Help and care from children to elderly parents: Hungary in European context

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INTRODUCTION[1]

The exchange of support between parents and their adult children can take several different forms. Parents often help their adult children by providing financial aid, labour-type support and advice (Lye 2996), while the children most often help with household chores and by taking care of their elderly parents. This familial solidarity between the generations is a major determinant of the wellbeing of both parent and child. Transfers from parents have a very strong effect on the life prospects of young adults (Henretta et al. 2012, Mulder & Smits 1999) or provide relief from temporary financial difficulties (Swartz et al. 2011). Transfers from children, on the other hand, can contribute to the parents' improved health, a lower risk of social isolation and a later entry into a nursing home or care home (Albertini 2016).

Intergenerational transfers affect not only the wellbeing of those receiving the transfer but are also important for the wellbeing of those giving it. Psychological studies have shown that elderly people's wellbeing is increased by being able to return the support they receive in some way (see e.g., Lowenstein et al. 2007). Another important consideration is the wellbeing of informal caregivers. Caring for the elderly is a time-consuming task, it may also incur financial costs, it is physically taxing and may make mental and psychological demands on the carers. Research evidence suggests that the provision of informal care for the elderly (primarily by women) is associated with a decline in health and in the probability of labour market success (see e.g., Carmicheal & Charles 1998, Sarasa 2008).

The process of population ageing taking place in the countries of the European Union including Hungary is transforming the conditions of intergenerational transfers. As a result of a longer lifespan and reduced fertility, the significance of vertical relationships within the family (parent

and child or grandparent and grandchild) is increasing while the importance of horizontal relationships (e.g., between siblings) is diminishing (Bengtson 2001, Dykstra 2009). Population ageing also means that social distribution systems (health care and the non-contributory old-age pension system) must be reformed in order to keep their balance. Reforms involve either increasing incomes by placing an ever-growing burden on the active generations financing the regime or reducing the support given to the elderly by raising the statutory retirement age and providing reduced services (Kohli 1999). Societies faced with the problem of population ageing may also choose to mitigate the consequences of the process by letting families play a greater role in caring for the elderly or in financing their care.

The ageing of the societies of the developed world and the increasing burden of the funding of state transfers targeting the elderly population (e.g., health care and long-term elderly care) turned the focus of research efforts towards intrafamily transfers. In these countries, special attention must be devoted to the characteristics and driving forces of intergenerational family transfers. Our study looks at the characteristics and driving forces of transfers from adult children to their elderly parents in Hungary as compared to other European countries. The study identifies the differences observed between Hungary and other European countries in the support given by adult children to their elderly parents, and investigates whether these differences can be explained by differing demographic features. This study is the first to compare Hungarian and international patterns of intergenerational transfers to the elderly. This has been made possible by including data from the international comparative study SHARE.

REVIEW OF THE LITERATURE ON INTERGENERATIONAL SUPPORT

International comparative demographic research projects (SHARE, GGP) gave a new impetus to the study of familial solidarity. Empirical studies comparing the countries of Europe reveal that within intergenerational family transfers, financial support tends to flow from the parents to the children while adult children tend to support their parents by providing labour (e.g., care) rather than financial aid (Albertini et al. 2007, Albertini – Kohli 2013). Research has also shown that there are characteristic differences between the various European countries in support patterns. In Southern European countries, a typical form of family transfer is co-residency while support given to family members beyond the household is less common. If the latter type of transfer does occur, it tends to be of higher intensity or of greater economic value. In the countries of Northern Europe, in contrast, adult children rarely co-reside with their parents but support is frequently given to family members beyond the household. This support tends to be of lower intensity or of smaller economic value. The countries of continental Europe are somewhere in between the Southern and Northern types (Albertini & Kohli 2013).

The current study looks at the characteristics of transfers from adult children to elderly parents in Hungary as compared to countries in other regions of Europe. Intercountry differences in transfer patterns may be rooted in a number of different factors, one of which may be that Hungary has some characteristic demographic feature in terms of the micro-level socio-economic factors that affect transfers. Of the micro-level factors affecting the prevalence and size of transfers, the literature identifies the needs and resources of the participants of the transfer relationship and the

costs of time-demanding support as the most important determinants.

The literature on the determinants of transfers attributes special significance to altruism and reciprocity as possible motivations for transfers (Kohli & Künemund 2003). Both the economic theory of altruistic transfers (Cox 1987) and the sociological theory of contingent transfers (Eggebeen & Davey 1998) rely on the surmise that individuals are more likely to give support to family members in need (parents or children). If individuals are more likely to give support to family members in need, elderly people with lower income or poorer health are expected to receive help from their children with increased probability and adult children who are in need themselves (having poorer health or lower income) are expected to provide support with decreased probability.

In addition to altruism, the literature on transfers identifies reciprocity as a second likely motivation for support. The literature notes that the intergenerational reciprocity relationship is typically characterized by a long time lag between the receipt and the return of the transfer (Silverstein 2006). Children receive a great deal of support from their parents during their years of childhood, which support often continues in their young adulthood. They return this support several years later in the form of giving assistance to their ageing and ailing parents who can no longer take care of themselves. Our study cannot draw conclusions with respect to this long-term reciprocity because we use cross-sectional data. The literature suggests, however, that reciprocity may also play a role in the short run. Leopold & Raab (2001) use cross-sectional data to show that parents are more likely to receive transfers if they at the same time give help and support to their children.

The prevalence and size of various forms of support are affected not only by the motivation for them but also by the means of the provider and the "costs" of the support. Doing household chores and caring for an elderly parent often demands a great deal of time. The cost of this form of help may be higher for children who live at a greater distance from their parents' home and therefore incur significant travel costs in helping their parents (Hank 2007). The costs of giving support to parents are also increased among adult children with higher educational attainment and higher income. The provision of time-demanding support may mean the loss of a significant size of income if they must reduce their working hours to be able to help their parents (Zissimopoulos 2001).

The motivations for and costs of transfers therefore have a major effect on transfer behaviours. There also are, however, other individual attributes that influence the incidence and intensity of transfers. One of these could be the child's gender: several empirical studies have shown that daughters are more likely to provide intensive support in the form of caring for their parent than sons (e.g., Brandt et al. 2012). Other attributes that may play a role include the age and marital status of the children and how many children they have themselves.

Overall, differences in transfer patterns between countries may well be rooted in differences in micro-level demographic features. There are several characteristics of Hungary that tend to affect transfers to elderly parents including the – in European comparison – poor health of the

Hungarian population, the pattern of co-residency and the low level of employment (especially among certain age groups of women). The literature also notes, however, that intercountry differences in transfer behaviour might also be associated with macro-level factors such as differing welfare policies toward the elderly and varying cultural norms (e.g., Albertini et al. 2007, Albertini & Kohli 2013).[2]

Regarding the interrelationship between the welfare system and familial transfers, there are two approaches in the literature. The so-called "crowding out" hypothesis contends that public and familial transfers are mutually exclusive (e.g., Barro 1974); the spreading of non-contributory old-age pension systems, for instance, gradually decreased the role of the family in the financing of consumption by the elderly. Other researchers argue, however, that the public and the private spheres complement rather than "crowd out" each other (e.g., Kühnemund & Rein 1999, Attias-Donfut & Wol 2000, Reil-Held 2006). Specifically, it is thanks to public transfers – they claim – that the elderly can participate in reciprocity-based transfer relationships. That is, the expansion of pension systems gave pensioners an opportunity to help their children when needed, i.e., it has actually led to an increase in the incidence of familial transfers.

Based on Leitner (2003), Saraceno & Keck (2010) distinguish three main types of division of labour between public welfare institutions and families in elderly care. The typology categorises countries along two dimensions: the level of elderly services maintained or funded by the state, and the level of welfare policies encouraging the families' involvement in elderly care (domestic leave entitlement, financial support for carers and care-linked pension entitlement). In countries with both a high level of institutional services and strong care-support policies, families have a real choice between using the advanced public elderly-care system and organizing the care of elderly family members within the family. These – using Saraceno & Kecks terminology – "defamilialisation" systems are mostly typical of Northern European countries. In countries with a regime of so-called "supported familialism," the state provides a low level of direct elderly care services but there are policies supporting the involvement of families in the care of the elderly (e.g., cash transfers to carers). So-called "familialistic" systems provide a low level of institutional elderly care services and also lack strong elderly-linked family support policies. This type of regime is characteristic of the Southern European countries within the EU15 and – according to Saraceno & Keck's (2010) study covering all EU member states – of the Eastern European countries including Hungary.

The effects of various institutional characteristics on transfers to the elderly have been investigated by several studies. Brandt et al. (2009) show, for instance, that while the incidence of providing family care for parents is lower – even after controlling for the effects of micro-level determinants – in countries with a high level of expenditure on elderly-care services (Northern European countries), less intensive help with household chores for elderly parents is more

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[2] Cultural norms and the welfare system are interdependent phenomena, of course. The values accepted by a given society have an effect on the kind of institutional system that may emerge in that society and, *vice versa*, the institutional regime moulds cultural norms.

common in these countries. The authors' explanation for this pattern is that there is specialisation in these countries: the taxing and expertise-demanding task of caring for the elderly is carried out by the institutions leaving the less intensive job of assistance with household chores to the families (Deindl & Brandt 2011, Brandt et al. 2012). The effects of the institutional environment have also been studied in connection with cash transfers. Deindls & Brandt's (2011) results support a crowding-out effect in this case. Elderly parents are less likely to receive financial support form their children and more likely to give cash transfers to their children in countries with high levels of social security expenditure on the elderly population.

In addition to the institutional environment of family transfers, cultural norms and values governing intergenerational relationships may also be significant macro-level determinants of transfers. Reher (1998) notes, for instance, that there are important differences between the tradition systems of Northern European and Southern European countries, which are rooted in the differing historical development of these two regions. In northern countries, the nuclear family plays a major role, ties with more distant relatives are weaker and children become independent at a younger age. Southern European countries, in contrast, are characterized by stronger family ties, adult children stay with their parents until they have their own families (or even after that) and family relationships beyond the nuclear family remain important throughout people's lives. Reher argues that these differences between the countries in Southern Europe and those in Northern and Western Europe have been characteristic of the Continent for several centuries and are likely to remain so in the foreseeable future. Herlofson et al. (2011) analysed the data from the *Gender and Generations Programme* (GGP) to compare the cultural values in Western European and Eastern European (including Hungary) countries concerning support for the elderly. The study looked at respondents' views on the degree to which providing help for elderly parents was considered the children's duty. The average value of the "filial responsibility" index places Hungary on a par with Germany and France. Adult children have a stronger feeling of responsibility in these countries than in Norway or the Netherlands but a lower feeling of responsibility than children in the remaining Eastern European countries (Romania, Bulgaria, Georgia and Russia).

Differences in family norms may have an effect on transfer behaviours. Kalmijn & Saraceno (2008) reveal, for instance, that in countries where people are more inclined to consider elderly care to be a family task, parental needs have a greater effect on the incidence of assistance. That is, a parent's poor health is associated with a greater increase in the probability of their children providing help in these countries than in countries where elderly care is seen as a family task to a lesser extent. Mureşan & Hărăguş (2015) used the GGP data to study the effects of norms in four Eastern European and two Western European countries. In the Eastern European countries (with the exception of Lithuania), those considering the care of elderly parents to be the children's task were more likely to participate in caring for their parents.

There is relative little data on transfers between adult children and their parents in Hungary. Most studies in this subject area focus on transfers flowing from the parents to their children and grandchildren (see Vaskovics 1003, Medgyesi 2003, Medgyesi 2005, Gyarmati 2014, Gyarmati

2015).[3] Family transfers to the elderly have received little attention in quantitative studies.[4] Using the data from the project *Turning points in our lives*, Spéder (2002) reveals that the prevalence of transfers to parents varies by age. The percentage of children helping their parents was higher than average among 30-50 year olds while it was lower than average among those aged 60 or more.[5] One likely explanation for this pattern is that a lower proportion of people in their sixties have living parents. Bocz & Medgyesi (2004) analysed the data of the survey *Lifestyle and Time Use* 2000 to study transfers between parents over the age of 40 and their adult children. The authors found that labour support flows at about the same rate in the two directions (about 30% of the subsample provides transfers of this kind) but financial transfers and especially significant sums are more likely to flow from the parents to the children than in the other direction. Utasi (2002) looked at transfers between adult children and parents in the broader context of family solidarity and found that there is a higher probability of being excluded from solidarity relationships among the elderly. Örkény & Székelyi (2011) collected questionnaire data from both the parents in their sample and their children regarding transfers both from and to the parents. Their results suggest that about a quarter of the parents' generation gave all sorts of support not only to their own parents but also to their spouse's parents. The transfers received by the grandparents varied by the age of the beneficiaries: their need of support increased with their age.

A detailed analysis of possible determinants and international comparisons was, however, beyond the scope of the above studies. The current work, therefore, provides new evidence in this respect. The only international comparative study that included Hungary has been Albuquerque (2014) but its focus was Portugal and mostly the links between financial and labour transfers. The Hungarian data of SHARE was analysed by Gáti (2012) to identify the relationship between elderly people's relationship networks and their subjective wellbeing but no special attention was paid to transfers between parents and children. We are not aware of any other studies in this subject area.

HYPOTHESES

Keeping the above discussion in mind, let us summarise our hypotheses concerning the support given by adult children to their elderly parents. Regarding the micro-level factors affecting transfers to parents, we expect to find confirmation for the relationships documented in the literature. The altruism hypothesis predicts that parents in greater need (those with low income, poor health or no partner) should receive help with higher probability. It also predicts that parents who get some support from someone other than their children within or outside the household should be given help by their children with lower probability. Based on the "parallel reciprocity

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[3] Intergenerational transfers within the household are studied by Gál et al. 2015.

[4] One example for a qualitative study in this area is Papházi 2005.

[5] The corresponding percentages of children giving transfers to their parents are 38% among 30-39 year-olds, 33% among 40-49 year-olds and 24% in the whole population (Spéder 2002).

hypothesis," we expect parents who give more help to their children to receive help from them with greater probability. We further expect to find a negative correlation between the prevalence of support and the "costs" of the support incurred by the child providing it. That is, the prevalence of care and support is expected to vary with the distance between the parents' and the children's places of residence.

Owing to the variability of welfare institution regimes and cultural norms concerning intergenerational support, the countries are expected to show substantial variation in elderly care patterns even with the effects of micro-level factors controlled for. In Hungary and other "familialist" welfare regimes, the prevalence of regular intensive help and care is expected to be relatively high. More occasional and less intensive transfers are, however, expected to be more frequent in countries where an advanced institutional elderly care system frees families from the burden of intensive care ("defamiliarised" regimes).

DATA, VARIABLES AND METHODS

The following analyses use the data from SHARE (*Survey of Health, Ageing and Retirement in Europe*). SHARE is a multidisciplinary survey exploring the lives and circumstances of the population aged 50 or more in several countries. It is essentially a panel database, i.e., the project started in 2004 with a sample aged 50 and over and the health, labour market position, income and financial situation, and social and family relationships of the members of this sample are measured every two years.[6] Hungary joined the project in 2011 but since no further waves of data collection have been carried out since then, the Hungarian data only allow cross-sectional analyses.

The 2011 – fourth – wave of the survey measured financial support received and given and care and non-financial help received and given. In this study, only the cohort aged over 65 is included because there is a very low level of need for care or help with household chores among younger cohorts. The main dependent variable in our analysis is the probability of care/help received from adult children (over the age of 21) not sharing a household with the parents. The pertinent question in the survey is given below:[7]

"Thinking about the last twelve months has any family member from outside the household, any friend or neighbour given you or your husband/wife/partner personal care or practical household help?"

If the members of the household received such help, they were asked who had given them the

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[6] For further details of the method of data collection see Börsch-Suppan 2013, Börsch-Suppan et al. 2013a, 2013b, Malter & Börsch- Suppan 2013.

[7] The decision to limit the analyses to transfers received from children not sharing a household with their parents is not unusual in the literature (see e.g., Albertini et al. 2007, Brandt et al. 2009, Brandt et al. 2012, Deindl & Brandt 2011, Schenk et al. 2010).

help. Respondents could name three persons, and their relationship to the respondent and the frequency of help (about daily/about every week/about every month/less often) were recorded in the questionnaire. As we can see, the question does not distinguish care from other types of household help and does not measure the precise time spent giving help but it does allow us to include the frequency of help in our analyses. The dependent variable of our analyses was therefore defined with reference to the data provided by the questionnaire and the following categories were created.

Possible values of the dependent variable:

0 – no care or help was received from their non-coresident children
1 – occasional care or help was received from their non-coresident children
2 – regular (almost daily) care or help was received from their non-coresident children

One advantage of the SHARE survey is that detailed data are collected about the respondents' children and social networks. This allows us to include the characteristics of both participants of the transfer relationship in our analyses of the prevalence of transfers. The currently available version of the database, however, does not allow us to identify the specific child from whom the parent received (or to whom the parent gave) support. Transfer relationships cannot, therefore, be analysed at the level of a particular parent-child dyad but must remain at the more general level of parent-child transfers. What is perhaps most important from the point of view of a parent's well-being is whether they have or do not have a child they can count on for help, i.e., whether they receive transfers from a child at all. This is not to mean that it may not be important for a parent which of their children they receive support from or give support to.

The needs of the elderly parents are characterised in our analyses by a number of socio-demographic variables. We looked at the age of the spouse (younger than 75 or 75 and older) and the structure of the household the respondent lives in (single woman/man, couple or other) considering older and single parents to be in greater need of support. Parents' need of help from their children is evidently also influenced by their health. Health was characterised using two indices measuring the extent to which an individual is restricted in performing various activities. The so-called "Activities of Daily Living" index measures the number of basic everyday activities that cause difficulty from the set: getting dressed, having a wash or shower, feeding, chopping up food, walking across the room, getting out of bed and using the toilet. The index values range between 0 and 6 where a higher value means greater difficulty with these activities. The second index, "Instrumental Activities of Daily Living," measures respondents' difficulty with the following set of activities: using a map, cooking a meal, shopping for food, making a phone call, taking medicines, doing household and garden chores, and handling money (e.g., paying bills). The values of this index range between 0 and 7.

Further measures of the parents' need for support were provided by the data on social status. We included educational attainment of the parents (primary, secondary, tertiary) and their labour market status (active or not) as variables. Income was measured by the quintile the respondent's income fell into on the household equivalised income scale. The values characterize the elderly

individual in the sample and his or her spouse or partner as a unit since the dependent variable also applies at this level. For couples, the higher values of the variables (age, educational attainment, ADL and IADL) were included in the analysis in all cases.

The parents' need for support from their adult children is, of course, also affected by whether they receive help from other sources. Our multiple regression model therefore includes as a control variable whether the target parent received personal care or other type of help from some other person living outside the household over the previous one year. This information also came from the survey question that measured the receipt of support from the children. The answers to this question created three categories of this variable: no help was received/only occasional help was received/regular help was received. A further variable concerned whether the respondent received help from an individual in the same household. The survey question on help from within the household is different from the question on help from outside the household. This question was asked from household members having health problems at the time of data collection and referred only to regular personal care. This information, therefore, let us identify the households where regular personal care was received from within the household.[8]

The SHARE database also allows us to control for the children's characteristics. As was mentioned before, our variables characterized the children as a whole because the data do not identify the specific child from whom the parent received support. The child characteristics included in the model were the number of adult children, their gender (there is or there is not a daughter), their average age, marital status (whether there is a single child) and the number of grandchildren. The children's social status was measured by their labour market status (whether there is an inactive child). In addition, the database provides data on the distance between the parents' and their children's homes, which – as was discussed above – has an effect on the cost of transfer provision for the child. This information was used to define a tertiary variable characterizing the distance between the respondent's and their children's place of residence (none of the children lives at a distance greater than 5 km/at least one child lives at a distance greater than 5 km/every child lives at a distance greater than 5 km). Finally, we also controlled for the number of children under the age of 21 and the number of children older than 21 co-residing with their parents.

In order to test the predictions of the hypothesis of reciprocity both financial and non-financial transfers given by the parents to their children were included in the model since elderly parents tend to help their children with both types of transfer. Financial support from the parents to their children was measured by the following questions:

„Please think of the last twelve months. Not counting any shared housing or shared food, have you or your husband/wife/partner received any financial or material gift from anyone inside or

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[8] The significant difference between the two questions is the reason why we did not include support received by the elderly parents from their co-residing children as a dependent variable in the model. The decision to limit the analyses to transfers received from children not sharing a household with their parents is not unusual in the literature (see e.g., Albertini et al. 2007, Brandt et al. 2009, Brandt et al. 2012, Deindl & Brandt 2011, Schenk et al. 2010).

outside this household amounting to 40000 HUF or more?"

Non-financial transfers from the parents were measured by the question about transfers to people living outside the household, which is similar to the question used to measure transfers received as discussed above. Another factor taken into consideration was whether a parent helped their children by looking after their grandchildren. The question asking about this was the following:

"During the last twelve months, have you regularly or occasionally looked after your grandchild/grandchildren without the presence of the parents?"

Parent transfers of help and care were merged, and our variable thus indicates whether or not the parents helped their children by either providing personal care, doing household chores or looking after their grandchildren.

The effects of the explanatory variables on our tertiary outcome variable were tested in a multinomial logistic regression model. The model tests whether a change in the value of a given explanatory variable has an effect on the probability of occurrence of a given category of the outcome variable compared to a reference category. As our data come from a relatively small number of countries, country-level variables indicating institutional regimes and cultural norms were not included in the model. Bryan and Jenkins (2016) note that at least 30 countries are needed for a reliable estimation of country-level effects in a multilevel nonlinear regression model, while we have only sixteen. We shall therefore measure the size of the differences between countries while controlling for micro-economic factors influencing transfers, and the differences that remain with the effects of other determinants held constant will be interpreted with reference to known macro-level features (institutional regime and cultural norms).

The results of the estimations were interpreted in terms of the so-called marginal effects. By marginal effect, we mean a change in the value of the outcome variable accompanying a change in the value of a given explanatory variable while the values of the remaining predictors are held constant (Long 1997, Bartus 2005). For a continuous explanatory variable, this shows the effects of an infinitely small change in the predictor on the value of the outcome variable (partial derivative regression analysis), while for a binary explanatory variable we are interested in the effect of a change from a value of 0 to a value of 1. In linear regression analysis, the regression coefficients give the answers to these questions and the coefficients are interpreted as marginal effects. In a non-linear model, such as the multinomial logit model, this is not the case. In this type of model the effects of a given predictor are influenced by the values of the remaining explanatory variables included in the model. We shall therefore report the results using so-called "average marginal effects," i.e., in addition to all possible combinations of the remaining explanatory variables, we have also calculated the marginal effects of a target explanatory variable, and computed our summary statistic indicating the effects of the target predictor by

averaging these marginal effects.[9]

RESULTS

Figure 1 shows the prevalence of support received by parents aged 65 and over from their adult children. Regular support is received with the highest probability in the countries in Southern Europe and Eastern Europe. Frequent, regular help is received by the highest percentage of over 65s from their children in Italy (13%). The corresponding proportions are around 10% in Poland and the Czech Republic, 9% in Spain and 8% in Hungary. They are also fairly high in the remaining Eastern European countries in the sample. The lowest percentages were observed in Sweden and the Netherlands (1%), with only slightly higher values in France and Switzerland. The proportions of parents receiving regular help also remain at or under 5% in the remaining countries in Northern Europe and Western Europe. Elderly parents only occasionally receiving support from their children occur in the Czech Republic with the highest frequency, followed by Denmark, Estonia and Sweden in the country ranking. Elderly parents are least likely to receive only occasional help from their non-coresident adult children in Spain and Portugal.

Figure 1: Percentage of parents receiving support from non-coresident children (parents aged 65 or over having at least one non-coresident child over age 21).

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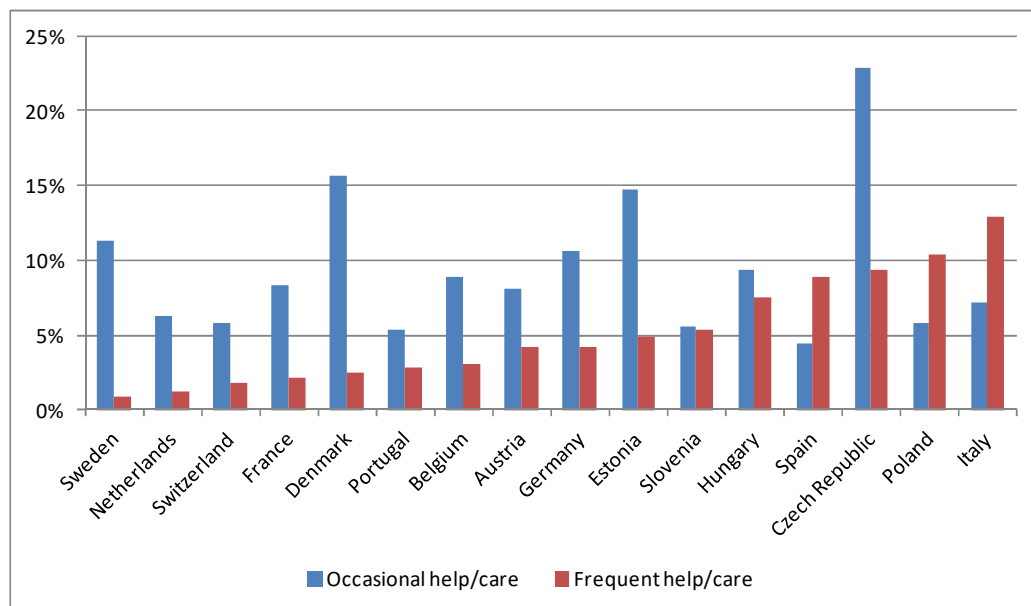
[9] Another common solution to the question of interpreting multinomial logit models is the conversion of the coefficients into odds ratios. When the outcome variable is nominal, however, what we are interested in is the increase in the probability of a given value of the dependent variable effected by a change in the value of a given predictor. While odds ratios do not allow such an interpretation, marginal effects do, which is the reason why those are reported here.

The determinants of transfers in Hungary and other European countries

This subsection looks at some demographic characteristics of our sample of parents aged 65 or over and having at least one child aged over 21 focusing on micro-level factors known to influence transfers. We shall compare the characteristics of the Hungarian sample with the characteristics of the samples in other regions of Europe. The characteristics included in the analysis are age, household structure, health, distance between the parents' and the children's places of residence and the frequency of transfers from the children to the parents.

Of the countries under analysis, Hungary has the lowest life expectancy at birth, which explains the relatively low average age of the Hungarian sample included in the analysis. Only 38% of the parents are aged 75 or over in the Hungarian sample, while the corresponding figures are 52-53% in France and Spain. The data on household structure are displayed in *Figure 2*. We can see that while a fairly low percentage of the elderly are single in the Southern European countries and in Poland (25-27%), more than half of the elderly in the sample are single in Austria, France and Denmark. It is also clear that in Spain and Poland, there is a high proportion of elderly living not with their partners but with their children, siblings or other relatives in households of type Other. Looking at the Hungarian data, the percentage of single elderly is close to the European average (39%); 42% live with their partners and 19% in other types of households.

*Figure 2: The composition of the sample by household structure*
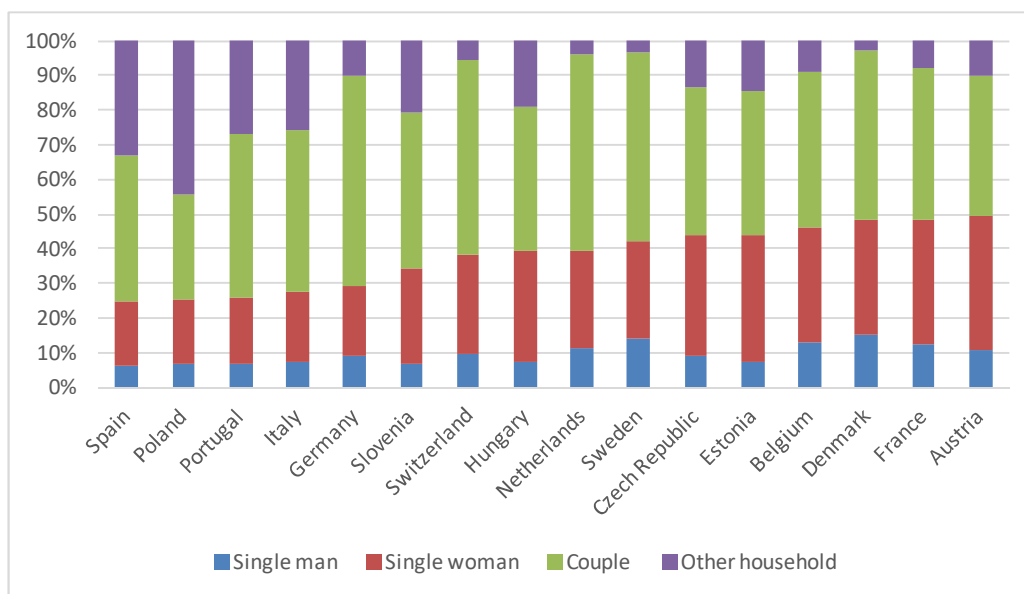
The ADL and IADL indices used here to represent health measure individuals' difficulty doing everyday activities. The average ADL values are highest in Poland and Portugal, where the

parents have difficulty with one dimension of the scale on average. The lowest values were observed in Switzerland and the Netherlands. The IADL index gives a similar ranking although Poland is paired with Hungary here as the countries with the highest levels of difficulty. The Hungarian average is 1.2 on the seven-point scale, while the corresponding values are under 0.5 for Switzerland and the Netherlands.

Figure 3. The composition of the sample by distance between parents' and children's places of residence
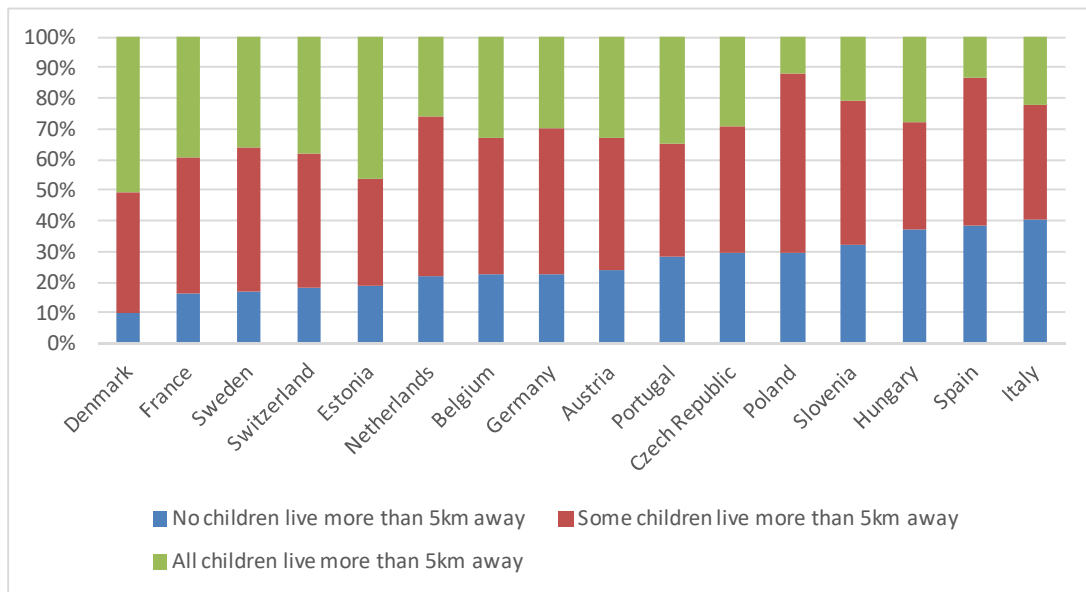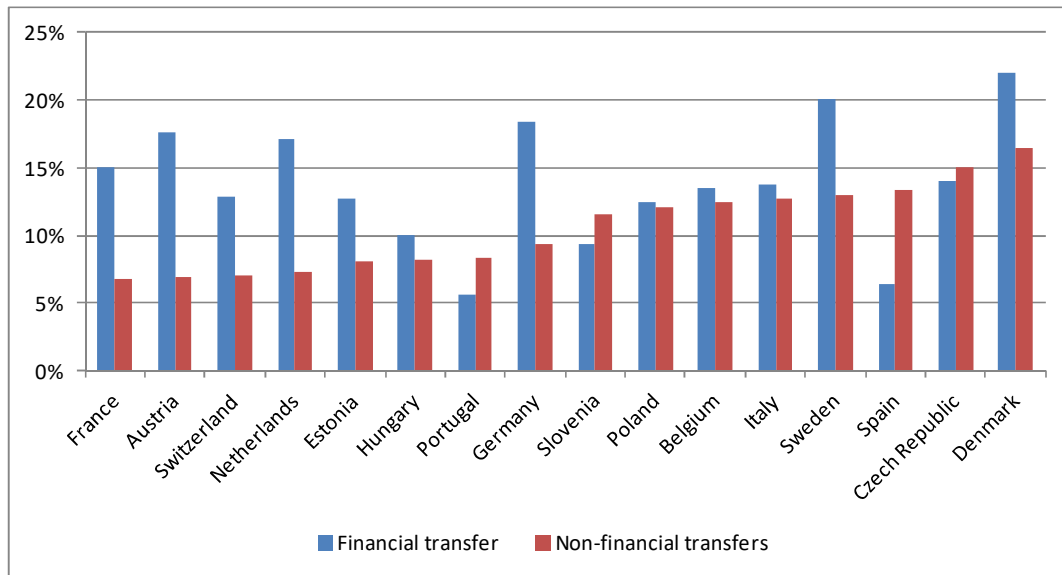

Source: own calculation from SHARE Wave 4

Figure 3 reveals that besides Italy and Spain, Hungary is the country where the highest percentage of parents have all their children living within a 5km radius (40%). In these countries – especially in Spain – a relatively small percentage of children live at a greater distance from their parents. In Denmark and Estonia, however, almost half of the parents in the sample have all their children living more than 5km away.

In Slovenia, Hungary and the countries of the Iberian Peninsula a relatively low percentage of elderly parents help their children with financial transfers (less than 10%). The corresponding figures for Denmark and Sweden, in contrast, are over 20% and also fairly high in the Western European countries (Germany, Austria and the Netherlands). The percentages of parents giving non-financial help to their children are highest in Denmark and the Czech Republic (15-16%) and lowest in France, Austria and Switzerland with values under 7%. The value for Hungary is only slightly higher (8%).

Figure 4: Percentage of parents giving financial and non-financial transfers to their children

Source: own calculation from SHARE Wave 4

Multivariate analysis

We also investigated the determinants of personal care/help given to elderly parents with multivariate analysis. Multinomial logit regressions were run on the pooled sample of countries with both parental and child characteristics as explanatory variables. Country differences were investigated with the inclusion of country dummies.

The results of the estimation are shown in Table 1. Our expectation that elderly parents in need would get support with higher probability was partly confirmed. Results confirmed our expectations in case of household structure, health status and education. Single parents received support from their children compared to parents living with their partner or parents living with other adults. Parents living with a partner are 13 points less likely to receive occasional help from their children and 4 points less likely to receive frequent help compared to single parents. In this analysis health status was measured by limitations in activities of daily living and instrumental activities of daily living. Those parents having one more limitation on the IADL scale are 1-2 points more likely to receive support. The receipt of support is also related to the education level of parents. The receipt of support is also related to some measures of social status of the parent. Parents with a tertiary degree are five points likely to receive frequent support compared to parents with a primary degree. Working parents receive occasional support with lower probability compared to non-working parents. Other evidence is not in line with the "needs" hypothesis: eg. receipt of support is not significantly related to age or income.

Table 1. Determinants of receiving support of elderly parents from their non-coresident children (average marginal effects from multinomial logit model)

	Occasional support		Frequent support	
Age 75 or older	-0.002	(0.095)	0.022	(1.907)
Household structure				
Single man (ref.)	0		0	
Single woman	-0.038	(0.870)	0.013	(0.642)
Couple	-0.133**	(3.121)	-0.039*	(2.033)
Other hhd str	-0.142***	(3.369)	-0.053*	(2.511)
Education level				
Primary education (ref)	0		0	
Secondary ed.	-0.004	(0.344)	-0.021	(1.571)
Tertiary ed.	0.027	(1.640)	-0.050***	(4.385)
ADL	0.000	(0.009)	0.005	(1.314)
IADL	0.010**	(2.579)	0.015***	(4.938)
Working	-0.074**	(2.601)	0.000	(0.010)
Household income				
1st income quintile (ref.)	0		0	
2nd income quintile	-0.013	(0.978)	0.015	(1.218)
3rd income quintile	0.014	(0.841)	-0.013	(1.113)
4th income quintile	0.000	(0.013)	0.004	(0.259)
5th income quintile	-0.021	(1.234)	-0.011	(0.750)
No. of children under 21	-0.199***	(3.391)	0.009	(0.429)
Number of non-cores. children	0.005	(0.872)	0.005	(1.293)
Has female child	0.012	(0.875)	0.025*	(2.167)
Has coresident child	-0.004	(0.225)	0.035*	(2.504)
Distance from child				
No child more than 5km away (ref.)	0		0	
Some children more than 5 km	-0.051***	(3.422)	0.010	(0.782)
All children more than 5km away	-0.060***	(3.686)	-0.046***	(3.934)
Unmarried child	-0.017	(1.652)	0.009	(0.925)
Non-working child	-0.004	(0.386)	0.023*	(2.464)
Average age of children	0.002	(1.668)	0.001	(1.495)
Number of grandchildren	0.001	(0.466)	-0.003	(1.505)
Parent has given financial transfers	0.014	(1.004)	0.007	(0.523)
Parent has given support	0.030*	(2.189)	0.011	(0.925)
Received support from others outside hhd				
No support received (ref.)	0		0	
Occasional support from others	0.103***	(5.421)	0.033	(1.719)
Frequent support from others	0.055*	(2.099)	0.029	(1.439)
Received support from hhd members	0.050**	(2.844)	0.011	(0.707)

*Note: average marginal effects of explanatory variables from multinomial logit model on pooled sample including country dummies. Categories of dependent variable: no support received (reference)/only occasional support received / frequent support received (N=16533). t statistics in parentheses * p<0.05, ** p<0.01, *** p<0.001.*

Elderly parents might also receive transfers and support from other members of their network which might be a substitute for help from children and decrease the need for help from children. For this reason we also examined whether help received from others (non-children) affects the likelihood of parents receiving support from children. In case of frequent support we haven't found a statistically significant effect, but in case of occasional support help received from others actually (and somewhat surprisingly) increases the likelihood of parents receiving support from children.

Characteristics of children also affect the likelihood of support to elderly parents. Gender of children is an important factor: parents who have a daughter have 3 points higher probability to receive frequent support. Interestingly, the presence of children in the parental household increases the likelihood that non-coresident children provide frequent support to their parents. This probably means that in these cases non-coresident children support not only parents but also their co-resident sisters or brothers. If parents have children below 21 the likelihood that they receive support from non-coresident children is reduced to a great extent.

Proximity between parents and children also determines the likelihood of support. If every non-coresident children lives more than 5 km away parents are 5 points less likely to receive occasional or frequent support compared to those parents whose children live closer than 5 km. This support our hypothesis that helping parents is also influenced by the cost of providing support: as distance increases the time costs of providing help (by increasing travelling time) this leads to a decline in the occurrence of support. Similarly, if there is a non-working child among the non-coresident the likelihood of parents receiving frequent support increases.

In order to test our hypothesis regarding the role of short-term reciprocity in support from children to elderly parents we also included measures of help provided by parents to their adult children. Both measures of financial and non-financial parental transfers (including grandchild-care) were included. Results show that parental non-financial transfers increases the probability that children provide occasional support to their parents. Parents who provide non-financial transfers to their children are 3 points more likely to receive occasional support from their children. there is no significant effect of parental transfers on frequent support provided by the children to their elderly parents. Overall, short-term reciprocity seems to play a role in case of occasional support, but not frequent support.

To sum up, analysis of determinants of support to elderly parents shows that parental need and costs of transfers (measured by eg. proximity) affect both occasional and frequent support to elderly parents, while short-term reciprocity is important in case of occasional care and help provided by children.
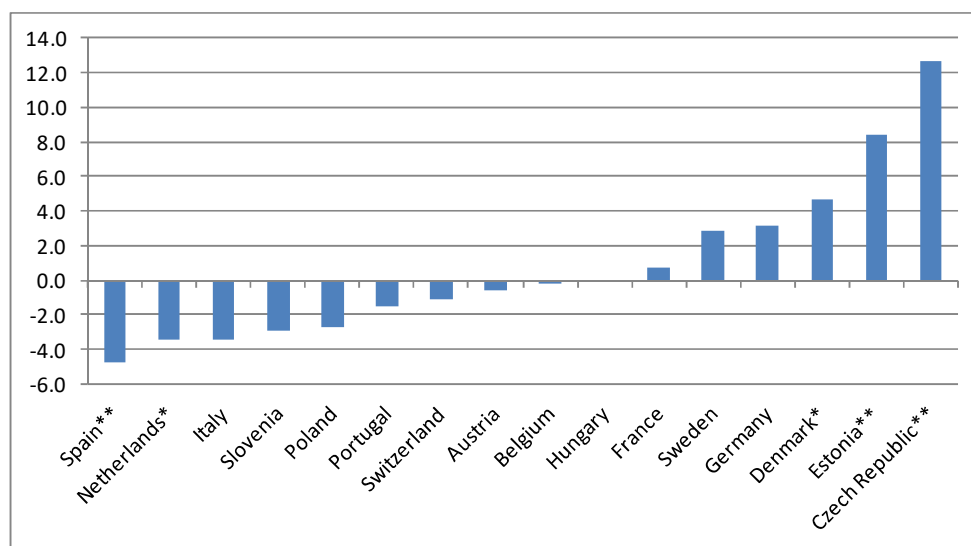
Differences between countries

Our multivariate model allows to investigate between-country differences after controlling for explanatory variables of support to elderly parents. Differences between countries that remain after the controlling of individual-level determinants of transfers is most often explained in the literature by differences in welfare policies regarding elderly care or differences in norms of filial responsibility. The low number of countries in the sample does not allow for the use of multilevel models to test the effect of such macro-level variables.

According to the article by Saraceno and Keck (2010) among countries included in the sample Denmark, Sweden, the Netherlands, Belgium, France and Austria have the highest levels of public elderly care services. If there is a crowding out effect between public and private support to the elderly these countries should be those with the lowest level of regular family support to the elderly. At the other end of the spectrum Italy, Spain, Poland, Estonia and Hungary have a relatively low level of public services in elderly care (and also public financial transfers towards the elderly). In these countries we expect the level of family support to be higher even after controlling for individual-level determinants of support to parents. According to Saraceno and Keck (2010) Germany, the Czech Republic, Slovenia and Portugal have medium level of public elderly care services. The following figures show between country differences in occasional frequent support to parents after controlling for individual- level variables.

Figure 5a Between-country differences in the occurrence of occasional support (% points, reference category: Hungary, controlling for micro-level determinants)

*Note: average marginal effects of country dummies from multinomial logit model on pooled sample (see Table 1). * p<0.05, ** p<0.01, *** p<0.001.*

Figure 5b Between-country differences in the occurrence of regular support (% points, reference category: Hungary, controlling for micro-level determinants)
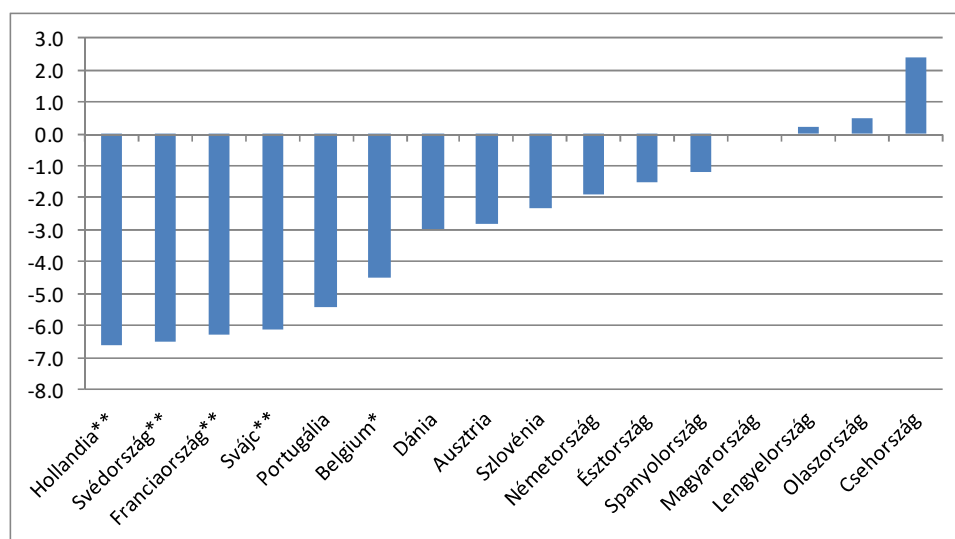
*Note: average marginal effects of country dummies from multinomial logit model on pooled sample (see Table 1). * p<0.05, ** p<0.01, *** p<0.001.*

Figure 5b shows that in case of frequent support the pattern of between country differences quite closely follow the typology of countries outlined above: countries belonging to the "defamilialisation" regime can be found on the left side of the country ranking with relatively low levels of frequent help compared to "familialistic" countries, which can be found on the right hand side of the graph. In Hungary adult children are significantly more likely to provide frequent support to their elderly parents compared to countries in the "defamilialisation" regime. The level of frequent help is relatively high in other Eastern European countries as well, thus these countries tend to be similar in term of regular support to parents. The pattern is less clear in case of occasional support (see Figure 5a), but it seems that in countries belonging to the "defamilialisation" regime (eg. Denmrak and Sweden) the elderly parents are more likely to receive occasional support, while in case of the "familialistic" regime (eg. Spain, Poland, Italy) the occurrence of such support is lower. Hungary seems to be an exception however, as level of occasional support is higher than in case of these countries. Eastern European countries are heterogeneous in this regard, as in countries like Poland or Slovenia the level of occasional support is relatively low, while in the Czech Republic or Estonia it is relatively high.

It has to be remembered however that this analysis cannot prove the causal impact of welfare policies or norms on support to the elderly. Nevertheless, the analysis shows that important differences between countries remain after controlling for individual-level determinants of support and these differences correlate with differences in welfare provisions towards the elderly.

CONCLUSION

Here we studied patterns of care and help from children to elderly parents in Hungary in a comparative context. The aim was to compare Hungary with other Eastern European countries and to situate these countries among the transfer regimes typical in Europe. The analysis also aimed to describe the possible determinants of differences between Hungary and other EU countries in the frequency of care and help adult children provide to elderly parents. The difference between Hungary and other countries can be related to differences in micro-level determinants of upward transfers (like needs for support, costs of providing help) and can also result from differences in welfare state involvement in elderly care (Brandt et al. 2012).

According to the literature on care regimes (eg. Leitner 2003, Saraceno and Keck 2010) Eastern European countries belong the group of implicitly familialistic countries, which assign to the family not only the financing, but also the provision of elderly care. In Hungary public services in elderly care exist but are scarce, and there is considerable unmet need for long-term care services. The analysis studied the determinants of receipt of personal care or practical help by the respondent from child differentiating between frequent (almost daily) and non-frequent help. Results on micro-level determinants are in line with previous results: intensive support is related to parental need, child gender and proximity. Short-term reciprocity seems to be more relevant in case of non-frequent support: transfers given by parents to children are more closely related to the receipt of occasional help. Eastern European countries are heterogeneous in terms of non-frequent support, but have generally high level of intensive support. Hungary occupies a middle position among Eastern European countries, showing lower occurrence of help compared to the Czech Republic and Estonia and higher level of help compared to Slovenia and Poland. Level of frequent support is larger in countries with low level of public expenditure on LTC services.

REFERENCES

Albertini, Marco – Kohli, Martin – Vogel, Claudia 2007: Intergenerational transfers of time and money in European families: common patterns different regimes? *Journal of European Social Policy,* 17(4), 319–334.

Albertini, Marco – Kohli, Martin 2013: The generational contract in the family: An analysis of transfer regimes in Europe. *European Sociological Review,* 29(4), 828–840.

Albertini, Marco 2016: *Ageing and Family Solidarity in Europe.* Patterns and Driving Factors of Intergenerational Support. Policy Research Working Paper No. 7678, World Bank Group.

Albuquerque, Paula C. 2014: Intergenerational private transfers. Portugal in the European context. *European Journal of Ageing*, 11(4), 301–312.

Attias-Donfut, Claudine – Wolff, Francois-Charles 2000: Complementarity between private and public transfers. In Attias-Donfut, Claudine – Arber, Sarah (eds.): *The Myth of Generational Conflict*. Routledge, London and New York, 47–68.

Barro, Robert J. 1974: Are Government Bonds Net Wealth? *Journal of Political Economy*, 82(6), 1095–1117.

Bartus, Tamás 2005: Estimation of marginal effects using margeff. *The Stata Journal,* 5(3), 309–329.

Bengtson, Vern L. 2001: Beyond the Nuclear Family: The Increasing Importance of Multigenerational Bonds, *Journal of Marriage & Family*, 63(1), 1–16.

Bocz, János – Medgyesi, Márton 2004: *A háztartások közötti együttműködés jellemzői II.* Életmód és időmérleg. Központi Statisztikai Hivatal, Budapest.

Börsch-Supan, Axel 2013: Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 4. Release version: 5.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w4.500

Börsch-Supan, Axel – Brandt, Martina – Litwin, Howard – Weber, Guglielmo (eds.) 2013a: *Active ageing and solidarity between generations in Europe: First results from SHARE after the economic crisis*. De Gruyter, Berlin.

Börsch-Supan, Axel – Brandt, Martina – Hunkler, Christian – Kneip, Thorsten – Korbmacher, Julie – Malter, Frederic – Schaan, Barbara – Stuck, Stephanie – Zuber, Sabrina 2013b: Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). *International Journal of Epidemiology,* 42(4), 992–1001.

Brandt, Martina – Haberkern, Klaus – Szydlik, Marc 2009: Intergenerational Help and Care in Europe. *European Sociological Review*, 25(5), 585–601.

Brandt, Martina – Schmid, Tina – Haberkern, Klaus 2012: Gendered support to older parents: do welfare states matter? *European Journal of Ageing*, 9(1), 39–50.

Bryan, Mark L.– Jenkins, Stephen P. 2016: Multilevel modelling of country effects: a cautionary tale. *European Sociological Review*, 32(1), 3–22.

Carmichael, Fiona – Charles, Sue 1998: The labour market costs of community care. *Journal of Health Economics*, 17(6), 747–765.

Cox, Donald 1987: Motives for private income transfers. *Journal of Political Economy*, 95(3), 508–546.

Deindl, Christian – Brandt, Martina 2011: Financial support and practical help between older parents and their middle-aged children in Europe. *Ageing and Society*, 31(4), 645– 662.

Dykstra, Pearl 2009: Intergenerational relationships in ageing societies: United Nations Economic Commission for Europe Working Group on Ageing, ECE/WG .1/2009/3.

Eggebeen, David J. – Davey, Adam 1998: Do safety nets work? The role of anticipated help in times of need. *Journal of Marriage and the Family*, 60(4), 939–950.

Gáti Annamária 2012: Az 50 éven felüliek „jólléte" kapcsolataik tükrében. In Kolosi Tamás - Tóth István György (szerk.): Társadalmi Riport 2012, TÁRKI Budapest, 271-290.

Gyarmati Andrea 2014: A nagyszülői gyermekgondozás intergenerációs változásának néhány jellemzője Magyarországon, kvalitatív adatokon, *Demográfia*, 57(1), 45–72.

Gyarmati Andrea 2015: *Nagyszülők és unokák. A nagyszülőktől az unokák felé irányuló gondozási transzferek jellege és változása.* PhD értekezés. Budapesti Corvinus Egyetem Szociológia Doktori Iskola, Budapest.

Hank, Karsten 2007: Proximity and Contacts Between Older Parents and Their Children: A European Comparison, *Journal of Marriage and Family*, 69(1), 157–173.

Henretta, John C. − Wolf, Douglas A. − van Voorhis, Matthew F. − Soldo, Beth J. 2012: Family structure and the reproduction of inequality: parents' contribution to children's college costs. *Social Science Research*, 41(4), 876–87.

Herlofson, Katharina − Hagestad, Gunhild − Slagsvold, Britt − Sørensen, Anne-Mette 2011: Intergenerational family responsibility and solidarity in Europe. Multilinks deliverable 4.3. Norwegian Social Research (NOVA), April 2011.

Kalmijn, Matthijs − Saraceno, Chiara 2008: A comparative perspective on intergenerational support. Responsiveness to parental needs in individualistic and familialistic countries *European Societies*, 10(3), 479–508.

Kohli, Martin 1999: Private and public transfers between generations: Linking the family and the state. *European Societies*, 1(1), 81–104.

Kohli, Martin − Künemund, Harald 2003: Intergenerational transfers in the family: What motives for giving? In Bengtson, Vern L. − Lowenstein, Ariela (eds.): *Global Aging and Challenges to Families*. Aldine de Gruyter, New York, 123–142.

Künemund, Harald − Rein, Martin 1999: There is more receiving than needing: theoretical arguments and empirical explorations of crowding in and crowding out. *Ageing and Society*, 19(1), 93–121.

Leitner, Sigrid 2003: Varieties of familialism. The caring function of the family in comparative perspective. *European Societies*, 5(4), 353–375.

Leopold, Thomas - Raab, Marcel 2011: Short-Term Reciprocity in Late Parent-Child Relationships. *Journal of Marriage and Family*, 73(1), 105–119.

Long, J. Scott 1997: *Regression models for categorical and limited dependent variables*. SAGE Thousand Oaks.

Lowenstein, Ariela − Katz, Ruth − Gur-Yaish, Nurit 2007: Reciprocity in Parent–Child Exchange and Life Satisfaction among the Elderly: A Cross-National Perspective. *Journal of Social Issues,* 63(4), 865–883.

Lye, Diane N. 1996: Adult child–parent relationships. *Annual Review of Sociology*, 22, 79–102.

Malter, Frederic − Börsch-Supan, Axel (szerk.) 2013: *SHARE Wave 4: Innovations & Methodology*. MEA, Max Planck Institute for Social Law and Social Policy, Munich.

Medgyesi, Márton 2003: Nemzedékek közötti privát transzferek motivációi Magyarországon. In Gál Róbert Iván (szerk.): *Apák és fiúk és unokák*. Osiris, Budapest, 173–197.

Medgyesi Márton 2005: *Nemzedékek közötti transzferek és a társadalmi státusz átörökítése.* PhD-értekezés, Budapesti Corvinus Egyetem, Szociológiai Doktori Iskola.

Mulder, Clara H.− Smits, Jeroen 1999: First-time home-ownership of couples. The effect of inter-generational transmission. *European Sociological Review*, 15(3), 323–37.

Mureşan, Cornelia – Hărăguş, Paul Theodor 2015: Norms of Filial Obligation and Actual Support to Parents in Central and Eastern Europe. *Romanian Journal of Population Studies*, 9(2), 49–81.

Örkény, Antal – Székelyi, Mária 2011: Családi transzferek és családon belüli értékválasztások. In Örkény Antal – Székelyi Mária (szerk.): *Az igazságosság labirintusaiban. Társadalmi méltányosság és generációs igazságosság a 21. század Magyarországán*. Sík Kiadó KFT, Budapest.

Papházi, Tibor 2005: A segítségnyújtás formái. In Török Péter (szerk.): *Képek az albumból, Munka és gondozás négygenerációs családok életében*. NCSSZI, Budapest.

Reil-Held, Anette 2006: Crowding out or crowding in? Public and private transfers in Germany. *European Journal of Population*, 22(3), 263–280.

Saraceno, Chiara – Keck, Wolfgang 2010: Can we identify intergenerational policy regimes in Europe? *European Societies*, 12(5), 675–696.

Sarasa, Sebastian 2008: Do welfare benefits affect women's choices of adult care giving? *European Sociological Review*, 24(1), 37–51.

Schenk, Niels – Dykstra, Pearl – Maas, Ineke 2010: The role of European welfare states in intergenerational money transfers: a micro-level perspective. *Ageing and Society,* 30(8), 1315–1342.

Silverstein, Merrill 2006: Intergenerational Family Transfers in Social Context In Binstock, Robert H. – George, Linda L. (eds.): *Handbook of Aging and the Social Sciences*. 6th edition, Elsevier Academic Press, 166–181.

Spéder Zsolt 2002: Generációk és élethelyzetek: háztartások közötti segítő kapcsolatok. In Spéder Zsolt (szerk.): *Demográfiai folyamatok és társadalmi környezet. Gyorsjelentés.* KSH Népességtudományi Kutatóintézet, Budapest.

Stata Corp. 2013: *Base Reference Manual*. Stata Press.

Swartz, Teresa Toguchi – Kim, Minzee – Uno, Mayumi – Mortimer, Jeylan – O'Brien, Kirsten Bengtson 2011: Safety nets and scaffolds: parental support in the transition to adulthood. *Journal of Marriage and Family*, 73(2), 414–429.

Utasi Ágnes 2002: Társadalmi integráció és családi szolidaritás. *Educatio,* 11(3), 384–403.

Vaskovics László 1993: A fiatal felnőtteknek nyújtott szülői segítség. *Aula,* 15(1), 7–21.

Zissimopoulos, Julie 2001: *Resource Transfers to the Elderly: Do Adult Children Substitute Financial Transfers for Time Transfers?* Working Papers 01-05. RAND Corporation.