# Caring obligations and transition to retirement among people aged 50-69 in Poland

Family situation and caregiving duties may increase the chances of retirement among people in older productive age groups, mostly among women, who take care of dependent family members or grandchildren more often than men. The purpose of the paper was the analysis of the determinants of retirement among Poles aged 50-69 taking into account their caring obligations. Data from the two waves of the Polish Generations and Gender Survey (GGS-PL) carried out in the years 2010-2011 and 2014-2015 were used. The obtained results show that regular care provided to an adult was negatively associated with the probability of retirement for men, while this relationship was positive for women, although not statistically significant. However, the co-residence with an older parent increased the likelihood of retirement for women which may be a proxy for providing care to a dependent adult. It should be highlighted that this association holds for economically inactive individuals. Moreover, caring for grandchildren increases the probability of retirement, notably for not employed women.

**Key words:** care for dependent adults, care for grandchildren, caregiving, Generations and Gender Survey (GGS-PL), retirement

Submitted: 9.7.2019 Accepted: 14.2.2020

DOI: 10.32088/0000\_14

#### Introduction

Ageing population in Poland, i.e., the growing number and share of older people in the population, will be accompanied by a decline in the total population and in that of those of working-age and by the ageing potential of labour resources (i.e., the growing share of people of an immobile age). These changes entail many socio-economic effects, including an increase in expenditure on various types of benefits for the elderly.<sup>2</sup> To counteract the negative consequences of an ageing population, it is proposed, inter alia, to increase the employment of people less visible on the labour market (young people, women and persons of pre-retirement age), as well as to increase the effective (average) retirement age. In this context, one of the key issues is to mobilise people in the older working age groups and to keep them in the labour market. One way to achieve this is to improve working conditions, job quality and satisfaction, because study results reveal a relationship between job satisfaction and productivity, absenteeism and leaving employment.3 Family and caring obligations can also be a factor "pushing out" those at near-retirement age from the labour market. The intensive care provided for dependent elderly people is correlated with a deterioration in the carer's health condition and an early exit from the labour market, especially among people with lower qualifications. 4 Similarly, caring for grandchildren can contribute to early retirement, especially as regards women.5

It is therefore interesting to examine what factors affect the retirement decision in Poland. In particular, I would like to check to what extent (if at all) the personal demographic and social characteristics of individuals, their family situation and caregiving obligations are associated with the decision to exit the labour market. The main objective of this paper is therefore to analyse the determinants of retirement in people aged 50-69 in Poland. The paper consists of five parts. The next part presents a review of the literature regarding the determinants of retirement, as well as the objectives of this paper and the research questions posed. The third part presents data source and analysis methods. The subsequent part describes the results of the analyses. The paper ends with a summary.

<sup>1</sup> Główny Urząd Statystyczny [Statistics Poland], Prognoza ludnościowa 2014-2050, Warszawa 2014.

<sup>2</sup> European Commission, The 2018 Ageing Report. Economic and budgetary projections for the 28 EU Member States (2016-2070), "European Economy Institutional Paper" 2018, No. 079.

<sup>3</sup> S. Gazioglu, A. Tansel, Job satisfaction in Britain: individual and job related factors, "Applied Economics" 2006, No. 38 (10).

<sup>4</sup> D. King, L. Pickard, When is a carer's employment at risk? Longitudinal analysis of unpaid care and employment in midlife in England, "Health & Social Care in the Community" 2013, No. 21 (3).

<sup>5</sup> R.L. Lumsdaine, S.J.C. Vermeer, Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren, "Demography" 2015, No. 52 (2).

## Retirement determinants – a subject literature review, objectives of the paper and research questions

Cessation of employment is one of the most important events in an adult's life that affects the subjective quality of life. The decision to retire depends on many factors both at the macro and micro levels. The retirement process differs significantly between individuals, depending on their individual work history, health condition and attitudes towards an early exit from, or staying longer in, the labour market.

At the macro level, the following constitute strong determinants of individual decisions regarding (early) retirement: the national pension system, the statutory retirement age and the possibility of early retirement. In addition, the labour market situation is a key factor in "pushing out" people at near-retirement age from or keeping them on the labour market. Cultural realities regarding the professional work of people in older working-age groups and their early exit from the labour market are also significant factors that determine any intentions and plans to leave employment. It is worth quoting here Justyna Wiktorowicz's results, who has shown that over 50% of employed persons aged 45-69 in Poland plan to retire as soon as possible, which may reflect the economic and cultural determinants of decisions on (early) exit from the labour market.

Personal characteristics are also major determinants of retirement decisions and of the final moment of their implementation. Gender is one of the key factors: women retire earlier than men," which on the one hand may be associated with the difference in the statutory retirement ages between the genders, and on the other hand with the greater involvement of women in caring for the elderly or grandchildren. Ill health and long-term health problems also contribute to an earlier exit from the labour market.<sup>12</sup>

<sup>6</sup> M. Wang, K. Henkens, H. van Solinge, A review of theoretical and empirical advancements, "The American Psychologist" 2011, No. 66 (3).

<sup>7</sup> O. Gough, Factors that influence voluntary and involuntary retirement, "Pensions: An International Journal" 2002, No. 8 (3).

<sup>8</sup> Ibid. More about the determinants of retirement decisions can be found, e.g., in: G. Kula, Decyzja o przejściu na emeryturę – przegląd literatury, "Ekonomista" 2007, No. 2 and A. Ruzik-Sierdzińska, An Attempt to Identify Factors Influencing Retirement Decisions in Poland, "Folia Oeconomica. Acta Universitatis Lodziensis" 2018, No. 4 (336).

<sup>9</sup> M. Unt, E. Saar, Determinants of Retirement and Late Careers in Estonia [in:] Delaying Retirement, ed. D. Hofäcker, M. Hess, S. König, London 2016.

<sup>10</sup> J. Wiktorowicz, Wydłużenie aktywności zawodowej czy przejście na emeryturę? Studium mikroekonomiczne, "Studia Demograficzne" 2014, No. 2 (166).

<sup>11</sup> Ibid; A. Chłoń-Domińczak, Retirement Behaviour in Poland and the Potential Impact of Pension System Changes, ENEPRI Research Report No. 61, 2009.

<sup>12</sup> S.M. Alavinia, A. Burdorf, Unemployment and retirement and ill-health: A cross-sectional analysis across European countries, "International Archives of Occupational and Environmental Health" 2008, No. 82 (1); M. Damman, K. Henkens, M. Kalmijn, Women's Retirement Intentions and Behavior: The Role of Childbearing and Marital Histories, "European Journal of Population" 2015, No. 31 (4); M. Fleischmann, F. Koster, From Early Exit to Postpon-

For example, the results of analyses based on SHARE<sup>13</sup> data have shown that over 37% of retired people aged 50-64 assessed their health condition as poor compared to 18% of employed people of the same age.<sup>14</sup> In addition, half of the retirees have experienced long-term health problems compared to 36% of employed persons aged 50-64. Similarly, people enjoying excellent health were more likely to be employed after reaching the statutory retirement age.<sup>15</sup> Furthermore, employed persons aged 45-69 who have rated their health condition more favourably were less likely to retire as soon as possible.<sup>16</sup>

Education is another factor differentiating the probability of retiring. Better educated people plan to exit the labour market and they actually stop working later than people with lower educational attainment (except for women with basic vocational education).<sup>17</sup> Analyses carried out by Agnieszka Chłoń-Domińczak for Poland have shown that people with lower educational attainment are more likely to exit early the labour market than those with a better education.<sup>18</sup> Also, according to J. Wiktorowicz, employed persons with tertiary-level education and aged 45-69 less frequently planned to retire as soon as possible than did less educated people.<sup>19</sup> And according to analyses carried out by Martie Gillen and Claudia J. Heath,<sup>20</sup> tertiary education reduced the probability of early retirement among married women.

The financial situation in the period preceding retirement also significantly affects the decision to stop working. The results of studies carried out by Marleen Damman, Kène Henkens and Matthijs Kalmijn show that the less favourable financial situation of women at pre-retirement age has reduced the likelihood of an early exit from the labour market. However, the results of other analyses have shown that people assessing the financial situation of a household as negative were more likely to continue working after reaching the retirement age. Similarly, results of analyses for Poland indicate that higher earnings in the pre-retirement period are a strong incentive for extended professional activity.

ing Pension: How the Dutch Polder Model Shapes Retirement [in:] Delaying Retirement, op. cit.; M. Kallestrup-Lamb, A.B. Kock., J.T. Kristensen, Lassoing the Determinants of Retirement, "Econometric Reviews" 2016, No. 35 (8-10); J. Liwiński, A. Giza-Poleszczuk et al., Dezaktywizacja osób w wieku okołoemerytalnym. Raport z badań, Warszawa 2008.

<sup>13</sup> Survey of Health, Ageing and Retirement in Europe (SHARE).

<sup>14</sup> S.M. Alavinia, A. Burdorf, op. cit.

<sup>15</sup> A. de Wind, S. van der Pas et al., A life course perspective on working beyond retirement-results from a longitudinal study in the Netherlands, "BMC Public Health" 2016, No. 16 (499).

<sup>16</sup> J. Wiktorowicz, op. cit.

<sup>17</sup> S.M. Alavinia, A. Burdorf, op. cit.; M. Unt, E. Saar, op. cit.

<sup>18</sup> A. Chłoń-Domińczak, op. cit.

<sup>19</sup> J. Wiktorowicz, op. cit.

<sup>20</sup> M. Gillen, C.J. Heath, Women's Timing of Receipt of Social Security Retirement Benefits, "Journal of Family and Economic Issues" 2014, No. 35 (3).

<sup>21</sup> M. Damman, K. Henkens, M. Kalmijn, op. cit.

<sup>22</sup> A. de Wind, S. van der Pas et al., op. cit.

<sup>23</sup> A. Chłoń-Domińczak, op. cit.

The family situation is another factor differentiating the timing of retirement, especially for women. Single women were more likely to continue working, while having a partner was associated with early retirement and unemployment.<sup>24</sup> This may be due to the fact that married women often retire at a similar time as their spouses, who are, on average, several years older.<sup>25</sup> It is worth noting that no such relationship has been noted among men. The results of the M. Gillen and C.J. Heath analysis<sup>26</sup> have shown that a higher percentage of married women than single women planned and ultimately opted for early retirement. What is more, divorced women intended to retire later than married women and realised this intention later, while remarried women did not differ in this respect from women remaining in their first marriage. M. Damman, K. Henkens and M. Kalmijn have also shown that women who had given birth to a child at a later age and still lived in the same household with their children intended to retire late and did actually retire relatively late.<sup>27</sup>

The results of the analyses show that people aged 50-69, mainly women, are largely involved in caring for other family members – dependent elderly persons or grandchildren. The results of the analyses carried out for Poland also confirm that women of this age take care of other people more often than do men. Support for third persons can also be a factor limiting labour market participation and reducing the number of hours worked, and in some cases may even lead to plans for and final decisions on (early) retirement. This can be associated with an overburdening of care-giving duties and professional work, which leads to a deterioration in the carers' health condition. All the more so since many analyses document the negative impact of caring for the elderly on the health condition and life satisfaction of carers. The results of analyses carried out by Madelin Gomez-Leon, Maria Evandrou *et al.* have also shown that the personal care

<sup>24</sup> S.M. Alavinia, A. Burdorf, op. cit.; M. Damman, K. Henkens, M. Kalmijn, op. cit.

<sup>25</sup> L. Hospido, G. Zamarro, *Retirement patterns of couples in Europe*, "IZA Journal of European Labor Studies" 2014, No. 3 (1).

<sup>26</sup> M. Gillen, C.J. Heath, op. cit.

<sup>27</sup> M. Damman, K. Henkens, M. Kalmijn, op. cit.

<sup>28</sup> N. Gerstel, S.K. Gallagher, Men's caregiving: gender and the contingent character of care, "Gender & Society" 2001, No. 15 (2); K. Haberkern, T. Schmid, M. Szydlik, Gender differences in intergenerational care in European welfare states, "Ageing & Society" 2015, No. 35 (2).

<sup>29</sup> A. Abramowska-Kmon, Determinanty sprawowania opieki nad starszymi rodzicami w Polsce w świetle danych badania GGS-PL, "Studia Demograficzne" 2015, No. 2 (168); A. Abramowska-Kmon, I.E. Kotowska, Usługi opiekuńcze dla osób starszych [in:] Rynek pracy i wykluczenie społeczne w kontekście percepcji Polaków – Diagnoza Społeczna 2009, ed. I.E. Kotowska, Warszawa 2009; P. Czekanowski, Family carers of elderly people [in:] Family caregiving for the elderly in Poland, ed. B. Bień, Białystok 2006.

<sup>30</sup> D. King, L. Pickard, op. cit.; J. Liwiński, A. Giza-Poleszczuk et al., op. cit.

<sup>31</sup> R. Schulz, P.R. Sherwood, Physical and mental health effects of family caregiving, "Journal of Social Work Education" 2008, No. 44 (3).

<sup>32</sup> N.F. Marks, J.D. Lambert, H. Choi, Transitions to caregiving, gender, and psychological well-being: A prospective U.S. national study, "Journal of Marriage and Family" 2002, No. 64 (3); R.J.V. Montgomery, J.M. Rowe, K. Kosloski, Family Caregiving [in:] Handbook of gerontology: evidence-based approaches to theory, practice, and policy, ed. J.A. Blackburn, C.N. Dulmus, New Jersey 2007; R. Schulz, P.R. Sherwood, op. cit.

of an elderly person on a broader scale was associated with earlier exit from the labour market for both women and men.<sup>33</sup>

Caring for grandchildren can also result in early exit from the labour market, especially in countries where the institutional care of young children does not meet demand.<sup>34</sup> The results of analyses for Poland published by J. Wiktorowicz have shown that employed people aged 45-69 who were not burdened with childcare, were most likely to extend their professional activity.35 It should be also noted that married women, when there is a need to take care of their grandchildren, limit the number of hours worked weekly, while those who live with their grandchildren in one household are less likely to remain in employment than others.<sup>36</sup> It is worth presenting here the results of the analysis of opinions expressed by respondents aged 50-69 participating in the GGS-PL survey on the responsibility of adult children to care for their elderly parents. The vast majority of the analysed population (84%) agree or strongly agree with the view that children should be responsible for taking care of parents when they are in need. However, interestingly, almost half of the respondents aged 50-69 disagreed or strongly disagreed with the opinion that children should adjust their professional life to the needs of their parents, which suggests a preference for combining care and professional responsibilities rather than giving up on work. It should be also emphasised that one in two respondents aged 50-69 disagreed with the opinion that when parents are in need, their daughters should take care of them more than their sons. In turn, the vast majority of respondents aged 50-69 (68%) agreed or strongly agreed with the view that grandparents should take care of their grandchildren if their parents are not able to do so.

The aim of this paper is to identify factors differentiating the probability of retiring among people aged 50-69 in Poland, taking into account their personal socio-demographic and economic characteristics as well as family and caring obligations. The paper focuses on the relationship between caring for other people and retirement. In view of the above theoretical considerations, I hope to gain answers to the following research questions:

- 1. How do the personal characteristics of respondents (gender, age, educational attainment, marital status, labour market status, place of residence, health condition, household income situation) determine the probability of retiring?
- 2. Do the direction and intensity of the relationship between the explanatory variables and the explained variable of the model differ for women and men?
- 3. Does (and if yes, how) caring for dependent adults affect the probability of the transition to retirement?
- 4. Does caring for grandchildren contribute to the retirement transition?

<sup>33</sup> M. Gomez-Leon, M. Evandrou et al., The dynamics of social care and employment in mid-life, "Ageing & Society" 2017, No. 39 (2).

<sup>34</sup> R.L. Lumsdaine, S.J.C. Vermeer, Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren, "Demography" 2015, No. 52 (2).

<sup>35</sup> J. Wiktorowicz, op. cit.

<sup>36</sup> C. Ho, Grandchild care, intergenerational transfers, and grandparents' labor supply, "Review of Economics of the Household" 2015, No. 13 (2).

#### Data and analytical approach

#### Data and variables

These analyses have been carried out with the use of data from the first and second wave of the Generations and Gender Survey (GGS-PL), implemented by the Institute of Statistics and Demography SGH in cooperation with the Statistics Poland [Główny Urzad Satystyczny]. The first wave of the survey was carried out at the turn of 2010 and 2011, while the second in 2014. This survey was conducted under the international Generations and Gender Programme (GGP).<sup>37</sup> It was aimed to obtain information on demographic processes in Poland allowing one to understand the causal mechanisms concerning, among others, the formation of families, development and dissolution, intergenerational relations or changes in the social roles of women and men.<sup>38</sup> In addition to the family, and professional, educational and migration biographies of respondents aged 18-84, the study has also collected information about their financial situation and social contacts, as well as about their standards, values and intentions. The original panel database contained information on nearly 12.3 thousand respondents aged 21-84. For the purposes of the present analyses, the sample has been limited to persons aged 50-69 in the first wave, who were not retired and for whom information on their labour market status was also collected in the second wave. The final analytical database contained information on over 2,200 persons.

#### Methods of analysis

To answer the research questions, *i.e.*, to define the determinants of retirement decisions taken between the first and second wave of the survey, logistic regression models have been estimated. The dependent variable was a binary variable created on the basis of information on the labour market status in the first and second wave of the survey, where 0 – means continuation of professional activity (employment or remaining unemployed) or remaining economically inactive (without acquiring old-age pension rights) in both waves of the survey, while 1 – means transition to retirement between the first and second wave of the survey (regardless of the labour market status in the first wave, except for persons already retired).<sup>39</sup> The models were estimated for people aged 50-69 who were not retired at the time of the first interview, separately for those employed and not employed

<sup>37</sup> More information on the website: www.ggp-i.org. Access to the international, harmonised GGS database for registered users is free.

<sup>38</sup> I.E. Kotowska, J. Jóźwiak, Panelowe badanie przemian relacji między pokoleniami, w rodzinie oraz między kobietami i mężczyznami: Generacje, Rodziny i Płeć Kulturowa – GGS-PL, "Studia Demograficzne" 2011, No. 1 (159); I.E. Kotowska, Panelowe badanie przemian relacji między pokoleniami, w rodzinie oraz między kobietami i mężczyznami jako podstawa diagnozowania zmian demograficznych w Polsce, "Studia Demograficzne" 2017, No. 2 (172).

<sup>39</sup> Retirement should be understood as the withdrawal from the labour market of professionally active people (employed and unemployed) and the acquisition of old-age pension rights by the economically inactive people.

(unemployed and economically inactive) at the time of the first wave of the survey. Such a division allowed one to check whether the same factors differentiated the probability of retiring in a similar way. In addition, all models were estimated separately for both genders to check the direction and intensity of the relationship between the explanatory variables and the variable explained in the models.

The logistic regression model is one of many models that can be applied to analyses for a binary dependent variable. It may be written as follows<sup>40</sup>:

$$P(y_i = 1) = \frac{\exp(\beta_0 + x\beta)}{1 + \exp(\beta_0 + x\beta)}$$

where:

$$\mathbf{x}\mathbf{\beta} = \beta_1 \mathbf{x}_1 + \beta_2 \mathbf{x}_2 + \dots + \beta_k \mathbf{x}_k.$$
  
  $\beta_0$  – constant in the model

In all models, independent variables were the basic socio-demographic variables of individuals (gender, age, place of residence, self-assessment of health condition, marital status, <sup>41</sup> co-residence with a child, co-residence with a parent, having grand-children) and the variable describing the economic situation (subjective assessment of the financial situation of the household <sup>42</sup>), educational attainment and binary variables describing the regular care of an adult or grandchild during the first wave of the survey. In addition, a variable describing the labour market status (employed, unemployed, economically inactive), which was omitted in models estimated separately for employed and not employed people, was included in models for the entire population aged 50-69.

Almost all independent variables (with the exception of age and subjective assessment of the household's financial situation) were included in the model as qualitative variables recoded into binary variables, respectively. In this way, it was possible to distinguish factors differentiating the probability of retirement among people aged 50-69. In all estimated models, the reference categories of qualitative variables were as follows: gender (ref. man), educational attainment (ref. lower-secondary and lower), marital status (ref. without a partner), co-residence with a child (ref. no), co-residence with a parent (ref. no), having grandchildren (ref. no), labour market status (ref. employed), self-assessment of health condition (ref. good health), place of residence (ref. rural area), regular care of an adult (ref. no), regular care of grandchildren (ref. no).

<sup>40</sup> See, for example, J.M. Wooldridge, Introductory econometrics: a modern approach, Mason 2006.

<sup>41</sup> This variable covered the following two categories: persons in partnership (formal or not) and persons without a partner.

<sup>42</sup> In the present analyses, a variable describing the subjective assessment of the household's financial situation was used to assess the economic situation of a household: "How do you assess the current financial situation of the household, also taking into account the income contributed by other household members to the common budget? Is it easy for your household to 'make ends meet'?" with possible answers: 1. very difficult, 2. difficult, 3. rather difficult, 4. rather easy, 5. easy, 6. very easy. To sum up, the higher the value of this variable, the better the household's financial situation.

Table 1 presents descriptive statistics for the explanatory variables and those explained in the models whose specification has been described above. Women constituted 55% of the analysed group of people aged 50-69 who were not retired during the first wave of the GGS-PL survey. People aged 50-54 (44%) were in majority, and people aged 65-69 (4%) – in minority. Three fourth of the analysed sample were people with secondary or post-secondary education, 14% had third-level education, while almost every fifth person had lower secondary or lower education. More than 70% were people in partnerships (formal or not), however, it is worth noting that these shares differed significantly for women and men: almost 2/3 of women and 80% of men belonged to this marital status category. Almost half of the surveyed population lived with their children, women slightly more often than men (51% compared to 46%), while every tenth person lived with an older parent. Grandparents constituted 57% of the analysed group, women more often than men (62% compared to 50%). In turn, 47% of the examined sample assessed their health condition as good or very good, less frequently men (50%) than women (58%). As far as regular care of an adult is concerned, this situation concerned every tenth person, women were slightly more often involved in such activity than men (13% vs. 8%). Similarly, 15% respondents declared regular care of their grandchildren, women more often than men (19% vs. 11%). Persons in employment in the first wave of the survey constituted almost 2/3 of the analysed population, unemployed – 11%, and economically inactive - 26%. The surveyed group was composed in 61% of city residents. As for the subjective assessment of the financial situation of the household, the vast majority (63%) of the analysed population admitted that they had problems with "making ends meet". In turn, more than 28% of respondents aged 50-69, 31% women and 24% men, retired between the waves of the survey.

**Table 1.** Descriptive statistics for independent variables in models

Feature	Total	Men	Women
	share	share	share
Gender			
men	0.45	NA	NA
women	0.55	NA	NA
Age group			
50-54 years	0.44	0.39	0.47
55-59 years	0.38	0.39	0.38
60-64 years	0.14	0.19	0.10
65-69 years	0.04	0.02	0.06
Educational attainment			
lower-secondary and lower	0.19	0.15	0.22
secondary and post-secondary	0.67	0.71	0.63
third-level	0.14	0.14	0.14

Feature	Total	Men	Women
	share	share	share
Marital status			
single	0.29	0.20	0.36
in partnership (married, in cohabitation)	0.71	0.80	0.64
Co-residence with a child			
yes	0.49	0.46	0.51
no	0.51	0.54	0.49
Co-residence with a parent			
yes	0.12	0.14	0.10
no	0.88	0.86	0.90
Has grandchildren			
no	0.43	0.50	0.38
yes	0.57	0.50	0.62
Self-assessed health condition			
good and very good	0.46	0.50	0.42
poor, very poor and fair	0.55	0.50	0.58
Regular care of an adult			
no	0.89	0.92	0.87
yes	0.11	0.08	0.13
Regular care of grandchildren			
no	0.85	0.90	0.81
yes	0.15	0.11	0.19
Labour market status in the first wave			
employed	0.64	0.75	0.54
unemployed	0.11	0.12	0.10
economically inactive	0.26	0.14	0.35
Place of residence			
rural area	0.39	0.41	0.37
urban area	0.61	0.59	0.63
Household income – "making ends meet"			
very difficult	0.17	0.17	0.17
difficult	0.19	0.17	0.20
rather difficult	0.28	0.27	0.28
rather easy	0.24	0.27	0.21
easy	0.11	0.11	0.10
very easy	0.02	0.03	0.02
Transition to retirement between waves			
no	0.72	0.76	0.69
yes	0.28	0.24	0.31

Note: shares may not add up to 100 due to rounding up.

Source: own study based on the second wave of the Generations and Gender Survey (GGS-PL) (non-weighted data)

#### Results

This section presents the results of the estimated models for all people aged 50-69 who were not retired in the first wave of the survey (regardless of their labour market status), and separately for people of the same age who were employed and not employed (unemployed and economically inactive). Generally, the obtained results are consistent with those described in the literature review.

#### Transition to retirement among people aged 50-69

The results of estimating the parameters of the logistic regression model for the probability of retirement among people aged 50-69 who were not retired at the time of the first interview (model 1) are presented in Table 2. In the model for both genders, the combined estimates of parameters with variables: gender, age, marital status, co-residence with a parent, regular care of grandchildren and the labour market status are statistically significant at the significance level of at most 0.1. For the remaining variables, statistically insignificant estimates have been obtained. As could be expected, the probability of retirement increases with age (by 32% with each subsequent year of life). Women are more likely to retire than men by 67%, which may be related to their early withdrawal from the labour market due to the statutory retirement age. The probability of retirement was higher by 56% for persons in a marriage/partnership than those without a partner. Co-residence with a parent increased the risk of retirement by almost 40%. Transition to retirement before the next wave of the survey was by 32% more probable for persons taking regular care of grandchildren. In contrast, economically inactive people aged 50 to 69 were more than twice as likely to retire as employed people.

Estimates for age, educational attainment, regular adult care and labour market status were statistically significant in the model estimated only for men, while in the model for women — estimates for age, marital status, co-residence with a child, co-residence with a parent, regular adult care and labour market status were statistically significant (at a significance level of at most 0.1). In both models estimated separately for women and men, the probability of retirement before the second wave of the survey increased with age. Men with higher educational attainment (secondary and post-secondary and third-level education) were characterised by significantly lower probability of retirement than those with at most lower secondary education — the probability was respectively by almost 40% and over 55% lower than for the least educated. On the other hand, men who have exercised regular care of an adult were by 65% less likely to retire than those not involved in adult care. As far as the labour market status is concerned, the probability of retirement of men unemployed during the first interview was lower by almost 60%, and for economically inactive men — almost 6 times higher than for employed men.

Women in a partnership (formal or informal) were more than half as likely to retire before the second wave of the survey than single women. This may be related to greater stability of the income situation of people in partnerships. Co-residence with a child

Table 2. The results of the logistic regression model for the probability of transition to retirement during the second wave of the survey for persons not retired during the first wave of the survey (Model 1)

		Σ	Model 1 Total	<u>'</u>			Σ	Model 1 Men	Ç			Σ	Model 1 Women	men	
		Ξ	001 T. 100	Į,				70C1 T. 141C	<u> </u>				T. 440		
Variable	coeffi- cient	OR	stand. error	signifi- cance		coeffi- cient	OR	stand. error	signifi- cance		coeffi- cient	OR	stand. error	signifi- cance	
Gender (ref. men)															
women	0.510	1.666	0.130	0.000	* *										
Age	0.277	1.319	0.019	0.000	* * *	0.351	1.420	0.033	0.000	* * *	0.247	1.280	0.023	0.000	* * *
Educational attainment (ref. lower-secondary and lower)	inment (ref	. lower-sec	ondary and	d lower)											
secondary and post-secondary	0.059	1.061	0.161	0.713		-0.498	0.608	0.275	0.070	×	0.194	1.214	0.199	0.329	
tertiary-level	-0.080	0.924	0.244	0.744		-0.835	0.434	0.407	0.040	* *	0.089	1.093	0.304	0.770	
Marital status (ref. with no partner)	of. with no p	artner)													
in partnership	0.446	1.562	0.143	0.002	* *	0.195	1.215	0.285	0.494		0.426	1.530	0.164	0.009	* * *
Lives with a child (ref. no)	d (ref. no)														
yes	-0.178	0.837	0.115	0.122		-0.025	0.975	0.211	0.904		-0.244	0.784	0.146	0.094	*
Lives with a parent (ref. no)	int (ref. no)														
yes	0.330	1.390	0.166	0.048	*	0.364	1.439	0.296	0.218		0.410	1.507	0.221	0.063	*
Has grandchildren (ref. no)	en (ref. no)														
yes	0.107	1.113	0.127	0.399		0.156	1.169	0.217	0.474		0.050	1.051	0.166	0.766	

Self-assessed health condition (ref. good health)	alth condi	tion (ref. go	ood health)												
poor heath	0.013	1.013	0.119	0.915		-0.085	0.918	0.202	0.674		-0.004	966.0	0.151	0.981	
Income in household	-0.077	0.926	0.050	0.125		-0.111	0.895	0.081	0.172		-0.044	0.957	0.065	0.498	
Regular care of an adult (ref. no)	n adult (re	f. no)													
yes	0.049	1.050	0.173	0.776		-1.052	0.349	0.449	0.019	*	0.288	1.334	0.192	0.134	
Regular care of grandchildren (ref. no)	randchildr	en (ref. no)													
yes	0.279	1.322	0.157	0.076	*	0.280	1.322	0.322	0.385		0.280	1.323	0.187	0.134	
Place of residence (ref. rural area)	s <b>e</b> (ref. rura	I area)													
urban area	-0.046	0.955	0.123	0.707		0.175	1.191	0.210	0.404		-0.084	0.920	0.158	0.595	
Labour market status (ref. employed)	tatus (ref. e	(pəkoldu													
unemployed	-0.208	0.812	0.195	0.288		-0.865	0.421	0.359	0.016	*	0.065	1.067	0.245	0.792	
economically inactive	0.703	2.021	0.143	0.000	* * *	1.761	5.820	0.285	0.000	* * *	0.380	1.462	0.172	0.027	* *
Fixed	-17.27	0.000	1.129	0.000	* * *	-20.99	0.000	1.873	0.000	* * *	-15.10	0.000	1.339	0.000	* * *
z	2209					686					1220				
Pseudo R2	0.238					0.358					0.188				

1 OR means odds ratio, i.e., the ratio of the odds of an event occurring in one group to the odds of it occurring in selected reference groups. Significance of parameters estimation \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: own calculations based on the Generations and Gender Survey (GGS-PL) (non-weighted data)

reduced the risk of transition to retirement by 20%, while residence with a parent in the same household increased this risk by over 50%. Similarly, adult care meant a greater probability of retirement, although this result is statically insignificant<sup>43</sup>. Therefore it can be concluded that co-residence with an older parent in practice means taking care of the parent<sup>44</sup>, which indirectly may contribute to increasing the probability of retirement. These results confirm previous findings that women in near-retirement age involved in caring for others are more likely to retire. Economically inactive women aged 50-69 were by 46% more likely to retire between two waves of the GGS-PL survey compared to employed women.

Summing up the results in terms of the relationship between caring for other people and transition to retirement, it should be emphasised that involvement in care of grand-children increases the probability of retiring among people aged 50-69, although this relationship is insignificant for women and men, which may be related to small populations. In turn, the relationship between taking care of an adult and exit from the labour market by people in retirement age is statistically insignificant, which may result from its different form among women (positive relationship) and men (negative relationship).

## Transition to retirement among employed persons aged 50-69

The results of estimating the parameters of the logistic regression model for the probability of retirement among people aged 50-69 who were employed during the first wave (model 2) are presented in Table 3. In the model for both genders, the estimates of parameters with the following variables turned out to be statistically significant at the significance level of at most 0.05: gender, age, educational attainment, subjective assessment of the income situation of the household. The obtained results show that the probability of retirement increased with age. As before, women are more than 2.5 times more likely to retire than men. Employed people aged 50-69 with a third-level education were less likely to retire before the second wave of the survey than those with the lowest educational attainment. The better the subjective assessment of income situation of one's household, the less likely he/she is to retire.

In the model estimated for men, only estimates for age and subjective assessment of the household's income situation were statistically significant, while in the model for women – estimates for age and educational attainment. In both models estimated separately for women and men, the probability of retirement before the second wave of the survey increased with age. Men who assessed the income situation of a household better

<sup>43</sup> It is worth mentioning that in the model without a variable describing co-residence with a parent, the probability of transition to retirement for women involved in regular support for adults was significantly higher than for women not involved in such an activity.

<sup>44</sup> Living together with an older parent is often not perceived as caregiving (A. Abramowska-Kmon, I.E. Kotowska, op. cit.).

were significantly less likely to retire (by 17%). Women with better education were less likely to retire than those with the lowest education, although a significant estimate was obtained only for secondary and post-secondary education (by 40%). The results obtained for employed persons aged 50-69 show that regular care of other persons (grandchildren or adults) did not contribute to a significant increase in the probability of retirement.

### Transition to retirement among persons not employed (unemployed and economically inactive) aged 50-69

The results of estimating the parameters of the logistic regression model for the probability of retirement among people aged 50-69 who were not employed during the first wave (model 3) are presented in Table 4. In the model for both genders, the estimates of parameters with the following variables were statistically significant at the significance level of at most 0.1: age, educational attainment, marital status, health condition self-assessment and regular care of grandchildren. Similarly as previously, the results show that the probability of retirement increased with age. Not employed people aged 50-69 who have a secondary and post-secondary education were characterised by the risk of retirement before the second wave of the survey higher by 40% than for people with the lowest educational attainment. Similarly, ill health and regular care of grandchildren significantly increased the probability of retirement by almost 50% and 66%, respectively.

Separate models for women and men show differences in factors (beside age) that significantly differentiate the probability of retirement - in the model for men these are the following: self-assessment of health condition, assessment of income situation of the household, regular care of an adult and place of residence, while in the model for women these are: educational attainment, marital status, co-residence with a parent and regular care of a grandchild. Men who assessed their health condition as poor were almost 2.5 times more likely to retire than those who assessed their health condition as good. Besides, the better the subjective assessment of a household's income situation, the higher is the risk of retirement. Men aged 50-69 who regularly cared for an adult were 60% more likely to retire than those who did not care for others. Similarly, men living in urban areas were 50% less likely to retire than rural dwellers. Surprisingly, women with better education were more likely to retire than those with the lowest possible educational attainment; while the probability of retirement was 63% higher for women with secondary and post-secondary education, and more than three times higher for women with tertiary-level education. This may be due to the fact that in the event of unemployment, retirement meant the acquisition of old-age pension rights. The risk of retiring was almost 70% higher for women in marriage/partnerships than for single women. Similarly as in Model 1, women's co-residence with an older parent doubled the probability of retirement in comparison to women not living with their parents in the same household. Regular care of grandchildren also increased the probability of retirement among unemployed women aged 50-69 by almost 60%.

Table 3. The results of the logistic regression model for the probability of transition to retirement before the second wave of the survey for persons employed during the first wave of the survey (Model 2)

		Σ	Model 2. Total	le.			Σ	Model 2. Men	L.			Mo	Model 2. Women	nen	
Variable	coeffi- cient	OR	stand. error	signifi- cance		coeffi- cient	OR	stand. error	signifi- cance		coeffi- cient	OR	stand. error	signifi- cance	
Gender (ref. men)															
women	0.980	2.663	0.176	0.000	* * *										
Age	0.346	1.413	0.028	0.000	* * *	0.374	1.453	0.041	0.000	* * *	0.328	1.388	0.040	0.000	* * *
Educational attainment (ref. lower-secondary and lower)	nment (ref.	lower-seco	ondary and	lower)											
secondary and post-secondary	-0.385	0.680	0.244	0.114		-0.200	0.818	0.388	0.605		-0.539	0.583	0.320	0.092	*
tertiary-level	-0.690	0.501	0.324	0.033	*	-0.622	0.537	0.502	0.215		-0.697	0.498	0.428	0.104	
Marital status (ref. with no partner)	f. with no p	artner)													
in partnership	0.159	1.173	0.194	0.412		0.014	1.014	0.335	0.966		0.147	1.158	0.239	0.540	
Lives with a child (ref. no)	(ref. no)														
yes	-0.123	0.884	0.160	0.441		0.041	1.042	0.240	0.865		-0.250	0.779	0.220	0.254	
Lives with a parent (ref. no)	nt (ref. no)														
yes	0.237	1.267	0.239	0.322		0.466	1.594	0.364	0.200		0.112	1.118	0.319	0.727	

Has grandchildren (ref. no)	n (ref. no)														
yes	0.190	1.209	0.171	0.266		0.117	1.125	0.247	0.635		0.231	1.260	0.239	0.334	
Self-assessed health condition (ref. good health)	alth condit	ion (ref. go	od health)												
poor heath	-0.135	0.874	0.158	0.391		-0.201	0.818	0.229	0.379		-0.094	0.910	0.217	0.664	
Household Income	-0.133	0.875	0.067	0.047	*	-0.188	0.829	0.090	0.038	*	-0.094	0.911	0.099	0.346	
Regular care of an adult (ref. no)	n adult (ref	: no)													
yes	0.040	1.040	0.255	0.876		-0.790	0.454	0.515	0.125		0.419	1.520	0.294	0.154	
Regular care of grandchildren (ref. no)	randchildre	en (ref. no)	_												
yes	0.080	1.084	0.256	0.753		0.220	1.246	0.378	0.561		-0.066	0.936	0.351	0.850	
Place of residence (ref. rural area)	e (ref. rural	area)													
urban area	0.024	1.024	0.172	0.889		0.359	1.432	0.244	0.140		-0.259	0.772	0.239	0.279	
Fixed	-20.610	0.000	1.609	0.000	* * *	-22.271	0.000	2.303	0.000	* * *	-18.482	0.000	2.267	0.000	* * *
Z	1399					736					899				
Pseudo R2	0.232					0.256					0.217				

Source: own calculations based on the Generations and Gender Survey (GGS-PL) (non-weighted data) Significance of parameters estimation \*\*\* p<0.01, \*\* p<0.05, \* p<0.1  $\,$ 

Table 4. The results of the logistic regression model for the probability of transition to retirement before the second wave of the survey for persons not employed (unemployed and economically inactive) during the first wave of the survey (Model 3)

		Σ	Model 3. Total	le:			Σ	Model 3. Men	Ę			Mo	Model 3. Women	nen	
Variable	coeffi- cient	OR	stand.	signifi- cance		coeffi- cient	OR	stand.	signifi- cance		coeffi-	OR	stand. error	signifi- cance	
Gender (ref. men)															
women	0.146	1.157	0.188	0.440											
Age	0.251	1.286	0.026	0.000	* * *	0.379	1.461	0.055	0.000	* * *	0.223	1.250	0.029	0.000	* * *
Educational attainment (ref. lower-secondary and lower)	nment (ref.	. lower-sec	ondary and	l lower)											
secondary and post-secondary	0.344	1.411	0.194	0.077	*	-0.161	0.851	0.379	0.671		0.491	1.634	0.234	0.036	* *
tertiary-level	0.638	1.892	0.507	0.208		-0.476	0.621	0.906	0.599		1.141	3.128	0.577	0.048	*
Marital status (ref. with no partner)	f. with no p	artner)													
in partnership	0.572	1.772	0.195	0.003	* * *	0.266	1.305	0.420	0.526		0.516	1.675	0.226	0.022	* *
Lives with a child (ref. no)	l (ref. no)														
yes	-0.179	0.836	0.168	0.288		-0.287	0.750	0.383	0.454		-0.253	0.777	0.197	0.199	
Lives with a parent (ref. no)	nt (ref. no)														
yes	0.366	1.442	0.252	0.146		-0.165	0.848	0.479	0.730		0.725	2.065	0.334	0:030	* *

Has grandchildren (ref. no)	n (ref. no)														
yes	0.069	1.071	0.197	0.726		0.532	1.703	0.386	0.168		-0.162	0.851	0.240	0.501	
Self-assessed health condition (ref. good	alth condit	ion (ref. go	od health)												
poor heath	0.383	1.467	0.195	0.049	*	0.879	2.408	0.412	0.033	* *	0.207	1.230	0.227	0.361	
Household income	0.069	1.072	0.073	0.343		0.323	1.381	0.160	0.044	* *	0.018	1.019	0.084	0.827	
Regular care of an adult (ref. no)	n adult (ref.	(ou													
yes	-0.013	0.987	0.242	0.958		-0.986	0.373	0.582	0.090	*	0.084	1.088	0.266	0.752	
Regular care of grandchildren (ref. no)	randchildre	en (ref. no)													
yes	0.508	1.661	0.203	0.013	*	0.591	1.806	0.520	0.256		0.450	1.569	0.233	0.053	*
Place of residence (ref. rural area)	e (ref. rural	area)													
urban area	-0.177	0.838	0.172	0.302		-0.665	0.514	0.355	0.061	*	-0.006	0.994	0.207	0.975	
Fixed	-15.939	0.000	1.556	0.000	* * *	-23.608	0.000	3.260	0.000	* * *	-13.939	0.000	1.738	0.000	* * *
z	810					253					557				
Pseudo R2	0.185					0.366					0.149				

Source: own calculations based on the Generations and Gender Survey (GGS-PL) (non-weighted data) Significance of parameters estimation \*\*\* p<0.01, \*\* p<0.05, \* p<0.1  $\,$ 

#### **Summary**

The paper aimed to present the results of analysis of factors differentiating the probability of retirement among Poles aged 50-69. The obtained results are consistent with those described in the subject literature review. As expected, the probability of retirement increased substantially with age. The probability is higher among women than men, as well as among less educated people than those with a better education (in particular men). Marital status affected the probability of retirement, especially for women – those living with a partner or a spouse were more likely to retire than those living alone. The relationship between the regular care of adults and the transition to retirement proved to be statistically insignificant, which is due to its different nature for men and women. For men, regular care of adults was associated with a substantially lower probability of retirement, while for women – with a higher, although statistically insignificant, probability. A possible explanation for this situation may be the fact that men probably take care of their partners and, in order to ensure an adequate standard of living for their families, tend to perform gainful employment in spite of the burden of care. However, it should be stressed that in the case of women, the relationship between co-residence with an older parent and transition to retirement was significantly positive, which means that these women were more likely to retire, and thus their transition to retirement can be indirectly associated with providing support/care to an adult. It can be thus assumed that this result confirms the previous findings in this regard. The care of grandchildren increased the probability of retirement. Moreover, economically inactive persons (both women and men) were more likely to retire than those employed.

In turn, the results obtained for employed and not employed persons show the importance of employment for the relationship between caring for others and any transition to retirement. For employed persons, no significant impact of adult support or grandchildren's care on the likelihood of any transition to retirement was noted. On the other hand, for not employed persons (the unemployed and inactive) a positive relationship can be observed between caring for grandchildren and exit from the labour market, especially for women. Moreover, also for not employed women living with an older parent, the risk of a transition to retirement was higher than for other women.

With reference to the research questions, it should be concluded that:

- 1. Not all the analysed personal characteristics of respondents differentiated the probability of retirement (mainly: gender, age, educational attainment, household income situation, health condition). It is worth noting that the relationship between these factors and the transition to retirement was different for the employed and not employed population.
- 2. What is more, the significance of these factors for the likelihood of any transition to retirement was different for women and men.

- There is a negative relationship between taking care of an adult and the transition to retirement for men, while for women this relationship is positive (reflected in co-residence with an older parent).
- 4. Regular care of grandchildren increased the probability of an exit from the labour market, especially for not employed women.

The results of the analyses presented in this paper do not fully cover issues related to the relationship between the family situation, care obligations and the transition to retirement of people aged 50-69 in Poland. First of all, the GGS-PL survey collected information on the regular care of adults or grandchildren, which could be understood differently by respondents. It would be more appropriate to include information on the intensity and duration of this care, because the burden on the carer is greater in the case of everyday, several-hour assistance to third persons than less frequent and less intensive support, and this can substantially increase the probability of retirement. Any further analysis should also include information on the degree of the relationship between the caregiver and the dependent adult as well as the quality of this relationship, as this may determine both the quality of the carer's life and their health condition, as well as their retirement decisions.

In conclusion, from the point of view of the proposed increase in employment of people at near-retirement age, including the postponing of any decision to retire, in particular as regards women, it is extremely important to identify in detail the determinants of exit from the labour market of this population in order to develop effective social policy tools. It is also worth considering the views of those who in 50% disagree with the opinion that the care of dependent family members should result in any withdrawal from the labour market. This means that social policy measures in the field of long-term care should be targeted both at older people and their carers, enabling them to combine professional work with their care obligations.

Anita Abramowska-Kmon, Ph.D. SGH Warsaw School of Economics Institute of Statistics and Demography ORCID: 0000-0001-9039-1989

#### **FUNDING SOURCES**

- The above analyses were co-financed from funds for research capacity maintenance (the so-called statutory research) granted to the Collegium of Economic Analysis at the Warsaw School of Economics in 2017 (Project No. KAE/S17/04/17).
- The data used in the analyses come from the first wave of the GGS-PL survey financed by the National Science Centre within the framework of the 554/N-UNECE/2009/0 grant and from the second wave of the GGS-PL survey also financed by the National Science Centre within the framework of project No. 2013/08/M/HS4/00421.

#### **SOURCES**

- Abramowska-Kmon A., Determinanty sprawowania opieki nad starszymi rodzicami w Polsce w świetle danych badania GGS-PL, "Studia Demograficzne" 2015, No. 2 (168).
- Abramowska-Kmon A., Kotowska I.E., Usługi opiekuńcze dla osób starszych [in:] Rynek pracy i wykluczenie społeczne w kontekście percepcji Polaków – Diagnoza Społeczna 2009, ed. I.E. Kotowska, Warszawa 2009.
- Alavinia S.M., Burdorf A., Unemployment and retirement and ill-health: A cross-sectional analysis across European countries, "International Archives of Occupational and Environmental Health" 2008, No. 82 (1).
- Chłoń-Domińczak A., Retirement Behaviour in Poland and the Potential Impact of Pension System Changes, ENEPRI Research Report No. 61, 2009.
- Czekanowski P., Family carers of elderly people [in:] Family caregiving for the elderly in Poland, ed. B. Bień, Białystok 2006.
- Damman M., Henkens K., Kalmijn M., Women's Retirement Intentions and Behavior: The Role of Childbearing and Marital Histories, "European Journal of Population" 2015, No. 31 (4).
- European Commission, *The 2018 Ageing Report. Economic and budgetary projections for the 28 EU Member States (2016-2070)*, "European Economy Institutional Paper" 2018, No. 079.
- Fleischmann M., Koster F., From Early Exit to Postponing Pension: How the Dutch Polder Model Shapes Retirement [in:] Delaying Retirement, ed. D. Hofäcker, M. Hess, S. König, London 2016.
- Gazioglu S., Tansel A., *Job satisfaction in Britain: individual and job related factors*, "Applied Economics" 2006, No. 38 (10).
- Gerstel N., Gallagher S.K., *Men's caregiving: gender and the contingent character of care*, "Gender & Society" 2001, No. 15 (2).
- Gillen M., Heath C.J., Women's Timing of Receipt of Social Security Retirement Benefits, "Journal of Family and Economic Issues" 2014, No. 35 (3).
- Główny Urząd Statystyczny [Statistics Poland], Prognoza ludnościowa 2014-2050, Warszawa 2014.
- Gomez-Leon M., Evandrou M., Falkingham J., Vlachantoni A., *The dynamics of social care and employment in mid-life*, "Ageing & Society" 2017, No. 39 (2).
- Gough O., Factors that influence voluntary and involuntary retirement, "Pensions: An International Journal" 2002, No. 8 (3).
- Haberkern K., Schmid T., Szydlik M., Gender differences in intergenerational care in European welfare states, "Ageing & Society" 2015, No. 35 (2).
- Ho C., Grandchild care, intergenerational transfers, and grandparents' labor supply, "Review of Economics of the Household" 2015, No. 13 (2).
- Hospido L., Zamarro G., *Retirement patterns of couples in Europe*, "IZA Journal of European Labor Studies" 2014, No. 3 (1).

- Kallestrup-Lamb M., Kock A.B., Kristensen J.T., *Lassoing the Determinants of Retirement*, "Econometric Reviews" 2016, No. 35 (8-10).
- King D., Pickard L., When is a carer's employment at risk? Longitudinal analysis of unpaid care and employment in midlife in England, "Health & Social Care in the Community" 2013, No. 21 (3).
- Kotowska I.E., Jóźwiak J., Panelowe badanie przemian relacji między pokoleniami, w rodzinie oraz między kobietami i mężczyznami: Generacje, Rodziny i Płeć Kulturowa – GGS-PL, "Studia Demograficzne" 2011, No. 1 (159).
- Kotowska I.E., Panelowe badanie przemian relacji między pokoleniami, w rodzinie oraz między kobietami i mężczyznami jako podstawa diagnozowania zmian demograficznych w Polsce, "Studia Demograficzne" 2017, No. 2 (172).
- Kula G., Decyzja o przejściu na emeryturę przegląd literatury, "Ekonomista" 2007, No. 2.
- Liwiński J., Giza-Poleszczuk A., Góra M., Sztanderska U., Dezaktywizacja osób w wieku okołoemerytalnym. Raport z badań, Warszawa 2008.
- Lumsdaine R.L., Vermeer S.J.C., Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren, "Demography" 2015, No. 52 (2).
- Marks N.F., Lambert J.D., Choi H., Transitions to caregiving, gender, and psychological well-being: A prospective U.S. national study, "Journal of Marriage and Family" 2002, No. 64 (3).
- Montgomery R.J.V., Rowe J.M., Kosloski K., Family Caregiving [in:] Handbook of gerontology: evidence-based approaches to theory, practice, and policy, ed. J.A. Blackburn, C.N. Dulmus, New Jersey 2007.
- Ruzik-Sierdzińska A., An Attempt to Identify Factors Influencing Retirement Decisions in Poland, "Folia Oeconomica. Acta Universitatis Lodziensis" 2018, No. 4 (336).
- Schulz R., Sherwood P.R., *Physical and mental health effects of family caregiving*, "Journal of Social Work Education" 2008, No. 44 (3).
- Unt M., Saar E., Determinants of Retirement and Late Careers in Estonia [in:] Delaying Retirement, ed. D. Hofäcker, M. Hess, S. König, London 2016.
- Wang M., Henkens K., Solinge H. van, *A review of theoretical and empirical advancements*, "The American Psychologist" 2011, No. 66 (3).
- Wiktorowicz J., Wydłużenie aktywności zawodowej czy przejście na emeryturę? Studium mikroekonomiczne, "Studia Demograficzne" 2014, No. 2 (166).
- Wind A. de, Pas S. van der, Blatter B.M., Beek. A.J. van der, A life course perspective on working beyond retirement—results from a longitudinal study in the Netherlands, "BMC Public Health" 2016, No. 16 (499).
- Wooldridge J.M., Introductory econometrics: a modern approach, Mason 2006.

## Zobowiązania opiekuńcze a przejście na emeryturę osób w wieku 50-69 lat w Polsce

Sytuacja rodzinna oraz sprawowanie opieki nad innymi osobami mogą zwiększać prawdopodobieństwo dezaktywizacji zawodowej osób w wieku okołoemerytalnym, zwłaszcza kobiet, które częściej niż mężczyźni sprawują opiekę nad niesamodzielnymi członkami rodziny lub wnukami. Celem artykułu jest analiza czynników różnicujących szanse przejścia na emeryturę wśród osób w wieku 50-69 lat w Polsce. Do analiz wykorzystano dane z pierwszej i drugiej rundy badania "Generacje i Rodziny" (GGS-PL) przeprowadzonego w Polsce w latach 2010–2011 oraz 2014–2015. Wyniki analiz pokazują, że sprawowanie regularnej opieki nad osobą dorosłą wiązało się dla mężczyzn z istotnie mniejszym prawdopodobieństwem przejścia na emeryturę, zaś dla kobiet – z większym, choć nieistotnym statystycznie. Jednakże w przypadku kobiet relacja między współzamieszkiwaniem ze starszym rodzicem a przejściem na emeryturę była istotnie dodatnia, co oznacza większe szanse przejścia na emeryturę tej grupy kobiet i tym samym można pośrednio powiązać to z udzielaniem wsparcia osobie dorosłej. Należy podkreślić, że relacja ta była istotna statystycznie zwłaszcza wśród osób niepracujących. Sprawowanie opieki nad wnukami zwiększało szanse przejścia na emeryturę, głównie niepracujących kobiet.

**Słowa kluczowe:** opieka nad niesamodzielnymi dorosłymi, opieka nad wnukami, dezaktywizacja zawodowa, "Generacje i Rodziny" (GGS-PL), przejście na emeryturę