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# THE PROFITABILITY IN THE ELDERLY HOMES

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**ABSTRACT** Now days, the population in Spain older than 65 is the 17,36%. The Instituto Nacional de Estadística thinks, that in 2030, the population older than 65 in Spain will be a 24,1 % of the total Spanish population.

The elderly population had specific needs that means business opportunities which must be comply. The companies have to be effective and efficient.

**PURPOSE** The aim of this paper is to analyze the effectiveness and efficiency in the elderly homes in the period going from 2004 to 2009. "Law 39/2006, de 14 de diciembre, de Promoción de la Autonomía Personal y Atención a las personas en situación de dependencia" was enacted in Spain in 2006.

**DESING/METHODOLOGY/APPROACH.** We are going to study the evolution, between 2004-2009, of the following ratios: the trading margin (Operating profit/Net sales average), Net sales to total fixed asset (Net sales/Fixed assets average) and the EBITDA/Net sales average. We are going to study those ratios in 31 companies that belong to the 88.10 and 87.3 sector (NACE rev 2). The methodology is going to be a quantitative research. We are going to use the SABI's information in order to obtain the accounting data. To analyse the results we will use pivot tables in excel.

**FINDINGS** We have found that those companies are effective but not efficient.

**ORIGINALITY/VALUE** The elderly sector is an unknown sector which needs to be study because is an emerging sector that has large business opportunities.

## KEY-WORDS

Elderly homes, profitability, aging

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## 1. INTRODUCTION

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Now days, the population in Spain that is more than 65 years old is the 17,36%. In Spain, the *Instituto Nacional de Estadística* thinks, that in 2030, the population older than 65 in Spain will be a 24,1 % and in 2049 it will be a 31,9% (Abelán et al, 2011, Libro blanco del Envejecimiento Activo, 2011).

Another important issue is that in Spain the current model for so many years has been the “male breadwinner” model. This model is based on the idea that women are primarily responsible for the care of the family unit members, while the man is primarily responsible for the provision of goods and material resources to the family. In this context, so far, one of the roles of women has been caring for older family members. As woman is joining the labour market, the model “male breadwinner“ loses weight as a basic way of family organization. Gradually emerging is the need to “buy” services whose principal purpose is the care of people of the “third age”.

The aging population has implications not only in the private domain; also result in the public domain. It is increasingly necessary to develop public policies that guarantee basic care of the elderly. The scarcity of resources that both have, families and State, and the high costs involved in assisting the elderly, entails the need in order to research about alternatives, from both: public and the private sector, to facilitate access to services for older people.

The so-called “third age” is a business opportunity that should not be wasted. The data analyses provided by the accounting information measures and assess the viability of different business opportunities. The purpose of this study is to determine the effectiveness and efficiency of companies that belong at 88.1 and 87.3 sector (NACE rev 2). By analyzing financial accounting information of firms we aim to identify potential strengths and weaknesses in their management.

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## 2. EMPIRICAL STUDY

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### 2.1. OBJECTIVES AND HYPOTHESES

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The companies, in the course of his business, should be effective and efficient. We define effectiveness as the degree in which the company responds to customer needs and where the main target is that the client has an optimal vision of the company in the process of meeting their needs. Efficiency refers to the amount of resources that must be consumed to obtain the output that will meet the needs of customers. Basically, the goal of any company shall be, on one hand, to produce products that meet customer needs, and on the other, to give a certain quality of product, using the minimum resources.

The aim of this project is to study the effectiveness and efficiency in the 88.1 and 87.3 sector, and answer the following question: Can we con-

firm that the new law has supposed an increase in the effectiveness and efficiency in this industry?

The specific aims are:

1. To summarize about effectiveness and efficiency ratio before and after the Law in 2006: Operating profit/sales, and net sales /fixed assets.
2. To summarize the created surplus value before and after the Law in 2006, we are going to study the evolution about the “Earnings Before Interests, Taxes, Depreciations and Amortizations (EBITDA)”. Specifically, the EBITDA/Net sales.

The hypotheses are:

- H1: The effectiveness of service sector companies for the elderly has increased significantly since the enactment of Law 2006.
- H2: The efficiency of the service sector companies for the elderly has increased significantly since the enactment of Law 2006.
- H3: The cash flow of those companies has increased significantly since the enactment of Law 2006.

## 2.2.

### VARIABLE, SAMPLE AND METHODOLOGY

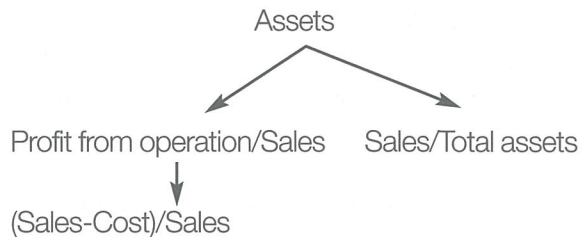
We have study all companies that below to 88.1 and also to 87.3 industry. The amount of companies in the study was: 31.

The period of time under study has been between 2004-2009. The starting point has been 2004, so we have data from two economic years

preceding the enactment of the law; last year of reference has been 2009, since it is the last financial year for which are available data at the time of completion of the field. Data have been obtained from the database: “Sistema de Análisis de Balances Ibéricos” (SABI).

In the definition of financial indicators of the efficiency and effectiveness we have had reference from an available study from Prior (2005) in which he analysed the effects of the privatization of some companies had on the effectiveness and efficiency.

Our starting point is: Profit from operation/Total



These two ratios are indicators of the effectiveness and efficiency. If the operating margin increases, means there has been an increase in sales (increase effectiveness) or that there has been a reduction in costs (increase efficiency). If the asset turnover increased, sales will increase thereby efficiency will increase. Also the asset turnover ratio indicates, for a given number of assets, which is the number of suitable investments (performance indicator). For this reason we are going to study sales/fixed assets. Also we have study the Earnings before interest taxes depreciation and amortization (EBITDA). The results in

other words, allows to answer in a preliminary way that EBITDA might give a sign of surplus value created, if it is considered as Margin EBITDA (Bastidas, 2007).

In the analysis of the evolution of the variables we use quantitative techniques. In order to conclude whether the detected changes in evolution are significant, we used the hypothesis testing of Wilcoxon. The software used to develop quantitative techniques has been the Excel (pivot tables).

### 2.3. CHARACTERISTICS OF COMPANIES

The companies that belong to 88.1 and 87.3 industry are small business. Corporate form is the private limited company which started-up before 2006. Table 1 is a summary of those features.

TABLE 1: Business features in the 88.1 and 87.3 sector.

FEATURES	%
Size (number of workers):	
– Big companies (more than 250)	3.32%
– Medium-sized business (50-250).	9,68 %
– Small business (minus than 50 ).	87%
Corporate form	
– Limited company (SA).	6,45%
– Private limited company (SRL)	93,55%
– Others (Foundations and associations)	0 %
Establishment	
– Before 2006.	100%
– After 2006.	0 %

SOURCE: Compiled from data obtained through the SABI.

### 2.4. EVOLUTION OF INDICATORS: INDIVIDUAL INDICATORS

As shown in Tables 2,3, 4 of all variables analyzed have increased since 2004. Sales increased by 41%, fixed assets increased by 49% and EBITDA increased by 159%. That is, analyzing the evolution of individual variables seems to be that the law has had a positive impact on companies' financial variables.

TABLE 2: Fixed assets and sales average: evolution.

	Fixed assets average	Sales average
2004-2006	1.012.955,603	983.659,9231
2007-2009	1.506.673,347	1.389.417,662

SOURCE: Own elaboration.

TABLE 3: EBITDA average: evolution

	Average EBITDA
2004-2006	42.531,52
2007-2009	110.369,56

SOURCE: Own elaboration.

A result that is particularly striking is the evolution of the operating profit average. We can see it in Table 4. We see that between the periods under study there is a significant increase between the two periods. However if we compare these results with the sales average we can conclude

that the profit margin has increase as we can see in Table 5 but the value is very small.

**TABLE 4: Operating profit average, evolution**

	Operating profit average
2004-2006	6867,95
2007-2009	53519,09

SOURCE: Own elaboration.

## 2.5. RATIOS EVOLUTION

Operating profit/sales. The results related to this ratio are found in Table 5. It Increases between the two periods. However, in the last period it is very small. This indicates that in 88.1 and 87.3 sector there are inefficient companies.

**TABLE 5: Operating profit/sales average: evolution.**

	Operating profit/sales average
2004-2006	0,01
2007-2009	0,04

SOURCE: Own elaboration.

Net sales/fixed assets. We can find out the results in Table 6. The results obtained in this ratio indicate that the proportion of the increasing sales is lower than the increase of investments. The sales have not increased enough to absorb the increase cost of the asset.

**TABLE 6: Net sales/fixed assets average evolution.**

	Sales to fixed assets average
2004-2006	0,97
2007-2009	0,92

SOURCE: Own elaboration.

In table 7 it can be seen the evolution of EBITDA/sales. As we can see, the ratio's evolution is positive, which indicates that so far the companies have revenues to pay for capital investments, but it is interesting to stress the low value of this ratio.

**TABLE 7: EBITDA sales average: evolution**

	EBITDA/sales average
2004-2006	0,04
2007-2009	0,08

SOURCE: Own elaboration.

The results suggest that all variables analyzed have increased. But we can know whether this increase is statistically significant or not. In order to do this we apply the hypothesis testing Wilconxon. The tests indicate that the shift is not statistically significant.

## 3. CONCLUSION

Life expectancy in the so-called first world has increased as a result of the improvements in the population living conditions. As a consequence, those countries have increased the percentage of people over 65. In 2030, the population older

than 65 in Spain, will be a 24,1% of the amount of the Spanish population.

In Spain, in the last third of last century a set of social and cultural changes have occur, which had several consequences. The most important one have been the increasing incorporation of women into the labour market. The model “malebread-winer” is no longer the hallmark of the Spanish families. The *Mater familias* works outside home. Its main task is not the care of children or older people who belong to the nuclear family. The so-called “third age” has needs. This situation is a business opportunity that should not be wasted.

Companies providing this services in Spain are small and with a long experience in the sector. All surveyed companies have started their activities prior to 2006.

The aim of this study has been to analyze the evolution of the effectiveness and efficiency of Spanish companies that provide services to older people. So it has been studied whether the enactment of Law 39/2006, de 14 of December , de *Provisión de la autonomía Personal y Atención a las personas en situación de dependencia* has been a significant change in indicators under study.

During the period analyzed (2004-2010) it has been observed that the tendency of the average of all variables: Fixed assets, sales, EBITDA, operating profit, was to go higher. It also had an upward tendency the ratio: Operating profit/Net sales. The average value of this ratio for the years 2007-2010 has been 0,04. It indicates that the profit margin on

sales in these businesses is very small. The conclusion is that companies are inefficient; the cost that results from the provision of services is really high. We analyzed what is the nature of expenditures that have a greater say in the income statement of the company. In these businesses, staff cost is the largest item of expenditure. In 98% of the companies analyzed, the relation between wages over sales is more than 50%.

The EBITDA/Net sales is positive, which indicates that so far the companies have revenues to pay for capital investments, but the low value of this ratio is something to be thought about in the near future by the companies.

The ratio Net sales/fixed asset has had a slight tendency to decrease since 2007. This means that sales have increased less than fixed assets. The conclusion is that sales have not increased enough to absorb the increased cost of the asset. This fact it is also something to be taken care of from the businesses.

Therefore, the results show that companies are effective but not efficient, but if they are to survive the uncertain future that approaches, they must design strategies to increase the effectiveness and efficiency.

In future studies, we are going to look at the specific situation of every company that took part in this present study, in order to be able to design a proper strategy that works in the future. The methodology which will be applied is the “interviews in depth”.

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