Measuring intergenerational financial support: Analysis of two cross-national surveys

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Introduction

The process of societal ageing raises many questions about the relationship between generations. With an increasing number of older persons relative to younger persons, it should be expected that intergenerational relationships are changing in their nature and form and this is reflected by the rich literature which examines this topic. However, whilst substantive research questions are of importance, the ability to answer them is dependent upon data that accurately measures various aspects and dimensions of intergenerational relationships, exchange, and solidarity. This paper explores one such dimension, intergenerational financial transfers, and examines the existing instruments designed to measure this phenomenon within two social surveys: the Generations and Gender Programme (GGP) and the Survey of Health Ageing and Retirement in Europe (SHARE). From this evaluation broader lessons for those studying intergenerational relations are drawn.

By considering the conceptualization, instrument design, and sampling unit associated with intergenerational financial transfers, this paper shows that there are significant differences in the way the GGP and SHARE conceptualize and measure intergenerational financial transfers. For example, the questions regarding financial transfers in SHARE and the GGP use differing prompts, reference periods and caps and these result in very different levels of transfers being reported across countries. The extent to which these differing conceptualizations of intergenerational financial transfers fit within theories of intergenerational relationships is therefore of considerable importance when making substantive conclusions about the scope and nature of intergenerational financial transfers. By examining the differences between the SHARE and the GGP, it is shown that existing instruments capture different behavior.

These differences have substantive implications for the study of intergenerational relationships and this paper argues that the analysis of these intergenerational relationships is susceptible to methodological issues and impediments that need to be addressed by studies in the field. The conclusion details the potential consequences of these limitations and how they might be better addressed in the future by social surveys such as SHARE and the related family of surveys such as the GGP, Household Panel Studies, and other similar surveys. The findings of this paper suggest that whilst existing surveys are excellent, substantive research should avoid being overly dependent on a single survey or data source.

Background

Intergenerational Transfers

There has been significant research into intergenerational financial transfers in Europe over the past decade as part of a broader interest in intergenerational exchange. Much of the existing literature on intergenerational financial transfers from parents to their adult children has come to the same conclusion: parents are a non-negligible source of financial support for young adults (Kohli, 1999; Attias-Donfut, Ogg, & Wolff, 2005). Subsequent research has elaborated on this and shown that transfer behavior is highly dependent on the circumstances of the parent and the child (Albertini, Kohli, & Vogel, 2007; Schenk, Dykstra, & Maas, 2010). This approach looked to enrich previous analyses by taking into consideration the specific circumstances of both the parent and child as well as the cultural and institutional context in which the relationship existed (Szydlik, 2008).

The interplay of parent and child characteristics has led to a considerable acceleration of our understanding of intergenerational exchange and this line of investigation has dominated the most recent transfer literature. Research has shown that transfer behavior is associated with a diverse range of factors such as socio-economic background (Albertini & Radl, 2012), family size and birth order (Emery, 2013) and the child's decision to leave home (Albertini & Kohli, 2012). This suggests that financial transfers are highly context dependent and part of a more complex matrix of intergenerational exchange.

Recent research has focused on the role of financial transfers within this wider matrix of exchange and thus identify the broader significance of financial exchange between generations. This research has shown that transfers and other forms of intergenerational exchange such as cohabitation are interrelated and thus require specific empirical techniques to disentangle them. For example, transfers can be given in exchange for care for elderly relatives (Leopold & Raab, 2011) Yet the relationship between transfers and other forms of exchange has been shown to be complex, sometimes acting as a substitute and at other times a complement to other forms of exchange (Brandt, Haberkern, & Szydlik, 2009). Furthermore they also reflect and interact in a myriad of ways with the policy environment in which they are found (Brandt & Deindl, 2013; Mudrazija, 2014).

In the past 10 years this literature has therefore evolved from basic descriptives of transfers into a sophisticated understanding of how transfers interrelate with other forms of intergenerational exchange and the policy environment. However, all of this research is based on SHARE data which acted as a catalyst for the development of this field of research. This raises the question of whether intergenerational transfers have become too dependent on a single data source and whether the aforementioned findings would hold with alternative data sources and methodologies.

A small number of non-SHARE studies have been conducted on individual countries in Europe. For example, Lennartson (2010) used data from Sweden to show that children 'in need' were not always more likely to receive financial support from their parents and the situation was far more dependent on the financial situation of the parents. Similarly, Leopold and Schneider (2010) found that whilst the receipt of financial transfers was highly correlated with specific family events such as marriage and divorce, no effect could be found regarding child birth. This analysis was based upon data from the German Socio-Economic Panel (SOEP) and like the analysis from Sweden, was based on a sample of recipients rather than giver's. To the best of the authors' knowledge these are the only two European studies of financial transfers that focus exclusively on a recipient perspective.

Methodological Literature

The dependence of this existing literature upon data from SHARE may be problematic if the methodology used within SHARE affects the reported level of transfer behaviour. Whilst the module on financial transfers in SHARE is well designed, survey methodologists caution against drawing inferences from a single source or method as it is then impossible to disentangle measurement error and sampling bias particular to the survey from the actual behaviour of the population. The phrase used by Rooney, Steinberg and Schervish (2004)\ to describe this is "methodology is destiny". In the existing literature we have identified three methodological issues that might be influencing survey instruments regarding financial transfers.

Prompts

Rooney, Steinberg and Schervish (2004)\ showed in their study of volunteering in the United States that the form of prompts included within the question wording significantly affected the likelihood of reporting volunteer activity. Yet they are clear in their conclusion that this doesn't necessarily mean that prompts are desirable or undesirable as it is possible that they could be either stimulating false recall or failing to effectively prompt for behaviour that has occurred. It does however show that the level of transfer behaviour is highly dependent on the prompts included within the question. Schaeffer and Presser (2003) argue that the issue of prompts is one of translation in which the interviewer is attempting to translate the concept targeted by the survey to the respondent. With financial transfers this can be difficult given that the term itself is one widely used in academic research but not in day to day parlance.

This may have significant consequences for research in which the function and nature of the transfer is prominent. For example, Leopold and Raab's (2011) work on exchange and care giving mostly refers to transfers as potentially part of a wide intergenerational exchange with younger generations, a process in which small but regular exchanges may well be prominent. Albertini & Radl (2012) by contrast consider the transmission of social status which puts greater emphasis on large transfers made at key times in the recipient's life. Both these studies found evidence to support their theories but may have been able to go further if there was a clearer understanding of what the SHARE measure included and excluded or alternative sources using differing operationalisations were available. Currently a single measure within SHARE is being used to measure what may well be conceptually different forms of financial transfer.

Schaeffer and Presser (2003) suggest that prompts to clarify the concept are incorporated as follow up questions or as a tick list, allowing for transfer dimensions to be recorded and a clear understanding of the concept communicated. Both SHARE and the GGP have such follow up questions regarding the recipient of a financial transfer and SHARE includes prompts on motivations. However these questions are only asked in the event that a respondent says 'Yes' to the initial question of whether they made a transfer. Both the GGP and SHARE are therefore very reliant on prompts included within the initial question. To understand the impact of these prompts on responses it is however necessary to conduct an analysis of multiple methodologies.

Reference Periods

Reference periods for questions are also an area where methodological effects can be observed. It might be assumed that reference periods can be corrected post hoc if one is to assume that the recall of reporting transfer behaviour is not effected by the length of reference period. However it is possible that longer reference periods lead to a failure to recall certain events (Schwarz & Oyserman, 2001). Furthermore a shift in reference period has been shown to affect the respondents' understanding of the concept being referred to. In research conducted by Igou, Bless and Schwarz (2002) for example, it was shown that when a reference period was longer, respondents interpreted it as pertaining to less frequent and more extreme forms of behaviour. This would suggest, for example, that a respondent understands what is meant by a financial transfer differently when they asked about the last three years than when they are asked about the last four weeks.

In SHARE wave 2 reference periods are defined as the time since wave 1 and thus there is variation in the reference periods. Given that fieldwork practices and timing vary by country, this raises questions about the suitability of SHARE wave 2 data for comparative research (Brandt & Deindl, 2013).

Furthermore, it raises questions about the comparability of these transfer instruments with Wave 1 of SHARE as well as other social surveys which measure intergenerational transfers such as the GGP.

Respondent Identity

A further issue in the study of intergenerational relationships is the use of ego-centric network measures to describe intergenerational relationships. This approach relies on one person reporting on their social networks, often using name generator techniques to distinguish between different dyads within the network. Within this approach, the responses are always given as relative to the respondent (i.e. 'John is my brother' rather than 'John is my father's son' or 'John and I are brothers'). This approach is commonly adopted in survey research given that it is difficult to survey whole networks due to the lack of an appropriate sampling frame and the compound effects of non-response rates (Kalmijn & Liefbroer, 2010). However ego-centric models can be problematic if their ego-centric nature is not incorporated in the analytical technique applied (Marsden, 2011).

In existing research using SHARE data, there has been great care taken not to infer about intergenerational relations generally or about their impact on recipients of transfers. However there is literature assessing transfer from a recipients perspective and it remains unclear how this work is empirically linked to the literature on the donor perspective given the use of ego-centric approaches in the measurement of transfers. That is to say, to what extent can studies using a recipient perspective such as Leopold and Schneider (2010) and Lennartson (2010) be said to draw from the same operationalization as studies based on SHARE data.

When drawing inferences from such data, it has been stressed that a total network approach should not be assumed (Handcock & Gile, 2010). A total network approach in which the entire network was captured would allow for researchers to make inferences about the recipient node of financial transfers, for example, or would enable researchers to infer about relationships more generally. In the existing literature it is common for an assessment of intergenerational transfers to be made in such terms (Kohli, 1999; Attias-Donfut, Ogg, & Wolff, 2005). Yet this is inappropriate given the sampling bias and measurement error incurred from taking an ego-centric approach to the study of intergenerational relationships.

Given that financial transfers are an abstract concept that exists within a complex network of intergenerational relationships, it is important to carefully examine the role of these methodological designs in the responses given by survey respondents. This is especially true in the literature on financial transfers where the majority of studies have come from a singular data source and methodological approach. In this instance, a specific trait of the SHARE data could determine the direction of an entire literature on intergenerational transfers in Europe, making the SHARE methodology its destiny.

Research Question

Given the potential overdependence of intergenerational transfer research in Europe on SHARE, this paper aims to examine the extent to which differences in transfer behavior between SHARE and the GGP are attributable to methodological differences. As a result, this paper sets out to examine the following question that has been developed in response to the existing literature on intergenerational financial transfers:

To what extent do different conceptualizations and methodologies used in the measurement of intergenerational financial transfers in SHARE and the GGP affect the estimates of the prevalence of parent-child transfers?

This question is persistently asked within the study of intergenerational financial transfers given the levels of ambiguity that exist. Despite continued attempts to clarify and firmly establish what should and what shouldn't be considered as a transfer, there are a number of areas which remain ambiguous (McDaniel, 1997). For example, do existing measures include all forms of financial transfers such as the transfer of ownership in property, shares, or other financial assets? Given the range and complexity of financial products currently on offer to consumers, intergenerational transfer research may not be measuring the full extent of financial support offered by older generations. SHARE itself has attempted to circumvent this through the use of prompts which will be discussed in greater detail in the data and methods section. Yet these prompts only go some way to addressing the level of complexity involved in some financial arrangements. Similarly, it might be that other methodological aspects such as the length of the reference period or identity of the respondent as a giver or receiver affect the types of transfers that are recorded.

Concerns about how comprehensive a measure the SHARE data is relate to a persistently observed yet rarely discussed problem when it comes to the financial support given from parents to adult children. This is the observation that financial transfers are not as common as many theories of social mobility and family sociology have suggested (Cox & Jimenez, 1992). Using SHARE data it is persistently found that around 20-25% of those over 50 make a financial transfer to at least one of their adult children. This falls much further when one increases the minimum cut off point beyond €250 per annum. According to the data from Wave 4 of SHARE just 7.2% of the over 50's have ever made a transfer of €5,000 or more in their life-time, which suggests that intergenerational inter-vivos transfers may not necessarily be a key determinant of social mobility and persistent inequalities (Kohli, 1999; Albertini & Radl, 2012). Such concerns are also to be felt in other areas of intergenerational transfer research such as exchange and solidarity or life-course approaches. In SHARE waves 1 and 2, only 13.8% of transfers were over €1,000 in value, implying that just 2-3% of potential recipients received a transfer over €1,000. These are, therefore, predominantly relatively small amounts and yet they are often identified as part of an exchange for intensive care and support (Attias-Donfut, Ogg, & Wolff, 2005) or key factors in enabling key life events such as marriages and the birth of grandchildren (Leopold & Schneider, 2010).

The association between transfers and a variety of social outcomes and dynamics found by the existing literature could suggest that the transfers that are measured are hiding a much broader package of financial and material transfers. That is to say that these theories maybe valid but they are supported by empirical evidence in spite of potentially poor measurement of the financial transfers that actually occur. For example, looking at the impact of transfers on social mobility may show an association between social mobility and transfers because the types of transfers that are captured by the survey instrument are highly correlated with those transfers that are not captured. Yet improving the measurement of financial transfers could reveal more complex patterns and processes involved in intergenerational financial exchange. In order to achieve this, it is necessary to consider what the existing instruments used by social surveys measure and how they might be improved.

Method

Data

SHARE

To answer the research question, this paper uses data from SHARE and GGP, which both include instruments to measure intergenerational transfers, but using differing methodologies. The majority of research on intergenerational transfers in Europe has been based on SHARE data, particularly from waves 1 and 2. SHARE is a cross-national, longitudinal survey of the over 50's (http://www.share-project.org/). Waves 1 and 2 were conducted in 2004 and 2006. Wave 1 was conducted in 12 countries[1] and wave 2 was conducted in 14[2] countries. These waves are used instead of waves 3 and 4 as they

[1] Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, Greece, Italy, Netherlands, Sweden, Israel.

[2] Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, Greece, Italy, Netherlands, Sweden, Czech Republic, Poland, Ireland, Israel (2009/2010).

closely correspond with the fieldwork time for the GGP. Within SHARE, financial transfers are measured in a series of questions. The first of these asks individuals:

> *"Now please think of the time since the last interview. Not counting any shared housing or shared food, have you or your partner given any financial or material gift or support to any person inside or outside this household amounting to €250 or more?"*
>
> *Note: FT001 - By financial gift we mean giving money, or covering specific types of costs such as those for medical care or insurance, schooling, down payment for a home. Do not include loans or donations to charities. (Survey of Health, Ageing & Retirement in Europe, 2011)*

One thing to note is that the question does vary depending on whether the respondent took part in a previous round of SHARE. If they are a new respondent they were asked if they had given any financial or material gift in the last 12 months. Given that all respondents in the Czech Republic and Poland are new respondents in Wave 2, in these countries we can expect the levels of transfers to be marginally lower given that the reference period is 12 months rather than the approximate 30 months between waves that existing SHARE respondents would be asked to refer to. Indeed there is considerable variation within those respondents who were participating in their second wave with around 20% being interviewed within two years of their first interview and around 20% being interviewed after 30 months had passed. To circumvent this, only respondents who were completing their first SHARE interview were used in the comparisons with the GGP. However we also use individuals' second interview in certain parts of the analysis to examine the consequences of this variable's reference period.

If the respondent answers yes to the initial question, it starts a loop sequence which looks at each payment in turn. The first of these questions identifies the person receiving the transfer:

> *"To whom did you or your partner provide such financial assistance or gift?"*

The responses are recorded with children identified by a ranking system specified by the parent in the section on children within the survey. Next, the respondent is asked to specify an amount:

> *"About how much did you or your partner give to this person altogether in the time since the last interview?"*
>
> *Note: Add single values to arrive at a total amount in Euros. (Survey of Health, Ageing & Retirement in Europe, 2011)*

The loop will only be executed three times. This means that if a respondent made more than 3 transfers, the smallest transfers will not be included in the dataset. Only 4.23% of respondents made at least three transfers (to anybody, not just children). This is compared to 12.69% who made at least two transfers and 28.64% who made at least one. Therefore, some censoring of transfer behaviour does exist but it would be anticipated that this would be very small and priority is given to larger transfers.

GGP

The Generations and Gender Programme is a cross-national, longitudinal survey that has now been conducted in 19 countries (http://www.ggp-i.org/). The data used here is from wave 1 which was primarily conducted between 2004-06[3]. For some of the analysis, the GGP will be compared with data from SHARE on a country by country basis and therefore only countries which fielded both the GGP and SHARE will be included within these parts of the analysis. This is the case for 5 countries: Belgium, Czech Republic, France, Germany, Poland. One considerable difference in the GGP compared to SHARE is that the sample is representative of the population aged 18-79 which allows a broader perspective on intergenerational transfers and the comparison of giving and receiving. When the GGP is directly compared with SHARE we limit the sample to 50-79 year olds for both surveys so that they are comparable. However in certain parts of the analysis the full sample is used to examine if the identity of the respondent as giver or recipient of transfers affects the measurement of transfers.

The instruments regarding intergenerational transfers in the GGP are somewhat similar to those in SHARE in that they also employ a loop system to assess individual transfers. First respondents are asked:

> *"During the last 12 months, have you or your partner/spouse given for one time, occasionally, or regularly money, assets, or goods of substantive value to a person outside the household? Please think also about land and property you or your partner/spouse transferred during this time."*[4]

If respondents answer yes they are put into a question loop which allows them to give details of up to 5 transfers. Unfortunately, questions regarding transfer amounts and motivations contained a number of missing values and so were not usable within this particular analysis. By analysing these two data sources it is possible to examine the impact of some conceptual and methodological differences on estimates of transfer behaviour in Europe. This will not enable a full and comprehensive analysis of all

[3] The exception to this is Poland (2011)
[4] Country specific wording is included in Annex 1

possible approaches to measurement but will enable some insight into how susceptible the estimates of transfer behaviour are to conceptual and methodological differences. A more comprehensive study could incorporate a full qualitative assessment of intergenerational financial transfers that examined the conceptual validity of the existing questions within comparative surveys. This however lies outside the scope of this research project as the aim is to examine the divergence between two pre-existing data sources and the extent to which the conclusions of existing research might be affected by the conceptualisation and methodology followed by SHARE.

Hypotheses

As part of the comparison between SHARE and the GGP data, four key hypotheses have been drawn which examine the role of wording, reference period and respondent identity (giving vs receiving) on the measurement of transfers. It should be stressed that it is not necessarily desirable that the two surveys measure the exact same concept, but it is informative to examine the extent to which different approaches produce different responses. Firstly, the question wording is considered by comparing SHARE and GGP. Given that the question in the GGP appears to be more open-ended and provides prompts for various types of transfers, it could be expected that the instrument in the GGP records higher levels of transfer behaviour in the previous twelve months. Specifically, the prompts for land and property which are contained within the question text could lead to an increase in the reporting of large transfers of wealth. There is also reference in the question to 'money, assets, or goods of substantive value' which could also act as prompts to respondents.

In contrast, the SHARE question starts by asking respondents to exclude transfers regarding shared housing and food and then goes on to refer only to a 'financial or material gift or support'. Within the interviewer instructions there are guidelines stating what should and shouldn't be included but this would depend on a respondent asking for clarification. Finally, SHARE also includes a floor for transfer size. Conceptually this is very sensible in that it reduces the recording of very small transfers such as birthday presents or token amounts. Nevertheless, it does suggest that SHARE uses a somewhat narrower definition of financial transfers than the GGP. Yet there are also reasons to believe that the SHARE data may provide higher levels of transfer behaviour, especially given that SHARE references a specific amount of money and also contains other questions within the survey which refer to transfers of other types such as inheritance. There are therefore reasons to believe that SHARE may report more transfers than the GGP. Given this ambiguity our first hypothesis is:

H1: The percentage of transfers will be different in SHARE than in the GGP for a comparable sample of 50-79 year olds

This hypothesis merely states that we expect the recorded levels of transfer behaviour in each survey to be different. The only thing we can say with any degree of confidence about the two surveys is that the conceptualizations of the financial transfers' questions are different, and that the percentage of transfers recorded in the two surveys is, therefore, likely to be different. However, it might be possible to explore the differences further. Given that the GGP prompts for transfers of financial assets, property and land, this might suggest that the difference between the GGP and SHARE would be particularly large for financially comfortable respondents. Because those with higher wealth and socio-economic status are probably more likely to make substantial transfers, the gap between the GGP and SHARE should be highest for those of higher socio-economic status. This is because those who make large transfers are more likely to report doing so when prompted by the GGP question rather than by the SHARE question. The converse could be argued however because those of low socio-economic status maybe more likely to make very small transfers below the €250 floor that exists in SHARE. However, whilst this will be considered during the analysis, the predominant distinction between the conceptualisations appears to be the inclusion of a broader array of financial transfers in GGP including the transfer of wealth and assets. Whereas the measures of wealth and assets are not comparable between the GGP and SHARE, measures of educational level, which is often used as a proxy for socio-economic status, are. This provides the second hypothesis:

H2: The difference between SHARE and the GGP will be greatest among the highly educated

The third hypothesis within the analysis examines the extent to which the reference period used within the question effects the response rate and thus gives some indication of its relevance. For this it is possible to use SHARE data as respondents were given different reference periods depending on whether it was the first or second time they had been interviewed. If it was the first time, then they were asked about the last 12 months. If it was their second interview, then they were asked about the period since the last interview which ranged from anywhere between 18 months and 36 months due to fieldwork windows varying between countries. A simple theory would state that the longer the time period, the more likely it is that an individual has made a transfer. However, as the previous section detailed, methodological literature has suggested that longer reference periods put greater emphasis on respondent recall and that this can systematically bias the types of transfers that are recorded. It is therefore expected that longer reference periods are associated with fewer transfers being reported:

H3: The longer the reference period, the less likely it is that the respondent reported making a financial transfer

The final issue that this paper examines is the level of measurement error stemming from asking parents compared to children. Definitively testing whether parents and children are reporting the same transfers is difficult given the lack of a sampling frame for parent-child relationships and problems of non-response on both nodes. Yet it is possible to examine the differences between individual donors and recipients given that the GGP includes both within its sample for a wide age range. Given this we can examine the extent to which young persons' reporting of receiving financial transfers reflects the parents' reporting of giving financial transfers which is examined in the previous three hypotheses. To do this, respondents can be matched with other respondents who share similar characteristics with their parent/children using their basic demographic information such as age, education, marital status and number of children. Based on an assumption that transfer giving is viewed positively and transfer receiving is viewed negatively, it is anticipated that children will under-report receiving transfers and parents will over report giving transfers (Schaeffer & Presser, 2003). The fourth hypothesis in this analysis is therefore:

H4: The receipt of a transfer is less likely to be reported by the child node than the giving of a transfer is by the parental node.

Nevertheless there are credible reasons to believe that the effect may be in the opposite direction. Parents could be concealing the dependence of their children and children may be keen to acknowledge the support their parents provide. Hypothesis 4 therefore seeks to test for this respondent effect and establish whether it is evident with regards to intergenerational transfers. In answering these hypotheses this paper aims to provide a clearer picture of what existing measures of financial transfers are capturing and what they are not. In doing so it is possible to provide context to some of the research conducted with existing data and possible ways in which the data collection process itself could be improved.

Results

Prompts

The first piece of analysis aims to examine the differences in reported transfer behaviour between SHARE and the GGP and consider the extent to which this might be driven by the way the questions are worded. The data on transfer giving by parents from SHARE and GGP were made as comparable as possible by limiting the age range in both surveys to 50-79. In addition the data for SHARE was taken from wave 1 and wave 2 but only interviews with new respondents were used so that the reference period was always one year and, therefore, comparable to the GGP data. Both surveys had cross sectional weights applied that ensured that each sample was representative of the population. Once this was completed the proportion of the population stating that they had made a financial transfer to a child was calculated and the results are given in Figure 1.

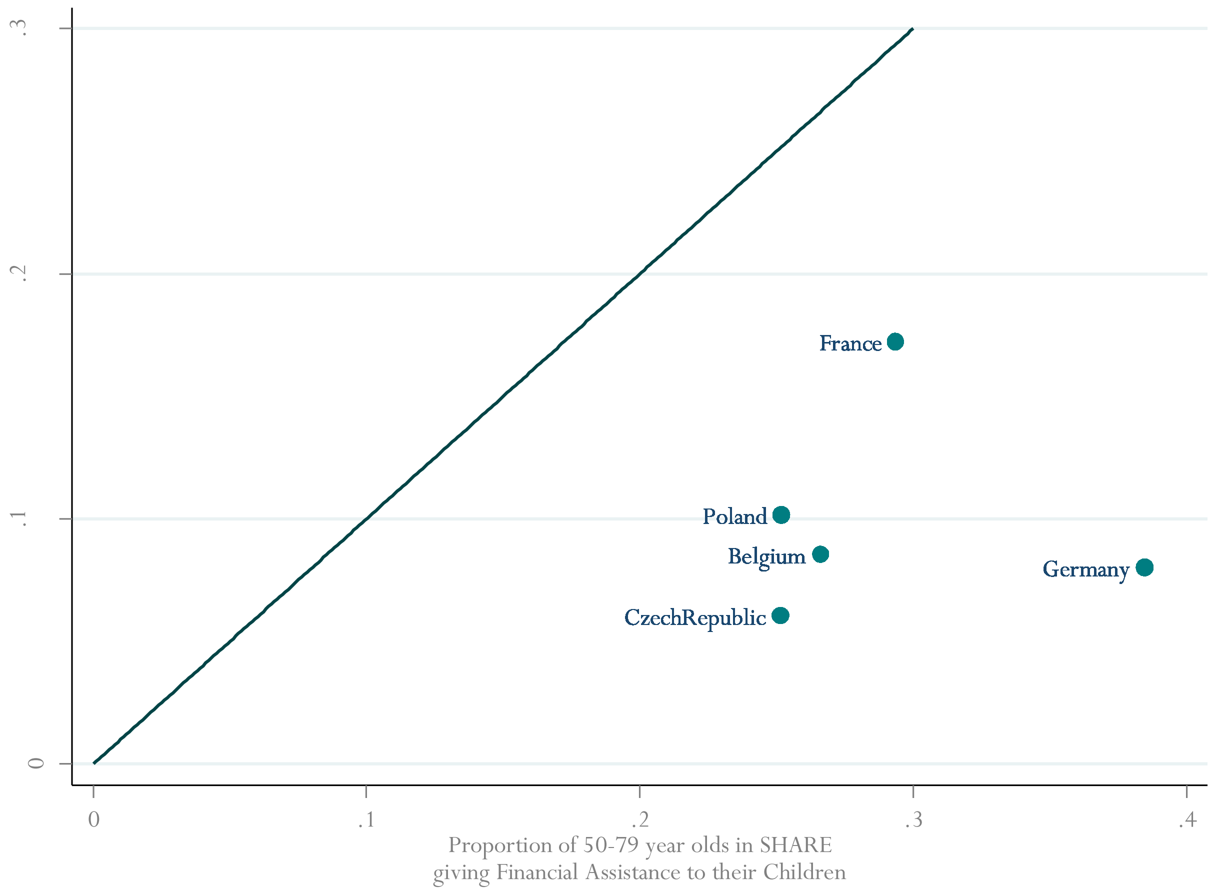

Figure 1 - Intergenerational Transfers in SHARE and the GGP

In this figure the black diagonal line represents parity between the two surveys and the positioning of all 5 countries below that line suggests that the estimate for the proportion of the population making a transfer in the last 12 months is considerably higher in SHARE than in the GGP. This may suggest that the wording in SHARE provides a more inclusive measure of transfers but to rule out the effect of sample differences between the two surveys a Propensity Score Matching (PSM) analysis was undertaken. This analysis matches all those respondents from SHARE with their closest possible match in the GGP and compares whether they made a transfer or not. The matching between SHARE and GGP respondents was based upon their age, marital status, occupational status, the number of children, educational level, gender and country of residence. Table 1 shows the results of the PSM results. The first line shows the difference between the two samples before they have been matched. Prior to matching the proportion of respondents making a financial transfer in SHARE was 18.8 percentage points higher than in the GGP. The difference rose slightly to 19.2 percentage points once the matching had been conducted. This suggests that the question from the GGP is recording far less transfer activity than in SHARE.

Table 1 – Results of Propensity Score Matching of respondents transfer behaviour

Sample	Treated	Controls	Difference	S.E.	T-stat
Unmatched	0.2922	0.1041	0.1881	0.0049	38.2700
ATT	0.2922	0.1006	0.1917	0.0060	31.8300

One observation is that the gap between the GGP and SHARE is smallest in France, where the translation of the initial question omitted the reference to "substantive value". It is therefore possible that respondents in the GGP omitted all transfers they did not feel to have been of substantive value when they were actually only prompted to consider goods of substantive value in addition to other types of material transfers such as money regardless of their value. If the use of the term substantive in the GGP is leading to omissions then this is disconcerting given that the term substantive only refers to 'goods' and is intended to limit the inclusion of goods to those that have value beyond emotional or sentimental.

It might be suspected that higher levels of transfers would be evident in the GGP given that it included an explicit prompt for the transfer of property, land and material goods of substantive value and that this would lead to the biggest discrepancies between the two surveys being between the highly educated. If it is the case that the term substantive is leading to omissions then one might expect those of lower socio-economic status to be less affected as they would view a greater proportion of transfers as being of substantive value. If one assumes that substantive adds a degree of subjective interpretation into the wording within the GGP it should be expected that those from lower socio-economic groups will report similar findings in the two surveys because they will view almost all transfers as having substantive value. However, those from higher socio-economic groups will omit some transfers that are of considerable value but do not affect their day to day lives or living conditions.

Examining the educational differential in transfers across the two surveys to test the second hypothesis may therefore help further clarify the source of the difference between the two surveys. To make the comparison, a probit model was constructed which included the same independent variables as the PSM and also a dummy variable indicating whether the respondent was from the SHARE sample or the

GGP sample. To test the hypothesis, interaction effects were then included between the respondents' educational level and the sample they were from[5]. The results from the pooled model suggest that the difference between SHARE and the GGP is significantly higher for those in medium (ISCED '97: 3 & 4) and high (ISCED '97: 5 & 6) education categories. This suggests that the transfers that are included in the SHARE measure and excluded by the GGP measure are more likely to be reported among these groups.

Table 2 – Probit Model of Transfer Behaviour in GGP & SHARE by Educational level

	Model 1	
GGP*Low Edu	0	
	(.)	
SHARE*Low Edu	0	
	(.)	
GGP*Med Edu	0	
	(.)	
SHARE*Med Edu	0.34	***
	(0.047)	
GGP*High Edu	0	
	(.)	
SHARE*High Edu	0.295	***
	(0.055)	
Constant	-1.452	***
	(0.040)	
N	24,153	
ll	-9957.08	
aic	19942.16	

Reference Period

In addition to the wording in existing instruments, there are also questions about the reference period for transfers which need to be considered. In the previous analysis only respondent's first interview in SHARE and GGP was used so that the reference period was always 12 months. However in SHARE

[5] The estimated coefficients for these interaction effects are included in the full model which is available on request

respondent's second interview the reference period was the time between interviews which could range from around 18 to 40 months. This is a large difference in reference periods and raises questions about the comparability of responses between countries where fieldwork schedules differ. The variation in the reference period also allows us to examine its effect on the reporting of transfers. The degree of variation in these reference periods is evident from the histogram in Figure 2. The data is taken from 11 countries[6] with each having its own slightly distinct timetable for fieldwork. For example, the average reference period was 32 months in the Netherlands yet in Belgium the average was just 21 months.

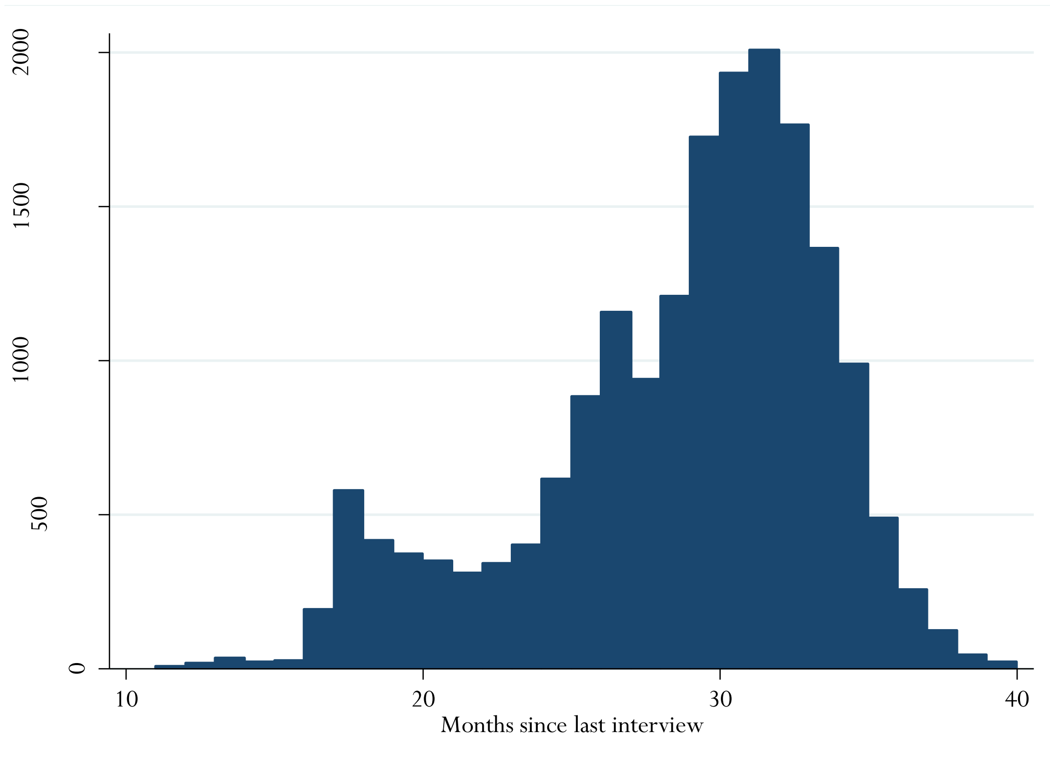

Figure 2 – Months since last interview for respondents at their second interview (SHARE, Wave 2)

There is also variation within countries. In all the countries for which data is available, the range between the lowest and highest number of months between a wave 1 interview and a wave 2 interview is at least a year and in most cases between 14-16 months. Some respondents, therefore, have a reference period which is approximately 50% longer than other respondents from the same country. It lies outside of the scope of this paper to examine whether this variation is associated with any demographic variables. However, it is of interest to examine whether the variation is related to the

[6] Austria, Germany, Sweden, Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium

recorded transfer behaviour. The ‘common sense’ logic suggests that the longer the reference period, the more likely that a transfer was made. Nevertheless, given existing research (Schwarz & Oyserman, 2001), it is suspected that longer reference periods are in fact associated with less transfer behaviour being recorded. To examine this, a probit analysis was conducted, which predicted whether a transfer was reported to have been made by the respondent. Age, education level, employment status, marital status, gender, number of children and country of residence were used as controls, and the key independent variable was the length of the reference period. The square of the reference period was also included in order to account for non-linearity. The marginal effects at the means of this model are given in Figure 3.

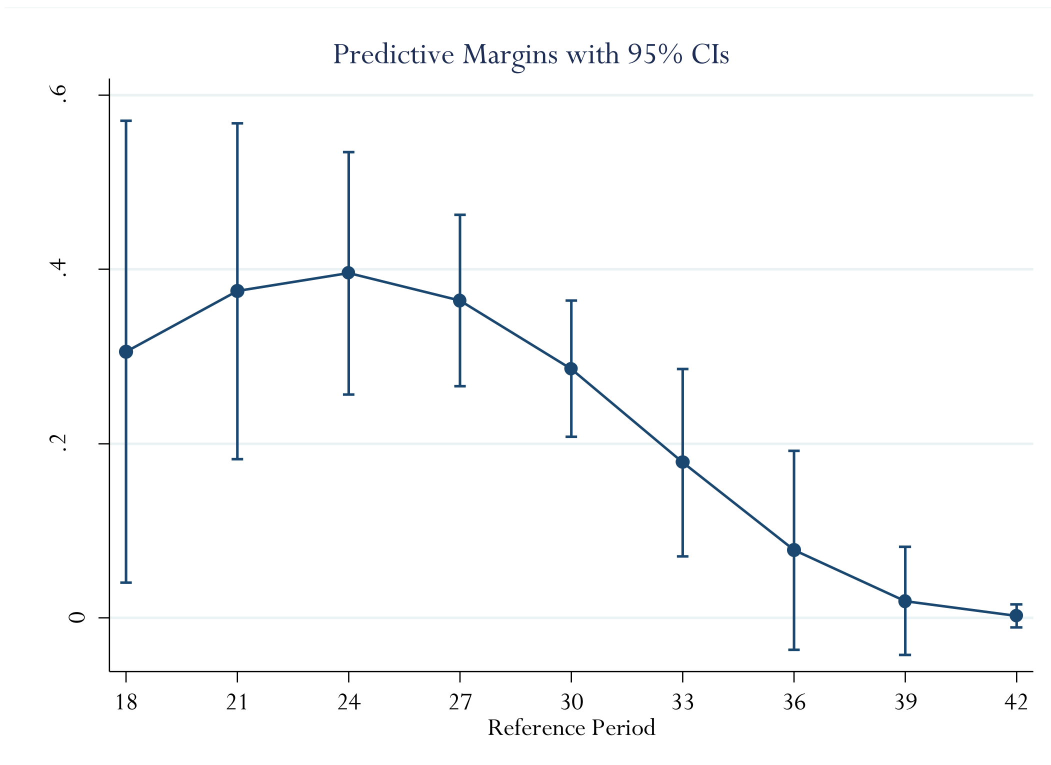

Figure 3 – Marginal Effects at the means of reference period length (months) on the probability of recording having given a transfer (SHARE, Wave 2)

The results are very striking in that they reveal that the likelihood of recording that a transfer has been made does indeed decrease past a certain time point. It would appear from the analysis that once 24 months have passed the likelihood of recording a transfer actually starts to decrease. Respondents whose second interview was 24 months after the first one have a 36% chance of recording a transfer since wave 1. The probability of recording a transfer falls to just 7.7% for a respondent who was interviewed at 36 months. Even at 30 months, the probability of recording a transfer has fallen by 23% from its peak at 24 months. This is of interest given that 44% of the SHARE Wave 2 sample had their wave 2 interview at least 30 months after their first wave interview. This suggests that respondents start to forget transfers past a certain point or choose to omit them under the assumption that reference to a long period in time means that the concept is limited to only substantial transfers.

To examine this further, a second model was run with the same covariates as the previous model but with 'total amount transferred' as the dependent variable and restricted only to those who had stated they had made at least one transfer. The results suggest that predicted total amount transferred mirrors the probability of making a transfer by first decreasing and then increasing[7]. This suggests that the transfers that are forgotten are smaller. The extent to which this could affect inferences, however, is dependent upon the extent to which the timing of the second interview is also associated with other socio-economic indicators and the national team conducting the fieldwork. Nevertheless, as with the first two hypotheses, the results appear to suggest that the response to questions about financial transfers is highly dependent upon the manner in which the question is asked.

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[7] However, the coefficients for the reference period are only significant at a 90% confidence level

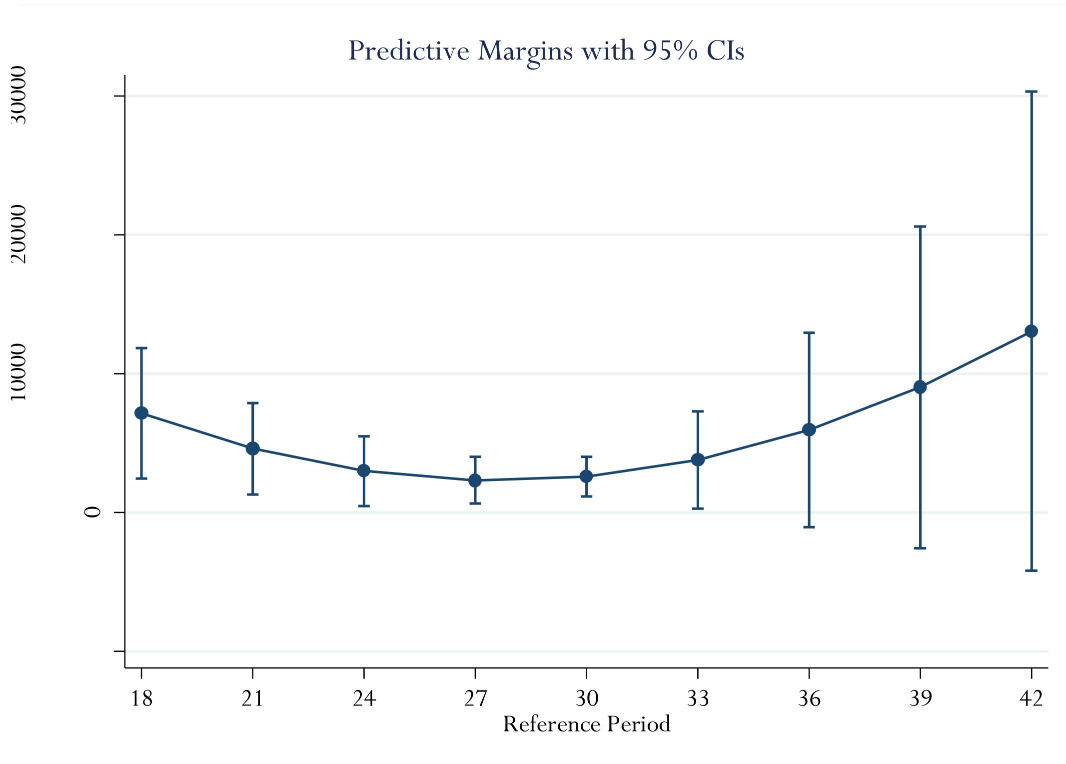

Figure 4 - Marginal Effects at the means of reference period length (months) on the predicted total amount transferred by those who made at least one transfer (SHARE, Wave 2)

Respondent Identity

Having established that what is asked and when it is asked is important, the fourth hypothesis considers whether who you ask is important. To assess this, the full sample from the GGP data is used given that it is representative of the population aged 18-79 and thus includes both recipients and donors of financial transfers. By exploiting this fact, the analysis can compare the responses of recipients of transfers with those who have made transfers. To conduct the analysis, the sample was duplicated to reflect that each individual is a potential giver and a potential recipient of an intergenerational financial transfer. There are, however, exceptions to this. Firstly, those whose parents had died or who were co-resident with them were removed as potential recipients from the sample. Moreover, those who had no non-coresident children were removed from the sample as potential givers of financial transfers. Variables were then recoded to reflect the dyadic nature of the new unit of analysis. For example, a variable was created which indicated the educational level of the parental node. For those in the sample who were recipients this was the educational level of their parents and for those who were potential givers of financial transfers, this was their own educational level. This was conducted for parent's age, children's age, parent's educational level, financial transfer behaviour and the number of siblings the child node has.[8] Once these variables were created it was possible to perform PSM analysis to ascertain the extent to which the likelihood of a transfer being recorded was different if the respondent was the parent or the child. The results of this analysis are given in Table 3.

Table 3 - Results of Propensity Score Matching of respondents transfer behavior for Parental and Child nodes

Sample	Parent	Child	Difference	S.E.	T-stat
Unmatched	0.13027	0.14860	-0.01833	0.00340	-5.39
ATT	0.13318	0.14860	-0.01542	0.00344	-4.48

The results suggest that before matching, parental nodes were actually 1.8 percentage points less likely to record a transfer. Once matching had been conducted this fell to 1.5 percentage points but still suggests that children are 11.5% more likely to report having received a transfer than their parents are of reporting having given one. This finding must however be held in context in that whilst the difference is significant it is also quite small.

Discussion

This paper set out to examine the extent to which the conceptualization of intergenerational transfers is comparable between two cross-national European surveys. The findings suggest that the instruments are different and that this has consequences for the use of these instruments as measures of the conceptualization of transfers within the substantive literature. Furthermore, they suggest that measures of intergenerational transfers are highly dependent on methodological design decisions. The confirmation of the first hypothesis suggested that SHARE's question wording recorded more financial transfers than the GGP, and this is believed to be derived from the prompt in terms of euro amount in the SHARE question and the use of the term "substantive" in the GGP question. This suggests that including such prompts which refer to explicit amounts of money may lead to a more inclusive recording of the transfer behavior of respondents as they are encouraged to think of payments that they may have otherwise dismissed as irrelevant or simply forgotten. Similarly, the use of subjective judgments such as the term substantive may not be limited to the part of the clause to which they grammatically belong but could affect the respondent's broader understanding of the concept.

[8] It is however important to note that the financial transfer variable for children does also include inheritance received from parents. This should, however, have a limited effect on the results given that the sample is limited to individuals who have a least one parent still alive and will thus only include individuals who have had one parent die in the last year. As a sensitivity analysis, only those with both parents still alive were analysed and the results remained the same.

This interpretation is supported by the confirmation of the second hypothesis. This showed that the difference between SHARE and the GGP was highest among those from higher education levels. This suggests that the payments that were not recorded in the GGP came from those with greater assets. Whilst it cannot be fully tested given the lack of comparable financial data between the two surveys, this systematic difference in reported transfers would appear to indicate that including a financial amount as a prompt within the question wording encourages those with higher levels of assets to include lower transfer amounts. It would have also been possible to test this theory more thoroughly if the data from the GGP had contained transfer amounts, however this was not the case.

More broadly, these conclusions suggest that the respondent's recall of financial transfers is 'soft' in that it is greatly affected by the wording of the question. This belief is also strongly supported by the finding from hypothesis three. Here, the results support the hypothesis in that the reference period appears to be negatively correlated with the reported likelihood of making at least one transfer. However, it does seem to have some positive correlation with the reported total amount transferred. This may suggest that a long reference period leads to respondents omitting small transfers and only including large transfers. This once again suggests that the type of transfers which are included is very dependent upon the context in which the question is asked.

This finding, however, is dependent upon the association with other socio-economic indicators. It could be that those who are of lower socio-economic status are harder to contact during fieldwork and therefore have longer reference periods. This could mean that they are given longer reference periods but are generally less likely to provide financial support. Yet, we do not believe this to be the case given that it is inconsistent with the positive relationship between average transfer size and the length of the reference period. If the timing between waves 1 and 2 is not associated with the socio-economic indicators, then differential transfer behavior could be attributable to differing reference periods and not other factors. For example, comparative analysis of transfers has been common in the intergenerational transfer literature. Wave 2 of SHARE should be used with considerable caution for such comparative analysis given the dependence of transfer behavior on the fieldwork particularities in each country which could lead to systematic bias in the measures of financial transfers. More generally, it raises the question of what types of transfers are excluded by both the GGP and SHARE wave 1 by having a reference period as long as one year. If survey instruments are to accurately capture transfer behavior, a greater understanding of the relationship between reference period and transfer reporting is needed.

In addition to these limitations in the measurement of financial transfers, there is also the issue of ego-centric methods in transfer research. The concern was that in asking only the parents about financial transfers, a bias was introduced due to the fact that parents maybe more likely to record a transfer than children. The opposite proved to be the case from an examination of parents' and children's responses that were matched using the GGP data, potentially suggesting that either parents are reluctant to report transfers or children are more willing to report them. Whilst the difference is small, it suggests that researchers should consider both the parental perspective and the child perspective in examining intergenerational transfer behavior. It would however be wrong to suggest that the analysis on this matter is conclusive given that it was conducted using only the measure of transfers available in the GGP. This could be problematic if children perceive transfers to be of importance whilst parents see them as irrelevant or too small to remember. This problem may therefore be circumvented by including a prompt for a specific financial amount as in SHARE for both the receiving and giving of financial transfers.

This paper has illustrated that instruments measuring intergenerational financial transfers capture a very specific conceptualisation of transfer activity. The proportion of individuals recording any transfer behavior appears to be very dependent on the way the question is worded, the reference period for which it refers, and who is being asked the question. The solution to this is not to recommend a singular way of asking about such financial transfers. Instead, a variety of measures should be encouraged that address utilizing different techniques, prompts, and sampling frames so that transfer behavior can be better understood. The difference between the instruments in the GGP and SHARE is subtle but the outcomes are very different and from this divergence there are insights which can be made and, as this paper has shown, these insights may occasionally be counter to conventional thinking. Given that the vast majority of literature on intergenerational financial transfers in Europe is based on the SHARE data, methodological dependency is an important issue that needs to be addressed.

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Annex – Survey Questions in field languages

SHARE

English

Now please think of [the time since the last interview, that is since /the last twelve months][{month year previous interview}/{empty}]. Not counting any shared housing or shared food, have you [or/or/or/or/{empty}/{empty}] [your/your/your/your/{empty}/{empty}] [husband/wife/partner/partner/{empty}/{empty}] given any financial or material gift or support to any person inside or outside this household amounting to [{empty}] [{local currency}] or more?
IWER:BY FINANCIAL GIFT WE MEAN GIVING MONEY, OR COVERING SPECIFIC TYPES OF COSTS SUCH AS THOSE FOR MEDICAL CARE OR INSURANCE, SCHOOLING, DOWN PAYMENT FOR A HOME. DO NOT INCLUDE LOANS OR DONATIONS TO CHARITIES.

Belgium

Denkt u aan [de periode sinds het laatste interview, dat wil zeggen sinds/de afgelopen twaalf maanden][{maand en jaar van vorig interview}/{empty}]. Gedeelde huisvesting of voedsel niet meegerekend, hebt u [of/of/of/of/{empty}/{empty}] [uw/uw/uw/uw/{empty}/{empty}] [man/vrouw/partner/partner/{empty}/{empty}] financiële of materiële hulp aan iemand (in uw huishouden of daarbuiten) gegeven voor een bedrag van [{empty}] [{Euro}] of hoger?

IWER:MET FINANCIËLE HULP WORDT BEDOELD GELD, HULP BIJ HET BETALEN VAN SPECIFIEKE KOSTEN ZOALS VOOR MEDISCHE ZORG OF EEN VERZEKERING, OPLEIDING, EEN AANBETALING VOOR EEN HUIS.REKEN LENINGEN OF DONATIES AAN GOEDE DOELEN NIET MEE

Czech Republic

[V době od posledního interview, to jest od/V posledních dvanácti měsících][{měsíc a rok předchozího interview}/{empty}], když nebudete brát v úvahu stravu a ubytování, podporoval/a jste Vy [nebo/nebo/nebo/nebo/{empty}/{empty}] [Váš/Vaše/Váš/Vaše/{empty}/{empty}] [manžel/manželka/partner/partnerka/{empty}/{empty}] v tomto období nějakou osobu uvnitř Vaší domácnosti nebo mimo ni penězi nebo věcnými dary v hodnotě [{2.500}] [{Kč}] a více?

TAZATEL:VEDLE FINANČNÍ PODPORY V HOTOVOSTI JE NUTNÉ JAKO PENĚŽNÍ DARY CHÁPAT I PŘEVZETÍ URČITÝCH NÁKLADŮ, NAPŘ. NA ZDRAVOTNÍ PÉČI NEBO POJIŠTĚNÍ, NA VZDĚLÁNÍ, NA POŘÍZENÍ BYTU NEBO DOMU. ÚVĚRY A DARY CHARITATIVNÍM ORGANIZACÍM SE NEPOČÍTAJÍ.

France

Veuillez maintenant penser [au temps écoulé depuis notre dernier entretien, c'est-à-dire depuis/aux douze derniers mois][mois année interview prédédente/{empty}]. Sans tenir compte du partage d'un logement ou de repas, vous est-il arrivé à vous [ou à/ou à/ou à/ou à/{empty}/{empty}] [votre/votre/votre/votre/{empty}/{empty}] [mari/ femme/compagnon/compagne/{empty}/{empty}] de faire un don ou d'apporter un soutien financier ou matériel à une personne, faisant partie ou non de votre ménage, d'un montant de [{250}] [EUROS] ou plus?

Germany

Denken Sie jetzt bitte an [die Zeit seit dem letzten Interview, also seit/die letzten zwölf Monate][{Monat und Jahre des letzten Interviews}/{empty}]. Wenn Sie freie Kost und Unterkunft unberücksichtigt lassen, haben Sie [oder/oder/oder/oder/{empty}/{empty}] [Ihr/Ihre/Ihr/Ihre/{empty}/{empty}] [Mann/Frau/Partner/Partnerin/{empty}/{empty}] in dieser Zeit eine Person innerhalb oder außerhalb ihres Haushalts mit Geld- oder Sachgeschenken im Wert von [{250}] [Euro] oder mehr unterstützt?

IWER:NEBEN ZUWENDUNGEN IN BAR SIND UNTER GELDGESCHENKEN AUCH DIE ÜBERNAHME VON BESTIMMTEN KOSTEN, Z.B. FÜR MEDIZINISCHE VERSORGUNG, VERSICHERUNGEN, AUSBILDUNG ODER ANZAHLUNGEN FÜR WOHNEIGENTUM ZU VERSTEHEN. KREDITE ODER SPENDEN AN GEMEINNÜTZIGE ORGANISATIONEN NICHT ZÄHLEN

Poland

Proszę teraz pomyśleć o [okresie od czasu ostatniego badania /okresie ostatnich dwunastu miesięcy][({month year previous interview})/{empty}]. | Nie licząc jakichkolwiek wydatków związanych ze wspólnym mieszkaniem lub jedzeniem, czy [udzielał Pan/udzielała Pani] [lub/lub/lub/lub/{empty}/{empty}] [Pani/Pana/Pani/Pana/{empty}/{empty}] [mąż/żona/partner/partnerka/{empty}/{empty}] jakiejkolwiek finansowej lub materialnej pomocy lub wsparcia o wartości [{200}] [{empty}] lub więcej jakiejkolwiek osobie w tym gospodarstwie domowym lub poza nim?

ANKIETER:PRZEZ POMOC FINANSOWĄ ROZUMIEMY DAWANIE PIENIĘDZY LUB POKRYWANIE OKREŚLONYCH RODZAJÓW KOSZTÓW, JAK KOSZTY OPIEKI MEDYCZNEJ LUB UBEZPIECZENIA, NAUKI, SPŁATY DOMU. PROSZĘ NIE UWZGLĘDNIAĆ POŻYCZEK I DARÓW DLA ORGANIZACJI CHARYTATYWNYCH.

GGP Country Specific Wording

English
During the last 12 months, have you or your partner/spouse received for one time, occasionally, or regularly money, assets, or goods of substantive value from a person outside the household? Please think also about land and property or inheritance that was transferred to you or your partner/spouse during this time.

Belgian (French)
Au cours des 12 derniers mois, vous-même ou votre conjoint/compagnon (conjointe/compagne) avez-vous reçu de façon exceptionnelle, occasionnelle ou régulière de l'argent, des valeurs ou des biens de valeur significative, donnés par une personne extérieure à votre ménage ? N'oubliez pas les terrains, propriétés ou héritages que vous (ou votre conjoint/compagnon (conjointe/compagne)) avez reçu au cours de cette période.

Czech Republic
Dostal/a jste Vy nebo Váš/e partner/ka během posledních 12 měsíců jednou, příleţitostně, nebo vícekrát peníze, aktiva nebo předměty větší hodnoty od osoby mimo Vaši domácnost? Zahrňte, prosím, i pozemky a majetek nebo dědictví, které byly na Vás nebo Vašeho partnera (Vaši partnerku) v této době převedeny.

Germany

Haben Sie oder Ihr(e) (Ehe-)Partner/in in den letzten zwölf Monaten einmal, gelegentlich oder regelmäßig Geld, Vermögen oder sonstige Wertgegenstände von einer Person außerhalb des Haushalts erhalten? Denken Sie dabei bitte auch an Grundstücke oder Erbschaften, die Sie oder Ihr(e) (Ehe)Partner/in in dieser Zeit erhalten haben.

France

Au cours des douze derniers mois, vous-même ou votre conjoint avez-vous reçu de façon exceptionnelle, occasionnelle ou régulière de l'argent, des valeurs ou des biens, donnés par une personne extérieure à votre ménage? N'oubliez pas les terrains, propriétés ou héritages que vous (ou votre conjoint) avez reçus au cours de cette période.

Poland

Czy w ciągu ostatnich 12 miesięcy Pan(i) lub Pana(i) współ mał żonek(ka)/ partner(ka) OTRZYMALIŚCIE jednorazowo, sporadycznie lub regularnie pieniądze, środki trwał e lub przedmioty dużej wartości od osoby nie będącej czł onkiem gospodarstwa domowego? Proszę wziąć także pod uwagę ziemię i majątek lub spadki przekazane Panu(i) lub współ mał żonkowi(ce)/ partnerowi(ce) w tym czasie.