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A NEW MODEL FOR STRATEGY: The Internal Dimensions in a Strategic Plan

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ABSTRACT

The aim of this study is to deep into the analysis of strategic planning and its consequences. Particularly, we look at the relationship between the economic performance of firms and their strategic plans. To do so, we gather a new database containing economic information of 150 firms, together with information related to their mission, vision and values. We analyze empirically the relationship between different measures of firm performance with each of these variables through the t-test methodology for independent samples. In addition, linear regression analysis is also performed to control for other variables such as firm size. Findings reveal, in some cases, a positive relation between the mentioned aspects that still hold in most cases when controlling for the number of employees. However, commonly, these relations are not statistically significant, so we cannot conclude that there is a clear and robust positive relationship between strategy, human resources, and processes.

KEY WORDS: Strategy, Human Resources, Processes.

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1. INTRODUCTION

In order to reach successfully a strategy, firms need the support of their employees, as well as very clearly established processes for the strategy's correct implantation.

There have been studies that relate the mission statement such as Valerij, (2012) or the Human Resources such as Erro and Cavero (2017), with positive economic results. However, future research should be done in this field.

We believe that it is important to take into account human resources when establishing a strategic plan for a company, since employees are the ones that achieve goals in most cases. If workers feel well-treated and valued, we believe that efficiency levels will increase, and both sides will enjoy the benefits.

On the other hand, there are four types of processes that are usually considered when setting the organization's strategy: management, organizational, innovation, and environmental processes. Just as we believed in the case of human resources, we have the opinion that if the strategy of the company is focus in any of these processes, efficiency levels will increase, favoring employees, shareholders, and the society.

Like we will see, previous literature mentions the scarce studies regarding strategic planning and its consequences. This situation supports our analysis of the impact of having different aspects of a strategic plan for the economic performance of a firm.

In particular, the first issue we analyze is whether the fact of mentioning human resources in the mission, vision or core values of a company in their strategic plan has any type of economic impact in the different organizations.

In addition to the potential impact of human resources on the organization's outcomes, different types of processes are likely to affect such outcomes too. In this vein, we analyze if mentioning operational, management, innovation, or environmental processes in either of the variables related to the strategic plan, affects the company's' results or size.

The way to perform such study is by creating a whole new database with the information compiled from databases like SABI, and the different webpages and strategic plans of the companies. Once the database is created, the SPSS program is used to perform T-test for independent samples between the strategy variables and the economic ones (divided into variables that define economic performance and variables that measure firm size), with the main objective of testing a hypothesis that states that there is a positive relation between

mentioning all the aspects in the different variables gathered in the strategic plan, and economic performance or size of the firms. Moreover, after conducting the t-test, a regression analysis with the significant cases of the variables measuring the economic performance will be analyzed in order to test whether these results still hold when controlling for firm size.

This study is organized as follows: Section 2 presents a summary of the most related literature of the topic. Section 3 describes how the database was created and what criteria were followed, while Section 4 presents the descriptive statistics and cross tables of our database. Section 5 explains the results obtained with the corresponding analyses. Finally, Section 6 summarized the main results and proposes future studies.

2. RELATED LITERATURE

Strategy planning is a very common term in our society. It refers to where a company desires to be in the future, how to get there, and how to measure if the objective has been fulfilled or not. The focus of such practice is the entire organization, and there is wide literature that explains the variety of strategic plan models.

Three different types of strategic planning are defined. The first one, is the most common one known by Goals- based planning. It focuses on the mission, vision and values, and the activity related to them such as goals towards the mission, strategies to achieve those goals, etc. Another variety of strategic planning is the one known as Issues- based planning, which analyses the issues facing the organizations and searches for strategies to overcome those issues. Finally, the third variety is the one called Organic strategic planning which is more focused on the vision and values, and the goals to achieve them.

Focusing on the first type, none would argue that owning a mission, and vision statements, together with a set of core values helps to define the purpose of the organization, and to establish certain goals for specific time-period, considering the company's capacity of implementation. Moreover, goals can be better translated to the rest of workers, so that the whole organization can act following the same clear established goals. Strategic plans not only help the employees, but also manager just like Klemm, M., Sanderson, S., & Luffman, G. (1991) suggested. These authors investigated the reasons for the increasing adoption of mission statement in companies. They used information for a UK survey elaborated in 1989, and found that the Mission is a crucial tool for managers, since it helps them so assert their

leadership in the organization. In other words, managers who used a mission statement could share their ideas and vision, together with short term objectives in a better way.

It is not a new idea that a well described and applied strategic plan improves the company's performance in terms of financial outcomes. Actually, Greenley, G. E. (1986) studied whether strategic planning improves in any way company performance. For the study, he concentrated in a sample of manufacturing companies. However, he did not obtain conclusive results to establish such relationship.

Some years later, Schwenk, C. R., & Shrader, C. B. (1993) applied meta-analysis to previous results of former studies related to formal strategic planning and small firm performance. Reviewers from prior studies drew differing conclusions regarding whether planning improves small firm performance or not, and therefore they decided to conduct such study. Their results suggested an overall positive and significant relationship, although the size of the effects for planning for individual studies is not large. However, they did conclude that strategic planning is a beneficial activity for small firms.

Finally, Miller, C. C., & Cardinal, L. B. (1994) elaborated a synthesis of more than two decades of research in strategic planning and firm performance. The results obtained suggest a positive relationship between strategic planning and firm performance, and that the methods factors are the ones primarily responsible for the inconsistencies reported in previous literature.

Besides studies analyzing how strategic planning affects financial performances, there are also other studies that analyze whether the mission statement has or not an impact in the company's performance.

A recent study of Valerij (2012) studies the relationship between the mission statement and the company performance. He found that there is a positive relationship between the mission statement and the value added per employee. However, he also mentioned that further research should be done in this area.

Moreover, Bart, C. K., Bontis, N., & Taggar, S. (2001) performed a study with 83 large Canadian and American organizations. They wanted to test whether the mission statement had any impact on firm performance. They did find a positive impact. However, they found several mediating elements such as "commitment to the mission", which were positively associated with the "employee behavior". This second variable, was in turn, the one that had most direct relationship to financial performance.

Besides studies that analyze the strategic planning or mission statement related to company's performance, we also find other studies that relate human resources with company's outcomes.

Gunnigle and Moore (1994), suggested a link between human resources and processes to the strategic plan, taking Irish companies as an example to study the extent to which human resources and processes were involved in the corporate strategy.

A similar study was executed by Erro and Cavero (2017), that also relate Human Resources in the business strategy with companies' outcomes, and provide the example of a Spanish industrial company, HidroRubber, that by focusing their strategy on employees, experimented gains of over 500,000 euros.

Although these studies predict a positive impact of the indicators in the companies' outcomes, further studies should be done just like Jarzabkowski, Balogun and Seidl (2007) suggests when analyzing the strategy as a practice, or like Valerij (2012) mentioned when studying the relationship between company performance and mission statement.

This thesis is trying to open a new line of study that takes into account the mission, vision, values and processes on the company's size and performance.

3. METHODOLOGY

The selection of the proper companies was one of the main steps taken for the consequent analysis developed. 150 companies were chosen with the following criteria:

In order to reflect the Spanish economy in our sample, we firstly used SABI, a wide database which contains comprehensive information on Spanish and Portuguese companies that can be used to research individual companies, or companies with specific profiles, and conduct analyses. We searched for an appropriate distribution by sectors in our economy following the IAE classification. Ten groups were drawn with the following distribution by economic sectors:

Table 1: Sector classification by LAE for the Spanish society and our data

Sector classification (IAE)		SABI (IAE)		Our Data	
		Number of Companies	Percentage	Companies	Percentage
0	Cattle raising	30181	2,0%	2	1,3%
1	Energy and water	21377	1,4%	9	6,0%
2	Extraction, transformation of non-energetic minerals	20109	1,3%	3	2,0%
3	Metal transforming industries	49330	3,3%	6	4,0%
4	Other manufacturing industries	91093	6,1%	12	8,0%
5	Construction	194770	13,0%	18	12,0%
6	Restaurant and lodging trade, etc...	425498	28,5%	40	26,7%
7	Transport and communications	61388	4,1%	9	6,0%
8	Financial, insurance, management activities	452698	30,3%	43	28,7%
9	Other services	147512	9,9%	8	5,3%
	TOTAL	1493956	100,0%	150	100,0%

Source: Own elaboration

Following the distribution of companies by economic sector from SABI, we tried to seek firms that would be representative of such distribution. As Table 1 reflects, an exact percentage could not be obtained given we require firms that contain, in the first place, a strategic plan in their website. Only firms with a company's webpage were selected and this restriction lead us to present a sample of firms whose distribution does not fit perfectly the distribution of Spanish firms as SABI presents.

Once our sample of we 150 companies is created, we entered in the website of each of these companies and gathered information of the mission, vision and values. All this information can be obtained in the following link: <http://bit.ly/2r9kT1T>, as well as in the appendix.

After all the information was gathered, we answered the following questions:

1. Does the strategic plan (or webpage) provide a "Mission"?
 1. Does this mission mention "Human Resources"?
 2. Does this mission mention "Processes"?

- i. Do we find operational processes in its mission? (improvements in quality, flexibility, efficiency, productivity, ...)
 - ii. Do we find management processes in its mission? (Related to the generation of satisfaction)
 - iii. Do we find innovation processes in its mission?
 - iv. Do we find environment or society concern processes in its mission?
2. Does the strategic plan (or webpage) provide a “Vision”?
 1. Does this vision mention “Human Resources”?
 2. Does this vision mention “Processes”?
 - i. Do we find operational processes in its vision? (improvements in quality, flexibility, efficiency, productivity, ...)
 - ii. Do we find management processes in its vision? (Related to the generation of satisfaction)
 - iii. Do we find innovation processes in its vision?
 - iv. Do we find environment or society concern processes in its vision?
3. Does the strategic plan (or webpage) provide the company’s “Values”?
 1. Do these values mention “Human Resources”?
 2. Do these values mention “Processes”?
 - i. Do we find operational processes in its values? (improvements in quality, flexibility, efficiency, productivity, ...)
 - ii. Do we find management processes in its values? (Related to the generation of satisfaction)
 - iii. Do we find innovation processes in its values?
 - iv. Do we find environment or society concern processes in its vales?

All the answers were recorded in the excel file with two possible values. If the answer to the given question was “yes”, a “1” was recorded, while if the answer was “no”, a “0” was recorded, in order to use these data as dummy variables. In many cases, we found companies with no Mission, Vision or Values in their strategic plans or webpages. In those cases, the companies were deleted and new ones were chosen so that the 150 companies could provide valuable information. If companies were missing some information, but at the same time provided other, they were kept since we understood that perhaps these companies valued more some concepts over other, and this was also another way to provide information about their priorities.

When the table was completed for the 150 companies following the given criteria, the financial data was obtained from SABI. Concretely, we were interested in gathering the following information of each of the companies:

Table 2: Information sought in SABI for the excel file

Constitution date	Last disposable year for the data	CNAE primary code
IAE sector	CNAE secondary code	Financial results
Economic profitability (%)	Total assets	Number of employees
share capital	(Cost of labor/operating income)	Benefit per employee
Staff costs	Profit margin	Operating income
Immobilized material	Immobilized material/Total assets	

Source: own elaboration

Many companies did not provide their financial information in SABI for any year, so all these companies were dropped from the sample and new companies were added trying to fit the distribution of firms by sectors. Due to these restrictions, an exact image of the Spanish society could not be drawn in our sample. Still, table 1 reflects that the distribution of firms by sector from our sample of 150 firms is not very different from the actual distribution of firms by sector, as described by SABI.

4. ANALYSIS OF DATA - DESCRIPTIVE STATISTICS

This section presents first the variables that are used to assess the relationship between the strategic orientation of firms towards HR and Processes and their performance.

Afterwards, information on the frequencies of each strategic orientation among the different categories of firms is presented.

4.1. Variables description

4.1.1. Variables measuring the strategic orientation of the firms

Mission Statements

Since one of our objectives is to analyze the correlation between economic performance and the relevance of the Mission of the company in their strategic plan, we need to know the distribution of the terms regarding the Mission in the firms of our sample.

Table 3: Mission Descriptive statistics

		Frequency	Percentage
Mission	0	12	7,9
	1	138	91,4
Mission HR	0	110	72,8
	1	36	23,8
Mission Processes	0	36	23,8
	1	114	75,5

Source: own elaboration

Table 3 provides the descriptive statistics of the Mission. Firstly, it describes the amount of companies that own a Mission statement in their strategic plan or webpage. As we can see, 138 of the 150 companies in our sample own a mission statement, which represent a 91,4% of the studied companies.

Moreover, in order to deep further into specific issues of the Mission statement, we analyze how many firms mention the Human Resources, or Processes in their Mission Statement. Just by looking at the information provided by the descriptive statistics, we perceive that only 23,8% of the studied companies talk about human resources, and 75,5% mention at least one process in their Mission statement.

In the next section, we perform an analysis in order to study whether taking into account the different variables of the mission statement in their strategic plan, has or not an impact in the company's performance. We distinguish between having each of these differential aspects, such as Human Resources, or Processes in the mission statement for the economic performance.

Vision Statement.

The vision of a company is a declaration of its objectives, usually based on economic foresight to guide the internal decision-making. Although it is focused on short-term objectives, it describes the steps that the company should follow intended to reach the set goals, and this will help us to understand the current behavior of the company.

The following table provides the descriptive statistics of the Vision, data from our sample, as well as those for the Visions' Human Resources and Processes:

Table 4: Vision Descriptive statistics

		Frequency	Percentage
Vision	0	9	6
	1	141	93,4
Vision HR	0	122	80,8
	1	26	17,2
Vision Processes	0	36	23,8
	1	114	75,5

Source: own elaboration

Table 4 states that there are 141 firms in our sample with a Vision statement in their strategic plan or webpage, which represent a 93,4% of the cases in our database.

It is noticeable that in most of the cases, a vision statement is presented. However, when looking at the next section, we perceive that most of the companies do not mention the Human Resources in their Vision statement. We obtained that an 80,8% of our sample does not mention such term, while 17,2% does.

On the other hand, processes are usually mentioned in the Vision statement. 75,5% of the cases in our sample do mention at least one process in their Vision statement, while 23,8% percent does not.

As it was mentioned in the Methodology section, there are four different types of processes. The first one captures if there is anything related to operational issues. In other

words, anything related to quality improvements, efficiency, flexibility, or productivity. A second one captures issues related to the satisfaction generation, followed by another one which gathers issues related to innovation. Finally, the last process reflects issues related to the environment and society.

It is clear that processes cover a wide range of possibilities, and this is the main reason why we find more companies in our sample which mention processes in their vision statement than companies which mention Human resources.

Values

Values are defined as operating philosophies that guide an organization's internal behavior as well as the relationship with the customers, partners, and shareholders.

The philosophy of a company will also describe in a way, its behavior, so it is important to analyze if companies own a set of state values that guide their way of working and relating to others.

For this reason, we now present the descriptive statistics of the Values found in our sample. Table 5 presents the information related to the ownership of that previously mentioned set of state values or not and to whether those values mention the Human Resources or Processes.

Table 5: Values Descriptive statistics

		Frequency	Percentage
Values	0	18	11,9
	1	132	87,4
Values HR	0	72	47,7
	1	78	51,7
Values Processes	0	30	19,9
	1	120	79,5

Source: own elaboration

Similarly, to the other cases, most companies own a set of Values that describe their behavior. However, the percentages of presenting a set of values in the strategic plan or webpage are smaller than those presenting a Mission or Vision statement. In this case, 87,4% of the sample facilitates the Values that guide their organization behavior.

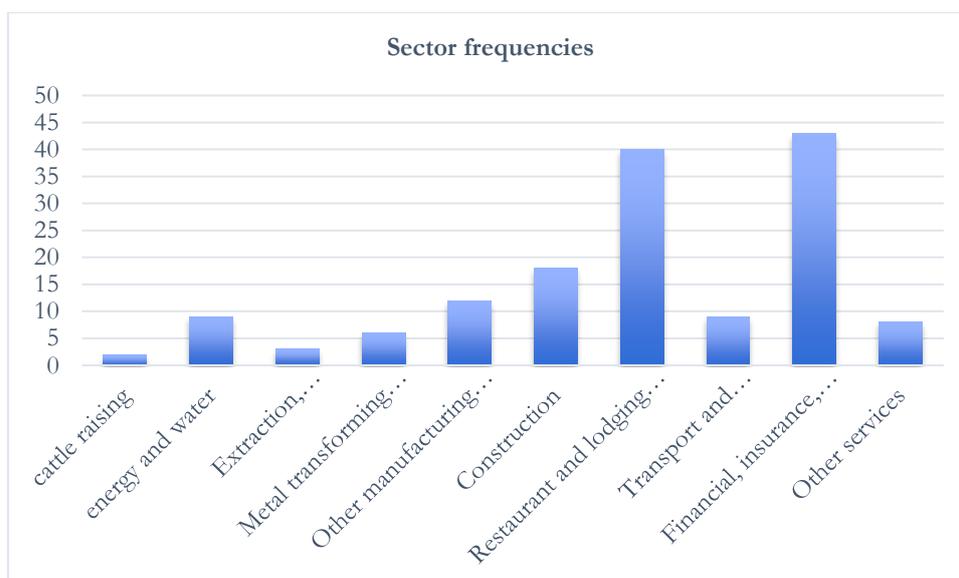
Moreover, the amount of companies mentioning Human Resources in those values is very similar to the amount of those who do not. We find that 51,7% of the companies mention this term, while 47,7% does not.

Finally, when looking at the processes, 79,5% of the companies in our sample mention at least one type of process in their set of values, which is very similar to the percentage obtained in the Mission and Vision cases.

4.1.2. Variables Measuring the Economic Profile of the Firms

The first variable which accounts for the economic profile of firms is the industry of reference for each one. As shown in Figure 1, and according to IAE classification, Sector 6 -Restaurant and lodging trade, etc- and Sector 8 – Financial, insurance, management activities- are the ones with higher frequencies (together represent over 55% of the cases) in our sample. On the other hand, Sector 0 - Cattle raising- is the one with the lowest frequency.

Figure 1: Sector frequencies



Source: own elaboration

The main concern of this research focuses on analyzing the effect of the interest placed by firms' strategies on HR and values (by studying their institutional statements) on their performance. This section presents a brief descriptive analysis of the different variables that are used to assess firm's performance. According to economic literature, Doğan (2013), suggests that economic performance might be positively correlated with firm size. The sample used in this research consists of firms with a very wide range of sizes. In order to take into account size effects on firms' profitability, we will use several variables (also described below) to assess on firms' sizes.

4.1.2.1. Variables measuring firms' performance:

Economic Profitability is measured as Benefits/Total Assets. Economic profitability of our sample of firms ranges from a maximum of 95,92%, and a minimum negative value of 77,93%. On average, economic profitability is at 3,26%. This variable, as it is measured in percentage points, does not depend directly on firm size. This is convenient for the consequent analysis given that empirical correlation we may find between economic profitability and different aspects of a mission and/or vision statements will be free from firm size effects.

Benefit Margin, defined as net profit /revenue. Benefit margin is also known as net margin, which is the ratio of net profits to revenues typically expressed as a percentage. They show how much of each dollar collected by an organization as revenue translates into profit. In our sample, it ranges between -998,471 and 93,763, with a mean value of -5,7071.

Financial Results are defined as the excess of revenues over outlays and expenses in a company over a year. The company with the lowest financial results, presented a value of a negative 1.062.761 euros, while the organization with the highest financial results presented a value of 1.920.246 euros. The average value was 109.131,75 euros.

*4.1.2.2. Variables measuring firms' sizes***Small and medium-sized enterprises (SMEs) are defined in the EU**

recommendation 2003/361. The main factors determining whether an enterprise is an **SME** are **(1)** Staff headcount or number of employees, **(2)** Operating Income **or (3)** Total Assets. Table 6 presents the different categories for firm size based on each of the three criteria.

Table 6: Company size categories

Company category	N. Employees (N)	Operating Income	Total Assets
Big Firm	$N > 250$		
Medium-sized	$50 \leq N < 251$	$\leq \text{€ } 50 \text{ m}$	$\leq \text{€ } 43 \text{ m}$
Small	$11 \leq N < 51$	$\leq \text{€ } 10 \text{ m}$	$\leq \text{€ } 10 \text{ m}$
Micro	$1 \leq N < 11$	$\leq \text{€ } 2 \text{ m}$	$\leq \text{€ } 2 \text{ m}$

Source: Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. Big firms have been added in the table as the remaining category given such definition.

If we would organize our data following the European Commission categories in terms of **number of employees**, we would find the following distribution of firms by company size:

- 1,4% micro companies
- 5% small companies
- 27% medium companies
- 66,6% big companies

Given that most of the companies in our sample belong to the “Big company” group, we reclassified them in order to have several homogeneous groups of firms (with a similar number of firms in each group). Hence, we created 3 different groups by size, as shown in table 7.

Table 7: Firm size by number of employees

Classification name	Classification number	Number of employees	Number of firms
smaller	1	N<255	49
medium	2	255<N<1800	50
big	3	N>1800	51

Source: own elaboration:

Operating Income, ranges from a maximum value of 2.470.784.000 euros, to a minimum of a negative -1.137.191.000 euros. The average value of this variable is 155.796.000,51 euros. Although we will analyze the correlation between this variable and mission/vision statements, it must be taken into account that the size of the company affects directly the Operating Income. This will be taken into account in the empirical exercise.

Total assets is one of the variables that are used to assess the size of the firms in the sample. It ranges between 441,585.55 euros and 317,756,635,000 euros. The average value is 5467347,627.23 euros.

4.2. Frequencies of each strategic orientation among the different categories of firms

We have already studied the descriptive statistics of the different variables. However, another interesting information that we would like to present are the cross tables between Sectors and Mission, Vision, and Values variables, as well as Firm Size with these same ones.

4.2.1. Mission, Vision and Values and Sector of Activity

Firstly, we will provide the information related to Sectors and the rest of variables:

Table 8: Mission and Sector

		Mission		Mission HR		Mission Processes	
		0	1	0	1	0	1
Sector	0-Cattle raising	0	2	2	0	0	2
	1-Energy and water	0	9	6	3	1	8
	2-Extraction, transformation of non-energetic minerals	0	3	3	0	0	3
	3-Metal transforming industries	0	6	5	0	1	5
	4-Other manufacturing industries	0	12	7	3	2	10
	5-Construction	2	16	14	4	4	14
	6-Restaurant and lodging trade, etc...	4	36	30	9	17	23
	7-Transport and communications	0	9	6	3	1	8
	8-Financial, insurance, management activities	6	37	31	12	9	34
	9-Other services	0	8	6	2	1	7
Total		12	138	110	36	36	114

Source: own elaboration

Table 9: Vision and Sector

		Vision		Vision HR		Vision Processes	
		0	1	0	1	0	1
Sector	0-Cattle raising	0	2	2	0	0	2
	1-Energy and water	0	9	6	3	0	9
	2-Extraction, transformation of non-energetic minerals	0	3	3	0	1	2
	3-Metal transforming industries	0	6	6	0	2	4
	4-Other manufacturing industries	0	12	9	1	2	10
	5-Construction	3	15	13	5	4	14
	6-Restaurant and lodging trade, etc...	3	37	33	7	15	25
	7-Transport and communications	0	9	6	3	2	7
	8-Financial, insurance, management activities	3	40	36	7	8	35
	9-Other services	0	8	8	0	2	6
Total		9	141	122	26	36	114

Source: own elaboration

Table 10: Values and Sector

		Values		Values HR		Values Processes	
		0	1	0	1	0	1
Sector	0-Cattle raising	0	2	1	1	0	2
	1-Energy and water	1	8	2	7	1	8
	2-Extraction, transformation of non-energetic minerals	0	3	2	1	0	3
	3-Metal transforming industries	0	6	4	2	1	5
	4-Other manufacturing industries	0	12	4	8	0	12
	5-Construction	2	16	9	9	3	15
	6-Restaurant and lodging trade, etc...	8	32	21	19	15	25
	7-Transport and communications	0	9	2	7	0	9
	8-Financial, insurance, management activities	7	36	26	17	10	33
	9-Other services	0	8	1	7	0	8
Total		18	132	72	78	30	120

Source: own elaboration

With respect to Mission HR, we can see that 1/3 of firms that contain Mission HR in their strategic plans come from the financial sector. A very similar picture emerges from looking at Mission Processes, as 30% of those firms with mission processes statements come from this sector. With respect to Vision HR and Processes, sectors 6- Restaurant and lodging trade- and 8 -financial, insurance, management activities- seem to be those with more firms with statements regarding these two vision aspects in their strategic plans. Finally, in terms of Values HR, 21% of those firms with human resources in their values come from the restaurant sector, while 21% come from the financial sector, which are similar results as the ones found for firms presenting processes in the core values.

4.2.2. Mission, Vision and Values and Company Size

Now, the information related to Firm Size and the rest of the variables will be presented. We should remember that the classification followed to determine the size of the company is the one that we have created, not the common one:

Table 11: *Mission and Firm size*

		Mission HR		Mission Processes		Mission	
		0	1	0	1	0	1
Firm size	small	38	13	8	43	2	49
	medium	36	11	14	36	5	45
	big	36	12	14	35	5	44
Total		110	36	36	114	12	138

Source: own elaboration

Table 12: *Vision and Firm size*

		Vision HR		Vision Processes		Vision	
		0	1	0	1	0	1
Firm size	small	42	9	13	38	4	47
	medium	39	9	13	37	2	48
	big	41	8	10	39	3	46
Total		122	26	36	114	9	141

Source: own elaboration

Table 13: *Values and Firm size*

		Values HR		Values Processes		Values	
		0	1	0	1	0	1
Firm size	small	28	23	11	40	7	44
	medium	21	29	10	40	6	44
	big	23	26	9	40	5	44
Total		72	78	30	120	18	132

Source: own elaboration

It is interesting and perhaps quite unexpected to find that there is not a clear correlation between firm size and having Mission HR and Mission Processes statements in their strategic plans. Indeed, table 16 reveals that small firms are the ones that have higher cases of owning a mission statement in the strategic plan than the others. When considering the vision or values variables no clear differences can be appreciated by firm size. Finally, when looking at the “Values” results, we see exact numbers for the cases considering having or not a set of values or mentioning any type of process in the core set of values. Hence, quite

unexpectedly, we do not find a clear positive correlation between firm size and having Mision/Vision/Values statements in the company's strategic plans.

5. RESULTS

5.1. T-Test for Independent Samples

As we mentioned in the "Objective" section, we are interested in studying the relationship between the economical results of a company, and the importance level of the variables of the mission, vision, and values in their strategic plan or webpage.

To do so, we conduct a T-test for independent samples, which helps us to compare whether two groups have different average values in the variables of interest. This test measures whether the difference in average values between the two groups is significantly different from zero. Such difference is more likely to be significant if the differences between the two average values is large, the sample size is large, or if the responses are consistently close to the average value and not spread out, in other words, if the standard deviation is low.

For this reason, the way to compute the T-test will be the following:

Firstly, each of the Mission information variables will be analyzed together with each of the different variables that describe performance of the companies, in our case: economic profitability, benefit margin, and financial results. Second, the same will be done with each of the Vision information variables. Finally, the same approach will be followed with regards to the analysis of the Values information and the variables reflecting economic performance of the company.

After this procedure has been done with the economic results, the same analysis will be performed with the variables that describe the firm's size, in our case: operating income, and total assets.

The way to compute a T-test analysis is the following:

1. We should enter our database into SPSS by clicking into File- Open- Data and selecting our already cleaned Excel File where all the information is gathered.
2. In order to conduct the T-test for independent samples, we should click into Analyze- Compare means- Independent Samples T-Test, and select the economic

- variables for the test variable list and the mission, vision and values information variables into the grouping variable one at the time.
3. Compute the T-test analysis for every desired grouping variable in order to obtain the information for each of them,
 4. Evaluate the obtained table provided by SPSS.

The way of describing the obtained results is the following:

Firstly, it should be known that we are evaluating the results for a hypothesis. In our case, the Null hypothesis (H_0) states that the means are equal, while the Alternative (H_1) states that they are not. We should also know that we are trying to analyze whether the independent variables- mission, vision, values information variables - influence the dependent ones -economic variables-, and the way to interpret these results as significant is by the significance level.

This significance level is provided by SPSS when computing the T-test, and we should be the ones deciding if the information provided by the table is reliable or not. The way to make this decision, is by looking at this significance level. If the given value is below or equal to 0,05 we will reject the Null (H_0), meaning that we reject that the means are equal, implying that the results are significant. On the other hand, if the significance level is higher than 0,05, the obtained information will not be significant, so we do not have enough information to reject the Null (H_0).

In order to understand this procedure in a better way, an example of an SPSS outcome will be presented:

We will take the example of the variable “Mission Processes”, which describes if the company mentions any type of process in their Mission statement or not, with the Operating Income variable. Once we perform the T-test for independent samples, SPSS provides the following information:

Table 14: SPSS data- t- test for independent samples: Operating Income and Mission Processes

GROUP STATISTICS					
	Mission Processes	N	Mean	Std. Deviation	Std. Error Mean
Operating income	1,0000	58	196454,88	522164,143	68563,511
	,0000	19	31681,47	114549,100	26279,366

INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variance		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Operating	Equal variances Assumed	7,395	,008	1,359	75	,178	164773,406	121239,361	-76747,786	406294,597
Income	Equal Variances Not Assumed			2,244	70,181	,028	164773,406	73427,244	18334,035	311212,776

Source: own elaboration

If we look at the top of the table, we can see that we are comparing two groups: The ones that Mention Processes in their Mission Statement (described as 1), and the ones who do not (described as 0). Moreover, the square in its right, describes the mean scores, which are the average operating income score obtained by each group. As we can see, in this case, the group that mentions the Processes, has an operating income of 196.454,88 million euros, while the one who does not, receives a value of 31.681,47 million euros, meaning that companies that mention Processes in their Mission statement have higher operating income than those who do not.

Moreover, the standard deviation in its right side gives an idea of the average variation in score within each subsample.

The lower chart shows the t-test for independent samples results, and we will firstly focus on the Levene's Test for Equality of Variances. The F-score, represents the F statistic, and the significance level (Sig.), represents the probability level. Both values are situated in the left-hand side of the chart. The higher the F-score gets, the lower the significance score value will be. These values will tell us which row to read from, since the Levene's Test for Equality of Variances determines if the two conditions have a similar or different amount of variability between scores. The way to state so is the following:

- $P\text{-values} \geq \alpha \rightarrow$ Equal Variances Assumed, being $\alpha=0,05$
- $P\text{-value} < \alpha \rightarrow$ Equal Variances Not Assumed, being $\alpha=0,05$

In this case, the significance level is 0,008 (when rounded). As this value is lower than 0,05, Equal Variances are Not Assumed, so the row to be read from, should be the second one.

Once the row is known, we should look at the results provided by the T-test in the right-hand side of the same chart. These results will inform us if the means of both groups are significantly different, or if they are relatively the same. In this case, as the value that we find is 0,028, which is lower than $\alpha=0,05$, we find that the means are significantly different, meaning that the means differ more than what would be expected only by chance. So, in general, it is very common to find that firms that do mention processes in their income statement, have higher operating income results than those who do not.

Now that we have understood how to read the SPSS outcomes, two tables with all the obtained results is presented, one with the variables that measure economic performance, and another one that measures firm size. These tables show the T-tests performed for each grouping variable with all the rest of variables. For each result, we present the average value of the given variables, and the obtained significance level for the Levene's test (Sig.), followed by the 2-tailed significance level of the independent t-test in each case.

In order to make it easier for the reader, the cell Sig. (2t-tailed) is followed by (EVA) or (EVNA) meaning "Equal Variances Assumed", or "Equal Variances Not Assumed", which depends on the result obtained by the Levene's test. Moreover, this column has been shaded with the proper option to choose, and significant values at any level have been written in red:

Table 15: SPSS results for Independent Samples T-test- variables that measure economic performance

		Economic profitability	Sig.	Sig. (2-tailed)	Benefit Margin	Sig.	Sig. (2-tailed)	Financial Results	Sig.	Sig.(2-tailed)	
Mission	Mission HR	Mission HR	5,568	0,559	0,289 (EVA)	-22,530	0,015	0,2 (EVA)	153774,800	0,725	0,614 (EVA)
		Mission no HR	2,467		0,173 (EVNA)	-0,495		0,441 (EVNA)	153774,800		0,561 (EVNA)
	Mission Processes	Mission Processes	3,438	0,234	0,801 (EVA)	-8,289	0,117	0,525 (EVA)	135884,260	0,008	0,29 (EVA)
		Mission no Processes	2,712		0,73 (EVNA)	2,470		0,261 (EVNA)	22186,100		0,069 (EVNA)
	M. Operational P.	M. Operational P.	1,948	0,741	0,428 (EVA)	5,534	0,152	0,249 (EVA)	107218,430	0,073	0,976 (EVA)
		No M. Operational P.	3,983		0,468 (EVNA)	-11,849		0,128 (EVNA)	110071,630		0,969 (EVNA)
	M. Management P.	M. Management P.	5,387	0,818	0,175 (EVA)	-10,941	0,062	0,570 (EVA)	200745,444	0,001	0,082 (EVA)
		No M. Management P.	1,963		0,179 (EVNA)	-2,499		0,648 (EVNA)	41823,735		0,121 (EVNA)
	M. Innovation P.	M. Innovation P.	3,476	0,856	0,917 (EVA)	-5,972	0,735	0,982 (EVA)	10318,550	0,184	0,228 (EVA)
		No M. Innovation P.	3,187		0,902 (EVNA)	-5,611		0,977 (EVNA)	139535,815		0,148 (EVNA)
M. Environmental P.	M. Environmental P.	3,629	0,250	0,787 (EVA)	-13,425	0,063	0,330 (EVA)	119005,978	0,822	0,814 (EVA)	
	No M. Environmental P.	2,962		0,775 (EVNA)	0,693		0,369 (EVNA)	97485,231		0,815 (EVNA)	
Vision	Vision HR	Vision HR	4,736	0,412	0,59(EVA)	2,900	0,317	0,583 (EVA)	75787,930	0,064	0,716 (EVA)
		Vision no HR	2,971		0,662 (EVNA)	-7,660		0,269 (EVNA)	119920,260		0,493 (EVNA)
	Vision Processes	Vision Processes	3,370	0,970	0,876 ((EVA)	2,963	0,000	0,031 (EVA)	94075,810	0,587	0,493 (EVA)
		Vission no Processes	2,922		0,85 (EVNA)	-33,161		0,219 (EVNA)	174060,500		0,515 (EVNA)
	Vi. Operational P.	Vi. Operational P.	1,713	0,532	0,350 (EVA)	4,665	0,165	0,287 (EVA)	148335,371	0,600	0,472 (EVA)
		No Vi. Operational P.	4,111		0,393 (EVNA)	-11,374		0,161 (EVNA)	81689,220		0,450 (EVNA)
	Vi. Management P.	Vi. Management P.	5,977	0,425	0,106 (EVA)	4,685	0,234	0,294 (EVA)	100101,000	0,341	0,883 (EVA)
		No Vi. Management P.	1,824		0,126 (EVNA)	-11,221		0,169 (EVNA)	114057,618		0,878 (EVNA)
	Vi. Innovation P.	Vi. Innovation P.	5,306	0,496	0,268 (EVA)	7,270	0,301	0,231 (EVA)	80893,591	0,497	0,714 (EVA)
		No Vi. Innovation P.	2,361		0,180 (EVNA)	-11,447		0,088 (EVNA)	118992,698		0,674 (EVNA)
Vi. Environmental P.	Vi. Environmental P.	3,049	0,430	0,873 (EVA)	3,411	0,074	0,249 (EVA)	60152,733	0,157	0,253 (EVA)	
	No Vi. Environmental P.	3,442		0,870 (EVNA)	-13,269		0,210 (EVNA)	164233,150		0,265 (EVNA)	
Values	Values HR	Values HR	5,343	0,848	0,077 (EVA)	-7,214	0,334	0,828 (EVA)	171849,820	0,019	0,143 (EVA)
		Values no HR	1,012		0,079 (EVNA)	-4,075		0,823 (EVNA)	38573,930		0,131 (EVNA)
	Values Processes	Values Processes	3,713	0,652	0,465 (EVA)	-7,659	0,218	0,589 (EVA)	117575,360	0,101	0,69 (EVA)
		Values no Processes	1,470		0,492 (EVNA)	2,100		0,298 (EVNA)	69728,270		0,491 (EVNA)
	Va. Operational P.	Va. Operational P.	3,786	0,149	0,690 (EVA)	-12,600	0,097	0,371 (EVA)	152254,886	0,129	0,326 (EVA)
		No Va. Operational P.	2,807		0,698 (EVNA)	0,324		0,399 (EVNA)	62853,268		0,322 (EVNA)
	Va. Management P.	Va. Management P.	5,614	0,882	0,076 (EVA)	-7,066	0,336	0,862 (EVA)	120298,100	0,222	0,817 (EVA)
		No Va. Management P.	1,262		0,073 (EVNA)	-4,550		0,871 (EVNA)	99206,111		0,820 (EVNA)
	Va. Innovation P.	Va. Innovation P.	3,839	0,730	0,713 (EVA)	1,811	0,160	0,363 (EVA)	135305,944	0,993	0,666 (EVA)
		No Va. Innovation P.	2,922		0,705 (EVNA)	-11,502		0,316 (EVNA)	95074,021		0,662 (EVNA)
Va. Environmental P.	Va. Environmental P.	4,348	0,320	0,409 (EVA)	5,435	0,037	0,147 (EVA)	147798,632	0,395	0,446 (EVA)	
	No Va. Environmental P.	2,316		0,391 (EVNA)	-15,457		0,124 (EVNA)	77869,170		0,446 (EVNA)	

Table 16: SPSS results for Independent Samples T-test- variables that measure firm size

			Operating income	Sig.	Sig. (2-tailed)	Total Assets	Sig.	Sig. (2-tailed)
Mission	Mission HR	Mission HR	17,000	0,212	0,511 (EVA)	14853658,011	0,000	0,024 (EVA)
		Mission no HR	60,000		0,454 (EVNA)	2577035,330		0,194 (EVNA)
	Mission Processes	Mission Processes	196454,880	0,008	0,178(EVA)	6783169,496	0,092	0,308 (EVA)
		Mission no Processes	31681,470		0,028 (EVNA)	1300578,377		0,073 (EVNA)
	M. Operational P.	M. Operational P.	195561,330	0,349	0,613 (EVA)	8947059,235	0,032	0,262 (EVA)
		No M. Operational P.	137789,790		0,518 (EVNA)	3566061,903		0,393 (EVNA)
	M. Management P.	M. Management P.	235124,563	0,004	0,205 (EVA)	4904920,300	0,603	0,848 (EVA)
		No M. Management P.	99385,444		0,268 (EVNA)	5812061,150		0,820 (EVNA)
	M. Innovation P.	M. Innovation P.	91546,684	0,046	0,487 (EVA)	9427699,369	0,043	0,298 (EVA)
		No M. Innovation P.	176843,862		0,292 (EVNA)	4027219,721		0,504 (EVNA)
	M. Environmental P.	M. Environmental P.	183977,805	0,245	0,570(EVA)	3668225,946	0,125	0,476 (EVA)
		No M. Environmental P.	123701,139		0,565 (EVNA)	6959302,192		0,441 (EVNA)
Vision	Vision HR	Vision HR	133194,070	0,185	0,841 (EVA)	3841902,597	0,694	0,738 (EVA)
		Vision no HR	160819,270		0,731 (EVNA)	5892330,660		0,631 (EVNA)
	Vision Processes	Vision Processes	196948,000	0,227	0,097 (EVA)	5519264,105	0,931	0,968 (EVA)
		Vission no Processes	-29385,210		0,047 (EVNA)	5302945,449		0,958 (EVNA)
	Vi. Operational P.	Vi. Operational P.	228997,710	0,453	0,255 (EVA)	9284310,255	0,018	0,219 (EVA)
		No Vi. Operational P.	106465,261		0,273 (EVNA)	3381790,727		0,349 (EVNA)
	Vi. Management P.	Vi. Management P.	139965,214	0,398	0,821 (EVA)	1224260,284	0,023	0,178 (EVA)
		No Vi. Management P.	164842,959		0,813 (EVNA)	7718781,728		0,066 (EVNA)
	Vi. Innovation P.	Vi. Innovation P.	145764,318	0,349	0,904 (EVA)	9988772,865	0,010	0,190 (EVA)
		No Vi. Innovation P.	159809,382		0,878 (EVNA)	3467486,464		0,367 (EVNA)
	Vi. Environmental P.	Vi. Environmental P.	170604,488	0,615	0,765 (EVA)	7079750,161	0,422	0,523 (EVA)
		No Vi. Environmental P.	138931,861		0,773 (EVNA)	4130233,331		0,552 (EVNA)
Values	Values HR	Values HR	209894,570	0,076	0,262 (EVA)	4787438,474	0,519	0,758 (EVA)
		Values no HR	90878,830		0,238 (EVNA)	6203915,877		0,765 (EVNA)
	Values Processes	Values Processes	165803,190	0,213	0,689 (EVA)	6529791,302	0,131	0,355 (EVA)
		Values no Processes	110766,430		0,533 (EVNA)	1217572,926		0,068 (EVNA)
	Va. Operational P.	Va. Operational P.	157797,821	0,609	0,969 (EVA)	8747717,707	0,025	0,181 (EVA)
		No Va. Operational P.	153742,526		0,969 (EVNA)	2597023,808		0,209 (EVNA)
	Va. Management P.	Va. Management P.	139621,972	0,783	0,775 (EVA)	5277327,597	0,760	0,939 (EVA)
		No Va. Management P.	169998,537		0,776 (EVNA)	5629216,542		0,936 (EVNA)
	Va. Innovation P.	Va. Innovation P.	173526,909	0,682	0,784 (EVA)	2639055,092	0,048	0,278 (EVA)
		No Va. Innovation P.	143790,977		0,778 (EVNA)	7688185,037		0,224 (EVNA)
	Va. Environmental P.	Va. Environmental P.	223784,114	0,559	0,240 (EVA)	8493181,251	0,031	0,217 (EVA)
		No Va. Environmental P.	99140,167		0,241 (EVNA)	2819743,207		0,246 (EVNA)

Source: own elaboration

The definition of some terms presented in the table is now presented:

- Sig. = Significance level of the Levene's test
- EVA= Equal Variances Assumed
- EVNA= Equal Variances Not Assumed

Tables 15 and 16 distinguish three groups. The first group is the one with the variables related to the Mission, followed by the group which encompasses the Vision Variables, and finishing with the groups which contains the Values variables. Given the broad amount of information, only significant cases will be mentioned.

An analysis of the Mission variables will be firstly provided:

Within the mission variables, we will start with Table 15, which provides the SPSS results for Independent Samples T-test- variables that measure economic performance. In this table, we find a significant result between Mission processes- which describes if the company mentions any type of process in their Mission statement or not-, and the variable Financial results. In this case, the SPSS information provides a mean value of 135.884,260 million euros for those who mention such processes in their mission statement presented in their webpage or strategic plan. On the other hand, firms that do not mention any type of operational, management, innovation, or environmental process in their mission statement, present a mean value of 22.186,1 million euros, which is a difference of over 100.000 million euros.

The followed procedure to state that such result is significant is the previously mentioned. Firstly, the significance level provided by the Levene's Test should be considered. Since this value is 0,008, equal variances are not assumed, and once again, the second row should be regarded. When looking at the significance level of our T- test for independent samples, we find a value of 0,069. This value is higher than 0,05 but lower than 0,10, so we can state that the results are significant at a 10% level, meaning that there is a 10% risk of concluding that such difference exists when there is no actual difference. We can then conclude that companies who present any type of process in their mission statement will tend to have higher Financial Results.

When looking at Table 16, which presents the SPSS results for Independent Samples T-test for variables that measure firm size, we find another significant result: The variable

“Mission Processes” with the Operating Income variable. As this was the case provided in the example, we can remember that we obtained a significant result at a 5% level. Since the difference in means is significant, and companies that mentioned processes in their mission statement presented a higher mean in operating income than the ones that do not, we can state that firms that do mention processes in their income statement, have higher operating income results than those who do not.

In terms of the Vision variables, we find another two significant results. However, both of these results are presented in Table 16. In other words, we do not find any significant case relating vision variables with variables that measure firm performance, but we do find two significant cases with variables that measure firm size. Both results are significant at a 10% level, since their significance level is above the an $\alpha=0,05$ but below an $\alpha=0,10$. As we have previously explained, this means that there is a 10% risk of concluding that the difference between both groups exists when it does not.

Firstly, the results for the variable Vision Processes and Operating income will be provided, followed by the results for the grouping variable which mentions or not the management process in the vision statement, with the total assets presented by the company in the last disposable year.

When looking at the companies who mention at least one type of process in their vision statement, we find a mean value of operating income of 196.948 million euros. On the other hand, the firms who do not present such processes, present a negative mean value of 29.385,21 million euros. The difference of the averages between both groups is over 200.000 million euros. In this case, equal variances were assumed and when the proper t-test was regarded, the founded value was 0,097. Although this value is very close to 0,10, we can still state that the results are significant at a 10% level, meaning that the means differ more than what would be expected only by chance, but have a 10% risk of concluding that the difference exist when it does not. Despite the difference only has a significance level of 10%, we can state at this value that companies that mention any type of process in their vision statement, have in mean higher operating income than those who do not.

Within the Vision, the other significant result founded was the one between the variable: Vision Management Processes and Total assets. The first one, describes if the company mentions or not any type of management process in their vision statement. The management processes are those related to providing satisfaction, creating a brand image,

or develop brand loyalty. On the other hand, total assets are those presented in their last disposable year in the SABI database.

In this case, we find that the mean value for those companies that do not mention a management process in their vision statement is higher than those companies who do present such process in the same one. In this case, companies who mention such process, provide in our sample, a mean value of 1.224.260,284 million euros, while those who do not, present a mean value of 7.718.781,728 million euros.

In this analysis, Equal Variances are not assumed, and the t-test for independent sample results presents a significance level of 0,066. Therefore, the difference in means is higher than the one expected only by chance. This result tells us that commonly, smaller companies in terms of total assets will be the ones mentioning management processes in their vision statement more than bigger ones.

Finally, the last group provided by Tables 15 and 16 is the Values in the Strategic plan or Company's webpage. In this case, the only significant cases that we found belong to table 15, which presents the t-test for those variables that measure the economic performance. Two significant results at a 10% level can be found.

The results for the Independent samples t-test between the grouping variable Values HR and the Economic Profitability will be firstly explained. In this case, companies that mentioned Human resources in the Values of the company had higher economic profitability in terms of benefits than those who do not. Equal Variances were Assumed, and the significance level provided by the t-test for independent samples is 0,077. For this reason, we can state that the results are significant at a 10% level, meaning that usually companies who mention Human resources in the Firm's values, present a higher economic profitability than those who do not.

The last results to be presented, are the ones considering the grouping variable that studies if companies mention or not the management processes in their Values, and the economic profitability of the same one. For this study, we find mean values of 5,614% and 1,262% for firms that do mention such processes, and those who do not, respectively. In this case, Equal variances were assumed and the significance level for the t-test for independent samples was 0,076, and this is why we can state that they are significant at a 10%.

Commonly we will find firms that mention management processes in their values with

higher economic profitability than those who do not, but with the risk of 10% of recognizing this difference when there is not.

To sum up, we only found significant differences in means in the following cases:

For variables that measure economic performance, we obtained the following significant results:

- Mission Processes and Financial Results (significance level 10%)(Positive)
- Values HR and Economic Profitability (significance level 10%) (Positive)
- Values Management Processes and Economic Profitability (significance level 10%)(Positive)

For variables that measure firm size, the significant results obtained are:

- Mission Processes and Operating Income (significance level 5%) (Positive)
- Vision processes and Operating Income (significance level 10%)(Positive)
- Vision Management Processes and Total Assets (significance level 10%) (Negative)

In the rest of the studies performed, we do not find significant differences in means given that the magnitude of the standard errors prevents the t-test from rejecting the null hypothesis. In other words, we do not have enough information to reject the null and state that this difference is consistent with other samples. However, it must be said that although significant differences are not found, the sign obtained in the means is usually the correct one¹.

5.2. Regression Analysis for Robustness Check

In the former sub-section, we have tested the extent to which there is any significant correlation between some Mission, Vision, and Values aspects and other indicators of the firms such as indicators that measure economic performance, and other which measure firm size. However, given that we found some significant results in both cases, it might be the case that even when positive correlation has been found in some cases, such correlation would be spurious, i.e., it might be driven by some other variable. For instance, one might argue that Mission, Vision, and Values in particular processes are more common in bigger

¹ If the economic performance variables were measured in growth terms instead of levels, the correlation between these and the different mission, vision and values would have been even lower, so we have only incorporated these values in levels.

firms, and that at the same time bigger firms have better economic performance. Hence, not controlling for firm size when analyzing the variables that measure economic performance, might give a wrong picture of the correlation found between Mission, Vision and Values and Economic indicators².

To avoid this problem, we can estimate an econometric model where the dependent variable is the economic performance of the firm (either economic profitability or financial results) and the explanatory variables include not only whether the firm's website contains Mission, Vision and Values in their strategic plans, but also firm size.

The model to be estimated is the following:

$$Y_j = \alpha_0 + \alpha_1 X_j + \alpha_2 FS_j$$

where Y_j represents the variables, which reflect Economic Performance of the firm j , X describes whether the firm contains Mission, Vision and Values Aspects in its strategic plan, and FS controls for Firm Size (in terms of number of employees). The coefficient of interest is α_1 , and if positive, we could confirm that within Firms of the same size, having Mission, Vision and Values Aspects in the strategic plan is positively correlated with the economic performance. This would mean that the possibility that Firm Size would be driving the positive correlation found before is excluded.

Below we present the table where the coefficients α_1 of different regressions (by OLS) are presented, together with the standard errors and the t-Student, which is the statistic that reveals whether the correlation is significantly different from zero or not.

We carry out the robustness check for those pairs of variables that we have found positive correlation before. As it can be seen above, we have found three different positive correlations related to the variables that measure economic performance, and these are the ones analyzed in the regression analysis:

² One might argue that there might be other potential covariates which should be controlled for. However, given that our sample of firms is rather small, we cannot include more covariates in the regression. We restrict the robustness check analysis to include Firm Size.

Table 17: Linear Regression Estimations

Covariates	Dependent Variable: Financial Results		
	Coefficient	Standard Error	t-Student
Mission Processes	104,424.179	105,332.842	0.991
Firm Size	2.213	3.645	0.607
	Dependent Variable: Economic Profitability		
Values HR	4.495	2.494	1.802
Firm Size	-9.240E-7	0	-0.007
	Dependent Variable: Economic Profitability		
Values Management. Processes	4.511	2.489	1.812
Firm Size	-2.288E-5	0	-0.180

Source: own elaboration

Although information for both independent variables- firm size and strategic variables- has been provided, we are interested in the results related to the strategic variables.

We will start by analyzing the linear regression with Financial results as the dependent variable, and mission processes and firm size as the independent ones. We want to test, if firms of the same size still have a positive correlation between mission processes and their financial results.

In this case, the obtained (non-standardized) coefficient is 104,424.179, meaning that mentioning processes in the mission statement, increases the company's financial results in this amount. However, the standard error is 105,332.842, so this coefficient could vary upwards or downwards in this quantity. Finally, the t-student will be the one determining that the correlation between the two variables is still positive even when controlling for firm size. In this case, as the t-student is 0.991 (lower than 1.95), we do not have a significant result. This implies that when controlling for firm size, the correlation obtained in the mean differences, does not hold anymore. Hence, the correlation we found before between these two variables is driven by the indirect correlation between firm size and the economic performance variables. This result is not surprising since when looking at the results obtained in the t-test, we observe that the variable Mission Processes had a positive significant relationship with Financial Results, as well as with Operating Income, which described the firm's size.

In the case of the linear regression analysis with Economic Profitability as dependent variable, and values HR and firm size as independent variables, another situation is found.

The provided t-student is 1.802, which is lower than 1.95 but higher than 1.60, so we obtain a significant result at a 10% level. The coefficient obtained in the linear regression analysis is 4.495, meaning that mentioning Human Resources in the company's core values, increases the economic profitability in 4.495 points. However, this quantity may vary in 2.494 points, just like the standard error suggests. In this case, the relationship between mentioning Human Resources in the Values and Economic Profitability still holds, even when we control for firm size.

Finally, the linear regression analysis for the dependent variable: economic profitability, and Values management processes, and firm size as independent variables will be presented.

Just like in the previous case, we observe a t-student lower than 1.95 but higher than 1.60. This once again means a significant result at a 10% level. The coefficient found in this analysis is 4.511, meaning that if companies mention management processes in their values, their economic profitability will increase in 4.511 points. However, once again, the result may vary due to the standard error, which in this case is 2.489. Like in the previous analysis, the relationship between mentioning management processes in the values and economic profitability still holds when controlling for firm size.

6. CONCLUSION

This study aims to analyze whether the fact of mentioning human resources or any type of process such as operational, management, innovation, or environmental processes, in the mission, vision or core values of a company is related to the economic performance of firms. From an empirical point of view, there are scarcity of studies regarding the consequences of strategic planning, and this study tries to contribute evidence on it.

The selection of the proper companies was one of the main steps taken for the consequent analysis developed. 150 companies were chosen selecting a distribution of firms by sector which resemble to the Spanish economy. For the economic information, SABI database was used, while the mission, vision and values information was taken from the companies' strategic plan or webpages.

When conducting the t-test for independent samples, most results, although presenting the proper differences in means, were not significant, meaning that in most cases we cannot

reject the Null hypothesis that stated that there was no significant difference in means. In most cases, the sign is positive, but not significant.

However, we also found some positive relationships: In particular, we found that companies that presented any type of process in their mission statement, had higher means in operating income and financial results. Moreover, those firms that mentioned processes in their vision statement, also presented higher means in operating income. Finally, the means of economic profitability increased, when Human Resources or management Processes were mentioned in the Values statement of the different companies.

Since significant results were observed for variables that measured economic performance and variables which measured firm size, we decided to conduct a linear regression analysis in order to evaluate, if the results previously obtained between strategic variables and economic performance ones still hold when firm size was controlled. This study suggested that only two of the three significant cases still hold when controlling for firm size.

One suggestion for further studies is to conduct a similar study but for a larger sample, so that more significant results might be obtained. Moreover, another way to obtain more reliable results could be by focusing in one sector. In this way, more cases within the sector could be gathered, and perhaps more significant results could be obtained. Additionally, it would be very interesting to measure the impact of these variables in some intangible ones such as the work environment, the employees' satisfaction in their firms, etc., which are also very important aspects, although very difficult to measure, as this information is difficult to obtain. But it is sensible to hypothesize that these intangible variables could have a positive impact in the economic variables, perhaps not in the short run, but primarily in the medium and long-run.

We hope that this study has shed light in the issue and open a new line of investigation related to the impact of the organizations' strategic plans and economic performance consequences.

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