

# ONE-PERSON HOUSEHOLDS IN SPAIN: TRANSFORMATIONS AND TERRITORIAL DISTRIBUTION PATTERNS<sup>1</sup>

## Sesión 501. New methodological approaches to study the contemporary family

PUJADAS RÚBIES, Isabel  
Universidad de Barcelona  
Facultad de Geografía e Historia  
Montalegre, 6  
08001 Barcelona  
Tel. (34) 934 037 849  
Fax. 934 037 850  
[ipujadas@ub.edu](mailto:ipujadas@ub.edu)

LÓPEZ VILLANUEVA, Cristina  
Universidad de Barcelona  
Facultad de Ciencias Económicas y Empresariales  
Diagonal, 690  
08034 Barcelona  
Telf. (34) 934 021 803  
Fax. 934 031 894  
[clopez@ub.edu](mailto:clopez@ub.edu)

### 1. INTRODUCTION

The fact of living alone- which in Spain was traditionally regarded as a marginal way to live and was impregnated by negative connotations related to loneliness, isolation, staying single and old age- is today presented as another residential option. Today, one-person households increase spectacularly, they are no longer exclusive to rural areas, become typologies of great weight in big cities and diversify their composition.

The fall in nuptiality , the increase in relationship breakups, the growth of unmarried people and the increase in life expectancy at advanced ages are explanatory factors for the rise and diversification of single-person households in Spain. Transformation of demographic behaviours, comprised within the framework of the Second Demographic Transition (van de Kaa, D., 1987; Lesthaeghe, R., 1994), run parallel to urban transformation processes; the extraordinary residential mobility redistributes territories, population (Champion, A.G., 200) and also households typology and composition (Odgen, P.E.; Hall, R., 2004).

---

<sup>1</sup> This paper is part of a broader project financed by the Ministry of Science and Innovation with reference SEJ2007-67948 under the title *La sostenibilidad social según las formas urbanas. Movilidad residencial, espacios de vida y uso del tiempo en las regiones metropolitanas* (“Social sustainability according to urban forms. Residence mobility, living spaces and use of time in metropolitan regions”) conducted by the consolidated investigation team *Territorio, Población y Ciudadanía* (“Territory, Population and Citizenship”) created by the departments of *Teoría Sociológica, Filosofía del Derecho y Metodología de las Ciencias Sociales* (“Sociological Theory, Philosophy of Law and Methodology of the Social Sciences”) and *Sociología y Análisis de las Organizaciones y Geografía Humana* (“Sociology and Organizations Analysis and Human Geography”) of the University of Barcelona.

This paper aims to: Firstly, analyze the rapid growth of one-person households in Spain – country in which their proportion has been traditionally small- and study the relationship between the growth of one-person households and the demographic changes typical of the Second Demographic Transition in a context where, despite the intense demographic transformations, the Mediterranean family model has remained; secondly, analyze the change and diversification of one-person households sociodemographic profile- rejuvenation, growth of unmarried and divorced people and rise in their level of education and professionalization; and thirdly, it aims to analyse the space differentiation of one-person households at the province level by type of municipality (capital, suburban ring and groups of municipalities by population size).

The two last decades of the 20th Century have been marked by a rapid evolution in households structure and composition within the countries of the developed world. The idea of the Second Demographic Transition (Lestheghe and Van de Kaa, 1986; Van de Kaa, 1987; Lesthaeghe, 1991; Kuijstein 1996), though challenged (Cliquet, 1991), provides an explanatory framework for the analysis and interpretation of the relationship between the demographic changes and households composition and dissolution. Demographic changes involve, mainly: the fall and delay of fecundity and nuptiality; the increase of relationship breakups caused by divorce or separation and the appearance of new ways of cohabitation. But also involve the increase of migratory waves and the growth in population life expectancy. In conclusion, they entail flexibility and reversibility in family itineraries and, therefore, increase in the number of households and diversity in their composition.

In a parallel manner, the growth of metropolitan areas has been accompanied by population redistribution processes of space (Champion, A.G., 2001,2002; Frey 1988,1991,2005) and also of households in a way that big cities retain a higher proportion of one-person households whereas family households with children migrate to new residential areas, causing a space segregation of metropolitan territories by types of households (Frey, W., Kobrin, F., 1982; Bonvalet, C., 1999; Pujadas, I.; 2005; Pujadas I., y López, C., 2006).

In the southern regions of Europe and in Spain the typical transformations of the Second Demographic Transition are not obvious until well into the 80's. Therefore, new ways to reside start to emerge in the 90's and are not visible until the recently started 21st Century, when they irrupt with great intensity and extraordinary rapidity (López, C.; 2007). Urban transformation processes have swiftly connected with a late rural exodus followed by the suburbanization process of big cities from the decade of the 80's. Both processes have conferred a special nature to households structure, composition and distribution in Spain.

## **2. METHODOLOGY AND SOURCES**

Sources used in the analysis of one-person households have been the Spanish Population Censuses of 1970, 1981, 1991 and especially that of 2001 which, apart from being the most recent one, allows detailed knowledge of sociodemographic features of people living alone and allows the analysis at the municipal level.

To analyze the evolution of one-person households, annual growth rates have been calculated (r%) and the direct standardization method has been applied to one-person household rates in order to eliminate the weight of aging on provinces and municipalities by population size.

So as to get to know the sociodemographic features of the population living alone in Spain, a distribution of frequencies has been done by age, sex, marital status, level of education, relationship with the activity and socio-professional status. A logistic regression model<sup>2</sup> has been used so as to establish the explanatory and most representative variables.

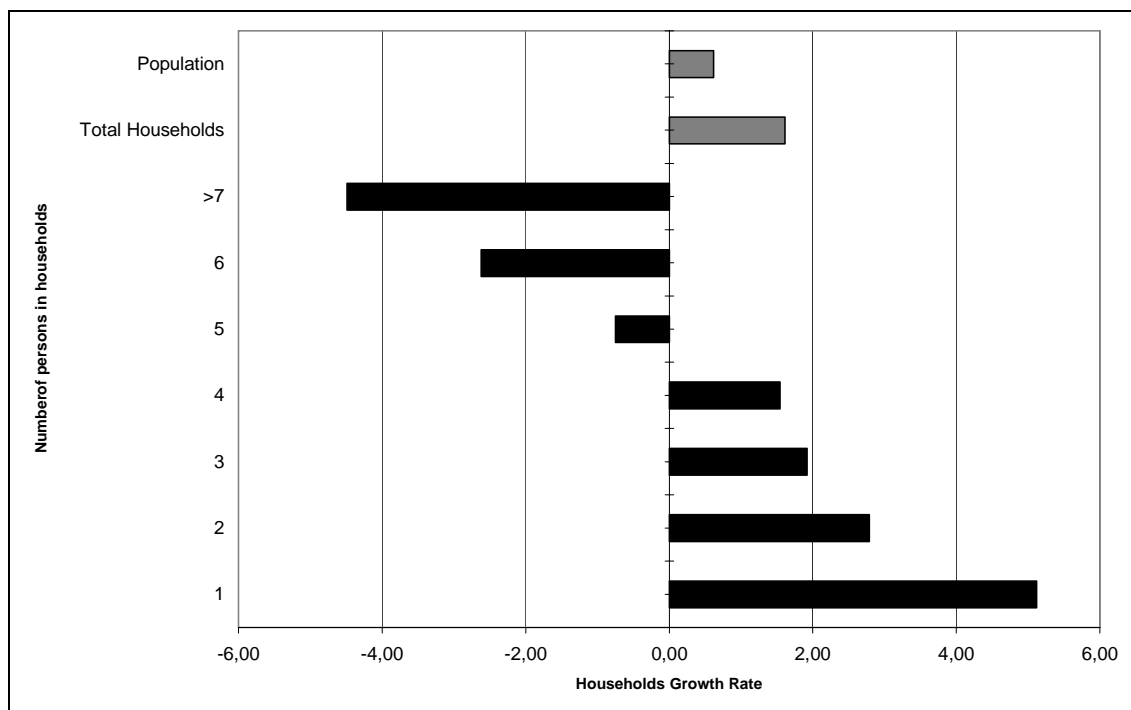
To study the territorial distribution of one-person households by provinces, a typology of provinces has been established based on the differentiation among capitals, suburban rings and municipalities by population size.

### 3. ONE-PERSON HOUSEHOLDS EVOLUTION IN SPAIN 1970-2001.

The number of households is growing over the last decades much faster than the population and, consequently, the average number of members per cohabitation unit is declining. This process is taking place with different intensity and speed in the European regions. The Mediterranean and Eastern regions are the ones showing a further difference between the growth in number of inhabitants and residential units.

Although Spain attains one of the highest values for average household size within the European context, Spanish households are the ones experiencing a greater growth and the ones seeing the average number of persons decline with greater intensity, almost one person in a little more than thirty years, from an average of 3.81 in 1970 to 2.84 in 2001.

**Figure 1: Distribution of households by number of persons. Spain. 1970-2001**



*Source: Own elaboration from census data of 1970, 1981, 1991 and 2001. INE (National Statistics Institute)*

<sup>2</sup> We thank-you the collaboration of researcher Mr. Fernando Anton in the elaboration of the logistic regression model from the 2001 census microdata and of professor Andrés Coco, member of the investigation committee, for the creation of the hierarchical cluster.

Households growth follow a size reverse hierarchy in all orders: those of larger size decline with greater intensity, especially those of more than seven persons, followed by those of six and five members; up to four members, they start to grow steadily, with moderate increases in those of three and four members, somewhat higher in those of two members with an outstanding progression in those consisting of one person.

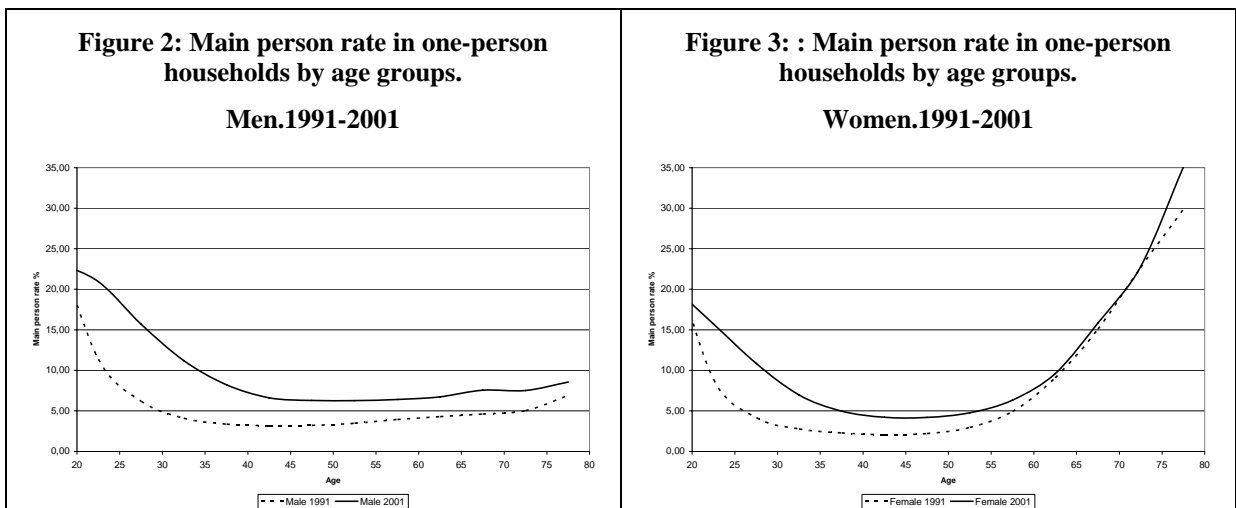
In 1970 only 660.353 persons lived alone in Spain, one-person households represented 7.47% of the overall residential units where 1.95% of the total population lived. In 2001 the number of solo living was quintuplicated: 2,876,572 persons lived alone, represented 20,78% of the overall households where 7.04% of the Spanish population lived.

Between 1970 and 2001 the total number of Spanish households grew to 5,434,996 units, being one-person households the leading actors of this rise, representing 42.15% of the overall growth of the period, followed by two-person households, whereas more of four-member units lost members (Figure 1).

#### 4. SOCIODEMOGRAPHIC ASPECTS OF PEOPLE LIVING ALONE IN SPAIN. TOWARDS A DIVERSIFICATION IN THE COMPOSITION.

The spectacular increase of one-person households is accompanied by a diversification in their composition. One-person households in Spain have traditionally supported the weight of aging; widows and unmarried persons have represented the traditional image of solitary residence. Today this structure tends to be more diversified, losing its residual character and consolidating as another residential option, above all among the youth and at different stages of life, not only at the end of it. (Chandler, J.; et al., 2004).

The growth of people living alone is seen in all age groups; it is concentrated, above all, in people between 20 and 40 years old and it is maintained among the elderly. The tendency to form one-person households in men between 20-40 years old has doubled last decade's main person rate value and varies little in women older than 75, with rates that exceed 30% (Figures 2 and 3). In general, the tendency to form one-person households is higher among women although in the case of men it has been doubled going from 4.48% to 8.32%.



Source: Own elaboration from census data of 1991 and 2001. INE (National Statistics Institute)

#### 4.1. Composition by age, sex and marital status

If in 1991 the most frequent marital status among solo living was widowhood (50.58%), in 2001 it is the unmarried status (42.09%)- although widows predominate among women.

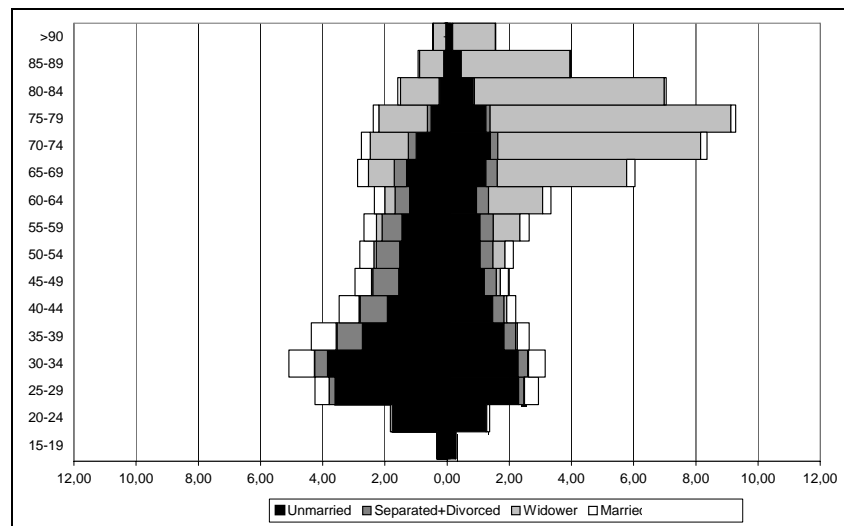
Separated and divorced persons living alone are the ones who have experienced a greater relative increase in relation to 1991 although absolute growth concentrates in the increase of unmarried persons.

**Table 1: Distribution of one-person households by marital status. Annual accumulative growth rate by sex. Spain 1991-2001**

	Distribution by Marital status %						Marital status growth rate % 1991-2001			Growth distribution %		
	1991			2001			Male	Female	Both	1991-2001		
	Male	Female	Both	Male	Female	Both				Male	Female	Both
Unmarried	54,12	29,18	37,56	56,20	32,26	42,09	8,72	5,97	7,38	57,90	37,27	47,62
Married	11,46	4,25	6,68	13,23	6,06	9,01	9,88	8,69	9,39	14,67	9,01	11,85
Widowed	25,00	63,52	50,58	16,39	55,48	39,43	3,84	3,50	3,56	9,35	42,41	25,83
Separated	6,18	1,78	3,26	9,10	3,42	5,75	12,59	11,96	12,36	11,49	6,07	8,79
Divorced	3,24	1,26	1,93	5,08	2,78	3,72	13,32	13,50	13,40	6,59	5,24	5,92
	100,00	100,00	100,00	100,00	100,00	100,00	8,31	4,91	6,17	100,00	100,00	100,00

Source: Own elaboration from census data of 1991 and 2001. INE (National Statistics Institute)

**Figure 4: One-person households by sex, age and marital status. Spain, 2001**



Source : Own elaboration form 2001 census data. INE (National Statistics Institute)

Unmarried people and widowhood, and specifically in this order, unmarried people and widows, concentrate the maximum growths (57.90% and 42.41% respectively). The increase in longevity is one of the reasons for the increase of solitary residence in the later years of life, above all among women, who survive men.

Matrimonial breakups- which are the explanatory key to itinerary reversibility in family and household formation – and the triumph of the unmarried status explain the growth of one-person households of young and young mature males.

#### 4.2. Relationship with the activity

The relationship with the activity of persons living alone is determined by their age and it is different for men and women. Both in 1991 and 2001 the predominant activity of persons living alone is that of pensioner although working persons predominate among men (55.6% in 2001) and pensioners among women (64.05%). The decade's higher relative annual growths are concentrated on working persons, the growth of

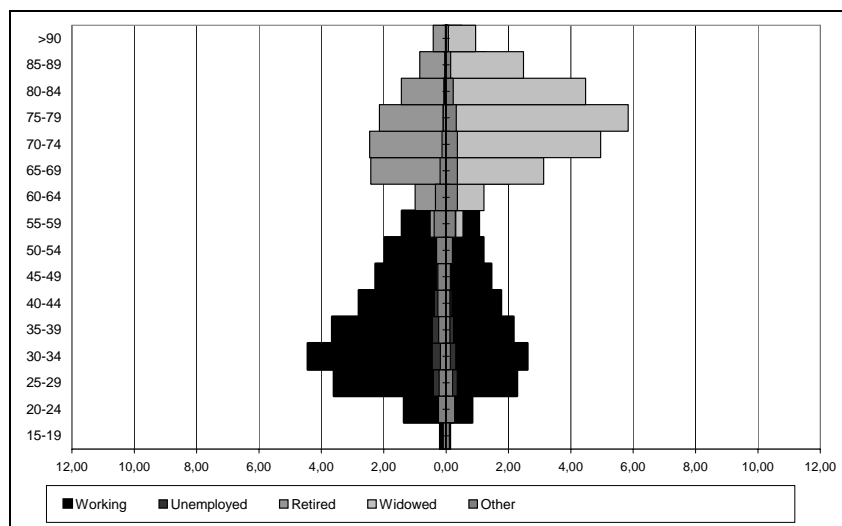
working age people living alone (9.75%) being remarked; working persons (63.05%) and pensioners (43.46%) experience the absolute growths of the period. People living alone have a double profile, elderly women with a widow's pension and working age mature men. Whereas elderly men have a retirement pension, elderly women have a widow's pension. (Figure 5).

**Table 2: Distribution of one-person households by relationship with the activity. Annual accumulative growth rate and distribution of growth by sex. Spain 1991-2001**

	Distribution by relationship with the activity %						Growth rate 1991-2001			Growth distribution 1991-2001		
	1991			2001			Male	Female	Both	Male	Female	Both
	Male	Female	Both	Male	Female	Both						
Employed	46,40	16,93	26,83	55,56	24,77	37,41	10,28	8,98	9,75	63,05	37,52	50,32
Unemployed	8,47	2,74	4,66	7,47	3,49	5,12	6,95	7,50	7,17	6,64	4,72	5,69
Retired	40,53	70,55	60,47	33,25	64,05	51,41	6,19	3,90	4,46	27,30	53,46	40,34
House woker	0,27	7,81	5,28	0,44	4,48	2,82	13,83	-0,76	-0,27	0,59	-0,93	-0,17
Other	4,32	1,97	2,76	3,28	3,21	3,24	5,36	10,16	7,87	2,42	5,23	3,82
	100,00	100,00	100,00	100,00	100,00	100,00	8,31	4,91	6,17	100,00	100,00	100,00

Source: Own elaboration from census data of 1991 and 200 .INE (National Statistics Institute)

**Figure 5: One-person households by sex, age and relationship with the activity. Spain, 2001**



Source: Own elaboration from census data of 1991 and 200. INE (National Statistics Institute)

### 4.3. Level of education and socio-professional status.

In 1991, solo living people with no studies predominated (36.16%); ten years later people living alone have increased their level of education: in 2001, 47.23% of persons living in one-person households have secondary and/or higher studies- although primary studies predominate among women living alone. During the present decade one-person households with medium and high-level of education residents have experienced a greater growth and, especially, people with secondary studies have concentrated 53.4% of the period's growth.

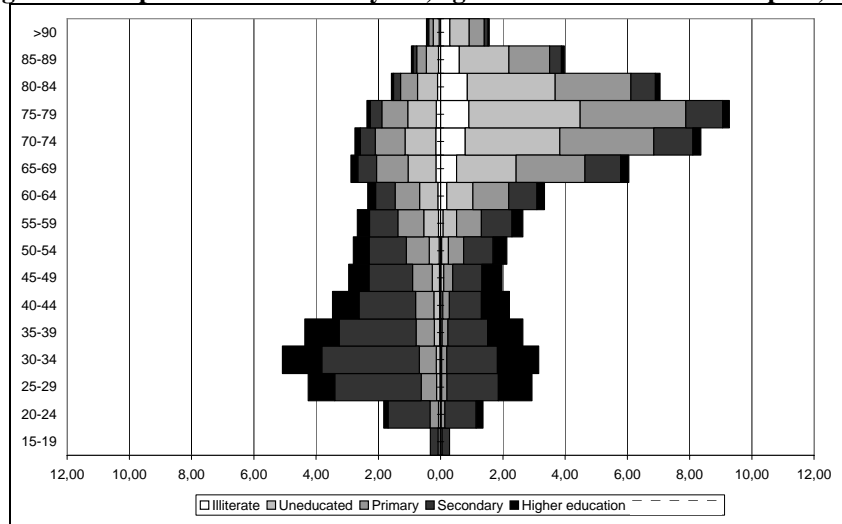
**Table 3: Distribution of one-person households by level of education. Annual accumulative growth rate and growth distribution by sex. Spain 1991-2001**

	Distribution by level of education						Level of education growth rate 1991-2001			Growth distribution %		
	1991			2001			Male	Female	Both	1991-2001		
	Male	Female	Both	Male	Female	Both				Male	Female	Both
Illiterate	4,32	12,12	9,50	2,42	7,39	5,35	2,23	-0,12	0,23	0,86	-0,32	0,27
Uneducated	29,02	39,77	36,16	15,36	25,97	21,62	1,63	0,53	0,82	4,14	3,42	3,78
Primary	28,63	28,00	28,21	22,75	27,92	25,80	5,85	4,87	5,20	17,92	27,78	22,83
Secondary	24,27	12,89	16,72	43,22	26,24	33,21	14,76	12,63	13,68	58,80	48,05	53,44
Higher education	13,07	6,90	8,97	16,24	12,48	14,02	10,70	11,31	10,99	18,85	21,59	20,22
	100,00	100,00	100,00	100,00	100,00	100,00	8,31	4,91	6,14	100,00	100,00	100,00

Source: Own elaboration from census data of 1991 and 2001. INE (National Statistics Institute)

The socioeconomic condition of persons living alone varies although the maximum annual average growth has been experienced by persons with a high professional status: businessmen and directors (14.70%), professionals and technicians (11.46%) and qualified employees (11.29%).

**Figure 6: One-person households by sex, age and level of education. Spain, 2001**



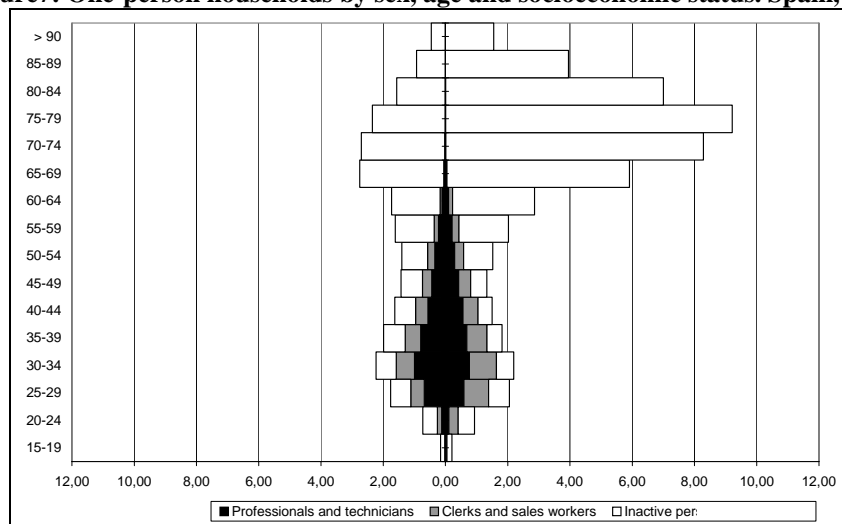
Source: Own elaboration from 2001 census data. INE (National Statistics Institute)

**Table 4: Distribution of one-person households by socioeconomic condition. Annual accumulative growth rate and growth distribution by sex. Spain 1991-2001**

	Distribution by socioeconomic condition						Growth rate% 1991-2001			Growth distribution 1991-2001		
	1991			2001			Male	Female	Both	Male	Female	Both
Businesspersons and non agrarian managers	2,87	0,55	1,32	5,02	1,48	2,93	14,70	15,78	15,01	6,73	2,95	4,90
Businesspersons and agrarian managers	3,82	0,56	1,63	1,69	0,18	0,80	-0,01	-6,10	-1,12	0,00	-0,42	-0,21
Professionals and Technicians	9,94	5,49	7,75	13,05	7,44	9,74	11,46	8,20	8,62	15,54	10,55	12,17
Qualified workers	11,34	1,30	4,62	14,67	1,81	7,09	11,29	8,48	10,81	17,32	2,62	10,10
Self-employed	4,07	1,10	2,07	3,67	1,14	2,18	7,37	5,30	6,68	3,36	1,19	2,30
Service sector workers	11,36	8,37	9,29	12,17	12,09	12,12	9,22	8,89	9,03	12,82	18,04	15,58
Agrarian workers	4,06	0,34	1,57	2,63	0,35	1,29	3,86	5,27	4,07	1,49	0,37	0,94
Non-qualified workers	4,62	0,53	1,88	2,52	0,21	1,16	2,07	-4,32	1,13	0,84	-0,30	0,27
Retired and pensioners	47,92	81,74	69,86	44,57	75,31	62,69	7,68	4,11	5,02	41,90	65,00	53,95
	100,00	100,00	100,00	100,00	100,00	100,00	8,46	4,97	6,17	100,00	100,00	100,00

Source: Own elaboration from census data of 1991 and 2001. INE (National Statistics Institute)

**Figure 7: One-person households by sex, age and socioeconomic status. Spain, 2001**



Source: Own elaboration from 2001 census data. INE (National Statistics Institute)

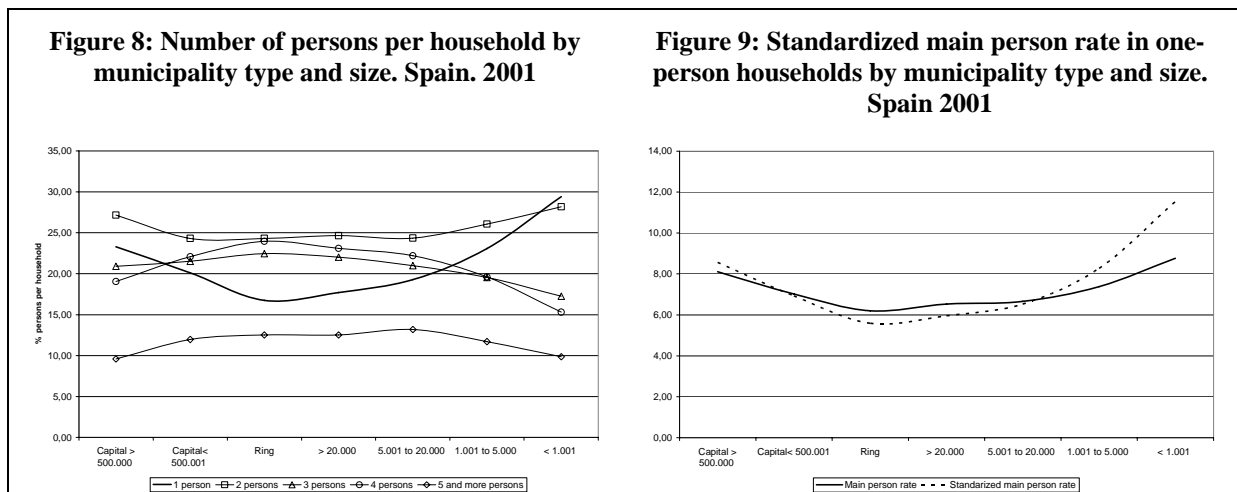
## 5. TERRITORIAL ASPECTS

One-person households are unevenly distributed and present different composition features depending on sex, age, level of education or socioeconomic condition and where they are located: big capitals, their metropolitan rings, medium-sized cities or rural areas.

### 5.1-. Households size by municipality type and size.

Municipality type and size has been defined according to the National Statistics Institute criteria, its classification being: Province's capital with more or fewer than 500,000 inhabitants; suburban ring, understanding as such the municipalities bordering the province's capital; municipalities with more than 20,000 inhabitants; municipalities between 20,000 and 5,000 inhabitants; municipalities between 5,000 and 2,000 inhabitants and municipalities under 1,000 inhabitants.

Single-person units prevail over any other type of residence in rural municipalities with fewer than 1,000 inhabitants as well as in big cities with more than 500,000 inhabitants. The largest households are found in municipalities between 5,000 and 500,000 inhabitants, where four- member residential units take the second place in the distribution, exceeding 20%. Two-member households, a majority in all municipalities over 1,000 inhabitants, maintain a steadier distribution although they are more numerous both in small municipalities and in municipalities with more than 100,000 inhabitants. Three-and-four member households follow the opposite distribution pattern to that of one-person households. They are scarcely represented both in small municipalities with fewer than 5,000 inhabitants and in big cities. On the contrary, they take the second place in the ranking of municipalities between 5,000 and 500,000 inhabitants.



Source: Own elaboration from 2001 census data..INE(National Statics Institute)

Differences in the distribution of one-person households by municipality size are heavily conditioned by age structure. Persons living alone are represented in the most rural municipalities and in big capitals because of the weight of aging. When main person rates in one-person households are standardized according to both municipality size and Spain's population age type-structure, differences diminish but there remains a high tendency to form one-person households both in municipalities with fewer than 1,000 inhabitants and in capitals with more than 500,000 inhabitants. Two sides of the same coin: aging from the rural and urban side.



## **5.2-. One-person households composition in province's capitals, metropolitan rings and municipalities size by number of inhabitants.**

Men and women living alone follow differentiated territorial patterns depending on their age, marital status, level of education and socioeconomic condition.

By age, big cities are specializing in solo living adults, between 35 and 50 in case of men and up to 65 in case of women. Young males living in one-person households are found in medium-sized cities and elderly people over 65 predominate in small municipalities.

Men under 30 living alone are mostly represented in municipalities between 20,000 and 100,000 inhabitants; those from 30 to 34 in municipalities between 100,000 and 500,000 inhabitants; males between 35 and 50 concentrate in big cities over 500,000 inhabitants and those over 50 tend to be found in small municipalities under 1,000 inhabitants.

Women under 35 living in one-person households are better represented in municipalities between 20,000 and 50,000 inhabitants; those between 35 and 65 in big cities over 500,000 inhabitants. Between 65 and 70 most women living alone polarize between municipalities over 500,000 and under 1,000 inhabitants. Over 75 women living alone are better represented in small municipalities under 1,000 inhabitants.

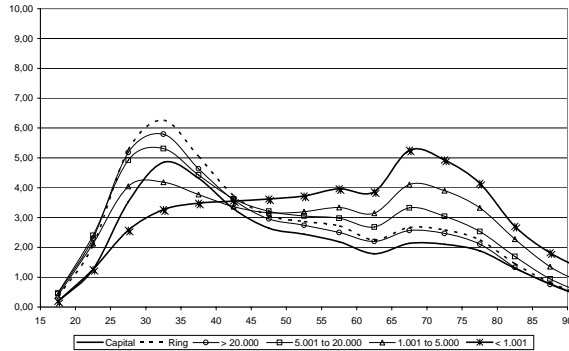
By marital status, the proportion of widowers and widows is reversely proportional to municipality size, the bigger the municipality is, the smaller the proportion of widowers and widows is; on the contrary, unmarried, divorced and separated people follow a directly proportional relationship: the bigger the municipality is, the higher the percentage of these categories is, with the exception of men and women living alone as a result of a relationship breakup, who are better represented in municipalities between 50,000 and 100,000 inhabitants- where there are also the higher number of family households -. (Feijten, P.; van Ham, M. 2007)

The level of education is also proportional to municipality size; the bigger, the higher the level of education is. Solo living persons with maximum level of instruction are better represented in capitals. Downtowns are more attractive to young-mature singles with also a high socioeconomic level. In rural areas, above all, in areas from 1,000 to 5,000 inhabitants solo living persons with an insufficient level of instruction (illiterate and/or without studies) predominate, matching with the eldest population.

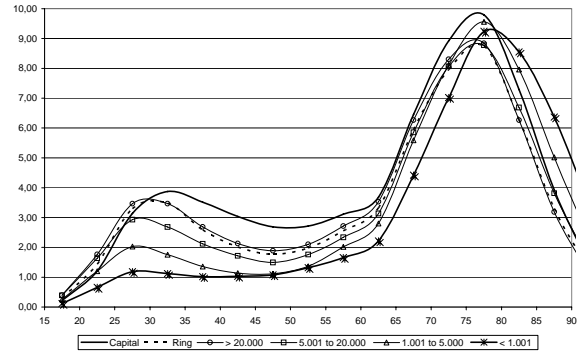
There is a strong correlation between the socioeconomic condition and the location of solo living: in big cities professionals and technicians predominate whereas agrarian workers predominate in smaller municipalities.

Inner distribution of one-person households in Spain by municipality type and size in each province enables to distinguish up to three big and differently structured groups. Province grouping has been done by constructing a hierarchical cluster with the proportions of one-person households in each municipality by type and size: capital, urban ring, cities over 20,000 inhabitants, municipalities from 5,001 to 20,000 inhabitants, municipalities from 1001 to 5,000 inhabitants and municipalities under 1,001 inhabitants.

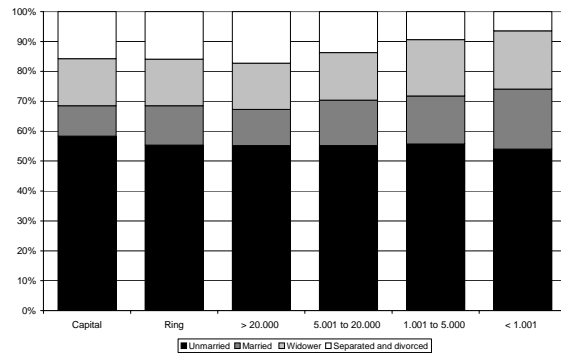
**Figure 10: Proportion of persons living alone by age and municipality type and size. Spain 2001. Men**



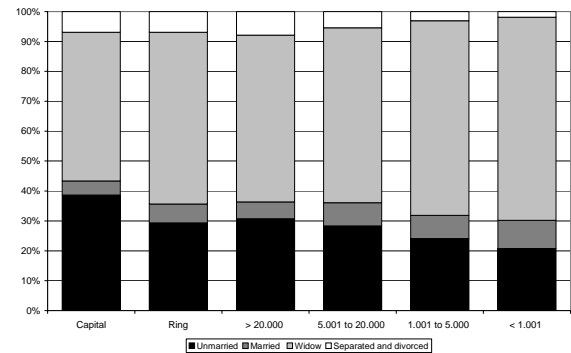
**Figure 11: Proportion of persons living alone by age and municipality age and size. Spain 2001. Women**



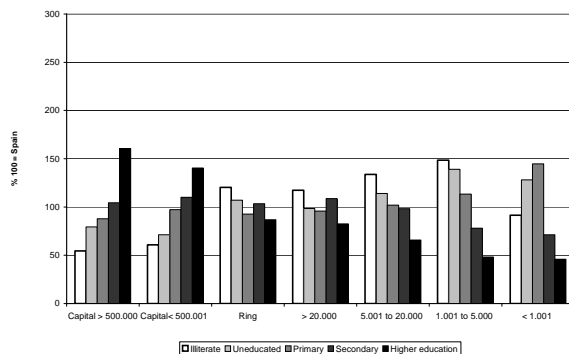
**Figure 12: Proportion of persons living alone by marital status and municipality type and size. Spain 2001. Men**



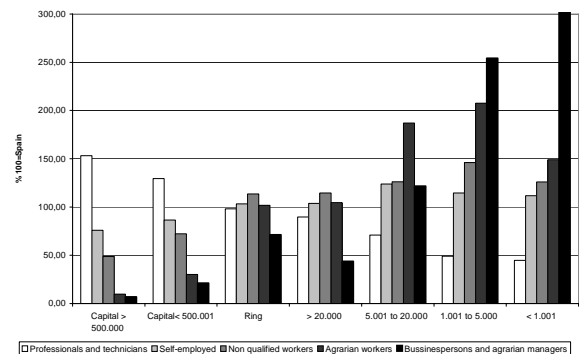
**Figure 13: Proportion of persons living alone by marital status and municipality type and size. Spain 2001. Women**



**Figure 14: Proportion by level of education and municipality type and size. Basic Index 100= Total Spain. 2001**



**Figure 15: Proportion by socioeconomic condition (selection) and by municipality type and size. Basic Index 100= Total Spain. 2001**



Source: Own elaboration from 2001 census data. "INE" ("National Statistics Institute")

## 6. LOGISTIC REGRESSION MODEL

With the objective of knowing how explanatory the variables- such as sex, age, marital status, level of education, relationship with the activity, socio-economic condition and municipality size according to the number of inhabitants- are, a logistic regression model has been created from 2001 Spanish Population census micro data published by the National Statistics Institute with a sample of 5%.

For the logistic regression analysis, the dicotomic dependent variable taken has been that of people living or not living in one-person households; categoric independent variables are those just mentioned above: sex and age combined; marital status, level of education per grade levels, relationship with the activity and professional category combined.

Logistic regression coefficient ( $\beta$ ) informs about the variation in the probability of the phenomenon happening, that is to say, about formation or non formation of one-person households. In all cases, except for married persons, the coefficient is positive, which indicates that the corresponding variable increases the probability of one-person household formation.

The (Sig.) indicates the meaningfulness of logistic regression coefficients, which in all cases are under 0,05, meaning the improbability that results are obtained at random. The Odds ratio ( $\text{Exp}(\beta)$ ) indicates the proportional change that each category of independent variables produces on the probability of living alone; they are over 1, meaning a higher probability of living alone.

### *a. Sex and age*

Men and women have been grouped separately in age groups of 15 years. Women of 20 to 34 years old have been taken as reference (coefficients shall be interpreted in relation to this category) . Probability of living alone is higher as age increases, above all in case of women, being those of 65 to 79 the ones presenting a higher probability (2.23). The coefficient value diminishes when age rises to 80 or more, possibly linked to autonomy decrease. In case of men, probability of living alone, in general, is lower than among women except in males between 20 and 49, who present a higher coefficient than women of their same age.

### *b. Marital Status*

The probability that widowed, separated and divorced persons form a one-person household is higher than in unmarried persons. It is not the case of married persons, who present a negative value in the logistic regression coefficient in relation to the unmarried (who have been taken as reference). Therefore, it becomes obvious again that together with widowhood (as a classic status) other profiles, resulting from relationship breakups and the fact of remaining unmarried, which is seen as an emerging value, appear.

**Tabla 6: Logistic regression Model. Age, sex, marital status, level of education, relationship with the activity , professional status and municipality size. Spain. 2001**

	<b>B</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Sex and Age</b>			
Woman 20 to 34	Reference	0,000	
Woman 35 to 49	0,807	0,000	2,241
Woman 50 to 64	1,439	0,000	4,216
Woman 65 to 79	2,233	0,000	9,330
Woman >80	2,057	0,000	7,822
Man 20 to 34	0,238	0,000	1,268
Man 35 to 49	1,299	0,000	3,665
Man 50 to 64	1,737	0,000	5,678
Man 65 to 79	1,902	0,000	6,701
Man >80	1,876	0,000	6,525
<b>Marital status</b>			
Unmarried	Reference	0,000	
Married	-3,171	0,000	0,042
Widowed	0,190	0,000	1,210
Separated	0,189	0,000	1,208
Divorced	0,193	0,000	1,213
<b>Level of Education</b>			
Illiterate	Reference	0,000	
Uneducated	0,215	0,000	1,240
Primary	0,220	0,000	1,247
Secondary	0,294	0,000	1,341
Higher education	0,476	0,000	1,609
<b>Professional status</b>			
Student	Reference	0,000	
Working. High professional status	1,542	0,000	4,673
Working. Medium-High professional status	1,375	0,000	3,954
Working. Low-medium professional status	1,123	0,000	3,074
Working. Low professional status	1,065	0,000	2,899
Unemployed	0,927	0,000	2,527
Pensioner	1,421	0,000	4,143
Other	0,596	0,000	1,815
<b>Municipality size</b>			
> 20.000 inhabitants	Reference	0,000	
Madrid	0,074	0,000	1,077
Barcelona	0,224	0,000	1,251
Capital >500.000 inhabitants	0,051	0,000	1,052
Capital < 501.000 inhabitants	0,014	0,000	1,014
10.001 to 20.000 inhabitants	0,074	0,000	1,077
5.001 to 10.000 inhabitants	0,087	0,000	1,091
2.001 to 5.000 inhabitatns	0,171	0,000	1,186
< 2.001 inhabitants	0,322	0,000	1,380
<b>Constant</b>	-4,095	0,000	0,017
<b>N</b>	32.100.060		
<b>n</b>	1.605.003		
<b>R2 de Nagelkerke</b>	0,361		
<b>% correct cases (0,5)</b>	91,277		
<b>% correct cases within the reference category.(Persons in one-person households (cross section value 0,5)</b>	14,124		

*Source: Own elaboration from 2001 Spanish population census micro data.. INE (National Statistics Institute)*

### *c. Level of education*

The level of education accounts for the probability of living alone; a positive and lineal relationship is observed between maximum level of education and one-person households (the "illiterate" category has been taken as reference). The higher the population level of education is, the probability of solo living increases. The higher increase in the probability (Odds Ratio) of forming a one-person household is found among the population having the highest level of education (60.9%)

Therefore, although a predominant profile of illiterate persons or persons with no studies who live alone results from the logistic regression coefficient values, a high level of education would increase the probability of forming a one-person household.

### *d. Relationship with working persons' activity and professional status*

Taking as reference the category of "student", the rest of categories of this variable are positively related to the fact of living alone; but, above all, working persons and pensioners are the ones who present higher regression coefficients; among working persons, those with a high and medium-high professional status present regression coefficients of 1.542 and 1.375 respectively. The fact of having a high professional status or being a pensioner implies an increase in the probability of living alone of 367% and of 314% with respect to students.

Thus, age, above all among women over 65, widowhood and marital statuses resulting from matrimonial breakups, high level of instruction and upper professional category, together with the classic variable of pensioner, are variables which account for the probability of forming one-person households.

### *e. Municipality types by population size*

To assess the explanatory level of households distribution, a logistic regression analysis has been done, which relates type and size of municipality to the probability or non probability of forming a one-person household.

It should be highlighted the positive existing relationship between municipality size and the probability of creating one-person households. The higher regression coefficient is found in municipalities under 2,000 inhabitants (0.322) and Barcelona (0.224). It is not found in the rest of cities over 500,000 inhabitants.

## **6-. CONCLUSIONS**

This paper aims to explain the progression, structure and composition of one-person households in Spain and to point out the territorial distribution patterns by provinces and municipalities size (capital, suburban ring and municipality by size).

Traditionally, one-person households have supported the weight of the aging population, both in rural and more recently in urban areas, as consequence, apart from the increase in life expectancy, of the depopulation suffered by the exodus to big cities, in the first case, and of the residence mobility processes from the city centres to the periphery, in the second case. Unmarried and widows have represented the traditional image of solo living.

Migration flows from the countryside to the city have given rise to an increase in the aging population of the most rural municipalities and at the same time in the number of one-person households. Staying unmarried and widowhood are the dominant profiles

of solo living in rural areas. Province capitals of Spain's most deserted areas became the migratory destinations of people from rural areas and for this reason they assemble the higher proportion of plural households. Thus, there exists an inner complementarity within the most rural provinces: capitals concentrate the highest proportion of plural households whereas the proportion of solo living is higher in the rest of the province, both in the ring next to the capital and in most rural municipalities.

On the other hand, residential mobility from the city centres towards the new residential peripheries, which have emerged with strength in Spain within the last three decades, is redrawing household location by type and composition. Metropolitan rings are the preferential destination of family households whereas the urban centre tends to concentrate one-person households more and more.

New sociodemographic behaviours influence the increase in the number of one-person households. The increase in unmarried persons, self-emancipation and in separations and divorces causes a heavy rise in the number of solo living, especially remarkable in big cities where social changes have emerged more strongly. Likewise, persistent increase in life expectancy at advanced ages and improvements in general health care have contributed to residential independence in elderly people.

The dominant territorial model of one-person households has been rapidly modified within the last years: from a predominance in rural areas, typical of small-sized populations, to a high concentration in big cities and not only as an effect of aging but as another residential option, above all, among the unmarried. One-person households are distributed unevenly and present different composition depending on sex, age, level of education or socioeconomic condition and where they are located: capitals, suburban rings or other municipalities by size.

Thus, big cities are specialized in solo living adults, unmarried with a high level of education and socio economic condition (technicians and professionals); whereas one-person households in the smallest municipalities have an aging profile, widowed and to a lower extent unmarried, inactive and with an insufficient level of education (as it corresponds to his/her elder age) and agrarian workers. Separated and divorced people have a higher representation in suburban rings in municipalities between 50,000 and 100,000 inhabitants.

## 7. BIBLIOGRAPHY

- ALABART, A.; LÓPEZ, C. (2007). "Familias, hogares y viviendas en las regiones metropolitanas. El caso de Barcelona" a *Cadernos Metrópole*, nº 17. Ed. Observatorio das Metrópoles, Sao Paulo. Brasil, págs. 81-103.
- ALBERDI, I. (1999). "Familias más largas y más estrechas" a *La nueva familia española*. Madrid. Taurus. Págs, 81-112.
- BERDIÉ, A. (2006). "Los hogares unipersonales en cifras". *Aral*, nº 1531, págs 18-20.
- BONVALET, C.; LELIÈVRE, E. (1997). "The transformation of housing and household structures in France and Great-Britain", *International Journal of Population Geography*, nº 3, págs. 183-201
- BONVALET, C ; ARBONVILLE, D. (dir). (2006). *Quelles familles ? Quels logements ?*. Col. Les Cahiers de l'INED nº 157, Paris. INED
- BONVALET, C., OGG, J. (2007). "Ageing in inner cities : the residential dilemmas of the baby boomer generation", *International Journal of Ageing*, 2 págs. 60-90
- BRULLET, C.; FLAQUER, LI. (1999). "Política familiar a Catalunya: una primera aproximació" a Navarro, V. et alt. *Les desigualtats socials a Catalunya*. Barcelona, Ed. Mediterrània págs. 75-191,
- BUZAR, S.; ODGEN, P.; HALL, R. (2005). "Household matter: the quiet demography of urban transformation". *Progress in Human Geography* nº 29, pág. 413-136.

- CABRÉ, A. (dir). (2007). *La constitución familiar en España*. Bilbao. Ed. BBVA.
- CLARK, W. ; DAVIES, S. (2007). "Family migration and mobility sequences in the United States : Spacial mobility in the context of life course". *Demographic Research*, Vol 17. págs. 591-622.
- CHALEIX, M. (2001). " Le recensement de la polulation de 1999. 7.4 millions de personnes vivent seules en 1999 " INSEE. *Premiere*. n° 788. Juillet 2001.
- CHAMPION, A.G. (ed) (1989). *Contraurbanization : the changing pace and nature of population deconcentration*. London, Edward Arnold.
- CHAMPION, A.G. (2001). "A changing demographic regime and evolving polycentric urban regions: consequences for de size, composition and distribution of city populations". *Urban Studies*, n° 38 págs. 657-677.
- CHANDLER, J.; WILLIAMS, M.; MACONACHIE, M.; COLLET, T.; DODGEON, B. (2004). "Living alone: Its place in Household Formation and Change". *Sociological Research Online*, Vol. 9. Issue
- COURGEAU. D. (1987). "Constitution de la famille et urbanisation". *Populatio*., 42° année, n° 1 págs. 57-81.
- DELBES, C.; GAYMU, J. (1990). "Croissance du nombre des isolés en France: vers de nouveaux comportements ? " *Population* n° 3. Paris, Ined, págs. 503-530
- FEIJTEN, P.; van HAM, M. (2007). "Residential mobility and migration of the divorced and separated". *Demographic Research*, Vol 17, págs. 623-654.
- FOKEMA, T.; LIEFBROER, A. (2008). "Trends in living arrangements in Europe: Convergence or divergence?" *Demographic Research*, Vol. 19, págs. 1351-1418.
- FREY, W.; KOBRIN, F. (1982). "Changing families and changing mobility: their impact on the central city" *Demography. Population Assotiation of America*. Vol. 19 n° 3. pp.261-277
- HALL, R.; ODGEN, P.E.; HILL, C., (1997). "The pattern and structure of one-person households in England Wales and Grance". *International Journal of Population Geography*, n° 3, págs. 161-181
- HALL, R.; ODGEN, P.E.; HILL, C., (1999). "Living alone: evidence from England Wales and France for last two decades a McRAE, S. (Ed). *Chaging Britain: families and households int the 1990s*. Oxford, Oxford University Press, págs. 265-296
- HALL, R.; ODGEN, P.E. (2000). "Households, reurbanisation and the rise of living alone in the principal french cities. 1975-1990" *Urban Studies*, Vol. 37, No. 2, 367-390.
- HALL, R.; ODGEN, P. (2003) "The rise of living alone in inner London: Trends among the population of working age" *Environment and Planning n° 35(5)* págs. 871 – 888.
- HARRISON, R.B (1981). *Living alone in Canada : demographic and economic perspectives, 1951-1976 = Vivre seul au Canada : perspectives demographiques et economiques, 1951-1976*. Ottawa. Statistics Canada, Social Statistics Field, Housing and Social Characteristics Staff.
- HASKEY, J.C. (1987). "One person households in Great Britain. Living Alone in the middle years life" a *Population Trends*, n° 50, págs. 23-31.
- IAURIF/INSEE (2002). *Atlas des franciliens. Population et Modes de Vie*. Paris, Tom 3.
- INGLEHART, R. (1977). *The Silent Revolution*, Princeton University Press.
- JACQUOT, A. (2006). "Des ménages toujours plus petits. Projection de menajes por la France Métropolitaine à l'horizon 2030 ». INSEE. N° 1106.
- JURADO, T. (2006). "El creciente dinamismo familiar frente a la inflexibilidad del modelo de vivienda español" a *Cuadernos de Información Económica*, n° 193. Madrid. Fundación de las Cajas de Ahorros, pags. 117-126.
- JURADO, T.; NALDINI, M. (1996). "Is the south so different? Italian and spanish families in a comparative perspective."a *South European Society and Politics*, n° 1 vol. 3, págs. 42-66
- KAUFFMAN, J.C. (1994). " Les ménages d'une personne en Europe " a *Population*. n° 4-5. Paris. INED. pags.995-1013.
- KOESOEBJONO S. (1984). "Trends of one-person households in the Netherlands, 1960-1981; a demographic analysis" *Population and family in the Low Countries*, IV. Voorburg, Netherlands, Netherlands Interuniversity Demographic Institute [NIDI] 101-33.
- LESTHAEGHE, R. (1994). "Una interpretación sobre la Segunda Transición Demográfica en los países occidentales" a VVAA. *Demografía y Políticas Públicas*. Emakunde. Instituto Vasco de la Mujer.pp 11-46.
- LESTHAEGHE, RON J., AND K. NEELS. 2002. "From the First to the Second Demographic Transition: An Interpretation of the Spatial Continuity of Demographic Innovation in France, Belgium and Switzerland." *European Journal of Population*, n° 18 (4), págs. 325-260.

- LÓPEZ, J. ; DÍAZ, P. ; (2005). “Les personnes âgées vivant seules en Espagne” a *Revue Retraite et Société*, nº 45, págs. 157-187.
- LÓPEZ, C. (2007). *Les tendències de les llars, les famílies i les persones a la ciutat de Barcelona*. Barcelona. Ed. Ajuntament de Barcelona.
- LÓPEZ, C.; PUJADAS, I. (2005). “Hogares y cambios residenciales: la diferenciación espacial de los hogares en la región metropolitana de Barcelona 1986-2001” a *Cuadernos Geográficos*, nº 36, Granada. págs. 409-436.
- LÓPEZ, C.; PUJADAS, I. (2009). “Los hogares unipersonales en España. Composición y pautas territoriales” a López, L, Abellán, A, Godenau, D. (coords.) *Envejecimiento, despoblación y territorio*, Universidad de León.
- LÓPEZ, P.; LOZARES, C.; DOMÍNGUEZ, M. (2001). “Disseny i construcció d’una mostra estratificada a partir de dades censals”. *Qüestió. Quaderns d’Estadística d’Investigació i Operativa*. Vol. 24 nº 1. Ed. Generalitat de Catalunya. Institut d’Estadística de Catalunya, págs. 111-136
- MEIL, G. (1999). *La postmodernització de la família espanyola*. Madrid. Ed. Acento.
- ODGEN, P.; SCHNOEBELEN, F. (2005) “The rise of the small household: Demographic change and household structure in Paris” *Population Space and Place*, nº 11. 251-268
- ODGEN, P.E.; HALL, R. (2000). “Households, reurbanisation, and the rise of living alone in the principal French cities 1975-1990”. *Urban Studies*, 37. pág. 367-390.
- ODGEN, P.E.; HALL, R.(2004). “The Second Demographic Transition, new household forms and the urban population of France during de 1990s”. *Transactions of the Institute of British Geographers*, nº 29, págs. 88-105.
- PUJADAS, I. (2009). Movilidad residencial y expansión urbana en la Región Metropolitana de Barcelona, 1982-2005 *Scripta Nova*, nº 13, págs. 281-290.
- PUJADAS, I.; LÓPEZ, C. (2009). *Hogares y viviendas en los procesos de movilidad residencial el caso de la Región Metropolitana de Barcelona*. Comunicación presentada al X Congreso de la Población Española. Universidad de Navarra. Julio 2006.
- REHER, D. (1998). Family ties in Western Europe: Persistent Contrasts. *Population and Development Review*, nº 24, (2). págs. 203-234.
- REQUENA, M. (2004). “Tamaño y composición de los hogares en España” a LEAL, J. (Coord). *Informe sobre la situación demográfica en España*. Madrid. Ed. Fundación Abril Martorell. págs. 135-161.
- ROUSSEL, L. (1983). “Les ménages d’une personne : L’évolution récente ” *Population*, nº 6. Paris. INED. págs. 995-1016.
- SOLSONA, M.; TREVIÑO, R. (1990). *Estructuras familiares en España*. Madrid. Ed. Ministerio de Asuntos Sociales. Instituto de la Mujer.
- TAPINOS, G. (1999). “Els reptes demogràfics. L’Europa mediterrània i els canvis demogràfics. Hi ha una especificitat pròpia dels països del sud?” VVAA. *L’espai mediterrani llatí*. Barcelona, Ed. Institut Català de la Mediterrània, págs.111-154.
- van de KAA (1987). “Europe’s Second Demographic Transition”. *Population Bulletin*, nº 42. págs. 3-57
- WALL, R. (1989). “Leaving home and living alone: an historical perspective”. *Population Studies*, nº 43. págs. 369-389.