provided by Erasmus University Digital Repository

## Multiple links

Public policy, family exchanges, well-being and policy endorsement

## Meervoudige verbindingen

Overheidsbeleid, familieuitwisselingen, welbevinden en instemming met beleid

Proefschift

ter verkrijging van de graad van doctor aan de
Erasmus Universiteit Rotterdam

op gezag van de
rector magnificus

Prof.dr. H.A.P. Pols

en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op

donderdag 12 december 2013 om 11.30 uur

door

Niels Schenk geboren te Geldrop

2 afus

ERASMUS UNIVERSITEIT ROTTERDAM

### Promotiecommissie

Promotores: Prof.dr. P.A. Dykstra

Prof.dr. I. Maas

Overige leden: Dr. A. Aassve

Prof.dr. P.L. Meurs

Prof.dr. R.J. van der Veen

# MULTIPLE LINKS

Public policy, family exchanges, well-being and policy endorsement.

Niels Schenk

Cover design: Marc Wehkamp

ISBN 978-94-6191-949-6

This thesis was written with the support from two projects: MULTILINKS 'How

demographic changes shape intergenerational solidarity, well-being, and social

integration: A multilinks framework' (EU 7th framework, 217523), and by 'Pro-

ductive in multiple ways: In search of activating institutions', Stichting Institutut

Gak (SZ 2025).

©2013, Niels Schenk

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system of any nature, or transmitted in any form or by any meas, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the holder of the copyright.

# Contents

# List of Figures

### List of Tables

1	Inti	roduction	3
	1.1	Background	4
	1.2	Theoretical framework	6
	1.3	Research design	
2	The	e role of European welfare states in intergenerational money	
	trai	nsfers	<b>15</b>
	2.1	Introduction	16
	2.2	Data and methods	23
	2.3	Results	26
	2.4	Conclusion and discussion	
3	Old	er adults' networks and public care receipt	43
	3.1	Introduction	44
	3.2	Data and methods	48
	3.3	Results	51
	3.4	Conclusion and discussion	56
4	Spo	ousal caregiving: a dyadic perspective	61
	4.1	Introduction	62
	4.2	Data and methods	67
	4.3	Results	70
	4.4	Conclusion and discussion	76

5		entry differences in age cleavages in endorsement of old age fare policies	<b>7</b> 9
	5.1	Introduction	80
	5.2	Data and methods	85
	5.3	Results	89
	5.4	Conclusion and discussion	95
6	Cor	nclusion and discussion	99
	6.1	Conclusion and discussion	100
7	San	nenvatting (Summary in Dutch)	111
	7.1	Terugtrekkende overheid	112
	7.2	Vier empirische hoofdstukken	113
	7.3	Conclusie en discussie	119
$\mathbf{R}$	efere	nces	122
D	ankw	voord (Acknowledgments)	137
C	Curriculum Vitae		

# List of Figures

1.1	Conceptual model, numbers denote the study addressing the specific relationship	6
2.1	Percentages of children receiving monetary support and of parents providing monetary support.	27
2.2	Employment status of adult children	29
2.3	Distance of adult children to their parents	29
2.4	Ability to make ends meet for household of parents	30
5.1	Means and standard deviations of variables aggregated over countries. Wider horizontal bars denote larger variations in means across countries.	88
5.2	Predicted probabilities and 95% credible intervals of endorsing old age policies for average respondent, by age and economic hardship.	91
5.3	Differences in age cleavages between countries. Predicted probabilities (dots) and 95% credible intervals (lines) for an average respondent with no elderly family member by economic hardship. Solid lines represent a 25-year-old and dashed lines a 70-year-old average respondent.	93
5.4	Differences in baseline response patterns and age cleavages between countries. Predicted probabilities (points) and 95% credible intervals (lines) for an average respondent with highest affective close-	50
	ness with an elderly family member by economic hardship	94

# List of Tables

2.1	The ranked generosity of three types of welfare provisions, 10 European countries 2004	22
2.2	Means of variables measuring alternative expenditures and control variables per country for parents and children in our sample	32
2.3	Results (odds ratios) from multilevel logistic regression predicting transfer receipt by children	34
2.4	Comparison of the country fixed-effects for the intercept-only model and the full model	36
3.1	Descriptive characteristics (based on self-reports) of the older adult sample at two points in time	51
3.2	Descriptive characteristics (based on self-reports and child-reports) of the older adults receiving public care at two points in time	52
3.3	Results from multilevel logistic regression predicting public care receipt of older adults	53
3.4	Results from multilevel logistic regression predicting unskilled versus skilled public care receipt of older adults	55
4.1	Descriptives of variables used in the final model for men and women separately	71
4.2	Predicting (changes in) relationship satisfaction of men and women simultaneously in response to entering caregiving periods and (changes	
4.3	in) self-rated health of respondent and partner $(N = 1531) \dots$ Predicting (changes in) life satisfaction of men and women simul-	72
	taneously in response to entering caregiving periods and (changes in) self-rated health of respondent and partner $(N=1531)$	75
5.1	Results from hierarchical ordered logit models	90

# 1 Introduction

## 1.1 Background

In a time when individuals prefer to operate as autonomous individuals, being dependent is often thought of as a negative state that is best overcome as soon as possible (Lee, 2002; Stone, 2010). Political institutions have a similar view when it comes to reliance on welfare services: welfare state services should support people for as short as possible so as to ensure that they are able to carry on living independently (Gilbert, 2004).

Whereas the insistence on independence from welfare support has been present in US welfare politics from its beginning, it is relatively new in European welfare states such as The Netherlands (Hemerijck, 2013). European welfare systems used to be passive systems aimed at income maintenance but have transformed into activating systems aimed at maximizing labor market employment by stressing individual responsibility (Gilbert, 2004), and the Dutch welfare system forms no exception to this rule (Hemerijck & Marx, 2010).

Due to the imminent unsustainability of generous social protection programs given aging populations, European welfare states have been retrenching (Pavolini & Ranci, 2008; Pierson, 2011). For many welfare states, this is a continuation of the transformation of welfare states into activating systems.

The retrenchment of earlier welfare models into models stressing individual responsibility has been termed the "surrender of public responsibility" by Gilbert (2004). Individuals are increasingly forced to rely on themselves or other sources for support. The retrenchment of long term care policies introduced between 2009 and 2010 in The Netherlands is a case in point. A classification system was put in place that categorizes care needs as mild, moderate or severe. Access to care was denied to applicants with mild care needs applying for support with usual care, defined as "the normal, daily care that nuclear family members or other people who share a household can be expected to provide to one another" (CIZ, 2012:9, author's translation). Nursing care and permanent personal care are not considered to be usual care. Under the new law physically and mentally capable household members are expected to provide a dependent older adult with social participation support and temporary personal care (i.e. when the need for personal care is expected to last no longer than three months) (CIZ, 2012).

This shift in balance of government policy from formal to informal home care is not limited to The Netherlands. Countries such as England, Finland and Sweden have seen similar shifts (Rostgaard, Glendinning, & Gori, 2011). By transferring responsibilities from state provided welfare services to family caregivers, the often made assumption is that those in need of care have become more dependent on family members (Heady & Kohli, 2010). In the first part of

this dissertation I try to establish the extent to which a linkage between public policy and family exchanges exists. Linkages as outcomes are addressed in the first and second studies of this dissertation. This is depicted in the left-hand side of this dissertation's conceptual model (see Figure 1.1).

The majority of the research outlined above focuses on how welfare policies and family constellations structure linkages between the receipt of welfare services and family exchanges. What is missing in existing research is an account of what consequences the increased appeal to family members may have for those involved. I therefore broaden the usual perspective by also considering the possible consequences of linkages between public policy and family exchanges for individual outcomes in the second part of my dissertation. There are two important questions to be raised in light of the shift of responsibilities from state to family.

The first is whether family members who are made increasingly important in providing help and care to needy family members endorse their new-found responsibilities. The majority of providers and recipients of help and care are divided across generational lines. Grandparents for example care for their grand-children and support their adult children financially, while adult children care for their parents in need. Research generally shows that the generational divide in policy endorsement – often called age-cleavages – between contributors to and beneficiaries of public policy is not as large as one would expect given the substantial division of interest between caring and receiving generations. I argue that explanations for the lack of age cleavages so often expected may lie in the intergenerational connections that people have.

The second is what consequences the increasing reliance on family members may have for both givers and receivers of care. As Grootegoed and Van Dijk (2012) have argued, state provided long term care enabled care receivers to retain their autonomy. Shifts from publicly provided care to increased reliance on family members is a threat to people's autonomy. According to these authors this reduction in autonomy is a threat to the well-being of those in need of care required to ask their family members for support.

In short, the linkages between receipt of welfare services and family exchanges, and how these in turn are related to policy endorsement and well-being form the topic of this dissertation. The research question of this dissertation is: how are family exchanges linked with receipt of welfare services and how do these linkages in turn shape policy endorsement and well-being?

### 1.2 Theoretical framework

The central premise of this dissertation is that linkages between the receipt of welfare services and family exchanges are shaped by the structure of family policies, and the availability of (specific types of) family members. As for example Leitner (2003) and Saraceno (2010) have shown, there are substantial differences between countries in the degree to which families are ascribed the responsibility for their family members' well-being. These differences can have substantial consequences for those in need of support. Figure 1.1 depicts the conceptual model underlying this dissertation. Different background shadings are used to emphasize the perspectives taken in the studies in this dissertation.

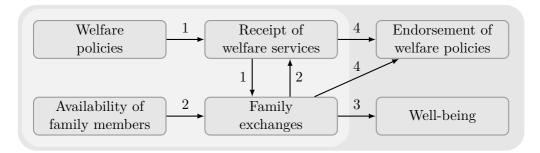


FIGURE 1.1: Conceptual model, numbers denote the study addressing the specific relationship

# 1.2.1 Linkages between receipt of welfare services and family exchanges

The emergence of the ideal typical descriptions of differences between welfare state policies that Esping-Andersen proposed (Esping-Andersen, 1990, 1999) sparked many attempts to link these ideal types to support patterns in European countries (Albertini, Kohli, & Vogel, 2007). Such research is often theoretically embedded in 'crowding in', 'crowding out', or substitution discussions. Researchers taking a 'crowding out' or substitution perspective (e.g. Cox & Jakubson, 1995) argue that the generous provision of welfare services to people in need 'crowds out' support that they would otherwise have received from their family members. However, both in the US and European literature evidence suggests that welfare services do not substitute for family support (e.g. Penning, 2002; Daatland & Herlofson, 2003), although research based on British data suggests that substitution may take place when support provided is very intense (Pickard, 2011).

To gain a better understanding of the linkage between receipt of welfare services and family exchanges, it is necessary to have a good understanding of the division of responsibilities between state and family for needy family members. Comparative research on the degree to which responsibilities are divided across the family and the state shows substantial differences in so-called familialism. Countries differ in the degree to which they expect the family (women) in their caring function (Korpi, 2000). So-called familialising policies are contrasted with de-familialising policies that alleviate the family from its caring responsibility (Leitner, 2003).

Researchers have tried to come up with descriptions that capture overall differences in familialization/de-familialization (e.g. Saraceno, 2010). Although valuable as parsimonious descriptions of country differences, it is clear that (changes in) various policies within countries do not fit into a coherent ideal-type (Daly, 1997; Kasza, 2002). Research has for example shown that ideal typical descriptions of differences in familialization/de-familialization do not translate directly into similar differences in support patterns across countries. Intergenerational support is for example overall much stronger than would be expected solely on the degree of de-familialisation in various Northern-European countries (Dykstra & Fokkema, 2011).

Scholars increasingly refrain from using these one-dimensional ideal types as predictors of support patterns, and have started to measure separate welfare policies directly (e.g. Brandt & Deindl, 2013). Directly measuring differences between policies offers a more precise and more nuanced verification of theories on the consequences of policy differences. In this dissertation I will therefore move beyond classifications of welfare state regimes as typologies and scrutinize how specific welfare policies organize the responsibility of family members by measuring them independently. As is depicted in the conceptual model, I assume that (differences in) welfare policies determine (differences in) the receipt of welfare services which in turn shape family exchanges.

### 1.2.2 Types of family exchanges

Much of the literature on familial exchanges focuses on the situation of older people and their family networks caring for them (Fine & Glendinning, 2005). However, exchanges between family members are not restricted to situations where older people who are disabled or ill require help or care. Children are for example in many stages of their lives dependent on their parents (Wilkin, 1987). Irrespective of the type of family member being helped or cared for, the majority of — especially European — literature on the possible linkage between welfare

state types and exchanges between family members focuses on intergenerational exchanges. Exchanges between partners are hardly ever considered (Brandt & Deindl, 2013; Kohli, 1999; Künemund & Rein, 1999).

While policy makers mostly appeal to intergenerational exchanges in shifting responsibilities from state to families, actual changes at the policy level have had legally binding consequences for both partners and children. Partners and not family members from other generations were for example ascribed the legally binding responsibility for unskilled care for their co-habiting partners in The Netherlands (Mot & Aouragh, 2010). In many other European countries, close family members (mostly partners and/or children) are responsible for providing care to older adults (Haberkern & Szydlik, 2010). Understanding how both exchanges between partners, and intergenerational exchanges are shaped by differences in welfare policies is therefore needed. In order to provide a full account of the linkages between the receipt of welfare policies and family exchanges, I focus on both vertical and horizontal types of exchanges between family members.

### 1.2.3 From explaining linkages to linkages as explanation

In this dissertation I not only address linkages between the receipt of welfare services and family exchanges, but also their consequences. The research summarized above deals with the left-hand side of this dissertation's conceptual model by only considering the linkages between receipt of welfare services and family exchanges. Scholars' endpoints mostly lie at the point where they show how family structures and welfare policies are mixed and matched differently by individuals or families in different countries, and how this is related to differences in caring, support or welfare receipt patterns. In this dissertation I extend this perspective by additionally studying how linkages between family exchanges and receipt of welfare policies are related to policy endorsement and well-being.

#### Well-being

In the context of the transfer of responsibilities from the welfare state to individuals due to the continuing retrenchment of welfare services, studies have looked at the consequences of this retrenchment for family exchanges. The consequences of the increasing importance of family exchanges for individuals involved has received much less attention. An intensification of family exchanges can mean anything from increases in monetary exchanges, exchanges of help or support, and exchanges of care. My specific focus in this study lies with exchanges of care.

The retrenchment of welfare policies has consequences for both givers and receivers of care. The former bear more responsibility for their family members in

retrenching welfare states, the latter are required to call on their family members for care more often. Research on the consequences of care exchanges between family members has generally overlooked care receivers by only paying a great deal of attention to the consequences of caregiving for caregivers' well-being. In such research, child or spouse caregivers are most often considered.

Considerably less attention has been paid to the consequences of family exchanges for family members on the receiving end. In terms of receiving social support, Thomas (2010) argues that receiving support disturbs people's identities with feelings of dependency, whereas providing support bolsters well-being. In line with these thoughts, she concludes that it is better to provide support than to receive it. Although retrenchment of welfare policies can have consequences for the entire constellation of family members receiving and providing care, the appeal to family members by welfare states is in most respects an appeal to spouses because care often takes place within the household. I have therefore chosen to only focus on the consequences of exchanges of care between spouses for the well-being of both givers and receivers of care.

#### Endorsement of welfare policies

In the context of demographic changes threatening the fiscal sustainability of welfare states, research has in recent years focused on the expected differences between age groups — also called age cleavages — in endorsement of certain welfare policies. From a self-interest perspective one might expect that people are only in favor or policies that benefit themselves. One of the most obvious explanations for why people may not solely be driven by self-interest is that they have intergenerational connections. By having exchanges of contact, help or care with family members from other generations, people do not only take their own interests in consideration when forming an opinion about certain welfare policies. This explanation has found support in both the US (Silverstein & Parrott, 1997; Ward, 2001) and European literature (Goerres & Tepe, 2010; Daatland, Veenstra, & Herlofson, 2012).

In this dissertation I build further on this research by determining how linkages between the receipt of welfare services and family exchanges are related to age cleavages in endorsement of welfare policies. By taking the perspective of linkages instead of only family exchanges, the goal was to determine whether family exchanges matter differently depending on the organization of family responsibilities at the societal level.

## 1.3 Research design

Many of the assumptions underlying this dissertation's conceptual model are in their core assumptions about cause-and-effect relationships. Although techniques to estimate the magnitude of causal effects are increasingly used in family research (e.g. Kalmijn, 2013), they are only suited for situations where it is clear what the causal effect to be estimated actually entails (Morgan & Winship, 2007). This is often not the case. Even with a seemingly clearly defined variable such as income, it is very difficult to establish what exactly would happen to income inequality if redistributive policies of the welfare state would not exist (Bergh, 2005). Although scholars seem to agree that family policies in some way affect family exchanges, the question of what would happen to family exchanges when family policies would not exist or be different from those that are in place at a certain moment in time is difficult if not impossible to answer. What welfare state scholars and family researchers are left with is describing the association between family policies and family exchanges.

Because of the difficulty of identifying a causal effect of interest and — even if there was a causal estimate of interest — its estimation, the research questions addressed in the various studies in this dissertation are descriptive. The methods and data used in each study were chosen so that the result would come as close as possible to describing what we wanted to know. In what follows I provide a brief summary of the specific questions answered in each of the studies, and describe the dataset and statistical technique used to answer it.

The first two empirical studies address the first part of this dissertation's research question and pertain to the left hand of my conceptual model. In these two studies the focus lies on the linkages between family exchanges and receipt of welfare services.

# 1.3.1 Study 1: Monetary transfers from parents to adult children

In the first study different European countries were compared to determine how family exchanges between parents and their adult children are shaped by welfare policies. Parental resources and childrens' needs were expected to be related to the likelihood of monetary transfers from parents to adult children. Based on previous research on the linkage between welfare states and intergenerational exchanges, we expected that differences in welfare policies would be related to differences in the importance of resources or needs for intergenerational monetary transfers. The reasoning was that for example the need for monetary support of an unemployed adult child would be lower in countries with generous unemployment protection.

Indicators of child-care, unemployment and old-age policies were used to predict how resources and needs would matter differently depending on the generosity of these welfare policies.

The analyses in this study were based on data from the Survey of Health, Ageing and Retirement in Europe (SHARE). This is one of the large-scale datasets available to researchers interested in European comparative social research. The advantages of SHARE over other datasets available were twofold.

First, the SHARE dataset contains specific information on up to four children of the adult parent (who was the actual respondent). Most other available datasets provide information on the number of children that are present, but do not collect more information. Because of the availability of detailed information on respondents' children, we were able to take into account both characteristics of parents and adult children.

Second, SHARE consists of data from European countries representative of various welfare regime typologies. As we have argued above, we refrain from using typologies as indicators of welfare policy differences. However, having countries belonging to different welfare regime typologies enabled us to establish whether it was actually the case that using typologies would have led to substantially different results compared to results based on indicators of specific policies.

The differences between countries in the specific policies addressed in this study were measured using indicators on policy differences collected within the MULTILINKS project funded by the European commission (Dykstra & Komter, 2012). The MULTILINKS indicators developed by Chiara Saraceno and Wolfgang Keck are a combination of harmonized indicators already available in other databases, and newly developed indicators collected from experts in the respective countries (Saraceno & Keck, 2008).

### 1.3.2 Study 2: Older adults' networks and public care receipt

In this study we distinguished market care from public care and skilled public care from unskilled public care. The first distinction is often missing in research on the linkages between receipt of welfare services and family exchanges. When welfare services are being studied they should also be measured as such. Including professional care paid for by recipients or their families into a measurement of welfare services provides us with an answer to a totally different questions than the one asked in this dissertation. Distinguishing unskilled from skilled public care is important because family members are more able to perform unskilled care as compared to skilled care. In this study we expected that family exchanges were especially an alternative to unskilled public care.

For this study the Netherlands Kinship Panel Study (NKPS) was used (Dykstra, Kalmijn, et al., 2006). The NKPS has the benefit of containing detailed information on family members surrounding the main respondents. In contrast to SHARE, this information is not provided by the main respondent but by the family members themselves. Having information from the family members surrounding the main respondent enabled us to determine to what extent potential exchanges from spouses and children were an alternative to public care, and whether this held especially for unskilled care.

An additional benefit of having information from family members surrounding the respondent was that it enabled us to enlarge our number of cases in the analyses. This was necessary because the number of NKPS respondents receiving public care turned out to be rather low. Enlarging our dataset was possible because the NKPS is linked to Dutch registry data by Statistics Netherlands. The result was a combined dataset containing highly detailed information on welfare receipt of respondents in the NKPS. Although there are a limited number of studies that do measure actual receipt of welfare services, using registry data ensures researchers that the collected information is of the highest possible quality.

### 1.3.3 Study 3: Spousal caregiving: a dyadic perspective

In the third study exchanges between spouses were researched in a dyadic framework by determining the consequences of giving and receiving care for caregivers' and receivers' well-being. The focus on the consequences of both giving and receiving care at the same time required me to restrict the scope of the research question. The study itself therefore does not specifically address the receipt of welfare policies. The study fits nicely into the dissertation however because it provides an in depth overview of the possible consequences of an increasing appeal to spouses due to welfare state retrenchment. In line with the argumentation outlined in the theoretical framework, the theoretical contribution of this study consists mainly of the consideration of both care givers and receivers. Two methodological aspects are worth noting as well.

Longitudinal data. The majority of earlier work on the consequences of receiving care use cross-sectional data. Unfortunately the use of cross-sectional data limits the questions that can be answered. Using cross-sectional data, the only possibility would be to determine whether there is an association between giving and receiving care, and well-being. Although it may be insightful to observe such an association, the arguably most interesting information lies in the temporal patterns of such an association. Researching the temporal patterns shows us whether well-being only changes at the beginning of providing or receiving care,

or whether well-being mostly changes when short-term caring patterns transition into more prolonged patterns of provision and receipt of care.

Dyadic data analysis. The concept of family exchanges used in this dissertation is a concept that stresses that interdependencies between family members are central to this dissertation. Dyadic data analysis (Kenny, Kashy, & Cook, 2006) provides a framework that enables researchers to study interdependence. There are basically two questions relevant for research on interdependence that require specific statistical techniques. The first is the extent to which dyad members are equally or differently affected by experiences they share. The second is the extent to which characteristics of one member influence the other member's outcomes (Gonzalez & Griffin, 2012). In the context of family exchanges these are important questions to ask because such types of questions provide information on the extent to which family exchanges manifest themselves by creating interdependencies between people involved.

The combination of requiring both longitudinal and dyadic data restricts the number of datasets available considerably. This study was based on data from the British Household Panel Study (BHPS), which was incorporated into Understanding Society in 2009 (Taylor, Brice, Buck, & Prentice-Lane, 2010). The BHPS is a long running panel study that is collected every year. This is a great advantage over other panel surveys because it enables researchers to relate possible changes in well-being to caregiving and care receiving patterns. This would be much harder if for example a start in care giving was observed three years before any change in well-being could be picked up.

# 1.3.4 Study 4: Age cleavages in endorsement of old age welfare policies

The fourth study was, like the first study, a comparison of a number of European countries. In this case the comparison focused on explaining age cleavages in attitudes towards welfare policies using the linkage between receipt of welfare services and family exchanges.

Given that this study dealt with people's values, the most obvious dataset to use was the European Social Survey (ESS). Round four of the ESS contains a comprehensive module on "Welfare attitudes in a changing Europe". The questions posed in this module combined with indicators drawn from the MULTILINKS database (Saraceno & Keck, 2008) provided the ideal combination to answer this study's research question.

Multilevel models within a Bayesian framework. The by far largest amount of research on country differences uses some form of multilevel modeling. The

SHARE dataset used in the first study contained too few countries to estimate a multilevel model with. The ESS dataset contains a much higher number of countries. The majority of multilevel models are estimated using frequentist approaches. The estimations resulting from these frequentist approaches are based on the assumption that the countries used a certain study are a random sample of the countries in which the scholar is interested. In most of the cases this is simply not true. Most of the datasets available to researchers contain a convenience sample of countries or all of the countries of interest. This results in incorrect estimates that do not provide the information that the researcher is interested in. I will not provide a full overview of the benefits of Bayesian over frequentist statistics but refer the interested reader to Jackman (2009).

Although the difference between Bayesian and frequentist statistics may seem more of a philosophical than practical issue, this is not the case. Research has shown that multilevel modeling within a Bayesian approach leads to substantially less bias in the resulting estimates compared to standard frequentist approaches, especially with a limited number of countries at the researcher's disposal (Stegmueller, 2013). The models in this study were therefore estimated within a Bayesian framework.

2 The role of European welfare states in intergenerational money transfers\*

<sup>\*</sup>This chapter is co-authored by Pearl Dykstra and Ineke Maas, and is published as: Schenk, N., Dykstra, P.A. & Maas, I. (2010). The role of European welfare states in intergenerational money transfers: A micro-level perspective. Ageing and Society, 30, 1315-1342, doi: 10.1017/S0144686X10000401

### 2.1 Introduction

Much research on cross-national differences in intergenerational monetary transfers from parents to their children focuses on the role of welfare regimes, and to distinguish types of welfare regimes, Esping-Andersen (1990) formulations in Three Worlds of Welfare Capitalism are often used. Observed differences in aggregate levels of support provisions have been linked to the types of welfare regimes (Albertini et al., 2007). Intergenerational transfers typically flow from parents to their children, a pattern observed in various European countries regardless of the welfare regime (Attias-Donfut, Ogg, & Wolff, 2005; Kohli, 1999; Kohli & Albertini, 2009). Researchers have shown that in southern European countries, transfers are higher but less frequent, whereas in Nordic countries they are more frequent but lower. Continental European countries take a middle position (Albertini et al., 2007). Most of the comparative studies of differences in support provision between welfare regimes have examined aggregate data without controlling for compositional differences among countries. The few studies that have controlled for such differences have used parents' characteristics, such as income, health status and level of education, but still found country differences in levels of support (Albertini et al., 2007; Attias-Donfut et al., 2005). In these studies the implicit assumption remains that there is a link between the welfare system and intergenerational transfers. The models control only for country level differences, and do not test the underlying assumptions.

This paper seeks to go further and to contribute to the literature in three ways. First, many studies have not acknowledged the importance of looking at both sides of the parent-child dyad. The characteristics of both parents and their children are important in determining why intergenerational monetary support is provided. Although parents decide on whether or not to send money, all their children are potential receivers of support. Intergenerational transfers are influenced by social interactions within the family. Considering the characteristics of all family members directly involved, not only those of the parents, should therefore give a fuller explanation of why children are financially supported, and which factors determine who actually receives the support (Becker, 1974). Analyses that have considered the attributes of both parties have included the health status of the head of the household and other household members as controls, and found that poor health decreases the likelihood of support provision, but increased the likelihood of support receipt (Schoeni, 1997; McGarry, 1999). A more comprehensive analysis by Berry (2008) included relevant non-economic factors, but with data for only the United States and the author did not address the issue of the influence of the welfare-state regime.

Third, finding aggregate differences in welfare provision does not explain any differences in intergenerational monetary support. An observed difference between countries after controlling for population composition does not irrefutably confirm a welfare-state influence. How welfare policies affect intergenerational transfers should be determined by testing whether individual monetary support is directly influenced by the welfare state. This requires testable hypotheses about how the welfare system influences transfers from parents to their children at the micro-level, and about the likelihood of children in different countries with different welfare-state provisions receiving transfers at all and of specified values (Tesch-Römer & Kondratowitz, 2006).

We propose a comprehensive theoretical framework that includes the characteristics of both parents and children at the individual and dyadic levels. To test the assumed influence of welfare regimes, we predict how particular adult children in need may be more likely to receive support depending on welfare-state differences. We start from the premise that intergenerational monetary transfers are dependent on parental resources, and that monetary support is provided if the child has needs. We furthermore incorporate the notion of future reciprocity, which is assumed to increase the likelihood of receiving support. Alternative expenditure, or circumstances in the parents' lives that also require spending, are on the other hand assumed to decrease the likelihood of support receipt. The unit of analysis is the parents-child dyad. We assume that transfer decisions are made by the parental couple (when parents are still together), not by individual parents. We also assume that specific welfare policies affect the degree to which

parental resources are used, or in other words how parents respond to the needs of their children. The research questions that we address are:

- 1. What factors determine whether parents provide monetary support to their children, and to what extent do the characteristics of their children influence this decision?
- 2. To what extent do differences between countries remain after taking the individual level differences into account?
- 3. Do differences in the generosity of welfare provisions influence monetary support from parents to children?

#### 2.1.1 Needs

The importance of considering the attributes of both parents and children in monetary transfers is stressed in the economics literature by social interaction theory (Becker, 1974). This assumes that parents are altruistic and therefore concerned with the material or economic wellbeing of their children. That concern motivates them to redistribute some of their income or assets to their children in need of economic support. Analyses have shown that economically worse-off children are more likely to receive support from their parents, which supports for the notion of an altruistic motive (Altonji, Hayashi, & Kotlikoff, 1997; McGarry, 1999). Adult children in relative economic hardship should therefore be more likely to receive monetary support from their parents than those less in need of support. We expect that children who are students or unemployed are more likely to receive monetary support from their parents than employed children.

Additionally, we draw upon the evidence that needs differ by life-course stage to hypothesise the conditions under which adult children are likely to be in more or less need of monetary support from their parents (Cooney & Uhlenberg, 1992). As adult children with young children of their own are more in need of support than those without children (Eggebeen & Hogan, 1990), we expect that having a child increases an adult child's likelihood of receiving monetary support. It has also been shown that financial transfers to children living in the same household are less frequent and on average lower than transfers to children living outside the household (Rosenzweig & Wolpin, 1994). Household income and assets can benefit all its members, and co-resident adult children generally receive various forms of material support – if not direct money transfers. Co-resident adult children are thus expected to be less likely to receive money transfers from their parents compared to children living outside the household and who do not have access to the material benefits of the parents' household.

#### 2.1.2 Resources

Parents' concerns about their children's material welfare are necessarily modulated by their concerns about their own financial wellbeing (Becker, 1974). Indeed, differences in parental wealth are to a large extent responsible for variations in the pattern of financial transfers (Albertini et al., 2007; Berry, 2008; McGarry, 1999). Wealthy parents have more resources to redistribute, and are thus better able to support their children. We therefore expect that parents with higher income are more likely to provide monetary support to their adult children.

### 2.1.3 Future reciprocity

If the decision to provide monetary support is entirely explained by altruistic motives, one might expect that the incomes of the parents and the children would be the main determinants, but scholars agree that there are other influences (Cox 2003), which include expectations of future reciprocity (Cox, 1987; Künemund & Rein, 1999). Parents may be more inclined to support the child who is most likely to return a favour in the long run. Another factor is that geographical proximity facilitates the exchange of practical or instrumental support and care (De Jong-Gierveld & Fokkema, 1998; Litwak & Kulis, 1987), and children living nearby have more contact with parents than those living further away (Van Gaalen, Dykstra, & Flap, 2008). Parents will thus expect that if in the future they need support, it is most likely to be provided by the children that live nearby. Moreover, parents will have better information about the needs of proximate children than those who live farther away. Both explanations lead to the hypothesis that children living near to their parents are more likely to receive monetary support from their parents than those living at greater distances.

Providing support to biological children is a more certain investment than support to non-biological children. Reciprocal support exchanges are less apparent with step-children than with own children. In the step-families formed following divorce or separation and remarriage, the future relationship with step-children is uncertain. The likelihood of divorce or separation is greater for ever-divorced individuals compared to never-divorced individuals (Haskey, 1996; Kalmijn, 2007). Moreover, from a biological perspective, people have more interest in investing in the survival of their own genes, so called inclusive fitness (Hamilton, 1964). Consistent with this perspective, it has been shown that step-parents support step-children less than biological parents their children, and that they support their biological children more than their step-children (Whyte, 1994). Step-parents often have biological children of their own, and when choosing between the two,

Many women act as kin-keepers within families (Rosenthal, 1985). In general, they are more active and assiduous than men in contacting other relatives, arranging visits, marking birthdays and so on, and daughters tend to help needy elderly parents with household tasks and personal care more than sons (Cloïn & Hermans, 2006; Dwyer & Coward, 1991). Given the gender imbalance in support provision, we assume that parents will expect more future support from daughters than from sons. This leads to the hypothesis that daughters are more likely to receive monetary support from their parents than sons.

### 2.1.4 Alternative expenditures

The composition of contemporary families is changing as a consequence of sociodemographic processes that pose particular challenges to intergenerational solidarity. One challenge is the emergence of vertical family structures, with more generations alive at the same time and fewer members of each generation (Harper, 2006; Saraceno, 2008; Uhlenberg, 1993; Walker, 1996). In multiple generation families, the middle generation lies between at least two potential generations that can be recipients of support. As noted earlier, comparative research has shown that net support flows from older to younger generations, but the middle generation may still support members of both the preceding and following generations (Grundy & Henretta, 2006). We expect that because support provisions are limited by finite resources, and because more extant generations imply more potential recipients of support, when both grandchildren and own parents are alive, this lessens the likelihood that children receive support. The circumstances of the parents may also require alternative spending. Parents in bad health may have treatment and care expenses and thus fewer resources to transfer to their children (McGarry, 1999; Schoeni, 1997). We expect that when at least one parent has bad health, an adult child will be less likely to receive a financial transfer.

### 2.1.5 Influence of welfare states on monetary transfers

Because our theoretical model explicitly focuses on the characteristics of both parents and children, we wished to formulate hypotheses about the influence of the welfare state that refer to both generations. This required close consideration of how the welfare state benefits the old and the young, and how this may influence intergenerational monetary transfers. The classic assumption underlying support provision for the needy is that the welfare state and the family substitute one for

From the child's perspective, one would expect that greater welfare support for children would decrease their need for support from parents. Other things being equal, children receiving assistance from the state must be less in need of support from family members than those not receiving. Rosenzweig and Wolpin (1994) showed that children's receipt of welfare provisions was associated with decreased monetary support from parents to their children, but the magnitude of the effect was small. We expect that unemployed children in countries with generous unemployment benefits are less in need and therefore less likely to receive monetary support from their parents than children in countries with less generous welfare benefits. Moreover, we hypothesise that adult children with children of their own living in countries with generous child-care support are less likely to receive financial transfers from their parents. Support for these hypotheses would be consistent with the crowding-out hypothesis.

From the parents' perspective, we expect that the greater the welfare state's support of their own age group, the more likely they are to support their children. There is evidence that public transfers to older people are partly channelled as monetary support to their children (Kohli, 1999; Reil-Held, 2006). We therefore expect that in countries with generous public pension systems, retired parents are more likely to transfer money to their children than retired parents in countries with less generous public pension systems. This is contrary to the crowding-out hypothesis, since the expectation is that a more generous welfare state actually increases support between parents and children.

To formulate detailed hypotheses about country differences in welfare generosity, we use national statistics on child-care support for working parents, unemployment benefits and old-age pensions. We focus on these three aspects because of their clear links with a person's financial status. Insofar as country differences exist, we formulate specific hypotheses on how the support received by adult children is expected to vary. Table 2.1 shows three types of welfare provision in the 10 European countries ranked in order of generosity. Child-care support is measured as the number of weeks of remunerated leave available to (working) parents with children aged less than three years in 2003: the data are from Saraceno and Keck (2008). We believe that this measure of the generosity of child-care support is a good indicator of the degree to which governments seek to maintain parents' income when a child is born and support their continued participation in the labour market. Alternative indicators, such as parental or child allowances, differ markedly by family type and are difficult to standardise (Saraceno & Keck, 2008). Single parent families, for example, receive much higher benefits in Sweden than in Austria, whereas this is not the case for two-parent families. Information on expenditure on old-age and unemployment benefits was taken from the Eurostat (2008) database and has been computed as a percentage of gross domestic product (GDP) in 2004.

Table 2.1: The ranked generosity of three types of welfare provisions, 10 European countries 2004.

Child-care support <sup>a</sup>	Unemployment <sup>b</sup>	Old-age <sup>b</sup>
Belgium (57 weeks)	Sweden $(3.5\%)$	Denmark (3.7%)
Denmark (56 weeks)	Germany $(2.8\%)$	Sweden $(2.9\%)$
France (43 weeks)	France (2.1%)	Austria (2.9%)
Sweden (41 weeks)	Belgium $(2.0\%)$	Germany $(2.1\%)$
The Netherlands (24 weeks)	Italy (1.9%)	Belgium $(2.0\%)$
Germany (10 weeks)	Austria (1.6%)	France $(1.6\%)$
Spain (10 weeks)	Denmark $(1.4\%)$	The Netherlands $(1.2\%)$
Austria (9 weeks)	The Netherlands $(1.2\%)$	Greece $(1.1\%)$
Italy (7 weeks)	Spain (1.1%)	Spain $(0.8\%)$
Greece (7 weeks)	Greece $(0.5\%)$	Italy (0.7%)

<sup>&</sup>lt;sup>a</sup> Duration in weeks of the support for children aged less than three years in 2004.

<sup>&</sup>lt;sup>b</sup> Spending on the benefit as a percentage of gross domestic product in 2004. Sources: (Saraceno & Keck, 2008; Eurostat, 2008).

Note in Table 2.1 that the levels of generosity of the provisions are similar in some countries and considerably different in others. For instance, The Netherlands, Greece, Italy and Spain have rather similar spending on old-age pensions but much less than in Denmark, Sweden and Austria. The country rank orders for the three types of provisions differ, which underscores the need to separate transfers to older and younger age groups. We expect that welfare provisions influence monetary transfers from parents to children, and more specifically that children who are recipients of child-care provisions and unemployment benefits have a lower likelihood of receiving parental support in the most generous welfare states. Likewise, we expect that children whose parents receive a pension have a greater chance of receiving parental support in the most generous welfare states.

In testing the hypotheses, The Netherlands is designated as the reference country. To limit the number of detailed hypotheses, they have been formulated only for the countries at the extremes of the rank orders in Table 2.1. We expect that adult children in The Netherlands with young children of their own are more likely to receive support from their parents compared to those in Belgium and Denmark, but less likely than those in Italy and Greece. For unemployed adult children, we expect that those in Sweden and Germany are especially unlikely to receive monetary support from their parents. Finally, we expect that adult children of retired parents in Denmark, Sweden and Austria are more likely to receive monetary support than those in The Netherlands.

### 2.2 Data and methods

## **2.2.1** Sample

The data are from the first wave (release 2.01) of the Survey of Health, Ageing and Retirement in Europe (SHARE) collected in 2004 (Börsch-Supan & Jürges, 2005). This wave compiled a sample of individuals aged 50 or more years in a number of European countries. The sampling design was not uniform for all the countries; some used samples of individuals and some samples of households. In both cases, however, all household members aged 50 or more years were invited for interview. The data therefore contain information on both parents of the child if they lived in the same household. The average household response rate was 55 per cent. The data for The Netherlands, Belgium, Austria, Germany, France, Sweden, Denmark, Spain, Italy, and Greece were analysed. These countries represent several regions of the continent but not Eastern Europe. Two surveyed countries were not included, Israel and Switzerland, in both cases because of a lack of comparative data on welfare provisions. The number of parents in the analysis

sample ranged from 947 in Denmark to 2,006 in Belgium, and the number of children for which there are data is 32,758, and they had 17,050 parents in the sample.

The respondents provided detailed information for up to four of their children. If the primary respondent had more than four children, those aged 18 or more years were selected first. If the respondent had more than four children aged 18 and over, the ones living closest by were selected. In the case of proximity ties, the oldest children were selected, and if there were identical birth years, a random selection was made. Since only four children were selected, the observed number of transfers may be under-estimated in families with more extant children (but this applied to only four per cent of the respondents, with a range from 1.3 per cent in Greece to 6.2 per cent in Spain). We selected all children aged 18 or more years.

#### 2.2.2 Measures

The dependent variable was measured from the responses to the question, 'Not counting any shared housing or shared food, have you [or] [your] [husband/wife/partner given any financial or material gift or support to any person inside or outside this household amounting to  $250 \in$  or more (in the local currency)?' If the parent had provided support to a child, the particular child who received the support was identified, which enabled characteristics of both the child and the parent(s) to be incorporated in the analysis. The needs of the child were measured by labour-force status and life-course stage. Since the data do not provide a direct measure of the child's income or 'ability to make ends meet', we used labour-force status as an indirect measure of the financial needs of the child. Three dummy variables were created to indicate whether the child was: (a) unemployed, (b) in vocational (re)training, or (c) a homemaker. Part-time or full-time employed children were the reference category. To restrict the number of labour-force categories, we excluded adult children who were already retired and those who were permanently sick or disabled (3\% of all children). Analyses not reported showed that including these groups did not affect the results, nor were the dummy variables representing these categories significant. A dummy variable for whether the child lived in the parental household was also created.

The indicator for the parents' resources is whether the household is 'able to make ends meet'. Although income was collected by SHARE, the number of missing values was high. We decided not to use imputed income because the theoretical model assumes that parents only provide monetary support to children when they have sufficient resources to distribute, so the indicator of whether

parents could 'make ends meet' is a more appropriate measure than income itself. Two dummy variables measured household resources: one indicates 'difficulty' with making ends meet, and the other that ends were met 'fairly easily' (the reference category). Parents' employment status was measured by two dummy variables indicating whether the parents were employed or retired. In the case of a single parent, the reference category is parents who are unemployed, a homemaker or permanently sick or disabled. When both parents were alive, the reference category is that both were unemployed, or a homemaker, or permanently sick or disabled. In cases where both parents were alive and one was employed and the other retired, they were coded into the retired dummy.

The three indicators of future reciprocity were constructed as follows. Distance to the parents was measured by creating a set of dummy variables to indicate whether the child lived within specified distances up to 25 kilometres, or further away. The reference category was living within one kilometre and included living in the same building but not the same household. A dummy variable was created to denote whether one of the child's parents (of either the respondent or his/her partner) was a step-parent. No children in the sample had only step-parents; they all had at least one biological parent. The gender of the child was measured by a dummy variable for female or not.

A number of variables measured the need for alternative expenditures. To represent the generational structure of the family, dummy variables were created for: (a) either parent having a living parent, viz. a grandparent of the child, (b) whether the parent(s) had grandchildren other than those belonging to the adult child respondent, (c) the interaction between the (a) and (b) dummy variables. The health of both parents was measured by the respondents' self-evaluations of their health on a five-point scale. The dummy variable represents situations where one of the parents has indicated that their health was 'bad' or 'very bad'.

A number of control variables for both the parent and the child were used. At the parental level, we included level of education, which was coded using the International Standard Classification of Education (ISCED) from 1997. Three levels were distinguished: (a) very little or no education (pre-primary education, primary education or first stage of basic education, and lower secondary or second stage of basic education), (b) intermediate levels of education (secondary education, and post-secondary non-tertiary education), and (c) high level of education (first stage of tertiary education, and second stage of tertiary education). The intermediate level was the reference category. As levels of education of both parents were correlated quite strongly (r = 0.60), we used the level of the more educated parent. We excluded respondents who were not classified in any of the pre-defined ISCED categories, which amounted to less than one per cent of all

### 2.2.3 Analyses

The unit of analysis is the parent-child dyad. As indicated before, we assumed that transfer decisions are made by the parental couple (when still together), not by individual parents. By using multilevel logistic models with random effects at the parental level, we accounted for the clustering of children by parents. Since there were insufficient countries to include these as a third level of analysis, The Netherlands was taken as the reference category and dummies for each of the other countries were included. To test the hypothesised influence of welfare-state provisions on individual support, we created terms for the interactions between individuals likely to receive welfare support and the country dummies. When significant, these indicate that children in the given country and in the given situation (has children/unemployed/with pensioned parents) were more or less likely to receive support from their parents compared to their peers in The Netherlands. To support the hypothesis that differences in welfare regimes shape intergenerational transfers at the dyadic level, the interactions would have be ranked in a similar order to those of welfare generosity as in Table 2.1.

### 2.3 Results

### 2.3.1 Descriptive results

Before detailing the results, it should be noted that the majority of children did not receive financial support from their parents, and that the calibrated model therefore predicts a phenomenon that is comparatively rare. While some of the effects are rather large, it should also be remembered that odds ratios (OR) indicate the relative probability of receiving support given the specified characteristics, not the actual probability. In the following account, both the predicted OR and the predicted actual probability are on occasion reported. As a final clarification, although the model accounts for national differences in the composition of the analysis sample, it does not indicate the nature of the compositional differences. We therefore begin the results section with an overview of the country differences in the dependent variable and in needs, resources and alternative expenditures.

# Monetary transfers

Figure 2.1 presents for each of the 10 countries the percentage of children who received financial support from their parents, and the percentage of parents who provided monetary support to at least one child. The former percentage is a measure of the proportion of all adult children that received financial support, and the latter a measure of the proportion of all parental couples that provided financial support to any of their children. Children in Spain (4%) were by far the least likely to receive support, and those in Italy (11%) the second least likely – its percentage is closer to that of all the mid-continental European countries except Germany) than to the figure for Spain. At the other extreme, Sweden clearly stands out as the country with the highest proportion (23%) of children that received support. Among the intermediate cases, in Greece a much higher proportion of children (17%) received support than in the other southern European countries.

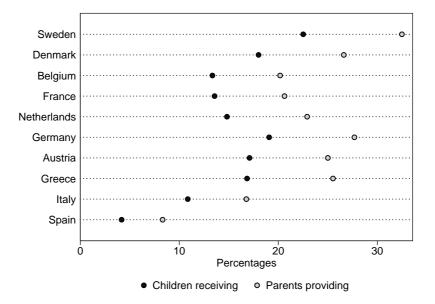


FIGURE 2.1: Percentages of children receiving monetary support and of parents providing monetary support.

The variations in the percentage of parents that supported their children have a similar pattern. The difference in the percentages that receive and give were greatest in countries where the number of children per family is relatively high, such as Spain and Italy (Figure 2.1). In these countries in 2004, it appears that

#### Needs

As depicted in Figure 2.2, the majority of adult children in all countries were employed in 2004. At the extremes were Greece (74%) and Belgium (86%) and there were considerable differences as between full-time and part-time employment. Especially in The Netherlands and to a lesser extent in Austria, many of the adult children were employed part-time. Note that full-time employees and part-time employees were not distinguished in the analyses. Given that part-time employment is often a conscious decision, rather than a response to a shortage of full-time jobs, we assume that all those that were employed had a similar and relatively low level of financial needs. Although there were national differences in the prevalence of the not-employed (or economically inactive) children, the greatest variations were in the constituent categories. For the unemployed, the lowest prevalence (3%) was in Austria, whereas the greatest (8%) was in Greece. Students varied more, from two per cent of the adult children in Belgium to nine per cent in Sweden and Denmark. The representation of homemakers also had substantial variation, from around four per cent in Denmark, Sweden and Belgium to around 11-12 per cent in Greece, Italy, and Spain. Austria, Germany, The Netherlands and France had intermediate values (around 8%). As Figure 2.3 shows, almost 30 per cent of adult children lived in their parents' household in Italy, Spain, and Greece. At the other extreme were Sweden and Denmark, where only two per cent lived in the same household. About 10 per cent of adult children lived with their parents in Belgium, Austria, The Netherlands, and Germany.

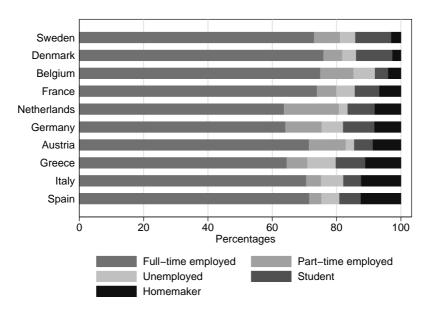


FIGURE 2.2: Employment status of adult children.

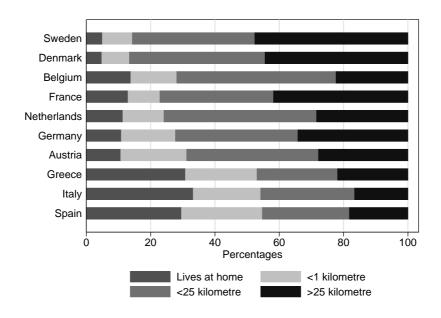


FIGURE 2.3: Distance of adult children to their parents.

#### Resources

Compared to children's needs, parents' resources showed more variation among the countries. Figure 2.4 shows substantial differences in the ability of the parents' households to make ends meet. Hardship was most prevalent in Greece, Italy and Spain, as more than 60 per cent of all parents reported 'difficulty' with household expenses, and only around 10 per cent that they 'easily got by'. By contrast, in The Netherlands, Sweden, and Denmark, only 20 per cent of the parents reported that their households had 'difficulty getting by', and around 40 per cent reported that they 'easily made ends meet'. The parental households in France, Belgium, Germany and Austria were in intermediate positions, with from 23 to 38 per cent having trouble making ends meet.

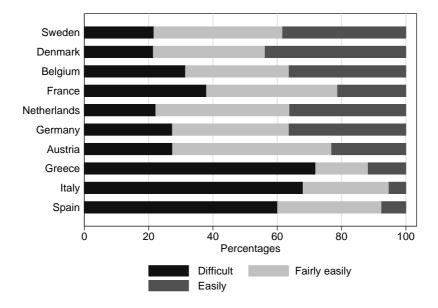


FIGURE 2.4: Ability to make ends meet for household of parents

#### Future reciprocity and alternative expenditures

Figure 2.3 shows substantial national differences in the distances between the parents' and their adult children's homes. In Italy, Spain, and Greece, almost 20 per cent lived within one kilometre, whereas in Sweden and Denmark only eight per cent were that close and a large majority of children lived a considerable distance from their parents – almost 50 per cent were more than 25 kilometres The indicators of alternative expenditures are presented in Table 2.2. The percentage of parents with other grandchildren varied between 36 per cent in Greece and 37 per cent in Italy to 51 per cent in Denmark. The number of parents with both grandchildren and at least one living parent was low, varying between two per cent in Greece, Germany, Spain and Italy, to seven per cent in France. Having a household member in bad health also varied among the countries, The Netherlands' parent respondents having the lowest (6%), and Italy (17%) and Spain (19%) the highest.

# 2.3.2 Explanatory results

The descriptive results have shown substantial differences among the countries, especially in parents' resources and requirements for alternative expenditures, but it has not yet been established if and how these compositional differences account for the observed differences in parent-to-child money transfers. A model that included only the country dummies will be discussed when differences between the countries are examined, but first we present the results of the model of how the child's and parents' characteristics influenced the support received by the child. Later we assess whether the national differences in individual-level transfers can be linked to welfare-state generosity. Since we use multilevel logistic regression models, a single measure of model fit is not available. To indicate the contribution of the included independent variables, we compare the model using only the intercepts for the different countries to the full model. The results indicate that our full model significantly reduced the model's log likelihood (Likelihood ratio $\chi^2(22) = 1,694; p < 0.001$ ).

Table 2.2: Means of variables measuring alternative expenditures and control variables per country for parents and children in our sample

	AT	DE	SE	NL	ES	IT	FR	DK	GR	BE
Parental characteristics:										
At least one retired	0.73	0.61	0.58	0.47	0.45	0.64	0.6	0.59	0.52	0.60
Both working	0.14	0.22	0.35	0.22	0.16	0.14	0.23	0.31	0.16	0.19
Either parent in bad health	0.11	0.16	0.10	0.06	0.19	0.17	0.14	0.10	0.12	0.10
Has grandchild	0.42	0.41	0.50	0.43	0.43	0.37	0.48	0.49	0.36	0.49
At least one living parent	0.15	0.15	0.18	0.17	0.13	0.14	0.26	0.21	0.23	0.20
Both grandchild and parent	0.04	0.03	0.04	0.02	0.02	0.02	0.07	0.05	0.02	0.05
Education: Low	0.28	0.13	0.46	0.51	0.82	0.75	0.44	0.2	0.61	0.43
Medium	0.48	0.58	0.30	0.25	0.08	0.19	0.33	0.44	0.24	0.28
High	0.24	0.29	0.24	0.24	0.09	0.05	0.22	0.36	0.15	0.29
Two parents	0.55	0.73	0.72	0.76	0.75	0.78	0.62	0.58	0.60	0.67
Child's characteristics:										
Has child	0.60	0.56	0.61	0.53	0.53	0.52	0.60	0.63	0.50	0.63
Has step-parent	0.03	0.08	0.20	0.06	0.02	0.01	0.05	0.15	0.01	0.07
Gender (female=1)	0.50	0.50	0.50	0.50	0.48	0.49	0.49	0.50	0.49	0.49
Age (mean centred in analyses)	37.76	37.55	37.09	35.73	36.32	36.01	36.51	37.9	36.12	36.79

#### Needs

The support received was clearly related to the child's needs (Table 2.3). With employed children as the reference category, the odds of receiving support were 3.8 times greater if a child was unemployed, and 5.3 if the child was a student. Being a homemaker did not increase the odds of receiving financial support. The odds of receiving a financial transfer were five times smaller if a child co-resided with the parents, compared to when he or she lived within one kilometre, all else equal. These results clearly illustrate the strong influence of a child's needs on the likelihood of receiving a transfer. Finally, an adult child with at least one child of their own moderately increased the likelihood that she or he received financial support (OR=1.2).

#### Resources

The resources of the parent were also important predictors of money transfers. Compared to the parents who reported that their household got by financially fairly easily, having a parent that reported that they got by easily increased the odds of a child receiving monetary support by 2.6, but if the parent said the household had difficulty, the odds were 3.3 times smaller. This clearly shows that, holding all other variables constant, the odds of a child receiving a transfer were highly dependent on how readily the parental household could make ends meet. The employment or economic activity status of the parents was also influential, even after taking the household's ability to make ends meet into account. Compared to the reference case of the parent or both parents not working, if both parents were employed the odds of receiving a transfer were 2.2 times higher. If either parent was retired, the odds of receiving a transfer were 1.6 times higher. Although the evidence about the resources available to the parents is indirect, these findings indicate that children are more likely to receive financial transfers when their parents are in economically stable situations such as employment or retirement.

## Future reciprocity

For those not living in the parents' home, the odds of receiving a financial transfer were 1.3 times lower if they lived more than one kilometre away from their parents. Adult children with a step-parent were considerably less likely to have received financial support than those without step-parents. Their odds of receiving a transfer were 2.5 times lower compared to those with only one or both biological

Table 2.3: Results (odds ratios) from multilevel logistic regression predicting transfer receipt by children.  $^{\rm a}$ 

Child's characteristics	OR	Parent's characteristics	OR
Needs and resources			
Child's needs:		Can make ends meet:	
Employed	$\operatorname{ref.}$	Difficult	0.34***
Unemployed	3.76***	Fairly easily	ref.
Student	5.27***	Easily	2.57***
Homemaker	1.00		
		One or both parents working	2.18***
Adult child has child	1.22*	One or both parents retired	1.59***
Lives with parents <sup>b</sup>	0.19***		
Expected reciprocity		Alternative expenditures	
Distance: <1 km away	ref.	Either parent in bad health	0.58***
<25 km away	0.80*	Parent has other grandchildren	0.42***
>25 km away	0.80*	At least one living parent	1.19
Has only Biological parent(s)	ref.	Grandchild and parent alive	1.09
Has Stepparent	0.36***		
Gender (female=1)	1.23**		
$Control\ variables$			
Age	0.93***	Parents' education: Low	0.40***
		Medium	ref.
		High	2.11***
		Parental couple	1.69***

<sup>&</sup>lt;sup>a</sup> The model also includes dummy variables for the countries. The effects of these variables are presented in Table 2.4.

<sup>&</sup>lt;sup>b</sup> The reference category is here living less than one kilometre from the parents. Differences between the other distance categories are also significant and in the same direction.

<sup>\*</sup>p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

parents. The results also show that daughters were somewhat more likely to receive support compared to sons (OR = 1.2).

## Alternative expenditures

It was also found that in cases where at least one of the parents had a serious health concern, the odds of receiving monetary support were 1.7 times lower. If the parent had grandchildren other than those of the child respondent, the odds of receiving a financial transfer were 2.5 times lower. Whether the child's parents had a living parent did not significantly influence the likelihood that a child received monetary support, nor did the parents having both grandchildren and a living parent.

## Control variables

With increasing age, children were less likely to receive support: the odds of receiving a transfer reduced 1.1 times for each year of age. The odds of receiving a transfer were also strongly influenced by the parents' level of education. Children with highly-educated parents had a 2.1 times higher odds compared to those with medium-educated parents, and those whose parents had a low level of education were much less likely to receive a transfer (OR=0.40). If the child still had two (or more) step or biological parents, the odds of receiving a transfer were 1.7 times larger compared to a child with only one biological parent.

#### Differences between countries

The descriptive results have confirmed that the countries differ considerably in terms of pertinent socio-demographic and socio-economic characteristics of the sample, in other words that composition effects are likely to be important. Table 2.4 presents the comparison between the intercept-only model and the full model, and shows that the compositional differences from The Netherlands had a considerable effect on the model explanation for the Southern European countries. Adult children in Spain, where levels of monetary transfers were lowest, were much more likely to receive support. In the intercept-only model, the odds (0.07) were 10 times lower in Spain than in the Netherlands, but after taking the compositional differences into account the disadvantage reduced to 3.3 times lower (OR=0.25). The most influential factors were co-residence with the parent and the parents' household having difficulty in making ends meet. Put another way, if we consider the odds of not receiving a transfer, the odds changed from a factor of ten to three when taking the composition of the Spanish and Dutch

samples into account. Although compositional differences do not fully explain the difference between Spain and The Netherlands, they substantially reduced the difference in odds of receiving financial support. For adult children in Italy, the effect of the compositional differences was to alter the intercept-only prediction that they were less likely (OR=0.47) to receive monetary support than those in The Netherlands, to a prediction that they were more likely to be recipients (OR=2.02). Among adult children in Greece, the compositional effects markedly raised the likelihood of receiving money transfers (OR=4.6). The differences between adult children in the other countries and The Netherlands produced only modest compositional effects, but interestingly in Denmark and Germany the full model reduced the odds of receiving money transfers (see Table 2.4).

Table 2.4: Comparison of the country fixed-effects for	or
the intercept-only model and the full model. <sup>a</sup>	

	Country fixed-effect	ets (odds ratios)
$\overline{Country}$	Intercept only	Full model
Spain	0.07***	0.25***
Italy	0.47***	2.02**
Greece	1.48*	4.63***
Austria	1.60**	2.12**
Germany	2.39***	1.86**
Netherlands	$\operatorname{ref.}$	ref.
France	0.85	1.20
Belgium	0.90	1.16
Denmark	2.22***	1.65*
Sweden	4.34***	4.12***

<sup>&</sup>lt;sup>a</sup> The model is specified in Table 2.3.

# Probability of receiving support

The results presented to this point indicate the probability of an adult child having received monetary support given a certain characteristic, relative to children without the characteristic. For example, unemployed children were more likely to receive monetary support than employed children controlling for other predictors. The absolute likelihood of receiving support depended on whether they, for example, had a child, lived in the household of their parents or not, and had parents

<sup>\*</sup>p < 0.05; \*\*p < 0.01; \*\*p < 0.001

### Influence of welfare states on monetary transfers

The question remains if the differences among the countries not explained by the micro-level model can be attributed to differences in welfare-state provisions. To test this hypothesis, we added terms to the model for the interactions between each country dummy and the indicators of whether the child was unemployed or had children of their own, and whether the parents were pensioned. Hardly any significant interaction effects were found, but in Belgium and Austria adult children who had children of their own were significantly more likely to receive financial support than their counterparts in The Netherlands (OR=2.4). The effect for respondents in Austria was expected, but not that in Belgium. Taken the two effects together, and considering the absence of any other significant difference between these particular countries, we reject the proposition that differences in welfare-state generosity in child-care support explain the difference in parental support. Neither do we find significant differences in the likelihood of receiving support from retired parents across countries. Given the different pension systems in Europe, we expected adult children in Sweden, Austria and Denmark to be significantly more likely to receive support from their pensioned parents than those in The Netherlands. Because of the very low number of unemployed adult children in the various countries, we cannot reliably report coefficients for the interaction terms with the countries. While some of the estimated coefficients were significant, the very low numbers of unemployed children led to implausibly high odds ratios. These not reported results were not in line with differences in generosity between the countries as reported in Table 2.1.

Additional analyses were run to determine whether the specification of the model was responsible for the lack of significant results. First of all, we changed the reference category from The Netherlands, a country with rather average welfare provisions, to countries at the extremes. Neither the use of Denmark (with one of the most generous welfare-state provision), nor Greece (one of the least generous) as reference categories resulted in any other significant interactions. We investigated whether the lack of significant results was attributable to the inclusion of the dummy variable representing the easiness of difficulty in making ends meet. The reasoning behind the welfare-state influencing intergenerational solidarity is that differences in the generosity of pension systems create greater means for pensioned parents to transfer funds to their children in some countries than others, but excluding the dummy variables for making ends meet did not change the significance of the interactions. The only notable change that we found was with the indicators of the parents' employment status. In the model where making ends meet was not used, the coefficients for parents who were employed or retired were considerably higher compared to the model where making ends meet was included (not shown). This is of course caused by the fact that employed and retired parents are in general much more able to make ends meet than parents who fall in the unemployed, homemaker or disabled category. Not including the dummy variables for making ends meet transfers part of the effects to the employment status indicators.

#### 2.4 Conclusion and discussion

This paper has examined financial transfers from parents to their adult children in 10 European countries in 2004 using a twofold approach. Firstly, we tested a theoretical model which incorporated micro-level determinants of support provision (money transfers) by parents and of receipts by children. This model was based on explicit expectations about the role of the child's and the parents' needs and resources, including the parents' need to make alternative expenditures, and the parents' expectations of future reciprocal support. We then used this model to test whether differences in welfare-state generosity were associated with systematic national differences in the patterns of transfers from parents to their children. To test the micro-level hypotheses, we used multilevel models to account for the nesting of children to parents. We controlled for country-level differences by using fixed-effects at the country level. The test of welfare-state influence was performed by identifying pensioned parents and adult children with children of their own or who were unemployed, viz. those who are prone to receive state support. Differences in generosity between welfare systems were hypothesised to result in differences between countries in the likelihood of financial transfers,

especially from pensioned parents and to unemployed children and children with children of their own.

At the individual level, the findings have revealed the importance of considering both the child's characteristics and the parental context. The child's needs were an important predictor of transfer receipt. Children more in need of financial support – as indicated by employment status – were considerably more likely to have received support from their parents. Children living in the parental household were least likely to have received financial support. Adult children who lived more than one kilometre away from the parents were less likely to have received monetary support, but considerably more so than those living inside the household. It was also found that adult children with children of their own were more likely to have received support, although this likelihood was attenuated when other siblings also had children of their own. The results also confirm our expectation that the parents' resources have a strong influence on whether they are able to provide monetary support. Parents that had alternative expenditures had a lower likelihood of making transfers to children. Daughters were more likely to receive transfers than sons, and step-children were less likely to receive support compared to biological children – both these findings are in line with the reasoning that expectations of future reciprocity influence the likelihood of transfers to adult children. We also found that in families where at least one of the parents was in poor health, adult children were less likely to receive monetary support from their parents.

In contrast to earlier comparative empirical work on support provision between parents and children in Europe, we chose not to cluster countries by welfare regimes (Albertini et al., 2007). Although this hampers the ability to compare our findings with those of previous research, we argue that examining individual countries provides more nuanced insights into macro-level differences and how they are translated at the micro-level. The variations in the aggregate level of financial support from parents to adult children among the 10 countries have shown that, on the whole, within cluster differences are just as large as between cluster differences. When the considerable compositional differences between countries were taken into account, the differences in the likelihood of support receipt were reduced, and those that remained are not consistent with the three commonly-used welfare regimes. Furthermore, we have not found evidence that the generosity of the welfare-state consistently influences the likelihood of transfer receipt by specific groups of children. The likelihoods of receipts from retired parents did not differ across the countries, and the same applied to adult children who received child-care support from the state.

The descriptive results also reveal marked differences among the countries in the levels of household wealth. At the individual level, the analysis showed that parents hardly ever send money when they have difficulty making ends meet. Only when money is of no concern did they support their children financially. Combining the descriptive and analytical results makes clear that aggregate differences in welfare-state spending go hand-in-hand with differences in individual incomes by country. Hence, aggregate differences among the countries in monetary transfers to a certain degree reflect levels of relative wealth. In families where wealth is a limiting factor, one expects that filial responsibility is fulfilled in other ways, for example, by investing time. Time transfers are perhaps not independent of money but rather a substitute in cases where monetary means are lacking. This may be a possible explanation for why the patterns are not in line with different welfare-state arrangements. Previous research has described

differences between countries in the provision of money and time transfers (Albertini et al., 2007). Time transfers are more common in Southern European countries than elsewhere in Europe, suggesting that they substitute for money transfers. We have attempted to take non-monetary transfers into account, at least partially, by including an indicator for whether adult children still live in the parental household (Tomassini, Glaser, Wolf, Broese van Groenou, & Grundy, 2004). Future research may be able to provide insight into the dynamics between different forms of transfers by incorporating other non-monetary forms of support into the models.

This close examination of the ten European countries for which there were sufficient data has unavoidably overlooked other European countries, and regrettably none of the countries in 'New Europe' were represented. Eastern European countries are not a homogenous set with either a common socio-demographic composition or uniform welfare policies. They have recently undergone major welfare policy changes (Adukaite, 2009), making them particularly interesting for further study. Extending the scope of research on intergenerational transfers would provide new insights into the micro and macro-level influences and dynamics.

3 Older adults' networks and public care receipt: do partners and adult children substitute for unskilled public care?\*

<sup>\*</sup>This chapter is co-authored by Pearl Dykstra, Ineke Maas, and Ruben van Gaalen, and is published as: Schenk, N., Dykstra, P.A., Maas, I. & Van Gaalen, R. (2013). Older adults' networks and public care receipt: do partners and adult children substitute for unskilled public care? Ageing and Society, doi: 10.1017/S0144686X13000469

## 3.1 Introduction

Public expenditure on care for older people has been rising along with the increasing number of senior citizens. Expenditures are expected to rise even more as population ageing continues (European Commission, 2012). Attempts to constrain expenditures have largely focused on enabling older people to live independently longer, thereby reducing the costs of institutionalization. Now that the demands for non-institutionalized care have rapidly increased, and are expected to rise even more, this type of care for older people is under pressure as well. Currently, over 12 per cent of European Union residents are 70 years and older, and this percentage is expected to rise to over 19 in 2035 (Eurostat, 2012). Many governments are in the process of redesigning their social protection schemes to ensure that home care remains sustainable and that quality of life for older people is maintained. Projections of future formal care use estimate an increase of 79%, 116%, and 150% for Germany, The Netherlands and Spain respectively (Geerts, 2012). To ensure the sustainability of care for older people in the future, policy makers are placing greater emphasis on the role of informal care, voluntary organizations and market care, and less on public care (OECD, 2005; Pavolini & Ranci, 2008).

# 3.1.1 A focus on public care

With the rise of the welfare state scholars were at first interested in how expanding welfare services might displace or crowd-out family support systems. Contrary to the crowding-out hypothesis, older people receive help from family members even in the most generous welfare systems (e.g. Daatland & Lowenstein, 2005; Motel-Klingebiel et al., 2005). This large body of – mostly European – research suggests that welfare services have not replaced the supportive role of the family. The current re-evaluation of social protection policies in many countries, and the increased emphasis that governments have placed on the role of families in providing care, has led researchers to address the opposite question, namely how informal care diminishes the necessity of home care receipt subsidized by the state (Bolin, Lindgren, & Lundborg, 2008; Bonsang, 2009; Van Houtven & Norton, 2004). To be able to scale down state expenditures, it is imperative to know if and under what conditions the receipt of informal care helps overcome the need for care provided by the state.

One of the difficulties in assessing the sparse research evidence is that many studies use formal care rather than state care as their object of study (Bolin et al., 2008; Bonsang, 2009; Geerts, 2012). Formal care, which in these studies also includes professional care paid for by recipients or their families, is a much broader

category than care subsidized by the state. In fact, self-paid professional care, or market care, is an alternative to care subsidized by the state and is also used as such by policy makers stressing alternatives to state subsidized care (OECD, 2005). In this study we will not consider market care, but specifically address home care for older people subsidized by the state. We refer to this with the term public care.

We aim to answer the following research question: to what extent is the receipt of public care by older people associated with characteristics of the family network and help provided by this network? Our hypotheses pertain to types of family care providers, and their gender. They also specify that patterns differ by types of public care. To answer our research question, we use a combination of survey data on the provision of family care and unique registry data on the receipt of public care by older adults in the Netherlands.

## 3.1.2 The association between informal and public care

In the Netherlands public care is only provided when care needs cannot be met by close family, also referred to as the principle of subsidiarity (Esping-Andersen, 1990; Van Hooren & Becker, 2012). The principle of subsidiarity is embodied in the two laws that regulate the provision of care to older adults: the Exceptional Medical Expenses Act (EMEA, Dutch: Algemene Wet Bijzondere Ziektekosten, AWBZ) and the Social Support Act (SSA, Dutch: Wet Maatschappelijke Ondersteuning, WMO). The aim of the EMEA is to provide a general insurance covering the Dutch population against exceptional health care needs. Among other benefits, EMEA regulates the provision of personal care (e.g., help with washing and dressing), nursing care (e.g., treating wounds and giving injections) and social participation support (e.g., help with mobility issues that would hamper family visits). The provision of household care (e.g., help with cleaning) was dropped from the EMEA provisions with the introduction of the SSA in 2007. The Personal Budget (PB) was introduced in 1995 (Kremer, 2006). This PB enabled EMEA eligible persons to organize and pay for their own care, including the employment of one's own family members. Information on PB receipt (about 10 per cent of EMEA expenses go to PB recipients) is not available in Dutch registers and therefore is outside the scope of this paper.

Eligibility for EMEA benefits is determined on the basis of a needs assessment performed by the Centre for Care Assessment (Dutch: Centrum Indicatiestelling Zorg, CIZ). The assessment takes not only disorders and functional limitations into account, but also the personal situation of the person requesting benefits (Mol, 2010). One of the central concepts in this assessment is "usual care" (Dutch:

gebruikelijke zorg). This concept was launched in 2003 and subsequently modified and formalized (Da Roit, 2012). It is defined as "the normal, daily care that nuclear family members or other people who share a household can be expected to provide to one another" (CIZ, 2012, p. 9, authors' translation). Physically and mentally capable household members are expected to provide a dependent older adult with social participation support and temporary personal care (i.e. when the need for personal care is expected to last no longer than three months) (CIZ, 2012). Household members are expected to provide these forms of informal care, regardless of willingness, religious beliefs, cultural background, conflicts with the dependent household member or conflicting obligations (CIZ, 2012; Saraceno & Keck, 2008). Nursing care and permanent personal care are not considered to be usual care (CIZ, 2012).

With the introduction of the SSA in 2007, government responsibility for the provision of household care was transferred to municipalities. Even though local authorities are free to determine household care eligibility criteria, 85% of all municipalities have introduced the usual care protocol used in EMEA needs assessments in their eligibility policy with regard to household care (Tuyman & Marangos, 2010). Physically and mentally capable household members are thus expected to provide household care to a dependent older adult before the municipality steps in.

Given the central role of the usual care concept in the needs assessments for EMEA and SSA benefits, frail older people who share a household in the Netherlands typically have only limited access to lighter forms of public care. They are eligible for public care only when they are unable to purchase care, or when their needs exceed the capabilities of their network. We expect to find reliance on public care only under the condition that the family network does not, or cannot provide the care needed. For that reason we distinguish between types of care that can and those that cannot easily exceed the capacities of the family network. We argue that the likelihood that informal care diminishes the reliance on public care depends on the type of public care and characteristics of the family network.

# 3.1.3 Types of public care

Unskilled forms of care are much more likely to be provided by family members than are forms of care requiring professional training (Wolff & Kasper, 2006; Litwak & Butler, 1985). Research clearly shows that the degree to which informal care diminishes the reliance on formal care – the research does not address public care specifically – varies with the type of care needed. With increasing disability

levels, family members are less able to provide the required care (Walker, Pratt, & Eddy, 1995). Bonsang (2009) shows that Europeans who receive informal care have a lower probability of receiving formal care when the type of care they require is unskilled but not when it is skilled. More specifically, receiving formal care in the form of paid domestic help is less likely only when help is received from children and when disability levels are low. At high levels of disability, help received from children does not lower the probability of receiving formal care. It is unknown whether a similar pattern exists for public care. We hypothesize that the availability of informal care diminishes the receipt of unskilled public care but not that of skilled public care.

# 3.1.4 Characteristics of the family network

According to behavioural model by Andersen (1995), the reliance on public care is dependent, among others, on characteristics of the potential care providers in the family network. In line with this model, scholars have shown that having access to caregivers in and outside the household decreases the need for public care (Li, 2005; Sundström, Malmberg, & Johansson, 2006).

Research has also shown that informal care is predominantly performed by female partners living in the household (Walker, Pratt, & Eddy, 1995) and by daughters living outside the household (Haberkern & Szydlik, 2010). Although male partners also take on caring duties when necessary, they do so to a lesser extent than female partners (Arber & Ginn, 1995; Noël-Miller, 2010). Male partners also perform fewer of the traditionally female domestic tasks compared to their female partners (Campbell & Martin-Matthews, 2003). As a consequence, older women with a partner are more dependent on public care than older men with a partner (Katz, 2000; Stoller & Cutler, 1992). Apart from theoretical reflections on the gendered welfare state (Knijn & Kremer, 1997), we know of no empirical study that investigates the gendered relationship between informal and public care. We hypothesize that male partners will be less likely to delay or diminish the reliance on public care compared to female partners. We also hypothesize that older people who receive household support from their children will be less likely to rely on public care, especially for those who receive this help from daughters. When distinguishing types of public care, we hypothesize that the family will be more able to provide unskilled care compared to skilled care, and that female caregivers are especially able to delay or diminish the use of unskilled public care.

# 3.2 Data and methods

# **3.2.1** Sample

For this study, registry data on receipt of care financed by the Exceptional Medical Expences Act (EMEA) over two time points were linked with survey data, the Netherlands Kinship Panel Study (NKPS). The EMEA provides care for those in need of chronic and continuous care both at home and in institutions. It enables recipients with chronic disabilities to continue living independently for as long as possible. The registry contains information for all Dutch residents on the various types of public care received. The NKPS is a panel consisting of 8160 men and women aged 18 to 79 years old (Dykstra & Komter, 2006). With a response rate of 45 per cent in the first wave held between 2002 and 2004, and 76 per cent in the second wave held between 2006 and 2007, non-response and attrition are higher than in comparable surveys in other Western countries, but comparable to other large family surveys in the Netherlands (De Leeuw & De Heer, 2001). Information on EMEA receipt was recorded yearly. If the NKPS survey took place in the second half of the year, we selected information on EMEA receipt from the year after the survey. Information from the same year was selected if the interview took place in the first half of the year.

We used data from two categories of respondents. First, we limited the NKPS sample to those with a reasonable chance of receiving public care, namely respondents aged 65-79 (the age of sample members was capped at 79). Ten per cent of the NKPS respondents belong to this age category in the first wave and responded in the second wave. Older adults who had no (living) children, had children under 18 years old only, died between waves or left the country after wave 1 were dropped from the sample. In the exceptional case that older people had children living in the household, respondents were dropped because the survey had no questions on household help received from co-resident children. The selection criteria resulted in a sample of 232 men and 259 women at the first time point. Linkage to registry information was done by Statistics Netherlands based on the NKPS respondents' addresses. In the total sample, 94 per cent of respondents did not object to linkage of their information to registry records; of these 95 per cent were successfully linked.

To expand the sample, we added data on older parents by using information provided by their adult children who participated in the NKPS. Individual records of NKPS respondents younger than 65 were linked to their parents by using personal index cards available in the Dutch registry. Personal index cards include the child's and the parent's individual registration numbers, their dates of birth

and, if applicable, dates of marriage. Record linkage was successful for 93 per cent of the NKPS children who had a parent living in the Netherlands and resulted in a much larger total sample of 1231 older men and 1321 older women at the first time point. The odds of unsuccessful record linkage were higher for older parents and for parents with few children.

The measures of the independent variables are thus based on self-reports (older adults) and child-reports (adult offspring with older parents). When older people were the respondents, questions on support exchanges were asked for a maximum of two randomly selected living children (Dykstra & Komter, 2006). When older people were identified by linking them to the child participating in the NKPS, the random selection of the child is the result of the sampling procedure used in the organization of the survey. Note that the data have two possible sources of bias. The first is that child-reports are from a randomly selected child (unless the parent has only one child), and that perhaps other children than the selected child provided help to their parents. The self-reports refer to help received from at maximum two children. Again, information is missing on whether other children than the selected offspring are providing help. The other possible source of bias is the success of linkage. Sensitivity analyses running our models on the self-reports and the child-reports separately revealed that using two sources of information did not affect our results (not reported here). Coefficients between the two models did not differ substantively.

#### 3.2.2 Measures

In our analyses we assume that guidance, e.g., how to organize one's day, and personal care such as dressing, bathing, using the toilet and helping with support stockings are unskilled types of public care. Nursing, such as home visits by a nurse to bandage a wound, give an injection, and treatments such as learning how to walk again after a stroke are skilled types of public care.

The following measures of informal care were used. The first is household help received from a child. Respondents were asked "In the last three months, did you provide help to mother/father or receive help from random child with housework, such as preparing meals, cleaning, fetching groceries, doing the laundry?". Answer categories were either no, once or twice, or several times. Dummy variables measure household help received several times from either a son or daughter. The reference category is not receiving help several times from children. We also indirectly measure the provision of informal care by the partner by creating a dummy variable for whether a partner is present (1 = partner living in household), and another dummy variable for whether this partner is female.

The following control variables were used. Two dummy variables measured high and low levels of education of the older adults, with an intermediate level of education as the reference category. Health was controlled for because it influences the need for public care (Van Houtven & Norton, 2004). Health status was measured by asking older people to rate their health on a five-point scale ranging from 0 (excellent) to 4 (very poor). Since more wealthy older people are less dependent on public care because of the option to purchase care (Bonsang, 2009), we control for monthly household income. The logarithm of monthly household income measured in euro was taken. Monthly income was derived from income tax records available in the registry. Age of older people was measured in years.

# 3.2.3 Analyses

Combining the NKPS with Dutch registry data resulted in a longitudinal dataset that enabled us, contrary to most of the previous literature, to estimate models with public care as the dependent variable, and information from the survey as independent variables. We estimated two models. The first model provides an answer to our research question by using a multilevel logistic model predicting whether or not respondents received any type of public care at any of the two time points. It thus sheds light on the overall impact of informal care on public care by grouping unskilled and skilled types of public care, and comparing older people who receive some form of public care with those who do not. The first model is based on self-reports only. The second model, also using multilevel logistic regression, predicts for those older people receiving at least some form of public care, the receipt of unskilled types of public care versus skilled types of public care. Coefficients in our second model denote odds of receiving unskilled care versus only skilled care. A result in line with our hypothesis would show that older people who receive informal care have lower odds of receiving unskilled care compared to skilled care. The second model is based on both self-reports and child-reports. Unfortunately a measure of health is not included in the second model; the first wave of the NKPS has no child-reports of parental health.

In our multilevel models, the first level corresponds to the two time points used in our analysis, the second level corresponds to the parents. When using NKPS child-reports, the linkage could result in two parents, namely the mother and father of the NKPS respondent. Our third level corrects for clustering of certain pairs of parents who are partnered. Older people generally did not start using public care between the first and second wave of the NKPS, so few respondents transitioned from not using public to using some form of public care. The low transition rate precludes the option of using fixed effects models that

more directly test the causal implications of our hypotheses (Johnson, 2005). The random effects multilevel logistic model that we employ does not require respondents (or parents of respondents in our case) to be present at both time points, the number of respondents will therefore not be equal across waves. The (few) differences between waves are due to older people returning to the Netherlands after having been abroad, and attrition between waves due to migration. Although the coefficients obtained from our random effects multilevel model are a combination of cross-sectional and longitudinal coefficients (Rabe-Hesketh & Skrondal, 2008), we have chosen to phrase our results as cross-sectional findings given the low transition rates mentioned above.

Table 3.1: Descriptive characteristics (based on self-reports) of the older adult sample at two points in time

	2002 - 2004		2006	- 2007
	Men	Women	Men	Women
Received public care (% yes)	0.02	0.19	0.06	0.17
Age (years)	70.29	70.49	73.90	73.90
High education (% yes)	0.36	0.17	0.36	0.17
Intermediate education (% yes)	0.24	0.21	0.23	0.21
Low education (% yes)	0.40	0.62	0.41	0.62
Self-rated health $(0-4)$	0.97	1.24	1.11	1.27
Partner status (partnered=1)	0.82	0.55	0.83	0.50
Household income (log)	7.91	7.60	7.90	7.60
Received help from adult child (% yes)	0.05	0.06	0.07	0.07
Received this help from daughter (% yes)	0.01	0.02	0.02	0.02
N	232	259	231	259

# 3.3 Results

Table 3.1 contains descriptive statistics of the sample based on self-reports. This first sample was used to predict the receipt of any type of public care. Table 3.2 describes the sample receiving public care using both self-reports and child-reports. This second sample was used to predict the receipt of unskilled types of public care versus only skilled types of public care.

Table 3.2: Descriptive characteristics (based on self-reports and child-reports) of the older adults receiving public care at two points in time

	2002 - 2004		2006	- 2007
	Men	Women	Men	Women
Received skilled care (% yes)	0.22	0.37	0.30	0.51
Received unskilled care (% yes)	0.46	0.16	0.38	0.13
Received both types of care (% yes)	0.32	0.46	0.31	0.36
Age (years)	78.00	76.99	80.87	78.96
High education (% yes)	0.01	0.02	0.02	0.02
Intermediate education (% yes))	0.36	0.13	0.38	0.13
Low education (% yes)	0.63	0.85	0.60	0.85
Partner status (partnered=1)	0.70	0.52	0.55	0.37
Household income (log)	7.60	7.40	7.67	7.40
Received help from adult child (% yes)	0.33	0.31	0.33	0.32
Received this help from daughter (% yes)	0.19	0.20	0.21	0.20
N	132	282	125	281

In the first sample at the first time point, 19 per cent of women and 2 per cent of men received public care. Of the older people receiving public care, 32 per cent received unskilled forms of public care only, 26 per cent received skilled forms of public care only, while 42 per cent received both types of public care (not shown in Table 3.1). At the second time point, the percentages of older adults receiving public care were quite similar. The total number of public care users in our second sample also hardly changed, 414 at the first time point, and 406 at the second. At time point two 45 per cent received unskilled care only, 20 per cent received skilled public care only, while 34 per cent received both (Table 3.2, averaged over men and women). Differences between the two samples are most apparent in the age distribution of the older people. Our first sample only contained NKPS respondents; age at the first time point was therefore limited to 79. In our second sample we also made use of linked parents from the registry and selected those who received public care. The maximum age for this sample was 99. Older people in our second sample were much less often high educated (2%) compared to those in the first sample (26%), and more often low educated (67% compared to 52%). Older men were more often partnered compared to older women in both samples (82% versus 55% and 70% versus 52% respectively). In the first sample about 15

per cent of both older men and women had no partner (mostly because partners had died) and in the second sample 30 per cent were unpartnered. The last notable difference between the two samples was the percentage of older people who received household help from the randomly selected child. In the first sample only 5 per cent of men and 6 per cent of women received such help at the first time point. In the second sample these percentages were 33 and 31 respectively. This difference is not surprising given that the second sample was on average considerably older and also selected on the receipt of public care.

Table 3.3: Results from multilevel logistic regression predicting public care receipt of older adults

	Men and women (Odds ratios)
Gender (female $= 1$ )	2.11
Partner status (partnered=1)	0.13**
Gender * Partner status	5.89**
Self-rated health	2.53*
Received help from adult child	2.03
Received this help from daughter	1.29
Control variables Household income (log) Age Educational level High education Medium education (ref.)	0.27** 1.23** 0.87
Low education	0.98
Model log-likelihood N	-250 983

Note: N = number of observations used in analyses, not number of respondents.

In Table 3.3 we summarize our findings from the model predicting public care receipt. The number of older people who received some form of public

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001.

care was rather small. Distinguishing men and women would have limited our power considerably. To check whether the model differed for men and women, we first estimated the model separately for the two groups. Only the coefficient of being partnered differed notably between men and women. We therefore included an interaction between being partnered and gender to test for the hypothesized differences between genders. Women did not have significantly higher odds of receiving public care compared to men. The odds for men with a spouse to receive public care were almost eight times smaller compared to men without a spouse (OR = 0.13). For partnered women the odds of receiving public care differed much less, partnered women had only 1.3 times lower odds of receiving public care compared to women who were not partnered (0.13 \* 5.89 = 0.77). This clearly shows that having a partner is a more important alternative to public care for men than for women. Findings also showed that men and women had 2.5 times higher odds of receiving public care with each unit decrease of health rating. Combining this result with our finding for partner status shows that partnered women with poor health had higher odds of receiving public care than partnered men with poor health. Household help from a randomly selected child showed no significant association with the receipt of public care, nor did receiving this help from a daughter. Income was another important determinant of public care use. With every unit increase in the log of household income, the odds of receiving public care were 3.7 times smaller, suggesting that more wealthy older people purchased market care rather than rely on public care. We did not find any significant differences between levels of education in the odds of receiving public care. Age differences did emerge, however. The odds of receiving some form of public care were 1.2 times larger with every year that men and women were older.

In Table 3.4 we summarize the findings for our second model where we compared the receipt of unskilled public care with the receipt of skilled public care. As was the case in our first model, only the coefficient of being partnered differed notably between men and women when estimating separate models. We therefore included an interaction between being partnered and gender. Our results showed that women did not have significantly higher odds of receiving unskilled public care than men. Once older people receive some form of public care, the odds of receiving either kind of care did not differ significantly between men and women. Partnered adults had a 10 times lower odds of receiving unskilled public care compared to those who were unpartnered. This clearly shows the importance of partners in decreasing the need for unskilled public care which is relatively easy to perform compared to skilled care. However, our interaction with gender

Table 3.4: Results from multilevel logistic regression predicting unskilled versus skilled public care receipt of older adults

	Men and women (Odds ratios)
Gender (female $= 1$ )	1.57
Partner status (partnered=1)	0.10***
Gender * Partner status	8.03***
Received help from adult child	0.66
Received this help from daughter	0.83
$Control\ variables$	
Household income (log)	0.27***
Age	1.02
Educational level	
High education	0.41
Medium education (ref.)	
Low education	0.92
Model log-likelihood	-360
N	820

Note: N= number of observations used in analyses, not number of respondents.

shows that women hardly benefited from having a partner. The odds of receiving unskilled public care were 8 times higher for partnered women compared to partnered men. Combining the odds of being partnered with the odds of the interaction shows that the odds for women with a partner to receive public care were virtually the same as for women without a partner (1.26 versus 1.57 respectively). Apparently female partners were a much more important alternative to unskilled care compared to male partners. Male partners appeared to be much less of an alternative. Receiving household help from a random child made no difference in terms of receipt of unskilled public care. Help from a child is unimportant in rendering unskilled public care unnecessary. Our descriptive results showed that about 20 per cent of the children provided household help when the parent received public care. Apparently such help was provided irrespective of

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001.

the type of public care received. Female spouses therefore seem to be the only viable informal alternative to public care. The odds of receiving public care did not differ significantly with levels of education. We did find, however, that with each point in the increase of log household income the odds of receiving unskilled public care were 3.7 times smaller. The odds of receiving unskilled public care did not differ by age of the respondent.

# 3.4 Conclusion and discussion

Much of the research concerning the interface between informal and formal care does not distinguish between market and state provided care. This is problematic given that much of this research is sparked by interest in the expansion and later retraction of government services in elder care. In this paper we have focused on the question of whether the use of public care is restricted by the availability of informal care providers. Combining the survey data with Dutch registry data resulted in a longitudinal dataset that enabled us, contrary to most of the previous literature, to estimate models with public care as the dependent variable, and information from the survey as independent variables. With the number of older people growing increasingly large in the coming years, policy makers in many countries aim to ensure the future sustainability of elder care. Many of such attempts consist of stressing the importance of informal carers as an alternative to public care (Pavolini & Ranci, 2008).

Our review of the literature resulted in specific predictions on how informal care might restrict the use of public care. Although we did not have a direct measure of informal care provided by the partner, we assumed that partnered older people in need of care would most likely receive some form of care from their partner. Our hypothesis on the importance of partners in influencing the need for public care specifically addressed the partner's gender. Our findings confirmed our hypotheses. Older people with a partner are considerably less likely to receive public care. Interestingly though, this holds especially for older men. Female partners are a much more important alternative to public care than are male partners. Scholars have often shown that women are more likely to perform the domestic tasks that should render such types of public care unnecessary (Walker, Pratt, & Eddy, 1995). In light of the Dutch policy measures in place however, which require older people to first rely on care provided by household members, one would expect male partners to play a more important role in substituting for public care than we have found. We have shown that they do not, and that to the degree that they provide care, male partners only complement public care.

The effect of having a partner on the receipt of public care was the substantial difference between men and women. We found that with deteriorating health both men and women had considerably higher odds of receiving public care, and that for older people with high levels of income the odds of receiving public care were considerably lower compared to those with low levels of income. This is not surprising given that people with high incomes pay an additional contribution when receiving public care. For older adults with higher incomes the threshold to apply for public care is therefore higher compared to older adults with lower incomes. Finally we found that older people who received help with household tasks from a randomly selected child did not have higher odds of receiving public care compared to those who did not receive such help. Distinguishing between help received from sons or daughters did not make any difference either. Unfortunately we only had information on household help received from up to a maximum of two randomly selected children. The absence of an association of informal care provided by children and care receipt is rather surprising given that such effects have been found in previous research (Bonsang, 2009; Brandt, Haberkern, & Szydlik, 2009). The difference with the present research is the specific focus on public care. Bonsang (2009) shows that care provided by children is especially an alternative for paid domestic help and not so much for (public or private) nursing care. At least in the Dutch context, where older people are not required to rely on their non co-resident adult children, care provided by children does not serve as an alternative to public care.

We hypothesized that partners and adult children, particularly if they are female, would be more likely to provide unskilled than skilled care. Our hypothesis was only partly confirmed. The odds of receiving unskilled care versus skilled care for older people with female partners were much lower compared to those with male partners. Actually, having a male partner did not lower the odds of receiving unskilled public care versus skilled care compared to having no partner. Receiving unskilled care from a random child did not lower the odds of receiving unskilled public care either. Our results therefore clearly show that female partners serve as the only actual alternative to public care, and especially so for unskilled types of care. Though the likelihood of receipt of household help from adult children and male partners is high in the Netherlands, their help does not render public care unnecessary.

# 3.4.1 Methodological issues

One of the drawbacks of the data we used is that the NKPS only included older people aged 79 at most. Fortunately, Statistics Netherlands has developed a parent-child module that enabled us to link children who were NKPS respondents to parents in the registers. This option provided us with a much larger number of respondents, and extended our sample to older people up to 99 years of age. Future analyses should ideally be done on older people who are the actual respondents themselves. Nevertheless, we feel confident about the quality of our data. The adult children reported on exchange behaviour which is less ambiguous and therefore less prone to measurement error than an outcome such as relationship quality (Mandemakers & Dykstra, 2008). Using only primary respondents would have enabled us to measure support provided by a wider range of family members than the random child now used in the linking procedure.

Another potential source of bias lies in the random child restriction. Selecting only one child decreases the chance that ageing parents report receiving help from offspring. Especially older people with many children would actually be more likely to receive help from a child than is being picked up by the selection procedure used in the NKPS. Our results suggest, however, that even if we would find higher percentages of household help given by children to parents, there would be no difference in the estimates of public care receipt.

# 3.4.2 Policy implications

Our results have shown that in the policy setting in which our data were collected, only female partners serve as an alternative to public care. Older people in need of the types of public care discussed in this paper are only eligible for that care in case they do not have a person living in the same household who can reasonably be expected to carry out the required tasks. When potential care providers live in the household, applying for public care is only an option when the co-resident carers cannot meet the care needs. Apparently female partners are much less likely to indicate that they are overburdened by the care needs of their partners compared to male partners. Since we have studied older people aged 65 and over, by far the largest part of our sample had left the labour market. This rules out the possibility that the differences in being overburdened are caused by differences in being employed between men and women. Another possibility might be that the processing of public care requests is gender biased. Officials might be more inclined to view female partners as being more able to provide the care needed compared to male partners. To the extent that this is true, it seems strange in light of the fact that women tend to more frequently use health services and have higher morbidity (Verbrugge, 1989). Perhaps favouring male partners is partly due to the age differences between partners. Men are on average older than their female partners, which offsets the overall gender differences found in health service use and morbidity. Unfortunately we were not able to control for the health of the partner, or the age difference between partners.

Future work should try to find out whether female partners actually suffer fewer encumbrances, or whether other processes such as a possible gender bias are responsible for the lower proportions of older partnered men who receive public care compared to older partnered women. Our results suggest that part of the difference between genders in receiving public care is attributable to the (perceived) lack of care giving skills of male partners as alternative to public care. Much might be gained in terms of public care costs by addressing the possible gender bias in processing public care requests. Another option might be that male partners are trained in, or being convinced of, their skills to care for their spouse, at least in cases where their own health is not the limiting factor (Van den Broek, 2013). A greater reliance on male partners is called for given the expected trends in living arrangements at advanced ages. Recent projections indicate that in thirty years' time the proportion of women living with a partner will sharply increase, whereas the proportion of men who are part of a couple will remain relatively unchanged (Gaymu, Ekamper, & Beets, 2008).

# 3.4.3 Generalization beyond the Netherlands

Population ageing is visible in most of the western world. Since the data we used are limited to the Netherlands only, it remains unclear to what degree our results can be generalized to other western countries. There are as many policy measures as there are countries, and our results are for a large part determined by these measures. Moreover, not many elder care policies are as generous as the Dutch (Saraceno & Keck, 2008). In countries with less generous policy arrangements, informal care by other family members than the (female) partner plays a role in substituting for public care. Tomassini et al. (2004) have for example shown that in countries such as Italy, where public care policies are much less generous compared to the Netherlands, older women are much more likely to live with their children.

4 Spousal caregiving: a dyadic perspective\*

<sup>\*</sup>This chapter is co-authored by Pearl Dykstra and Ineke Maas, and is currently under review at an international journal.

## 4.1 Introduction

Family caregivers are the primary source of help for older adults. Although other family members may jump in to help, the bulk of caregiving is concentrated within the spousal dyad. Husbands and wives often give care on an ongoing, intense, and daily basis, which includes diverse types of services ranging from personal care and the performance of domestic labor to emotional support. Generally, the spouse is the only informal caregiver and this responsibility frequently lasts for years (Wolff & Kasper, 2006; Agee & Glaser, 2009).

From a social and psychological perspective, it is therefore not surprising that the majority of caregiving research has centered on understanding the consequences of assuming the role of caregiving for a spouse's own well-being. Empirical support is found for both positive and negative repercussions of giving care. On the one hand, studies show that spousal caregivers experience emotional distress and depressive symptoms when taking care of their partners intensively. On the other hand, evidence is provided for the psychological benefits of taking on the spousal caregiving role, especially increased feelings of satisfaction derived from caring for a dependent person (Kramer, 1997; Marks, Lambert, & Choi, 2002; Pinquart & Sörensen, 2003). Spousal caregivers are affected by the stressors surrounding the provision of care, mainly the duration, intensity and unpredictability of giving care, while at the same time experiencing positive affect from fulfilling their spousal role (Lawton, Moss, Kleban, Glicksman, & Rovine, 1991).

Compared to the wealth of studies examining caregivers' well-being, there is a dearth of information on the consequences of receiving care (Brown, 2007; Martire, Schulz, Wrosch, & Newsom, 2003; Cox, Green, Hobart, Jang, & Seo, 2007; Pruchno, Burant, & Peters, 1997). In most studies, the caregiving relationship is assumed to be unidirectional and the care recipient is often merely taken into account as a contextual factor, rather than as a person who may also be affected by the provision of care. Uehara (1995) argues that, when considering social support, receiving support may be detrimental for the recipient when the recipient is unable to reciprocate the care received. The few studies specifically focusing on the consequences of receiving care report that it is threatening to the receiver's self-esteem, as self-reliance and independence are compromised (Fisher, Nadler, & Whitcher-Alagna, 1982), resulting in a lack of feelings of self-control (Brown, 2007).

Although our understanding of spousal caregiving has greatly benefited from the recognition that not only the well-being of the caregiver but also that of the care recipient is affected by the provision of care, scholars still tend to study the outcomes of caregiver and care receiver as if they live in separate worlds, thereby overlooking dyadic interactions and the nature of the caregiving relationship (Lyons, Zarit, Sayer, & Whitlatch, 2002). In real life, caregiver and care receiver are affected by each other's appraisal of being cared for or being the caregiver (Lyons & Sayer, 2005b). Recently, scholars have started to treat caregiving as a dyadic process (e.g. Lyons, Zarit, et al., 2002; Schulz & Schwarzer, 2004; Wilson-Genderson, Pruchno, & Cartwright, 2009). These studies highlight two important points. First, they underscore that caregiver and care receiver are mutually affected by caregiving and that they mutually affect each other while giving care. Second, they highlight that characteristics of the care relationship may play out differently for caregiver's and care recipient's subjective well-being. Our aim is to further contribute to the literature in two ways.

First, although scholars have taken a step forward by considering spousal caregivers and receivers as members of the same dyad influencing each others outcomes, they have not yet recognized the importance of knowing whether the husband or wife is the care provider or care receiver. It is likely that husbands and wives react differently when becoming either caregiver or receiver. There is consensus in the literature that women experience more stressors related to caregiving (Pearlin, Mullan, Semple, & Skaff, 1990). The literature suggests that these differences in stressors do not translate into substantial differences in well-being outcomes (Pinquart & Sörensen, 2006). I would like to point out that the absence of well-being differences between male and female caregivers even though women report higher levels of stress might be attributable to the analytical strategy often used. Most studies merely compare men and women from different couples. Differences between men and women may not be present when comparing overall distributions of the consequences of caregiving. This does not imply that men and women within couples do not differ in their caregiving experiences either. Our dyadic approach allows us to compare men and women within couples.

Our second contribution is that we use a relational outcome measure next to an indicator of personal well-being such as depressive symptoms or life-satisfaction as is typically done. Surprisingly few studies have examined relational outcome measures, let alone in a dyadic framework, although caregiving also affects the evaluation of the dyadic relationship (Savundranayagam, Montgomery, & Kosloski, 2011). The lack of focus on relational outcomes is surprising because when giving care to, or receiving care from, one's spouse the dynamics of the relationship change to a situation in which there is a rather strong dependence of one partner on the other. Studies that have focused on consequences of caregiving for relationship satisfaction find that caregiving wives but not husbands report declining relationship quality when giving care (Bookwala & Schulz, 2000). In this study

we focus on both relationship satisfaction and life-satisfaction. By focusing on relationship satisfaction, we are able to determine to what extent the relationship between spouses changes after entering the roles of care recipient and caregiver. The inclusion of life satisfaction as a measure of personal well-being enables us to compare the extent to which entering the role of caregiver and receiver plays out differently for individual life satisfaction compared to couple satisfaction.

We use stress process theory (Pearlin et al., 1990) as the basis for focusing on two contextual characteristics of the caring dyad that are shared by both caregiver and care receiver, namely (1) the duration and (2) the intensity of the care provided. We will also examine to what extent the well-being of the male or the female partner in a couple is more strongly associated with giving and receiving care. Well-being of both caregiver and receiver may also be affected by the duration of the illness itself. In this paper we are interested in the consequences of assuming the role of caregiver and receiver, not in the consequences of being ill or having a partner who is ill. We therefore aim to distinguish the duration and severity of the illness from the duration and onset of caregiving and receiving. Using 12 waves of the British Household Panel Study and employing longitudinal dyadic models we try to answer the following research question: To what extent and under which circumstances are caregivers and care receivers differently affected by spousal caregiving, and to what extent do these results differ by gender?

# 4.1.1 The transition into roles of caregiver and receiver

The majority of the caregiving studies focus on couples who are in an ongoing process of giving and receiving care (for an exception, see Schulz & Williamson, 1991). In a dyadic framework, scholars have shown how the well-being of caregiver and care receiver changes during caregiving (Lyons, Zarit, et al., 2002; Wilson-Genderson et al., 2009). The design of these studies allows researchers to investigate whether and how the couple relationship and life satisfaction fluctuate as a result of changes in the intensity of the care given. Such a research design does not allow for an investigation of what occurs in relationships that start off without any illnesses and without caregiving or receiving and then become ones in which one of the members of the couple takes on the role of caregiver and the other the role of care receiver. Only studies that address both healthy couples and couples where either one of the partners is ill but does not receive care or couples where one of the partners is ill and receives care are able to provide insight into the consequences of becoming caregiver or care receiver, net of the accompanying illness causing the need for care. Hence, in order to determine to what extent

taking on the role of care recipient and caregiver affect both members' well-being, it is necessary to observe couples who enter into a caregiver and care receiver role.

### Duration of giving and receiving care

According to Pearlin et al. (1990) the duration of caregiving signifies the chronicity of exposure to the stressors involved in caregiving. In line with these thoughts, Wilson-Genderson et al. (2009) observed over a two year time-span that negative affect of caregivers (but not of care receivers) increased over time while positive affect decreased for both. As scholars have argued that spousal caregivers are negatively affected by the stressors surrounding the provision of care, while at the same time experiencing positive affect from fulfilling their spousal role (Lawton et al., 1991), we expect that the duration of caregiving has a less detrimental impact on caregiver's relationship satisfaction than on caregiver's life satisfaction.

For care receivers, duration of care received obviously signifies the chronicity of their impairment. Helgeson (1993) interviewed care receivers three and twelve months after the start of care receipt and found that receiving help leads to poorer psychological adjustment after twelve months. Nagurney, Reich, and Newsom (2004) poses that a negative response to receiving care is related to the desire for independence of the receiver while Fisher et al. (1982) argue that negative reactions are linked to the threat to self-esteem that receiving care brings about. We therefore expect that the duration of care receipt is more detrimental for care recipients' life satisfaction than for relationship satisfaction.

### Importance of also focusing on intensity

Although the above reasoning implies that as time progresses, giving and receiving care become progressively harder to endure, there are scholars (Walker, Acock, Bowman, & Li, 1996) who criticize this so-called wear-and-tear hypothesis (Haley & Pardo, 1989; Townsend, Noelker, Deimling, & Bass, 1989), at least for caregivers. According to Walker, Acock, et al. (1996), it is not the duration of providing care itself but rather the increasing demands of caregiving over time that make caregiving harder, suggesting that scholars should not only focus on the duration but also on the intensity of the care provided (and received). The research by Wilson-Genderson et al. (2009) shows that, even after taking account of caregiver burden, negative affect of caregivers increased over time while positive affect decreased at roughly the same degree prior to taking account of the level of burden. Intensity of care provided thus seems to be an additional rather than the only factor relevant in predicting caregiver well-being. We expect that spouses who give care at higher intensities will report lower levels of well-being

compared to those giving care at lower intensities. We expect that receiving care is more burdensome at higher intensities because of increasing feelings of guilt about the greater demand that is being required of the caregiver. We do not have any a priori expectations on how differences in the intensity of giving or receiving care would work out differently for relationship satisfaction or life satisfaction.

### Importance of disentangling duration and intensity

As mentioned above, most studies focusing on the impact of giving and receiving care on well-being, start off with couples who are in the middle of caring for and receiving care from their spouse. Some of these couples may be in a care relationship for 35 years, whereas others may have only recently entered this care relationship (Wilson-Genderson et al., 2009). As a result, most of the time patterns in these studies are averages of care dyads with wide ranging durations of giving and receiving care. The findings from an examination of how relationship satisfaction and life satisfaction change during an ongoing two-year pattern of giving and receiving care are likely completely different from those for a couple who have been in a care relationship for 35 years. It is therefore important to be able to separate the mere passing of time from the duration of the care relationship. Previous studies mainly made use of a wide range of care durations, which obfuscates the temporal patterns in the beginning of giving and receiving care with patterns later on. In the current study, with our focus on couples that enter the care recipient and caregiver role, we are able to separate how outcomes of both giver and receiver change at the start and in later stages of receiving and giving care. As a result, we are also able to investigate whether and to what extent the duration of providing and receiving care is more detrimental for couple members' well-being when the care provided and received is also very intense. Providing burdensome care may be manageable for a short period of time but will become more and more of a burden as caregiving endures. We therefore expect that the intensity of giving care will be most strongly associated with outcomes of caregivers later rather than earlier in the caregiving period.

### 4.1.2 Gender differences

A general conclusion in the literature is that women are more often than men the providers of care to the sick, handicapped and frail (Yee & Schulz, 2000). Based on a meta-analysis of 229 studies Pinquart and Sörensen (2006) find small to no gender differences in the consequences of these differences for caregiver well-being. This is at odds with the stress process theory of care which assumes that, when giving care, wives are more exposed to stressors compared to husbands, resulting

in lower levels of well-being (Pearlin et al., 1990). Given the large amount of research showing no substantial differences between caring men and women, we refrain from formulating any expectations to the contrary.

Studies on the consequences of receiving care hardly ever distinguish between men and women. According to Aronson (1990), a distinctive aspect of women receiving care is that they feel uncomfortable because of a desire not to burden the caregiver due to both personal and social norms to remain autonomous. Social norms are much less disapproving of men being a burden to female caregivers. We expect that women are more affected by receiving care than men, translating into lower levels of well-being. It is unclear from the literature how being a care receiver would have different consequences for personal compared to interpersonal measures of well-being. We therefore refrain from formulating hypotheses about differential effects for the two outcomes. Irrespective of the type of outcome, well-being of receivers will be especially affected when they perceive themselves to be a burden for a long time. We therefore expect that as caring endures, the care recipient will report decreasing levels of well-being.

## 4.2 Data and methods

## 4.2.1 Sample

Our analyses were based on 12 waves of data from the public release file of the British Household Panel Study. The BHPS is an annual survey consisting of a nationally representative sample of about 5,500 private households recruited in 1991, containing a total of approximately 10,000 interviewed individuals (Taylor et al., 2010). The sample was extended in 1999 to include households from Scotland and Wales. In 2001 the BHPS was further extended to include households from Northern Ireland. We did not use the extensions because our analyses of BHPS waves started earlier than 1999 (the year the BHPS was extended for the first time). Including the samples in later waves would invalidate the comparison with preceding waves. We also only included respondents who participated in the full interview. Questionnaires that were collected by phone or answered by a proxy respondent were excluded because key variables were missing.

The questions on relationship satisfaction and life satisfaction were asked only from 1996 onwards and were interrupted for one year in 2001. We therefore started our observation period in 1996 (BHPS wave 6), and ended with the last available survey which was held in 2008 and 2009 (BHPS wave 18). Full interview response rates of individuals at Wave 1 were 72% for wave 6 and 44.5% for wave 18. Only

respondents who were 40 or older in wave 6 were selected. We excluded respondents below 40, because the likelihood of entering the role of caregiver and care receiver is much lower for respondents below this age. Furthermore, when couples below the age of 40 are in a care relationship, the context is quite different from that when the couple is older and caregiving is part of what Neugarten (1969) described as the "normal, expectable life". Spousal caregiving at a young age is "off time", far from the modal age at which it usually occurs. Young spousal caregivers are in a deviant position relative to peers and thus often without appropriate support, and have had little anticipatory rehearsal of effective behavioral repertoires.

The final sample consisted of 1531 opposite-sex couples of whom 458 (30%) experienced a caregiving period at least once. We only selected respondents who stayed together for the entire period of observation. In cases where one of the partners died during the period of observation the couple was retained until death. We did not include information on a possible new partner after widowhood. Median age at the first year of observation was 58 for women (range was 40 - 94) and 61 for men (range was 40 - 94); median ages during the entire window of observation were 58 and 61 for women and men, respectively. Note that we use marital terminology (husbands and wives) although our sample also includes unmarried opposite-sex couples.

Non-random attrition related to characteristics relevant for this study may be a reason for concern given that the data we employed span such a long time period. A slightly higher likelihood of attrition among those who were unemployed, never married, male, and in poor health at Wave 1 has been reported (Buck, Burton, Laurie, Lynn, & Uhrig, 2006). Given that the magnitude of overrepresentation in attrition of these groups is generally small, we perceived it acceptable to employ longitudinal models without weights. Moreover, it remains unclear how weights varying over time would affect the results in multilevel models (Gelman, 2007).

### 4.2.2 Measures

Relationship satisfaction and life satisfaction. In the BHPS, respondents were asked to indicate, on a scale that ranged from 1 (not satisfied at all) to 7 (completely satisfied), how satisfied they were with their partner and with life overall. We subtracted 1 from these measures so that the minimum was 0 and the maximum was 6.

Receiving and giving care. Respondents were asked "Is there anyone living with you who is sick, disabled or elderly whom you look after or give special help to (for example, a sick or handicapped (or elderly) relative/husband/wife/friend,

etc)?". If respondents mentioned their partner, respondents were identified as caregivers. Such a question was not asked about receiving care. We therefore identified respondents receiving care by using the information provided by the caregiving spouse. Because both giving and receiving care might be dependent on whether formal care is received, our initial goal was to take any formal care received into consideration. The number of persons in our sample reporting to have received privately or publicly paid home help was very low (less than 1%). Taking account of formal care use was therefore deemed unnecessary.

Duration of care given and received. Duration of caregiving and receiving was determined by measuring the number of consecutive years that caregivers indicated that care was provided to their partners.

Intensity of care given and received. Intensity of care was measured as the number of hours the caregiver indicated having given care. Respondents were asked "In total, how many hours do you spend each week looking after or helping (him/her/them)?". Because the questionnaire fails to distinguish the hours of care provided to each identified care recipient, we were forced to drop all respondents that provided care to more than one person (in or outside of the household, 6% of original sample).

Self-rated physical health. To make sure that increases or decreases in well-being while receiving care were not related to a possible decrease in the physical condition of either caregiver or receiver, we controlled for physical health of both respondent and his or her spouse. The following question was put to respondents: "Please think back over the last 12 months about how your health has been. Compared to people of your own age, would you say that your health has on the whole been ...". The five-point scale ranged from excellent (= 0) to very poor (= 4).

Age. In addition to physical health, differences in age were also taken into account. This was done so as to separate experiences of giving and receiving care from experiences of being older.

Financial difficulties. We take account of the (lack of) possible alternatives to spousal care by controlling for the financial situation of the respondent. Respondents were asked "How well would you say you yourself are managing financially these days? Would you say you are....". Answer categories ranged from "living comfortably" (1) to "finding it very difficult" (5). We subtracted 1 from this measure so that the minimum was 0 and the maximum was 4.

Number of children. We also take account of the respondents' number of children to control for the availability of alternative sources of care provision.

## 4.2.3 Analyses

Data were analyzed using the multivariate two-level model for longitudinal data (Lyons & Sayer, 2005a; Raudenbush, Brennan, & Barnett, 1995), enabling simultaneous estimation of the unique effects for each couple member as well as crossover effects, while taking account of interdependencies within couples by including random effects at the level of couples.

Relationship and life satisfaction of two partners are related because both partners share characteristics and experiences that make them more similar to each other than to persons from other couples (Kenny et al., 2006). By entering a caring relationship couples experience a similar life event in time. Using a longitudinal dyadic model enabled us to determine whether and to what extent women's and men's relationship and life satisfaction within couples was associated with onset and duration of the caring relationship. Interdependencies within each partner's scores over time were handled by allowing the within-subject error terms of women's outcome scores to be correlated across time with men's within-subject error terms within a dyad. The variances of these error terms were assumed to be constant both within and across dyads.

Time was measured in years of cohabitation. The time trends in these models thus indicated average changes in relationship and life satisfaction over the duration of the cohabiting relationship.

## 4.3 Results

Table 4.1 contains summary statistics for the variables used in our models. Respondents were observed for an average of 6.7 years. Average relationship satisfaction was very high, only 0.5 (men) and 0.7 (women) less than the maximum (completely satisfied). Average life satisfaction was about one point lower compared to relationship satisfaction. All of our measures had remarkably similar averages and standard deviations for men and women. This does not necessarily imply that scores were also similar within partnerships. Correlations between men's and women's scores within partnerships were actually rather low given the similarity in scores, with r(1627)=0.33 for relationship satisfaction and r(1627)=0.25 for life satisfaction. About 18 percent of men and women cared for their partner at least once. Within caregiving periods, men and women spent 2.7 and 2.6 hours on average on caregiving. The bulk of both men (71%) and women (72%) in the sample rated their physical health as either good or fair.

Table 4.1: Descriptives of variables used in the final model for men and women separately

	Men			Women		
	M	SD	Range	M	SD	Range
Duration of observation	6.7	4.0	1-13	6.7	4.0	1-13
Relationship satisfaction	5.5	1.0	0-6	5.3	1.1	0 - 6
Life satisfaction	4.4	1.2	0 - 6	4.4	1.2	0 - 6
Cares for partner (%) <sup>a</sup>	17.8			17.7		
Caregiving intensity <sup>b</sup>	2.7	2.1	1 - 10	2.6	2.0	1 - 10
Age at first observation	58.1	11.2	40 - 91	55.7	10.6	40 - 90
Self-rated physical health <sup>c</sup>	1.3	0.9	0 - 4	1.3	0.9	0 - 4
Financial situation respondent	1.0	1.0	0 - 4	1.0	1.0	0 - 4
Number of children	2.0	1.3	0 - 10	2.1	1.4	0 - 16

<sup>&</sup>lt;sup>a</sup> Percentages denote men and women having experienced at least one caregiving period.

<sup>&</sup>lt;sup>b</sup> Measured in number of hours. Summary statistics only concern caring periods. Men or women not caring were ignored.

<sup>&</sup>lt;sup>c</sup> Higher scores denote worse physical health.

Table 4.2: Predicting (changes in) relationship satisfaction of men and women simultaneously in response to entering caregiving periods and (changes in) self-rated health of respondent and partner (N = 1531)

	Men			Women			
	В	SE	95% CI	В	SE	95% CI	
Constant	5.44***	0.08	5.28,5.59	5.33***	0.09	5.15,5.51	
Linear time	0.00	0.00	$0.01,\!0.00$	0.00	0.00	0.00, 0.00	
Cares for partner (intercept)	0.12	0.08	-0.01, 0.25	-0.03	0.07	-0.17, 0.10	
Cares for partner (linear)	-0.03	0.03	-0.09, 0.03	0.04	0.04	-0.04, 0.11	
Cares for partner (quadratic)	-0.00	0.00	-0.01, 0.01	0.00	0.01	-0.01, 0.01	
Intensity of care provided	-0.04*	0.02	-0.07, -0.01	0.01	0.02	-0.02, 0.05	
Intensity * time care given	0.00	0.01	-0.01, 0.01	-0.02**	0.01	-0.03, -0.01	
Receives care from partner (intercept)	-0.01	0.06	-0.14, 0.11	0.03	0.07	-0.10, 0.16	
Receives care from partner (linear)	0.05	0.04	-0.03, 0.13	-0.07*	0.03	-0.14, -0.01	
Receives care from partner (quadratic)	0.00	0.01	-0.01, 0.01	0.00	0.00	-0.01, 0.01	
Intensity of care received	0.02	0.02	-0.01, 0.05	-0.01	0.02	-0.02, 0.04	
Intensity * time care received	-0.02**	0.01	-0.03, -0.00	-0.01	0.01	-0.01, 0.02	
Age at first observation	0.02***	0.00	0.01,0.02	0.02***	0.00	0.01,0.02	
Self-rated physical health	0.04**	0.01	0.02, 0.07	0.03*	0.01	0.01, 0.06	
Physical health of partner	0.01	0.01	-0.01, 0.03	0.02	0.01	0.00, -0.05	
Financial difficulties	-0.04**	0.01	-0.06, -0.01	-0.07***	0.01	-0.10, -0.05	
Number of children	0.01	0.02	-0.02, 0.04	-0.00	0.02	-0.04, 0.03	

<sup>\*</sup>p < .05; \*\*p < .01; \*\*p < .001.

## 4.3.1 Relationship satisfaction

The results of our model predicting relationship satisfaction are reported in Table 4.2. The results can be read in two ways. First, Table 4.2 can be read horizontally, which results in a comparison of men and women either giving or receiving care. Second, the table can be read diagonally which results in a comparison between husbands (wives) giving care and wives (husbands) receiving care.

Reading the table diagonally, neither men nor women who started caring for their spouse reported higher relationship satisfaction than those who did not make this transition. Entry into the role of care recipient was not significantly associated with his or her relationship satisfaction, but the duration of his care given was associated with a decline in her relationship satisfaction (b = -0.07, p < 0.05). At higher levels of intensity, care provided by him was associated with a decrease in his relationship satisfaction (b = -0.04, p < 0.05). The intensity of the care provided by her was associated with both his and her relationship satisfaction but only when care endured for longer periods of time: The more intense the care given by the wife and thus the more intense the care received by the husband, the lower his and her relationship satisfaction were as caregiving endured (b = -0.02, p < 0.01).

Viewing the results from a gender differences perspective (reading the table horizontally), two observations can be made. First, both men and women were less satisfied with their relationship when caregiving at high intensities. For men this held irrespective of the duration of caregiving, for women low levels were only apparent when giving care intensely for longer periods of time. Second, both men and women reported lower relationship satisfaction when receiving care. For men this only held when receiving more intense care for longer periods of time.

Older men and women reported somewhat higher relationship satisfaction compared to younger men and women (b=0.02,p<0.001). Self-rated physical health but not partner's physical health was positively associated with relationship satisfaction for him (b=0.04,p<0.01) and her (b=0.03,p<0.05). Relationship satisfaction was somewhat higher for respondents in better health. Both men (b=-0.04,p<0.01) and women (b=-0.07,p<0.001) reported lower relationship satisfaction for increasing levels of having problems managing financially. There were no differences in relationship satisfaction depending on the number of children respondents had.

### 4.3.2 Life satisfaction

Reading Table 4.3 diagonally, results show that husbands who entered the role of caregiver and wives who entered the role of care receiver did not differ significantly

from those who did not make this transition in terms of life satisfaction. The provision of care over time by the husband was not significantly associated with husbands' life satisfaction, but receiving his care over time was associated with a substantial decrease in her life satisfaction (b = -0.13, p < 0.01). Higher intensity of care provided by the husband was not associated with his life satisfaction, but lowered hers (b = -0.04, p < 0.001).

Although wives who entered the role of caregiver did not significantly differ from their counterparts who did not enter this role, husbands who entered the role of care receiver reported substantially lower life satisfaction (b=-0.27, p<0.001). Providing care to their male partner over time was not associated with wives' life satisfaction, but decreased their husbands' life satisfaction (b=-0.10, p<0.05). Life satisfaction for female caregivers (b=-0.04, p<0.05) but not for male receivers was lower as the intensity of the care provided by her and received by him was higher.

Looking at Table 4.3 results from a gender differences perspective, four observations can be made. First, both women's and men's life satisfaction did not change when becoming caregiver, although women's life satisfaction was somewhat lower when providing care at higher intensities. Second, only the husband's life satisfaction not the wife's decreased when entering the role of care recipient. Third, both women and men became less satisfied with their lives over time when receiving spousal care. Fourth, only women and not men became less satisfied with their life when the care they received from their partner was more intense.

Older men and women reported somewhat higher life satisfaction compared to younger men and women (b=0.02,p<0.001). Both men (b=0.24,p<0.001) and women (b=0.21,p<0.001) reported substantially higher life-satisfaction when their self-rated physical health was better or improved over time. Men (b=-0.04,p<0.01) and women (b=-0.03,p<0.05) reported higher life satisfaction when their spouse reported higher levels of physical health. Both men (b=-0.19,p<0.001) and women (b=-0.20,p<0.001) reported substantially poorer life satisfaction with increasing levels of financial difficulties. Respondents' number of children made no difference for levels of life satisfaction.

Table 4.3: Predicting (changes in) life satisfaction of men and women simultaneously in response to entering caregiving periods and (changes in) self-rated health of respondent and partner (N=1531)

	Men				omen	
	В	SE	95% CI	В	SE	95% CI
Constant	4.05***	0.09	3.87, 4.23	4.03***	0.10	3.84, 4.22
Linear time	-0.00	0.00	0.00, 0.01	0.00	0.00	-0.00, 0.00
Cares for partner (intercept)	-0.02	0.08	-0.18, 0.14	-0.01	0.08	-0.17, 0.14
Cares for partner (linear)	0.04	0.04	-0.03, 0.12	0.00	0.05	-0.09, 0.09
Cares for partner (quadratic)	-0.01	0.01	-0.02, 0.00	-0.01	0.01	-0.02, 0.00
Intensity of care provided	-0.02	0.02	-0.06, 0.02	-0.04*	0.02	-0.08, -0.00
Intensity * time care given	0.01	0.01	-0.02, 0.00	0.01	0.01	-0.01, 0.02
Receives care from partner (intercept)	-0.27***	0.07	-0.42, -0.13	-0.11	0.08	-0.27, 0.04
Receives care from partner (linear)	-0.10*	0.05	-0.19, -0.01	-0.13**	0.04	-0.20, -0.05
Receives care from partner (quadratic)	0.01	0.01	-0.00, 0.02	0.00	0.01	-0.01, 0.01
Intensity of care received	-0.01	0.02	-0.04, -0.03	-0.04***	0.01	-0.08, -0.00
Intensity * time care received	0.01	0.01	-0.02, 0.01	0.01	0.01	-0.01, 0.02
Age at first observation	0.02***	0.00	0.02, 0.03	0.02***	0.00	0.02,0.03
Self-rated physical health	0.24***	0.01	0.21, 0.27	0.21***	0.01	0.18, 0.24
Physical health of partner	0.04**	0.01	0.01, 0.07	0.03*	0.01	0.00, 0.06
Financial situation respondent	-0.19***	0.01	-0.22, -0.16	-0.20***	0.01	-0.23, -0.17
Number of children	0.01	0.02	-0.02, 0.04	-0.01	0.02	-0.04, 0.03

<sup>\*</sup>p < .05; \*\*p < .01; \*\*p < .001.

### 4.4 Conclusion and discussion

Following stress process theory (Pearlin et al., 1990), this study adopted a longitudinal dyadic perspective to study changes in the well-being of caregivers and receivers, and possible gender differences in these changes in connection with the onset, duration, and intensity of giving or receiving care. Previous studies have mostly studied personal well-being measures such as life satisfaction. We argued that when giving care to, or receiving care from one's spouse, the dynamics of the relationship change to a situation in which there is a rather strong dependence of one partner on the other. We therefore also studied interpersonal well-being by focusing on relationship satisfaction. The analyses were based on 12 waves of the British Household Panel Study.

The findings revealed that for women and men, relationship satisfaction was negatively associated with caregiving only when it involved higher intensity levels. For women the negative associations only emerged when care was provided for longer periods of time. These findings are consistent with the stress process model because they show that caregiving is especially detrimental under conditions that compromise caregivers' daily lives (Pearlin et al., 1990). Bookwala and Schulz (2000) found that wives reported lower marital satisfaction than husbands, and attributed this difference to the higher caregiving demands that wives encounter. Our results suggest that, in demanding conditions that endure for longer periods of time, wives are worse off than men in terms of relationship satisfaction, even at the same level of caregiving intensity. It is important to note that the differences in relationship satisfaction between husbands and wives involved in caregiving remain quite small. When receiving care, wives reported lower relationship satisfaction with increasing durations of dependency. This also held for men but only for higher levels of caregiving intensity. Men reported higher relationship satisfaction at the onset of giving care, and reported lower relationship satisfaction with higher intensities of care received. Overall our findings suggest that there is very little spillover from caregiving and care receiving to the way in which the marital relationship is evaluated. The lack of spillover is surprising, given that caregiving and receiving clearly alter the relationship dynamics.

In contrast to the limited findings for relationship satisfaction, the results indicated that, as expected, the provision and receipt of spousal care had negative implications for life satisfaction. Wives reported lower life satisfaction the higher the caregiving intensity. Their husbands receiving this care reported lower life satisfaction at the onset of receiving care, and also reported lower life satisfaction as they received care for longer durations. When husbands provided care to their wives, their reported life satisfaction did not change. Wives receiving this care

also reported lower life satisfaction with time, and were also less satisfied with their lives as the care they received was more intense.

Based on previous research (Pinquart & Sörensen, 2006) we had expected no differences between husbands and wives in the consequences of caregiving. Our results showed otherwise. In contrast to husbands, wives giving care were somewhat less satisfied with their lives when caregiving was more intense, although the differences found can hardly be called substantial. As was found in earlier research (Miller & Cafasso, 1992), the number of hours spent caring each week by husbands and wives (2.7 and 2.6 respectively) are virtually indistinguishable. Our results therefore suggest that differences in well-being due to caregiving cannot arise because of differences in the amount of care given. The differences between husbands and wives that do arise are caused by an association between care intensity and well-being that exists for wives but does not exist for husbands.

The difference between our study and previous studies not finding differences between husbands and wives in the consequences of caring may lie in the variables used in our study. We did not measure what exactly husbands and wives do in the hours that they provide care. Our findings may be a reflection of the differences in caregiving tasks that husbands and wives perform (Miller & Cafasso, 1992). Although husbands and wives may indicate that they provide the same amount of hours of care, they may experiences these hours differently. From a stress process perspective one would assume that this difference is due to the experiences of more stressors, or to the more negative evaluation of stressors while giving care.

Relatively little research has been done on gender differences in receiving spousal care. Our study is among the few that have addressed this issue. Our results suggest that gender differences in the impact of receiving spousal care on well-being are small, as is the impact of spousal care provision on well-being. One of the few differences we observed was at the onset of receiving care, where men reported substantially lower life satisfaction compared to women. This is contrary to what we expected. By starting to receive care, women and not men transition into a situation that goes against prevailing social norms (Aronson, 1990).

Using a longitudinal dyadic perspective yielded a number of benefits compared to more conventional types of analyses. First, we were able to include both caregivers and receivers in the same analyses, thereby making it possible to compare the experiences of receiving and giving care of husbands and wives in the couple. Second, we were able to determine whether differences between husbands and wives giving care to and receiving care from each other were actually different from each other. Third, we were able to incorporate measures of the care receiver as controls for responses of the caregiver, thus taking (changes in) physical health of both provider and receiver into account. The advantage of the procedure is

that the associations of giving and receiving care with well-being now provide actual estimates of how the experiences of giving and receiving care are associated with well-being, rather than reflect possible by-products of negative or positive changes in the physical health of either caregiver or receiver.

Most of the previous studies have either focused on giving or receiving care. Ours is one of the first to directly compare the consequences of the two for both husbands' and wives' well-being. This enabled us to show that particularly those receiving care report lower life satisfaction, and more strongly so when care receipt endured for a long time. From the care receivers' perspective this is a beneficial conclusion because they have an interest in the relationship staying intact. Without it they would be without a caregiver. It would be interesting to see how receiving public or privately paid market care compares to spousal care for both care givers' and receivers' well-being. Since the evaluation of the relationship itself does not seem to change much, the question arises whether persons are better off by — where possible — resolving care needs within the spousal context rather than seeking help from other formal sources.

Given that we have only taken physical health of caregivers and receivers into account, it remains unclear to what extent care receivers report lower life satisfaction because of other factors, such as emotional signals they pick up from caregivers. The dyadic models used in this paper are very suitable to address this issue because they enable researchers to take into account (changes in) characteristics of both givers and receivers. Argued from a stress process perspective, an interesting question is which specific factors are associated with receivers' (changes in) life satisfaction. Future research should specifically point to processes responsible for the patterns at onset, over time, and with intensity that we have described in this study.

5 Country differences in age cleavages in endorsement of old age welfare policies: self-interest, family ties and welfare state arrangements\*

<sup>\*</sup>This chapter is co-authored by Pearl Dykstra and Ineke Maas, and is currently under review at an international journal.

### 5.1 Introduction

Population ageing implies that smaller working age cohorts carry the burden of providing the social security of much larger older age cohorts. This development has made age a distinguishing factor that, along with socio-economic status, divides the interests between contributors and beneficiaries of a wide range of welfare policies. The division of interest according to age is at odds with the intergenerational contract that underlies welfare states. The willingness of people in the younger age group in society to contribute to the welfare of the older is key to ensure sufficient financial contributions to welfare policies now and in the future (Esping-Andersen, 2002). The expectation of an exacerbating conflict of interests between age groups due to demographic changes has been coined by some researchers as "generations at war" (Lindh, Malmberg, & Palme, 2005).

In order to determine the degree to which the intergenerational contract is threatened, scholars have investigated age cleavages in preferences for welfare policies (Ponza, Duncan, Corcoran, & Groskind, 1988; Preston, 1984). Surprisingly however, age cleavages in endorsement for welfare policies hardly provide us with the empirical confirmation of patterns so often expected. Although age cleavages are often found, the magnitude of the reported differences between age groups is negligible. Blekesaune and Quadagno (2003) find age to be a significant predictor of support for the sick and old, but the estimated difference between a 30 and an 80-year-old is only 0.2 on a scale ranging from 1 to 7. Busemeyer, Goerres, and Weschle (2009) report differences between age groups in predicted probabilities of being in favour of more spending on welfare policies that on average do not exceed 0.1. Similar small differences have been reported by other researchers (Svallfors, 2008).

Many scholars report weaker evidence for age cleavages than anticipated, but very few have scrutinized why this might be the case. Our first aim is to determine why substantial age cleavages in endorsement of welfare policies seem absent. To do so, we focus on endorsement of specific welfare policies which are most strongly demarcated by age and as such should give rise to the most pronounced age cleavages. We explicitly focus on policies that organize responsibilities towards those in old age, as age cleavages should be large given that their benefit is clearly age dependent. We think that age cleavages are small due to opposing effects of self-interest and familial considerations.

Although age cleavages themselves appear to be generally small, research suggests that they are more pronounced in certain countries than in others. As Busemeyer et al. (2009) report, age cleavages in the USA for example rank among the highest which may indicate that they are greatest in liberal welfare states.

This is not consistent with patterns in France and former Eastern-Germany (so-called conservative welfare regimes) where age cleavages in endorsement of greater spending also rank among the highest. In another liberal welfare state (Great Britain) age cleavages rank among the lowest. The variation in age cleavages between countries is therefore inconsistent with any welfare typology such as the 'three worlds of welfare' proposed by Esping-Andersen (1990). Our second aim is to explain the extent to which age cleavages differ between countries by using a refined measure of structural differences and differences in welfare systems between countries. Countries for example greatly differ in the way that responsibilities concerning older adults are organized (Saraceno & Keck, 2008).

The fourth round of the European Social Survey (ESS) which contains a module concerning attitudes towards welfare states was used. Hierarchical ordered logit models were estimated within a Bayesian framework to predict endorsement of old age policies in 17 European countries.

## 5.1.1 Self-interest: economic resources, age, and their interplay

Conventional explanations of endorsement of welfare policies assume that people's attitudes towards the welfare state are partly determined by self-interest. Supposedly, a rational cost-benefit calculation of welfare policies drives endorsement of welfare policies. Meltzer and Richard (1981) posit that individuals' level of endorsement is based on their relative position in a countries' income distribution. Iversen and Soskice (2001) extend this model by showing that not only income, but also the degree of exposure to labour market risks determines support for social protection.

Many other scholars have focused on circumstances in people's lives that are assumed to increase endorsement of welfare policies because of an inherent self-interest as well. Wealthy individuals are for example found to more weakly endorse welfare policies than people who are less well off (Andres & Heien, 2001; Hasenfeld & Rafferty, 1989). In this paper we focus on economic resources as an indicator of self-interest. We expect that endorsement of welfare policies will be highest among those most in of need of these policies as indicated by their economic resources. In our view, age structures the effects of economic resources. We return to this point after discussing how age is assumed to shape endorsement of welfare policies.

The depiction of demographic processes threatening the intergenerational contract such as outlined above stems from a rationalized understanding of why people endorse welfare policies. Age is, similarly as with socio-economic circumstances, assumed to be taken into a cost-benefit calculation that determines

endorsement of welfare policies. Age groups are considered to be less supportive of welfare policies that they cannot benefit from (Svallfors, 2008). Following this reasoning, the traditional expectation is that endorsement of welfare policies targeting a specific age group should be higher in this age group compared to age groups that are not targeted by these welfare policies.

The empirical analyses undertaken to determine the magnitude of age cleavages often assume that cleavages are just as large between the young and old as between the young-old and old-old (Blekesaune & Quadagno, 2003). These approaches don't take into account that because the young-old and old-old both benefit from old age policies, their differences should be smaller as compared to those who cannot benefit (the young) and those who can (the old). Cost-benefit calculations also include the anticipation of benefit from welfare policies that is still to come. From the perspective of younger adults, anticipation of the benefit of policies in the (near) future should lead to a gradual increase in endorsement. We expect that differences between young-old and old-old will most likely be present because the old-old will in general benefit more strongly from old age policies such as for example care arrangements. A substantially larger proportion of old-old benefit from state provided care compared to the young-old.

In our view the interdependence between self-interest because of age and because of wealth might be an explanation for why empirical studies report age cleavages that are not as large as expected. Adults at ages that enable them to benefit from old age policies are expected to endorse such policies more strongly than younger age groups. Individuals with fewer economic resources are also expected to endorse such policies to a greater degree. In previous work these two expectations have been considered independent of one another. It seems unrealistic though, to expect that economic resources matter the same for age groups that do (the old), and for those that do not (the young) benefit from certain policies. Older adults in adverse economic situations have a substantial interest in old age policies. Young adults in adverse situations on the other hand will not strongly support transferring a large share of their hardly sufficient income to another age group because they have no direct interest in the policies that they contribute to. We therefore expect that among those with few economic resources age cleavages are substantially larger than among those with ample resources.

# 5.1.2 Beyond conventional explanations: the family and its interplay with age

We introduce 'familial considerations' as another explanation for why age cleavages are not as large as often expected. The intergenerational contract as a basis for welfare policy contributions refers to intergenerational solidarity between young and old in the wider society. Defined in a narrower sense however, intergenerational solidarity also refers to solidarity within families, not within society at large (Dykstra, 2010). Intergenerational solidarity in this sense is characteristic of the strong normative obligations felt by family members (Rossi & Rossi, 1990), which are manifested in family members engaging in a plethora of support exchanges. Older adults provide financial support to their adult children in times of need, and adult children care for their needy parents (Cooney & Dykstra, 2011). Obligations are not felt as strongly by everyone for every family member, as normative obligations depend on the degree of affective closeness between family members (Rossi & Rossi, 1990).

Not all exchanges between family members are tangible. For example, family members also serve as bridges in dealing with bureaucracies and social services (Dykstra & Hagestad, 2007). People are generally aware of the difficulties that their kin face in dealing with the challenges of every day life through either active or passive involvement with close family members. This is exactly why we expect that endorsement of old age policies is also partly determined by the evaluation of how family members (could) benefit from welfare policies. We furthermore expect that the degree of such attitudinal solidarity is dependent on the quality of the relationship with elderly family members.

We hypothesize that endorsement is higher when people who do not benefit themselves have family members in age groups that might benefit from welfare policies. Such attitudinal solidarity because of familial considerations is expected to be especially apparent with increasing affective closeness with these family members. Older adults in close relationships with family members of their own age already have an interest in old age policies by virtue of being old themselves. This is different from younger individuals for whom the considerations for their elderly family members would counteract their self-interest. We therefore expect that being in a close relationship with an elderly family member will increase endorsement of old age policies to a greater degree for younger adults compared to older adults.

# 5.1.3 Policy environments structuring endorsement of welfare policies

As noted earlier, studies on differences in age cleavages between countries have largely failed to take account of characteristics of these countries. We first address how endorsement of welfare policies might differ between countries in general. How age cleavages might differ between countries is addressed afterwards.

Norms of social justice in a country are assumed to be reflected in its institutional structure, which then in turn shapes people's attitudes towards these institutions through policy feedbacks (Esping-Andersen, 1990; Mau, 2004; Pierson, 1995). Scholars using measures of expenditures on social protection in general (Dallinger, 2010), and specifically on family services (Jaeger, 2005) have shown that endorsement of welfare policies is higher in countries where social expenditures as a percentage of GDP are higher. Based on the assumed feedback loops of policies on their endorsement, we hypothesize that with increasing levels of generosity in old-age policies, endorsement of old-age policies will be greater for all age groups.

## 5.1.4 Policy environments structuring age cleavages

The potential for conflict between generations due to population ageing is a more pressing issue in some countries than in others. This is clearly reflected in the differences in dependency ratios (the ratio between persons aged 65 and over divided by the number of persons at working age) between countries. For example, Germany, Italy and Sweden rank among the highest whereas countries such as Poland, Ireland, and Slovakia rank among the lowest (Eurostat, 2011). Dependency ratios are expected to rise in all European countries. The degree to which, and how this rise will affect the sustainability of the current level of social expenditures differ considerably between countries (Raffelhüschen, 1999). We expect that the current differences in dependency ratios between countries might explain why age cleavages differ between countries. Comparing dependency ratios between countries enables us to determine the extent of relative differences in clashes of generational interests between countries. We expect that these relative differences translate into higher age cleavages in countries where dependencies are relatively high compared to when these ratios are relatively low.

Family policies play an important role in dividing the caring responsibilities of elderly family members between the family and the state (Leitner, 2003). Countries differ in the way in which intergenerational responsibilities are divided between the family and the state (Saraceno & Keck, 2010), irrespective of the overall generosity of countries' welfare policies. Persons required to care for their

family members may endorse welfare policies to a greater extent because it is in their interest that policies alleviate their responsibilities. Earlier we hypothesized that being in a close relationship with an elderly family member would increase endorsement of old age policies to a greater degree for younger adults compared to older adults. Taking differences in the division of intergenerational responsibilities between countries into account, we expect that this hypothesized pattern will hold more strongly in countries where families (and thus especially younger adults) share a larger part of caring responsibilities.

## 5.2 Data and methods

## **5.2.1** Sample

To test our hypotheses, we used the fourth wave of the European Social Survey (ESS, version 4.0). The ESS is a cross-national survey that contains cross-sections of European countries, aiming for full coverage of the residential population aged 15 and over. The 28 countries included in the fourth wave were Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Israel, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom. Although ESS surveys are held in each country separately, there are strict guidelines concerning questionnaire implementation and fieldwork. The target response rate for the ESS was 70% but response rates varied from 43% in Germany to 81% in Cyprus. Refusal rates appeared to be especially high in western European countries such as the Netherlands (41%), France (36%), and Germany (33%) (Matsuo, Billiet, & Loosveldt, 2010). For the current analyses we restrict ourselves to adult respondents aged 18 or older. Because the country indicators we used (discussed later) were not available for all countries participating in the fourth round of the ESS, our final sample consisted of 34608 respondents from 17 countries. All continuous variables in our models were grand-mean centred.

### 5.2.2 Measures

#### Individual level characteristics

The ESS contains a fixed set of questions that is repeated in every wave, and two rotating modules of question sets that are specific to a certain wave. The module of interest for this paper is "Welfare attitudes in a changing Europe". Our dependent variable measured endorsement of old age policies for older adults on a scale from 0 to 10. The question asked to what extent respondents deemed it a responsibility of the government to ensure a reasonable standard of living for the old.

We used a measure of economic hardship as a proxy for self-interest because of wealth. The following question was asked: "Which of the descriptions on this card comes closest to how you feel about your household's income nowadays?". Three dummy variables were created based on the answer categories: very difficult, difficult, coping, and living comfortably (the reference category).

Familial interest was measured by determining the degree of affective closeness of the respondent with any living family member between of 70 or older (both blood relatives and relatives through marriage). The following question was put to respondents with living family members over 70 who were identified using a dummy variable (1 = yes) in our models. "Which option on this card best describes whether or not you can discuss personal issues such as feelings, beliefs or experiences with any of these [family members]?". Answer categories ranged from "I can discuss no personal issues" (1) to "I can discuss all personal issues" (6).

### Country characteristics

Three country level variables were used in our models. Generosity of old age welfare policies was measured by the total old age public expenditure as a percentage of GDP in a country divided by the dependency ratio in that country. Differences in the division of intergenerational responsibilities were measured by the percentage of elderly over 65 receiving home-based care. According to Saraceno and Keck (2008) this indicates whether countries intervene in the beginning of disability, or whether the disabled are assumed to first rely on other sources of help such as family members. Country differences in dependency ratios were measured by the ratio of elderly people 65 and over compared to people of working age (Eurostat, 2011).

#### Control variables

Political ideology is often used to explain why people, in contrast to their self-interest, endorse welfare policies. Political ideology as a concept consists of a set of interrelated ideas about how society should operate. According to Jost, Federico, and Napier (2009) these ideas pertain to social change and inequality in society and can be captured by a single left-right distinction of political affinity. Empirical research suggests that respondents preferring a left-wing party are more in support of reducing income differences than respondents preferring a right-wing

party (Jaeger, 2006). Research suggests that attitudes change as people age. This change is most often directed towards more tolerance rather than to conservatism (Danigelis, Hardy, & Cutler, 2007). The ESS data however suggest that older adults in general place themselves more to the right on a political ideology scale compared to younger adults. We take account of these differences by including a variable measuring one's political ideology. It was measured using a statement with a scale ranging from "left" (0) to "right" (10) that read: "In politics people sometimes talk of 'left' and 'right'. [...] where would you place yourself on this scale, where 0 means the left and 10 means the right?".

Three dummy variables measured whether the respondent was in paid work or education (reference category), unemployed, pensioned, or fell in none of these categories. The latter category included those permanently sick or disabled, in the military, and home-makers. Two dummy variables measured respondents' educational attainment. The reference category consisted of respondents with no completed, only primary or the first stage of basic education, or lower secondary or second stage of basic education (ISCED levels 0, 1, and 2). The first dummy variable consisted of respondents with upper secondary or post-secondary education. Respondents with first or second stages of tertiary education made up the second dummy variable. Gender of the respondent was measured using a dummy variable (female = 1).

# 5.2.3 Analyses

Hierarchical ordered logit models with proportional odds were estimated in order to estimate the effects of both individual and country level variables. Differences between countries were captured by estimating a random shift parameter that offset the estimated set of cut-points by a value specific to each country (Jackman, 2009). Originally, the scale of our dependent variable consisted of 11 different categories. Categories zero to six were collapsed into one lowest category spreading the number of responses more evenly over the five remaining categories. Sensitivity analyses indicated that collapsing the categories did not affect our results substantially. Our models were estimated within a Bayesian framework. We refrain from discussing the advantages of Bayesian statistics over Frequentist statistics but refer the interested reader to Gill (2007) or Jackman (2009). All regression parameters at the individual level were given non-informative normal priors with means zero and variances 1000. Priors for the cut-points were also noninformative and normal with means zero and variances 100. In order to estimate random effects and country level parameters we used an inverse-Wishart prior with degrees of freedom equal to the number of parameters plus one (Gelman,

Carlin, Stern, & Rubin, 2003). For each of the estimated models 310000 Markov chain Monte Carlo (MCMC) iterations were generated using JAGS (Plummer, 2003) and the first 10000 discarded as burn-in. Standard convergence diagnostics indicated convergence for all of the parameters.

With one exception, all of the variables used in our models had relatively few missing values. About 11% of the respondents did not answer our measure of political ideology. Given that political ideology is an important determinant of endorsement of welfare policies, ignoring this missingness is inappropriate. A more appropriate approach is to use multiple imputation (Rubin, 1987). Five individual datasets were imputed using Amelia II (Honaker, King, & Blackwell, 2010) based on all the individual level variables in our most elaborate model. Each dataset was used in a separate MCMC chain. Inferences on the parameters of interest were based on the combined chains (Gelman et al., 2003).

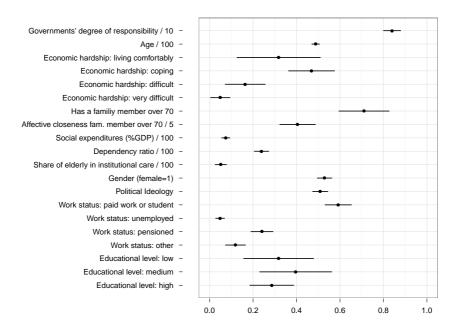


Figure 5.1: Means and standard deviations of variables aggregated over countries. Wider horizontal bars denote larger variations in means across countries.

## 5.3 Results

## 5.3.1 Descriptive results

In Figure 5.1 we show the means (dots) and standard deviations (horizontal bars) of the variables used in our models. To construct the figure, the variables were scaled to have minimum zero and maximum one. Unscaled variables were used in our models. The dots represent the aggregate mean over all countries while the horizontal bars denote standard deviations of these means over countries. A reasonable standard of living for the old was clearly deemed as mostly the responsibility of the government. Considerable variation between countries in which answer categories were chosen existed, but this boiled down to whether the majority chose an eight instead of a ten. Our models thus can only reveal how characteristics are associated with whether persons strongly or less strongly endorsed policies for the old. The average age of the respondents hardly differed between countries. The considerable variation in perceived hardship is clearly a reflection of the different countries incorporated in the ESS. Many more respondents perceived their economic circumstances as difficult in Eastern compared to Western European countries. This also held for respondents from Southern European countries, but to a lesser degree. The mean political ideology was in the centre for most countries, with more countries slightly leaning to the right than to the left. A large share of respondents had at least one elderly family member although this differed considerably between countries, the mean degree of affective closeness with any of these family members also differed considerably. Just over half of the respondents were female, and most of the respondents were in paid work or were students. Educational levels differed widely between countries. Compared to the individual level variables, there was only slight variation in our three country level variables.

# 5.3.2 Individual level explanations

Turning to our models estimating age cleavages in Table 5.1, Model 1 indicates that, as expected, at higher ages, endorsement of old age policies was also higher. The rate at which endorsement increased with age was stronger among younger respondents and started levelling off around ages 45 and older as indicated by the logarithmic effect of age. The standard deviation of the effect of age clearly indicates that age cleavages differed considerably between countries. As the results in Model 2 reported in Table 5.1 indicate, adding the other explanatory individual level and control variables to the model actually increased the variability in age cleavages across countries. The results indicate that with increasing

Table 5.1: Results from hierarchical ordered logit models

	Model 1		Model 2		Model 3		Model 4	
	est.	se	est.	se	est.	se	est.	se
Individual level effects:								
Age (log)	0.31	0.05	0.18	0.11	0.17	0.11	0.19	0.11
Perceived hardship:								
Living comfortably			ref.					
Coping			0.18	0.04	0.18	0.03	0.18	0.03
Difficult			0.41	0.05	0.41	0.05	0.41	0.05
Very difficult			0.78	0.08	0.77	0.08	0.78	0.08
Age(log) * perceived hardship:								
Living comfortably			ref.					
Coping			0.21	0.09	0.22	0.09	0.21	0.09
Difficult			0.05	0.12	0.06	0.11	0.06	0.11
Very difficult			0.52	0.19	0.52	0.20	0.54	0.19
Family member over 70			0.05	0.04	0.05	0.03	0.05	0.03
Affective closeness fam. member			0.03	0.01	0.03	0.01	0.03	0.01
Age(log) * affective closeness			-0.05	0.02	-0.05	0.02	-0.04	0.08
Control variables:								
Gender (female=1)			0.17	0.03	0.17	0.03	0.17	0.03
Political ideology (left-right)			-0.07	0.01	-0.07	0.01	-0.07	0.01
Educational level:			0.0.	0.0-	0.0,	0.0-		0.0-
Low			ref.					
Middle			0.01	0.04	0.01	0.04	0.01	0.04
High			-0.21	0.04	-0.21	0.04	-0.21	0.04
Occupational status:								
In paid work or student			ref.					
Unemployed			0.04	0.07	0.04	0.07	0.05	0.07
Pensioned			-0.02	0.05	-0.02	0.05	-0.02	0.05
Other			0.12	0.05	0.12	0.05	0.13	0.05
Country level variables:								
Old age public expenditure					0.02	0.08	0.02	0.08
Dependency ratio					-0.03	0.05	-0.03	0.05
Share of 65+ in institutional care					-0.05	0.06	-0.05	0.05
Cross-level interactions								
Dependency ratio * age							0.02	0.03
Share of 65+ in institutional care *								
Age(log)							-0.02	0.02
Affective closeness							-0.01	0.04
Age(log) * affective closeness							-0.01	0.03
Country level variance components:								
Intercept	0.57	0.12	0.54	0.09	0.54	0.10	0.57	0.12
Age(log)	0.14	0.06	0.34	0.07	0.34	0.06	0.36	0.07
Affective closeness							0.29	0.05
N	0.44	308	346	100	346		346	

levels of economic hardship, the probability to strongly favour old-age policies greatly increased. Each step higher in economic hardship roughly doubled the logarithmic effect of age. As expected, age cleavages were more pronounced for respondents in economic hardship.

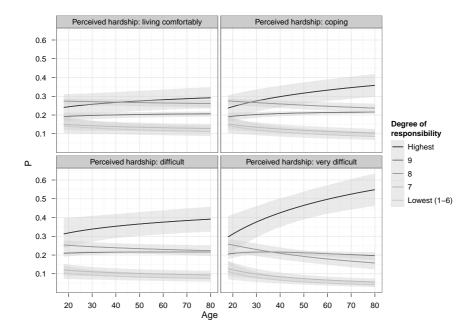


Figure 5.2: Predicted probabilities and 95% credible intervals of endorsing old age policies for average respondent, by age and economic hardship.

Figure 5.2 illustrates the interplay between age and economic hardship. Predicted probabilities of choosing one of the five levels of endorsement (y-axis) are plotted as a function of age (x-axis) for different degrees of economic hardship (four different panels). Age cleavages were only substantial in the highest category of endorsement of old age policies. They were marginal for respondents with no economic hardship, and marginal when they found it somewhat difficult with the present household income. When perceived hardship was difficult, age cleavages were virtually non-existent. Older adults in greatest economic hardship were considerably more likely to indicate that a decent standard of living for them was entirely the government's responsibility compared to younger adults with the same level of perceived hardship, and compared to older adults in more moderate levels of economic hardship. The predicted probability of choosing the

most extreme category was 0.52 for a 70-year-old compared to 0.35 for a 25-year-old when perceived economic hardship was highest. When perceived economic hardship was lowest, predicted probabilities were 0.29 and 0.25 respectively. Age cleavages were clearly greatest when respondents were most in need. These predicted probabilities were calculated for an otherwise average respondent in an average country. The model implies that, although in some countries the most extreme category was hardly chosen at all, the patterns illustrated here also hold for these countries but that the most extreme category should be taken to be 8 or 9 and not 10.

Turning to the family as an explanation for age cleavages, endorsement of old age policies did not differ between respondents without a family member or with one with an average level of affective closeness (about 2 on a scale from 0 to 5). However, respondents were expected to be less likely to endorse old age policies at lower levels of affective closeness compared to respondents without an elderly family member. At above average levels of affective closeness the predicted probability to endorse old age policies was higher compared to having no family member. These results held for an average respondent with no economic hardship. However, in line with our expectations, affective closeness with an elderly family member mattered differently depending on age. With increasing age, elderly respondents were expected to have similar levels of endorsement compared to those not having an elderly family member, irrespective of the level of affective closeness. For younger respondents, any level of affective closeness with a family member increased the predicted probability of endorsement compared to having no elderly family member.

The magnitude of estimated differences in probabilities to more strongly endorse old age policies was much greater with varying levels of perceived economic hardship compared to levels of affective closeness with an elderly family member. For respondents with an elderly family member with the lowest level of affective closeness, predicted probabilities for the most extreme category in endorsement of old age policies was 0.24 for a 25-year-old and 0.30 for a 75-year-old. When the level of affective closeness was set to highest, the age cleavage was reduced to 0.1 based on predicted probabilities of 0.29 and 0.30 respectively. Comparing this with predicted probabilities of 0.25 and 0.29 for respondents without an elderly family member shows that having a family member only marginally decreases (when affective closeness is high) or contributes to (when affective closeness is low) age cleavages. In calculating these predicted probabilities, we held the level of perceived hardship constant at the lowest level, while other characteristics were set at their means.

The control variables had similar effects as reported in previous research on

endorsement of the welfare state. Female respondents were considerably more likely to endorse old age policies, possibly a reflection of females being the kinkeepers of the family. The results also indicated that respondents leaning more towards the right in terms of political ideology were somewhat less likely to endorse old age policies. Those out of the labour market were more likely to endorse old age policies compared to respondents in paid work or students. Compared to having a low level of education, only having a high level of education decreased the probability to endorse old age policies.

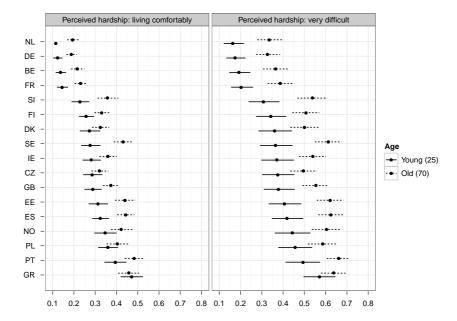


FIGURE 5.3: Differences in age cleavages between countries. Predicted probabilities (dots) and 95% credible intervals (lines) for an average respondent with no elderly family member by economic hardship. Solid lines represent a 25-year-old and dashed lines a 70-year-old average respondent.

### 5.3.3 Differences between countries

In Figure 5.3 we illustrate how the probability to most strongly endorse old age policies differed considerably between countries and between age groups within countries. With the exception of Norway and Sweden, respondents from all of the Southern and Eastern European countries generally had higher predicted probabilities to most strongly endorse old age policies compared to respondents from

Western-European countries (as indicated by the vertical shift to the right in both panels). Although these country differences in predicted probabilities were quite dramatic, they only concern the most extreme category. The differences between countries were generally limited to differences in whether predicted probabilities of a score of 8, 9, or 10 on a scale from 0 to 10 were highest.

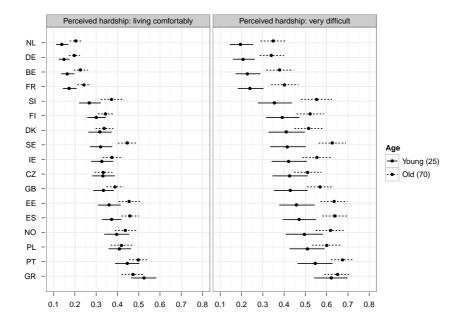


FIGURE 5.4: Differences in baseline response patterns and age cleavages between countries. Predicted probabilities (points) and 95% credible intervals (lines) for an average respondent with highest affective closeness with an elderly family member by economic hardship.

Figure 5.3 also illustrates how age cleavages (the degree to which credible intervals of 25 and 70 year-old respondents did not overlap) differed between countries. Note that age cleavages were universally observed across each unit of endorsement. Comparing the two panels in Figure 5.3 shows that age cleavages were in virtually all countries substantially greater for respondents perceiving their economic hardship as very difficult compared to when economic hardship was non-existent.

As noted before, the individual level effects of affective closeness with a possible elderly family member had only small effects, especially compared to perceived hardship. Nonetheless, as the first panel in Figure 5.4 shows, having an

elderly family member with the highest level of affective closeness overcame the age cleavages illustrated in the first panel of Figure 5.3. Except for Sweden, in all countries the credible intervals of both age groups overlap for respondents reporting the lowest level of economic hardship. The substantial age cleavages that existed for respondents perceiving their hardship as very difficult (second panels) could not be overcome by high levels of affective closeness with an elderly family member for most countries.

Model 3 shown in Table 5.1 indicated that none of our measurements of countries' policy environments were related to endorsement of old age policies in general. In Model 4 cross level interactions with age and it's interaction with affective closeness were added. The results indicated that differences in age cleavages between countries were not related to differences in dependency ratios. Differences in the number of elderly in institutional care were also unrelated to differences in whether the relationship with an elderly family member mattered differently depending on the age of the respondent. Hence, the substantial differences in age cleavages between countries could not be related to any of the measured characteristics.

## 5.4 Conclusion and discussion

This article aimed to clarify why scholars reported age cleavages in endorsement of old age policies that were smaller than expected. The second aim was to determine what differences between countries were related to differences in age cleavages between countries. In our expectation, going beyond describing overall patterns and digging deeper into specific factors contributing to age cleavages would show that age cleavages could only be expected to be substantial in specific circumstances.

Two explanations were proposed for how overall patterns might reveal more substantial age cleavages within certain subgroups of society. First, age cleavages were expected to be larger for people in adverse economic circumstances that lead them to consider their own interest more strongly compared to people in better economic circumstances. Our results revealed some support for this expectation. Age cleavages were not present for people living comfortably, but were for people living in adverse economic circumstances. Age cleavages were only substantial for respondents in the most adverse circumstances however. If self-interest would be the driving force behind age cleavages, the expected difference in self-interest between age groups was overcome for people in all but the most dire circumstances. Second, intergenerational relations with elderly family members were expected to mitigate age cleavages. Feelings of intergenerational obligations were

expected to help overcome the lack of self-interest of younger adults that lead them to endorse old age policies less compared to older adults who did have a clear interest. We expected that intergenerational obligations would mitigate age cleavages especially when people had high levels of affective closeness with elderly family members. These expectations were supported. The degree to which age cleavages were mitigated because of familial concerns was only marginal, especially compared to the substantial differences between respondents according to varying levels of economic hardship. The findings also indicated that female respondents were considerably more likely than men to endorse old age policies more strongly. Differences between men and women may also be apparent when considering intergenerational obligations as a mechanism for overcoming age cleavages. Determining how differences between men and women in their relationships with (older) family members is related to differences in age cleavages between men and women is an interesting question that remains to be answered.

Differences in age cleavages between countries were expected to be related to differences in dependency ratios and policy environments organizing care for elderly citizens. Age cleavages were expected to be greater in countries with greater dependency ratios because the clash of interests between generations would be more pressing in these countries. In countries where a greater deal of the caring responsibility for elderly family members was taken over, age cleavages were expected to be smaller because young adults would be alleviated from their (perceived) burden to care. Country differences in age cleavages were unrelated to any of our measured characteristics of countries.

The questions posed concerning responsibility of governments to care for older adults were somewhat different than those used in other research on age differences referred to before (Busemeyer et al., 2009; Svallfors, 2008). These authors used items asking about preferences for an increase in spending on policies specific to certain age groups. Such measures might be more susceptible to country differences in already existing policies. In countries with relatively few old age policies, a need for an increase in spending may be voiced by a large part of the population, whereas this would hold to a lesser degree in countries with already generous old age policies. This pattern would not necessarily have to be apparent when asking about the responsibility of governments for older people in general because in both countries endorsement could possibly be just as high.

Although age cleavages seemed larger than previously shown, they clearly did not corroborate the bleak outlook sketched by some scholars. Age cleavages were really only apparent in a country's most extreme category of endorsement. In some countries respondents were inclined to most strongly endorse old age policies whereas in others hardly anybody scored beyond an eight. Whether these

differences actually pertain to different degrees of endorsement of old age policies, or whether they pertain to differences between countries in response styles remains an open question (Morren, Gelissen, & Vermunt, 2011). Nevertheless, consistent with previous research, endorsement of old age policies is high in any country and in any age group (Van Oorschot, 2006). The variations shown in this article lies in whether respondents think it's mostly or entirely a responsibility of their government to care for elderly citizens in their countries.

Does this mean that the age cleavages documented in this article have no implications whatsoever? It depends. In countries where governments have ample means to fulfill all of the responsibilities that their citizens think they are responsible for, nothing is at stake. However, research interest in age cleavages was sparked by an understanding that in most countries social expenditures are not sustainable at the level they are at now. When citizens from various age groups are forced to choose between social support for their own or for other groups, age cleavages may actually undermine the intergenerational contract underlying welfare states.

A case in point is the discussion concerning pension reforms in various European Countries. Early retirement schemes were abandoned in The Netherlands because of their rising costs caused by the ageing of the Dutch labour force. However, research showed that prior to the changes in early retirement schemes, the desired age of retirement for those near retirement was substantially lower than implied by the planned reforms (Van Dalen & Henkens, 2002). Such patterns indicate that the desires of older generations go against the interests of younger generations who require a sustainable pension system that is able to offer them a pension when they get old. Older people form an increasingly larger share of populations, which consequently shifts voting power to recipients of policies that in many countries are too generous to sustain given the changing demographics. If older people would vote solely according to their own interests, subtle differences in what older adults want and what younger adults find reasonable may still lead to a conflict between generations.

## 6 Conclusion and discussion

### 6.1 Conclusion and discussion

This dissertation addressed the linkages between public policy, family exchanges and individual outcomes. Four empirical studies each addressed a different part of a conceptual model that in its core concerned linkages between the receipt of welfare services and family exchanges. These linkages were explained using differences in welfare policies, and the availability of family members. They were also used as explanations for differences in individual well-being and attitudes towards the welfare state. The joint aim of the four studies was to answer the following research question: how are family exchanges linked with receipt of welfare services and how do these linkages in turn shape policy endorsement and well-being?

The necessity of studying linkages between public policy and family exchanges lies in the increasing retrenchment of welfare states. This retrenchment results in people being more individually responsible for their own well-being. Presumably, in situations where people would normally be able to rely on welfare services, they now need to rely more on themselves or others. These others are very often family members, as the family is in many cases the first people turn to when in need of support. Hence, the retrenchment of welfare states due to looming difficulties with the sustainability of welfare state arrangements increases the necessity of generational and spousal contracts. These generational and spousal contracts are used to describe how family members from other generations (generational contract), or spouses (spousal contract) rely on each other (Kohli & Heady, 2010), something that is more broadly termed as family exchanges in this dissertation. There are substantial differences between countries in the extent to which these two contracts are called upon because of retrenchments and more longer lasting ideological differences between welfare state systems. These differences provided the basis of the research in this dissertation. Two studies exploited these differences between countries to determine the extent of linkages between receipt of welfare services and family exchanges. Two other studies used linkages as their vantage point to determine the degree to which linkages shape well-being and endorsement of welfare policies. In this concluding chapter I provide a brief overview of the main findings from the four empirical studies. This chapter ends with an overview of limitations and suggestions for further research.

### 6.1.1 Overview of main findings

#### Monetary transfers from parents to adult children

In the first study I focus on monetary transfers from parents to their adult children, and attempt to relate differences in welfare policies to differences in transfer behavior between countries, over and above compositional differences between countries. The existing research relating welfare state differences to differences in monetary transfers only distinguishes welfare regime types that cluster countries together (Esping-Andersen, 1999, 1990). I argue that this is not the best way to go because there are substantial differences within typologies that are otherwise overlooked. Overlooking such differences may be acceptable when describing broad patterns of similarity, but is unfortunate when predicting consequences of welfare policies for individuals. Because typologies only summarize a wide range of welfare policies, they cannot be used to predict how for example the likelihood to receive monetary support is dependent on the generosity of pension systems. By using specific information on policy differences between countries, I was able to predict that individuals with different characteristics would have different probabilities of receiving monetary support from their parents. The theoretical model was based on explicit expectations about the role of the child's and the parents' needs and resources, including the parents' need to make alternative expenditures, and the parents' expectations of future reciprocal support. The analyses of welfare policy differences were based on a social policy database (Saraceno & Keck, 2008) collected within the European MULTILINKS project (Dykstra & Komter, 2012), and information from Eurostat. The individual-level data were taken from the first wave of the Survey of Health, Ageing and Retirement in Europe (SHARE). The SHARE data have the benefit of spanning a number of European countries with very distinct social policies, and contain information on up to four children of the respondents (the adult parents in this research).

Using information from both parents and children indicated that the likelihood of a financial transfer being made is the outcome of a combination of resources (ability) of the parents and the needs of a child. Children with needs, as indicated by their employment status, having children, and living independently were substantially more likely to have received financial support from their parents. Parents living in material comfort were much more likely to support their adult children financially. Alternative expenditures such as being in bad health or having grandchildren other than the adult child's children lowered the likelihood of transfer receipt by the adult child.

While these findings at the individual level on the whole corresponded with

our expectations, findings at the country level did not. The measures of differences in welfare policies between countries used in this study – child-care support, unemployment protection, and old-age pensions – did not correspond with differences in the likelihood of receiving monetary support for those with young children, the unemployed, or receiving support from pensioned parents. The differences left after taking account of composition neither corresponded with any welfare state typology. Based on the findings in this study, there does not seem to be a clear link between welfare policies and financial transfers.

#### Older adults' networks and public care receipt

The first study researched linkages between receipt of welfare services and family exchanges by using family exchanges in the form of monetary transfers as the dependent variable. In the second study the perspective on linkages is reversed by now taking receipt of welfare services as the dependent variable and using family exchanges to explain them.

The receipt of publicly paid care to older adults was predicted using characteristics of family members surrounding these older adults. Two aspects of the paper set it apart from earlier research. First I argued that it is important to distinguish public from market care. Previous research had mainly dealt with the relationship between informal and formal care. My objection pertained to the concept of formal care. In virtually all of the research to date, formal care is conceptualized or measured as care paid for by the state (public care) or purchased from private parties (market care). Although this is an important distinction from care provided by family members or friends, we argued that it is important to distinguish public and market care within the broader concept of formal care. Predictions on the relationship between receipt of welfare services and care received from family members can be tested much more precisely when the receipt of welfare services is not convoluted with the possibility that respondents have purchased their care. The second aspect was a distinction between skilled and unskilled care provision within the concept of public care. Such a distinction already exists in for example the Dutch system of allocating care services to needy citizens. "Usual care" daily care that household members can be expected to provide — is distinguished from more specialized forms of care, and especially access to usual care has been drastically restricted based on the assumption that — when available — informal care givers should provide such care. This distinction had not made it to scholarly work however, something I argued was an important omission.

I used the distinction between skilled and unskilled care to predict that the availability of potential informal caregivers — spouses and children — would only reduce the likelihood of public care receipt when unskilled care was concerned.

The data I used to test this were a unique combination of Dutch survey data on families (the Netherlands Kinship Panel Study - NKPS) and registry data containing highly detailed and reliable information on the incidence and type of public care receipt.

The results revealed that the only apparent alternative to public care were female partners. Neither having children nor male spouses were associated with public care receipt. Further analyses revealed that female spouses were only an alternative to unskilled public care, and not skilled public care. A first interpretation for the findings is that a gender-bias possibly exists in processing public care requests – men are perceived as less able to provide care to their female partners. Another possible interpretation is that men lack the skills, or perceive themselves as lacking the care skills that female partners generally have.

## Spousal caregiving: a dyadic perspective

The third study is a logical extension to the second. Given the finding that female partners seem to be the only alternative to unskilled public care, the question arises whether the experiences of men and women giving care also differs. It is imperative to have a thorough understanding of the consequences of caregiving by family members for individual's well-being because of the retrenchment of welfare states taking place in virtually every country in the developed world. Two additions to the existing research on the consequences of caregiving made this research worthwhile.

First, I simultaneously considered givers and receivers of care within the same partnership, distinguishing men from women. This enabled us to determine the extent to which husbands and wives differed in their experiences of either giving or receiving care. Caregiving research has traditionally focused much more on caregiving than on receiving care. Irrespective of what is being studied, giving or receiving care are studied independently from each other. The analyses were done within a dyadic data analysis framework which allowed us take account of both partner's health status when determining each partner's association with giving or receiving care and the outcome measures. This way our estimates actually reflected the experiences of giving or receiving care, and not the experiences associated with fluctuations in health of either partners.

Second, I extended previous research by also focusing on changes in relationship quality. The vast majority of research on caregiving studies well-being such as life satisfaction. I argued that relationships that transition into a state where one of the spouses receives care from the other might suffer from this imbalance in the relationship. In addition to life satisfaction I therefore also studied relationship satisfaction. By doing so, I learned more on the changes that occur within the relationship itself when either partner requires care from the other.

The study was based on the British Household Panel Study (BHPS) that spanned 12 years of data collection. Such a long time span is unique for European datasets on family relations and was necessary to distinguish associations of our outcome measure with either onset or duration of giving and receiving care. In addition to the long time span, the BHPS also contains information on both spouses living in the household, enabling us to determine whether either giving or receiving care was more strongly associated with life satisfaction or relationship quality when care given or received was intense (measured as the number of hours of care given or received).

Overall the findings suggested that there is very little spillover from giving and receiving care to the way ones relationship is evaluated. The results indicated that the provision and receipt of spousal care was somewhat more detrimental for life satisfaction. With the exception of women providing intense care, only receiving care was found to be negatively associated with life satisfaction. Differences between men and women giving or receiving care were generally very small. An interesting question that remains is which specific factors are associated with changes in life satisfaction and relationship satisfaction. Future research should specifically point to processes underlying the changes that were described in this study.

#### Age cleavages in endorsement of old age welfare policies

The retrenchment of welfare states due to demographic changes has led researchers to expect that when looking at support for welfare policies that are not universal but restricted to a subset of people living in a country, the division of self-interest would be clearly visible in a division of attitudes. The fourth study addressed so-called age cleavages; differences between age groups in endorsement of welfare policies. The starting point of the study was the observation that age groups seem to think alike about topics in which their interests are opposites of each other. Insofar there are differences between groups that have an apparent conflict of interest, these differences are only marginal. In this study I drew on family exchanges and individual circumstances to argue why age cleavages in the endorsement of old age welfare policies are not as large as one would expect solely on the basis of individual interest because of age.

I used the concept of familial interest to argue that overcoming ones interest because of age might occur when people have close family members who might benefit from specific policies. These family members are taken into consideration when forming a position on specific policies. Linkages between welfare policies and family exchanges were included by expecting that familial interest would be stronger in countries where families share a larger part of caring responsibilities for family members. In addition to familial interest, I argued that when predicting endorsement of welfare policies, one should not look at interest positions one-dimensionally but take multiple competing positions into account. I expected age cleavages to be larger for people in adverse economic circumstances that lead them to consider their own interest more strongly compared to people in better economic circumstances.

The data for this study come from the fourth wave of the European Social Survey (ESS) which included a specific module called "Welfare attitudes in a changing Europe". Our dependent variable measured endorsement of old age policies by asking to what extent respondents deemed it a responsibility of the government to ensure a reasonable standard of living for the old. Given that the measurement level of the dependent variable was ordinal, and the ESS contained information on 28 countries, our model was estimated as a hierarchical ordered logit model.

The results suggested that the degree to which age cleavages were mitigated because of familial concerns was only marginal. Cleavages in endorsement between respondents with substantial economic difficulties were substantial. Having family members crossing generational lines did not do much to reduce them. Familial concerns were only able to overcome the marginal age cleavages that exist between age groups that are well-off. The findings also indicated that the linkage between welfare policies and family exchanges did not matter for country differences in age cleavages.

Since the study showed that age cleavages in endorsement of old age policies are generally small, the question arises whether these cleavages are important enough to have any implications. The answer might lie in the future. Research interest in age cleavages was sparked by an understanding that in most countries social expenditures are not sustainable at the level the are at now. When citizens from various age groups are forced to choose between social support for their own or for other groups, age cleavages may actually undermine the intergenerational contract underlying welfare states.

## 6.1.2 Limitations and suggestions for further research

One consistency in the studies summarized above stands out. Contrary to very convincing arguments for linkages between public policy and family exchanges, these were hardly found in this dissertation. The only clear exception was the

finding that men in need of care living together with a spouse were less likely to receive unskilled public care compared to women in need of care living together with a man. Perhaps unsurprisingly, this finding emerged in analyses using a dataset that did not concern multiple countries. In all of the country comparative studies performed in this dissertation, a link between public policy and family exchanges was not found. This can mean two things. Either the association does not exist, or the methods or measures used in this dissertation were unsuitable to find an association that does exist. Based on the vast amount of theoretical arguments put forward in previous research on the linkage between receipt of welfare services and family exchanges, one would think the latter.

In this dissertation indicators rather than typologies were used to measure between-country differences. According to my reasoning, this leads to more precise predictions of what a linkage between welfare service receipt and family exchanges should look like, should such a linkage exist. In my opinion the most important caveat in this dissertation is the use of country comparative datasets necessary to test these more precise predictions. This caveat is not limited to this dissertation but characteristic of much of the research on the linkages that this dissertation also concerns. Perhaps it is useful to take a step back and consider why scholars use between country differences to establish whether linkages exist.

### Why between country comparisons of welfare policies?

Scholars need between country differences in welfare policies to establish how family exchanges are shaped by receipt of welfare services provided through these policies. The reason is that there is no within-country variation in eligibility criteria of welfare services at a given moment in time. If a scholar would want to establish whether welfare service receipt is causally affected by a certain type or amount of family exchange, such variation is necessary.

To see why variation in eligibility of welfare services is necessary, an example is perhaps most clear. Consider two women living in the same country at the same time, both 54 years old, both having the same severe care needs because of the same disease. One of the women does not receive any welfare services and has children and a spouse taking care of her intensively. The other does receive the welfare services that the other woman is also eligible to but does not receive. This woman also has children and a spouse taking care of her but to a much lesser extent. Is this difference in family exchanges between these two women caused by the fact that they differ in their welfare service receipt? My answer would be no. There are probably other underlying factors responsible for why one women chose to apply for the welfare services she receives while the other did not. It is impossible to say that — using standard multivariate regression

techniques — an association between service receipt and family exchange in this case is due to the nature of the services themselves. It is for example much more likely that the association is an indication of the reverse pattern. One of the women in my example most probably chose not to apply for welfare services because she had family members able and willing to perform the care that she would have been able to receive through welfare services. This also shows why there is no problem researching linkages between family exchanges and receipt of welfare services (arrow 1 in Figure 1.1 of chapter 1) instead of between receipt of welfare services and family exchanges (arrow 2 in Figure 1.1 of chapter 1). Since there is plenty variation in family exchanges within a country, researchers are able to determine the extent to which people chose not to receive welfare services for which they are eligible because of family exchanges.

#### Issues with multilevel modeling in welfare state research

The above example has hopefully made clear why scholars revert to between country comparisons to research the linkage between welfare service receipt and family exchanges. Unfortunately the outcome of between country comparisons hardly provide the conclusive evidence that researchers are after. Below I outline why I think this is the case.

First, country comparative datasets do not contain many countries. The lack of countries in a dataset restricts the number of variables that can be taken into account of simultaneously. This creates the problem that alternative explanations for an association between welfare service receipt and family exchanges are difficult to rule out. Although the data collection of country comparative datasets is often centrally coordinated, the actual collection of data in a certain country is dependent on the availability of funding available in individual countries. Hardly any data collection has the means of centrally funding a country comparative dataset. Even if datasets on public policy and family exchanges that include a large amount of countries would exist, the question remains whether we expect that our theoretical models can be applied to each and every country in our dataset. Including Asian as well as European countries in the same analyses and assuming that the same model would apply to each and every country in the dataset may be problematic. This restricts the number of countries available for analyses, and thus the number of alternative explanations that can be taken into account.

Second, measuring alternative explanations for the association between welfare service receipt and family exchanges is a challenge. One of the most obvious explanations for an association between country differences in welfare service receipt and family exchanges is culture. Pfau-Effinger (2005) argues that both

welfare state policies and individual behavior are shaped by a country's cultural system. Not taking account of this cultural system would thus create an association between services receipt and family exchanges that cannot be interpreted causally.

While Pfau-Effinger (2005) provides convincing arguments for why the cultural system of a country should be taken into account when researching the link between public policy and individual behavior, she is not very specific on how a cultural system should be measured. This is perhaps due to the difficulty of measuring culture. Culture is itself a concept that carries many different meanings. Pfau-Effinger (2005) distinguishes as many as four key elements of "welfare culture", the basis of different welfare arrangements. According to her these key elements are (1) cultural ideas on the necessity of labor market integration of dependent groups, (2) cultural ideas about social inclusion or exclusion, (3) cultural ideas about redistributional justice, and (4) cultural values on poverty.

Assuming that these are indeed (some of) the cultural underpinnings of welfare states, how would one go about measuring them? When using standard statistical methods such as multilevel models we should be controlling for these elements if we agree that these are the elements shaping both welfare policies and individual behavior. Even if we did have measures for these elements, we would really require measurements going back in time because 'culture' that would now be measured has already been influenced by the welfare policies that are now in place (Pfau-Effinger, 2005).

#### The importance of explicating causal assumptions.

The above shows that based on country comparative multilevel models it is very hard, if not impossible, to estimate relationships between receipt of welfare policies and family exchanges that can convincingly be presented as something causal. This would not be problematic if all researchers would want is to describe relationships. Although researchers are well trained in avoiding causal language when describing their results, this can hardly be a solution to the problem. What I would have liked to present were causal estimates of the assumed relationships in my conceptual model. Because I knew my methodological strategy did not allow for using causal language when describing my results, I did not.

In my view researchers should try harder to come up with causal claims than they do now. Describing how family exchanges differ in countries with different levels of family policy can be interesting. However, if we want to understand how and why family policy shapes family exchanges, we need to move beyond descriptions and come up with claims about the expected causal relationships. In my view only causal claims provide necessary conditions for scientific debate that

brings science further because descriptive estimates are insensitive to criticism. A description of an association will generally be correctly estimated, but does not provide us with much information on a causal relationship. Of course one finds arguments about whether or not relevant alternative explanations have been taken into account in multivariate models. However, as I have argued above, in phenomena with such complexity as the relationship between welfare states and individual behavior, there are factors that simply cannot properly be taken into account. To further the scientific debate on how and why linkages between receipt of welfare services and family exchanges might work, we need debates on causal claims, not descriptions.

#### Methods and data for causal estimates

If researchers were to put more effort in attempting to provide causal estimates of relationships of interest, other methods are needed than the multilevel models that are so often used because it is impossible to assume that all relevant alternative explanations have been taken into account. Luckily, methods that provide options for causal estimation are available. Below I discuss a methodological and statistical strategy.

The most obvious alternative to country comparative research is to perform experiments. Experiments are by far the most powerful tools available to researchers. Once an experiment has been properly designed and executed, causal estimates of interest are very straightforward to derive (Morgan & Winship, 2007).

The problem with experiments lies with the feasibility of implementing them. Experiments manipulating the receipt of welfare services require that a (randomized) group of people do not have access to the same services that another group does have access to. This is probably one of the most important reasons why experiments are not performed as much as they should. In my view however this disadvantage does not outweigh the clear benefits. Experiments are just about the only tools available that provide scientists and policy makers with the answers that they are actually after. In my view the enormous costs that go into social protection through welfare policies requires for unambiguous evaluations of the supposed benefits.

#### Causal estimation from observational data

Until experiments are the default precondition before widespread implementation of (changes in) welfare policies, researchers have access to a number of statistical techniques that should be used much more often. An attractive option for research on the linkage between public policy and family exchanges are regression

discontinuity designs. Regression discontinuity techniques exploit sudden changes in the lives of people to serve as quasi-experimental designs. By comparing observations closely before and after these sudden changes, researchers are able to estimate causal effects in situations where experimental randomization is unfeasible. Given that public policy changes very often there are numerous occasions where these designs can be implemented. To be really useful, this technique requires data that contain longitudinal measures spanning relatively long periods of time before and after these changes. Although this might be costly, such data collections are an attractive alternative in situations where randomized assignment of treatment and control conditions are politically or practically unfeasible.

Consider for example the changes in the Exceptional Medical Expenses Act (EMEA) described in chapter 3 on page 45. With the introduction of the Social Support Act, a large part of the people that received publicly provided household care lost this because they were no longer eligible. Under the new regime, in most cases people were expected to rely on their family members for support. A regression discontinuity design would be able to exploit this situation to estimate a causal effect of losing publicly provided household care on family exchanges.

An extensive discussion of regression discontinuity and other techniques is beyond the scope of this dissertation. Many overviews already exist (e.g. Morgan & Winship, 2007; Winship & Morgan, 1999; Angrist & Pischke, 2008). The most important prerequisite for using techniques such as instrumental variables regression, propensity score matching or regression discontinuity designs is a shift in scientific thinking that ensures that researchers attempt to answer their research questions using causal language. This will automatically force researchers to more thoroughly consider what type of data or statistical technique is able provide the proper answers.

7 Samenvatting (Summary in Dutch)

## 7.1 Terugtrekkende overheid

De Nederlandse verzorgingsstaat is de afgelopen decennia aanzienlijk veranderd. Daarin is zij niet uniek. Veel Europese welvaartsstaten waren oorspronkelijk, net als de Nederlandse verzorgingsstaat, erop gericht om mensen een financieel vangnet te bieden in situaties waarin zij zelf (tijdelijk) geen inkomen konden generen. Later zijn zij omgevormd naar systemen waarbij nadruk werd gelegd op individuele verantwoordelijkheid en waarin werd getracht zoveel mogelijk mensen aan het werk te krijgen en te houden. Ook het huidige overheidsbeleid is er op gericht om mensen zoveel mogelijk onafhankelijk te laten zijn van overheidssteun. Veranderingen in de afgelopen jaren zijn vooral ingegeven door de voorziene financiële problemen die de steeds verder toenemende vergrijzing met zich meebrengt.

Een voorbeeld van de bovenstaande verandering in het Nederlandse welvaartssysteem is de recente wijziging in de Algemene Wet Bijzondere Ziektekosten (AWBZ). Voorheen konden zowel mensen met een zware als die met een lichte beperking aanspraak maken op huishoudelijke hulp, maar sinds kort is deze voorziening afgeschaft voor mensen met een lichte beperking. Zij worden geacht deze hulp zelf te mobiliseren door aan te kloppen bij familieleden of deze hulp particulier in te kopen. Deze verschuiving van verantwoordelijkheden van de overheid naar individuen heeft zich ook in veel andere Europese landen zoals Finland, Zweden en het Verenigd Koninkrijk, voltrokken.

Gegeven bovenstaande ontwikkelingen is het de vraag of verschuivingen naar individuele verantwoordelijkheid een grotere afhankelijkheid van familieleden met zich meebrengen. Mensen mogen dan wel minder afhankelijk zijn geworden van de overheid, ze zijn wellicht een stuk afhankelijker van familieleden geworden. Het eerste deel van dit proefschrift richt zich op de vraag of overheidsbeleid daadwerkelijk samenhangt met uitwisselingen van steun tussen familieleden, en zo ja, hoe deze samenhang er voor verschillende typen beleid precies uitziet.

In het tweede deel van dit proefschrift wordt nagegaan wat voor gevolgen de verbindingen tussen overheidsbeleid en familie-uitwisselingen voor individuen hebben. Er zijn twee belangrijke vragen te stellen bij de steeds verdere verschuiving van verantwoordelijkheden van de overheid naar individuen en daardoor naar familieleden. De eerste vraag is ingegeven door de constatering dat de afhankelijkheid van familieleden vaak een afhankelijkheid tussen generaties is. Grootouders zijn voor hulp steeds vaker aangewezen op hun (klein)kinderen en kinderen worden geacht steeds vaker een beroep te doen op hun ouders. De vraag is of die verschillende generaties wel instemmen met het toebedeeld krijgen van steeds meer verantwoordelijkheden. Onderzoek laat over het algemeen zien dat er veel minder verschillen in instemming met beleid zijn tussen hulp gevende en

hulp ontvangende generaties dan verwacht zou mogen worden op basis van het verschil in belang dat zij hebben bij genereus overheidsbeleid. De tweede vraag is ingegeven door de vaststelling dat familieleden wellicht wel bereid zijn om meer voor elkaar te zorgen maar dat dit ook (nadelige) gevolgen kan hebben voor het welbevinden van zowel de zorgverlener als de ontvanger van hulp.

Samenvattend staan in dit proefschrift niet alleen de verbindingen tussen overheidsbeleid en familie-uitwisselingen centraal, maar ook de gevolgen die deze verbindingen hebben voor het welbevinden van familieleden als voor de mate waarin deze familieleden instemmen met het (voorgestelde) overheidsbeleid. Mijn onderzoeksvraag luidt dan ook als volgt: In hoeverre en op welke wijze is overheidsbeleid verbonden met familie-uitwisselingen en in hoeverre en op welke wijze beïnvloeden deze verbindingen het welbevinden van familieleden en de mate van hun instemming met overheidsbeleid.

## 7.2 Vier empirische hoofdstukken

De beantwoording van de onderzoeksvraag is uitgewerkt in vier empirische hoofdstukken. De eerste twee hebben betrekking op de verbindingen tussen overheidsbeleid en familie-uitwisselingen, de laatste twee op de gevolgen daarvan voor welbevinden en instemming met beleid. Hieronder worden voor elk van de hoofdstukken de aanpak en belangrijkste resultaten samengevat.

## 7.2.1 Welvaartsstaten en financiële steun van ouders aan hun volwassen kinderen

Eerder onderzoek heeft vooral gebruik gemaakt van een veelgebruikte typologie van welvaartsstaatverschillen tussen landen (Esping-Andersen, 1990) om te voorspellen in welke landen familie-uitwisselingen het sterkst zijn. De algemene conclusie van de betreffende studies is dat in meer genereuze welvaartsstaten familie-uitwisselingen frequenter voorkomen dan in minder genereuze welvaartsstaten.

Bovenstaande bevinding zou er op kunnen wijzen dat beleid welke een grotere individuele verantwoordelijkheid voorstaat ervoor zorgt dat familieleden elkaar minder vaak helpen. Het probleem van het gebruik van typologieën is echter dat het onduidelijk is of, en zo ja, welk beleid binnen een typologie verantwoordelijk is voor gevonden verschillen in familie-uitwisselingen. In dit hoofdstuk beargumenteer ik dat het beter is om de verschillen tussen typologieën meetbaar te maken wanneer men het verband tussen welvaartsstaten en familie-uitwisselingen in kaart wilt brengen.

In dit licht richtte het onderzoek in het eerste empirische hoofdstuk zich specifiek op financiële hulp die ouders aan hun volwassen kinderen geven. De verwachting was dat overheidsbeleid ten aanzien van kinderopvang, werkloosheid, en ouderen, de behoefte van kinderen tot het ontvangen van financiële steun en de mogelijkheden van ouders tot het geven van financiële steun structureren.

De analyses in het betreffende hoofdstuk zijn gebaseerd op de SHARE (Survey of Health, Ageing and Retirement in Europe) data. Deze data maken het mogelijk om verschillende Europese landen met elkaar te vergelijken en ook om rekening te houden met de eigenschappen van zowel ouders als kinderen.

De resultaten laten vooral zien dat het gebruik van typologieën – een strategie veelvuldig gebruikt in eerder onderzoek – het begrip van de verbindingen tussen overheidsbeleid en familie-uitwisselingen vertroebelt. Wanneer een concrete meting van overheidsbeleid wordt meegenomen in de analyse, blijkt er namelijk geen duidelijk verband te bestaan tussen overheidsbeleid en financiële hulp van ouders aan hun volwassen kinderen. Werkloze kinderen en gepensioneerde ouders hebben zoals verwacht op basis van hun persoonlijke situatie een grotere kans om financiële hulp te krijgen respectievelijk te geven. Het blijkt echter niet het geval te zijn dat werkloze kinderen uit landen waar zij minder overheidssteun ontvangen een grotere kans hebben op financiële steun van hun ouders.

# 7.2.2 Zijn partners en volwassen kinderen alternatieven voor publieke zorg?

In het tweede empirische hoofdstuk wordt beargumenteerd dat onderzoek naar de verbindingen tussen overheidsbeleid en familie-uitwisselingen aandacht moet hebben voor het onderscheid tussen publieke zorg en zorg die wordt aangeboden door marktpartijen. Beide zijn alternatieven voor zorg die mensen van familieleden kunnen krijgen. In eerder onderzoek wordt dit onderscheid nauwelijks gemaakt en wordt vaak enkel formele van informele zorg gescheiden. Dit maakt het onderzoeken van verbindingen tussen beleid en familie-uitwisselingen lastig omdat formele zorg ook zorg kan omvatten die door marktpartijen wordt verleend.

Een andere toevoeging aan bestaand onderzoek is het onderscheid dat in dit hoofdstuk wordt gemaakt tussen specialistische en niet-specialistische zorg. Ik stel in dit hoofdstuk dat de verbinding tussen publieke zorg en zorg gegeven door familieleden afhangt van het type zorg dat een hulpbehoevend persoon nodig heeft. Als dat gespecialiseerd hulp betreft die niet eenvoudig door familieleden gegeven kan worden dan zullen familieleden ook niet snel als alternatief kunnen dienen voor publieke zorg.

Het gelijktijdige onderscheid tussen publieke zorg en marktzorg, en tussen gespecialiseerde en niet-gespecialiseerde zorg vraagt om specifieke data. In veel van de bestaande publiek beschikbare datasets wordt slechts onderscheid gemaakt tussen formele en informele zorg. Om toch over de benodigde informatie te beschikken werd er op het CBS – door medeauteur van het tweede empirische hoofdstuk Ruben van Gaalen – een koppeling gemaakt tussen de NKPS (Netherlands Kinship Panel Study) en registerdata. Die registerdata bevatten zeer gedetailleerde informatie over het type AWBZ-zorg dat respondenten in de NKPS in het jaar voor deelname aan het onderzoek hadden ontvangen. De combinatie tussen NKPS en registerdata maakt het mogelijk om na te gaan in hoeverre partners en volwassen kinderen een alternatief voor publieke zorg en meer specifiek nietgespecialiseerde publieke zorg zijn.

De resultaten suggereren dat mannelijke partners en volwassen kinderen geen alternatief voor niet-specialistische zorg zijn. Alleen mannen met een vrouwelijke partner hebben een kleinere kans op het ontvangen van niet-specialistische AWBZ-hulp. Alleen vrouwelijke partners lijken dus een alternatief voor niet-gespecialiseerde publieke zorg, mannelijke partner niet. Deze bevinding verdient aandacht, omdat het Nederlandse beleid veronderstelt dat, wanneer iemand een partner heeft, deze partner de niet-specialistische AWBZ-zorg ook zal verlenen: Enkel mensen zonder partner kunnen aanspraak maken op dit type AWBZ-hulp. Wellicht worden mannen vaker dan vrouwen niet in staat geacht om de vereiste zorg te verlenen.

## 7.2.3 Zorguitwisseling tussen partners

In het derde empirische hoofdstuk verschuift de focus van de verbindingen tussen overheidsbeleid en familie-uitwisselingen naar de mogelijke gevolgen van deze verbindingen. In dit hoofdstuk richt ik mij specifiek op de gevolgen voor welbevinden en relatiekwaliteit.

Partners worden geacht om voor elkaar te zorgen als de partner die deze zorg zou moeten verlenen daartoe in staat is. Het vorige hoofdstuk liet zien dat deze regel vooral consequenties heeft voor de vrouwelijke partner. Zij krijgen minder vaak dan mannen ondersteuning door de overheid bij niet-gespecialiseerde vormen van zorg. In dit hoofdstuk staat de vraag centraal of de toenemende druk om zorg te verlenen en de toenemende afhankelijkheid van de partner om hulp te ontvangen negatieve gevolgen kan hebben voor zowel gevers als ontvangers van zorg.

De bijdrage van dit hoofdstuk is drieledig. Ten eerste wordt er onderscheid gemaakt tussen mannelijke en vrouwelijke ontvangers en verleners van zorg. Het onderscheid tussen mannen en vrouwen is van belang omdat op basis van de literatuur niet duidelijk is of het feit dat vrouwen vaker en ook vaak zwaardere zorg dan mannen verlenen aan hun partner ook leidt tot meer negatieve consequenties voor het welbevinden en de relatiekwaliteit van vrouwelijke dan voor mannelijke partners.

Ten tweede is de aandacht voor het welbevinden en de relatiekwaliteit van de zorgontvanger een belangrijke bijdrage aan de literatuur. Er is al een omvangrijk aantal studies verricht naar de gevolgen van het geven van zorg voor het welbevinden van de zorgverlener, maar over de invloed van het ontvangen van zorg op welbevinden en relatiekwaliteit is nog maar zeer weinig bekend. Omdat zorgbehoevenden steeds meer worden geacht een beroep te doen op familieleden is het interessant om na te gaan of het ontvangen van zorg verleend door familieleden gevolgen heeft voor het welbevinden van de ontvanger van die zorg.

Tot slot levert de benadering gehanteerd in dit hoofdstuk een methodologische bijdrage aan de literatuur. In dit hoofdstuk wordt namelijk een analytisch perspectief gebruikt dat tegelijkertijd zowel ontvangers als verleners van zorg in ogenschouw neemt. Dit is van belang omdat het onduidelijk is in hoeverre het ontvangen van zorg ten opzichte van het verlenen van zorg verschillende consequenties heeft voor iemands welbevinden.

De analyses voor dit hoofdstuk zijn gebaseerd op de BHPS (British Household Panel Study). Deze longitudinale data maken het mogelijk om na te gaan in hoeverre de overgang naar een situatie waarin hulp wordt verleend en hulp wordt ontvangen gevolgen heeft voor het welbevinden en de relatiekwaliteit van zowel hulpverleners als -ontvangers. Deze benadering is wezenlijk anders dan de benadering gehanteerd in eerder onderzoek, omdat daar enkel koppels werden bestudeerd waarin de hulp al werd gegeven en ontvangen. Het nadeel van een dergelijke benadering is dat men niet goed kan onderzoeken in hoeverre het geven of ontvangen van hulp van invloed is op het welbevinden en de relatiekwaliteit van de partners, omdat de partner gedurende de studie zich al in een zorgrelatie bevinden en niet de overgang maken van een gelijkwaardige relatie naar een zorgrelatie. In het licht van de toegenomen afhankelijkheid van familieleden is het interessant om te weten of het afhankelijk worden van familieleden gevolgen heeft voor het welbevinden van beide partners. Dit is iets substantieel anders dan te weten of het afhankelijk zijn van familieleden gevolgen heeft voor de partners over de duur dat de zorgbehoevende afhankelijk is.

De resultaten tonen dat zowel het geven als ontvangen van zorg relatief weinig gevolgen lijkt te hebben voor de relatiekwaliteit van beide partners. De verandering van een min of meer gelijkwaardige relatie naar een zorgrelatie lijkt daarentegen iets meer van invloed te zijn op het welbevinden van de partners.

De negatieve gevolgen blijven echter klein. Tot slot tonen de resultaten enkele, maar wel marginale, verschillen tussen mannelijke en vrouwelijke hulpverleners en ontvangers.

# 7.2.4 Landenverschillen in instemming met beleid tussen leeftijdsgroepen

In het laatste empirische hoofdstuk richt ik mij op de gevolgen van de verbindingen tussen overheidsbeleid en familie-uitwisselingen voor de mate waarin mensen instemmen met overheidsbeleid, specifiek ouderenbeleid. Ik formuleer hypotheses voor mensen van verschillende leeftijdsgroepen op basis van hun belangen.

In tegenstelling tot algemeen gedeelde verwachtingen, toont de literatuur over een heel spectrum van typen overheidsbeleid aan dat verschillen in de mate waarin men instemt met beleid niet veel te maken heeft met leeftijd. In dit vierde empirische hoofdstuk probeer ik, door de introductie van intergenerationele belangen, deze puzzel te verhelderen.

Leeftijd wordt een steeds belangrijkere scheidslijn in overheidsbeleid omdat een van de belangrijkste redenen voor hervormingen in de laatste jaren de getalsmatige verhouding tussen jongeren en ouderen is. Ouderen worden bijvoorbeeld geacht langer door te werken, en vaker een beroep te doen op hun familieleden. Aan de andere kant van het spectrum is er de recente substantiële versobering van kinderopvangvergoedingen.

Het is aannemelijk dat mensen afhankelijk van de levensfase waarin ze zitten wel of niet instemmen met bepaald beleid omdat veel overheidsbeleid zich veelal richt op een groep mensen in een bepaalde leeftijdscategorie. Hoewel deze redenering logisch lijkt, strookt dit niet met de bevindingen uit eerder onderzoek. Deze toonden dat de verschillen tussen leeftijdsgroepen klein zijn. Waar andere onderzoekers veelal hun zoektocht naar verklaringen voor deze constatering staakten, wordt in dit hoofdstuk een poging gedaan om uit te zoeken hoe het komt dat mensen niet in sterke mate gestuurd worden door hun eigenbelang.

In het hoofdstuk wordt beargumenteerd dat mensen niet alleen maar oog hebben voor hun eigen door leeftijdsgrenzen afgebakende belangen, maar dat zij ook worden gedreven door intergenerationele belangen. Door deze intergenerationele verbindingen – in het hoofdstuk familiaire overwegingen genoemd – nemen mensen ook het belang van familieleden in andere leeftijdsgroepen in ogenschouw bij het bepalen in welke mate zij instemmen met bepaald beleid.

Omdat ik mij in dit hoofdstuk richt op instemming met ouderenbeleid, was de verwachting dat ouderen zelf in de grootste mate van mening zijn dat de overheid verantwoordelijk is voor een redelijke levensstandaard voor ouderen. Vooral jongvolwassenen die nog ver verwijderd zijn van hun oude dag zouden in de minste mate moeten vinden dat dit de verantwoordelijkheid van de overheid is.

De aanname is bovendien dat eigenbelang vooral leidend is voor mensen naarmate zij daadwerkelijk belang hebben bij overheidssteun, en dus naarmate de economische omstandigheden waarin men leeft slechter zijn.

In het hoofdstuk wordt ook een verklaring getoetst voor het gegeven dat landen verschillen in de mate waarin er verschillen tussen leeftijdsgroepen zichtbaar zijn. Deze verklaring wordt gezocht in de verbinding tussen overheidsbeleid en familie-uitwisselingen. Landen verschillen sterk in de mate waarin familieleden verantwoordelijk voor elkaars welzijn worden geacht te zijn. Ik verwacht daarom dat in landen waar de overheidssteun voor ouderen genereus is, er minder intergenerationele verbindingen aanwezig zijn en leeftijdsverschillen in instemming met ouderenbeleid sterker zichtbaar zijn.

De combinatie van individuele en macroverklaringen vereist een dataset die het toetsen van verklaringen op de twee verschillende niveaus mogelijk maakt. Het ESS (European Social Survey) is een dataset met informatie over de attitudes van mensen uit een groot aantal Europese landen. Aan deze dataset werden gegevens over beleidsverschillen tussen landen gekoppeld. Deze gegevens werden verzameld door collega's Chiara Saraceno en Wolfgang Keck binnen het MULTI-LINKS project.

De data werden geanalyseerd met Bayesiaanse statistische technieken. Het grootste voordeel van deze technieken boven andere veelgebruikte technieken zijn de meer correcte schattingen van significantietoetsen die ze opleveren. Bij andere technieken loopt men vooral bij analyses op basis van weinig landen een veel groter risico dat de gevonden resultaten niet kloppen.

In lijn met mijn verwachtingen tonen de resultaten dat leeftijdsverschillen alleen groot zijn wanneer mensen in slechte economische omstandigheden verkeren. Familiale overwegingen lijken ook vooral van belang voor deze groep mensen. Dat lijkt te liggen aan het gegeven dat mensen in minder slechte economische omstandigheden zich minder laten leiden door eigenbelang.

De resultaten tonen substantiële verschillen tussen landen in de mate waarin er leeftijdsverschillen in de instemming met ouderenbeleid zijn. De resultaten suggereren echter dat de mate waarin er een beroep op familieleden door overheden wordt gedaan niet leidt tot verschillen in de mate waarin men familiale overwegingen het eigenbelang laat overwinnen.

## 7.3 Conclusie en discussie

Het onderzoek in dit proefschrift richt zich op verbindingen tussen overheidsbeleid en familie-uitwisselingen, en de gevolgen van deze verbindingen voor de betreffende familieleden. Aandacht voor deze verbindingen, en de gevolgen ervan, wordt gedreven door het feit dat vrijwel alle Europese welvaartsstaten hervormingen door moeten voeren om hun welvaartsstaat betaalbaar te houden. Deze hervormingen houden vaak een terugtrekking van verantwoordelijkheden in waardoor mensen meer individuele verantwoordelijkheid moeten dragen voor hun eigen welzijn. In de praktijk houdt dit in dat slechts een enkeling zorg voor zichzelf kan inkopen bij marktpartijen, terwijl de overgrote meerderheid een beroep moet doen op familieleden. Dit proefschrift richt zich op de vraag in hoeverre een terugtredende overheid daadwerkelijk meer familie-uitwisselingen met zich meebrengt en wat de mogelijke gevolgen hiervan zijn.

Het onderzoek in dit proefschrift bestaat uit twee delen waarin de verbindingen tussen overheidsbeleid en familie-uitwisselingen centraal staan. In de eerste twee hoofdstukken wordt gekeken in hoeverre deze verbindingen daadwerkelijk bestaan en waardoor de aanwezigheid van deze verbindingen kan woren verklaard. In de laatste twee hoofdstukken zijn deze verbindingen het startpunt om na te gaan in hoeverre ze het welbevinden en opvattingen van familieleden structureren.

Dat er verbindingen bestaan tussen overheidsbeleid en familie-uitwisselingen lijkt een vanzelfsprekendheid. Bij hervormingen doet de overheid immers in toenemende mate een beroep op familieleden om hulp- en zorgtaken op zich te nemen. Op basis van grove kwalitatieve beschrijvingen van verschillen in overheidsbeleid tussen landen is al veelal geconcludeerd dat deze verbindingen inderdaad bestaan. In dit proefschrift wordt deze constatering opnieuw getoetst, door zo gedetailleerd mogelijk na te gaan wat voor verbindingen er dan precies bestaan, en tussen welk overheidsbeleid en welke familieleden deze bevindingen zich bevinden. Een dergelijke gedetailleerde kijk op de verbindingen tussen overheidsbeleid en familie-uitwisselingen levert een veel genuanceerder beeld op. Uit dit proefschrift komt naar voren dat de verbindingen vaak moeilijk vast te stellen zijn. In de gevallen waar de verbindingen wel duidelijk aanwezig zijn, gaan ze slechts op voor bepaalde groepen. Slechts vrouwelijke en niet mannelijke partners blijken bijvoorbeeld een alternatief voor niet-gespecialiseerde zorg die de overheid in principe overlaat aan familieleden.

In dit proefschrift worden vervolgens twee mogelijke consequenties van verbindingen tussen overheidsbeleid en familie-uitwisselingen onderzocht. Allereerst wordt er nagegaan wat voor gevolgen een terugtredende overheid kan hebben voor partners die meer en vaker voor elkaar moeten gaan zorgen. Er wordt een

onderscheid tussen mannen en vrouwen gemaakt omdat, zoals ook uit het tweede empirische hoofdstuk blijkt, vooral vrouwen de gevolgen ervaren van een terugtrekkende overheid in termen van zorglast. Uit mijn bevindingen komt naar voren dat wanneer er zorg wordt verleend of ontvangen, de gevolgen voor mannen en vrouwen niet ver uiteenlopen. Omdat vrouwen echter vaker zorg verlenen, zullen ze ook vaker de gevolgen hiervan ondervinden. De resultaten in dit proefschrift suggereren echter dat deze gevolgen in termen van verschillen in welbevinden en relatiekwaliteit tussen mannen en vrouwen beperkt blijven.

Ten tweede wordt er nagegaan of het zo zou kunnen zijn dat een terugtredende overheid ertoe leidt dat mensen zich vooral door eigenbelang laten leiden bij het beoordelen van overheidsbeleid. Er wordt specifiek naar instemming met ouderenbeleid gekeken. De resultaten suggereren dat eigenbelang geen grote leidraad is voor instemming met overheidsbeleid; leeftijdsverschillen in instemming met beleid zijn klein in vrijwel alle Europese landen. Ze zijn iets groter als alleen mensen in economisch slechte omstandigheden in ogenschouw worden genomen.

De vraag is wat de resultaten uit dit proefschrift voor betekenis hebben voor het grotere wetenschappelijke debat dat wordt gevoerd over de gevolgen van een terugtrekkende overheid voor familierelaties. Allereerst is de boodschap dat de empirische realiteit vaak maar met moeite strookt met gedane aannamen over de verbindingen tussen overheidsbeleid en familie-uitwisselingen. Dit betekent niet automatisch dat die verbindingen niet bestaan. Het niet kunnen vinden van duidelijke verbindingen kan ook aan de gebruikte methoden en data liggen. Uiteindelijk komen de analyses in dit proefschrift neer op beschrijvingen van de situaties waarin er wel/geen verbindingen lijken te bestaan.

Hoewel dit proefschrift een belangrijke bijdrage levert aan de literatuur door de verbindingen tussen overheidsbeleid en familie-uitwisselingen te onderzoeken, moet deze bijdrage niet worden overschat. Om vast te kunnen stellen hoe deze verbindingen precies werken en wat voor gevolgen ze hebben zijn idealiter andere methoden nodig die in dit proefschrift en in het meeste andere onderzoek niet gebruikt worden. Er zijn niet alleen zeer gedetailleerde gegevens nodig met betrekking tot de uitwisseling van hulp en zorg tussen familieleden. Aanvullend zijn er data nodig die het mogelijk maken om de verbindingen tussen beleid en deze familieleden te onderzoeken. Vanwege de schaarste aan geschikte data kan het wetenschappelijke debat vaak niet scherp genoeg gevoerd worden omdat de basis waarop beweringen worden gedaan vrij dun is.

Voor sterkere conclusies van wetenschappelijk onderzoek naar verbindingen tussen overheidsbeleid en familie-uitwisselingen zou meer gebruik gemaakt moeten worden van (1) experimenten en (2) longitudinale gegevens van mensen voor

en na het invoeren van bepaalde beleidswijzigingen. Het uitvoeren van experimenten is in het licht van overheidsbeleid echter vaak moeilijk te verantwoorden. Het is immers lastig te verdedigen dat een willekeurige groep wel profiteert van een bepaalde beleidswijzing en een andere groep niet. Daarnaast is het volgen van mensen voor en na het invoeren van een beleidswijziging helaas zeer kostbaar. Het onderhavige proefschrift heeft een aantal vragen naar de verbindingen tussen overheidsbeleid en familie-uitwisselingen en de gevolgen van deze bevindingen beantwoord, maar heeft daarentegen ook een aantal nieuwe vragen opgeworpen, welke nieuwsgierig maken naar vervolgonderzoek. Zonder meer geavanceerde data is het echter lastig om met meer zekerheid te zeggen wat de oorzaken en gevolgen van verbindingen tussen overheidsbeleid en familie-uitwisselingen zijn.

- Adukaite, J. (2009). Old welfare state theories and new welfare regimes in Eastern Europe: Challenges and implications. *Communist and Post-Communist Studies*, 42, 23–39.
- Agee, E. M. & Glaser, K. (2009). Demography of informal caregiving. In P. Uhlenberg (Ed.), *International handbook of population aging* (pp. 647–668). Dordrecht: Springer Netherlands.
- Albertini, M., Kohli, M., & Vogel, C. (2007). Intergenerational transfers of time and money in European families: Common patterns different regimes? *Journal of European Social Policy*, 17, 319–334.
- Altonji, J. G., Hayashi, F., & Kotlikoff, L. J. (1997). Parental altruism and inter vivos transfers: Theory and evidence. *Journal of Political Economy*, 105, 1121–1166.
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36, 1–10.
- Andres, H. J. & Heien, T. (2001). Four worlds of welfare state attitudes? A comparison of Germany, Norway, and the United States. *European Sociological Review*, 17, 337–356.
- Angrist, J. D. & Pischke, J. S. (2008). Mostly harmless econometrics: An empiricist's companion. Princeton: Princeton University Press.
- Arber, S. & Ginn, J. (1995). Gender differences in informal caring. *Health and Social Care in the Community*, 3, 19–31.
- Aronson, J. (1990). Old women's experiences of needing care: Choice or compulsion? Canadian Journal on Aging / La Revue Canadienne du Veillissement, 9, 234–247.
- Attias-Donfut, C., Ogg, J., & Wolff, F.-C. (2005). European patterns of intergenerational financial and time transfers. *European Journal of Ageing*, 2, 161–173.
- Becker, G. S. (1974). A theory of social interactions. *Journal of Political Economy*, 82, 1063–1093.

Bergh, A. (2005). On the counterfactual problem of welfare state research: How can we measure redistribution? *European Sociological Review*, 21, 345–357.

- Berry, B. (2008). Financial transfers from living parents to adult children: Who is helped and why? *American Journal of Economics and Sociology*, 67, 207–239.
- Blekesaune, M. & Quadagno, J. (2003). Public attitudes toward welfare state policies: A comparative analysis of 24 nations. *European Sociological Review*, 19, 415–427.
- Bolin, K., Lindgren, B., & Lundborg, P. (2008). Informal and formal care among single-living elderly in Europe. *Health Economics*, 17, 393–409.
- Bonsang, E. (2009). Does informal care from children to their elderly parents substitute for formal care in Europe? *Journal of Health Economics*, 28, 143–154.
- Bookwala, J. & Schulz, R. (2000). A comparison of primary stressors, secondary stressors, and depressive symptoms between elderly caregiving husbands and wives: The Caregiver Health Effects Study. *Psychology and Aging*, 15, 607–16.
- Börsch-Supan, A. & Jürges, H. (2005). The Survey of Health, Ageing and Retirement in Europe methodology. Mannheim: MEA.
- Brandt, M. & Deindl, C. (2013). Intergenerational transfers to adult children in Europe: Do social policies matter? *Journal of Marriage and Family*, 75, 235–251.
- Brandt, M., Haberkern, K., & Szydlik, M. (2009). Intergenerational help and care in Europe. *European Sociological Review*, 25, 585–601.
- Brown, E. (2007). Care recipients' psychological well-being: The role of sense of control and caregiver type. *Aging and Mental Health*, 11, 405–14.
- Buck, N., Burton, J., Laurie, H., Lynn, P., & Uhrig, S. (2006). Quality profile: British Household Panel Survey version 2.0. Waves 1 to 13: 1991 2003. Colchester, UK: University of Essex, Institute for Social and Economic Research.
- Busemeyer, M. R., Goerres, A., & Weschle, S. (2009). Attitudes towards redistributive spending in an era of demographic ageing: The rival pressures from age and income in 14 OECD countries. *Journal of European Social Policy*, 19, 195–212.
- Campbell, L. D. & Martin-Matthews, A. (2003). The gendered nature of men's filial care. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 58, S350–S358.

CIZ. (2012). CIZ indicatiewijzer versie 5.0. toelichting op de beleidsregels indicatiestelling AWBZ 2012 zoals vastgesteld door het ministerie van VWS. CIZ. Driebergen, The Netherlands.

- Cloïn, M. & Hermans, B. (2006). Onbetaalde arbeid en de combinatie van arbeid en zorg. In W. Portegijs, B. Hermans, & V. Lalta (Eds.), *Emancipatiemonitor 2006*. Den Haag: Sociaal en Cultureel Planbureau / Centraal Bureau voor de Statistiek.
- Cooney, T. M. & Dykstra, P. A. (2011). Theories and their empirical support in the study of intergenerational family relationships in adulthood. In M. Fine & F. Fincham (Eds.), *Family theories: a content-based approach*. London: Routledge.
- Cooney, T. M. & Uhlenberg, P. (1992). Support from parents over the life course: The adult child's perspective. *Social Forces*, 70, 63–84.
- Cox, D. (1987). Motives for private income transfers. *Journal of Political Economy*, 95, 508–546.
- Cox, D. & Jakubson, G. (1995). The connection between public transfers and private interfamily transfers. *Journal of Public Economics*, 57, 129–167.
- Cox, E. O., Green, K. E., Hobart, K., Jang, L.-J., & Seo, H. (2007). Strengthening the late-life care process: Effects of two forms of a care-receiver efficacy intervention. *The Gerontologist*, 47, 388–397.
- Da Roit, B. (2012). The Netherlands: the struggle between universalism and cost containment. *Health and Social Care in the Community*, 20, 228–237.
- Daatland, S. O. & Herlofson, K. (2003). 'Lost solidarity' or 'changed solidarity': a comparative European view of normative family solidarity. *Ageing and Society*, 23, 537.
- Daatland, S. O. & Lowenstein, A. (2005). Intergenerational solidarity and the family-welfare state balance. *European Journal of Ageing*, 2, 174–182.
- Daatland, S. O., Veenstra, M., & Herlofson, K. (2012). Age and intergenerational attitudes in the family and the welfare state. *Advances in Life Course Research*, 17, 133–144.
- Dallinger, U. (2010). Public support for redistribution: What explains cross-national differences? *Journal of European Social Policy*, 20, 333–349.
- Daly, M. (1997). Welfare states under pressure: Cash benefits in European welfare states over the last ten years. *Journal of European Social Policy*, 7, 129–146.
- Danigelis, N. L., Hardy, M., & Cutler, S. J. (2007). Population aging, intracohort aging, and sociopolitical attitudes. *American Sociological Review*, 72, 812–830.

De Jong - Gierveld, J. & Fokkema, T. (1998). Geographical differences in support networks of older adults. *Tijdschrift voor Economische en Sociale Geografie*, 89, 328–336.

- De Leeuw, E. & De Heer, W. (2001). Trends in household survey nonresponse: A longitudinal and international comparison. In R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.), *Survey nonresponse* (pp. 41–54). New York: Wiley.
- Dwyer, J. & Coward, R. T. (1991). A multivariate comparison of the involvement of adult sons versus daughters in the care of impaired parents. *Journal of Gerontology: Social Sciences*, 46, S259–S269.
- Dykstra, P. A. (2010). Intergenerational family relationships in ageing societies. Geneva: UN.
- Dykstra, P. A. & Fokkema, T. (2011). Relationships between parents and their adult children: A West European typology of late-life families. *Ageing and Society*, 31, 545–569.
- Dykstra, P. A. & Hagestad, G. O. (2007). Roads less taken. *Journal of Family Issues*, 28, 1275–1310.
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2006). Codebook of the Netherlands Kinship Panel Study, a multi-actor, multi-method panel study on solidarity in family relationships, wave 2. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Dykstra, P. A. & Komter, A. E. (2006). Structural characteristics of Dutch kin networks. In P. A. Dykstra, M. Kalmijn, T. C. M. Knijn, A. E. Komter, A. C. Liefbroer, & C. H. Mulder (Eds.), Family solidarity in the Netherlands. Amsterdam: Dutch University Press.
- Dykstra, P. A. & Komter, A. (2012). Generational interdependencies in families. *Demographic Research*, 27, 487–506.
- Eggebeen, D. & Hogan, D. (1990). Giving between generations in American families. *Human Nature*, 1, 211–232.
- Esping-Andersen, G. (1990). The three worlds of welfare capitalism. Cambridge: Polity Press.
- Esping-Andersen, G. (1999). Social foundations of postindustrial economies. New York: Oxford University Press.
- Esping-Andersen, G. (2002). Why we need a new welfare state. New York: Oxford University Press.
- Etzoni, A. (1993). The spirit of community: Rights, responsibilities, and the communitarian agenda. New York: Crown.

European Commission. (2012). The 2012 ageing report: Economic and budgetary projections for the 27 EU member states (2010-2060). European Commission. Brussels.

- Eurostat. (2008). Social benefits per head of population by function. Luxembourg: Eurostat.
- Eurostat. (2011). At-risk-of poverty rate by detailed age group.
- Eurostat. (2012). Europop.
- Fine, M. & Glendinning, C. (2005). Dependence, independence or inter-dependence? Revisiting the concepts of 'care' and 'dependency'. *Ageing and Society*, 25, 601–621.
- Fisher, J. D., Nadler, A., & Whitcher-Alagna, S. (1982). Recipient reactions to aid. *Psychological Bulletin*, 91, 27–54.
- Gaymu, J., Ekamper, P., & Beets, G. (2008). Future trends in health and marital status: Effects on the structure of living arrangements of older Europeans in 2030. European Journal of Ageing, 5, 5–17.
- Geerts, J. (2012). Determinants of use of formal and informal personal care by older persons living at home: Evidence from Germany, the Netherlands and Spain. In Long-term care use and supply in Europe: Projections for Germany, the Netherlands, Spain and Poland. ENEPRI research report no. 116. (pp. 15–29). CEPS.
- Gelman, A. (2007). Struggles with survey weighting and regression modeling. Statistical Science, 22, 153–164.
- Gelman, A., Carlin, J. B., Stern, H. S., & Rubin, D. B. (2003). *Bayesian data analysis* (Second). New York: Chapman and Hall/CRC.
- Gilbert, N. (2004). Transformation of the welfare state: The silent surrender of public responsibility. Oxford: Oxford University Press.
- Gill, J. (2007). Bayesian methods: A social and behavioral sciences approach (Second). Boca Raton.
- Goerres, A. & Tepe, M. (2010). Age-based self-interest, intergenerational solidarity and the welfare state: A comparative analysis of older people's attitudes towards public childcare in 12 OECD countries. European Journal of Political Research, 49, 818–851.
- Gonzalez, R. & Griffin, D. (2012). Dyadic data analysis. In H. Cooper, P. Camic,
  D. Long, A. Panter, D. Rindskopf, & K. Sher (Eds.), APA handbook of research methods in psychology, vol 3: Data analysis and research publication.
  Washington, DC: American Psychological Association.
- Grootegoed, E. & Van Dijk, D. (2012). The return of the family? Welfare state retrenchment and client autonomy in long-term care. *Journal of Social Policy*, 41, 677–694.

Grundy, E. & Henretta, J. C. (2006). Between elderly parents and adult children: A new look at the intergenerational care provided by the 'sandwich generation'. *Ageing and Society*, 26, 707.

- Haberkern, K. & Szydlik, M. (2010). State care provision, societal opinion and children's care of older parents in 11 European countries. *Ageing and Society*, 30, 299.
- Haley, W. E. & Pardo, K. M. (1989). Relationship of severity of dementia to caregiving stressors. *Psychology and Aging*, 4, 389–392.
- Hamilton, W. (1964). The genetical evolution of social behaviour. II. *Journal of Theoretical Biology*, 7, 17–52.
- Harper, S. (2006). Mature societies: Planning for our future selves. *Daedalus*, 135, 20–31.
- Hasenfeld, Y. & Rafferty, J. A. (1989). The determinants of public attitudes toward the welfare state. *Social Forces*, 67, 1027–1048.
- Haskey, J. (1996). The proportion of married couples who divorce: Past patterns and current prospects. *Population Trends*, 25–36.
- Heady, P. & Kohli, M. (2010). Introduction: Towards a political economy of kinship and welfare. In *Family, kinship and state in contemporary Europe, vol.* 3: Perspectives on theory and policy (pp. 15–30). Frankfurt am Main: Campus Verlag.
- Helgeson, V. S. (1993). The onset of chronic illness: Its effect on the patient-spouse relationship. *Journal of Social and Clinical Psychology*, 12, 406–428.
- Hemerijck, A. (2013). Changing welfare states. Oxford: Oxford University Press.
- Hemerijck, A. & Marx, I. (2010). Continental welfare at a crossroads: The choice between activation and minimum income protection in Belgium and the Netherlands. In B. Palier (Ed.), A long goodbye to Bismarck? The politics of welfare reform in continental Europe (pp. 129–155). Oxford: Oxford University Press.
- Honaker, J., King, G., & Blackwell, M. (2010). Amelia II: A program for missing data. Cambridge: Harvard University.
- Iversen, T. & Soskice, D. (2001). An asset theory of social policy preferences. *The American Political Science Review*, 95, 875–893.
- Jackman, S. (2009). Bayesian analysis for the social sciences. New York: Wiley.Jaeger, M. M. (2005). Welfare regimes and attitudes towards redistribution: The regime hypothesis revisited. European Sociological Review, 22, 157–170.
- Jaeger, M. M. (2006). What makes people support public responsibility for welfare provision: Self-interest or political ideology?: A longitudinal approach. Acta Sociologica, 49, 321–338.

Johnson, D. (2005). Two-wave panel analysis: Comparing statistical methods for studying the effects of transitions. *Journal of Marriage and Family*, 67, 1061–1075.

- Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. Annual Review of Psychology, 60, 307–37.
- Kalmijn, M. (2007). Gender differences in the effects of divorce, widowhood and remarriage on intergenerational support: Does marriage protect fathers? *Social Forces*, 85, 1079–1104.
- Kalmijn, M. (2013). How mothers allocate support among adult children: Evidence from a multiactor survey. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 68, S268–S277.
- Kalmijn, M. & Saraceno, C. (2008). A comparative perspective on intergenerational support. *European Societies*, 10, 479–508.
- Kasza, G. J. (2002). The illusion of welfare 'regimes'. *Journal of Social Policy*, 31, 271–287.
- Katz, S. J. (2000). Gender disparities in the receipt of home care for elderly people with disability in the United States. *JAMA: The Journal of the American Medical Association*, 284, 3022–3027.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: The Guilford Press.
- Knijn, T. C. M. & Kremer, M. (1997). Gender and the caring dimension of welfare states: Toward inclusive citizenship. *Social Politics: International Studies in Gender, State and Society*, 4, 328–361.
- Kohli, M. (1999). Private and public transfers between generations: Linking the family and the state. *European Societies*, 1, 81–104.
- Kohli, M. & Albertini, M. (2009). Childlessness and intergenerational transfers: What is at stake? *Ageing and Society*, 29, 1171.
- Kohli, M. & Heady, P. (2010). Conclusion: Implications for policy. In P. Heady & M. Kohli (Eds.), Family, kinship and state in contemporary Europe. vol. 3: Perspectives on theory and policy. Frankfurt am Main: Campus Verlag.
- Korpi, W. (2000). Faces of inequality: Gender, class, and patterns of inequalities in different types of welfare states. *Social Politics*, 7, 127–191.
- Kramer, B. J. (1997). Gain in the caregiving experience: Where are we? What next? *The Gerontologist*, 37, 218–232.
- Kremer, M. (2006). Consumers in charge of care: The Dutch personal budget and its impact on the market, professionals and the family. *European Societies*, 8, 385–401.

Künemund, H. (2008). Intergenerational relations within the family and the state. In C. Saraceno (Ed.), *Families, ageing and social policy*. Cheltenham, UK: Edward Elgar.

- Künemund, H. & Rein, M. (1999). There is more to receiving than needing: Theoretical arguments and empirical explorations of crowding in and crowding out. *Ageing and Society*, 19, 93–121.
- Lawton, M. P., Moss, M., Kleban, M. H., Glicksman, A., & Rovine, M. (1991).
  A two-factor model of caregiving appraisal and psychological well-being.
  Journal of Gerontology, 46, P181–189.
- Lee, F. (2002). The social costs of seeking help. The Journal of Applied Behavioral Science, 38, 17–35.
- Leitner, S. (2003). Varieties of familialism: The caring function of the family in comparative perspective. *European Societies*, 5, 353–375.
- Li, L. W. (2005). Longitudinal changes in the amount of informal care among publicly paid home care recipients. *The Gerontologist*, 45, 465–473.
- Lindh, T., Malmberg, B., & Palme, J. (2005). Generations at war or sustainable social policy in ageing societies? *Journal of Political Philosophy*, 13, 470–489.
- Litwak, E. & Butler, R. (1985). Helping the elderly: The complementary roles of informal networks and formal systems. New York: Guilford.
- Litwak, E. & Kulis, S. (1987). Technology, proximity, and measures of kin support. Journal of Marriage and Family, 49, 649–661.
- Lyons, K. S. & Sayer, A. G. (2005a). Longitudinal dyad models in family research. Journal of Marriage and Family, 67, 1048–1060.
- Lyons, K. S. & Sayer, A. G. (2005b). Using multilevel modeling in caregiving research. Aging and Mental Health, 9, 189–195.
- Lyons, K. S., Zarit, S. H., Sayer, A. G., & Whitlatch, C. J. (2002). Caregiving as a dyadic process: Perspectives from caregiver and receiver. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57, P195–P204.
- Mandemakers, J. J. & Dykstra, P. A. (2008). Discrepancies in parent's and adult child's reports of support and contact. *Journal of Marriage and Family*, 70, 495–506.
- Marks, N. F., Lambert, J. D., & Choi, H. (2002). Transitions to caregiving, gender, and psychological well-being: A prospective U.S. national study. *Journal of Marriage and Family*, 64, 657–667.
- Martire, L. M., Schulz, R., Wrosch, C., & Newsom, J. T. (2003). Perceptions and implications of received spousal care: Evidence from the Caregiver Health Effects Study. *Psychology and Aging*, 18, 593–601.

Matsuo, H., Billiet, J., & Loosveldt, G. (2010). Response-based quality assessment of ESS round 4: Results for 24 countries based on contact files. University of Leuven. Leuven.

- Mau, S. (2004). Welfare regimes and the norms of social exchange. *Current Sociology*, 52, 53–74.
- McGarry, K. (1999). Inter vivos transfers and intended bequests. *Journal of Public Economics*, 73, 321–351.
- Meltzer, A. H. & Richard, S. F. (1981). A rational theory of the size of government. Journal of Political Economy, 89, 914–927.
- Miller, B. & Cafasso, L. (1992). Gender differences in caregiving: Fact or artifact? The Gerontologist, 32, 498–507.
- Mol, E. (2010). *CPB document no. 204. the Dutch system of long term care.* Netherlands Bureau for Economic Policy Analysis (CPB). The Hague.
- Morgan, S. L. & Winship, C. (2007). Counterfactuals and causal inference: Methods and principles for social research. Cambridge: Cambridge University Press.
- Morren, M., Gelissen, J. P., & Vermunt, J. K. (2011). Dealing with extreme response syle in cross-cultural research: A restricted latent class factor analysis approach. *Sociological Methodology*, 41, 13–47.
- Mot, E. & Aouragh, A. (2010). The Dutch system of long-term care. Netherlands Bureau for Economic Policy Analysis. The Hague.
- Motel-Klingebiel, A., Tesch-Römer, C., & Von Kondratowitz, H.-J. (2005). Welfare states do not crowd out the family: Evidence for mixed responsibility from comparative analyses. *Ageing and Society*, 25, 863–882.
- Nagurney, A. J., Reich, J. W., & Newsom, J. T. (2004). Gender moderates the effects of independence and dependence desires during the social support process. *Psychology and Aging*, 19, 215–218.
- Neugarten, B. (1969). Continuities and discontinuities of psychological issues into adult life. *Human Development*, 12, 121–130.
- Noël-Miller, C. M. (2010). Longitudinal changes in disabled husbands' and wives' receipt of care. *The Gerontologist*, 50, 681–93.
- OECD. (2005). Long-term care for older people. Paris: OECD.
- Pavolini, E. & Ranci, C. (2008). Restructuring the welfare state: Reforms in long-term care in Western European countries. *Journal of European Social Policy*, 18, 246–259.
- Pearlin, L. I., Mullan, J. T., Semple, S. J., & Skaff, M. M. (1990). Caregiving and the stress process: An overview of concepts and their measures. *The Gerontologist*, 30, 583–594.

Penning, M. J. (2002). Hydra revisited: Substituting formal for self- and informal in-home care among older adults with disabilities. *The Gerontologist*, 42, 4–16.

- Pfau-Effinger, B. (2005). Culture and welfare state policies: Reflections on a complex interrelation. *Journal of Social Policy*, 34, 3–20.
- Pickard, L. (2011). Substitution between formal and informal care: A 'natural experiment' in social policy in Britain between 1985 and 2000. Ageing and Society, 32, 1147–1175.
- Pierson, P. (1995). Dismantling the welfare state?: Reagan, Thatcher and the politics of retrenchment. Cambridge: Cambridge University Press.
- Pierson, P. (2011). The new politics of the welfare state. World Politics, 48, 143–179.
- Pinquart, M. & Sörensen, S. (2003). Associations of stressors and uplifts of caregiving with caregiver burden and depressive mood: A meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58, 112–128.
- Pinquart, M. & Sörensen, S. (2006). Gender differences in caregiver stressors, social resources, and health: An updated meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61, P33–P45.
- Plummer, M. (2003). JAGS: A program for analysis of bayesian graphical models using Gibbs sampling. In 3rd international workshop on distributed statistical computing. Vienna, Austria.
- Ponza, M., Duncan, G. J., Corcoran, M., & Groskind, F. (1988). The Guns of Autumn?: Age differences in support for income transfers to the young and old. *The Public Opinion Quarterly*, 52, 441–466.
- Preston, S. H. (1984). Children and the elderly: Divergent paths for America's dependents. *Demography*, 21, 435–457.
- Pruchno, R. A., Burant, C. J., & Peters, N. D. (1997). Understanding the well-being of care receivers. *The Gerontologist*, 37, 102–109.
- Rabe-Hesketh, S. & Skrondal, A. (2008). Multilevel and longitudinal modeling using Stata. College Station: Stata Corp.
- Raffelhüschen, B. (1999). Generational accounting in Europe. *The American Economic Review*, 89, 167–170.
- Raudenbush, S. W., Brennan, R., & Barnett, R. (1995). A multivariate hierarchical model for studying psychological change within married couples. *Journal of Family Psychology*, 9, 161.
- Reher, D. S. (1998). Family ties in Western Europe: Persistent contrasts. *Population and Development Review*, 24, 203–234.

Reil-Held, A. (2006). Crowding out or crowding in? Public and private transfers in Germany. European Journal of Population / Revue Européenne de Démographie, 22, 263–280.

- Rosenthal, C. J. (1985). Kinkeeping in the familial division of labor. *Journal of Marriage and Family*, 47, 965–974.
- Rosenzweig, M. R. & Wolpin, K. I. (1994). Parental and public transfers to young women and their children. *The American Economic Review*, 84, 1195–1212.
- Rossi, P. H. & Rossi, A. (1990). Of human bonding: Parent-child relations across the life course. New York: Aldine de Gruyter.
- Rostgaard, T., Glendinning, C., & Gori, C. (2011). Livindhome: Living independently at home: Reforms in home care in 9 European countries. Denmark: SFI The Danish National Centre for Social Research.
- Rubin, D. B. (1987). Multiple imputation for nonresponse in surveys (Wiley series in probability and statistics). New York: Wiley.
- Saraceno, C. (2008). Families, ageing and social policy: Intergenerational solidarity in European welfare states. Cheltenham, UK: Edward Elgar.
- Saraceno, C. (2010). Social inequalities in facing old-age dependency: A bi-generational perspective. *Journal of European Social Policy*, 20, 32–44.
- Saraceno, C. & Keck, W. (2008). The institutional framework of intergenerational family obligations in Europe: A conceptual and methodological overview. Social Science Research Center Berlin. Berlin.
- Saraceno, C. & Keck, W. (2010). Can we identify intergenerational policy regimes in Europe? *European Societies*, 12, 675–696.
- Savundranayagam, M. Y., Montgomery, R. J. V., & Kosloski, K. (2011). A dimensional analysis of caregiver burden among spouses and adult children. *The Gerontologist*, 51, 321–31.
- Schoeni, R. F. (1997). Private interhousehold transfers of money and time: New empirical evidence. *Review of Income and Wealth*, 43, 423–448.
- Schulz, R. & Williamson, G. M. (1991). A 2-year longitudinal study of depression among Alzheimer's caregivers. *Psychology and Aging*, 6, 569–578.
- Schulz, U. & Schwarzer, R. (2004). Long-term effects of spousal support on coping with cancer after surgery. *Journal of Social and Clinical Psychology*, 23, 716–732.
- Silverstein, M. & Parrott, T. M. (1997). Attitudes toward public support of the elderly: Does early involvement with grandparents moderate generational tensions? *Research on Aging*, 19, 108–132.
- Stegmueller, D. (2013). How many countries for multilevel modeling? A comparison of frequentist and bayesian approaches. *American Journal of Political Science*, 57, 748–761.

Stoller, E. P. & Cutler, S. J. (1992). The impact of gender on configurations of care among married elderly couples. *Research on Aging*, 14, 313–330.

- Stone, S. D. (2010). Disability, dependence, and old age: Problematic constructions. Canadian Journal on Aging / La Revue Canadienne du Vieillissement, 22, 59–67.
- Sundström, G., Malmberg, B., & Johansson, L. (2006). Balancing family and state care: Neither, either or both? The case of Sweden. *Ageing and Society*, 26, 767–782.
- Svallfors, S. (2008). The generational contract in Sweden: Age-specific attitudes to age-related policies. *Policy and Politics*, 36, 381–396.
- Taylor, M. F., Brice, J., Buck, N., & Prentice-Lane, E. (2010). British House-hold Panel Survey user manual volume A: Introduction, technical report and appendices. Colchester, UK: University of Essex, Institute for Social and Economic Research.
- Tesch-Römer, C. & Kondratowitz, H.-J. (2006). Comparative ageing research: A flourishing field in need of theoretical cultivation. *European Journal of Ageing*, 3, 155–167.
- Thomas, P. A. (2010). Is it better to give or to receive? Social support and the well-being of older adults. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 65B, 351–357.
- Tomassini, C., Glaser, K., Wolf, D. A., Broese van Groenou, M. I., & Grundy, E. (2004). Living arrangements among older people: An overview of trends in Europe and the USA. *Population Trends*, 24–34.
- Townsend, A. L., Noelker, L., Deimling, G., & Bass, D. (1989). Longitudinal impact of interhousehold caregiving on adult children's mental health. *Psychology and Aging*, 4, 393–401.
- Tuyman, M. & Marangos, A. M. (2010). Gemeentelijk Wmo-beleid op de negen prestatievelden. In M. De Klerk, R. Gilsing, & J. Timmermans (Eds.), *Op weg met de Wmo* (pp. 69–100). The Hague: The Netherlands Institute for Social Research (SCP).
- Uehara, E. S. (1995). Reciprocity reconsidered: Gouldner's 'moral norm of reciprocity' and social support. *Journal of Social and Personal Relationships*, 12, 483–502.
- Uhlenberg, P. (1993). Demographic change and kin relationships in later life. In G. L. Maddox & M. P. Lawton (Eds.), *Annual review of gerontology and geriatrics* (pp. 219–238). New York: Springer Publishing Company.
- Van Dalen, H. P. & Henkens, K. (2002). Early-retirement reform: Can it and will it work? *Ageing and Society*, 22, 209–231.

Van den Broek, T. (2013). Formalization of informal care in the Netherlands: Cost containment or gendered cost redistribution? *International Journal of Feminist Approaches to Bioethics*, 6.

- Van Gaalen, R., Dykstra, P. A., & Flap, H. (2008). Intergenerational contact beyond the dyad: The role of the sibling network. European Journal of Ageing, 5, 19–29.
- Van Hooren, F. & Becker, U. (2012). One welfare state, two care regimes: Understanding developments in child and elderly care policies in the Netherlands. Social Policy and Administration, 46, 83–107.
- Van Houtven, C. H. & Norton, E. C. (2004). Informal care and health care use of older adults. *Journal of Health Economics*, 23, 1159–1180.
- Van Oorschot, W. (2006). Making the difference in social Europe: Deservingness perceptions among citizens of European welfare states. *Journal of European Social Policy*, 16, 23–42.
- Verbrugge, L. M. (1989). The twain meet: Empirical explanations of sex differences in health and mortality. *Journal of Health and Social Behavior*, 30, 282–304.
- Walker, A. (1996). The new generational contract: Intergenerational relations and the welfare state. London: University College London Press.
- Walker, A. J., Acock, A. C., Bowman, S. R., & Li, F. (1996). Amount of care given and caregiving satisfaction: A latent growth curve analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 51B, P130–P142.
- Walker, A. J., Pratt, C. C., & Eddy, L. (1995). Informal caregiving to aging family members: A critical review. Family Relations, 44, 402–411.
- Ward, R. A. (2001). Linkages between family and societal-level intergenerational attitudes. *Research on Aging*, 23, 179–208.
- Whyte, L. (1994). Growing up with single parents and stepparents: Long-term effects on family solidarity. *Journal of Marriage and the Family*, 56, 935–948.
- Wilkin, D. (1987). Conceptual problems in dependency research. *Social Science and Medicine*, 24, 867–873.
- Wilson-Genderson, M., Pruchno, R. A., & Cartwright, F. P. (2009). Effects of caregiver burden and satisfaction on affect of older end-stage renal disease patients and their spouses. *Psychology and Aging*, 24, 955–967.
- Winship, C. & Morgan, S. L. (1999). The estimation of causal effects from observational data. *Annual Review of Sociology*, 25, 659–706.
- Wolfe, A. (1989). Whose keeper? Social science and moral obligations. Berkely: University of California Press.

Wolff, J. L. & Kasper, J. D. (2006). Caregivers of frail elders: Updating a national profile. *The Gerontologist*, 46, 344–356.

Yee, J. L. & Schulz, R. (2000). Gender differences in psychiatric morbidity among family caregivers: A review and analysis. *The Gerontologist*, 40, 147–164.

## Dankwoord (Acknowledgments)

Het schrijven van dit proefschrift is een van vele dingen die ik de afgelopen jaren heb gedaan. Dit dankwoord kan ik niet schrijven zonder daarbij ook stil te staan bij andere gebeurtenissen die tijdens het schrijven aan dit proefschrift hebben plaatsgevonden.

In de vijf jaar dat ik aan dit proefschrift heb gewerkt, heb ik voor twee verschillende werkgevers gewerkt aan drie dataverzamelingen en bijgedragen aan vier onderzoeksprojecten met veel meer publicaties dan die er in dit proefschrift zijn beland. Inmiddels hebben ook al een paar honderd studenten mijn enthousiasme voor statistiek moeten ondergaan.

Dat ik ondanks al mijn professionele omzwervingen nu toch mijn proefschrift heb afgemaakt heb ik vooral te danken aan Pearl Dykstra en Ineke Maas. Daarbij moet ik wel aantekenen dat Pearl ook een groot aandeel heeft gehad in de verschillende zijpaden die ik heb bewandeld. Ik had het niet anders gewild en wellicht ook niet anders gekund. De afgelopen jaren heb ik veel geleerd en dat heb ik vooral aan Pearl te danken. Daar ben ik haar bijzonder dankbaar voor. Toen ik ging promoveren wilde ik Ineke graag als tweede begeleider omdat ze zo ontzettend goed artikelen van commentaar kan voorzien. Die verwachting heeft ze meer dan waargemaakt. Ik weet zeker dat haar bijdrage de hoofdstukken in dit proefschrift aanzienlijk sterker heeft gemaakt.

Zonder al mijn omzwervingen en afleidingen had ik dit proefschrift wellicht wat eerder afgerond maar meer plezier in mijn werk had ik zeker niet gehad. Ik ben mijn oud-collega's op het NIDI en mijn huidige collega's aan de EUR dankbaar voor de fijne werkomgeving. Ik heb de afgelopen jaren met een aantal mensen buiten mijn proefschrift om samengewerkt en daar veel van geleerd. Frans van Poppel, Jenny Gierveld, Ruben van Gaalen en Thijs van den Broek, bedankt voor de samenwerking in de afgelopen jaren.

Op het persoonlijke vlak heb ik tijdens het werken aan mijn proefschrift op vijf verschillende plaatsen in drie verschillende steden gewoond, twee huizen gekocht en verbouwd en één weer verkocht, drie fietsen gekocht en opgebouwd en daarmee vele duizenden kilometers gefietst en mag ik drie kinderen zien opgroeien

waarvan er twee mijn biologische kinderen zijn. Het is moeilijk te bevatten dat dit allemaal in de afgelopen vijf jaar heeft plaatsgevonden. Dat ik nu toch in relatieve rust dit dankwoord kan schrijven heb ik vooral te danken aan mijn familie. Als er ergens veel familie-uitwisselingen plaatsvinden dan is het wel in de familie Schenk. Hopelijk blijft dit de rest van mijn leven zo. Ondanks of wellicht dankzij veranderingen in Nederlands overheidsbeleid.

De keuze voor mijn paranimfen lag voor de hand. Met Ruud en Niek ben ik ooit gaan studeren in Utrecht. De tijd die we daar gehad hebben is onvergetelijk. Een buitenstaander had waarschijnlijk nooit gedacht dat wij ooit alle drie zouden gaan promoveren. Met Niek heb ik zelfs een artikel samen geschreven. Bedankt voor de tijd dat we samen gewoond en gestudeerd hebben en bedankt voor de mogelijkheid om mijn ervaringen de afgelopen jaren met jullie te delen.

Mijn ervaringen kon ik ook delen met mijn oud-studiegenoten uit Utrecht. Het was altijd bijzonder fijn om mijn hart tijdens MERM-etentjes te kunnen luchten en om de voor- en nadelen van het promoveren te kunnen delen.

Dat ik dit proefschrift mag verdedigen of al het andere wat er de afgelopen jaren heeft plaatsgevonden is volstrekt onbelangrijk vergeleken met het allerbelangrijkste wat mij ooit is en zal overkomen: Renske.

Niels Schenk Gouda, Oktober 2013

## Curriculum Vitae

Niels Schenk (Geldrop, 1982) obtained his Master's degree in Migration Ethnic Relations and Minorities (MERM) at Utrecht University. After graduating Niels worked at the Netherlands Interdisciplinary Demographic Institute (NIDI) as a fieldwork coordinator for the Netherlands Kinship Panel Study. In 2008 he started his PhD-research within the European PF7 project MULTILINKS. While working on his PhD-research, he was also responsible for harmonization of GGP datasets at NIDI. From September 2009, Niels continued his PhD research within the department of sociology at Erasmus University Rotterdam, where he combined his PhD-research with the role of coordinator and teacher of the statistics curriculum. Niels co-authored several papers published in Journal of Marriage and the Family, Ageing and Society, Demographic Research, Advances in Life Course Research, Explorations in Economic History, Population Research and Policy Review, Population Space and Place, and Mens en Maatschappij.