

Long-term care, dependence and the third sector

Francisco Escribano Sotos · Isabel Pardo García

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Abstract The demographic changes that have taken place throughout the twentieth and early twenty-first century confirm the increase in the number of older adults. More older adults implicitly entail an increase in the number of people in a situation of dependence. The issue of long-term care has economic, social and health care implications. This article addresses the characteristics of the companies involved in long-term care services and the employment generated. The database of the Spanish Directory of Companies (DIRCE) provided information on the variables used in the analysis: companies created, employment generated, companies by legal status and territorial distribution of the companies. Noteworthy findings were that the long-term care service sector contributes more to creating jobs than other economic sectors and that third sector companies are important in providing long-term care services.

Keywords Long-term care · Dependence · Employment · Business · Companies · Third sector

JEL Classifications I11 · I12 · J21 · J22

1 Introduction

Population reports from the United Nations, European Union and individual countries show that the number of older people has increased and will continue to rise throughout the twenty-first century. This finding has a variety of economic, social and health care implications. The increase in the number of older adults will demand more public expenditure on pensions, health care and long-term care (European Commission 2006).

The aging process involves a growing rate of dependence. Worldwide, the mean global prevalence of population over 60 years old with moderate-to-severe dependence is estimated at 46% (World Health Organization 2008, p. 34). Therefore, long-term care will be a high-priority problem in the coming years. As family structures change and the entry of women in the labor market advances, the hypothesis that long-term care can be addressed by informal care is no longer tenable.

The current trend is for governments to develop public systems of financing services for people with dependence that attempt to address deficiencies by allocating funds commensurate to the degree or level of dependence and the formal services needed. In the case of Spain, 77.5% of dependent older adults

F. Escribano Sotos (✉) · I. Pardo García
Facultad de Ciencias Sociales, Universidad de Castilla-La Mancha, Avda. de los Alfares, 42, 16071 Cuenca, Spain
e-mail: francisco.esotos@uclm.es

I. Pardo García
e-mail: isabel.pardo@uclm.es

receive only informal support (Roger-García 2009, p. 398), so any increase in formal care services may have an impact on job creation. Since the care of people with dependence consists mainly of personal care, dependency care is intensive in manual labor. Providing formal care services to people with dependence will affect job creation in two ways: on the one hand, by allowing people who have been caring for dependents to enter or return to the workplace and by the development of new jobs in the formal care services sector. The relation between informal care and participation in the workplace has been little analyzed in the literature. The study by Bolin et al. (2008) confirms that people with informal care responsibilities are less likely to be able to work at all or at full capacity in Spain and other countries of the European Union. As for the generation of employment, the White Book on Dependence and the Law of Promotion of Personal Independence and Care for People in Situations of Dependence estimate the employment generated in Spain as a result of the approval of this law. On the other hand, Herce et al. (2006) evaluate the effect on employment of short-comings in the Spanish national system of services for people with dependence.

In this article the authors analyze the number of companies created and employment generated in Spain in the activity sector related to long-term care, with special attention to so-called “third sector” or non-profit, mixed and joint government–private companies. After the general analysis of aspects relative to aging and dependence with which we began, the article continues with an analysis of the potential for job creation in long-term care services and the characteristics of the third sector. The fourth part briefly describes the DIRCE database used for the study and the analyses made. The fifth and sixth parts summarize the results. The article closes with a discussion of the principal findings.

2 Aging and dependence

2.1 Aging

One of the fundamental characteristics of the demographic transformation that took place over the twentieth century and has continued into the twenty-first century is demographic aging, defined

as the increase of the proportion of older adults. Increased life expectancy and reduced fertility rates are responsible for this change in trend (Commission of the European Communities 2006, p. 3).

Demographic aging is occurring through the world. According to United Nations projections (United Nations 2009, p. 1), the world population will exceed 9 billion people by 2050. The population of the more industrialized countries will hardly change, growing from 1.23 to 1.28 billion people. The increase will be largest in developing countries, which will increase by 2.3 billion people. Of these 2.3 billion people, 1.2 billion will be aged 15–59 years and 1.1 billion will be over 60 years old. Although trends confirm that demographic aging also is advancing rapidly in less developed regions, more developed regions are experiencing faster growth of the population over 60. The aging trend will continue. In the next 4 decades, the number of people over 60 years is expected to increase by more than 50%, from 264 million in 2009 to 416 million in 2050 (United Nations 2009, p. vii). Not only that, but the stratum of older adults is also aging, meaning that the percentage of the people over 80 years old also is increasing. By 2050, more than 11% of the population will be older than 80 in Germany, France, Switzerland, Austria, Italy, Portugal and Spain.

The aging of older adults is sustained by life expectancy at birth; Switzerland, France, Spain and Italy have life expectancies at birth in excess of 85 years. Changes in the population structure and its evolution can be represented as population pyramids in which the form reflects changes in birth rates and mortality. Population projections for Europe in 2060 confirm the above claims, i.e., many European countries will have low birth rates and a larger proportion of older people due to more prolonged life expectancy at birth (European Commission 2009, pp. 38–45) (Fig. 1).

Population projections for 2050 show the population pyramid for Spain. According to this figure, the population shows progressive growth from the base to the age of 75 years. Within the range of 0–75 years, there is a bulge between 45 and 55 years, followed by a reduction until 65 years and then another bulge from 65 to 75 years (especially women). After 75 the population diminishes progressively until the age of 100 years and more. A large portion of the population is concentrated in the age range of 75–100 years, which contrasts with

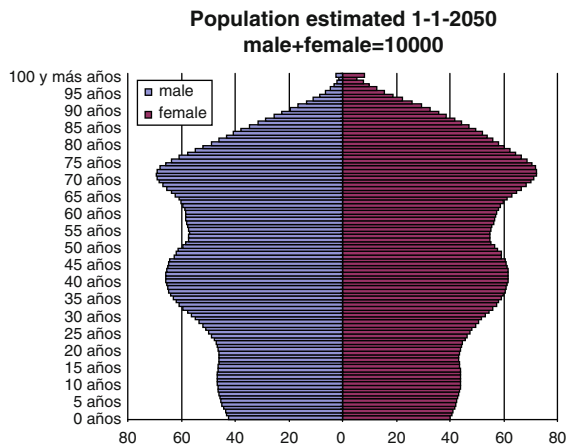


Fig. 1 Population pyramid 2050 Spain. *Source:* Prepared using data from the Spanish National Institute of Statistics (INE)/Inebase

analogous graphs for the beginning of the twentieth century. The Spanish demographic distribution has evolved toward a population with a concentration of population in age cohorts older than 65 years, maintenance of the proportion in the cohort 25–65 years old and an alarming reduction in birth rate, as indicated by the relatively small proportion of population under 25 years.

Aging is a universal process that accompanies economic and social development and has important effects on different facets of human life. It will affect pensions, the work market, health care models, conditions of life and the need for long-term care of dependent people.

2.2 Dependence

Worldwide and European trends hold true for Spain. The aging trend and increase in the population over

80 years old imply an increase in dependence because this age stratum holds a larger percentage of people in situations of dependence.

According to EDAD 2008 (SAAD-IMSERSO 2009), the Survey of Disability, Personal Independence and Situations of Dependency (*Encuesta de Discapacidad, Autonomía Personal y situación de Dependencia*), 3.8 million people (8.5% of the population) in Spain have some disability. Compared to the findings of EDDS 1999 (Survey on Disability, Deficiencies and Health Status, or *Encuesta sobre Discapacidades, Deficiencias y Estado de Salud*), the number of people with disabilities has increased by 320,000 since 1999.

The rate of disability by age will hardly change in people younger than 65 years and will diminish in people aged 65–79 years and increase in the group aged 80 and older (Table 1). In general, disability appears at later ages, but the proportion of older adults with disabilities increases in older age strata as a result of increased life expectancy. This means that dependence is age-related and that as life expectancy grows, the probability of eventually becoming dependent will grow.

2.3 Long-term care, employment and the third sector

In September 1998, the Council of Europe approved a recommendation on dependence that established that dependent people are people who, for reasons linked to an impairment or loss of physical, mental or intellectual capacity, have a need for considerable care and/or assistance in carrying out daily life activities, meaning that people in a situation of dependence require the aid of other people according to their degree of disability (Committee of Ministers of the Council of Europe 1998, p. 2).

Table 1 People with disability by age group, EDDS 1999 and EDAD 2008

	EDDS 1999		EDAD 2008	
	No. of people (thousands)	% of people with disability	No. of people (thousands)	% of people with disability
Total	3,528.2	100.0	3,847.9	100.0
0–5 years	49.6	1.4	60.4	1.6
6–64 years	1,406.0	39.9	1,560.0	40.5
65–79 years	1,320.5	37.4	1,201.7	31.2
80 and more years	752.1	21.3	1,025.8	26.7

Source: INEbase

Long-term care and the provision of this service are relevant in the measure that demographic aging in industrialized countries correlates closely with the rate of dependence. This stage of life is presently becoming longer (Harwood et al. 2004; Shrestha 2000; Ebrahim 1996). A European study (Mansell et al. 2007) shows that a paradigm shift toward community-based care (“de-institutionalization”) that allows older people to stay longer in their own homes increases quality of life without incurring higher costs. It is obvious that providing the goods and services required to maintain the quality of life of older people is a notable economic opportunity (European Commission 2009, p. 136).

In general, support services for people with dependence have been provided in all industrialized countries by different administrative sectors and consist of either institutional care or at-home care. In the case of at-home care, it is necessary to distinguish between formal care (provided by paid professionals) and informal care (provided by relatives and/or friends). Although 77.5% of dependent people in Spain receive only informal support (Rogerio-García 2009, p. 389), it is not viable to continue to rely on this service being provided by informal caregivers. This means that there will be a growing demand for support services for dependent people to address the need for long-term care services and maintain the quality of life of older people. The provision of these services will have consequences in terms of job creation.

The relation between long-term care services and employment has been little studied in the literature. The relation between informal care and participation in the labor market has been analyzed more. Lilly et al. (2007) cite 35 studies that analyze the relation between informal care of people with dependence and the labor market. Among these studies are 1 Canadian and 1 European study, 27 studies from the US, and 6 from the UK. Nevertheless, few studies have examined the possibilities of job creation related to long-term care services. In Spain, only the *Act on Personal Independence and Dependence Care* and the study by Herce et al. (2006) offer an evaluation of the potential for job creation. To our knowledge, the analyses are general, and no study has examined in depth the characteristics of the companies that provide services for dependent people.

The provision of long-term care services necessarily entails an increase in formal care services consistent in expanding the number of beds in institutions and adult day care centers and incrementing at-home assistance services. Therefore, the generation of employment linked to long-term care basically will take place in the service sector. In the 1990s the European Commission already foresaw that job creation in certain service activities would increase as a result of new social demands. These new settings for job creation, known as employment sites, are characterized as employing groups of people with difficulties in entering the labor market, such as women, and as using a large proportion of independent workers (European Commission 1995). In addition, if we consider that the employments generated will be related to institutional care services and at-home assistance, the provision of long-term care services can be understood as expanding the Welfare State because it improves quality of life and creates employment.

From this point of view and given the dearth of previous studies on the topic, the present study centered on the analysis of job creation in long-term care services, particularly in the third sector.

It is generally difficult to quantify the importance of this sector and how much employment it generates. This is due to several factors. In the first place, until recent times this sector developed its activities on the sidelines of the market and, in the second place, the importance of dependence was quantitatively smaller in earlier times, so official statistics failed to give it the necessary attention. In the case of Spain, we relied on the database of the Directory of Companies (DIRCE)¹ to determine how many people are involved in the sector of services for people with dependence using group 85 of the National Classification of Economic Activities (CNAE-93) as

¹ The Central Directory of Companies (Spanish acronym, DIRCE) offers in a single information system all Spanish companies and their local offices located in Spanish territory. The purpose of the directory is to allow economic surveys to be made by sampling. It is updated once a year, generating a new information system on 1 January of each period. A statistical analysis of the results for companies and local offices is published. Results are expressed in relation to autonomous community and legal situation, primary economic activity and stratum of employees assigned.

reference. Group 85 covers Healthcare Activities (code 851), Veterinary Activities (code 852) and Social Services Activities (code 853). Since 2006, modifications in the CNAE 2006 have meant that the two groups of interest are Care in Residential Establishments (code 87) and Social Service Activities without Lodging (code 88).

Delimiting the third sector involved more difficulties because the literature uses a variety of synonyms for the third sector (Ben-Ner and Gui 1993; Hassmann 1987; Young 1981, among others). Although the designation “third sector” or “not-for-profit sector” predominates, references to the “alternative economy,” “associative economy” or “voluntary sector” and other designations appear in the literature. Generally speaking, the companies of the third sector have some of the following characteristics: they are neither public nor private, they are non-profit, and their purpose is usually to enhance general welfare and the quality of life.²

Given the plurality of the third sector and the variety of organizations found under this umbrella, it is difficult to characterize the type of companies that can be considered representative of the third sector. According to earlier studies, representative companies of the third sector are cooperatives, foundations and associations, including, in some cases, some offices of autonomic organizations. In general, studies of cooperatives in the third sector include only limited liability companies and worker cooperatives.

Therefore, this study examines two relevant questions not analyzed previously in the literature, i.e., the generation of employment in the sector of services for the care of dependent people and the relation between this area of economic activity and the third sector. The focus on the third sector is justified basically by two facts. Firstly, the government is not the fundamental service provider in the care of people with dependence because families take on most of the responsibility for these services. Secondly, many companies created to provide long-term care are third sector companies that contribute to enhancing the welfare and quality of life of people in this way. In addition, the provision of services linked to long-term care is acquiring growing importance in Europe and

countries like China, where the percentage of older people is increasing.

3 The data set

The present study was based on data from the National Institute of Statistics (INE) (data prepared by the Subdirector General of Statistical Dissemination) and the DIRCE database of the INE. The DIRCE database allows estimates to be made of the number of companies and people occupied in all business activities, including third sector companies providing care for people with dependence. The first consideration of consequence was that we had to work with two different classifications of economic activities during our study period. Up until 2005, code 853 (CNAE-93) covered social service activities, the category that we thought best covered the study sample of companies that provide care services for dependent people. Since 2006, when the activity code of the CNAE changed, we collected our study information using codes 87 and 88. In the DIRCE database, companies are classified as dedicated to the health, veterinary medicine and social welfare sectors. A subsample of companies is dedicated to care services for people with dependency and disability. These companies are of different sizes, legal conditions and place of origin in the country. According to these characteristics, we separated companies of the third sector dedicated to providing care services for people with dependence.

The sample dated from January 2003 to December 2008. The period was chosen with the aim of analyzing whether changes occurred in the sector as a result of the publication in the official government bulletin of legislation on the promotion of personal independence and care of people in a situation of dependence, Act 39/2006. The time range was chosen to include years prior to and posterior to the publication of Act 39/2006.

Using 2003 as our reference year and companies that provide long-term care services as our sample, we calculated annual variations in the number of companies in each category, the number of workers, legal status of the company and the Autonomous Community where the company operates. We compared the findings with health care, veterinary and social activity and with the combined total of all activities.

² Besides the characteristics of the third sector, literature studies the characteristics of social entrepreneurship, too; i.e., Benz (2009), Tan Williams and Tan (2005), among others.

Using the number of companies and the number of workers, we determined how many positions were generated during this period of activity of third sector companies providing services for people with dependence.

4 Employment in the dependence sector

The first analytical section provided evidence on the aggregate number of firms in Spain dedicated to the long-term care of dependent people. The section begins with an analysis of the companies created in relation to their size as defined by the number of employees.

Employment change can be measured in two ways: absolute or relative figures. Data sets that include many very small companies may exhibit misleading relative changes in the number of employees (i.e., percentage change over time) because a very small change in the absolute number of jobs can result in a large percentage change in employment (Tethe and Massini 1998, p. 356). Our examination of changes in employment in this study used an absolute measure of employment change. The “mean annual change” (MAC) in number of employees was calculated to provide a standardized measure of the absolute number of jobs created over time.

Starting with the number of companies that were created in relation to company size (Table 2), the number of companies created was multiplied by the mean number of workers for each range in the number of employees. The referential values obtained for each range were 1.5, 4, 7.5, 14.5, 34.5, 74.5, 149.5, 349.5, 749.5, 2,999.5 and 5,000. This allowed us to determine how many jobs were generated in each period (Table 3) and to compare the number of jobs generated with the number of jobs generated by health care, veterinary and social activity and by all activities. Clear growth was observed in the percentage of jobs created by companies dedicated to providing care services to dependent people compared to the rest of the activities, including health care, veterinary and social activity.

MAC was calculated as the mean value of the growth in the number of jobs in for each year studied. However, the MAC value, as shown by the work of Storey (1994, pp. 160–164), indicated that the trend toward the creation of companies is concentrated in a small proportion of companies. Mean MAC provides a standardized measurement of job creation per company, whereas median MAC gives us a more realistic indicator of the mean change in the number of jobs that has taken place in companies. Median MAC thus offers a point for comparison of the mean number of new jobs generated annually by companies.

Table 2 Number of companies by size in companies dedicated to long-term care services

	2003		2004–2003		2005–2004		2006–2005		2007–2006		2008–2007		Mean difference	Median difference
	<i>n</i>		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Total	8.532	611	7.16	−1.071	−11.71	429	5.31	492	5.79	463	5.15	185	463	
No paid employees	1.395	49	3.51	−93	−6.44	75	5.55	176	12.34	96	5.99	61	75	
1–2 paid employees	1.532	92	6.01	−375	−23.09	28	2.24	70	5.48	43	3.19	−28	43	
3–5 paid employees	1.357	63	4.64	−350	−24.65	31	2.90	26	2.36	82	7.28	−30	31	
6–9 paid employees	1.179	189	16.03	−314	−22.95	68	6.45	−43	−3.83	40	3.71	−12	40	
10–19 paid employees	1.757	258	14.68	−485	−24.07	26	1.70	30	1.93	13	0.82	−32	26	
20–49 paid employees	855	−68	−7.95	353	44.85	126	11.05	130	10.27	111	7.95	130	126	
50–99 paid employees	272	−21	−7.72	136	54.18	46	11.89	39	9.01	53	11.23	51	46	
100–199 paid employees	114	37	32.46	31	20.53	8	4.40	45	23.68	3	1.28	25	31	
200–499 paid employees	53	6	11.32	24	40.68	14	16.87	14	14.43	18	16.22	15	14	
500–999 paid employees	10	4	40.00	−3	−21.43	6	54.55	7	41.18	1	4.17	3	4	
1,000–4,999 paid employees	6	2	33.33	5	62.50	0	0.00	−2	−15.38	3	27.27	2	2	
5,000 or more paid employees	2	0	0.00	0	0.00	1	50.00	0	0.00	0	0.00	0	0	

Source: Prepared using INE data

Table 3 Number of jobs created per activity (*n* in thousands of people)

	2003	2004–2003		2005–2004		2006–2005		2007–2006		2008–2007		Mean difference <i>n</i>	Median difference <i>N</i>
	<i>n</i>	<i>n</i>	%	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Total	12,346.58	565.04	4.6	579.72	4.5	640.26	4.8	649.77	4.6	536.41	3.6	59.42	579.72
Healthcare and veterinary activities social services	550.51	50.19	9.1	61.33	10.2	55.29	8.4	47.87	6.7	65.79	8.6	56.09	55.29
Dependence activity	162.86	18.26	11.2	36.73	20.3	24.41	11.2	18.58	7.7	25.15	9.6	24.63	24.41

Source: Prepared using INE data

Table 4 Number of companies per activity (*n* in thousands)

	2003	2004–2003		2005–2004		2006–2005		2007–2006		2008–2007		Mean difference <i>n</i>	Median difference <i>N</i>
	<i>n</i>	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%	<i>n</i>	%		
Total	2,813.2	129.4	4.6	121.5	4.1	110.3	3.6	162.3	5.1	85.6	2.6	121.8	121.5
Healthcare and veterinary activities social services	107.1	4.1	3.8	3.4	3.0	5.8	5.0	6.3	5.2	5.1	4.0	4.9	5.1
Services to people with dependence activity	8.6	0.6	7.2	-1.1	-11.7	0.4	5.3	0.5	5.8	0.5	5.2	0.2	0.5

Source: Prepared using INE data

The tables show the mean and median, but for the reasons indicated above, the analysis focused on median MAC.

5 Factors associated with changes in employment at third sector companies

The analysis in Sect. 4 showed that the companies dedicated to long-term care services had more growth than the rest of companies in other sectors, as indicated by its growth rate (Table 4). It was observed that, except for the period before Act 39/2006 came into force, the rate of growth in terms of the number of companies was higher in the sector of companies dedicated to providing care services to people with dependence. After Act 39/2006 came into effect, annual growth from 2006 to 2008 was 5.3, 5.8 and 5.2%, respectively. In addition, more jobs were generated by these companies (Table 3) in every case, and annual growth rates were higher than average throughout the study period. This confirms that these companies are intensive in manual labor.

The next obvious question that arises is: What factors are associated with employment growth performance at these firms?

Although this question is interesting, the findings should be interpreted cautiously. Most small businesses do not strive for rapid growth, preferring either modest expansion or a stable size (Hakim 1989; Cambridge Small Business Research Centre 1992). It is important to understand that failure to create jobs is not synonymous with business failure.

After taking due note of this caveat, when we review the evidence on the factors that influence economic growth, according to Storey (1994, p. 113), these factors can be classified into three dimensions:

1. The entrepreneur’s start-up resources;
2. The characteristics of the firm;
3. The strategy followed once business is under way.

The literature on the topic of change in the number of job positions has used different factors in the analysis, depending on the availability of data. Job creation is one of the most important elements considered in studies of small companies in a sector in which the quantification and limitation of the activity are imprecise. The characteristics of the firms with extreme figures can dramatically affect the overall performance of the categories in which they are found. For these reasons, it is useful to present a

simple and descriptive univariate assessment of the factors available.

The following analysis does not claim to investigate all of the factors that influence employment change in third sector companies dedicated to providing long-term care services for people with dependence.

Instead, only a few characteristics will be assessed: the initial size of the firm, legal status and the autonomous community where the firm operates. The findings were compared to the findings for other health care activities and for overall activities.

5.1 Change in the number of jobs created in relation to initial firm size

We are not aware of any other studies in Spain that have analyzed the change in the number of companies before and after Act 39/2006 on dependence came into force. Similarly, we know of no other studies that have analyzed the number of jobs created by companies related to the third sector. The main reason for this lack of studies may be the difficulty in obtaining reliable statistics and the scant development of companies dedicated to the providing care services for people with dependence in Spain. The usual business goal of maximizing profits makes little sense in companies dedicated to the development of social or healthcare activities, in which one of the primary measures of success is the number of people

served. The ultimate goal of such companies is to implement an improvement in the quality of life of people in a situation of dependence.

The analysis of job creation in relation to company size is shown in Table 5. It is highly significant that small companies of up to 19 workers showed the least amount of growth in the number of employees in the study period, and slightly larger firms, of up to 199 workers, showed the second lowest growth rates were the companies that grew the second least. Medium-sized and large companies had the greatest growth. This finding contradicts earlier studies that have reported a positive and inverse relation between growth and company size (Storey 1994, pp. 201–203; Tethe and Massini 1998, pp. 361–363). This means that the companies that are dedicated to the care of dependent people are medium to large companies. This result was foreseeable because, as has been indicated, this sector is characterized by companies that require a large amount of manual labor because people with severe dependency may require support from more than one caregiver. In the 2003–2008 period, 11.21 new jobs per year were generated, reaching more than 35 new jobs per year in the case of large companies.

5.2 Employment change by legal status

The employment generated in relation to the type of company is shown in Table 6. As has been indicated

Table 5 Creation of employment in relation to initial firm size from 2003 to 2008

Firm size in 2003	Number of firms	Total employment in 2003	Total employment in 2008	Employment change 2003–2008	Mean MAC	Median MAC
Total	8,532	162,865.00	298,099.00	135,234.00	12.93	11.21
No paid employees	1,395	0.00	0.00	0.00	0.00	0.00
1–2 paid employees	1,532	2,298.00	14,184.00	11,886.00	118.53	5.48
3–5 paid employees	1,357	5,428.00	4,836.00	−592.00	−1.49	2.90
6–9 paid employees	1,179	8,842.50	8,392.50	−450.00	−0.12	3.71
10–19 paid employees	1,757	25,476.50	23,185.50	−2,291.00	−0.99	1.70
20–49 paid employees	855	29,497.50	51,991.50	22,494.00	13.23	10.27
50–99 paid employees	272	20,264.00	39,112.50	18,848.50	15.72	11.23
100–199 paid employees	114	17,043.00	35,581.00	18,538.00	16.47	20.53
200–499 paid employees	53	18,523.50	45,085.50	26,562.00	19.90	16.22
500–999 paid employees	10	7,495.00	18,737.50	11,242.50	23.69	40.00
1,000–4,999 paid employees	6	17,997.00	41,993.00	23,996.00	21.54	27.27
5,000 or more paid employees	2	10,000.00	15,000.00	5,000.00	10.00	0.00

Source: Prepared using INE data

Table 6 Creation of employment in relation to type of firm from 2003 to 2008

Type of firm	Number of firms	Total employment in 2003	Total employment in 2008	Employment change 2003–2008	Mean MAC	Median MAC
Total	8,532	162,865.00	286,000.00	123,135.00	12.00	12.16
Public companies	242	15,092.00	40,560.50	25,468.50	23.73	26.95
Limited liability companies	2,330	37,391.50	83,623.00	46,231.50	18.06	20.54
Limited partnerships	0	0.00	0.00	0.00	0.00	0.00
Common assets	213	860.00	1,012.50	152.50	3.43	3.75
Cooperative societies	292	8,098.00	9,930.00	1,832.00	4.90	3.05
Associations and other	3,699	73,856.50	102,752.00	28,895.50	6.86	7.22
Autonomous community bodies and other	712	23,464.00	43,485.50	20,021.50	14.16	8.48
Physical people	1,044	4,103.00	4,636.50	533.50	2.49	2.32

Source: Prepared using INE data

in the literature on the labor market, these questions are not usually analyzed. However, given the characteristics of long-term care, its potential growth, and the fact that companies of the third sector usually are oriented toward the social, educational, health care and personal services sector, we consider this analysis to be highly relevant because it allows us to clearly differentiate what type of company is most commonly used to constitute a society dedicated to assisting dependent people and, therefore, determining the role of third sector companies in long-term care.

As observed, the three types of legal entity with the greatest capacity for generating employment are companies, limited liability companies, autonomic organizations and others, emphasizing associations and other types of organization.

The most noteworthy information in this table is collected in the last three types of companies mentioned, since the public company is the most usual in almost all types of activity. In particular, it was observed that associations created an average of 7.22 jobs a year and autonomic organizations, almost 8.5 positions a year. These figures are lower than the almost 27 positions generated by public companies or the 20 positions created by limited liability companies. However, we observed that these institutions are not primarily profit-driven, but that among their objectives are the improvement of social welfare and quality of life, which weigh heavily in this sector of care for people with dependence. This study showed that third sector companies offer strong support for activities related to long-term care, the hypothesis

established in this study. This suggests that it is necessary to go further in this line of investigation.

5.3 Employment change in relation to autonomous community

The distribution of the jobs generated in long-term care services in Spain, overall and by autonomous communities, is shown in Table 7.

In this period of the analysis, the role of the autonomous communities of Galicia, Castile-La Mancha and the Balearic Islands in creating jobs related to long-term care was noteworthy and superior to that of the rest of the autonomous communities.

This finding may explain the data collected by the Observatory on Older Adults, 2009, in which it was observed that some of the autonomous communities that offered more long-term care services had also generated more employment in this sector as of July 2009. Specifically, Galicia, Castile-La Mancha, Castile-Leon and Extremadura were the autonomous communities that generated the largest number of jobs and, according to the Observatory on Older Adults, were also the autonomous communities that offered the widest variety of services. In Galicia, specifically, 13.28 jobs a year were created and in Castile-La Mancha, 12.44 related to this activity. It was undoubtedly interesting to find that companies that provide long-term care services to people with dependence were instrumental in creating jobs in a situation of economic downturn such as the present. This is particularly true when there has been massive destruction of employment in Spain and

Table 7 Creation of employment by autonomous community from 2003 to 2008

Autonomous community	Number of firms	Total employment in 2003	Total employment in 2008	Employment change 2003–2008	Mean MAC	Median MAC
Andalusia	1,146	11,317.50	16,326	5,008.5	7.67	7.36
Aragon	359	3,399.50	5,236	1,836.5	9.04	9.09
Asturias	266	2,432.00	3,403	971	6.98	7.51
Balearic Islands	107	1,124.00	1,880.5	756.5	10.88	11.91
Canary Islands	219	2,483.50	3,242	758.5	5.69	6.45
Cantabria	100	1,372.00	1,785	413	5.89	4.75
Castile and Leon	655	7,390.00	10,680.5	3,290.5	7.81	10.58
Castile-La Mancha	321	3,755.00	6,680.5	2,925.5	12.31	13.28
Catalonia	1,737	21,335.50	30,640	9,304.5	7.69	5.53
Community of Valencia	620	6,578.00	10,633.5	4,055.5	10.12	9.09
Extremadura	139	1,514.50	2,306	791.5	8.97	10.89
Galicia	325	3,310.50	6,060.5	2,750	13.05	12.44
Madrid	1,314	15,769.50	21,835	6,065.5	6.78	7.81
Murcia	149	1,482.00	2,232.5	750.5	8.55	8.53
Navarre	193	2,230.50	3,193	962.5	7.57	7.24
Basque country	802	7,943.00	9,995.5	2,052.5	4.72	5.17
Rioja	59	660.00	858	198	5.80	7.99

Source: Prepared using INE data

unemployment is one of the most important economic problems of the downturn. This was clearly evident in the autonomous communities that made the commitment to providing services for people with dependence, which has made it possible to generate employment despite the economic downturn.

6 Conclusion

This study on the creation of employment by companies of the third sector dedicated to long-term care services in Spain is relevant because it provides information on a sector in which scant metrics exist and the sector itself still is small. In Spain, the care of people with dependence is characterized by a predominance of informal care and little professionalization among informal caregivers. However, as recent studies have shown, demographic aging and changes in family structures will make it necessary to implement fundamental changes in the supply and demand of these services.

The growing demand for services for people with dependence and the impact that these activities have

on job creation are trends confirmed by the findings of our study. The number of companies involved in the long-term care services sector and the employment they have generated have exhibited higher growth rates than health care, veterinary and social activity and more growth than the mean growth for all business activities in Spain. The observation that the unemployment rate grew to 13.91% in 2008 in Spain during the study period makes the performance of long-term care services in stimulating economic activity and job creation even more noteworthy. In the study period from 2003 to 2008, 500 companies and 24,410 jobs were created annually.

Employment was generated by medium to large-sized companies, which is characteristic of the type of companies that we are discussing, which typically have a strong demand for human resources to attend to the needs of dependent people.

Another relevant finding that characterized the companies of the third sector was their legal status. In the sector of services for people with dependence, employment generated by associations, autonomic organizations and non-profit institutions was relevant and clearly differentiated the third sector from others.

It is worth noting that between third sector and non-third sector companies almost 16 jobs per thousand are generated annually.

As for the territorial distribution, it was notable that the autonomous communities that decided to offer services to residents with dependence were also the autonomous communities that generated more jobs in this sector, particularly Galicia, Castile-La Mancha, Castile-Leon and Extremadura. This findings indicates the importance of policy decisions by government bodies. Compared to the autonomous communities that decided to offer compensation to people with dependence in relation to their level of disability, the autonomous communities that decided to offer professional services to address these needs obtained better results in job creation.

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