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## IS POLAND BECOMING NORDIC? CHANGING TRENDS IN HOUSEHOLD STRUCTURES IN POLAND AND FINLAND WITH THE EMPHASIS ON PEOPLE LIVING ALONE

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### ABSTRACT

This paper presents a comparative analysis of the household structure and its dynamics between post-economic-transformation Poland and Scandinavian-welfare-state Finland, with a focus on one-person households (OPH). Based on the literature, two research hypotheses were formulated: (H1) strong differences in the household structure in Finland and Poland still occur, and (H2) the share of one-person households is at very different levels in the two countries. However, due to the globally growing popularity of solo living, the difference is diminishing. Finally, an estimate was made for the time when the shares of one-person households will be equal in both countries if the changing trends from 2005–2015 stay the same.

The first research hypothesis was proven to be correct. Small, one- or two-person households dominate the household structure in Finland, while in Poland the household structure by size was considerably more balanced. The second hypothesis was confirmed only partially. The share of OPH among all the households in 2015 was significantly larger in Finland (42%) than in Poland (24%). However, the difference between the countries was not diminishing. The share in Finland is increasing, while it is decreasing in Poland. This allowed the assumption that if the changing trends from the studied period are maintained, the shares of OPH in the two countries will not equalize, but will instead grow further apart. An estimate was made that in 2030 46% of Finnish households and 22% of Polish households will be one-person households.

**Key words:** household structure, people living alone, one-person households, comparative analyses and forecast.

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## 1. Introduction

Many social, economic and demographic processes are becoming similar among different European countries. The countries that underwent economic transformation from a centrally planned to a market-oriented economy in the 1980s and 1990s have experienced particularly strong structural changes. In many respects, these countries have become similar to countries in Western and Northern Europe (Batóg & Batóg, 2006; Hozer-Koćmiel & Lis, 2016; Zimoch, 2013).

This paper reviews household structures in two relatively different countries, Poland and Finland. Poland represents post-economic transformation countries, while Finland is a prosperous Nordic welfare state country. The paper compares household structures and their dynamics in Poland and Finland, with a particular focus on one-person households (OPH), whose relative percentages among all households have been growing across Europe.

Additionally, an attempt has been made to estimate when the shares of OPH will be the same in Poland and Finland if the changing trends during the analysed period 2005–2015 are maintained.

One-person households and persons living alone correspond to the same target group. The terms being used may depend on the source of the data, e.g. households or population statistics, market or demography studies. Additionally, using basic descriptive analysis both terms can be used alternatively. However, while calculating shares, it is important to distinguish the share of OPH, which is the number of OPH divided by the total number of households and the share of population living alone, standing for the number of people living alone out of a total population (aged 15+). In this paper the terms OPH and persons living alone are used to provide the reader with a maximum understanding of the changing trends in household structures.

## 2. Literature review

Households are a basic economic market element and they play a key role in consumption. The main purpose of a household is to fulfil all the needs of its members. 'A household is understood as a single or multi-person economic entity, usually based on family ties, operating in the sphere of consumption, whose purpose is to meet the needs of all members, thanks to the common disposition of income earned by all or only some of them' (Zalega, 2007, pp. 8: translated by S.M.-K.).

Similarly, according to the United Nations Economic Commission for Europe (UN, 2011), a private household is either a one-person household (i.e. a person living alone in a separate housing unit, or occupying, as a lodger, one or more separate rooms in a housing unit, but not joining with other occupants to form a multi-person household), or a multi-person household (i.e. a group of two or more persons occupying a housing unit, or a part of it, jointly providing themselves with food and other essentials). Both of the above household categories represent housekeeping concepts in which joint providing for common goods plays an essential part. UN also distinguished that countries with register-based data often

use a household-dwelling concept, instead, then the number of households and dwellings is equal.

Samuelson and Nordhaus (2005) mention that the terms family and household are often used alternatively. However, according to these authors, there are big differences between these concepts due to their different functions: the role of a family is to maintain biological and cultural continuity, while a household has economic functions, depending on the scope of its members' needs. In economics, it is assumed that these functions result from the main goal of the household, i.e. utility maximization or maximizing the fulfilment of needs (Kopycińska, 2011).

Thus, households consist of members who not only live together, but also decide and act together based on their own preferences and existing restrictions. As a statistical unit, however, a household has socio-economic rather than biological features (Latuch, 1980). Referring to Statistics Poland's definition of a household, one of the criteria distinguishing a household is its common economic management, with the condition of joint residence or family ties, thus it follows the housekeeping concept. The same source determines a one-person household as a person who is self-dependent and lives alone. In Finland, up until the 1980 census Statistics Finland (OSF) used the housekeeping concept of the household, which was then substituted by the concept of a household-dwelling unit. The household-dwelling unit consists of the permanent occupants of a dwelling. Persons classified in the Population Information System of the Population Register Centre as institutionalized, homeless or living abroad are excluded. Additionally, living in a residential home that does not meet the criteria of a dwelling (intended for year-round habitation, at least 7 m<sup>2</sup>, furnished with at least a cooking area and its own entrance) is also not categorized as a household-dwelling unit. Statistics Finland recognizes two categories of a household dwelling: 1) family household-dwelling units that comprise one or more families, with or without other persons, or one family and other persons, and 2) other household-dwelling units, including people living alone, and two or more people of the same or different sex.

Changing trends in partnership and childbearing patterns from the last decades have influenced the household structure across Europe (Oláh, 2015). According to Eurostat (2015), a rising share of people living alone, declining fertility rates, higher divorce rates, and a shift in household structures away from multigenerational living have visibly shrunk the average size of households in the European Union in recent decades. One-person households have become a dominant household type in many regions of Europe. The dominance of OPH has been somewhat overlooked by public policy and social research, which in the last decades was focused on bigger households and on families.

Living alone is a growing trend worldwide, noticed decades ago in North America and Europe (Hall et al., 1997; Jacobsen et al., 2012). Bennet and Dixon (2006) called the rising number of people living alone one of the most important demographic shifts in recent decades. According to the following brief literature review, the increase in separate living can be seen both as a cause and as a result of changing household and family composition. There are relatively many literature sources from the 80s analysing the changes in family and household structures, which in some countries started already after the Second World War.

Next to reporting the facts that the number of people living alone has been increasing, or that the average size of a household has decreased, researchers have tried to analyse the factors that influence the choice of living alone along with other structural changes in the family. Pampel (1983) linked separate living with increased income and changes in norms and tastes as well as changes in the relationship between parents and children. While some of these linkages were more obvious than others, throughout his modelling analysis, time seemed to have the strongest additive result on propensity to live alone. The rising importance of one-person households was grouped by Keilman (1988) according to demographic factors: delayed marriage at a young age, divorce without a new relationship in middle age, lower male mortality at elder ages, and cultural factors following the above-mentioned shift in propensity to live alone. He also stated that higher living standards have made it easier for an individual person to set up an independent, solitary household. Similarly, Keyfitz and Caswell (2005) stated three supporting aspects for separate living: the desire for privacy and independence highly correlated with income; an absence of kin correlated with low fertility rates; and finally, personal changed preferences. In their probabilistic, dynamic household forecast, Christiansen and Keilman (2013) observed several features concerning the status of living alone: young people living alone are likely to enter into cohabitation; at all ages, the status from cohabiting is more likely to change toward living alone than to living with a spouse; a high increase of living alone of previously single parents in their fifties due to the adulthood of their children; living alone starting at an advanced age (e.g. after the death of the spouse) is a common state.

In its series of *Statistics Explained*, Eurostat (2016) published a summary of European household composition focusing on the size and types of households across 28 countries in the EU. With a timeline between 2005 and 2015, single households, i.e. people living alone, recorded the greatest increase between those years and was the most common household type (EU-28 average of 33.4% in 2015). The same publication clearly showed how living alone varies across different countries, including our countries of interest, namely Poland and Finland.

Iacovou and Skew (2011) present several indicators of the household structure in the enlarged EU. They marked Finland in the Nordic cluster of countries of the EU15 with attributes such as, on average, a small household, early residential independence of young people and extended residential independence of the elderly. Poland, on the other hand, is classified among the new member states along the Hajnal line, a line that runs from St. Petersburg (Russia) to Trieste (Italy), which historically was characterized by an early marriage and multigenerational households. They also conclude that Poland belongs to the four Eastern European countries that stand out from the rest of Europe by having the largest households, an absence of separate living among young people, extended multigenerational co-residence and relative scarcity of lone-parent families.

Also, a current paper by Habartova (2018) presents a cross-country analysis of recent household trends. Based on the 2011 census, Habartova presents the average size of households (Poland having the second highest and Finland the lowest value in Europe) and analyses particular types of households in more detail. According to cluster analysis, the household structure in Poland is similar

to the traditional structure (i.e. fewer lone parents, large family size, etc.) observed in Southern Europe (e.g. Portugal, Spain, Italy), while Finland among other Nordic countries (plus France and the Netherlands) presents, inter alia, a high intensity of new forms of living arrangements and a great number of people living alone.

Changing trends in living arrangements of men and women from the late 80s in Europe were analysed by Fokkema & Liefbroer (2008). They refer to the Second Demographic Transition developed by Lesthaeghe and Van de Kaa in the 80s, as an explanation for the weakening of the institution of the family through the strengthening economic independence of people and the rise of self-development ideologies. They summarize their findings on people living alone as very age-specific trends concentrated on the elderly, taking diverse forms in different parts of Europe. They also point out that age patterns are different between men and women, with women being, in general, less likely to live alone at a younger age and more likely at an older age.

Nowak-Sapota (2007) analysed regional differences in household structures and shares of living alone in Poland up to 2002. As a reason for separate living, next to economic factors and marital status, she pointed out that living alone does not specifically stand for being unmarried or widowed, however it is highly correlated. It is important to note that the majority of single households (over 75%) were located in urban areas. Nowak-Sopota (2008) also forecasted that in 2030, corresponding to the year 2002, the number of people living alone in Poland will increase by 55% (meaning every third household in Poland being OPH) and the majority (61.6%) of people living alone will be aged 60 and over.

Forecasting the number of households and their composition according to Alho and Keilman (2010) is an essential action from the policy perspective, for example when planning social support expenditures or evaluating the demand for new dwellings or electricity consumption. They forecasted that among all household types the share of people living alone will steadily grow, while Keilman (2016) estimated that the growth of people living alone would even be as high as 40% for the period 2011–2041 for selected European countries.

Based on the review of the literature, two hypotheses were formulated:

*H1:* Strong differences in household structure can still be observed in Finland and Poland,

*H2:* The share of OPH among all households is far larger in Finland, yet the difference was diminishing.

### 3. Research methods and data

Descriptive analysis was carried out based on (1) shares of OPH among all household types and structural differences among all OPH, and (2) shares of people living alone in the total population.

To measure the similarities among household structures in Poland and Finland, the Renkonen similarity index was used (Renkonen, 1938; Bağ et al., 2015) in its basic form:

$$\omega_p = \sum_{i=1}^k \min(\omega_{1i}, \omega_{2i}), \quad 0 \leq \omega_p \leq 1,$$

where  $\omega_{1i} = n_i / \sum n_i$  is a relative (proportional) representation of characteristic  $n_i$  in the total population  $\sum n_i$ .

Age pyramids were used to capture the structure of the total population (see Fig.4). This simple tool presents graphically the population structure by age and sex (Holzer, 2003; Okólski, 2005).

Changing trends within the OPH structures by socio-economic characteristics were presented graphically as the difference of shares between the two study periods. The single-base increments showing changes in the shares were determined:

$$\Delta y_{t/0} = y_t - y_0,$$

where  $y_t$  is the variable value in the later observation period, and  $y_0$  the variable value in the initial period.

Linear trend models describing changes in the shares over time were also built:

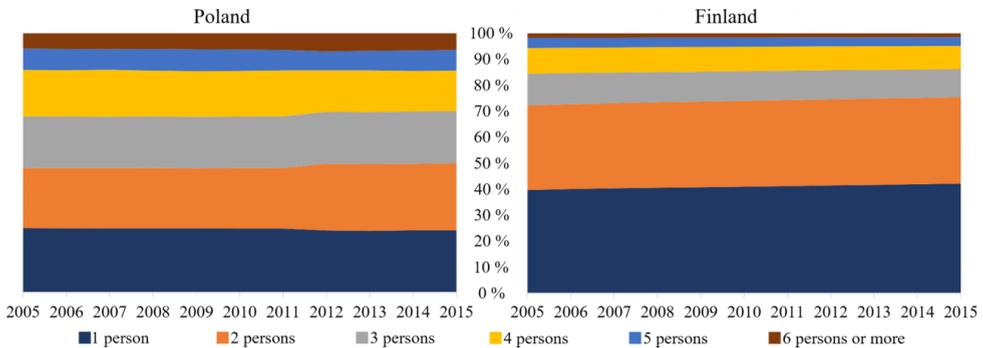
$$\hat{y}_t = a_1 t + a_0, \quad t = 1, 2, \dots, n.$$

In the above equation,  $\hat{y}_t$  is the dependent variable,  $t$  is the time variable, and  $a_1$  and  $a_0$  are coefficients. Based on the trend models for both Poland and Finland, the shares of OPH until 2030 were estimated (Bağ et al., 2015; Hozer, 1997; Weinbach & Grinnell, 2007).

Data on the composition of household structures in 2005 and 2015 in Poland and Finland were obtained from Eurostat data on private households. The vital and population statistics were obtained from Eurostat, Statistics Poland and Statistics Finland. Despite having two different concepts of households, Eurostat database is a reputable source of comparable data. However, this has influenced the choice of study period for the openly available and comparable data across different themes. Additionally, in 2005, both countries were already part of the European Union, thus the descriptive comparison occurs in a similar political setting.

#### 4. Presentation of the obtained results

The first analytical step was to answer the questions: What is the current household structure in Finland and Poland? How did it change in the last few years? And are Polish and Finnish structures similar or different? Based on official statistics, households were divided into six groups, depending on their size, from one-person households to six and more persons in a household. While comparing the structures, it is also worth considering the difference in the number of households in Finland and Poland: in 2015 there were 2.6 million households in Finland and 13.5 million households in Poland (also see Fig. 3).



**Figure 1.** Cumulative household structures in Poland and Finland from 2005 to 2015 by number of persons in each household

Source: Calculations based on Eurostat data: *Distribution of private households by household size [ilc\_lvph03]*.

Figure 1 shows clear differences in the household structure by the household size between the studied countries, and also presents the changing trends over time. In Poland, the household structure by size has been more even, with no dominant groups. In Finland, one- and two-person households together accounted for nearly 75% of all households in 2015, while Polish households of the same size accounted for less than 50%. One-person households (almost 25%) were the most numerous household type in Poland until 2011, and then two-person households became most numerous. In Poland, through the research period, three-person households accounted for about 20% of all households, which can be called a constant due to an increase of as little as 1%. A visible difference between Finland and Poland was also seen in households with four members, for in Poland this type of living was significantly more popular. However, their shares dropped within the ten-year period from 18% to 15.6%. In both countries, the least numerous household types were those of five and six or more persons.

Comparing two countries and their household structures required an assessment of the similarity between these two populations. The Renkonen similarity index presented in Table 1 indicates not only that Polish and Finnish household structures are not similar (with an index lower than 1), but also indicates that the differences increased with time (lower index value for 2015 than 2005).

**Table 1.** The Renkonen similarity index of the household structure in Poland and Finland according to size

Proportional shares by household size	1 pers.	2 pers.	3 pers.	4 pers.	5 pers.	6+ pers.	Renkonen similarity index
$\omega_{PL2005}$	0.25	0.23	0.20	0.18	0.08	0.06	0.76
$\omega_{FI2005}$	0.40	0.33	0.12	0.10	0.04	0.02	
min	0.25	0.23	0.12	0.10	0.04	0.02	
$\omega_{PL2015}$	0.24	0.26	0.20	0.16	0.08	0.06	0.74
$\omega_{FI2015}$	0.42	0.33	0.11	0.09	0.03	0.01	
min	0.24	0.26	0.11	0.09	0.03	0.01	

Source: Calculation based on Eurostat data: Distribution of private households by household size [ilc\_lvph03].

#### 4.1. Dynamics of OPH shares among all households

After analysing the household structures in both countries, the focus was placed on OPH, in order to answer the question of the shares of OPH and its changing trends (Table 2) in the studied period in Poland and Finland. Between 2005 and 2015, the share of OPH in Poland dropped steadily, while in Finland the share kept growing. The changes, although not strong (1% for Poland, and 2.5% for Finland), went in the opposite direction.

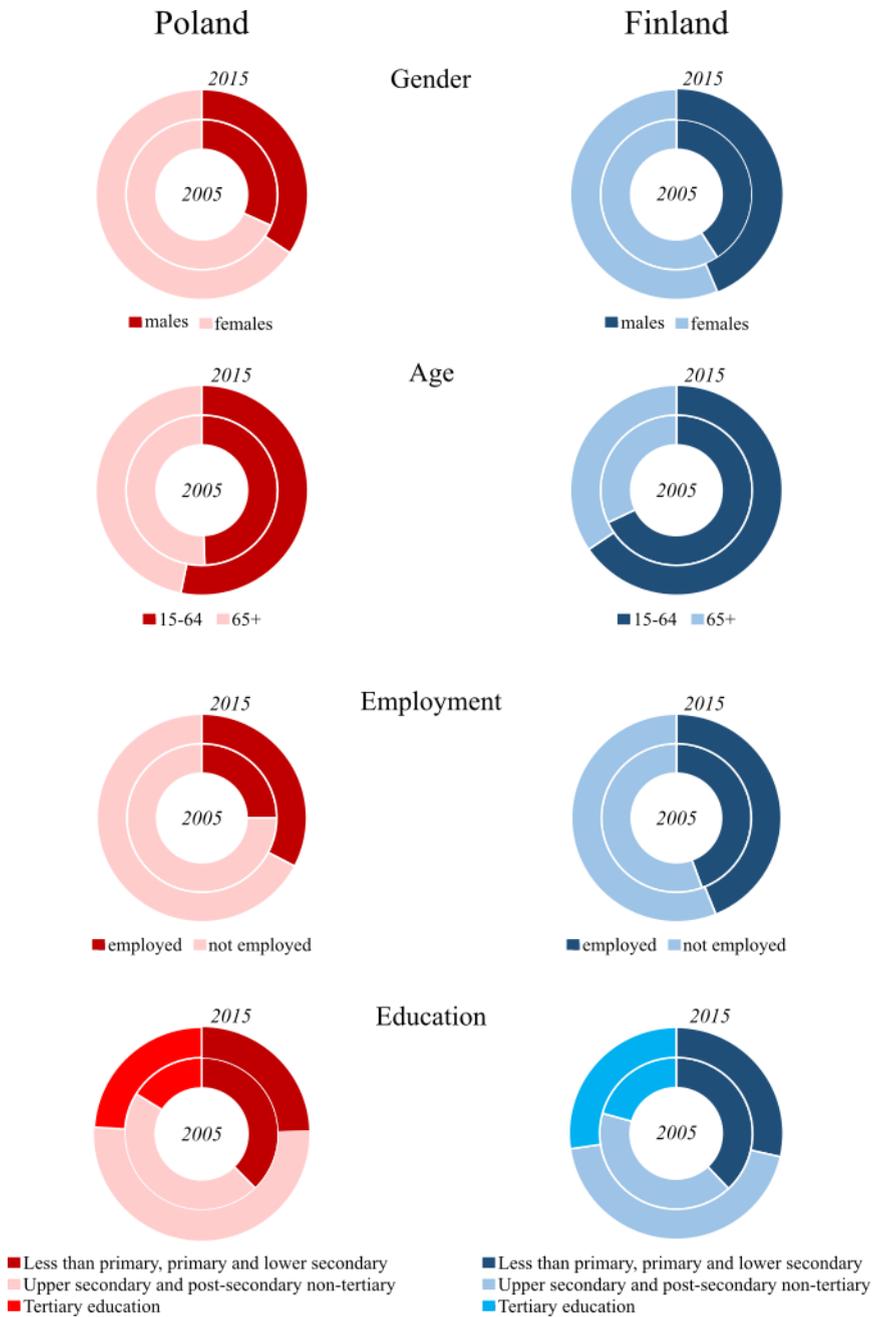
**Table 2.** Shares of one-person households out of all household types, percent

TIME	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
OPH <sub>PL</sub>	24.80	24.70	24.70	24.70	24.70	24.60	24.60	23.90	23.70	23.90	23.90
OPH <sub>FI</sub>	39.71	40.09	40.37	40.61	40.74	41.01	41.20	41.47	41.66	41.94	42.22

Source: Calculation based on Eurostat data: Distribution of private households by household size [ilc\_lvph03].

#### 4.2. Structure of one-person households by selected socio-economic variables

Further analysis divides one-person households by age, sex, employment and education (Figure 2). In both countries, women were the majority among people living alone, with greater gender differences in Poland. In both Poland and Finland, the share of men among OPH slightly increased from 2005 to 2015. Overall, in 2015, women in Poland constituted 66% and in Finland 56% of all OPH.



**Figure 2.** Comparison of structures of one-person households by selected socio-economic attributes

Source: Analysis based on Eurostat data on private household characteristics by type of household [hbs\_car\_t313].

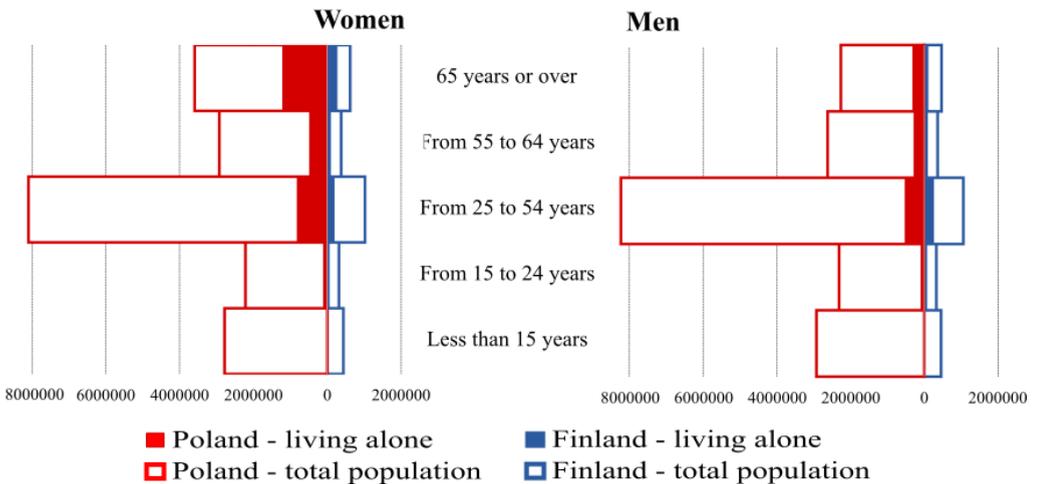
Dividing OPH into two age groups, corresponding roughly to the working age (15–64) and the retirement age (65+), shown that the majority of people living alone in both countries belong to the younger age group. In Finland, the share of people aged 15–64 among those living alone was visibly higher than in Poland; however, it slightly dropped from 2005 to 2015, while in Poland that share grew.

In both Poland and Finland the majority of OPH were not employed. However, Polish employed OPH grew between 2005 and 2015, while the structure in Finland stayed the same. This finding was confirmed by the fact that many people living alone are of retirement age; thus, they are outside the labour force (see Figure 3).

The analysis of the distribution of OPH by the level of education presented in both countries shows that most people living alone had an upper secondary and post-secondary (non-tertiary) education. Also, for both studied countries, between 2005 and 2015 a decrease in shares of OPH with lower education levels was noticeable, as was an increase in tertiary education. The general education level of OPH hence increased.

### 4.3. Population pyramids

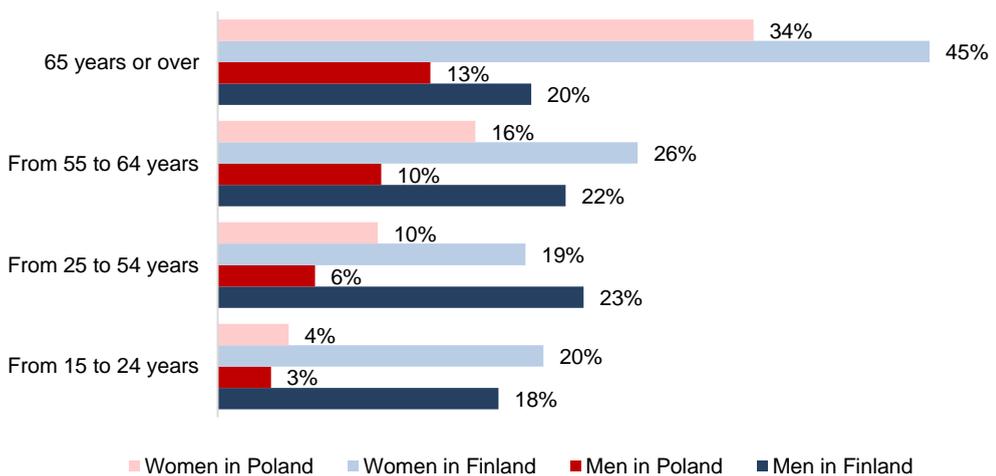
Figure 3 presents the shares of people living alone among the total population, i.e. the second research approach. Having the total population of each country categorized by sex and age groups, the number of people living alone with the same attributes was collected. Therefore, it first shows the age distribution of the population; second, it emphasizes the difference in size of the Polish and Finnish populations. Finally, it presents the number of each age group that lives alone.



**Figure 3.** Population pyramids of total and living alone population in 2015

Source: Analysis based on population statistics from Statistics Poland and Statistics Finland.

Due to the vast difference in size of the populations, the share of people living alone per sex and age is additionally presented in Figure 4. Shares of living alone in Finland across every age group above 15 are higher in Finland than in Poland. Similarly, in both countries, living alone is more common among women and the elderly population, while an interesting difference is the almost non-existent OPH of ages 15–24 in Poland compared to every fifth Finnish woman of that age, and almost as many young Finnish men lived alone in 2015. Another difference is the age group 25–54; in Poland, women have higher shares of separate living, while in Finland men have higher shares.



**Figure 4.** Share of the population living alone among total population by age and sex

Source: Analysis based on population statistics from Statistics Poland and Statistics Finland.

#### 4.4. Selected demographic indicators

The literature mostly links living arrangements, especially OPH, with the economic variables. However, living alone as a process is affected by several marital and vital life-events. Different shares of people living alone at different age indicate that several demographic indicators could also have an explanatory role. For example, the difference in mortality, the longer life expectancy of women over men could, at least partially, describe the high differences in shares of OPH in the oldest age group.

**Table 3.** Selected descriptive demographic indicators for Poland and Finland

year	Male life expectancy at age 0		Female life expectancy at age 0		Difference in life expectancy of male and females		Crude birth rate		Crude death rate	
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
PL	70.8	73.5	79.3	81.6	8.5	8.1	9.5	9.7	9.6	10.4
FI	75.6	78.7	82.5	84.4	6.9	5.7	11.0	10.1	9.1	9.6

year	Total fertility rate		Mean age of women at birth of first child		Mean age at first marriage woman/man		Crude marriage rate		Crude divorce rate	
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
PL	1.24	1.32	25.7	27.0	25.3/27.7	26.9/29.3	5.4	5	1.8	1.8
FI	1.80	1.65	27.9	28.8	29.4/31.5	31.0/33.4	5.6	4.5	2.6	2.5

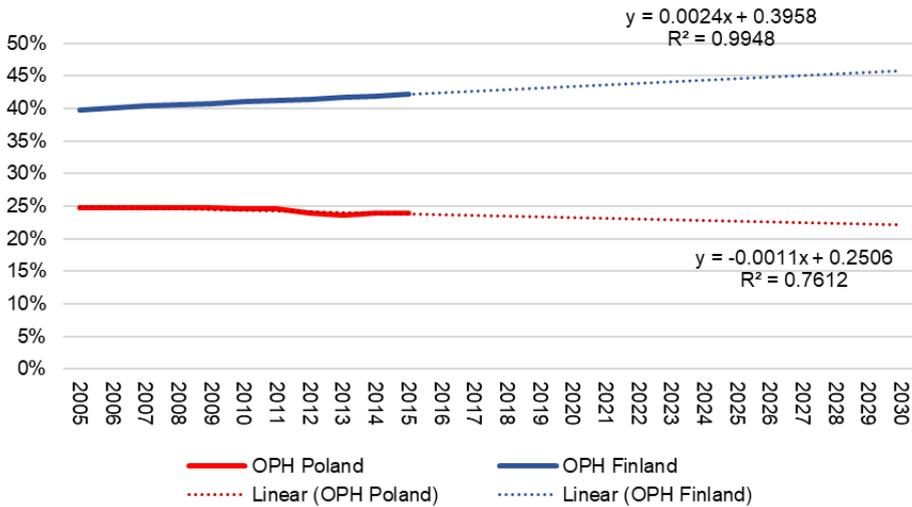
Source: Eurostat data on demographic indicators: [demo\_gind], [demo\_find], [demo\_nind], [demo\_mlexpec].

Furthermore, the lower mean age at the events of first child birth and first marriage in Poland also shows that young Poles start family life sooner, thus they are less likely to live alone. At the same time, in the studied period there was an increase in both the crude birth and crude death rates for Poland (i.e. occurring event per 1,000 of population), while the crude birth rate for Finland decreased.

The causality between demographic indicators and shares of people living alone is not targeted by the paper, one of the reasons being a short time series and lack of individual base data. The subject, however, is considered being of future interest to the authors.

#### 4.5. When will the shares of OPH be equal in both countries?

Inspired by the literature, the last point of the analysis was to estimate when the shares of OPH will have the same values in Poland and Finland if the changing trends from 2005 – 2015 stayed the same. For that purpose, the changing trends of the shares of OPH in both countries were presented and described with a linear trend model (Fig. 5). In Finland, from 2005 to 2015, the annual share of OPH among all household types increased by 0.002 percent, while in Poland the share decreased by 0.001 percent.



**Figure 5.** Linear trend estimation for shares of OPH in Finland and Poland.

Source: Analysis based on Eurostat data: Distribution of households by household size [ilc\_lvph03].

**Table 4.** Quality assessment of the model fit

	Regression Coefficient a1 (Error)	t-value for a1	Regression Coefficient a0 (Error)	t-value for a0	R-square	Standard Error
PL	-0.001 (0.000)	-5.356	0.251 (0.001)	175.542	0.761	0.002
FI	0.002 (0.000)	41.633	0.396 (0.000)	1028.010	0.995	0.001

Table 4 presents an assessment of fitting the linear trend model to the changing shares of OPH in household structures. Both regression coefficients proved to be statistically significant. R-square and standard error both indicate a good model fit. As the values of the slope (a1) are close to 0, yearly changes are minor. However, having different signs means that the values for Finland are increasing and the values for Poland are decreasing.

The estimate of the shares of OPH up to 2030 was conducted with the linear trend model. Assuming the trend changes remained the same over the 2005 – 2015 period, the share of OPH in Poland and Finland will never be equal. This means that, regardless of the ongoing development and despite aspiring to the level of its Western neighbouring countries, *Poland has not become Nordic* with respect to living solo. According to the forecast, in Finland in 2030, one-person households will account for 46% of all households, and in Poland they will account for 22%.

## 5. Discussion

The household structure is an important indicator of well-being in a society. As presented in Eurostat (2013), national household structures are strongly linked to the level of income, with a clear connection between joint living arrangements and lower incomes (Kuijsten, 1995, 1999). Labour market indicators, such as the rate of economically active people, or the employment rate, put Finland in a better position than Poland (Ramb, 2008; Misiak et al., 2014). In addition, the proportion of people at risk of poverty or social exclusion indicates that Finland is a country with higher living standards compared to Poland (Misiak-Kwit et al., 2016). However, as the employment rate of Finnish women in 2015 was 71.8 and its full-time equivalent was 66.8, for Finnish men the values were 73.9 and 71.5, and the employment of Polish women accounted for 60.9 with full-time employed 59.2, and Polish men were working at the rate of 74.7 and 75.0 (EC, 2016). These differences support the theory of the growing difference of only female OPH shares.

According to Czapiński and Panek (2009), 72% of households in Poland were finding it a little hard, hard or very hard to make ends meet. A visible share of Polish households (28%) claimed that their income was not sufficient to cover their basic needs; however, the share was decreasing over the last few years. To be able to cover the costs of necessities, 55% of households in Poland lived economically or very economically. When incomes were low, people's ability to meet their own needs was compromised: 86% of households had to choose what needs to satisfy and what not, while another 39% asked other family members for support and 36% took loans.

According to Eurostat, GDP per capita in 2015 in Finland was 9% above the EU-28 average (securing 9<sup>th</sup> position in the EU), while the Polish equivalent was 32% below the average. This, however, does not explain why Finland has an exceptionally high share of OPH among the EU countries. Therefore, next to income level, other factors influence household structures.

Another factor that could explain the high share of OPH is low fertility rates (TFR). However, both Poland and Finland currently struggle with low TFR, while the differences in OPH shares increase. In theory, changes in civil status, such as getting married, lowers the OPH shares, while getting a divorce increases separate living. The presented data on selected demographic indicators indeed supports the national differences. However, with the divorce rate being almost constant in Finland over the recent years, and growing in Poland, the shares of people living alone in Poland should be increasing and not decreasing, as it is shown here. Linking child birth with the change of OPH status can also partially explain the different trend direction for Poland and Finland, as the crude birth rate was increasing in Poland and decreasing in Finland.

The Finnish welfare state system provides a housing subsidy for students, among other things. Together, the financial independence and high social acceptance of separate living is considered by the authors to be the main reason for the great difference in shares of living alone among the population aged 15–24 in Poland and Finland.

Similarly, the elderly care system in Finland could be seen as more complex than in Poland. Not only can Finnish pensioners afford separate living, e.g. after

the death of a spouse, but in the case of higher care needs (with no need for hospitalization), a person can move into independent dwellings (and therefore still live separately) in a direct neighbourhood or into a hospital where daily care can be easily provided.

Finland is a bilingual country with both Finnish and Swedish as the national languages. There is, however, a lack of available data on language-based household structure. The population of Swedish-speaking Finns in 2015 constituted 5.3%, thus rather a minor share, however, together with a foreign language population of 6% in 2015, the language-based household composition is a potentially interesting subject, once the data is available.

The decreasing share of people living alone in Poland is in contradiction to the statement in the literature that living solo is a growing phenomenon across Europe. For example, Nowak-Sapota (2008) forecasted that in 2030 OPH will constitute one out of three households in the country. However, according to this paper, the shares of OPH are undergoing a decreasing trend and in 2030 they will account for only 22%. On the basis of this result it can be stated that the forecast made by Nowak-Sapota cannot be confirmed, but the important research question instead became: What are the reasons for this situation? The authors of this article recommend further in-depth research on the subject. Other research question also arise: Do people in Poland live in bigger households by choice or out of necessity? Are Poles and Finns satisfied with their accommodation? It should be noted that overall life satisfaction and average satisfaction with living accommodation tended to be highest in the Nordic countries. Moreover, those living in rural areas were clearly more satisfied with their accommodation than those living in cities (Misiak-Kwit et al., 2016).

While writing this paper, both Statistics Poland and Statistics Finland have published data on private household composition for 2017. Keeping in mind the conceptual difference, the data showed the share of OPH in Poland in 2017 was 23.5% (i.e. still decreasing) and in Finland 43.4% (i.e. still increasing). These values support the findings of this paper.

## **6. Summary and Conclusions**

The paper compared the household structure and its dynamics in Finland and Poland, with the focus on one-person households, in the form of a descriptive analysis. The first research hypothesis was confirmed, namely that there are strong differences in household structures in Finland and Poland. Small, one- or two-person households dominate the household structure in Finland to as high as 75%. In Poland, the household structure by size has been more even and households up to three persons together account for about 70%. The differences are considered to have both a cultural and an economic background. Living solo has reached a much higher social acceptance in Finland, while high economic development and the Nordic welfare state model is also supportive.

The second hypothesis was confirmed only partially. The share of OPH among all households has been significantly larger in Finland (42%) than in Poland (24%). However, the distance between these countries has not been diminishing. The OPH share in Finland is increasing, while in Poland it is decreasing. This has allowed for the calculation that, if the changing trends from

the studied period are maintained, the shares of OPH in these two countries will not equalize, but will instead grow further apart. An estimate was made that in 2030, 46% of Finnish households and 22% of Polish households will be one-person households.

Summing up, regardless of the progressive convergence that is diminishing difference gaps between different European regions and countries, the position of people living alone is still different between Poland and Finland. *Poland has not gone Nordic* in this aspect.

In the next paper, the authors plan to expand the comparative analysis to all European countries, empirically and spatially analysing changing trends in the shares of one-person households across Europe. Statistical analysis of casualty between demographic indicators as well as economic indicators is also planned in order to better understand why transnational differences occur.

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