

# Does it Matter Ownership Structure? Performance in Spanish Companies<sup>1</sup>

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## *Abstract:*

*This paper examines the relationship between ownership structure and corporate performance in Spanish companies. Ownership structure has been analysed in terms of concentration of control and the type of investor exerting control. The study applies the Variance Analysis with one and two factors to compare the performance (ROE and ROA) of different groups of companies and determine if their average return could be considered equal. Close to 100.000 firms have been analysed to conclude that exists an important link between ownership structure and performance in Spanish companies. Both, the concentration of control and the type of investor exerting control, individually considered, influence in companies return, nevertheless, jointly took the second one has turned to be the most relevant.*

*Firm size and financial structure (measured as the relation between equity and total assets) have also been considered.*

## *Keywords:*

*OWNERHIP STRUCTURES, FINANCIAL STRUCTURE, PERFORMANCE, SPANISH COMPANIES*

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## **1. INTRODUCTION**

The relationship between ownership structure and corporate performance is one that received considerable attention in the finance literature. How important is the concentration of control for the company performance or the type of investors exerting that control are questions that authors have tried to answer for long time.

This current paper shows the statistical analysis carried out seeking to discover if exists a relationship between ownership structure (considering concentration of control and the type of investors exerting that control) and performance in Spanish companies.

The remainder of this paper is organised as follows. Section 2 reviews briefly previous studies that examine the relationship between ownership structure and performance conducted in some other countries. Section 3 shows the objectives of this paper and Section 4 the hypothesis to begin with. Section 5 contains descriptive statistics about the firms in our study, the variables we use and the statistical analyses conducted with the data. Section 6 describes results. These results are summarised in Section 7.

## **2. BRIEF LITERATURE REVIEW**

The relevance of ownership structure and companies' performance arises as a result of firms' growth and the power acquired by professional managers. The diffuseness of ownership increases and shareholders become powerless to control managers.

How aligned are interests of management and shareholders, how strong is the control of shareholders -depending on their type and concentration of shares-, over managers, and, as a result of this, how efficiently are used corporate resources to maximising corporate profit are some of the questions that authors make and try to answer. Berle & Means (1932) analysed this problem and, for the first time, talked about the Agency Theory.

The literature about this issue is abundant and diverse. However, studies could be classified in two groups depending on their approach to ownership structure:

- 1.- Those which consider the concentration of control, and
- 2.- those which consider the type of investors exerting control.

In the first group, we refer to those studies which try to conclude about the relevance of the concentration of shares on main shareholders and the performance of companies, due to the control that these main shareholders can exert on professional managers. Welch (2003), Leech & Leahy (1991), Maher & Anderson (1999), Prowse (1992), etc., are a sample of these studies.

In general, the concentration of shares is associated with the possibility of exerting control over professional managers and obtaining a better performance for the company. However, the empirical evidence is hardly conclusive to this respect. So, while some authors suggest that the relationship between ownership concentration and performance is positive, some others argue that too much control in main shareholders can make performance worse and talk about an optimum level of share concentration.

Most of the studies compare the proportion of shares in the largest shareholder of the company or the shareholdings of the firm's five largest shareholders to the ROE or the Tobin's Q (if all companies are listed).

In the second group, we consider those authors (Douma, George & Kabir (2003), Prouse (1992), Tong y Ning (2004), Morck, Nakamura y Shivdasani (2000), etc.) that, more than number of shares hold by largerst shareholders, take into account the type of invertors exerting the control (Financial firms, families, groups, foreign companies, etc) and the differences among these:

- In the way of managing the firm and, as a consequence, the results obtained, and,
- In their capacity to exert control over the professional managers.

As and example, Douma, George & Kabir (2003) suggest that financial investors like more those firms with higher profits in the short term, while business groups look for a long term relationship with the firm and don't matter much the short term returns. They consider that government, as a shareholder, doesn't seek to obtain high yield but social aims, and that foreign investors tend to benefit companies providing them technical and managerial knowledge and an easier access to financial resources.

Also, they say that domestic firms have a good influence on company's performance given that they can exert more control over professional managers, although they usually don't contribute to improve technical and managerial knowledge as much as foreign firms do.

Finally, some authors, when modelling the relationship between ownership structure and corporate performance, find necessary to control for firm-specific characteristics including such variables to discover if these jointly affect ownership structure or corporate performance. Among the control variables used by researchers, firm size has been one of the most relevant (Welch (2003), Kiel y Nicholson (2003), Laporta, López de Silanes y Shleifer (1990), Leech y Leathy (1991), etc.). In general, authors consider firm size very important and suggest that small firms usually turn to show a greater concentration of shares by largest shareholders and, as a consequence, to have a higher level of control over professional managers that drives to a better company performance.

We also consider structure in our analysis to contrast if this variable matters and if there is any correlation between this one and ownership structure and both jointly influence on firm performance.

The relationship between financial structure and performance was taken into account for the first time in the 50's when Modigliani and Miller proposed their theory about the independence between both variable. These authors proposed that, in a world without taxes:

- ROA depends exclusively on operational risk due to the economic activity of the firm. How financial resources are got doesn't matter.
- ROE, however, is linked to financial risk and, as a consequence, to firm's financial structure. If debt to total assets ratio increases, firm risk does also increase and so expected return for shareholders. When debt ratio increases too much, some risk is transferred to credit firms and shareholders don't receive a higher return for it.

Later on, these authors considered the effect of taxes and concluded that ROE improves as a consequence of tax savings in firms with a high debt ratio.

Short Keasey y Duxbury (2002), Morck, Nakumuna y Shivdasani (2000), Douma, George & Kabir (2003), Petersen y Rajan (1994), Short, H (1994), Brailsford, Oliver y Pua (2002) and Lensink, Van der Molen y Gangopadhyay (2003) study the relationship between financial structure and firm performance. Some of them also consider the influence of ownership structure on financial structure.

### **3. OBJECTIVES**

Considering previous research on this area and our aim to go deeply into the study of ownership structure and control of Spanish companies and their relationship with performance, we propose the following objectives for this paper:

- Analyse the statistical relationship between company's performance (ROE and ROA) and ownership structure in Spain. We consider both, concentration of shares and type of investors exerting control.
- Analyse the statistical relationship between company's performance (ROE and ROA) and firm size in Spain.
- Analyse the statistical relationship between company's performance (ROE and ROA) and financial structure in Spain.
- Finally, to detect if the previous variables jointly affect corporate performance, analyse the relationship between company's performance (ROE and ROA) and these four variables taking them in pairs.

## 4. HYPOTHESIS

According to the objectives, and taking into account the previous research, we propose the following hypothesis:

- Related to concentration of control and firm size:

Hypothesis 1: Concentration is positively associated to corporate performance given that a higher concentration makes possible a higher control over professional managers.

Hypothesis 2: Concentration and firm size are related.

Hypothesis 3: Small firms show usually higher concentration of shares in largest shareholders given that, in large firms, is much more difficult to get a relevant proportion of shares.

Hypothesis 4: Taking into account hypothesis 2 and 3, firm size is associated to corporate performance. Small firms tend to have a better performance due to their higher concentration of control of largest shareholders.

- Related to type of investors:

Hypothesis 5: There is a relationship between corporate performance and type of investors exerting control.

Hypothesis 6: Firms controlled by government are less profitable than the rest

Hypothesis 7: Firms controlled by domestic and foreign no financial companies have better performance.

- Related to financial structure:

Hypothesis 8: Due to tax savings and control exerted by credit firms, companies with a higher debt ratio show a better performance (ROE)..

## 5. DATA AND STATISTICAL ANALYSIS

We have used SABI as database for our study. This is a database which offers financial information about the vast majority of Spanish companies. We have considered data for year 2000 due to the fact that the information available for that year was better than for following years.

We have codified companies in groups taking into account the type of investors exerting control (more than 50%) as follows (Table 1):

1. Banks and other credit firms
2. Families
3. Domestic firms (no financial firms)
4. Foreign firms
5. Government

6. Financial firms other than credit firms
7. Two types each 50%
8. No one reaches to 50%

**Table 1. Companies classified by type of investors**

Type of investors	Spain	
	N°Firms	%/total
Banks and other credit firms	640	0,59
Families	64.734	60,48
Domestic firms	27.603	25,79
Foreign firms	5.076	4,74
Government	685	0,64
Financial firms other than credit firms	1.149	1,07
Two types each 50%	501	0,47
No one reaches to 50%	6.641	6,20
<b>TOTAL</b>	<b>107.029</b>	<b>100</b>

Due to the fact that firm size is analysed, we have associated firm size with number of employees and codified companies as follows:

- Group 1 – Less than 20 employees
- Group 2 – Between 20 and 49 employees.
- Group 3 – Between 50 and 249 employees.
- Group 4 – Between 250 and 999 employees.
- Group 5 – More than 999 employees.

To analyse concentration of shares in the largest shareholder, we have codified companies in four groups as follows:

- Group 1 – Up to 25%.
- Group 2 – Between 25% and 50%.
- Group 3 – Between 50% and 75%.
- Group 4 – More than 75%.

Financial structure has also been considered. We have calculated the equity to total assets ratio for each company and codified them in four groups as follows:

- Group 1 – Up to 25%.
- Group 2 – Between 25% and 50%.
- Group 3 – Between 50% and 75%.
- Group 4 – More than 75%.

To measure corporate performance, we have calculated ROA and ROE:

- Return on Assets (ROA):

$$ROA = \frac{Net\ Profit + Taxes + Financial\ Costs}{Assets}$$

- Return on Equity (ROE):

$$ROE = \frac{Net\ Profit}{Equity}$$

Finally, we have checked data to eliminate those companies whose information could be incorrect and distort the results and conclusions. Table 2 shows the descriptive statistics of firms finally considered in the study.

**Table 2 . Descriptive statistics**

	NºFirms	Minimum	Maximum	Mean	Stand. Dev.
<b>ROE</b>	88503	-995,45	998,41	11,3802	69,84762
<b>ROA</b>	88503	-852,77	900,00	7,5350	17,22280
<b>Structure</b>	89698	,00	100,00	36,6020	28,31773

Taking into account the data base finally considered, the number of firms included in each group, according to the previous codification made, is shown in table 6.

**Table 3. Number of firms included in groups**

Groups definition	Spain	
	Number	Percentage
<b>Concentration</b>		
Less than 25%	6182	6,99
Between 25% and 50%	16418	18,55
Between 50% and 75%	23287	26,31
Between 75% and 100%	42616	48,16
<b>TOTAL</b>	<b>88503</b>	<b>100</b>
<b>Type of investors</b>		
Banks and other credit firms	572	0,65
Families	52356	59,15
Domestic firms	23356	26,39
Foreign firms	4204	4,75
Government	577	0,65
Financial firms other than credit firms	1034	1,17
Two types each 50%	436	0,49
No one reaches to 50%	5972	6,74
<b>TOTAL</b>	<b>88503</b>	<b>100</b>
<b>Firm Size</b>		
Less than 20	44655	64,90
Between 20 and 49	13238	19,24
Between 50 and 249	8896	12,92
Between 250 and 999	1663	2,42
More than 999	358	0,52
<b>TOTAL</b>	<b>68810</b>	<b>100</b>
<b>Structure</b>		
Less than 25%	38534	43,54
Between 25% and 50%	24528	27,72
Between 50% and 75%	13653	15,43
Between 75% and 100%	11785	13,32
<b>TOTAL</b>	<b>88500</b>	<b>100</b>

On average, Spanish companies have a high level of concentration of shares in the largest shareholder, are mainly controlled by families, have less than 20 employees (so, they are small firms) and the majority of their financial resources comes from credit firms.

The statistical analysis has consisted, mainly, in comparing the average ROE and ROA for the firms in groups (according to the four previously mentioned variables) trying to detect if there are differences statistically significant. We have used the Analysis of Variance (ANOVA) for one factor to contrast the hypothesis null of equal means ( $H_0 : \mu_1 = \mu_2 = \dots = \mu_K$ ) and considered less significance,  $\alpha$ , of five per cent (Fisher test) to reject it (so, we reject  $H_0$  when the error of doing it is less than 5%).

To analyse if the four variables studied jointly affect performance, we have considered them in pairs and applied the Analysis of Variance (ANOVA) for two factors to contrast the hypothesis null of equal means and, again, rejected it when significance has been less than 5%. To reject the hypothesis null means that it exists relationship between both factors, so they jointly affect performance.

## 6. RESULTS

This section is organised in five parts to present the results linked to each of the objectives proposed: Next section summarises these results.

### 6.1 Corporate performance and concentration of shares

Table 4 presents the results for the analysis of variance to contrast the homogeneity of ROE and ROA means in groups of firms according to the concentration of shares in the largest shareholder.

Table 4 shows that:

- ROA, in general, always is smaller than ROE which means there is an important financial leverage, so that shareholders receive a higher return for taking risk.
- ROA and ROE (and also the gap between both) differ depending on the groups of firms we consider. So, taking into account the concentration of shares, groups of firms show different ROA and ROE means and these differences are statistically significant.
- ROA increases as concentration does up to the third group (50%-75%). In the last group (75%-100%), we observe the decrease of this performance measure. The evolution of ROE is similar, although the differences among groups are bigger.



- If we take into account the gap between ROE and ROA, we can affirm that the financial leverage increases as concentration does up to the third group of companies and then, in the fourth group, decreases.

**Table 4. Corporate performance and concentration of shares**

	ROA	ROE
Less than 25%	7,25	7,98
Between 25% and 50%	7,43	10,27
Between 50% and 75%	7,85	13,45
Between 75% and 100%	7,44	11,17
<b>TOTAL</b>	<b>7,54</b>	<b>11,38</b>
<b>Statistics</b>	<b>F = 3,81</b> <b>Sig =0,010</b>	<b>F = 13,23</b> <b>Sig =0,000</b>

According to these results, hypothesis 1 comes true. There is a positive association between corporate performance and concentration, although it seems there is an optimal level of concentration (as Maher and Anderson (1999) suggest), above which corporate performance goes worse.

To deep on the real effect of concentration on corporate performance, we show in Table 5 the average percentage of shares controlled by the largest shareholder for groups of companies according to the for variables considered in this study and the results of the analysis of variance carried out.

Taking into account data on Table 5:

- The average of concentration for Spanish companies is quite high (68,54%).
- Taking into account groups of firms according to concentration level, the firms included in the last group (75%-100%) show a greater level of concentration (close to the maximum of the interval) than the rest where average is closer to the minimum of each interval. Given that performance improves as concentration increases up to the third group, (as we show in Table 4), that suggests that performance increases till the moment when the largest shareholder holds the control of the company (50%); from that moment, a higher concentration doesn't improve performance but the opposite.
- If we observe groups according to type of investors exerting the control on the company, performance's averages are different and statistically significant. Firms controlled by foreign firms, banks and other credit companies have high level of concentration (92,16% and 89,18%), in contrast with those controlled by families (66,68%).
- If we consider groups according to firm size, there are differences on performance averages and these are statistically significant. Hypothesis 2 comes true, there is a relationship between size and performance, but this relationship is in the opposite way to what hypothesis 3 proposes. Small firms (considering that number of employees measures firm size) don't turn

to be those of higher level of concentration. So, the better performance showed by small firms can't be explain by their level of concentration as suggest hypothesis 4.

- Finally, Spanish firms quoted at the Stock Exchange show lower level of concentration (48%) than the rest (68%). This result is linked to the idea of diversity associated to firms quoted in a Stock Exchange and opposite to what we could have expected if we take into account that, usually, listed firms are big firms and, as we have seen in the previous point, big firms show higher level of concentration.

**Table 5 Shares control by the largest shareholder (%)**

<b>Groups</b>	<b>Mean</b>
<b>Concentration</b>	
Less than 25%	14,40
Between 25% and 50%	34,76
Between 50% and 75%	53,81
Between 75% and 100%	97,45
<b>TOTAL</b>	<b>68,54</b>
<b>Statistics</b>	<b>F =602760,18</b> <b>Sig = 0,000</b>
<b>Type of investors</b>	
Banks and other credit firms	89,18
Families	66,68
Domestic firms	79,99
Foreign firms	92,16
Government	83,84
Financial firms other than credit firms	82,07
Two types each 50%	49,34
No one reaches to 50%	18,97
<b>TOTAL</b>	<b>68,54</b>
<b>Statistics</b>	<b>F =3420,01</b> <b>Sig = 0,000</b>
<b>Firm size</b>	
Less than 20	66,73
Between 20 and 49	64,68
Between 50 and 249	69,06
Between 250 and 999	77,10
More than 999	79,86
<b>TOTAL</b>	<b>66,96</b>
<b>Statistics</b>	<b>F =95,32</b> <b>Sig = 0,000</b>

## 6.2 Corporate performance and type of investors

Table 6 presents the results for the analysis of variance to contrast the homogeneity of ROE and ROA means in groups of firms according to the type of investors exerting control in the firm..

Taking into account data on Table 6:

- Average ROA and ROE differences among groups are statistically significant. Hypothesis 5 turns to be true: The type of investors exerting control over professional managers matters and corporate performance depends on it.

- In general terms, firms controlled by banks and other credit companies show the highest levels of ROA and ROE, while those government owned just the opposite (negative returns). Hypothesis 6 comes true, government owned firms have worse performance than the rest.
- Firms controlled by domestic and foreign companies or by financial companies other than credit firms, show ROE smaller than ROA, what means a negative financial leverage. Firms don't make a profit from money borrowed; taxes and financial costs exceed ROA obtained. Hypothesis 7 is rejected in Spanish companies.
- Firms controlled by families show ROA and ROE above the average.
- Finally, we should point out those firms with two types of control each 50% show very good performance, overall in ROE terms (the highest).

**Table 6. Corporate performance and type of investors**

<b>Groups</b>	<b>ROA</b>	<b>ROE</b>
Banks and other credit firms	13,12	14,96
Families	7,98	14,81
Domestic firms	6,78	6,31
Foreign firms	7,11	6,10
Government owned	-1,99	-13,33
Financial firms other than credit firms	7,95	6,19
Two types each 50%	10,26	21,05
No one reaches to 50%	6,96	7,09
<b>TOTAL</b>	<b>7,54</b>	<b>11,38</b>
<b>Statistics</b>	<b>F = 38,15</b> <b>Sig =0,000</b>	<b>F = 42,97</b> <b>Sig =0,000</b>

### 6.3 Corporate performance and firm size

Table 7 presents the results for the analysis of variance to contrast the homogeneity of ROE and ROA means in groups of firms according to firm size.

**Table 7. Corporate performance and firm size**

<b>Groups</b>	<b>ROA</b>	<b>ROE</b>
Less than 20	7,60	12,55
Between 20 and 49	8,67	12,04
Between 50 and 249	8,28	11,26
Between 250 and 999	8,14	7,97
More than 999	6,55	7,35
<b>TOTAL</b>	<b>7,90</b>	<b>12,15</b>
<b>Statistics</b>	<b>F = 15,46</b> <b>Sig =0,000</b>	<b>F = 2,94</b> <b>Sig =0,019</b>

Taking into account data on Table 7:

- Firm size also turns to be statistically significant trying to explain corporate performance. ROA is under the mean for small firms (the vast majority), it increases quite a lot in the second interval (between 20 and 49 employees) and, from this point (third group) decreases. So, except for the first group, firm size is negatively associated to corporate performance. ROE also show a negative relationship with firm size but, in this case, the decrease begins in the second group.
- Examining the gap between ROE and ROA, small firms turn to have a higher level of financial leverage than the rest of firms. Even obtaining a lower ROA, small firms spend borrowed money more effectively and get a higher return for shareholders. Hypothesis 4 comes true in Spanish companies, although, as we have already seen, this is not as a consequence of a higher level of concentration of shares in largest shareholder.

## 6.4 Corporate performance and financial structure

Finally, we analyse the relationship between corporate performance and the financial structure of the firm. Table 8 presents ROA and ROE data for all groups and the statistical results of variance analysis.

**Table 8. Corporate Performance and Financial Structure**

Groups	ROA	ROE
Less than 25%	5,30	12,22
Between 25% and 50%	9,07	13,15
Between 50% and 75%	12,07	12,10
Between 75% and 100%	7,15	4,03
<b>TOTAL</b>	<b>7,63</b>	<b>11,37</b>
<b>Statistics</b>	<b>F = 540,47</b> <b>Sig =0,000</b>	<b>F = 50,61</b> <b>Sig =0,000</b>

Taking into account data on Table 8:

- ROA turns to be entirely determined by financial structure. Differences among groups are statistically significant.
- ROA increases as equity to total assets ratio does up to the third interval. In the last group we observe a decrease of ROA. This result conflicts with Modigliani and Miller theory.
- ROE is also strongly influenced by financial structure. Differences among groups are statistically significant. ROE is similar for the first three groups (round 12%-13%) but decreases a lot in the fourth one (4%). If we consider only the last three groups, Modigliani and Miller theory makes sense and our hypothesis 8 comes true (related to ROE).

- Taking into account ROE and ROA gap, financial leverage decreases as equity to total asset ratio increases.

## **6.5 Relation among analysed variables and corporate performance**

Analysing the relationship between corporate performance and each of the four variables (concentration, type of investors, firm size and structure) individually considered, can hide possible correlations between them.

To see if variables jointly affect corporate performance, we have applied the Variance Analysis with two factors. Table 9 presents significance levels for each variable individually and jointly considered with each of the rest.

Taking into account Table 9, although Spanish companies show relationship between performance and each of the four variables individually considered, if we consider the results of Analysis of Variance with two factors, conclusions are quite different.

- Respect to ROA:
  - Type of investors and financial structure turn to be the most relevant variables of the four studied, although firm size and concentration also must be considered very important:
    - Firm size jointly considered with type of investors loses importance although affects the average performance of each group according to it (variable type of investors). So, firm's performance differs among each group according to type of investors but in a different way depending the size.
    - Similar happens to variable concentration. This variable loses importance when is studied jointly with firm size but, in this case, it doesn't interfere on the effect of the last one over performance.
  - In general, the four variables jointly affect firm's performance.
- Respect to ROE:
  - Financial structure and, overall, type of investors are the variables which most obviously explain the differences on corporate performance. Financial structure loses importance when it is considered jointly with type of investors, but influences on it.
  - Concentration and firm size hardly matter. Concentration only explains performance's differences when it is considered with financial structure, and firm size affects performance jointly with structure and type of investors.

To sum up, corporate performance is strongly determined by the type of investors exerting control over professional managers and financial structure. Firm size and, the last, concentration of shares can affect performance (strongly to ROA and lightly to ROE) when they are jointly considered with the firsts ones.

**Table 9 Relation between variables. Analysis of Variance with two factors**

ROA ROE	Concentration	Type of investors	Firm size	Structure
<b>Concent.</b>		Sig <sub>Type investors</sub> 0,000 Sig <sub>Concentration</sub> 0,001 <b>Sig<sub>Jointly</sub> 0,000</b>	Sig <sub>Firm size</sub> 0,000 Sig <sub>Concentration</sub> 0,098 Sig <sub>Jointly</sub> 0,503	Sig <sub>Structure</sub> 0,000 Sig <sub>Concentration</sub> 0,000 <b>Sig<sub>Jointly</sub> 0,000</b>
<b>Type of investors</b>	Sig <sub>Concentration</sub> 0,516 Sig <sub>Type investors</sub> 0,000 Sig <sub>Jointly</sub> 0,584		Sig <sub>Firm size</sub> 0,091 Sig <sub>Type investors</sub> 0,000 <b>Sig<sub>Jointly</sub> 0,000</b>	Sig <sub>Structure</sub> 0,000 Sig <sub>Type investors</sub> 0,000 <b>Sig<sub>Jointly</sub> 0,000</b>
<b>Firm size</b>	Sig <sub>Concentration</sub> 0,092 Sig <sub>Firm size</sub> 0,963 Sig <sub>Jointly</sub> 0,086	Sig <sub>Type investors</sub> 0,000 Sig <sub>Firm size</sub> 0,853 <b>Sig<sub>Jointly</sub> 0,004</b>		Sig <sub>Structure</sub> 0,000 Sig <sub>Firm size</sub> 0,000 <b>Sig<sub>Jointly</sub> 0,000</b>
<b>Structure</b>	Sig <sub>Concentration</sub> 0,001 Sig <sub>Structure</sub> 0,000 <b>Sig<sub>Jointly</sub> 0,041*</b>	Sig <sub>Type investors</sub> 0,000 Sig <sub>Structure</sub> 0,192 <b>Sig<sub>Jointly</sub> 0,000</b>	Sig <sub>Firm size</sub> 0,704 Sig <sub>Structure</sub> 0,000 <b>Sig<sub>Jointly</sub> 0,000</b>	

## 7. CONCLUSIONS

The main conclusions of our study on Spanish firms' performance and its relationship with ownership structure are the following:

- On average, ROA is lower than ROE. We can talk about a positive financial leverage on Spanish companies.
- Concentration of shares in the largest shareholder, individually considered, seems to be a relevant variable to corporate performance. ROA increases as concentration does up to the third interval defined (50%-75%) and then decreases a little bit. ROE seems to follow the same evolution as ROA, but the gap between ROE and ROA increases as concentration does what means that financial leverage is different for companies depending on their level of concentration. The companies with the most concentrated share capital are the ones with a higher positive financial leverage.
- Type of investors, individually considered, turns to be the most relevant one to explain corporate performance differences among Spanish companies. According to data:
  - Those companies controlled by banks and other credit firms show the best performance in terms of ROA and ROE.
  - Companies controlled by families show also ROA and ROA above the average and the second highest level of financial average.

- Companies where control is exerted by foreign and domestic (no financial) firms present negative financial leverage.
  - Government owned companies show ROA and ROE negative (specially the second one).
  - Finally, companies with two types of control each 50% should be pointed out due to their excellent performance.
- Firm size, individually considered, has been found statistically relevant to explain performance differences. ROA for the smallest companies is under the average, increases in the second interval (20-49 employees) and then goes down progressively as the number of employees increases. ROE shows a negative association between firm size and corporate performance. If we consider the gap between ROE and ROA, the smallest companies have the highest level of financial leverage.
  - Financial structure, individually considered, has turned to be very important to explain performance differences among firms, although more relevant to ROA than to ROE. Results on ROA contradict Modigliani and Miller theory, but those on ROE are consistent with these authors' theory.

Taking into account the individual analyses, and after having carried out the Analysis of Variance with two factors taking the four variables in pairs, our final conclusion about the effect of ownership structure on corporate performance is the following:

- Spanish companies' performance is strongly determined by type of investors exerting control and financial structure. Firm size and concentration of share on the largest shareholder can be relevant jointly considered with the first ones.

Respect to proposed hypothesis,

- Hypothesis 1 that proposed "Concentration is positively associated to corporate performance given that a higher concentration makes possible a higher control over professional managers" comes true, although it seems to be an optimal point (as Maher and Anderson (1999) point out), so a higher level of concentration makes worse performance.
- Hypothesis 2 that proposed "Concentration and firm size are related" comes true.
- Hypothesis 3 that proposed "Small firms show usually higher concentration of shares in largest shareholders given that, in large firms, is much more difficult to get a relevant proportion of shares" is rejected.
- Hypothesis 5 that proposed "There is a relationship between corporate performance and type of investors exerting control" comes true.

- Hypothesis 6 that proposed “Firms controlled by government are less profitable than the rest” comes true.
- Hypothesis 7 that proposed “Firms controlled by domestic and foreign non financial companies have better performance” is rejected.
- Hypothesis 4 that proposed “Taking into account hypothesis 2 and 3, firm size is associated to corporate performance. Small firms tend to have a better performance due to their higher concentration of control on largest shareholders” comes in part true given that, although small firms are not the most concentrated ones, they have the highest ROE.
- Hypothesis 8 that proposed “Due to tax savings and control exerted by credit firms, companies with a higher debt ratio show a better performance” comes true if we consider ROE but is rejected in the case of ROA.

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