



# **Home Bitter Home?**

## **Gender, Living Arrangements, and the Exclusion from Home-Ownership among Older Europeans**

Daniele Vignoli, Maria Letizia Tanturri and Francesco Acciai

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## Gender, Living Arrangements, and the Exclusion from Home-Ownership among Older Europeans

*Daniele Vignoli<sup>1</sup>, Maria Letizia Tanturri<sup>2</sup> and Francesco Acciai<sup>3</sup>*

*Abstract:*

Home-ownership is the most important asset among the elderly in Europe, but in this domain very little is known about gender differences. This paper aims at exploring the link between gender, living arrangements, and the exclusion from home-ownership among older Europeans. The analysis is based on the fourth wave of “Survey of Health, Aging and Retirement in Europe” and includes a sub-sample of about 56,000 individuals aged 50 or over, living in 16 European countries: Austria, Belgium, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Italy, the Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and Switzerland. Our findings show that women are generally more likely to be excluded from homeownership than men. However, a closer look suggests that the gender gap in home ownership is essentially generated by compositional differences between men and women, with the most relevant factor being the type of living arrangement.

*Keywords:* Home tenure, Gender, Living arrangement, Older Europeans, Poverty.

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# 1. Introduction

The economic well-being of the elderly is often assessed using income measures, and a typical result is that living alone older women, who are generally widows, tend to display higher poverty rates than the average population (e.g., De Santis *et al.*, 2008; Vignoli & De Santis, 2009). But, would the picture be any different if we considered also the assets of the elderly? Among the various types of assets housing is often the largest component in most Western countries. Especially for older Europeans, home appears to be the most important bequeathable wealth virtually everywhere (Angelini *et al.*, 2013a; Lefebure *et al.*, 2006). For the elderly home-property provides a financial buffer against contingencies such as ill health or economic difficulties, and also offers a nest egg for later life (Gaymu, 2003).

From a gender perspective, whilst an extensive literature exists on women's income and the gender wage gap, relatively little work has been done on the gender wealth or asset gap (Deere & Doss, 2006). In particular, research that explicitly addresses gender-related differences in home-ownership is rather scarce (Gornik *et al.*, 2010). An exception is the paper by Blaauboer (2010), which provides an insightful investigation on the different determinants of home-ownership by gender, but limited to the case of the Netherlands and not addressing the issue specifically in later life. Most studies focusing on home-ownership ignore gender, some simply omit women from the discussion, some skirt the issue by analyzing home-ownership patterns only for married couples, and others consider women's home-ownership, gender, or marital status as control variables, but not as crucial points of discussion. In 2006, a special issue of *Feminist Economics* (n. 12/2006) was entirely dedicated to the gender gap in wealth in a plurality of contexts (Deere & Doss, 2006), but none of the papers has been specifically focused on home-ownership among older Europeans.

Our paper is aimed at exploring the links between the exclusion from home ownership, gender, and living arrangements among older Europeans. We distinguish between gender disparities in the exclusion from home-ownership arising because of differences in family structures and differences within family structures. The expression "exclusion from home ownership" is used for simplicity; it can also describe situations which are not of exclusion, such as the possible choice of old individuals to bequeath their property to their children in advance, while keeping the usufruct of their home.

The study is organized as follows. After a background discussion on the connections between gender, living arrangement, and home tenure, we propose a descriptive overview of home-ownership patterns in a cross-national comparative European perspective. We then look at differences in access to home ownership by gender and living arrangements, keeping into account a plurality of covariates related to personal and family characteristics, as well as contextual factors. Finally, we summarize and discuss our findings.

## 2. Background

The analysis of housing conditions in family demography research generally focuses on home ownership (Mulder, 2006a,b; Mulder & Billari, 2010). This issue is important for several reasons. First of all, home-ownership provides a source of income (the so-called *imputed rent*); especially in later life, home-ownership is found to offer protection against poverty, as an income buffer in case of need (Castles, 1998; Conley & Gifford, 2006). Second, it assures future and sustainable consumption (Christelis *et al.*, 2005). Homeowners also have the highest degree of control over their own housing conditions (Mulder & Hooimeijer, 1999; Vignoli *et al.*, 2013a), as owning a home provides, for example, protection against the risk of eviction. Furthermore, by becoming a homeowner, a person not only has better economic prospects, but also an enhanced quality of life (Kurz & Blossfeld, 2004; Mulder & Wagner, 1998). Compared with rented dwellings, owner-occupied homes are, on average, more spacious, better located and more easily adapted to a household's needs; thus they provide better housing conditions in the long term (e.g., Mulder & Smits, 1999). Moreover, home ownership is a status symbol, and has an emotional value for many people (Saunders, 1990). An aspect that is particularly appreciated by old people is that it can be transferred to descendants (Kurz & Blossfeld, 2004). In addition, home-ownership can be considered as an alternative form of insurance that secures a valuable asset, which can be drawn upon to raise economic well-being in old age (Dewilde & Raeymaeckers, 2008). Overall, home ownership is a key indicator of quality of life of the elderly from both a monetary and psychological point of view.

A home is the most important asset among older Europeans, as the proportion of household wealth accounted for by home value is more than 70% in each country (Angelini *et al.*, 2013a). Recent data confirm previous research findings that ownership rates decline considerably with age in most countries; however, a large part of the decline is found to be

attributed to cohort effects (Angelini *et al.*, 2013a; Börsch-Supan *et al.*, 2005; Chiuri & Jappelli, 2006). Interestingly, ownership patterns across age are quite similar across countries: an increase in home-ownership is observed up to age 50-59, then levelling-up, while a slight decline is noticed after age 80 almost everywhere (but not in Poland and Greece), with the exception of Denmark, Sweden and the Netherlands where it occurs after the age of 70 (Angelini *et al.*, 2013a). In the Mediterranean countries, where ownership acquisition has been stable for a long time and across cohorts, the older cohort shows high ownership rates as well (Angelini *et al.*, 2013b; Castles and Ferrera, 1996; Kohli *et al.*, 2005).

Home-ownership and pensions have been often considered as alternative strategies to obtain financial security in old age, as in the life cycle the costs of ownership are typically higher in early adulthood and lower at older ages (Castles, 1998; Kemeny, 1981). When individuals own their homes, they tend to rely on smaller pensions; at a macro level this results in a sort of trade-off between the degree of home-ownership and generosity of retirement pensions (Castles, 1998). Many authors refer to this as the paradox of the “cash poor/house rich” elderly (Castles, 1998; Lefebure *et al.*, 2006). Recent studies show that the reluctance or the difficulties of old Europeans to reduce housing equity might be a relevant factor linked to their financial hardship (Angelini *et al.*, 2009). It has been found that low income households who are house-rich and cash-poor are more likely to sell their home in later life, but it is also noticed that changes in demographics and in living arrangements play an over-arching role in explaining home-tenure change in the final phase of the life course (Angelini *et al.*, 2013a; Dewilde & Stier, 2014). For instance, the experience of marital breakdown in adulthood is associated with a lower likelihood of being a homeowner in later life (Dewilde & Stier, 2014), and this effect is stronger for women than for men (Gram-Hanssen & Bech-Denielsen, 2008). Similarly, the experience of the loss of a spouse can increase the probability to move from home-ownership to rent accommodation before age 65 (Angelini *et al.*, 2003).

Socio-demographic literature indicates that a home is more than a mere asset for the elderly, and to a certain extent it can be considered a *consumption good*. In fact, for the elderly home represents a safe environment, rich in memories, that plays a role of refuge (Gaymu, 2003). This is a further reason that may make older people particularly reluctant to sell their home and make profit by their redundant housing capacity (e.g. when children leave the nest). As already stated, home ownership is usually associated to a better quality of the home itself, and to an easier social integration of the owner within a community (Börsch-Supan *et al.*, 2005;

Kurz & Blossfeld, 2004). All these aspects are particularly important for the elderly, as most of their everyday life takes place at home, especially in case of restrained physical mobility.

From a comparative perspective, variations in national housing tenure patterns can be explained by many factors: historical influences, cultural variations (e.g. in inter-generational transfers of wealth), economic cycle, housing and financial markets, institutional arrangements and welfare state support (Lefebure *et al.*, 2006; Poggio, 2006). Variety in home tenure structure impinges on poverty differences between countries and groups (Börsch-Supan *et al.*, 2005; Lefebure *et al.*, 2006). An owner occupier is in significantly better position than a renter with the same income, while those who are poor are definitively worse off if they even have to pay a rent (Börsch-Supan *et al.*, 2005).

Gender is likely to play a key role in housing decisions, and also in home ownership. A recent study illustrates that single women are less likely to be home owners than single men (Blaauboer, 2010). Within couples, the resources of men are more relevant than those of women for the process of home-acquisition (Angelini *et al.*, 2013b; Mulder & Smits, 1999; results further corroborated by Blaauboer, 2010). Despite few exceptions, however, there is a relatively scarce literature on gender differences in home tenure. First of all it is difficult to disentangle home-ownership for men and women because they often live together. Second, housing studies usually use the household as the unit of analysis—ignoring intra-household issues. Besides, data on the intra-household distribution of assets is rarely collected. When women do emerge in this literature, they are identified through family type, typically as female heads of households (Deere & Doss, 2006). However, in two-adults households, the designation of the head is often arbitrary; and self-reporting is likely to reflect social norms regarding who should be considered the head (Deere & Doss, 2006). Previous literature suggests that using the gender of the head as a base for analysis of wealth distribution confounds marital status and gender (Deere & Doss, 2006). To avoid this problem, households headed by a couple should be treated differently than households headed by individuals (Blaauboer, 2010; Sedo & Kassoudji, 2004;). In our work we follow this suggestion. In this way we are able to assess whether the gender of the householder, the family type, and the poverty status are significantly associated with the exclusion from home-ownership among the old Europeans.

A review of housing studies suggests that gender issues are typically ignored (Deere & Doss, 2006); in fact, the number of studies dealing with this subject is limited, and in general they are not specifically focused on the elderly. Virtually in every European country women seem to have less access to home ownership (Kohli *et al.*, 2005), but it is not clear whether this is linked to specific family typology or to other individual or contextual characteristics. For instance, Warren *et al.* (2000) in a comparison of differentials among various asset types in Great Britain find that housing wealth is similar for single men and women, while among unmarried parents there is a large gender disparity. In an older article by Smith (1990) three barriers that women have to face when purchasing a home are identified: first, women gain lower incomes; second, they are more likely than men to live in single earner households with children; and finally they have less access to credit—especially if they are in non-traditional family types.

Women have traditionally acquired property through marriage or inheritance (Blaauboer, 2010); especially before women became active participants in the labour market, they often gained a home by marrying a man who could afford one (Deere & Doss, 2006). Later, as women progressively entered the labour market, couples in two income households were more likely to own a home than couples in a single income household. Unfortunately, however, very little is known about people who do not live in married couple households.

### **3. Home Tenure, Gender, and Living Arrangements across Europe: A Description**

#### **3.1. Data**

We use the data from the fourth wave<sup>1</sup> (2011/2012) of the Survey of Health, Aging and Retirement in Europe<sup>2</sup> (SHARE), which is a multidisciplinary and cross-national database of freely accessible micro data on health, socio-economic status and social and family networks of individuals aged 50 or over (for further detail see Börsch-Supan *et al.*, 2005). Our analysis includes about 56,000 individuals residing in sixteen European countries, namely Austria, Belgium, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Italy, the

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<sup>1</sup> Release 1.1.1

<sup>2</sup> Hereafter SHARE.



Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, or Switzerland. The SHARE project offers a balanced sample of countries, as there are some for each European region (Northern, Southern, Eastern, and Western Europe), and therefore it provides an excellent data source to assess home tenure patterns by gender among older Europeans, in a cross-country perspective.

For our analysis we rely on the question that asks whether an individual lives as an owner (or a member of cooperative), or rather as a tenant (or a subtenant), or as a rent-free (a heterogeneous category including for instance social housing, as well as co-residence in children's home). Whether people live in social housing is unknown in SHARE; in fact, rent free means that one does not have to pay any rent, for instance because the home belongs to a family member who let them live there for free.

We consider as “owners” those who declared that either s/he or her/his spouse/partner is the owner. In the fourth wave of SHARE, there is also a question asking what percentage of the dwelling is owned by the respondent. However, we do not consider this variable in the analysis because we believe that the cons of its usage overcome the pros. First, property and divorce laws regulating access to home-ownership are likely to be different in different contexts. Second, the definition of property may be linked to different aspects than gender differences within couples *per se* – e.g., fiscal reasons or the wish to be entitled to get certain public benefits. For instance, when one partner is self-employed, in many contexts it is usual custom to attribute the property to the other partner, in order to avoid the repossession of goods by the authority in case of a failure of the activity. Third, it would be completely arbitrary to choose a threshold to recode as “owners” those who possess only a low percentage of the property. And, even after a certain cut-off point to define them as “owners” is set, their comparison with those who are “rent free” or “tenants” would make little sense. For all these reasons, we consider as owners all members who live in a home owned by the family, regardless of the amount held by each member of the family. We feel safe in this decision because in more than 85% of cases property is fully attributed to either the respondent or her/his partner. In addition, the distribution of the percentage of the dwelling owned by the respondent does not (statistically) differ between genders.

In order to shed light on the connection between home tenure and poverty status among older Europeans, we stick to the narrower notion of relative monetary poverty<sup>3</sup>, defined as a lack of disposable income. In SHARE 4 the measure of income collected is the net household income, which we transformed into net equivalent income by applying a standard equivalence scale: the square root of the number of household members (OECD, 2008). We consider poor those individuals whose net equivalent income lies below the poverty threshold, set at 60% of the country-specific median income (De Santis *et al.*, 2008), as calculated from SHARE. Note that this measure is based on country-specific poverty lines, under the implicit assumption that people compare themselves to their country fellows. There are reasons for considering narrower approaches (whereby people compare themselves to their neighbours, i.e. to people they see in person everyday) as well as larger approaches (people would compare themselves to other Europeans, who are now easier to reach). The implications of these alternative choices are profound, not only theoretically, but also from a practical point of view, because the ranking of regions according to their poverty levels would change dramatically. What criterion is preferable—a regional, national, or European poverty line—is still unclear. In line with previous research, this study, as mentioned, uses a national poverty line (De Santis *at al.* 2008; OECD, 2008).

### **3.2. Descriptive Findings**

The fourth wave of SHARE data confirms that home is the most important asset among older Europeans: the proportion of household wealth accounted for by home value is more than 60% in every country and over 80% in Italy, Spain, Slovenia, and Poland (Figure 1). What it is uncertain is whether this situation is the result of pure older people preferences or rather the consequence of inadequate alternative asset and insurance market in our continent in general, and in Mediterranean, Central and Eastern European countries in particular.

The rate of home ownership among older Europeans varies substantially across countries; they range from 55% in Sweden to over 80% in the Mediterranean area (Italy, Spain, but also France) and in some Eastern countries (Hungary, Slovenia, Estonia) (Figure 2). Compared to men, women are particularly disadvantaged in Portugal, Denmark, Sweden, Switzerland, the Netherlands, Hungary, and Austria (Figure 2), where gender differences account for 8% or more, and are statistically significant at the 0.01 level.

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<sup>3</sup> Relative monetary poverty is strictly correlated with other spheres of deprivation.

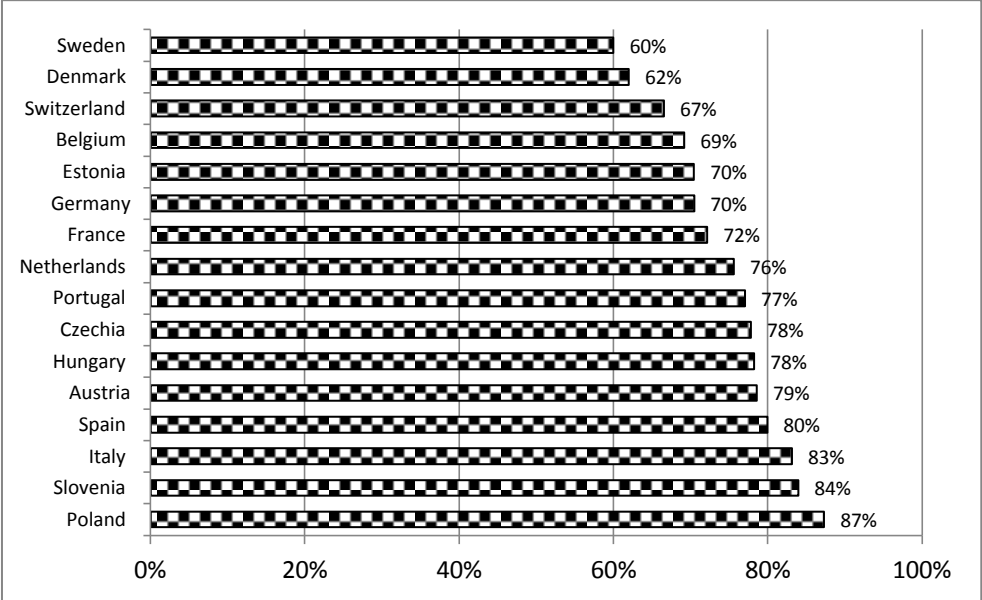
As mentioned earlier, it is difficult to pinpoint which family member is the homeowner in a co-resident couple or in an enlarged family. Home can be a common possession and all the components usually benefit from it if they live in the same household. Moreover, in many cases the legal owner within the family can be chosen for different reasons. Thus, the evaluation of gender differences would be very complicated, even if the legal owner is known. A first straightforward way to compare men and women property rates in a descriptive fashion is to limit the study to one-person households. Figure 3 displays the ownership rate for households of men living alone (*dotted bars*) and women living alone (*striped bars*), while the reference line is the average calculated in each country on all households (*solid line*). Virtually in every country, single men and women are less likely to be owners than the average household, with women being particularly disadvantaged. In many countries, gender differences are negligible, while in others, they are relevant: for instance in Denmark and Portugal they are about 20 percentage points. Country differences in home ownership are accentuated among these disadvantaged groups: In Germany, Switzerland, Austria, and Sweden, only 40% or less people living alone – either men or women – are homeowners. In Denmark, the percentage of home ownership is this low only among women.

Clearly, living arrangements seem to matter more than gender in highlighting differences by property ownership. Figure 4 displays the ownership rate for households of individuals living alone (*striped bars*) and those households formed by two persons or more (*dotted bars*), while the reference line is still the average calculated in each country on all households (*solid line*), no matter the size. Those living with other family members display higher ownership rates in all countries. The differences between solo families and families formed by two members or more are particularly evident where homeownership is less widespread; differences over 20% are recorded in Germany, Switzerland, Austria, and Sweden.

In Figure 5, we look at the differences between all households (*solid line*), all poor households (*dotted line*), poor household of women living alone (*striped bars*), and poor household of men living alone (*dotted bars*). Overall, the prevalence of home-ownership among poor households is lower compared to all households. However, differences are small where home ownership is widespread, larger elsewhere. In every country, households composed by poor old women and men living alone have lower ownership rates than the poor households altogether. Surprisingly, among poor households no particular gender gap emerges.

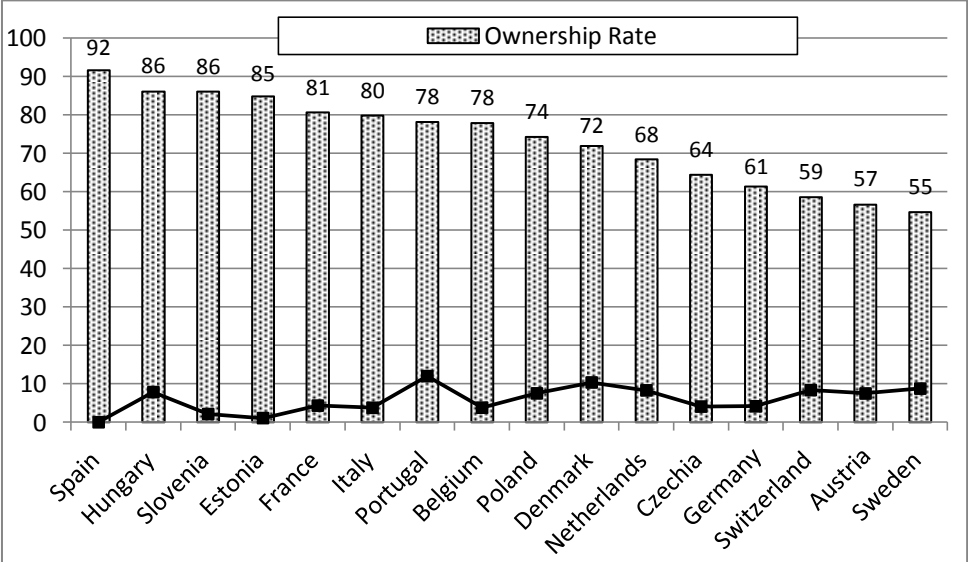
From these descriptive results, we have a first indication that women seem to be disadvantaged in terms of home tenure. However, differences by living arrangements seem to be more relevant than differences by gender, for all households in general, as well as for households currently experiencing economic shortages. In the next section, our aim is to verify whether these associations still hold when controlling for other demographic and socio-economic confounders in a multivariate framework.

Figure 1: Percentage of total household wealth accounted for by home value.



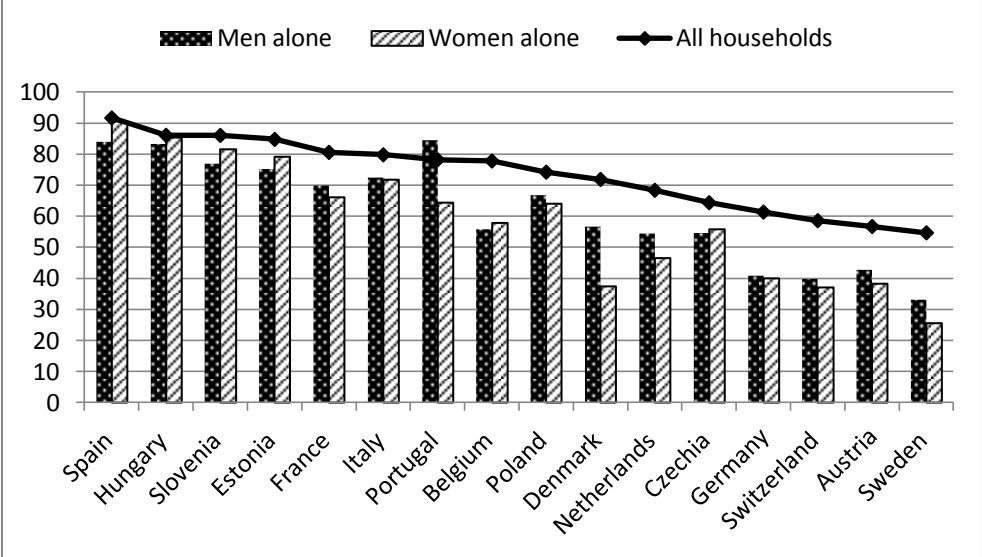
Source: own elaboration on SHARE 4 data.

Figure 2: Home-ownership rates among older European and gender differences.



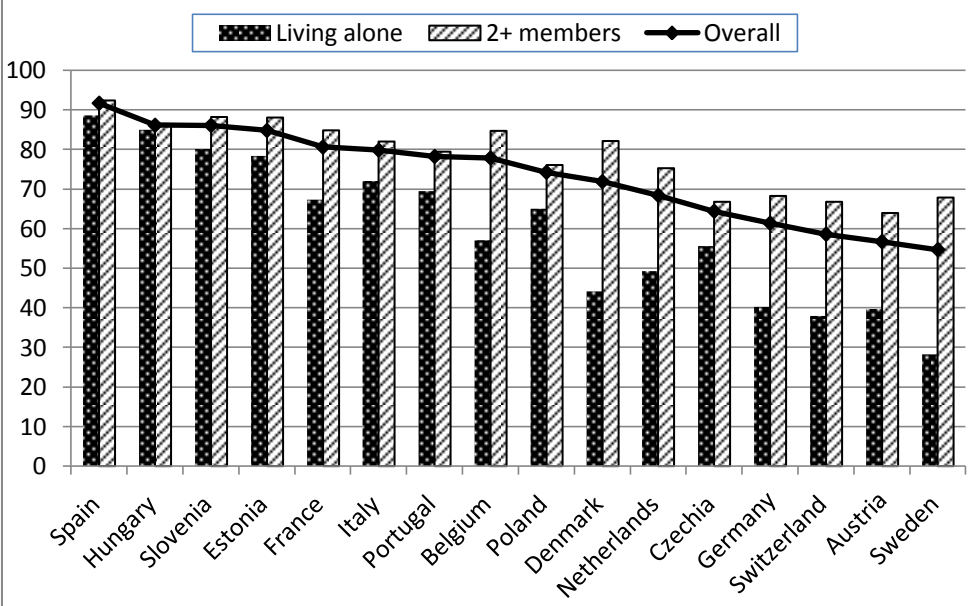
Source: own elaboration on SHARE 4 data

Figure 3: Property rate among the older European. Differences between the averages computed on all households, only on households of a man living alone, and only on households of women living alone.



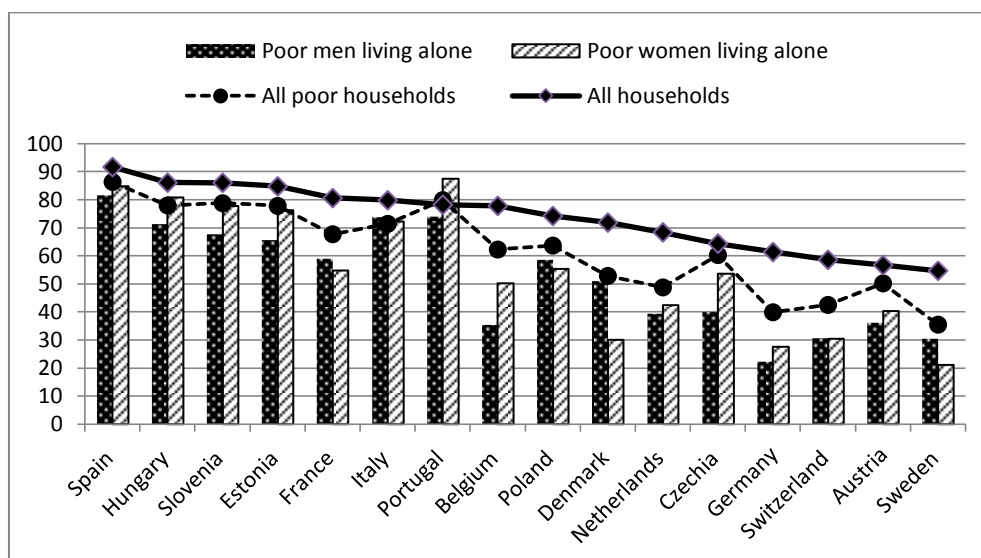
Source: own elaboration on SHARE 4 data.

Figure 4: Property rate among the older European. Differences between all households, one-person households, and households with 2+ members.



Source: own elaboration on SHARE 4 data.

Figure 5: Property rate among the older European. Differences between all households, all poor households, poor household of women living alone, and poor household of men living alone



Source: own elaboration on SHARE 4 data.

## 4. Who is Excluded from Home Ownership? Some Insight into Differences by Gender and Living Arrangements

### 4.1. Model Specification

A multinomial logit model is used to contrast homeowners to both tenant and rent free. Our key explanatory variables are gender and the household composition (ego alone, couple alone, and ego living with relatives or others). Importantly, the associations between home tenure, gender, and living arrangements are likely to be affected by other confounders as well. Thus, we controlled the estimates for several additional covariates. Our demographic variables are gender and respondent's age (coded as 50-59, 60-69, and 70 or more). Then, we considered the number of living children, which is grouped as: no (living) child, one, two or three, and four or more.

The socio-economic status is measured through the level of education, the working situation, and the poverty status. In order to make cross-national comparisons possible, the level of education is harmonized using the International Standard Classification of Education (ISCED) maintained by the UNESCO ([www.uis.unesco.org](http://www.uis.unesco.org)); and it is coded in the customary way: primary, secondary, and tertiary education. Working status has four categories: retired, employed or self-employed, unemployed, and homemaker. The poverty status is a binary

variable, indicating whether the respondents is poor or not, as we explained in paragraph 3.1. Our model also control for health condition. We chose to refer to the question about self-rated limitations in daily activities caused by health problems, which is categorized as follows: severely limited; limited, but not severely; not limited. Finally, in order to characterize the housing condition we considered the area of residence (a big city, the suburbs or outskirts of a big city, a large town, a small town, and a rural area or village) and the number of rooms (1-2, 3, 4, 5+).

The following analyses are purely exploratory; although we look at the influence of gender and living arrangements net of quite a few socio-economic, health-, and housing-related characteristics, we do not account for unobserved factors that may simultaneously affect to the exclusion from home-ownership and the propensity to be in a certain family status.

## **4.2 Findings**

Tables 1A and 1B present the results of the logistic multinomial regression model predicting the exclusion from home-ownership; they include the effects of our independent variables on the likelihood of being tenant or rent free, respectively, versus being homeowner. Results are presented in a stepwise fashion: Model 1 includes only gender; model 2 adds the individuals' demographic and socio-economic characteristics; model 3 adds the contextual variables (country and area residence, and a characteristic of the housing situation—the number of rooms); finally, model 4 adds the household type.

The gender gap in home ownership – i.e., the likelihood of being tenant or rent free instead of homeowner for women with respect to men – is positive and significant (model 1). However, the story is not as simple as this initial model suggests. While individual demographic and socio-economic characteristics do not alter the gender gap in home-ownership, this seems to be strongly shaped by contextual and household variables, in particular by living arrangements (models 3-4). For tenants, the gender gap is significant only until we add the household type. Namely, the household composition fully mediates the association between gender and home ownership. Also for rent-free, the household composition mediates a considerable part of the gender gap in home ownership, even though some gender differences persist; in fact, females are still more likely to belong to the rent-free category than males, everything else being equal. Overall, living arrangements clearly affect the exclusion from

homeownership; we found that people not in couple are more likely to be tenant or rent free than homeowners compared to their coupled counterparts. Note that being in a couple is associated with higher likelihood of being home-owner only when the household is formed by the couple alone, without additional members.

Table 2 complements the outcomes of Table 1A and Table 1B, by reporting the unconditional baseline probabilities of being respectively home-owners, tenant or rent-free occupier, estimated for a reference person, based on model 4. The reference person resides in a rural area of Italy, is a man aged 50-59 living alone, with no living children, a primary level of education, is currently retired, is not poor, does not report any limitations in usual activities, and lives in a home of 1 to 2 rooms only. Marginal effects have been reported for each of the variables in order to facilitate the interpretation of the results, by highlighting the magnitude of their effect on the unconditional baseline probability.

As for country differences in the exclusion from home ownership, our multivariate findings confirm the descriptive patterns observed in Figures 2-5. Other things being equal, the exclusion from property is much more common in Austria, Sweden and Germany than in the Mediterranean area and in Central and Eastern Europe. In particular, results for the gender gap have been confirmed also once we estimate the gender gap by single country (Table 3). The bivariate association shows that women have less access to home ownership in many countries. For instance, old women are more likely to be tenants than homeowners everywhere but Spain, Italy, Czech Republic, Hungary, Slovenia, and Estonia. However, when living arrangements is also controlled for, the gender gap in home ownership vanishes almost everywhere. And even in the few countries where the gender gap persists after controlling for household type, it disappears once we account for the other individual and contextual confounders.

All other demographic and socio-economic covariates behave in the customarily way and accordingly to previous empirical findings. Being childless decreases the probability of being tenant and rent free. This is possibly due to the fact that during the life-course old people might have left the property to their descendants (*inter vivos* transfers) or also that parents have less chance to save enough to access ownership, because of high cost of childbearing in modern societies. As regards to the socio-economic situation, not surprisingly, a negative gradient of education can be observed for the exclusion from property: the less educated have



a higher probability to be tenant or rent free. Similarly, as one would expect, unemployed, as well as the poor, are more likely to be excluded from home ownership. Also those who perform worse in terms of health status (especially people who that reported severe limitations in their daily activities) are less likely to be homeowners. Looking more closely at the housing situation, we notice that smaller houses are associated with exclusion from property (thus suggesting, again, the presence of an income effect). Moreover, people residing either in a small or a large town, or also in a big city and their suburbs, display a higher likelihood of being tenant or rent free than those living in a rural area or in a village, where home ownership is more common.

Table 1A: Multinomial regression models predicting the exclusion from home ownership (tenant versus homeowners).

Variable	Categories	Model 1	Model 2	Model 3	Model 4
Gender	Male (ref.)				
	Female	0.182***	0.192***	0.083**	0.006
Age group	50-59 (ref.)				
	60-69		-0.004	-0.246***	-0.237***
	70+		0.109	-0.251*	-0.297*
Education	Primary (ref.)				
	Secondary		0.039	-0.236***	-0.233***
	Tertiary		-0.178	-0.534***	-0.550***
Occupation	Retired (ref.)				
	Employed/Self-employed		0.116	0.090	0.068
	Unemployed/Disabled		0.476*	0.649***	0.631***
	Homemaker		-0.200	-0.178*	-0.125
Health Status	Not limited (ref.)				
	Moderately limited		-0.193*	-0.199***	-0.197***
	Severely limited		-0.241	-0.279***	-0.274***
Children alive	None (ref.)				
	1		-0.426***	-0.047	0.031
	2 or 3		-0.670***	0.000	0.105
	4+		-0.224	0.520***	0.623***
Poverty Status	Not poor (ref.)				
	Poor		0.557***	0.468***	0.391***
Country	Italy (ref.)				
	Austria			1.634***	1.616***
	Germany			1.732***	1.782***
	Sweden			1.229***	1.252***
	Netherlands			1.660***	1.669***
	Spain			-1.122***	-1.131***
	France			1.019***	0.975***
	Denmark			1.170***	1.168***
	Switzerland			2.608***	2.612***
	Belgium			1.075***	1.046***
	Czechia			-0.227**	-0.198*
	Poland			-1.172***	-1.136***
	Hungary			-2.454***	-2.420***
	Portugal			0.651***	0.677***
	Slovenia			-1.717***	-1.698***
	Estonia			-2.398***	-2.371***
	Area of residence	Rural area or village (ref.)			
Small town				0.937***	0.927***
Large town				1.458***	1.446***
Big city suburbs				1.215***	1.201***
Big city				1.928***	1.922***
Number of rooms	1-2 (ref.)				
	3			-0.989***	-0.924***
	4			-1.883***	-1.784***
	5+			-3.010***	-2.904***
Household composition	Couple alone (ref.)				
	Ego alone				0.546***
	With family/with others				0.246***
Constant		-1.655***	-1.192***	-1.389***	-1.657***

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001

*Table 1B: Multinomial regression models predicting the exclusion from home ownership (rent-free versus homeowners).*

<b>Variable</b>	<b>Categories</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
Gender	Male (ref.)				
	Female	0.247***	0.258***	0.125***	0.047*
Age group	50-59 (ref.)				
	60-69		0.117	0.099	0.146
	70+		0.562*	0.590***	0.603***
Education	Primary (ref.)				
	Secondary		-0.065	-0.251***	-0.234***
	Tertiary		-0.417**	-0.444***	-0.435***
Occupation	Retired (ref.)				
	Employed/Self-employed		-0.162	0.009	-0.034
	Unemployed/Disabled		0.078	0.368***	0.351***
	Homemaker		-0.645*	0.050	0.093
Health Status	Not limited (ref.)				
	Moderately limited		-0.213***	-0.195***	-0.182***
	Severely limited		-0.480***	-0.310***	-0.297***
Children alive	None (ref.)				
	1		0.077	0.083	0.137
	2 or 3		0.053	0.145	0.215
	4+		0.192	0.432**	0.478**
Poverty Status	Not poor (ref.)				
	Poor		0.452***	0.438***	0.342***
Country	Italy (ref.)				
	Austria			1.255***	1.291***
	Germany			0.685***	0.788***
	Sweden			1.822***	1.936***
	Netherlands			-1.217***	-1.119***
	Spain			-0.973***	-0.980***
	France			-0.223***	-0.181**
	Denmark			0.601***	0.688***
	Switzerland			0.424***	0.509***
	Belgium			-0.043	0.003
	Czechia			1.298***	1.354***
	Poland			0.744***	0.726***
	Hungary			-0.142*	-0.124
	Portugal			-0.106	-0.072
	Slovenia			-0.023	-0.001
	Estonia			0.212**	0.250**
	Area of residence	Rural area or village (ref.)			
Small town				-0.149	-0.146
Large town				-0.035	-0.031
Big city suburbs				0.073	0.071
Big city				0.263	0.261
Number of rooms	1-2 (ref.)				
	3			-0.328***	-0.305***
	4			-0.962***	-0.928***
	5+			-1.420***	-1.399***
Household composition	Couple alone (ref.)				
	Ego alone				0.502***
	With family/with others				0.473***
Constant		-2.278***	-2.255***	-2.212***	-2.542***

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001

**Table 2** – Multinomial regression model predicting the exclusion from home ownership (tenant or rent free versus homeowners). Unconditional Baseline Probability and Marginal Effects.

		Home-owners	Tenant	Rent-free
Baseline Probability		<b>0.7878</b>	<b>0.1502</b>	<b>0.062</b>
Variable	Categories	Marginal effects	Marginal effects	Marginal effects
Country	Italy (ref.)			
	Austria	-0.343	0.277	0.065
	Germany	-0.354	0.341	0.013
	Sweden	-0.336	0.151	0.185
	Netherlands	-0.297	0.346	-0.049
	Spain	0.129	-0.094	-0.035
	France	-0.151	0.172	-0.020
	Denmark	-0.223	0.196	0.026
	Switzerland	-0.520	0.547	-0.027
	Belgium	-0.171	0.184	-0.013
	Czechia	-0.103	-0.043	0.147
	Poland	0.029	-0.100	0.071
	Hungary	0.133	-0.135	0.002
	Portugal	-0.097	0.109	-0.011
Slovenia	0.110	-0.119	0.009	
Estonia	0.106	-0.134	0.028	
Gender	Male (ref.)			
	Female	-0.003	0.000	0.003
Age group	50-59 (ref.)			
	60-69	0.018	-0.029	0.011
	70+	-0.010	-0.040	0.050
Household composition	Couple alone (ref.)			
	Ego alone	-0.103	0.075	0.027
	With family/with others	-0.058	0.028	0.030
Children alive	None (ref.)			
	1	-0.011	0.003	0.008
	2 or 3	-0.024	0.012	0.013
	4+	-0.113	0.090	0.024
Education	Primary (ref.)			
	Secondary	0.036	-0.026	-0.011
	Tertiary	0.074	-0.055	-0.018
Occupation	Retired (ref.)			
	Employed/Self-employed	-0.007	0.009	-0.003
	Unemployed/Disabled	-0.108	0.094	0.014
	Homemaker	0.009	-0.016	0.007
Area of residence	Rural area or village (ref.)			
	Small town	-0.143	0.161	-0.018
	Large town	-0.257	0.279	-0.022
	Big city suburbs	-0.206	0.219	-0.013
	Big city	-0.372	0.392	-0.020
Number of rooms	1-2 (ref.)			
	3	0.094	-0.083	-0.011
	4	0.153	-0.120	-0.033
	5+	0.183	-0.140	-0.043
Poverty status	Not poor (ref.)			
	Poor	-0.070	0.052	0.018
Health status	Not limited (ref.)			
	Moderately limited	0.030	-0.022	-0.008
	Severely limited	0.043	-0.030	-0.013

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Table 3: Gender gap in the exclusion from home ownership (home-owners versus tenant or rent free) by country of residence. Results of a multinomial regression model.

Country	Gender gap in home-ownership (RRR)					
	Tenant			Rent-free		
	Initial	Controlling for hh type	Controlling for ALL	Initial	Controlling for hh type	Controlling for ALL
Austria	1.27*	1.05	0.95	1.32*	1.22*	0.95
Germany	1.26*	1.12	1.12	0.94	0.89	0.86
Sweden	1.41*	1.15	1.15	1.26*	1.08	0.97
Netherlands	1.31*	1.17	1.11	1.08	0.90	0.69
Spain	0.95	0.90	0.91	1.12	1.01	1.02
Italy	1.09	1.01	0.87	1.17	1.04	0.97
France	1.35*	1.15	0.90	1.37*	1.21	1.14
Denmark	1.48*	1.26*	1.08	1.90*	1.55*	1.44
Switzerland	1.34*	1.16*	1.13	1.23	1.12	0.91
Belgium	1.19*	1.01	1.04	1.26	1.10	0.98
Czechia	1.12	0.99	0.94	1.20*	1.08	1.05
Poland	1.51*	1.44	1.33	1.36*	1.29	1.23
Hungary	0.89	0.81	0.78	1.44*	1.33*	1.23
Portugal	1.26*	1.18	1.04	1.40	1.37	1.27
Slovenia	0.80	0.72	0.68	1.34*	1.21	1.31
Estonia	1.08	0.83	0.90	1.20*	1.03	1.01

\* p<0.05

## 5. Conclusions

Although it is well-established that home-ownership is one of the most important assets among older Europeans, so far very little was known about gender differences in a cross-country perspective. Our analysis is a first effort to assess this insidious topic, and to disentangle the effect of gender and living arrangements. We aim to assess if women are disadvantaged in terms of home-ownership compared to men, or if this effect is rather shaped by their family structure.

Overall, women seem to be generally disadvantaged in terms of home tenure. The descriptive analysis with the fourth wave of SHARE data reveals a disadvantage for women in home tenure in every country but Spain, with wider gender differences in Northern countries, than in the Mediterranean, Central and Eastern European countries. However, differences by living arrangements are more notable than differences by gender, both when we consider all older households in general, and when we consider only older households with economic difficulties. Results from our multivariate analysis confirm the descriptive findings with few exceptions. A multinomial regression model was used to look at differences in the exclusion

from home ownership by gender and living arrangements, distinguishing between tenants and rent-free, while controlling for a plurality of covariates, related to demographic background, health and socio-economic status, and housing characteristics. As expected, we found that women are more likely to be excluded from home ownership than men. However, living arrangement status strongly mediates the gender gap in home ownership; in fact, individuals living alone are much more likely to be tenant or rent free. Controlling for the household type, the gender gap in home ownership vanishes in virtually every country. Importantly, when the gender gap persists after controlling for household type, it disappears once we control for the other individual and contextual factors.

In short, we found that the gender gap in home ownership among older Europeans is generated by compositional differences between men and women, with the most relevant factor being household type. Women are almost as twice as likely as men to live alone, which in turn is associated with a particularly low rate of home ownership. Our findings suggest that the (often) more fragile socioeconomic position of women living in non-traditional family arrangements has the greatest effect on their housing status.

Being a home the most important asset among older Europeans, we believe this analysis raises important questions about family change and homeownership in post-industrial societies. Since the second half of the 20th century, in fact, family forms have become more diverse everywhere in Europe. The decreasing propensity to marry and have children and the general increase of union dissolutions, have led to the formation of many different types of living arrangements. Living in a non-traditional family is often associated with lower socioeconomic status (Vignoli *et al.*, 2013b), and our finding additionally venture that this condition may also lead to the exclusion from home-ownership in old age, thus adding additional economic hardships among the elderly in Europe. This paper is essentially exploratory; an exploratory study is a necessary first step in understanding deeper causal mechanisms under consideration. Further research should scrutinize deeply our findings and go beyond them, utilizing better data containing intra-household information on homeownership.

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