### 2.1. Hypotheses

It is the aim of this study to provide an empirical analysis on how ownership structure affects the corporate performance of Portuguese listed Firms over the period 2006 to 2014. This leads to the *first hypothesis* which states:

*Hypothesis 1a: Family firms significantly outperform non-family.* 

*Hypothesis 1b: Do family firms perform better than non-family regardless of their ownership structure?* 

Following the premise of *hypotheses 1a and 1b*, our analysis will bias if we no further consider that the over performance family firms may be due to some characteristics, especially their involvement in the day to day management of the company. That is, it enables us to investigate if the family members themselves are responsible for the over the performance of the family firms. This leads to the *second hypothesis* which states:

Hypothesis 2a: Family characteristic of family firms restrict the performance of family firms as such family firms do not outperform non-family firms.

Hypothesis 2b: Family members as CEO or Chairman negatively affect family firms as such family firms underperform non-family firms.

If Hypotheses 1a and 1b are supported by our research findings and Hypothesis 2 is not supported, we can conclude that the family characteristic of family business do add value to companies, thus reducing the agency cost of type I. However, as ownership structure gets more concentrated, controlling shareholder may involve in undesirable behaviour at the expense of other minority shareholder, thus enhancing the agency cost of type II. The controlling shareholder can extract private benefits from his company at the expense of other because he has absolute power over the company and the minority cannot easily defence themselves. An effective way to reduce agency cost of type II is by examining the second large shareholder to equalize some of the power of the controlling shareholder and prevent the undesirable behaviour of private interests. This leads to the *third hypothesis* which states:

Hypothesis 3: Family firms' performance is not enhanced if another second large blockholder holds shares in the company as such family firms underperform non-family firms.

#### **3. METHODOLOGY**

#### 3.1. Empirical Model

To examine the relationship between firm performance (Productivity and ROA-EBIT, ROA-EBITDA) and ownership structure control, we apply a two-fixed effect model with each industry and each year is considered as a dummy. The regression equation is illustrated as follows:

Firm performance = $\alpha_0 + \alpha_1$ (Family firm) + $\alpha_2$ (Control variable) + $\alpha_3$ (Year dummy) +	(1)
$+ \alpha_4$ (CAE Rev.3 industry code) $+ \varepsilon$	(1)

Where:

• *Firm performance:* Productivity and return on asset with EBIT and EBITDA as numerators.

• *Family firm takes:* dummy equals 1 when a firm is a family firm or zero otherwise.

• *Control variable:* refers to size (logarithm of total assets), age (logarithm of the date of establishment), growth opportunities (increase in one-year sales), return on asset with EBIT and EBITDA as numerators, incentive policy measure by dividend at time over total assets.

• *Industry dummy:* equalling 1 as dummy for each CAE Rev.3 classification code,

• *Year dummy:* equals 1 for each year considered in the analysis.

Furthermore, to correct the presence of heteroskedasticity and serial correlation in the data, we employ the Huber-White Sandwich estimator for a variance. One important observation concerning the productivity is that sometimes the value is extremely high which might cause our dependent variable possess some features of outliers. To correct this, we considered the logarithm of productivity. See Table 1 for details about family firms.

# 3.2. Data

In this section, we examine the ownership structure and corporate performance of listed family business using data constructed based on the Iberian Balance sheet Analysis System (SABI) of the Bureau Van Dijk, containing detailed financial information on more than 500,000 Portuguese businesses. Next, we employ the CAE Rev. 3 classification code excluded all financial and utility firms using the industry classification CAE 64-66; CAE 84; CAE 94; CAE 97-99. The reason for the exclusion of firms in these industries is due to the fact that firms are strongly regulated and influenced by the government. We also excluded all firms with incomplete accounting information. Our final sample consists of 52 firms and 468 firm-year observations listed in the Portuguese Stock Market over the period 2006 to 2014.

### 3.3. Variables Measurement

#### 3.3.1. Dependent Variables

We focus on three different measures of corporate performance. We analyse firm performance by looking at the productivity of the family business. The choice of using the productivity is due to the availability of information in SABI. In order to calculate the productivity, we divide the sales value of year t over the number of employees of year t. This is consistent with Anderson and Reeb (2003). Return performance is measured using the return on assets. To calculate return on asset, we employ ROA (EBIT) as Earnings before Interest and Taxes divided by total assets as well as ROA (EBITDA) as Earnings Depreciation Before Interest Taxes, and Amortization divided by total assets. This is consistent with Sraer and Thesmar (2007), Villalonga and Amit (2006), Daily and Dollinger (1992), Binder and Hamlyn (1994).

#### *3.3.2. Independent Variables – Ownership Structure*

The criteria used for the ownership structure of firms in Portugal are based on Iberian Balance sheet Analysis System (SABI). It focuses on the holding of a shareholder ultimate voting rights across these



firms which differ from the ultimate cash flow rights. In cases where information was available about the ownership structure of a company, we search this property directly on the company websites. Family firms in Portugal were classified through the aid of the BvD independence indicator available in SABI. The BvD independence indicator has 5 levels such as "A", "B", "C", "D" and "U". According to SABI, Independent Indicator "A", denotes that a company is said to be independent if the shareholder must be independent by itself (i.e. no shareholder with more than 25% of ownership of ultimate voting rights); whereas Independent Indicator "B" is when no shareholder with more than 50% but exist one shareholder with voting rights between 25.1% to 50%. For a company to be "C", the classified with Independent Indicator company must have a recorded shareholder with a total or a calculated ownership of 50.1% or higher, whereas a company is classified with "D" when a recorded shareholder with a direct ownership of over 50% with branches and foreign companies.

Independent Indicator "U" is applied when a company does not fall into the categories "A", "B", "C" or "D". Based on the above features and prior studies, a company with a shareholder having more than 25% is classified as a family while firms with no shareholder with more than 25% are classified as widely held firms. This threshold of 25% allows shareholder to have a significant influence on the firm. Therefore firms categorized with "A" are widely held firms while firms in "B", "C", "D" are family firms. Our next criteria for a family is that in a family firm an individual or a family must be the

largest shareholder and be categorized in "B", "C", and "D". Individual must be part of the founding family. If this is not the case, the controlling shareholder must have had the largest percentage of ultimate voting right over a long horizon.

We eliminated firms under the category "U". Also, we incorporate the information relating to family management. We check for the name of the CEO, Chairman, and board members, and if they are a family member with a daily participation in the management of the family firm. This information is very important because it helps us to check the performance of family firm with active owners verse passive owners. We considered another type of blockholders such as widely held corporation and widely held financial shareholders. A miscellaneous category pools all firms with blockholders that don't represent any of the categories above meanwhile firms with the government as shareholders were eliminated due to the limited number.

# *3.3.3. Independent Variables – Control Variables*

To control for certain industry and firm-specific characteristics, we employ variable such as firms size measured as the logarithm of total assets, age defined the logarithm of the date of establishment, growth opportunities as increase in one-year sales, return on asset with EBIT and EBITDA as numerators, incentive policy measure by dividend at time over total assets, industry is defined according to CAE Rev.3 classification code and yearly dummy.

#### **Table 1.** Definition of variable

Dependent Variables - Performance					
Accounting performance	Productivity (Sales/number of employees), Return on assets (EBIT/Total Assets and				
	EDITDA/ Total Assets)				
	Indicates a dummy coupling lif no charabelder with more than 25% of ownership of				
"A"	ultimate voting rights);				
"D"	Indicates a dummy equalling 1 if no shareholder with more than 50% but exist one				
В	shareholder with voting rights between 25.1% and 50%.				
"C"	Indicates a dummy equalling 1 if a recorded shareholder with a total or a calculated				
C	ownership of 50.1% or higher				
"D"	Indicates a dummy equalling 1 if a recorded shareholder with a direct ownership of				
D	over 50% with branches and foreign companies				
Family firms	"B", "C" and "D"				
Non-family firms	"A"				
Family CEO, Family Chairman, and	Indicates a dummy equalling 1 if a family member is CEO, Chairman, CEO and				
Family CEO_Chairman	Chairman, respectively in a family firm.				
Passive owner	Indicates a dummy equalling 1 if the family only holds shares in the company without				
	taking an active position.				
Founder active and descendant active	Indicates a dummy equalling 1 if the founder or a descendant is actively managing the				
Founder deuve und descendant deuve	company as Chairman or CEO.				
Founder CEO (Chairman), descendant	Indicate a dummy equalling 1 if respectively the founder, descendant or an outsider				
CEO (Chairman) and outside CEO	holds the CEQ (Chairman) position in the family company				
(Chairman),					
Second blockholder with intervals	Indicates a dummy equalling 1 if a second large blockholder exists in a family firm and				
<5%, 5-10%, and more than 10%	controls voting right in one of the given intervals (<5%, 5-10%, more than 10%)				
Widely held corporation, Widely held	Denote a dummy variable 1 if the largest ultimate shareholder owns does not have				
financial, Miscellaneous category	more than 25% of the shares in one of the categories.				
	Independent Variables - Control Variables				
Firms size	Logarithm of total assets				
Growth opportunities	The increase in one-year sales.				
Return on assets	EBIT/Total Assets and EBITDA/Total Assets				
Incentive policy	Dividend at period t over total assets at period t				
Firm age	Logarithm of the date of establishment				
Industry	CNAE 2009 classification code				

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### 4. EMPIRICAL ANALYSIS

#### 4.1. Descriptive Statistics

Table 2 shows that 60% of firms are classified as family firms, of which 51,6% are managed by

founder, 32,3% are managed by heirs and 16,1% by outside CEO. However, 40% of the observations are classified as non-family firms. Across industries, our findings show that on average family firms have an involvement of 59,3% of all industries that make up the Portuguese economy.

Table 2. Number and percentage of firm-years observation for ownership type and each CAE Rev.3 code

CAE Rev.3 code	Industry	Total	Non- Family	Family	Founder	Heir	Outside CEO	Family Firm in Industry
70100	Activities of head offices	12	4	8	4	3	1	66,67%
64202	Activities of holding companies nonfinancial	16	8	8	5	2	1	50,00%
93120	Activities of sport clubs	4	1	3	0	1	2	75,00%
42130	consultancy activities	4	1	3	2	2	1	75,00%
71120	Construction	1	1	0	0	0	0	0,00%
21100	Manufacturing	6	3	3	1	1	1	50,00%
55111	Hotels with restaurant	2	0	2	2	0	0	100,00%
52291	Transportation and Communication	4	2	2	1	1	0	50,00%
46520	Retails	3	1	2	1	1	0	66,67%
	Total	52	21	31	16	10	5	60%

Note: Family is defined as an individuals or families holding more than 25% of voting right. A 25% ownership level is also used for the remaining ownership types. Widely held firms do not have any shareholder holding 25% or more of voting rights (SABI of the Bureau Van Dijk). The overall sample contains 468 firm-year observations taken from 52 listed firms for the period 2006 to 2014. Source: Authors elaboration

Table 3 summarizes the descriptive statistic for all the variables used in the study. Productivity for the sample firms is 58,04 while return on assets with EBIT and EBITDA as numerators are 5,57% and 3,35% respectively. With respect to the control variables, the average age of firms examines is 38 while firms have an average size of 1,15 billion euros. For the ownership variables, on average 0,29 family firms have family Chairman while 0,20 have a family CEO and 0,09 have both a family CEO and Chairman. Lastly, on average 0,53 of the firms are classified in the first generation while 0,46 of which are a category as second generational firms.

Table 3. Descriptive statistics of the sample

	Minimum	Maximum	Mean	Standard Deviation
Productivity	5,00	1141,00	58,04	181,99
Return on assets (EBIT) (%)	-57,08	15,99	5,57	13,76
Return on assets (EBITDA) (%)	-55,00	178,00	3,35	12,06
Family firm	0,00	1,00	0,58	0,49
Non-family firm	0,00	1,00	0,42	0,49
Family Chairman	0,00	1,00	0,29	0,45
Family CEO	0,00	1,00	0,20	0,45
Family CEO and Chairman	0,00	1,00	0,09	0,29
First generation	0,00	1,00	0,53	0,49
Second generation	0,00	1,00	0,46	0,49
Second blockholders with less than 5%	0,00	1,00	0,44	0,49
Second blockholders with more than 5%	0,00	1,00	0,15	0,36
Sale growth (%)	-91,21	567156,00	4683,23	40816,65
Incentive efficiency	-212,00	4386	119,14	316,42
Firm size (total assets 000,000 euros)	0,14	2237,36	1153,77	3010,70
Age (years of establishment)	4	116	37,78	26,06
Number of firm-observations	468	468	468	468

Note: The variables for the analysed sample of 52 firms and 468 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. Family firm denotes a dummy taking the value 1 if the firm has a family or individual with 25% or more voting rights, Family CEO, Family Chairman, and Family CEO and Chairman indicates a dummy equalling 1 if a family member is CEO, Chairman, CEO and Chairman, respectively in a family firm. According to SABI, Non-family are those with no shareholder has at least 25% of voting rights.

Source: Authors elaboration

Table 4 shows that return on asset EBIT and EBITDA as numerator are highly significant for both family and non-family firms. However, the return on assets (EBIT) is highly significant for family meanwhile the difference of mean for return on assets (EBITDA) is relatively equal for both family and non-family. The difference of mean for Productivity is found non-significant between family and non-family firms. Non-family firms have significantly more growth rate than their counterpart firms. Also, family firms significantly maintain a long term outlook than non-family. Even though the difference of mean for size is not significant, our finding shows that family firms are smaller than their counterpart firms.



	Non-Family Firms	Family Firms	Difference in Mean	t-stat
Productivity	430,44	509,11	-78,67	-4,55
Return on assets (EBIT) (%)	-30,79	302,28	-333,08	-3,11***
Return on assets (EBITDA) (%)	2,15	2,47	0,32	2,91*
Family Chairman	0,49	0,00	0,49	13,89***
Family CEO	0,51	0,00	0,51	14,91***
Family CEO and Chairman	0,33	000	0,33	-17,25***
First generation	0,68	0,34	0,34	0,29
Second generation	0,45	0,21	42	0,09
Second blockholders with less than 5%	0,44	0,00	0,44	2,482**
Second blockholders with more than 5%	0,38	0,00	0,38	3,21**
Sale growth (%)	7873,61	3433,98	4439,63	1,02***
Incentive efficiency	120,26	70,26	50,00	3,48**
Firm size (total assets 000,000 euros)	2009,90	554,61	1455,29	4,59
Age (years of establishment)	30,37	35,05	4,32	1,69*

Table 4. Tests of difference of means between family and non-family firms

Note: The variables for the analysed sample of 52 firms and 468 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. Family firm denotes a dummy taking the value 1 if the firm has a family or individual with 25% or more voting rights, Family CEO, Family Chairman, and Family CEO and Chairman *statistic function of the provided and the second provided and the provid* 

Source: Authors elaboration

# 4.2. Regression Results

#### 4.2.1. Performance of Family Firms

Analysis of Table 5 shows that the corporate performance of family firms outperforms non-family firms. Specifically, column 1, 3 and 5 show that both productivity and return on assets with EBIT and EBITDA as numerators are statistically significant at the 5% level. However, higher coefficients are associated with the returns than the productivity. This indicates that companies that family have total control are more profitable than those market favour firms that the family does not have total ownership. In addition, columns 2, 4, and 6 show the difference percentage of ownership of family firms are statistically significant at the 5% level. However, the Independent Indicator "C" significantly outperform the Independent Indicator "B" and "D" for ROA (EBIT) and ROA (EBITDA). This indicates that family firm with a total or a calculated ownership of 50.1% or higher are more profitable than those in which no shareholder with more than 50% but exist one shareholder with voting rights between 25.1% and 50%. Family firm with ownership structure categories under Independent Indicator "D" have significantly higher productivity than family firms with independent indicator "B" and "C". These results support Hypothesis 1a that family firms significantly outperform non-family firms.

Table 5. Performance of family ownership

	Produ	ctivity	ROA	(EBIT)	ROA (E	EBITDA)
Family	3,264***		6,070**		9,087***	
Family	(4,117)		(2,117)		(1,825)	
First constion	0,00		0,00		0,00	
First generation	(0,00)		(0,00)		(0,00)	
Cocord concretion	-31,221		31,119		0,685	
Second generation	(-1,369)		(1,895)		(0,423)	
D		-9,133		-4,033		-8,783**
Б		(-0,515)		(-0,903)		(-2,130)
C		1,541**		4,675		9,193**
C		(2,720)		(-0,841)		(2,080)
D		3,01*		0,921**		0,318*
D		(3,54)		(1,838)		(2,471)
Calas mouth			2,034**	2,84**	2,391**	2,182**
Sales growth			(2,461)	(3,219)	(3,985)	(3,829)
$\mathbf{P} \cap \mathbf{A}$ (EPITDA)	0,265**	0,289**				
ROA (EBIIDA)	(3,170)	(2,342)				
$\mathbf{P} \cap \mathbf{A}$ (EPITDA)	0,287**	0,535**				
KOA (EDITDA)	(0,532)	(2,054)				
Incontivo officient	-0,090	-0,075**	-0,477	-0,003	-0,003	-0,003*
incentive enicient	(0,175)	(-3,067)	(-0,649)	(-0,014)	(-1,650)	(-1,668)
In(ago)	0,083	-0,091	3,403**	0,615**	0,011*	0,015**
LII(age)	(0,869)	(-1,354)	(2,742)	(1,150)	(1,674)	(3,069)
Im(Total acceta)	4,296***	31,337	0,134***	70,398**	0,465*	0,470*
LII(10tal assets)	(6,119)	(8,074)	1,935	(2,285)	(1,649)	(1,656)
Intercent	16,841**	17,53**	7,938*	7,227**	6,742*	6,385*
muercept	(3,684)	(2,812)	(-1,876)	(1,845)	(1,776)	(1,665)
Adjusted R square	0,149***	0,201***	0,673**	0,224	0,132***	0,129***
Durbin-Watson	2,009	2,031	2,010	1,959	1,955	1,977
Total firms-observation	468	468	468	468	468	468

Note: The variables for the analysed sample of 52 firms and 468 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. Family firm, B denotes a dummy taking the value 1 if the firm has a family or individual with 25-50% of voting rights or C for ultimate family owning 50.01% or higher or D for family company with an unknown direct shareholder with 50.01% or higher Also family firms denotes a dummy variable 1 if the founder actively involves in the decision making and the company must be above 30 years. Heir designates a dummy with the value 1 if the heir actively involves in the decision making and the company must be above 30 years (SABI of the Bureau Van Dijk).

, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration.



As shown in section 4.2.1 above, the validity of Hypothesis 1a depends on Hypothesis 1b which takes that family firms significantly outperform nonfamily firms regardless of the ownership structure. We deduct the ownership structure of non-family firms into a widely held corporation, widely held financial, miscellaneous and state categories. We eliminated miscellaneous and state categories due to the limited number of firms. Table 6 illustrates the performance of family firm versus the different categories of ownership of non-family firms. The findings show that ownership type has a different influence on firm performance. The market seems to value family firms highest while all results of the types of category seem to have different influence but the results are not statistically significant at the 5% level. With respect to the accounting measure of performance, the family firms seem to outperform all of the other categories of the ownership structure of non-family firms for ROA with EBIT (2,253) and EBITDA (6,295) as numerator at the 10% and 5% levels. The results of this study are consistent with Andres (2008) on one hand that family firms significantly over perform non-family firms regarding the accounting performance. These results do support Hypothesis 1b that family firms significantly outperform non-family firms regardless of the ownership structure.

Table 6. Perform	ance of family ow	vnership and wig	dely held firms
	,	1	

	Productivity	ROA (EBIT)	ROA (EBITDA)
Intercent	13,458*	15,183**	-2,466**
intercept	(1,686)	(1,836)	(2,433)
Family	6,120**	2,298**	6,295*
Falliny	(3,457)	(2,253)	(1,538)
Widely held corporation	4,135	1,185	3,195*
where here corporation	(1,418)	(0,692)	(2,171)
Widely held financial	4,327	4,010	4,512*
wheely new mancial	(0,073)	(1,051)	(2,023)
Salas growth		0,003**	0,000
Sales growin		(2,045)	(-0,065)
$P \cap A (FRITDA)$	0,342**		
KOA (EBIIDA)	(2,31)		
$P \cap A (FRITDA)$	0,298**		
KOA (EBIIDA)	(5,424)		
Incontivo officient	-0,093**	0,006	-0,003
incentive efficient	(-3,756)	(0,030)	(-1,719)
I n(ago)	-0,024	0,657	0,015
LII(age)	(-0,359)	(1,259)	(3,156)
In(Total assots)	27,825***	6,882**	4,467**
LII(10tal assets)	(7,139)	(2,81)	(-1,68)
Adjusted R square	0,163	0,125	0,144
Durbin-Watson	2,002	1,969	1,976
Total observation	468	468	468

Note: The variables for the analysed sample of 52 firms and 468 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. Family firm denotes a dummy taking the value 1 if the firm has a family or individual with 25% or more voting rights. A firm is assigned a dummy with value 1 if the firm is a non-family (when there is no individual or collective shareholder with more than 25% direct or total ownership). Also widely held corporation and widely held financial denote a dummy variable 1 if the largest ultimate shareholder owns more than 25% of the shares in one of the categories (SABI of the Bureau Van Dijk).

\*\*\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration

# *4.2.2. Active Management and Performance of Family Firms*

Hypothesis 2a posits that the family characteristic of family firms restrict the performance of family firms as such family firms do not outperform non-family firms. Evidence from Table 7 shows that performance of family ownership with founder or heir who held active position in the management. Family firms with active founders perform better whereas those with active heirs significantly outperform compared to family firms with passive owners at the 5% level. According to profitability measure of performance (EBIT and EBITDA), family firms with active founders significantly outperform family firms with active heirs. However, when the productivity measure of performance is considered, family firms with active descendants do better, meanwhile family firms with active founders significantly outperform passive owners at the 5% level. This indicates that the knowledge of the family is important in running a company. We suggest that the reason of active descendant outperform the others is due to that fact that descendants have superior skills and are motivated by incentive which enhances the gain of the firm. These results do not support Hypothesis 2a that the family characteristic of family firms restrict the performance of family firms as such family firms do not outperform nonfamily firms.

# *4.2.3. Founder, Heir CEO and Chairman and Performance of Family Firms*

Next, we argue that the difference in family firm performance and active management displayed in Table 8 can be further simplified based on their levels responsibilities in the company (i.e., the distinction between CEO and Chairman). Table 8 shows that family firms with descendant as CEO perform better meanwhile family firms with the founder as CEO significantly outperform family firms with Outside CEO for accounting measure performance at the 5% level. With respect the productivity measure performance, none of the categories was significant at the 1% level. Profitability equally augments for family firms with descendants as CEO than with founder as CEO. For both the profitability and productivity measure of performance, analysing Chairman shows that family firms with founder and descendant as Chairman

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does better than those with Outsider Chairman and are statistically significant at the 5% level. However, the family firms with the founder as CEO does better meanwhile those with heir significantly outperform Outsider CEO. These results reject Hypothesis 2b that family members as CEO or Chairman negatively affect family firms as such family firm underperform non-family firms.

Table 7. Active famil	y and performanc	e of family firms
-----------------------	------------------	-------------------

	Productivity	ROA (EBIT)	ROA (EBITDA)
Interest	5,756*	7,219***	5,756**
Intercept	(1,328)	(4,132)	(1,328)
Foundar active	3,294**	8,095**	7,812**
Founder active	(2,093)	(2,143)	(3,056)
Dassivo oumor	2,786	-4,972	2,789
Passive owner	(1,644)	(-1,033)	(1,644)
Descendent active	5,262**	2,228**	3,031**
Descentiant active	(2,329)	(8,061)	(2,329)
Dessing desserved and	-2,614	-0,924	-2,614
Passive descendant	(-1,245)	(-0,033)	(-1,245)
Calas manuth		0,000**	-0,017
Sales growth		(5,492)	(-0,554)
	0,329*		
KUA (EBIIDA)	(2,342)		
	0,891**		
KUA (EBIIDA)	(2,956)		
In continue officient	-0,002	-0,078***	-0,002
incentive efficient	(-1,375)	(-3,325)	(0,170)
I m(n mn)	0,012**	-0,071	0,012**
Ln(age)	(2,422)	(-1,058)	(2,422)
Im(Total accests)	-0,385	23,673**	-0,382
LII(TOTAL ASSETS)	(-1,277)	(5,936)	(0,202)
Adjusted R square	0,260	0,262	0,141***
Durbin-Watson	1,980	2,013	1,980
Total firms-observation	468	468	468

Note: The variables for the analysed sample of 51 firms and 459 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. Founder active and descendant active indicate a dummy equalling 1 if the founder or a descendant is actively managing the company as Chairman or CEO. Passive owner indicates that the family only holds shares in the company without taking an active position in it (SABI of the Bureau Van Dijk). \*\*\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration

### Table 8. Active management and performance of family firms

	Produc	ctivity	ROA	(EBIT)	ROA (	EBITDA)
Internet	16,766,***	12,341**	4,987***	7,385*	5,873***	3,451***
intercept	(2,965)	(3,456)	(1,286)	(1,666)	(12,348)	(2,349)
From der CEO	0,321		1,374***		1,201***	
Founder CEO	(2,783)		(1,846)		(2,884)	
Orstalidar CEO	-0,432		0,384*		-0,285*	
Outsider CEO	(-0,309)		(2,499)		(2,239)	
Decession down (CEO	0,532		4,381**		1,873***	
Descendant CEO	(2,134)		(2,981)		(3,611)	
Freedow Chairman		0,231**		0,324*		1,233***
Founder Chairman		(2,128)		(1,553)		(9,324)
Orstaidan Chairmann		-0,324		-0,235		-0,47**
Outsider Chairman		(-3,197)		(-2,130)		(3,362)
Deceendant Cheirman		0,241**		0,119*		0,000**
Descendant Chairman		(3,892)		(1,864)		(2,398)
Cales mouth			-4,620**	-3,243**	0,387	-3,238
sales growth			(-2,481)	(-3,340)	(1,238)	(-2,198)
	2,138**	0,345**				
KOA (EBIIDA)	(3,253)	(2,389)				
	0,324**	0,439**				
KOA (EBIIDA)	(3,892)	(3,289)				
Inconting officient	-0,091	0,017	-0,002	-0,254	0,342***	0,322***
Incentive efficient	(-3,684)	(0,087)	(-1,342)	(-3,753)	(1,234)	(2,132)
Im(aga)	-0,024	0,128	0,011*	0,343*	0,421***	0,346*
LII(age)	(-0,347)	(0,235)	(2,147)	(2,349)	(3,287)	(1,295)
Im(Total acceta)	30,262	38,692	31,379	31,347	31,340	34,671*
Ln(Total assets)	(7,114)	(7,721)	(2,139)	(4,398)	(2,123)	(2,348)
Adjusted R square	0,188***	0,132***	0,140**	0,160***	0,167***	0,174***
Durbin-Watson	2,007	1,928	1,865	2,001	1,890	1,907
Total firms-observation	468	468	468	468	468	468

Note: The variables for the analysed sample of 52 firms and 468 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. The Founder CEO (Chairman), descendant CEO (Chairman) and Outsider CEO (Chairman), indicate a dummy equalling 1 if respectively the founder, descendant or an outsider holds the CEO (Chairman) position in the family company (SABI of the Bureau Van Dijk). T-statistic is presented in the parentheses. \*\*\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration

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# *4.2.4. Multiple Blockholders and Performance of Family Firms*

One suitable approach to Hypothesis 3 which states that Family firm performance is not enhanced if another second blockholder holds shares in the company is by examining the ownership % of the second blockholder across various intervals. We create three categories of the second blockholder denoting a dummy equalling 1 if a second large blockholder exists in a family firm and controls voting right in one of the given intervals (<5%, 5-10% and more 10%). Results from Table 9 show that family firm with a second shareholder having 5-10% ultimate voting rights is significantly for both the market and accounting measure of performance at the 1% level. This indicates that the market rate family firms with second shareholder having between 5-10% ultimate voting rights of the company. All the other intervals were not significant for both the market and the accounting performance. One reason for that is due to the fact that family firm with no or very small second shareholder owning less than 5% in the company does not perform better than non-family firm. Also, those with second shareholder owning above 10% neither perform better than non-family firms. Too small will not be sufficient to equalize the family blockholder whereas too large will resolve to a war which might negatively affect the good functioning of the family firm. Thus, 5-10% ownership of the second shareholder is optimal of reducing agency cost of type II. Thus, we reject the Hypothesis 3 that family firm performance is not enhanced if another second blockholder holds shares in the company.

able 9. Balance sar	nple of multiple	blockholder and	performance of	family firm
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	Produ	Productivity		ROA (EBITDA)	
Intercept	6,385*	3,187*	5,432**	2,348*	
	(1,069)	(3,249)	(4,392)	(3,291)	
Family firms	6,383**		0,393**		
Family mins	(1,554)		(2,341)		
Second blockholder 5% or less		0,298*		0,231**	
Second Diockholder 5% of less		(3,274)		(1,349)	
Second blockholder 5% - 10%		0,826*		2,341**	
Second Diocknoider 5% - 10%		(2,983)		(2,123)	
Second blockholder 10% or more		-0,000		-0,000	
Second biockholder 10% of more		(0,000)		(0,001)	
Salas growth			3,245*	2,746*	
Sales growin			(4,582)	(3,029)	
$R \cap A$ (FRITDA)	1,376***	1,932**			
KOA (EDITDA)	(2,349)	(3,281)			
$B \cap A$ (FRITDA)	2,563***	2,675***			
	(4,321)	(6,492)			
Incentive efficient	-0,003*	-0,432*	-0,058***	-0,231**	
Incentive enterent	(-1,668)	(-1,460)	(-2,634)	(-3,280)	
In(age)	0,015	0,392	0,017	0,081	
LII(age)	(3,069)	(0,248)	(3,847)	(0,00)	
In(Total assets)	0,470*	0,239*	0,421**	0,398*	
Lii(10tai a55ct5)	(1,656)	(2,341)	(3,459)	(1,237)	
Adjusted R square	0,129***	0,202***	0,201***	0,208***	
Durbin-Watson	1,977	2,001	1,959	2,008	
Total firms-observation	414	414	414	414	

Note: The variables for the analysed sample of 46 firms and 414 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. The different second blockholder variable take a dummy equalling 1 if a second large blockholder exists in a family firm and controls voting right in one of the given intervals (<5%, 5-10% and more 10%) (SABI of the Bureau Van Dijk). T-statistic is presented in the parentheses.

\*\*\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration

In the light of the above mentioned, Hypothesis 1 is supported by our findings while Hypotheses 2 and 3 are not supported by our research findings. Thus, we can conclude that family firm outperforms non-family firm for 52 Portuguese listed firms with full information available in SABI over the period 2006 to 2014.

### 4.3. Robustness Test

The endogeneity of ownership structure of firms is it family or non-family post an important concern regarding the validity of the result obtained. Several authors fail to consider ownership as endogenous; and have reported positive, negative, insignificant, the nonlinear reverse relationship between ownership and firm performance. While other authors considering ownership as endogenous obtained conclusion of no significant relationship using either a Panel-Fixed Effect or Instrumental Variables. In this study, we argue that ownership structure can be motivated by the good performance of the company as opposed to the fact that ownership structure yields good performance. This is true in the sense that family owners in the family firm will neither sell their ownership of the company just because of a short horizon of poor performance nor will they sell their ownership structure when the performance of the company is good. As usual, every business is characterized of both up and downs. To see if poor performance is the sole cause of family firm change to non-family, over the time period of this study three firms change their ownership from family to non-family, which remain



very insignificant to the rest of the sample. However, the reason for the change of ownership structure was due to the presence of agency cost of type II, which constrains the founder or his family to lower their voting right to less than 25% but maintain their CEO or Chairman responsibility. Meanwhile, other owners decide to maintain lower shareholding and remain passive. In the light of the above, we conclude the change of the ownership structure from family to non-family is not due to poor performance.

According to the age variable, our findings show that on average family firms have a long time horizon of 35 years. This suggests that most of the companies are in the second and second generations. Prior research argues that most family fails to attain the second and third generation due to poor performance. This confirms that poor performance is not associated with family firms changing their ownership structure from family to non-family. As examined in this study, most of the family firms have a mean age of 35 above the mean age of non-family. Also, it will be very difficult for a family to sell a firm that main good performance over the long horizon time. Neither is it possible to believe that family sell off their shares in a time of poor performance. To confirm this intuitive reason we apply an instrumental variable 2 SLS regression. After controlling for endogeneity family firms, results from Table 10 show the productivity value of family firm higher than non-family and family firms are more profitable than their counterpart firms.

Table 10. 2 SLS instrumental variable regression of performance on family ownership

	Productivity			ROA (EBITDA)				
Family firm	3,291***				3,989***			
	(4,726)				(5,321)			
Second blockholder 5% or		0,019*				0,082		
less		(3,919)				(2,341)		
Second blockholder 5-10%		0,548***				1,238**		
		(6,601)				(3,482)		
Second blockholder more		0,000				0,000		
than 10%		(0,219)				(0,001)		
Founder CEO			0,531**				0,425**	
			(2,772)				(3,245)	
Outsider CEO			-0,399				-0,322**	
			(3,153)				(-1,298)	
Descendant CEO			0,265***				0,432**	
			(1,124)				(2,376)	
Founder Chairman				0,312**				3,286***
				(1,286)				(5,398)
Outsider Chairman				-0,392*				0,312**
				(1,348)				(2,381)
Descendant Chairman				0,302**				3,281**
				(3,495)				(3,934)
R square	0,293***	0,291	0,293	0,293	0,378***	0,379***	0,378**	0,378***
Total firms-observation	693	693	693	693	693	693	693	693

Note: The table shows the result of 2 SLS Instrument Variable regressions. The variables for the analysed sample of 52 firms and 468 firm-year observations includes productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. The family firm, B denotes a dummy taking the value 1 if the firm has a family or individual with 25-50% of voting rights, C for the ultimate family owning 50.01% or higher and D for a family company with an unknown direct shareholder with 50.01% or higher. Founder CEO (Chairman), descendant CEO (Chairman) and Outsider CEO (Chairman), indicate a dummy equalling 1 if respectively the founder, descendant or an outsider holds the CEO position in the family company (SABI of the Bureau Van Dijk). Also, we included all the usual control variables, dummies for industries and years as well as the robust standard errors. T-statistic is presented in the parentheses.

\*\*\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively. Source: Authors elaboration

In addition, we acknowledge that the presence of outliers can rise from companies that drop out during the sampled period. Therefore, we employ a balanced sample that consists of 46 firms. Analysis of Table 9 above shows that the stock market value family firms better than non-family at the 5% level of significance, even though the coefficients slightly reduced. Specifically, for the return measure of performance, family firms outperform non-family firms. Family firms with the second blockholder owning 5-10% decreases but remain statistically significant at the 5% level. This indicates that the presence of a second large shareholder in a family firms outperform non-family firms.

To verify the consistency of robustness test presented in Table 11, we further check the presence of outliers using return on equity (ROE) as our new dependent variable. Results from Table 11 confirm that family firms significantly over perform nonfamily firms. Also, family firms are more profitable than all other blockholder and still perform better if a second blockholder retain 5-10% of the share.

Finally, to conclude our verification on robustness, we carry out a pooled used (average) regression instead of a fixed effect regression. Results from Table 12 show that the findings support our Hypothesis 1 which states that family firm significantly outperforms non-family firms at the 5% level and are more profitable than their counterpart firms. Considering family firms with a second large shareholder, the finding shows that family with second large shareholders are still profitable and the market grade them higher than non-family firms and can serve as a better instrument to reduce the agency cost of type II.



	ROE				
Intercept	2,422***	1,283*	1,476***		
	(4,137)	(2,381)	(4,761)		
Family firms	0,915**				
	(3,975)				
Non-family firms		0,328*			
		(1,236)			
Second blockholder 5% or less			0,055*		
			(1,661)		
Second blockholder 5-10%			0,262***		
			(5,921)		
Second blockholder more 10%			0,001		
Second bioekholder more 10%			(0,193)		
Salas growth	0,000	0,213	-0,000		
Sales growin	(-0,031)	(0,219)	(-0,552)		
Incentive efficient	0,000	-2,138*	0,000		
	(-0,383)	(3,651)	(0,523)		
Ln(age)	0,821	0,394	0,782		
	(0,937)	(-0,142)	(1,273)		
Ln(Total assets)	0,245***	0,321**	0,033***		
	(3,318)	(2,128)	(4,383)		
Adjusted R square	0,370	0,289	0,117		
Durbin-Watson	2,002	1,981	2,014		
Total firms-observation	414	414	414		

# Table 11. Balanced sample of 46 firms and the performance of family firm

Note: The variables for the analysed sample of 46 firms and 414 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), sale growth, incentive efficiency, firm size and age. The different second blockholder variables indicate a dummy equalling 1 if a second large blockholder exists in a family firm and controls voting rights in one of the given intervals. The family firm, Non-family firm take dummy equalling 1 if the largest ultimate shareholder owns more than 25% of the shares in one of the categories (SABI of the Bureau Van Dijk). T-statistic is presented in the parentheses.

\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration

#### Table 12. Pooled (average) regression on family firm performance

	Produ	Productivity		BITDA)
Intercept	9,012*	4,372	6,385*	3,251**
	(1,784)	(6,362)	(5,666)	(3,728)
Formily firms	3,882**		6,383**	
Failing fifting	(3,069)		(7,463)	
Second blockholder 5% or less		0,263**		0,023***
Second Diockholder 5% of less		(2,370)		(0,955)
Second blockholder 5-10%		0,289**		0,083
Second Diocknoider 5-10%		(1,273)		(1,426)
Second blockholder 10% or more		0,000		0,000*
Second blockholder 10% of more		(0,281)		(0,3618)
$\mathbf{DOA}$ (EDITDA)	2,079**	1,263**		
KOA (EBIIDA)	(2,060)	(3,711)		
DOE	7,646*	0,927**		
RUE	(1,952)	(3,451)		
Salag growth			0,624*	0,312**
Sales growin			(2,341)	(2,114)
Incentive officient	-0,068**	0,028	-0,003	0,992
	(-2,782)	(0,395)	(-1,668)	(0,473)
	-0,092	-0,000	0,015**	0,238***
LII(dge)	(-2,782)	(0,000)	(3,069)	(4,791)
In(Total access)	5,029**	2,183*	0,470***	0,479**
LII(10tal assets)	(8,588)	(8,372)	(1,656)	(1,269)
Adjusted R square	0,211***	0,247***	0,144***	0,163***
Durbin-Watson	2,097	1,908	1,977	2,012
Total firms-observation	414	414	414	414

Note: The variables for the analysed sample of 46 firms and 414 firm-year observations include productivity, return on assets (EBIT and EBITDA as numerators), Sale growth, incentive efficiency, firm size and age. The different second blockholder variables indicate a dummy equalling 1 if a second large blockholder exists in a family firm and controls voting rights in one of the given intervals (SABI of the Bureau Van Dijk). T-statistic is presented in the parentheses.

\*\*\*, \*\*, \* illustrate the significance at the 1%, 5%, 10% level respectively.

Source: Authors elaboration

#### **5. CONCLUSION**

This analysis investigates how family ownership structure affects the corporate performance of Portuguese listed Firms using a panel data set covering the period from 2006 to 2014. Three main characteristics of family firms (such as active management, founder or heir active and second blockholder) were examined with respect to the corporate performance.

The main finding is that family firms over perform non-family in term productivity and profitability. This result supports the *Hypothesis 1*, thus firms with family ownership structure have better corporate performance than non-family firms.

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This indicates that companies that family have total control are more productive and profitable than those market favour firms that the family does not have total ownership. The statistical results are in line with the family business theory which has been debated that ownership structure enhances the performance family business. And that family ownership structure is one of the possibilities that exist resolving the conflicts of interest between shareholders and managers. Even though other authors believe that as ownership gets more concentrated the corporate governance strategy of resolving Agency cost of type I rises to a type II. Therefore, this extraction of private benefits by the majority shareholder can negatively affect the value of the firms.

Specifically, the extreme corporate performance of family over their counterpart firms is due to the family characteristic of family firms. The findings reject Hypothesis 2, thus family firms with active founders perform better whereas those with active heirs significantly outperform compared to family firms with passive. This indicates that the knowledge of the family is important in running a company. We suggest that the reason of active descendant outperform the others is due to that fact that descendants have superior skills and are motivated by incentive which enhances the gain of the firm. Also, family firms with family members in the company being either CEO or Chairman create more value and are more profitable than non-family firms. Family firms with descendant as CEO perform better meanwhile family firms with the founder as CEO significantly outperform family firms with Outside CEO for corporate performance.

*Hypothesis 3* is rejected as the presence of a second blockholder who owns between 5-10% of the voting right enhances the performance of the firms as it counterbalances the controlling shareholder from unnecessary behaviours. Therefore investors and other users will value family firm more than their counterpart firms. Further research can be carried out examining the second largest shareholders and how it ownership position can influence the performance of family firms.

We also investigate during the sample period the number of firms that change their ownership structure from family firm to non-family and claim that these changes cannot be due to low performance as most family firms retained their ownership structure when they perform better and the owner cannot sell their firm just because it is not doing well. To see if poor performance is the sole cause of family firm change to non-family, over the time period of this study two firms change their ownership from family to non-family, which remain very insignificant to the rest of the sample. However, the reason for the change of ownership structure was due to the presence of agency cost of type II, which constrains the founder or his family to lower their voting right to less than 25% but maintain their CEO or Chairman responsibility. Meanwhile, other owners decide to maintain lower shareholding and remain passive. In the light of the above, we conclude the change of the ownership structure from family to non-family is not due to poor performance. Therefore, family firms outperform non-family firms.

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