Ageing and Family Solidarity in Europe

Patterns and Driving Factors of Intergenerational Support

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Abstract

At the beginning of the twenty-first century, intergenerational relations remain a key aspect of the future development and sustainability of the European social model. In the present paper, patterns of intergenerational support and the main driving factors behind individuals' transfer behavior are explored. In particular, the data from the Survey of Health, Ageing, and Retirement in Europe are utilized to shed light on the main factors behind the likelihood and intensity of social support, and financial help provided to and received from other family members by ageing and elderly Europeans. The analysis also takes into consideration patterns and factors correlated with grandparenting

activities. Finally, special attention is devoted to the condition of those individuals who are sandwiched between care obligations toward their elderly parents and young adult children. It is shown that the likelihood of the exchange of support between family generations is highest in Scandinavian countries and lowest in Southern Europe. The intensity of support follows an opposite North-South gradient. In addition, relevant gender-related inequalities are documented. In general, time-demanding support obligations are more likely to fall on the shoulders of women in the early stage of their later life, while mainly benefitting elderly men.

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**Ageing and Family Solidarity in Europe:
Patterns and Driving Factors of Intergenerational Support**

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1. Introduction

At the beginning of the XXI century, intergenerational relations remain a key aspect of the future development and sustainability of the European social model. In fact, intergenerational relations, both at the macro and micro levels, adapt to and shape changes in population demographics, economic cycle, family cultures and values, and social policies. Having a clear map of cross-national patterns of intergenerational exchanges of time and money, and understanding the micro level processes and macro level structures that shape the exchange of resources between generations is key to our understanding of how society works, and to forecast some of the most prominent challenges and promising opportunities for countries' future social and economic development.

The exchange of social and economic support between the generations is one of the main pillars of both family life and welfare systems (Hashimoto 1996, Künemund and Rein 1999). Within the family, parents generally support their children not only while they grow up but also when they have become independent and left the parental home, whereas grown-up children support their parents when they have become disabled and need help (Finch and Mason 1993, Lee et al. 1994, 1998, Saraceno et al. 2005, Henretta et al. 1997, Silverstein et al. 2006). Within the welfare system, those of working age provide the economic resources both for the young, in terms of family support and schooling, and for the old, in terms of pension and health care financing. This may be conceptualized not only as redistribution among age groups, but also it refers to the succession of generations. In the usual understanding of welfare systems, today's children will provide for the welfare of their parents' generation when the latter has become old. Therefore, the sustainability of population ageing in European societies needs to be addressed from, at least, two different perspectives. Firstly, one needs to explore the consequences that this demographic shift and the existing patterns of intergenerational support and welfare provision have on the wellbeing and life chances of the elderly. Secondly, it is also necessary to analyze the consequences that population ageing has on the younger generations. In particular, special attention should be paid to the effect that the increasing quota of frail elderly and the redesign of long-term care policies have on the burden of informal care provision that falls on the shoulder of young adult women.

1.1. The relevance of intergenerational support for the receivers' wellbeing (and its distribution)

The quality and amount of informal support that individuals receive from their family during the joint life course of the different generations is an essential factor in determining their own economic, physical, psychological and social wellbeing (Bönke 2008, Furstenberg 2005, Spilerman and Wolff 2012). Furthermore, individuals' position into the system of social stratification is significantly affected by the amount of informal support they can count on (Olagnero et al. 2005, Lee et al. 1994, 1998, Lin 1999, Szydlik 2004). The availability of intergenerational support is a key element in determining the life chances of young adults (Bowles and Gintis 2002). Previous research has consistently shown that early parental investment in children's education has significant consequences on the unequal distribution of educational opportunities (Breen and Goldthorpe 1997, Breen and Jonsson 2005). But the family's sponsorship of children continues well beyond childhood and entry into the labor market. Thus, parents invest in adult children's consumption, housing, geographical mobility, etc. (Litwak 1960, Kohli and Albertini 2008, Albertini and Radl 2012). Receiving intergenerational support, therefore, not only means having better educational opportunities and better jobs, but also better access to housing, more chances of starting own business, a higher degree of geographical mobility and, thus, accessing more and better job career opportunities. In some countries by

looking after their grandchildren parents make it possible for their children – mainly daughters – to participate into the paid labor market. Eventually, the availability of parental support also affects the fertility decisions of younger generations (Aassve et al. 2012). At the opposite end of the life course, receiving informal support in old age translates into healthier and more active aging, lower risk of social isolation, later entry into nursing or old age homes and health care institutions. Children's support to elderly parents is also essential to bridge frail individuals to both public and private care services. Thus, also when not directly providing informal social support, children's help is essential to the elderly parents (especially those with daily living activities limitations) receiving adequate support and care (Choi 1994, Litwin 1997).

1.2. The relevance of intergenerational support for the donors' wellbeing (and its distribution)

Intergenerational support does not only affect the wellbeing of those who receive support, but it also has significant consequences on the wellbeing and life chances of the donors. In other words population ageing does not affect only the elderly population, it profoundly affects other age groups as well.

Most of previous research on intergenerational support has mainly focused on the effect that time and financial transfers have on the wellbeing of the receivers' generation – being that of the elderly parents or young adult children. There is little international comparative research addressing how the provision of support affects the wellbeing and life chances of the donors. From the point of view of the elderly, providing support to others is usually beneficial: it keeps them in better health, socially included and eventually results in improved psychological health. However, providing support to others not always results in more wellbeing. Thus, for instance, elderly parents who need to give financial support to economically frail children, or need to share their dwelling with their children after the latter went through a divorce or economic difficulties, might suffer some relevant negative consequences - especially in terms of psychological wellbeing and quality of intergenerational relations (Timonen et al. 2011, Bengtson et al 2002; Luescher and Pillemer 1998).

Special attention to the effects of support provision on the wellbeing of the donors should be paid when we focus on social support provided by adult children – mainly daughters – to their elderly parents. As a matter of fact, supporting the frail elderly remains essentially a family task (or obligation) in countries where long term care (LTC) policies are underdeveloped, or inexistent. At the same time, in countries with a developed welfare system, the scale of the challenge represented by increasing LTC needs has pushed the state to shifting the burden of care provision from the state to the family, and from formal to informal care (Simonazzi 2009, OECD 1996, Pacolet et al. 2000, Theobald 2005, Pavolini e Ranci 2008). Thus, in both cases, informal care provision is likely to play the lion's share in meeting the needs of an increasing ageing population. And, considering the persistent unequal division of family work between men and women, this growing demand of informal care is likely to fall on the shoulders of women - as daughters and wives, but also as workers in the (regular and irregular) market of care providers (Bettio et al. 2006, Saraceno and Keck 2011).

Adopting the donors' perspective in the analysis of the consequences of the exchange of intergenerational support is particularly relevant. In fact, help with personal care and household chores is time consuming, physically demanding and, most importantly, usually is highly needed at a point of the donor's life course in which her working and career maturity is at its peak. As it has been documented by Carmichael and Charles (1998) and Sarasa (2008) prolonged periods invested in caring for elderly parents and relatives have significant negative consequences on women's labor market outcomes and health status. As a consequence, if policies do not respond adequately to the challenge of increasing care needs of the elderly population the negative

consequences of population ageing on women's economic empowerment are likely to be huge. Moreover, failing to meet this challenge also means offsetting the potential positive effects of other policies and social trends such as: increasing women's educational investment, expansion of policies aiming at supporting mothers' employment and (re)conciliating family and working life, increasing the employment rate among women aged 50 years or more.

2. Macro and micro level factors affecting intergenerational support: Previous findings

To date, research on intergenerational support exchange - in the fields of sociology, demography and economics - has mainly focused on three topics. First, a number of scholars have explored which are the motivations behind support exchange. In other words, this research has tried to establish which are the reasons for which individuals provide instrumental or emotional support to others. Scholars have developed a wide variety of typologies of transfer motives; the common denominator among the different research traditions in sociology, psychology and economics is the distinction between altruism and reciprocity (Cox 1987; Bengtson & Roberts 1991; Kolm & Ythier 2006). A second group of studies has focused on the micro level factors that influence individuals' transfer behavior – such as the demographic and socioeconomic characteristics of the donor and the receiver (Attias-Donfut et al. 2005; Klein Ikkink et al. 1999; Silverstein et al. 2006; Albertini et al. 2007; Hurd et al. 2007). Finally, a number of (mainly) comparative studies have investigated cross-country differences in patterns of support exchange and, at the same time, explored the role of macro level institutions and context in influencing transfer behavior. In particular, a large part of this research has addressed the question of “if” and “how” welfare state generosity and the characteristics of welfare regimes affect the exchange of intergenerational support within the family. In the present review I will mainly focus on studies conducted within the second and third of these research strands.

Previous studies have suggested a range of factors that would affect intergenerational family transfers and their national patterns, for example: the demographic structure of families; the educational and occupational status balance between the sexes and the generations; the legal obligations of intergenerational support; the characteristics of family policies and systems of social care provision; the values and traditions which make up a family culture. Differences in the specific set of factors examined are often closely related to the theoretical approach adopted. Thus, behind the various combinations of explanatory factors used in the literature, there is variation in the theoretical models of intergenerational solidarity (Kohli, 2004; Szydlik, 2004). Furthermore, explanations differ according to which specific characteristics of the exchange are considered; for example, qualitative versus quantitative dimensions, or social support and in kind help versus financial transfers. This complexity can be reduced by taking account of levels of aggregation and categories of explanatory factors. For the sake of simplicity, it has been suggested to distinguish between the micro (individual and family) and the macro (anything above) levels, and between three broad categories: structural, institutional and cultural factors (Albertini et al. 2007; Kohli, 2004).

Macro-level factors comprise, for example, the demographic structure of the population, the prevalent household forms and the distribution of resources; the institutional landscape of publicly regulated benefits and obligations, such as pension systems, family allowances, public care provisions, legal obligations of intergenerational support, or inheritance taxation; and the cultural patterns of family values and attitudes towards the welfare state. Micro-level factors comprise the characteristics, resources and needs of givers and receivers, such as gender, income and wealth, marital status and parenthood, or health; their preferences and

motives; and the characteristics of their relationship, such as emotional closeness or frequency of contact (Kohli and Künemund, 2003; Albertini and Radl, 2012).

Macro-level factors can be conceptualized as the distal causes for transfer giving, micro-level factors as the proximate causes. An explanation of the macro level variations in support patterns can uncover the effects of the larger social context, but misses how they play out on the ground. On the other hand, an explanation at the micro level is possible but remain incomplete to the extent to which variations across different socioeconomic and cultural contexts are not taken into account. Both these analytical approaches have received considerably attention in past research. The next challenge taken up in present-day scientific literature is that of analyzing how the distal level impacts and mediates the role of proximate factors.

In the following part of this review I summarize the main results from previous empirical research on support exchange. In doing that I will distinguish between factors affecting transfer behavior at the micro and macro level and, at the micro level, I will distinguish between the role played by donors' and receivers' socioeconomic characteristics. In addition, where possible, I will also take into consideration the results of recent analyses on how the effect of micro level factors varies across different social contexts.

2.1. National level patterns and macro level factors affecting support exchange

As mentioned above, a large part of the literature on the macro level factors has been dealing with the relation existing between the generosity of social policies and the strength of family solidarity. Until recent years this literature has debated over two hypotheses: the “crowding out” and the “crowding in” hypothesis - i.e. the idea that welfare state substitutes family solidarity vs. the hypothesis that intergenerational support increases with welfare generosity (Künemund & Rein 1999; Kohli & Kunemund 2003; Cox & Jakubson 1995; Shoeni 2002). The set of questions around which this literature has developed is the following: to what extent the public and private dimension of the generational contract have interacted? To what extent they substituted, reinforced or complemented each other?

Early theories – deriving from modernization theories – suggested that the emergence of the welfare state jeopardized family solidarity, restricting support exchange to the co-residing family members. The results of recent studies, however, show that substantial exchange of resources still takes place beyond the co-residing household. It has been found that growing public welfare provisions have not diminished the role of the family in providing care and financial support to its members – in other words the welfare state does not crowd out family solidarity. On the contrary, state intervention has enabled the family to perform new roles in social protection (Künemund and Rein 1999; Knijn and Komter 2004; Reil-Held 2005). Furthermore, it has been suggested that, due to its relational and emotional dimensions, the support received from the family has a special quality that cannot be emulated and substituted by the market or public institutions (Kohli 1999). The availability of international comparative data has permitted to consistently document that the generous, service-based welfare systems of the Nordic European countries - and the corresponding family culture and values - promote an high frequency, but low intensity of support exchange within the Nordic families. Whereas Mediterranean societies - characterized by a high level of familialism and a weak welfare provision - are located at the opposite side of the spectrum. In these societies, in fact, individuals within the family are less likely to exchange support; on the other hand, the amount of resources exchanged is much higher than in other countries and co-residency is an often-adopted strategy to cope with support needs of family members (Albertini et al. 2007; Attias-Donfut et al. 2005). Existing empirical evidence has also pointed out that to the

extent that public institutions take over the most demanding activities of personal and physical care, the family specializes in less time and skills-requiring support such as household chores and paperwork (Brandt et al. 2009). This indicates that there is complementarity (or specialization) of family and welfare support. In other words, there is a “task-specificity” model (Litwak 1985): family and welfare systematically take care of different types of services, according to a sort of functional differentiation model or task specialization. Eventually, the relation between public and family support seems not to be one of crowding out nor of crowding in, but one of specialization. In fact, the only group of the population for which the state (and/or the not-for-profit sector) seems to be substituting family’s support is that of the frail childless elderly (Albertini and Mencarini, 2014).

Beside the exchange of social or economic support between non-coresiding parents and adult children, there is another important strategy that European families adopt to support each other along their life courses: co-residence. However, the extent to which parents and adult children co-reside varies considerably across European countries – also as a consequence of the different normative ages for grown-up children to leave the parental home (Aassve et al. 2002; Billari et al 2001). These differences are rooted in the social and economic history of preindustrial European societies (Reher 1998), but continue to exist today as a consequence, not only of long-established cultural differences, but also of different welfare systems (Glaser & Tomassini 2000; Tomassini et al. 2003, 2004, Hank 2007). In general previous research has well documented that in Southern Europe not only adult children leave parental home at a later age than in Continental and Scandinavian countries, but also once they move out they tend to live nearer to their parental home. In addition, it has also been shown that intergenerational co-residence is more frequent in Mediterranean countries also when considering the oldest parents and their “young-elderly” children (Kohli et al. 2005).

Beside these differences, however, there are also a number of commonalities between countries in patterns of intergenerational exchange of support. Previous research has clearly documented that, although with different degrees, in all western developed countries the exchange of financial support flows mainly downward along the generational lineage. That is to say that there is a net flow of economic resources from the older family generations to their descendants. The largest transfers are made from parents in their mid (or early old) age to their adult children, especially those who are establishing their own household or facing difficult transitions and situations – e.g. losing their job or divorcing. A common characteristic of intergenerational support in western developed societies is also that few financial exchanges take place between non-relatives, or between relatives other than parents, children and grandparents – e.g. between siblings, nephews and nieces or cousins. The flow of social support, differently from what observed for financial transfers, is less one-way. The largest amount of time transfers is provided by mid-age adults (i.e. between 45 and 65 years old) to both the younger and older generations within the family. Therefore, to the extent to which the parent-child relation is considered, the flow is mainly an upward one if we consider very old parents – i.e. older than 70 years; whereas support mainly flows downward to children when we focus on younger parents and, particularly, when considering support that parents give to children by looking after grandchildren. Similarly to what is observed for financial help, social support mainly takes place within the parent-child relation, with other relations being much less frequent.

2.2. Micro level factors affecting support exchange

2.2.1. Donors

A number of donor's characteristics have been found to be positively related to giving support. Parents from higher (occupational) social classes, with higher educational level, incomes and financial wealth are more likely than lower class parents to provide children with financial and social support – the positive effect of these variables being stronger for the former type of support. These findings clearly points to the fact that intergenerational support might be a relevant factor in explaining the transmission of socioeconomic inequalities from one generation to the following one. In particular, concerning the transmission of economic resources, it has been documented that parents' support for children continues well beyond childhood and entry into the labor market (Kurz, 2004; Spilerman, 2004; Kohli and Albertini 2008; Zissimopoulos and Smith 2011, Spilerman and Wolf 2012) and even beyond the joint life course of the two generations in the form of bequests (Bernheim et al. 1985, Szidlik, 2004). In a recent study Albertini and Radl have shown that financial inter-vivos transfers are understood as parental investments in the socioeconomic status of their offspring. Thus, parents use transfers to make sure that their children do not fall short of expectations. They promote the socioeconomic success of children not only in terms of educational attainment, but also continue to invest in their professional careers and even in their “conspicuous consumption”. It is found that, above a certain level of household wealth, the status aspirations mechanism explains why, *at equal income and wealth*, parents from higher social classes transfer more economic resources to their children than parents from lower occupational social classes (Albertini and Radl 2012). Previous research has also shown that parental income and wealth have a similar effect on the inter-vivos transfers to their children across all Western European countries. In contrast, the effect of parents' educational level shows some variation. It is markedly stronger in Southern and Continental Europe than in the Nordic countries. In other words, the highly educated parents of the Southern and Continental countries are much more similar in their transfer behavior to their Nordic peers than the low-educated parents.

Other donors characteristics have been found to have a significant impact on the likelihood and amount of support transferred to the children generation: older parents, partnered parents, parents in bad health, and those with many children are less likely to transfer time and/or money to their children – i.e. siblings ‘compete’ for parental support (Emery 2013).

Some donor's characteristics play a different role depending on the type of support considered. Thus, parents who are employed (vs. pensioners or homemakers) are more likely to financially support their children, but less likely to give social support. Mothers are more prone than fathers to provide time resources to their children and relatives, whereas fathers give financial support more frequently than mothers.

A special form of support that flows from the older to the younger family generations is grandparenting. Previous research has shown that between-countries differences in the likelihood of providing grandparenting time to the children generation are not as marked as cross-countries differences in the exchange of social or financial support (Attias-Donfut et al 2005; Albertini et al. 2007). However, within Europe, a north-south gradient has also been documented concerning the probability that grandparents look after their grandchildren (Hank and Buber 2009). The support that parents provide to their children by looking after their grandchildren is of paramount importance to the younger generations. Children fertility behavior is influenced by the availability of grandparenting. Hank and Kreyenfeld, for instance, find that in Germany informal care arrangements positively affect the probability of having children, whereas public day care provision does not (Hank and Kreynefeld 2002). Also, comparative analyses suggest that the positive effect of grandparents'

availability on children's fertility is particularly important in Southern European countries (Aassve et al. 2012). Furthermore, the availability of grandparenting is key in determining women's participation in the paid labor market. In particular, support from grandparents has a significant positive effect on labor market participation of women with lower earnings potential. On the other hand, there is empirical evidence showing that mothers with lower educational levels provide time assistance to their better off daughters (Gray 2005, Dimova and Wolff 2011). It is also worth noting, that the positive effect of grandparenting on mothers' labor market participation varies across countries. Thus, Aassve et al., using data from the Generations and Gender Survey, find a positive effect of grandparenting in France, Germany, Hungary and Bulgaria whereas there is no indication of a causal effect of informal childcare on mothers' work decisions in Georgia, the Russian Federation, and the Netherlands (Aassve et al 2012).

It is worth noting that also concerning grandparenting we observe notable gender differences. Grandmothers are more likely than grandfathers to look after grandchildren (Attias-Donfut et al. 2005, Guzman 2004). On the other hand, maternal full time employment and mother's young age are positively related with the likelihood of receiving grandparenting time (Guzman 1999; Kuhltau and Mason 1996, Baydar and Brooks-Gunn 1998, Vandell et al. 2003).

Moving our focus from the downward flow of resources to the upward one, it should be pointed out that economic support from the young to the elderly generation is quite rare in Europe. In general, less than 5-6% of elderly individuals have received economic help from children in the last 12 months – whereas figures of financial support going in the opposite direction are at least 4 times higher. Slightly higher figures of parents receiving economic help from children are found in Greece and in Eastern European countries – probably due to relatively less generous pension systems.

Therefore, the main form of support going upward along the generational lineage is help with personal care, household chores and paperwork. Concerning this type of instrumental help, the first and most relevant finding from previous research is that daughters are significantly more likely to provide help to parents than sons. This result mirrors what has been reported for social support provided by mothers to children. In other words, independently from which generation's perspective is adopted the majority of caregivers are women (Attias-Donfut et al. 2005, Albertini et al. 2007).

Furthermore, the burden of providing unpaid care and help with household chores to the elderly is unequally distributed along the social stratification system. That is to say that adult daughters from lower socioeconomic classes are more likely to provide informal unpaid support to their elderly parents than women from higher social strata. This holds true in all Europe, but in Scandinavian countries (Sarasa and Billingsley 2008). In fact, children of different social classes are characterized by very different sets of opportunities and constraints. Living proximity, which is an essential condition to provide social support, tend to be higher among individuals in middle or low social classes (Litwak 1960; Kulis 1987) and, in addition, children from these classes are more likely to (go back to) co-reside with their parents when they become frail and need support.

Next, and most importantly, the trade-off between paid employment and caring time (or the opportunity cost of directly taking care of the parents vs. buying care services on the market) is quite different depending on the occupational status and position of the children (Johnson and Lo Sasso 2006). This is particularly relevant when intensive, time demanding care is needed: as a matter of fact providing care for more than 20 hours per week has a significant negative effect on the likelihood of staying in the paid labor market (Henz 2006, Sarasa 2008, Carmichael and Charles 1998). Welfare state generosity, of course, can tap these differences between

women from different social classes by targeting and improving the provision of LTC services.

Women who provide help to their elderly parents (or parents in law) often face an additional trade-off: that of simultaneously providing care support to young adult children – also in terms of time devoted to grandparenting activities. Individuals who have the responsibility of supporting both older and younger generations are usually referred to, in the literature, as the “sandwich generation” or “pivot generation” (Miller 1981, Brody 1981, Attias-Donfut 1995, Soldo 1996). Of particular concern here are those women who must face the care demands coming from parents (both natural and in law), children and partner, and simultaneously participate into paid labor market. This is a potentially increasing group of the female population, due to a series of different socioeconomic phenomena such as: prolonged educational careers and later entry into paid labor market and independent life on the side of children, increasing incidence of children’s divorce, and prolonged life expectancy of elderly frail parents (Hogan et al 1993; Bengtson 2001, Grundy and Henretta 2006, Daatland et al. 2012). Previous research on women of the sandwich generation shows that the competing demands of care from both the younger and older generations do not push these women to provide less support to children or parents. On the opposite, the likelihood of giving help to the elderly generation is positively correlated with the probability of supporting the younger generation too. Only when faced with the high demand of care from three or more children, women of the pivot generation diminish the flow of resources going to their own elderly parents (Grundy and Henretta 2006, Fingerman et al. 2011, Igarashi et al. 2013). This condition, however, has relevant consequences on the wellbeing of these women. In general, it has been shown that the need to cope with demands of care from both older and younger generations, and the need to combine work and family, results in significantly lower levels of psychological wellbeing among women in the sandwiched generations (Hammer and Neal 2008, Voydanoff and Donnelly 1999, Rubin and White-Means 2009, Oprea and Kalmjin 2012). The condition of member of the sandwiched generation is particularly harmful when social withdrawal is utilized as a strategy to cope with the overwhelming multiple time demands (Neal and Hammer 2010). Furthermore, women in the pivot generation (vs. men, or women providing to just one generation) are more likely to experience work-related stress, higher levels of absenteeism, a mismatch between actual and preferred working hours and, eventually, to leave the workforce or decreasing their paid working time (Buffardi et al 1999, Starrels et al 1997, Couch et al. 1999, Keene and Prokos 2007, Chapman et al. 1994).

2.2.2.Receivers

Previous empirical research has produced some consistent findings about the role of the characteristics of the receiver in shaping support patterns. A finding, which is common to virtually all European societies is that, among siblings, it is the most needy child the one who gets the largest part of parents’ economic support. Thus, children who are unemployed or student, and the ones who are divorced, widowed or never married are those who are more likely to get financial help (Kohli and Albertini 2008). In other words, it can be argued that while *inter-vivos* financial transfers contribute to maintaining or increasing inequality between children from different social classes, on the other hand they tend to reduce economic inequality between individuals from the same family. It is also worth noting that in all Western societies daughters are as much likely as sons to receive economic support from their parents. The only exception to this regularity has been documented for immigrants of Muslim religion in France (Wolff et al. 2007). On this latter point, however, it is worth noting that previous research on Western European societies has found that the exchange of financial support among immigrants tends to follow a different logic from the one that regulates the same exchange among natives (Baykara-Krumme 2008; Björnberg & Ekbrand 2008). Concerning social support, it has been found that

children who are employed (vs. student or unemployed), who are in bad health status, and who have own children are more likely to receive time transfers than children in different conditions. Once more, the child's gender does not play a role: both daughters and sons are equally likely to get parental social support.

As for what concerns the variation of the role of micro level factors across different countries, previous analyses have proven that being divorced or widowed, or being a parent, has a positive effect on receiving transfers from one's parents in Continental Europe, but this does not apply to Mediterranean or Scandinavian countries. Similarly, when non-co-residing children are unemployed or still in education they are more likely to receive economic support from their parents in Denmark, Sweden, and in Continental Europe but not in Southern Europe. Moreover, in the latter countries children's educational level — which can also be thought of as a proxy for economic standing — is positively and strongly correlated with the likelihood of receiving economic support, whereas the correlation is absent in Scandinavia and very weak or absent in Continental Europe (Albertini et al. 2007).

When we turn our attention to the elderly, as social support receivers, it must be noted that the first and most relevant explanatory factor is the individual's health status: parents in bad health are more likely to receive support. On the other hand, differently from what might be expected, there is not clear evidence that individuals living in economically disadvantaged families receive more social support than others. Previous research results on the role of individuals' social class on the likelihood of receiving care support are mixed and contradictory – also due to the fact that different definitions of social class have been adopted (i.e. using occupation, income, wealth or education as a proxy for individuals' position in the social stratification system).

Eventually, one key characteristic that affects the likelihood of receiving social support in old age is the fact of having or not having children. Previous research has shown that not having children, (i.e. being childless or childfree) has not any effect on the likelihood of being socially isolated in old age. Childless people, in fact, learn early in their lives to live outside conventions and develop alternative non-family based social networks. Nonetheless, support networks of childless elderly, despite being suited to providing emotional and low-intensity support, largely fails to provide the intense help that is needed when limitations with daily living activities arise. Thus, eventually, it has been shown that not having children increases individuals' risks of lacking personal care and long term care support at very old ages. In addition, childless elderly are more likely to enter residential care early in their lives, and at lower levels of dependency than parents (Albertini and Mencarini 2014; Wenger 2009; Wenger et al 2007; Albertini & Kohli 2009; Dykstra & Hagestad 2007). It is worth noting that these negative consequences of being childless are more harming to elderly women due to their higher life expectancy. As a matter of fact, partnered elderly men without children are often taken care by their own female partners – which, in general, tend to be younger and healthier.

Besides providing financial and social support while living separated, the exchange of support between elderly parents and adult children can take the form of intergenerational co-residence. As we have seen above, the extent to which co-residence is adopted as a support strategy varies considerably across countries. In general, existing research on the topic has shown that the educational level of parents and children is negatively correlated with the likelihood of intergenerational co-residence. In other words, living together is a support strategy more common among people from lower social classes. This educational gradient, however, has not been found in Scandinavian countries, where co-residence between adult children and parents is a non-normative behavior and the level of defamilialization and de-commodification of individuals' welfare is significantly higher than elsewhere (Reher 1998, Viazso 2010). Similarly, it has also been found that children who are not employed in Continental and Southern Europe are more likely than employed ones to live with

their parents. Differently, in Scandinavia the likelihood of co-residence is not significantly different across the children's labor force statuses.

3. Patterns and driving factors of intergenerational support: Evidence from Europe

The empirical analysis presented below aims at exploring three different dimensions of intergenerational transfers in Europe. First, I will provide a picture of European patterns of intergenerational exchange of support. Second, the analysis will focus on the main factors correlated to the intergenerational exchange of social and financial support within families. The last step will be that of analyzing the specific condition of the sandwiched generation.

The data utilized in the analyses are from the Survey of Health, Ageing and Retirement in Europe (SHARE). SHARE is a longitudinal, cross-national survey representative of the population aged 50 years and older; the partners of selected individuals, independently of their age, are also interviewed. SHARE contains detailed information on the social, economic and health situation of the interviewed individuals. In particular, data from the first three regular waves² of the survey have been utilized.³ The interviews for these three waves took place, respectively, in years 2004, 2007 and 2011.

The sample utilized in the analyses only includes respondents aged 50 years or more at the moment of the interview (i.e. eligible partners below this age are not taken into consideration). In particular, the analyses are conducted on the unbalanced panel sample of individuals included in at least one of the three waves. Data from 17 countries are utilized. There are 8 countries that belong to the EC15_NCE group: Austria, Germany, Sweden, the Netherlands, France, Denmark, Switzerland, and Belgium. Four additional countries are in the EC15_Southern group: Spain, Italy, Greece and Portugal. Finally, 5 countries that belong to the ECA-EU13 group are included: Czech Republic, Poland, Hungary, Slovenia, Estonia. The number of observations (i.e. individuals per year) is equal to 116747, from 79359 interviewed individuals. It is worth noting that Greece took part only to the first two regular waves of the SHARE, Czech Republic and Poland joined the survey starting from wave 2 and other 4 countries joined SHARE starting from the third regular wave (i.e. Portugal, Hungary, Slovenia, and Estonia). Therefore, data from these countries are only partially comparable with those from other ones – in fact the observation period over which intergenerational transfers are registered (i.e. the 12 months previous to each interview) varies between countries.

Before moving to the empirical analyses it is worth clarifying the specific meaning of instrumental, social and financial support in the context of the present study and of the SHARE survey. Social support is help provided to (or received from) individuals not co-residing with the respondent during the last 12 months before

² Data from the SHARE wave 3 have not been included since this wave is a retrospective one. Thus, while information on past life history of the respondents have been recorded (such as, work or health history) the regular information collected in waves 1, 2 and 4 has not been recorded in wave 3.

³ “This paper uses data from SHARE wave 4 release 1.1.1, as of March 28th 2013 (DOI: 10.6103/SHARE.w4.111) and SHARE wave 1 and 2 release 2.6.0, as of November 29 2013 (DOI: 10.6103/SHARE.w1.260 and 10.6103/SHARE.w2.260). The SHARE data collection has been primarily funded by the European Commission through the 5th Framework Programme (project QLK6-CT-2001-00360 in the thematic programme Quality of Life), through the 6th Framework Programme (projects SHARE-I3, RII-CT-2006-062193, COMPARE, CIT5- CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th Framework Programme (SHARE-PREP, N° 211909, SHARE-LEAP, N° 227822 and SHARE M4, N° 261982). Additional funding from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, R21 AG025169, Y1-AG-4553-01, IAG BSR06-11 and OGHA 04-064) and the German Ministry of Education and Research as well as from various national sources is gratefully acknowledged (see www.share-project.org for a full list of funding institutions).”

the interview. In particular it refers to help provided with personal care (e.g. dressing, bathing, eating), practical household help (e.g. household chores, transportation, shopping) and paperwork (e.g. filling out forms).⁴ Looking after grandchildren without the presence of the parents is not included in the definition of social support and is considered as a separate form of support. Financial support is any financial or material gift - provided or received - amounting to 250 euros or more.⁵ Costs connected with shared housing or food are not included in the definition of financial support. Instrumental support is the sum of all of these types of help: social support, grandparenting and financial support. Thus it is worth noting that the following analyses only focus on instrumental support and do not take into consideration other forms of help - such as, for instance, emotional support. Unless differently specified, “intergenerational support exchange” refers to the exchange of instrumental support.

3.1. Patterns of Intergenerational Support Exchange in Europe

As reported above, previous research has consistently documented that relevant between-countries differences in the likelihood and amount of intergenerational support exist in Europe. Table 1 shows the pattern of instrumental support provided to others from the perspective of elderly Europeans who participated to the SHARE. Some commonalities emerge across all of the 17 European countries considered: (i) as far as support to children is considered, the respondents are considerably more likely to give financial help than to provide social support; (ii) in terms of time transfers what elderly Europeans really do for their own children is to look after their grandchildren. On average more than one grandparent out of two has provided some grandparenting time in the 12 months previous to the interview; (iii) there is a minority of respondents who still have at least one (natural or in law) parent alive (see table A1), those who do are more likely to provide social support to their own elderly parents than to their children. At the same time, however, they are much more likely to look after their grandchildren than providing support to elderly parents (figure 1). Beside these commonalities, however, there are relevant between-countries differences both in the likelihood and amount of support provided to children and parents. In general, coherently with previous research on the topic, it emerges that the likelihood of providing support decreases following a North to South gradient, whereas the intensity of support follows an opposite gradient.

⁴ It is worth noting that while each respondent is requested to report social support he/she provided to others, only one of the two members of a conjugal couple is requested to report about support received by him/her and his/her partner. Therefore, in the following analyses, the information about support received has been imputed to the not-responding partner using information provided by the responding member of the couple.

⁵ Questions about financial transfers given and received are asked to one of the two members of the conjugal couple, with the only exception of those couples in which the partners manage their finances separately. In the latter case, questions on financial transfers are made to both partners. The information about financial transfers given and received has been imputed to the not-responding partner using information provided by the responding member of the couple.

Table 1: Instrumental support provided by respondents to their children or parents.

Country	Given to children					Given to parents
	Participation in social support (%) (a)	Intensity of social support (median hours) (b)	Participation in financial transfers (%) (e)	Participation in grand parenting (%) (c)	Intensity of grand parenting (median hours) (d)	Participation in social support (%) (f)
EC15_NCE						
Austria	7.1	120	21.9	44.6	360	15.6
Germany	14.8	96	26.1	48.2	288	33.2
Sweden	22.3	52	33.7	60.2	156	44.6
Netherlands	15.2	73	23.0	66.5	240	39.6
France	7.3	100	18.1	55.0	360	24.0
Denmark	23.2	52	30.5	62.9	144	42.5
Switzerland	6.8	104	18.4	52.6	312	26.2
Belgium	16.4	156	20.4	61.4	416	38.7
EC15_Southern						
Spain	3.0	365	8.5	45.3	576	17.7
Italy	6.1	365	19.5	50.9	730	24.3
Greece*	7.0	208	20.9	50.1	960	19.9
Portugal***	1.4	-	8.2	40.1	-	9.9
ECA_EU13						
Czech Rep.**	10.3	208	16.2	45.3	416	18.3
Poland**	6.0	208	17.6	49.0	730	15.7
Hungary***	4.1	-	9.6	44.3	-	9.9
Slovenia***	3.0	-	10.0	45.2	-	4.8
Estonia***	3.9	-	12.2	36.3	-	8.1

Notes: *no data for wave3; **no data for wave1, ***no data for waves 1 and 2. Percentages refer to % of respondents who has received/given support from a child/parent at least once during observation period (between %); median is calculated as overall distribution (individual*year); amount of social support and grand parenting are projected number of hours per year (available only for waves1 & 2) (a) conditioned on having at least one living child, who live closer than 500km away; (b) conditioned on (a) & having received/given social support from child(ren) for an amount greater than 0 hours*year; (c) has at least one living grandchild; (d) conditioned on (c) & has done some grand parenting for an amount greater than 0 hours*year; (e) conditioned on having at least one living child; (f) has at least one parent (natural or in law) alive at the moment of interview.

Figure 1: Participation in social support to children and parents (a) and grandparenting (b).

Notes: (a) conditioned on having at least one living child, who live closer than 500km away, and at least one parent (natural or in law) alive at the moment of interview; (b) conditioned on (a) & having at least one living grandchild.

3.1.1.Social support to children

The two Nordic countries clearly stand out in the ranking of the likelihood of providing social support to children: both in Sweden and Denmark more than one fifth of the respondents have helped their children during the observation period. Next comes a group of countries in which the likelihood of time transfers is in the range between 10 to 16 percent. These are mainly countries in central Europe: Belgium, the Netherlands, Germany and the Czech Republic. A third group is made of Austria, France, Switzerland, Italy, Greece and Poland. Here the quota of respondents who have provided social support to children is around 6-7%. In Spain a few of ageing parents, just 3%, gave help with household chores, paperwork or personal care to their children. Finally, some of the lowest values are registered in those countries that joined SHARE only in 2011: Portugal, Hungary, Slovenia and Estonia.⁶

The analysis of the amount of support provided (in hours per year) delivers a different picture. Both in Italy and Spain the median value is of about one hour of support for each day of the year. In Czech Republic and Poland the median parent has provided slightly more than 208 hours of support to their children in the 12 months previous to the interview. Next come Belgium and Austria where the median amount of support provided is, respectively, 156 and 120 hours. In Germany, France and Switzerland the median respondent has provided around 100 hours per year, while in the two Nordic countries and the Netherlands the intensity of time transfers to children is considerably lower (i.e. between 52 and 73 hours per year). Once more, the two extremes of the ranking – i.e. Southern vs. Nordic European countries - are clearly identifiable, while the clustering of nations between these two extremes is more articulated. It is interesting to note that the scatterplot of the likelihood and intensity of social support to children suggests that, across Europe, there is a negative relation, a tradeoff, between the probability of giving and the amount of support provided (figure 2).

3.1.2.Grandparenting

As argued above, if one looks at the average likelihood and intensity of support provided by parents to children grandparenting stands out as the most relevant downward flux of time resources. Variation between-countries in the likelihood of looking after grandchildren is relatively small. In the 10 countries participating to all of the three regular waves of SHARE, it ranges from a maximum of 67% in the Netherlands to a minimum of 45% in Austria. In general the higher values are observed in the two Nordic countries plus Belgium and the Netherlands. However, if we look at the median number of hours spent by the respondents looking after their grandchildren – provided that they have engaged in that activity – relevant between-countries differences do emerge. In Greece, Italy, Poland and Spain – and to some extent also in Czech Republic and Belgium – those respondents who look after their grandchildren are engaging in such a time-demanding activity that they can be easily considered an alternative to (or a substitute of) kindergartens and other child care facilities. The intensity of this form of support is lower – i.e. between 360 and 240 hours per year in most continental European countries, i.e. Austria, Germany, the Netherlands, France and Switzerland. Finally, once more, the lowest intensity of support is to be found in the two Scandinavian countries.

⁶ The fact that the percentage of those who have ever made or received a transfer during the observation period is the lowest in these countries is clearly affected by the fact that the observation period is a third – i.e. 12 months instead of 36 - of that considered for the countries that entered SHARE already in wave 1.

Figure 2: Participation in and intensity of social support to children.

3.1.3. Social support to parents

Everywhere when respondents' parents are still alive they represent a major source of care demands. But, the quota of respondents who provide support to their parents varies considerably between countries. There is a first group of nations where more than one-third of those who still have parents gave them some social support: Germany, Belgium, the Netherlands, Denmark and Sweden. In a second group of countries – France, Switzerland and Italy – about one-fourth of the respondent provided care to their parents. Next, in 5 countries the quota of care providers ranges between 16 and 20% and, finally, in the 4 countries that only took part to the last wave of the SHARE less than 10% of respondents provided help to their parents.

3.1.4. Financial transfers to children

As suggested by previous research, the exchange of economic resources between family generations almost exclusively flows from the older to the younger generations. But the likelihood of parents making a financial transfer to their children varies hugely within Europe. In the 10 countries taking part to all of the three regular waves of the survey the quota of respondents who provided, at least once, economic help to their descendants ranges between 8.5 and 33.7%. In line with what has been observed for other forms of instrumental support, the two countries where the highest values are registered are Sweden and Denmark. Following these two nations there is a group of countries where between one fourth and one fifth of the respondent reported about giving financial support to their children: Germany, the Netherlands, Austria, Belgium, Greece and Italy. Next, come France, Switzerland and Poland with values included between 16 and 18%. The lowest likelihood of observing downward financial transfers is found in Spain. The values reported for Portugal, Hungary, Slovenia and Poland are also very low, but for these countries the observation period is limited to the 12 months previous to the 2011 interview. Interestingly, when we look simultaneously at the likelihood of providing social and financial help to children we can observe that, at the European level, there is a direct positive relation between these two types of support. Thus, at the countries level there does not appear to be any substituting effect between money and time transferred to children (figure 3).

Figure 3: Participation in social support and financial transfers to children.

3.1.5. Social support received from children

The highest likelihood of receiving social support from children, i.e. 19%, is found in the Czech Republic – the result is particularly remarkable if one thinks that this country only took part to the last two waves of the survey and, therefore, the observation period is shorter than that for other countries. The two Nordic countries plus Germany and Greece follow with values between 14 and 16%. Estonia shows a slightly lower value, while all the other countries, with the exception of Switzerland and Slovenia – where the number of parents receiving support is extremely low – are in the range between 7 and 11%. Thus the already observed North to and South gradient is registered, to some extent, also for what concerns the likelihood of receiving social support - although with some significant exceptions, i.e. Greece. But how many hours of support do elderly parents receive from their children? The intensity of care provision is particularly high in Spain where the median value in our sample is of more than 600 hours of support per year. In Italy and Poland the amount of support is lower, but still very significant: respectively 365 and 308 hours per year. The elderly receive considerable support also in Portugal and Czech Republic. In three of the Continental European countries: Austria, Germany and France the median respondent receiving support from children got about 150 hours in the last 12 months, while in all of the other countries the intensity of support is much lower: about a third of this value or even less. Similarly to what observed for social support provided to children, also for the support received from children there seems to be, at the countries level, a negative relation between the likelihood and the intensity of support (figure 4). However, in this latter case, the negative relation is much weaker and appears to be mainly due to the Spanish and Italian cases.

Figure 4: Likelihood and intensity of social support from children.

3.1.6. Financial transfers from children to parents

As noted in previous literature, the upward flow of economic resources within European families is almost negligible. In general less than 2% of respondents in the sample have received financial support from a child. There are a few exceptions. In two countries, Czech Republic and Greece the quota of elderly people receiving financial help is above 7% - possibly a consequence of weaker public pension provision. In 6 other countries – Poland, Austria, Estonia, Germany, Italy and Spain – between 3 and 5% of the respondents have received economic support from their children.

3.1.7. Intergenerational coresidence

Besides exchanging support while living in separate households, family generations can adopt a further strategy to support each other: co-residence. As it has been shown in previous research, parents support their children also by letting them to prolong their co-residence in the parental home when they are adult and already working, or letting them come back after a divorce or when becoming unemployed. On the other hand, children might support their elderly parents by co-residing with them when they become frail and need assistance. So far, when using the SHARE data, it has proven difficult to separate the two different motives for co-residence and, thus, answer the question: who is helping whom through co-residence? Some analyses, though, indicates that the needs of the children are more strongly correlated with intergenerational co-residence than the needs of the parents (see for instance Albertini and Kohli 2013). This result suggests that it is more frequently the case that co-residence is a strategy adopted by parents to support their adult children than the other way around. More research is needed, however, to clearly sort out the main reasons behind intergenerational co-residence, also taking into consideration external constraints and opportunities such as: the characteristics of the housing market, labor market conditions for the younger generations, accessibility of loans and mortgages, availability of nursing and old age homes, etc.

Table 2: Instrumental support received by respondents from their children

Country	Social support % (a)	Amount of social support. Median (b)	Financial transfers % (c)
EC15_NCE			
Austria	9.8	156	4.4
Germany	16.3	144	3.2
Sweden	14.3	40	1.7
Netherlands	8.8	38	1.1
France	7.6	157	1.2
Denmark	15.2	42	1.5
Switzerland	5.6	60	1.8
Belgium	10.6	25	1.6
EC15_Southern			
Spain	8.0	614	2.5
Italy	7.2	365	3.7
Greece*	14.8	260	7.2
Portugal***	4.8	-	1.6
ECA_EU13			
Czech Rep.**	19.2	194	8.3
Poland**	10.3	308	5.1
Hungary***	7.9	-	1.7
Slovenia***	5.0	-	1.6
Estonia***	11.6	-	3.7

Notes: *no data for wave3; **no data for wave1, ***no data for waves 1 and 2. Percentages refer to % of respondents who has received/given support from a child/parent at least once during observation period (between %); median is calculated as overall distribution (individual*year); amount of social support and grand parenting are projected number of hours per year (available only for waves1 & 2) (a) conditioned on having at least one living child, who live closer than 500km away; (b) conditioned on (a) & having received/given social support from child(ren) for an amount greater than 0 hours*year; (c) conditioned on having at least one living child.

As mentioned above, the extent to which co-residence is utilized as a support strategy varies considerably across countries and cultural contexts. This is also confirmed by the data displayed in figure 5. In the Mediterranean countries, Poland and Slovenia more than half of the respondents co-reside with at least one child. The quota is slightly lower in Portugal (i.e. 42%) but still significantly higher than elsewhere in Europe. Then comes a group of countries in which at least one-third (or slightly more) of parents still have children living with them, these are mostly nations of the Continental Europe: Austria, Germany, Switzerland, Belgium, Czech Republic and Hungary. Co-residence with children is in the range between 20 and 30% in all of the remaining countries, with the exception of Sweden where just 16% of respondents live with their children.

As it might be expected co-residence with elderly parents – when at least one of these is still alive – is much less common; also, the clustering of countries is slightly different than that observed for co-residence with children. In all of the countries in the groups EC15_Southern and ECA_EU13, with the exception of Czech Republic, more than 10% of the respondents live with at least one parent. In three countries – Czech Republic, Austria and Germany – the quota of co-residing individuals is slightly below 10%, while in all of the remaining nations the quota is lower than 5%. The lowest level of co-residence with very elderly parents is to be found in Denmark, where less than 1% of the respondents with at least one living parent do reside with them.

3.2. Factors correlated with intergenerational transfer behavior

The aim of this section of the paper is that of uncovering which are the main factors affecting intergenerational transfer behavior. To do so, both the downward and upward flux of resources are analyzed, moreover both financial and time transfers are taken into consideration.

The analyses have been conducted using random effects logistic regression models on the unbalanced sample of individuals taking part to at least one of the three regular waves of the SHARE. The models include numerous variables describing the most salient socio-economic characteristic of the respondents: gender; age; partnership status and partners' autonomy in carrying out daily living activities; respondent's limitations with global activities (GALI), activities of the daily living (ADL and IADL) or with mobility; educational level; labor force status; household equivalent income from old age and early retirement pensions⁷; household equivalent income from disability, unemployment, survivor and war pensions; household equivalent income from other sources; household per capita real wealth⁸; household per capita financial wealth⁹ (both income and wealth amounts are in purchasing power parities); country of residence.

The following analytic strategy has been followed: for each dependent variable the regression model is firstly fitted on the entire sample; secondly, separate analyses are performed separately for men and women; finally, the model is estimated on the three separate samples corresponding to the three different groups of countries identified throughout the report: EC15_NCE, EC15_Southern and ECA_EU13. This last step cannot be fully implemented when analyzing the intensity of support exchanged. In fact, the amount of help provided/received was registered only in the first two waves. As a result, the group of ECA-EU13 countries has insufficient observations for the regression models to be estimated.

Figure 5: Percentage of SHARE respondents co-residing with at least one child (a), or with at least one parent (b)

Notes: *no data for wave3; **no data for wave1, ***no data for waves 1 and 2. Percentages refer to % of respondents who are in the specific condition at least once during observation period (between %); Co-residence is living in the same household or same building at least once during the observation period; parents are respondent's natural parents or parents in law (i.e. natural parents of respondent's partner); (a) conditioned on having at least one living child; (b) conditioned on having at least one natural parent (own or in law) still alive.

⁷ The equivalence scale adopted here and for the two following variables is the squared root of the number of household members.

⁸ Household real wealth is defined as the sum of the value of the main residence, other real estates, own share of business and cars minus mortgages of main residence.

⁹ Household financial wealth is defined as the sum of the values of bank accounts, government and corporate bonds, stocks and shares, mutual funds, retirement accounts, contractual savings for housing and life insurances.

3.2.1. Social support to children

As documented above, the likelihood of parents providing social support to children varies considerably across Europe. The analyses show that some relevant between-countries differences are also to be found when analyzing factors correlated with parents' support behavior. Next, relevant differences also emerge when comparing the support behavior of women and men.

The traditional gendered division of unpaid labor is found when analyzing time transfers towards non-coresiding adult children. In general women are more likely to provide social support to their adult children than men. However, when analyzing separately the sample of respondents from different European areas, it emerges that this association is the result of a relevant positive relation between being women and providing support in Southern and Eastern Europe, and a weakly negative relation in Central and Nordic countries. This result can be attributed both to the less traditional gender roles and values that characterize families in the latter countries, and to the lower intensity of informal family support *vis à vis* the role of welfare state provision in Continental and Nordic Europe.

The analysis of the intensity of support (table 3) shows that not only women are more likely to help their children, but also when they do so they donate more time than their partners. The relation is particularly strong in Southern Europe, but it also there for Continental and Nordic countries. This latter finding partially "compensates" the gender equality in the likelihood of providing support observed above. In other words, the extent to which in Nordic Europe gender equality is to be found in patterns of intergenerational support should not be overestimated. Women might be less likely to help their non-coresiding children, but they are likely to provide time-demanding help and, thus, more hours of social support.

As it might be expected age has a clear negative effect on the likelihood of supporting children by transferring time to them. On the contrary, partnership status does not seem to play a role in the decision to provide help to children: in addition, similarly to what observed in the literature on the sandwiched generations, there is no sign that partners with limitations and children compete for respondents' support.

Having at least one (also minor) limitation does not negatively affect the likelihood of providing help; on the opposite, this condition is positively associated with giving time to children. This could be the result of reciprocity expectations and the aim of needy parents to ease the burden of late parent-child relationships (Leopold and Raab 2011) by providing some (little) time-support. This interpretation is partially confirmed by the (weak) negative association between having limitations and the intensity of time transfers.

In general both respondents' educational level and economic resources tend to be positively related with the likelihood of providing support to children. It is worth noting, however, that this relation is stronger for men than for women and that countries in the ECA_EU13 group appear to be an exception to this general trend.

The results clearly show that having a job – or looking for it – is a time consuming activity that negatively influences the possibility of providing social support to children, while pensioners are those who are more likely to transfer time to their descendants. This is more so for men than for women, and in Southern and Eastern European countries versus Continental and Nordic ones. That is to say that time constraints seem to be a more relevant factor for men and in those contexts where welfare provision is weak.

3.2.2.Supporting children by providing grandparenting time

As argued above grandparenting represents the most relevant flux of time resources from parents to children. In a number of countries the amount of time that the respondents devote to this activity is very relevant and, in fact, they seem to act as substitutes of a weak public provision of formal childcare. It is essential, therefore, to analyze those factors that are correlated with an increased likelihood and intensity of this form of support (tables 4 and 5).

Once more, the results show very clearly that informal care work falls, for the largest part, on the shoulders of women - with little variation between the different European macro-areas. Women are both more likely to look after grandchildren and, when they do so, they provide more time than grandfathers. Next, as it has been suggested in previous research, the grandparenting activity of men is often mediated by their wives – that is to say that men, more than women, look after their grandchildren together with their spouses. This is confirmed by the results reported in table 4: not having a partner has a negative effect on the likelihood of looking after grandchildren and on the intensity of support, but the negative relation is considerably stronger for men than it is for women. It is also worth noting that, differently from what has been observed for social support given to children, having a partner who needs support with daily living activities negatively affect both the likelihood and intensity of grandparenting activities. That is to say that grandchildren and frail partners do compete for respondents' care. Respondents' own limitations also represent an obstacle to looking after grandchildren.

Both individuals' educational level and household's economic resources are positively correlated with the probability of looking after grandchildren, whereas being in employment is negatively correlated with both the likelihood and intensity of looking after grandchildren.

Finally, it is worth noting that even after controlling for respondents' socio economic characteristics the coefficients for the different countries indicate that in Southern Europe and Poland looking after grandchildren involves devoting a much higher number of hours to this activity than elsewhere in Europe. This is a further confirmation that in these countries grandmothers tend to compensate (or substitute) for a rather weak public provision of childcare services.

3.2.3.Financial support to children

The provision of economic support by parents to their adult children is one essential elements of the private generational contract in contemporary European societies. Some authors have argued that the fact that economic resources flow almost exclusively downward along the generational lineage is a clear sign of a crowding-in effect of the public pensions schemes of European welfare systems and, in addition, have labeled this process “pension overshooting” (Künemund and Rein 1999). However our results reported in table 6 do not provide full support to this latter argument.

The first indication provided by the analysis of factors connected with financial transfers to children is that these are typically the “masculine way” of supporting children. As a matter of fact, mothers are more likely than fathers to provide social support and (grand)childcare to their offspring, but fathers are more likely to be the donors of economic resources.¹⁰ One exception to this is to be found in Eastern European countries, where

¹⁰ It is worth noting that the gender effect observed here is to be imputed to those respondents who do not have a partner or who manage finances separately within the couple. As a matter of fact, as reported above, when couples manage finances together, then the question on financial transfers have been asked to just one of the two and the response is has been imputed to the non-responding partner. In these cases, therefore, making a transfer (or not) is treated as a joint decision of the couple.

female respondents are more likely than male ones to report having supported economically their children. Secondly, it should be noted that the oldest old are less likely to transfer economic resources to their offspring.

The regression results also shed light on the role of household and individual's socioeconomic characteristics that foster inter-vivos transfers: the more educated parents are more likely to transfer to their children. Also, children of the more wealthy families (both in terms of financial and real wealth) have higher chances of receiving economic help. On the other hand, while income from "other sources" (typically labor) is positively related to making a transfer, the amount of pension incomes is negatively correlated with economic support to children in Nordic, Continental and Eastern European countries – but not in Southern Europe. Finally, the amount of other transfers from the welfare state plays an opposite role for men (negative) and women (positive), and in Nordic and Continental Europe (positive) versus Eastern countries (negative).

3.2.4. Providing social support to parents

Clearly children are not the only source of care demands for the SHARE respondents. On the contrary, as shown by descriptive statistics, when respondents' own parents (both natural and in law) are still alive, the likelihood of providing support to them is higher than that of transferring time resources to children – but not to grandchildren.

The analysis of factors related to the provision of social support to parents confirms, once more, that the burden of providing care to family members mainly falls on the shoulders of women. And, again, this gendered division of unpaid care work is more pronounced in Southern Europe than in Nordic and Continental countries. It is also interesting to note that while it has been shown before that partners and children do not compete for support respondents without a partner are more likely than partnered ones to help their parents. Thus, not partnered individuals seem to be specially selected, among siblings, as those in charge of taking care of elderly frail parents. This finding mirrors previous research showing that childless adult children are often selected as the main care providers to their elderly parents (Albertini & Kohli 2009).

Concerning inequalities between social classes, the regression results does not support the common belief that lower social classes compensate a lower utilization of formal care services with an higher utilization of informal support. On the contrary, those respondents with higher educational levels, labor income and wealth are more likely to provide support to their parents than respondents from lower classes. However, it is important to observe that, – due to the too small number of cases available, it not possible to establish if to this higher likelihood it also corresponds an higher average intensity of time transfers.

3.2.5. Social support from children

Who are the SHARE respondents who are more likely to receive help from their children? If on the one hand, previous analyses documented that mothers are more likely than fathers to transfer time to their children, at the same time they are also more likely to receive support from the offspring (table 7), with one relevant exception: the Mediterranean countries. As it has been shown before, in Southern Europe the gendered division of care provision is more pronounced than elsewhere. However, at the same time, in these countries mothers are not significantly more likely than fathers to be receiving help from their children. We can thus argue that, concerning the intergenerational exchange of care, Southern European women cumulate a double disadvantage *vis-à-vis* men: they are expected to give more, but they are not more likely to receive back from their children.

In general, however, everywhere in Europe the relative advantage of mothers disappears once we take into consideration the intensity of support. As a matter of fact, on average, they do not receive more hours of social support than fathers (table 8).

There are several factors eliciting support provision from the offspring: age, not having a partner, and having limitations. The role of these characteristics in stimulating support provision is generally stronger for women than for men, and in Southern Europe than elsewhere. Concerning the intensity of support provision, these factors exert a positive role also on the number of hours of help received. However, it is worth noting that while it is confirmed that the role of age is stronger for men than for women, not having a partner translates into receiving a larger amount of support for male respondents, but not necessarily for female ones - as if widowed men are more in need of support than widowed women.

Differently from what has been found about respondent's provision of support, parents with lower educational level and economic resources are more likely to receive informal care and they also tend to receive more hours of support. Thus, from the SHARE respondents' perspective, informal support is in fact an alternative or compensating source of support for the lower classes *vis-à-vis* the receipt of formal care.

3.2.6. Economic support from children

As shown in the descriptive statistics, the likelihood of children making financial transfers to their parents is relatively small. The analysis of socio-economic characteristics connected with these transfers show that, in general, this is a form of support that mainly benefit mothers living without a partner, and having limitations with daily living activities (table 9). Once more, Southern Europe is an exception: here female respondents are not significantly more likely than fathers to receive economic support; however, at the same time, the effect of not having a partner and having limitations is larger here than elsewhere.

One would think that parents receiving economic help are the poorest ones. This is not necessarily the case. The probability of receiving financial assistance from children increases with the amount of income from sources other than pensions and with financial wealth. On the opposite, there is a negative correlation between the likelihood of receiving economic support and the amount of pension incomes and real wealth. It might well be the case that the former relation is mediated by the economic resources available to the donating children - that is to say that more affluent parents have richer children. Unfortunately, this argument cannot be empirically tested due to lack of data on children's economic resources.

Eventually, the multivariate analyses confirm that, *ceteris paribus*, aging individuals living in the Czech Republic and Greece are significantly more likely to receive economic support from their children.

3.2.7. Intergenerational co-residence

As it has been suggested above and in previous literature, one additional strategy available to individuals to support younger and/or older family generations is co-residence. It is interesting to analyze, then, which are the respondents' characteristics that are associated with this living arrangement.

The probability of living with a child – *ceteris paribus* – is lower for mothers than fathers, and for those respondents who do not have a partner. There are no clear signs that, from the perspective of SHARE respondents, parent-child co-residence is utilized as a strategy to receive social support from children. On the contrary, some of the results suggest that intergenerational co-residence is, mostly, for the benefit of the children. As a matter of fact, individuals who have a partner who need assistance, who have themselves some

limitation with the activities of the daily living, and are pensioner are less likely than others to live with their children.

Looking at the coefficients for education it emerges that intergenerational co-residence is more common among the low educated. On the other hand, household income from sources other than pensions and transfers is higher for families where there is at least one co-residing child, whereas wealth and pension income are negatively correlated with intergenerational co-residence. In other words, children of less wealthy families are less likely to leave the parental home early in their life course, but since most of them are adult and working they contribute to the total amount of household labor incomes.

The analysis of co-residence between SHARE respondents and their parents (natural or in law) confirms that women are less likely to share their dwellings with other generations and that the unmarried or widowed are much more likely than partnered respondents to live with their own parents. Next, differently from what is observed for respondent-child co-residence, education does not result to be a relevant factor in explaining respondent-parent co-residence.

4. The sandwiched generation

As mentioned above, when analyzing the distribution of the burden of providing social and financial support to (enlarged) family members, there is one group of the population that deserves special attention: the sandwiched generation. As a matter of fact, individuals who have the responsibility of supporting simultaneously the younger and older family members are at high risk of being overburdened by support obligations and, as a consequence, exiting the paid labor market, and experiencing a deterioration of their psychological and physical health status. Next, the condition of the sandwiched generation is particularly important also from the perspective of the study of inequalities connected with individuals' gender. Women are much more likely than men to be sandwiched in between the care demands of both parents and children, indeed. Moreover, given their longer life expectancy they are also more likely than men to be caring for their own partners while still helping their children and/or parents. In the present section the aim is that of analyzing which is the pattern of the sandwiched generation across Europe, and to explore which individuals' characteristics are correlated with the likelihood of being sandwiched between the care needs of both parents and children.

In general, the members of the sandwiched generation are defined as those individuals who, having at least one child and one parent alive, do provide instrumental support to both these family generations. In the following analyses, two definitions of the sandwich are adopted. In the first one, individuals are considered sandwiched if they provide some instrumental support and/or co-reside with both their own children and parents. A second definition, instead, excludes co-residence as a form of support and, thus, only takes into consideration the exchange of informal support as financial transfers or time transfers (including the provision of grandparenting time).

The proportion of SHARE respondents who are simultaneously supporting parents and children is clearly smaller than the one of those who are just helping the younger generation. Nonetheless the quota of individuals who find themselves sandwiched between the support needs of family members is far from being insignificant (figure 6).¹¹ Even when excluding co-residence as a form of support, it is found that in Sweden, Denmark, the

¹¹ It is important to observe, however, that here we are probably not capturing the whole sandwich generation. In fact, the age distribution of SHARE respondents is left-censored at age 50.

Netherlands and Belgium between one-third and one-fourth of respondents are sandwiched in between care obligations towards previous and following generations. In other 7 countries - mostly continental ones but also including Italy, Czech Republic and Poland - the size of the sandwich generation is between 10 and 20% of those who have at least one surviving child and parent. Whereas in Greece, Spain, Portugal, Hungary, Slovenia and Estonia the quota of the sandwiched generation is lower than 10%. Therefore, in general, it can be argued that the likelihood of being sandwiched is higher in Scandinavian and BeNeLux countries, followed by nations in Continental Europe and, last, by countries in Eastern and Mediterranean Europe. Though Italy, Poland and the Czech Republic represent relevant exceptions to this European pattern. Finally, it is worth noting that further descriptive analyses revealed that in every country considered here, the risk of being sandwiched is higher for women than it is for the general ageing population. A more detailed analysis of risk factors, however, does require using multivariate models.

Figure 6: Proportion of respondents (a) who are sandwiched in between support obligations towards younger and older generations.

Notes: *no data for wave3; **no data for wave1, ***no data for waves 1 and 2. Percentages refer to % of respondents who are in the specific condition at least once during observation period (between %); Co-residence is living in the same household or same building; parents are respondent's natural parents or parent in law (i.e. natural parents of respondent's partner) instrumental support is any type of social support (help with personal care, housework, paperwork), looking after grandchildren or inter-vivos financial transfer (a) conditioned on having at least one living child and having at least one natural parent (own or in law) still alive.

The results of the multivariate analysis (table 10) confirm that, *ceteris paribus*, being women entails a significant higher risk of being sandwiched between the support needs of parents and children. In general, the condition of the sandwiched generation is more common among those women younger than 65 years and respondents who do not have a partner (whether because they are widowed or not partnered). Looking at variables accounting for the individuals' socioeconomic status, it clearly emerges that those who are more educated, have higher market incomes (i.e. incomes not from pensions or welfare transfers) and the wealthier respondents are at higher risks of being caught in between the care needs of the younger and the older family members. The finding that women and the highly educated are more likely to be sandwiched is particularly

alarming since previous literature indicates that one of the main consequences of this condition is that people drop out of the paid labor market – or significantly reduce the number of hours of paid work. In other words, being caught in the sandwich, a relevant quota of highly skilled and still relatively young women might opt for exiting from the paid labor market. As a consequence these women will be at higher risk of social exclusion and economic poverty when they will become old. Finally, it is interesting to note that once one takes into account individuals' socioeconomic characteristics Italy does not represent anymore an exception to the “rule” that sees lower levels in the likelihood of being sandwiched in Southern and Eastern Europe.

5. Conclusions

The exchange of support between family generations is at the core of both family life and public welfare systems. Having a full understanding of patterns of intergenerational support and of the main factors explaining family solidarity is key to identify the future challenges and opportunities of ageing European societies. In the present paper, using data from the Survey of Health Ageing and Retirement in Europe, it has been shown that ageing elderly individuals – particularly those in between 50 and 65 years – do provide an important amount of instrumental support to both parents and children. The type of help they give to other (extended) family members varies systematically according to the direction of the resources flow: support with household chores, personal care and paper work is mainly provided to very elderly parents. Whereas, financial transfers are the most common form of support going from parents to children. However, two other types of help should not be forgotten: looking after grandchildren and co-residence. The former does represent the most relevant transfer of time from the older to the younger generations. Furthermore, in some countries and particularly Southern European ones, the intensity of grandparenting activity is so elevated that, in fact, grandparents do represent an alternative to the weak provision of public child care services. Living together is also a strategy that can be utilized by families to support each other. However, the extent to which this strategy is adopted by families varies considerably within Europe: intergenerational co-residence with both parents and children tends to be more widespread in Southern and Eastern Europe – and in the latter particularly in Poland and Slovenia. More in general, the exchange of informal instrumental support within families is more common but less intense in Nordic Europe than in Mediterranean countries.

To be sure, among the different factors explaining individuals' exchange behavior, the most relevant is gender. Women are significantly more likely than men to provide social support to both parents and children and, when they do, they also give more hours of help than men. Differently the latter are more likely to provide economic help to children. Women are also those who mediate grandparenting activities within the families. That is to say that when grandfathers look after grandchildren they do that mostly together with their wives and, in fact, being widowed has a considerable negative effect on grandparenting activities for men respondents. Family educational level and economic resources are also important correlates of support provision. The highly educated and the richer respondents are more likely to report having made a financial transfer or having provided time help to both their children and their parents and they are also more likely to look after grandchildren – although it is worth noting that these characteristics do not necessarily play the same significant role when analyzing the intensity of social support provision. It is clear, then, that informal support is far from being the support strategy of the lower classes. On the contrary, the SHARE data suggest that formal and informal support are likely to cumulate to the advantage of the higher social classes.

Statistical appendix and tables

Table A.1: Characteristics of respondents' family networks.

Country	% has at least one child	% at least one child living closer than 500km	% having at least one grandchild	% having at least on parent (natural or in law) alive
EC15_NCE				
Austria	87.6	83.5	61.6	27.3
Germany	87.8	83.5	63.4	29.9
Sweden	92.9	87.0	75.8	37.4
Netherlands	90.7	87.2	65.2	33.8
France	89.6	80.8	65.6	39.0
Denmark	91.6	88.1	68.2	38.4
Switzerland	85.8	81.5	52.1	25.8
Belgium	88.3	85.5	65.1	28.9
EC15_Southern				
Spain	89.4	83.9	63.5	25.0
Italy	88.9	85.1	60.8	29.2
Greece*	89.7	87.6	48.2	38.2
Portugal ***	92.2	86.9	67.0	25.0
ECA_EU13				
Czech Republic**	93.8	90.9	77.1	28.1
Poland**	94.2	84.1	81.8	29.5
Hungary***	91.1	89.1	71.5	12.1
Slovenia***	93.5	90.9	72.2	9.1
Estonia***	91.6	86.4	75.1	9.5

Notes: *no data for wave3; **no data for wave1, ***no data for waves 1 and 2. Percentages refer to % of respondents who are in the specified condition at least once during observation period (between %).

Table 3: Results of a random effects linear regression model on the intensity of social support provided to children, as natural logarithm of estimated hours per year (conditioned on having at least one child alive, residing closer than 500 kilometers and on having transferred more than 0 hours per year).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern
Female	0.403***			0.286***	0.999***
Age (ref. 50-65)					
66-80	-0.0765	-0.0130	-0.133	-0.104	-0.149
81+	-0.205	-0.0330	-0.360	-0.354*	-0.177
Partnership status					
Has not partner	-0.0111	-0.0850	0.00244	-0.0584	-0.0197
Has partner who needs support	0.125	0.178	0.113	-0.0561	0.295
Respondent has limitations	-0.0687	-0.164**	0.00986	-0.0479	-0.0579
Educational level					
ISCO 1-2	-0.0316	0.524	-0.242	-0.00895	0.345
ISCO 3-4	-0.211	0.284	-0.390	-0.154	-0.222
ISCO 5-6	-0.294	0.0839	-0.295	-0.238	-0.283
Missing info	-0.276	0.500	-0.749*	-0.146	-0.808
Labor force status (ref. pensioner)					
Employed, self-employed, unemployed	-0.465***	-0.443***	-0.528***	-0.524***	-0.622*
Other condition	-0.0782	-0.0468	-0.163	0.0447	-0.377
LN other incomes	-0.00616	-0.00249	-0.00834	-0.0244**	0.00627
LN pension incomes	0.00935	0.00453	0.0123	0.0123	-0.0118
LN other welfare transfers	-0.00620	-0.00737	-0.00466	-0.0119	0.0268
LN financial wealth	0.00475	0.0157	-0.00283	0.0106	0.0165
LN real wealth	0.00561	0.00138	0.00938	0.00937	0.00956
Country (ref. Austria)					
Germany	-0.222	-0.319	-0.158		
Sweden	-0.607***	-0.635***	-0.670***		
Netherlands	-0.374***	-0.431**	-0.349*		
Spain	0.505**	0.430	0.506*		
Italy	0.727***	0.422	0.913***		
France	-0.493***	-0.608**	-0.430**		
Denmark	-0.651***	-0.527***	-0.869***		
Greece	0.200	-0.472*	0.571**		
Switzerland	-0.383**	-0.325	-0.433*		
Belgium	0.148	0.0971	0.141		
Czech Rep.	0.222	0.0885	0.274		
Poland	0.227	-0.209	0.483*		
Constant	4.829***	4.383***	5.406***	4.586***	4.745***
Observations	5,136	2,497	2,639	4,137	578

*** p<0.01, ** p<0.05, * p<0.1

Table 4: Results of a random effects logistic regression model on the likelihood of looking after grandchildren (conditioned on having at least one grandchild alive).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern	ECA_EU13
Female	0.527***			0.416***	0.602***	0.534***
Age (ref. 50-65)						
66-80	-1.366***	-0.989***	-1.617***	-1.329***	-1.061***	-1.619***
81+	-3.980***	-3.279***	-4.446***	-4.087***	-3.509***	-3.789***
Partnership status						
Has not partner	-0.460***	-1.220***	-0.187***	-0.607***	-0.0879	-0.208*
Has partner who needs support	-0.274***	-0.315***	-0.251***	-0.442***	0.0544	-0.174
Respondent has limitations	-0.219***	-0.203***	-0.229***	-0.325***	0.0190	-0.216***
Educational level						
ISCO 1-2	0.143	0.144	0.147	0.289**	0.406***	-0.0184
ISCO 3-4	0.498***	0.431***	0.539***	0.404***	1.045***	0.351
ISCO 5-6	0.655***	0.632***	0.595***	0.701***	0.565***	0.613
Missing info	0.545***	0.603***	0.502***	0.291**	0.343***	0.346
Labor force status (ref. pensioner)						
Employed, self-employed, unemployed	-0.109**	-0.272***	0.172**	-0.105	-0.396***	-0.230***
Other condition	0.000406	-0.0271	0.0694	0.152**	-0.0642	-0.359***
LN other incomes	0.0494***	0.0450***	0.0504***	0.0517***	0.0250***	0.0484***
LN pension incomes	0.0301***	0.0413***	0.0182***	0.0218***	0.0389***	-0.00567
LN other welfare transfers	0.00744*	0.0125*	0.00302	0.0104**	-0.00453	-0.00403
LN financial wealth	0.0220***	0.0315***	0.0168***	0.0208***	0.0209***	0.0215***
LN real wealth	0.0708***	0.0696***	0.0704***	0.0947***	0.0582***	0.00851
Country (ref. Austria)						
Germany	0.0915	0.114	0.0116			
Sweden	0.885***	0.886***	0.839***			
Netherlands	1.312***	1.270***	1.289***			
Spain	0.243***	0.141	0.242**			
Italy	0.469***	0.149	0.646***			
France	0.694***	0.609***	0.728***			
Denmark	0.992***	0.989***	1.000***			
Greece	1.039***	0.916***	1.025***			
Switzerland	0.603***	0.545***	0.600***			
Belgium	1.042***	1.036***	1.010***			
Czech Rep.	0.443***	0.261**	0.554***			
Poland	0.555***	0.409***	0.640***			
Hungary	1.014***	1.205***	0.889***			
Portugal	-0.0560	-0.235	0.0136			
Slovenia	0.247**	0.209	0.263*			
Estonia	-0.262***	-0.524***	-0.111			
Constant	-1.494***	-1.665***	-0.836***	-0.799***	-1.332***	-0.125
Observations	61,216	24,951	36,265	35,275	11,946	13,995

*** p<0.01, ** p<0.05, * p<0.1

Table 5: Results of a random effects linear regression model on the intensity of looking after grandchildren, as natural logarithm of estimated hours per year (conditioned on having at least one grandchild alive, and on having transferred more than 0 hours per year).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern
Female	0.282***			0.273***	0.203**
Age (ref. 50-65)					
66-80	-0.277***	-0.230***	-0.322***	-0.356***	-0.226***
81+	-0.601***	-0.517***	-0.706***	-0.819***	-0.212
Partnership status					
Has not partner	-0.273***	-0.843***	-0.111**	-0.191***	-0.385***
Has partner who needs support	-0.270***	-0.263**	-0.255***	-0.331***	-0.120
Respondent has limitations	-0.0693**	-0.0245	-0.0993***	-0.0310	-0.109
Educational level					
ISCO 1-2	0.0168	-0.00910	0.0212	-0.137	-0.0130
ISCO 3-4	-0.00760	-0.132	0.0538	-0.143	0.0719
ISCO 5-6	-0.00334	-0.110	0.0389	-0.157	-0.0463
Missing info	0.0956	0.294	-0.0675	-0.0554	0.101
Labor force status (ref. pensioner)					
Employed, self-employed, unemployed	-0.335***	-0.377***	-0.246***	-0.382***	-0.421***
Other condition	0.0259	0.0478	0.0963**	0.0329	-0.0241
LN other incomes	-0.00645	-0.0158**	-0.000508	-0.0268***	-0.00858
LN pension incomes	0.00261	0.00772	0.00217	0.00167	0.00184
LN other welfare transfers	0.00657*	0.00551	0.00385	-0.00401	0.0139
LN financial wealth	-0.00453	0.00157	-0.00766	0.00373	-0.0238***
LN real wealth	-0.00341	0.000776	-0.00219	0.0132**	-0.0160
Country (ref. Austria)					
Germany	-0.153*	-0.0572	-0.211*		
Sweden	-0.714***	-0.654***	-0.727***		
Netherlands	-0.557***	-0.500***	-0.595***		
Spain	0.318***	0.395**	0.241*		
Italy	0.521***	0.570***	0.483***		
France	0.0858	0.102	0.0675		
Denmark	-0.702***	-0.542***	-0.793***		
Greece	0.787***	0.917***	0.692***		
Switzerland	-0.112	-0.147	-0.101		
Belgium	0.178**	0.305**	0.0920		
Czech Rep.	0.171*	0.188	0.164		
Poland	0.491***	0.410***	0.562***		
Constant	5.799***	5.751***	6.024***	5.633***	6.682***
Observations	15,866	6,369	9,497	11,132	3,197

*** p<0.01, ** p<0.05, * p<0.1

Table 6: Results of a random effects logistic regression model on the likelihood of making inter-vivos transfers to children (conditioned on having at least one child alive).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern	ECA_EU13
Female	-0.109***			-0.197***	-0.274***	0.201***
Age (ref. 50-65)						
66-80	-0.322***	-0.279***	-0.372***	-0.303***	-0.662***	-0.184***
81+	-0.607***	-0.541***	-0.694***	-0.544***	-1.283***	-0.484***
Partnership status						
Has not partner	0.495***	0.615***	0.451***	0.520***	0.798***	0.302***
Has partner who needs support	0.00246	-0.147	0.143*	-0.0604	-0.0940	0.139
Respondent has limitations	0.0259	0.0247	0.0323	0.00157	0.127*	0.0444
Educational level						
ISCO 1-2	0.506***	0.397**	0.565***	0.819***	0.858***	0.123
ISCO 3-4	0.893***	0.755***	0.956***	1.248***	1.571***	0.355
ISCO 5-6	1.331***	1.245***	1.304***	1.693***	1.849***	0.772
Missing info	0.892***	0.695***	1.021***	1.140***	0.670***	0.269
Labor force status (ref. pensioner)						
Employed, self-employed, unemployed	-0.0258	-0.0259	0.0178	0.0129	-0.365***	0.0487
Other condition	-0.408***	-0.208**	-0.418***	-0.456***	-0.520***	-0.367***
LN other incomes	0.0715***	0.0866***	0.0611***	0.0849***	0.0731***	0.0446***
LN pension incomes	-	-0.0109*	-	-0.0151***	0.00482	-0.0416***
	0.0185***		0.0223***			
LN other welfare transfers	-0.00205	-	0.0122***	0.00759*	0.0150	-0.0398***
		0.0218***				
LN financial wealth	0.0628***	0.0802***	0.0482***	0.0599***	0.0429***	0.0645***
LN real wealth	0.0432***	0.0628***	0.0326***	0.0368***	0.0437***	0.0162**
Country (ref. Austria)						
Germany	-0.280***	-0.219**	-0.316***			
Sweden	0.190***	0.315***	0.108			
Netherlands	-0.411***	-0.460***	-0.353***			
Spain	-1.263***	-1.267***	-1.245***			
Italy	-0.228***	-0.172*	-0.262***			
France	-0.545***	-0.444***	-0.629***			
Denmark	-0.101	0.0847	-0.230**			
Greece	0.0927	0.257**	-0.0642			
Switzerland	-0.624***	-0.545***	-0.695***			
Belgium	-0.602***	-0.500***	-0.697***			
Czech Rep.	0.0287	0.154	-0.0509			
Poland	-0.0383	-0.0122	-0.0495			
Hungary	0.0490	0.222	-0.0558			
Portugal	-1.015***	-0.840***	-1.149***			
Slovenia	-0.614***	-0.488***	-0.720***			
Estonia	-0.358***	-0.567***	-0.254***			
Constant	-3.859***	-4.271***	-3.707***	-4.488***	-4.692***	-2.977***
Observations	103,325	46,043	57,282	58,406	21,943	22,976

*** p<0.01, ** p<0.05, * p<0.1

Note: intergenerational financial transfers include transfer of money or gift but not shared consumption within the household

Table 7: Results of a random effects logistic regression model on the likelihood of receiving social support from children (conditioned on having at least one child alive, residing closer than 500 kilometers).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern	ECA_EU13
Female	0.564***			0.470***	0.113	0.672***
Age (ref. 50-65)						
66-80	0.803***	0.579***	0.860***	0.606***	1.239***	0.613***
81+	1.997***	1.734***	2.048***	1.800***	2.524***	1.330***
Partnership status						
Has not partner	1.653***	1.507***	1.822***	1.639***	2.169***	1.009***
Has partner who needs support	0.835***	0.767***	0.939***	0.966***	1.094***	0.364***
Respondent has limitations	1.082***	0.989***	1.157***	0.973***	1.646***	0.825***
Educational level						
ISCO 1-2	-0.726***	-0.618***	-0.796***	-0.231*	-0.668***	-0.329
ISCO 3-4	-0.976***	-0.925***	-1.076***	-0.250*	-1.467***	-0.559
ISCO 5-6	-0.924***	-1.070***	-0.888***	-0.271*	-1.011***	-0.285
Missing info	-0.901***	-1.339***	-0.621***	-0.707***	-0.654***	-0.568
Labor force status (ref. pensioner)						
Employed, self-employed, unemployed	-0.363***	-0.301**	-0.367***	-0.370***	-0.426*	-0.320***
Other condition	-0.0293	0.0851	0.0610	-0.119	0.207	-0.329***
LN other incomes	0.00344	-0.000947	0.00800	0.0221***	-0.0227*	-0.00447
LN pension incomes	-	-0.0171	-	-0.0418***	-0.0174	-0.0285***
	0.0399***		0.0433***			
LN other welfare transfers	0.0423***	0.0170*	0.0519***	0.0402***	0.0669***	0.0276***
LN financial wealth	0.00432	0.00582	0.00353	-0.00181	-0.0252**	0.0364***
LN real wealth	-	-0.00880	-	-0.0381***	-0.0192	-0.0224***
	0.0248***		0.0287***			
Country (ref. Austria)						
Germany	0.646***	0.505***	0.746***			
Sweden	0.176*	-0.335*	0.532***			
Netherlands	-0.271**	-0.561***	-0.118			
Spain	-0.912***	-1.064***	-0.887***			
Italy	-0.735***	-0.938***	-0.660***			
France	-0.682***	-1.066***	-0.505***			
Denmark	0.618***	0.366**	0.799***			
Greece	0.0431	-0.0592	0.0256			
Switzerland	-0.589***	-0.921***	-0.399***			
Belgium	-0.132	-0.457***	0.0259			
Czech Rep.	1.400***	1.188***	1.578***			
Poland	-0.143	-0.574***	0.131			
Hungary	-0.0760	-0.388	0.146			
Portugal	-0.569***	-0.523*	-0.564***			
Slovenia	-0.509***	-0.739***	-0.392**			
Estonia	0.747***	0.394**	0.948***			
Constant	-4.235***	-3.797***	-4.084***	-4.274***	-6.253***	-2.864***
Observations	82,818	37,038	45,780	45,160	18,019	19,639

*** p<0.01, ** p<0.05, * p<0.1

Table 8: Results of a random effects linear regression model on the intensity of social support received from children, as natural logarithm of estimated hours per year (conditioned on having at least one child alive, residing closer than 500 kilometers and on having received more than 0 hours per year).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern
Female	-0.0740			-0.107	-0.0806
Age (ref. 50-65)					
66-80	0.165**	0.251	0.183*	0.241**	0.00848
81+	0.789***	0.681***	0.866***	0.812***	0.590**
Partnership status					
Has not partner	0.318***	0.684***	0.131	0.335***	0.454**
Has partner who needs support	0.549***	0.720***	0.406**	0.630***	0.608**
Respondent has limitations	0.443***	0.465***	0.404***	0.519***	0.923***
Educational level					
ISCO 1-2	-0.216*	0.111	-0.323**	-0.294*	-0.448***
ISCO 3-4	-0.465***	-0.0868	-0.597***	-0.339*	-0.611*
ISCO 5-6	-0.469***	-0.0719	-0.590***	-0.459**	-0.408
Missing info	-0.273	0.466	-0.519*	-0.384	-0.564
Labor force status (ref. pensioner)					
Employed, self-employed, unemployed	-0.178	-0.283	-0.191	-0.446***	-0.100
Other condition	0.214**	0.124	0.219**	0.123	0.158
LN other incomes	0.00911	0.00638	0.00931	-0.00536	0.00151
LN pension incomes	-0.0137	-0.0433**	-0.00878	-0.0441***	0.00663
LN other welfare transfers	-0.00726	-0.0124	-0.00193	-0.0103	-0.0150
LN financial wealth	-0.0356***	-0.0208	-0.0416***	-0.0397***	-0.0174
LN real wealth	-0.0191***	-0.0394***	-0.0146**	-0.0117	-0.0265
Country (ref. Austria)					
Germany	0.0589	0.114	-0.00431		
Sweden	-0.975***	-1.106***	-0.939***		
Netherlands	-1.374***	-1.307***	-1.429***		
Spain	0.563***	0.663*	0.493**		
Italy	0.551***	0.603*	0.491**		
France	-0.219	0.290	-0.388**		
Denmark	-1.052***	-0.861***	-1.160***		
Greece	0.0905	0.407	-0.0641		
Switzerland	-0.794***	-0.318	-1.027***		
Belgium	-0.321**	-0.338	-0.313*		
Czech Rep.	0.406***	0.285	0.447**		
Poland	0.413**	0.574*	0.320		
Constant	4.795***	4.574***	4.976***	4.494***	4.871***
Observations	4,785	1,457	3,328	3,058	1,011

*** p<0.01, ** p<0.05, * p<0.1

Table 9: Results of a random effects logistic regression model on the likelihood of receiving financial transfers from children (conditioned on having at least one child alive).

VARIABLES	Full sample	Men	Women	EC15_NCE	EC15_Southern	ECA_EU13
Female	0.646***			0.446***	0.160	0.963***
Age (ref. 50-65)						
66-80	0.393***	0.409***	0.357***	0.548***	0.403**	0.221**
81+	0.462***	0.632***	0.340***	0.410**	0.806***	0.0329
Partnership status						
Has not partner	0.749***	0.693***	0.786***	0.770***	1.537***	0.358***
Has partner who needs support	0.257**	0.626***	0.0710	0.368*	0.455*	0.0560
Respondent has limitations	0.410***	0.384***	0.442***	0.341***	0.910***	0.218**
Educational level						
ISCO 1-2	-0.385***	-0.724**	-0.269	-0.212	0.0981	1.152
ISCO 3-4	-0.372**	-0.881***	-0.214	0.0923	-0.0437	1.394
ISCO 5-6	-0.398**	-0.964***	-0.234	0.109	-0.255	1.335
Missing info	-0.135	-0.620**	0.0593	0.717***	-0.319	0.995
Labor force status (ref. pensioner)						
Employed, self-employed, unemployed	-0.381***	0.0249	-0.439***	-0.792***	-0.334	-0.286**
Other condition	-0.153*	0.334	-0.125	-0.291**	-0.0586	-0.414***
LN other incomes	0.0288***	0.0207	0.0321***	0.0520***	-0.0159	0.0196*
LN pension incomes	-	0.0189	-	-0.0526***	-0.0259	-0.0378***
	0.0363***		0.0504***			
LN other welfare transfers	0.0208**	-0.00780	0.0294***	0.00487	0.0126	0.0196
LN financial wealth	0.00539	0.0305**	-0.00473	-0.00542	-0.0324**	0.0445***
LN real wealth	-	-0.00685	-	-0.0779***	-0.0703***	-0.0271***
	0.0467***		0.0586***			
Country (ref. Austria)						
Germany	-0.576***	-0.107	-0.813***			
Sweden	-1.437***	-1.548***	-1.326***			
Netherlands	-1.752***	-1.550***	-1.863***			
Spain	-0.850***	-0.997***	-0.819***			
Italy	-0.288**	-0.177	-0.369**			
France	-1.681***	-1.738***	-1.644***			
Denmark	-1.504***	-1.241***	-1.566***			
Greece	0.687***	0.869***	0.564***			
Switzerland	-1.027***	-0.952***	-1.044***			
Belgium	-1.397***	-1.183***	-1.535***			
Czech Rep.	0.995***	0.934***	1.082***			
Poland	0.0847	-0.0140	0.159			
Hungary	-1.028***	-1.118**	-0.958***			
Portugal	-0.916***	-0.312	-1.253***			
Slovenia	-0.822***	-0.464	-0.979***			
Estonia	0.146	-0.0364	0.236			
Constant	-5.008***	-5.650***	-4.251***	-5.927***	-6.056***	-5.303***
Observations	103,325	46,043	57,282	58,406	21,943	22,976

*** p<0.01, ** p<0.05, * p<0.1

Table 10: Results of a random effects logistic regression model on the likelihood of simultaneously providing instrumental support (i.e. social support, financial transfer or grandparenting time) to both the younger and older family generations (conditioned on having at least one child and one parent alive).

VARIABLES	Full sample	Men	Women
Female	0.563***		
Age (ref. 50-65)			
66-80	-0.276***	-0.244**	-0.306**
81+	-0.562	-0.904	0.288
Partnership status			
Has not partner	0.464***	0.506***	0.426***
Has partner who needs support	-0.176	-0.555**	0.0265
Respondent has limitations	0.0626	0.0464	0.0930
Educational level			
ISCO 1-2	0.323	0.0425	0.492
ISCO 3-4	0.532**	0.484	0.563*
ISCO 5-6	0.592**	0.614	0.533*
Missing info	0.0107	-0.100	0.0961
Labor force status (ref. pensioner)			
Employed, self-employed, unemployed	-0.128*	-0.181	-0.0933
Other condition	-0.0978	-0.385*	-0.0522
LN other incomes	0.0368***	0.0561***	0.0255*
LN pension incomes	0.0184***	0.0182	0.0164*
LN other welfare transfers	0.00316	-0.0136	0.0165*
LN financial wealth	0.0460***	0.0479***	0.0443***
LN real wealth	0.0730***	0.0955***	0.0614***
Country (ref. Austria)			
Germany	0.241*	0.411*	0.133
Sweden	1.223***	1.437***	1.113***
Netherlands	0.739***	0.792***	0.712***
Spain	-1.045***	-0.999***	-1.078***
Italy	-0.287*	-0.321	-0.264
France	0.215*	0.305	0.165
Denmark	0.965***	1.038***	0.955***
Greece	-0.564***	-0.487*	-0.615***
Switzerland	0.0189	0.314	-0.183
Belgium	0.605***	0.915***	0.388**
Czech Rep.	0.568***	0.648***	0.542***
Poland	-0.182	-0.00349	-0.259
Hungary	1.006***	1.289***	0.855**
Portugal	-0.507*	-0.0573	-0.843**
Slovenia	-1.031**	-0.718	-1.242**
Estonia	-0.220	-0.398	-0.128
Constant	-4.891***	-5.258***	-4.149***
Observations	28,233	13,825	14,408

*** p<0.01, ** p<0.05, * p<0.1

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