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**Intergenerational Transfers over the Adult Life Cycle in Three
European Welfare State Regimes**

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European Welfare State Regimes**

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Dedication

To my parents who gave me life and Sofia who made it complete.

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Intergenerational Transfers over the Adult Life Cycle in Three European Welfare State Regimes

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The University of Texas at Austin, 2013

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Rapid population aging driven by increasing life expectancy and falling birthrates has resulted in substantial increases in the old-age dependency ratio and decreases in the ratio of workers to retirees in all developed nations. In this context, some policymakers look to the support role of the family to moderate the effects of potentially shrinking public support. Yet, relatively little is known about the flow of transfers between family generations across the life cycle or the influence of public policy on the size and timing of those transfers. A core objective of this dissertation is to study the nature and net value of family transfers, defined in terms of the financial value of various types of transfers parents give to children (e.g., money, care and help, grandchild care, and co-residence) net of the value of the same types transfers they receive from children.

Data for this study come primarily from the Survey of Health, Ageing, and Retirement in Europe, and the sample includes 36,095 parent-child dyads from 11 European countries representing social democratic, conservative, and traditional welfare-state regimes. Time transfers are monetized using information on minimum and average hourly wages. The net value of intergenerational family transfers over the adult life cycle is estimated using piecewise linear spline regression.

The findings reveal that intergenerational family transfers are nontrivial across mature European welfare states. Their net value follows a nonlinear pattern of positive transfers from parents to grown children until advanced old age when the net value declines sharply and ultimately becomes negative—the point at which the generational exchange starts mostly to benefit parents. The transition starts later and is less pronounced across more generous welfare states in Northern Europe, while the opposite is true of less generous welfare states in Southern Europe. Transfer behavior of parents and grown children across Europe is most consistent with the need for help and ability to give. The results demonstrate that assessments of the effects of public policies affecting intergenerational redistribution of resources would benefit from taking into account how family members of different generations redistribute resources due to changes in those policies.

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Chapter 1: Introduction

This dissertation explores intrafamilial inter vivos transfers between older parents and grown children in different institutional and socioeconomic contexts. A core objective of the dissertation is to study the nature and net value of family transfers, defined in terms of the financial value of various transfers (i.e., money, care and help, grandchild care, and co-residence) parents give to children net of the value of transfers they receive from children. Such information has important policy implications for social security reform and the financing of a growing welfare state.

This chapter begins with an overview of the motivation for studying family-transfer behavior in the context of different welfare regimes and identifies major areas where the dissertation can contribute to advancing the knowledge on the subject. The next section specifies the main dissertation objectives and explains how achieving the objectives will add to the research on intergenerational transfers. This is followed by an explanation of policy implications of research on family transfer behavior across welfare regimes. The chapter concludes with an outline of the dissertation.

DISSERTATION MOTIVATION

Profound and recent demographic and socioeconomic changes have presented mounting challenges to developed countries in the structuring and administration of social security systems. Increasing life expectancy has led to a larger aging population. Coupled with falling birthrates, this results in substantial increases in the old-age dependency, which is a key indicator for the sustainability of pension systems, in

particular pay-as-you-go systems that are still the backbone of social security systems across developed countries (OECD, 2012). In a globalized economy, countries are increasingly under pressure to limit welfare benefits and improve the efficiency of welfare state spending in an effort to raise productivity and increase private sector employment and ultimately preserve global competitiveness (Scharpf, 2000). Economic downturns, often accompanied by sharp increases in budget deficits and public debts, might further exacerbate the problem of the growing burden of intergenerational redistribution toward the elderly. Under these circumstances, policymakers increasingly look to the support role of the family to ameliorate the effects of potentially shrinking public support.

Simultaneously, individuals and families adapt their behavior to the circumstances they are facing. Due to increasing life spans, multigenerational families with three and even four generations are becoming more prevalent, which often results in the middle-aged generation caring for their children and grandchildren as well as their elderly parents (Attias-Donfut, Ogg, & Wolff, 2005). Furthermore, the prospect of fiscal austerity, especially the possibility of a decrease in pension and healthcare benefits, substantially affects the retirement calculus for current workers and calls into question the adequacy of their retirement savings accumulated during their working years. In the classical life-cycle model of consumption and savings (Friedman, 1957; Modigliani & Brumberg, 1954) the expectation is that savings during the working years would be used to finance less than sufficient current income in their youth and in retirement. With later entry into the workforce due to increasing educational attainment, longer periods in retirement due to increasing longevity, and either no or fairly modest gains in income for an average worker, the standard of life across the life cycle and especially in retirement is likely to suffer.

Consequently, if the working-age population does not want to experience a decrease in their expected standard of living in retirement, they will have to adapt to this new demographic and economic reality by either increasing personal (retirement) savings or working longer. On the other hand, governments are increasingly considering raising current workers' contributions to the various pay-as-you-go public pension schemes or, alternatively, cutting the benefits they provide to the dependent population (National Research Council, 2012). The result for the working-age population is either fewer financial resources available to redistribute directly to children and/or elderly parents or less time available to provide them with practical help owing to additional work effort needed to preserve the current level of consumption. With this context in mind, it is possible to identify several important areas where this dissertation can contribute to the research on intergenerational transfers.

First, the public redistribution of resources, primarily through transfers and taxes, has important consequences on the calculus families and individuals perform to determine savings and consumption, yet public and policy discourse focuses primarily on estimating costs and benefits of the public component of transfers in isolation from the corresponding private component. This approach implicitly assumes that governments interact with individuals/citizens through taxes, transfers, and the legal system, but fails to recognize that individuals, especially within families, may be making transfers as a direct consequence of public redistribution of resources, but independent of formal government control. Limiting the evaluation of the effectiveness of public policies affecting intergenerational redistribution of resources only to the relationship of governments and individuals could, therefore, result in an inaccurate assessment of the extent of the overall intergenerational redistribution of resources and the true impact of public policies. Studies show that private financial transfers, which mostly flow from

older to younger generations in developed nations, are by no means trivial in comparison with public transfer programs, including pension and health care benefits that predominantly flow in the opposite direction (National Research Council, 2001). It is likely the value of private nonfinancial transfers is also substantial, but international data to support such claims are still very limited. This dissertation will, therefore, examine the flow of various types of transfers between family generations across the life cycle and assess the influence of public policies on their relative size and timing.

Another important issue in the study of intergenerational family transfers is estimating the value of net total transfers exchanged across generations over the life cycle. Such information could allow one, for example, to better evaluate whether transfer behavior of parents and grown children is consistent with their relative needs as the major operating motive of transfers, which would have profound implications for the scope of government redistribution policy. In the absence of such information, though, policymakers can only rely on theory and limited empirical evidence to inform their decisions on the appropriate level of intergenerational redistribution of resources through the public system of taxes and transfers. Therefore, this dissertation will calculate the net value of transfers that parents and grown children exchange over the adult life cycle. It will try to overcome some of the major obstacles that have limited such calculation in previous research, by expanding the types of transfers to be included in the net transfer measure as well as selecting the appropriate methodology to appraise (i.e., monetize) the value various types of nonmonetary transfers.

While single-country studies dominated the literature on intergenerational transfers for a long time, the focus is increasingly shifting to comparative research, and this dissertation contributes to this growing field. In the absence of randomized experiments with policy variation across individuals within a country, cross-country

research provides the context of diverse policy environments. Assuming individual behavior and intrafamilial intergenerational transfers in the absence of different policy environments and in particular welfare regimes would follow broadly similar pattern across different societies, cross-national study of the public-private nexus of transfers offers the best available alternative to the gold standard of randomized experiment and greatly enhances the empirical value of the work on the many aspects of private intergenerational exchanges within the family and the new realities of aging in different countries and cultures.

Arguably the most important theoretical aspect in the comparative research on family-transfer behavior has been the use of the welfare-regime framework, most notably Esping-Andersen's typology of welfare regimes (1990). This approach appears to be motivated by considerable observed differences in family-transfer behavior that seem to broadly correspond to well-studied differences in the principles, structure, and generosity of public systems of intergenerational redistribution (OECD, 2009). Empirically, it has been very useful in describing family-transfer behavior, especially in Europe where studies established significant variation in the magnitude and frequency of private transfers of money and time across welfare state regimes ranging from relatively small, but frequent transfers in Northern European countries to less frequent, but substantial in magnitude in Southern Europe (e.g., Albertini, Kohli, & Vogel, 2007; Brandt, Haberkern, & Szydlik, 2009).

However, while cross-national research using the welfare-regime typology framework to analyze family transfers has made important contributions in recent years, the literature has made only limited progress in the analysis of the links between welfare regimes and family-transfer regimes. With several notable exceptions (e.g., Albertini & Kohli, 2012), most of cross-national research on family transfers adopts a welfare-regime

framework without justifying the need for its use. Without a conclusive explanation why family-transfer behaviors vary across welfare regimes, though, it is not possible to understand how social-level factors interact with individual- and family-level behaviors to determine the unique characteristics of intergenerational (re)distribution of resources across societies. This dissertation explicitly examines this link, and given the historical context of each society, it conceptually describes how the mechanism connecting individuals/families and institutions functions and illustrates the link with the example of co-residence and homeownership propensity across three European welfare regimes.

DISSERTATION OBJECTIVES

Three major objectives of this dissertation are to:

1. Examine and compare financial and nonfinancial (e.g., personal help and care, grandchild care, and imputed rent) transfers between older parents and grown children and calculate their net value across three welfare regimes in Europe;
2. Determine the likelihood and the net flow of transfers between older parents and grown children over the adult life cycle across the three welfare regimes; and
3. Explain the mechanism that links welfare-regime characteristics with family-transfer behavior using the example of homeownership and co-residence between older parents and grown children across the three welfare regimes.

In order to achieve these objectives, the dissertation introduces a comprehensive framework that accounts for macro-level constraints of family giving behavior using the welfare-regime typology that distinguishes between countries based on their social spending as well as the legal and organizational features of their social policy. On the

individual and family level, the framework accounts for the typical flow of intergenerational support across the life cycle and accounts for the mechanisms that may mediate the relationship between macro-level constraints and individual/family transfer decisions. Therefore, the framework makes it possible to explain why family-transfer behavior may be different across countries (or groups of countries), even though in the abstract of the social-level variables it would be reasonable to expect similar patterns of family giving behavior across different countries and regions. The central role of government support to all needy in Northern Europe, class-based public support in Continental Europe, or preeminence of family over public support in Southern Europe, hence, are all important explanatory factors accounting for individual and family differences in providing financial and nonfinancial support across generations.

The dissertation explores some of the important issues raised in the emerging literature on comparative welfare states (e.g., Albertini & Kohli, 2012; Albertini et al., 2007; Attias-Donfut et al., 2005; Brandt et al., 2009; Hurd, Michaud, & Rohwedder, 2008; Rohwedder & Willis, 2010) that gained in prominence with the advent of several major longitudinal surveys of older adults in the United States and Europe. The overarching goal of this literature as well as the goal of my dissertation is to establish to what extent the behavior of individuals and families is affected by the existence of the welfare state and how individuals and families would likely respond to changes in the welfare state's structure and generosity. This dissertation extends prior comparative research in several ways.

First, it introduces the life-cycle overlapping generations (OLG) model perspective in comparative welfare literature, which allows for comparison of the effects of the welfare state on the pattern of intrafamilial transfers over the adult life cycle. Therefore, this dissertation represents the first effort to systematically describe how net

intergenerational transfers are conditioned by age. It identifies three distinct phases of intergenerational transfers: the long period of high positive net transfers to grown children that lasts approximately until parents reach 70 years of age; followed by a transitional decade during which the balance decreases and becomes negative, stabilizing again after approximately 80 years of age; and finally the negative net transfer, that is, transfers flowing predominantly from middle-aged children to oldest parent. The life-cycle OLG model can be easily modified to accommodate the effects of the welfare state and different public transfers. Different countries provide various types of public intergenerational support including child support, public education, loan subsidies for the first-time home buyers (mainly targeting young adults), and universal healthcare (or at least healthcare coverage for the elderly) that might result in substantial deviation in the magnitude of transfers and even the direction of transfers from theoretical predictions. Therefore, this dissertation explores to what extent transfers of money and time between parents and adult children over the adult life cycle and across different welfare state regimes follow the proposed life-cycle model of intergenerational transfers. The expectation is that less generous welfare states more closely follow the proposed model, while more generous welfare states are associated with greater discrepancies from the model.

An implicit assumption in the life-cycle OLG model is that family generations primarily give or receive support based on relative needs and the ability to give. However, with the exception of money transfers between parents and grown children, the Survey of Health, Ageing, and Retirement in Europe (SHARE) and its sister studies such as the Health and Retirement Study (HRS) and the English Longitudinal Study of Ageing (ELSA) do not directly ask study participants for the motives of making a transfer, but rather only observes individuals' behavior over time. Consequently, it is not possible to

make inferences about the true underlying motives of giving in the absence of such information. Yet, the behavior of individuals is still important, as certain (unrevealed) motives of giving can be consistent only with certain (revealed) behaviors and vice versa. This is significant, because observing family giving behavior inconsistent with need as the major reason to give between parents and grown children would call into question the proposed model of family giving. It also represents the limit of what can be inferred about the motives of giving, because more nuanced distinctions between the motives can be made only with direct, individual-level information on the true underlying psychological processes.

Furthermore, this dissertation establishes which among various nonfinancial transfers between parents and grown children can be considered to have sufficient economic value to merit inclusion in the balance estimate. As an example, grandchild care is considered as a plausible substitute for daycare only if grandparents provide it at least weekly or more frequently and for at least 500 hours or more during the year prior to the interview. Similarly, as an essential element in estimating net intergenerational transfers, the dissertation introduces a methodology for monetizing various nonfinancial transfers using national (or sectoral) minimum wages and national average wages to establish a range of plausible transfer-value estimates. Although this approach is seemingly more precise than prior treatment of net transfers between older parents and grown children in the literature (e.g., Litwin, Vogel, Künemund, & Kohli, 2008), it is still only a plausible approximation rather than a precise estimate, which would require more detailed data on transfers as well as time sheets documenting in great detail the use of time by parents and grown children participating in transfer programs.

In its modeling approach, much of prior research conceptualizes welfare-state regimes in a narrow sense—limiting its scope to social policy expenditures and/or social

services employment. This dissertation, however, has a broader conceptualization of the welfare state that also emphasizes its important redistributive role through the tax system as well as the legal framework to the extent it regulates private transfer behavior.

This dissertation uses spline regression to account for the nonlinear character of the relationship between net transfers and age, whereas previous research imposes a linear structure on the data, regardless of the true underlying relationship. The focus on parent-child dyads as the unit of analysis allows for the control of the unique characteristics of each child and parent-child pair in addition to the parents' characteristics. Furthermore, by correcting financial transfers, income, and assets for differences in purchasing power across countries, this analysis surpasses previous studies in accounting for substantial differences in price levels across countries of interest that could otherwise significantly affect the validity of inferences from such a deficient cross-national modeling approach.

The key theoretical contribution of the research, then, is a more comprehensive treatment of the issue of the link between welfare-state regimes and family transfers. Much of the literature using a welfare-regime typology does not discuss the origins of the link of a welfare-regime typology and family transfers. The rest provides only a broad conceptualization that assigns the link to the exposure to the same institutions and socioeconomic conditions, and in particular to the existence of a shared "family culture" in each society or groups of societies (the most comprehensive treatment of this issue can be found in Albertini & Kohli, 2012, and Kohli & Albertini, 2007). However, even the most comprehensive among the current explanations of the nexus of welfare regimes and family-transfer behavior is still incomplete, as it treats "family culture" or accepted social norms of behavior in family transfers across countries as independent factors. While in the short or even medium run, this assumption may be correct, in the very long run (i.e.,

over decades and centuries), these factors determining individual and family behavior across societies cannot be considered independent. Rather, they are shaped over time by various structural and institutional constraints and opportunities (Flaquer, 2000) or more abruptly affected by the "black swans" of economic recession or depression, war, environmental disaster, or other dramatic events (Castles, 2010).

In order to explain the link between welfare regimes and family-transfer regimes, it is necessary to incorporate the "families of nations" idea of the importance of history and culture in shaping economic, social, and political factors, emphasized in Esping-Andersen's welfare-regime approach (Castles, 1993; Flaquer, 2000). Building on this approach, this dissertation explores the idea that the historical experiences of various nations shaped both people's values and institutions, but that there is nothing inherently different between individuals in different societies in the absence of the accumulated personal, familial, and social-historical experience that shaped both institutional frameworks and the patterns of behavior among individuals and families. In most of the literature, these are simply recognized as "family culture" (or culture in general) and considered as an exogenous, virtually immutable explanatory factor in models, used to "explain" away inconsistencies that exist in the data.

This modification of Esping-Andersen's welfare-regime approach convincingly explains why people in different societies and across different welfare regimes pursue different strategies when it comes to family transfers, but also why individuals and governments occasionally pursue apparently suboptimal strategies from the point of view of maximizing individual and social welfare. What may seem as suboptimal strategy, though, may as well be a very rational strategy shaped over a long time as a response to the specific set of circumstances facing a society, and as such has been passed from one generation to the next.

For example, in societies with either long or relatively recent experiences of political instability and a limited rule of law, less developed stock and credit markets, and a history of higher inflation and (the policy of competitive) devaluation of national currency, which is true of Southern European countries, people have "learned" over generations to save almost exclusively through real estate investment (i.e., buying their primary residence). However, with democratization and increased political transparency and accountability, economic globalization, European political unification, the adoption of a common European currency, increased price stability, and other changes affecting these countries in recent decades, the underlying conditions have changed to the point where change in people's behavior would likely be socially beneficial. Yet, it seems this is the situation in which societies may perpetuate old learned models unfit for a new reality and fail to recognize what is a new, socially optimal strategy. While individuals and societies may still be rational actors, they may be either slow or even unable to adjust to a new situation in a timely manner, not only as a consequence of being locked into the old pattern of behavior (i.e., path dependency), but also due to institutional obstacles, a lack of trust in government and society in general, and other factors relevant for successful social and behavioral changes.

The dissertation presents the analysis of the link between co-residence of grown children with parents and homeownership differences across welfare regimes or groups of nations as an example of this model modification. Homeownership rates are higher in Southern (and Eastern) European countries than in Western or Northern European countries. However, the prices of real estate relative to income (and in many cases even in absolute value) are substantially higher in the former group of countries. All else equal, this makes little economic sense, unless Southern and Eastern Europeans do not have a substantially higher propensity for owning real estate compared to their Western and

Northern European counterparts. This dissertation presents a comprehensive analysis of data, showing how histories of these countries that included comparatively more political and economic instability as well as a lack of viable alternative investment opportunities may have contributed to the high propensity for and almost exalted status of owning real estate (Symeonidou, 1997). Therefore, it is also socially acceptable and even encouraged behavior for children to stay with parents well into adulthood until they achieve desired educational attainment, possibly marry, and/or find suitable jobs that would allow them to buy real estate of their own, thereby perpetuating the existing model.

While it is true this dissertation is not going to fully resolve the question whether people in different countries fashioned welfare states to reflect their needs or the welfare state somehow emerged independently and then shaped people's behavior, it will address this issue in a much more systematic fashion than the prior literature on the nexus of the welfare regime and family-transfer behavior. In some sense, it might even suggest that this question represents a false dichotomy, as the welfare state seems to be an organic and constantly evolving product of the interaction of state and people in given historical context.

Ultimately, following Berry (2008) and Leopold and Raab (2011), this dissertation also emphasizes the importance of controlling for unobserved family characteristics. Assuming unmeasured family norms affecting transfer behavior, like the level of closeness within and across generations or the importance of education, are shared equally across family members, it is possible to obtain unbiased estimates using a conditional logistic model for the sample of families with more than one child.

POLICY IMPLICATIONS

Certain family-transfer behaviors can be consistent with only certain motives of transfers. This notion is important for policymakers, as it suggests that studying transfer behavior can contribute to a better understanding the importance of underlying motives for transfers between family generations as well as the overall public-private nexus of transfers. This information is invaluable for the appropriate targeting of public transfers to the elderly because it facilitates the assessment of the efficiency of transfers, that is, the extent to which the intended beneficiary of public transfers is the actual beneficiary.

Furthermore, studying the pattern of private transfers over the life cycle of individuals and how it is affected by public transfers and taxes can be very helpful in determining the overall impact of redistribution on the standard of living at various stages of life. In rapidly aging societies, particularly important is the adequacy of redistribution of resources from working age to late life, and how governments can incentivize people to achieve a desirable spending-saving pattern that would translate into sustainability for the model of caring for dependent populations, that is, children and the elderly.

Another policy-relevant issue is whether people maximize utility exclusively at the individual level or if they do it predominantly at the family level. Tracking this behavior is key to understanding the pattern of intergenerational family transfers, and has important implications for the effectiveness of public transfers in their generational redistribution role. Although most of the research focuses on individuals, there is a long-standing tradition that recognizes the possible role of a family or a household as a production unit that shares benefits among its members (Skopek, Buchholz, & Blossfeld, 2011; Becker, 1976). While many public programs target individuals of a particular generation, if families are utility-maximizing units, then the final beneficiary of such

programs may not be the statutory (i.e., the intended) beneficiary, and this may provide impetus for revision of some of the programs to accommodate for this reality. In a more normative context, government may not necessarily want or even be able to alter the utility-maximizing calculus of families, but it may still care about whether private transfers that occur as a result of public transfers flow from elderly parents to grown children or in the opposite direction. In either case, parents and children may ultimately have similar resources at their disposal, but the relative importance of the two generations in terms of decision-making and setting up priorities at the family level may significantly change.

While this dissertation focuses on net family transfers over the life cycle, it does not study in detail how public transfers change over an individual's life cycle and across families and countries. Fortunately, projects like the National Transfer Accounts (NTA) provide such information, and therefore this dissertation will complement existing data on public and private transfers (Mason, Lee, Tung, Lai, & Miller, 2006). In conjunction, these data will be invaluable for policy makers and will provide a more complete insight into the true distributional impact of public transfers across countries with different institutional arrangements, histories, and traditions, as well as across various types of families. This information is particularly timely, given population aging and the need to understand the impact it is going to have on net intergenerational transfers overall. For example, recent literature on the impact of extending the working age and keeping older people in the workforce in response to population aging suggests this extension may have an unintended consequence of decreasing the informal care this group provides to their very old parents (Fontaine, 2009) as well as to grandchildren (Hank & Buber, 2009). The comprehensive framework of tracking various intergenerational transfers across countries

that is currently being developed across multiple projects, including this dissertation, will allow researchers to track such effects as they appear in the transfer system.

Finally, understanding the nature of the link between institutions and family transfers can be important in the policy context. This dissertation documents how differences in the accumulated socioeconomic experience across welfare regimes translate into different patterns of behavior both within and between private and public spheres of life. As some of these models seem to better fit the modern globalized economy than others, it is possible for governments and public administrations to learn from such examples and initiate institutional change that can ultimately affect the speed of the evolution of public-private relationships. In the ever faster-changing world, the ability of a society to adapt to changing circumstances in as short time as possible gives it a critical competitive advantage and assures its long-term survival and success.

DISSERTATION OUTLINE

Chapter 2 starts with the overview of the literature on the origins and typologies of welfare regimes, which is followed by a survey of prior research on family transfers, using welfare-regime typology to explain different patterns of individual transfer behavior observed across developed, mostly European, countries. The second part of Chapter 2 examines different theories of motivation for private transfers, with particular attention to the broad distinction between need-based theories and theories founded on the idea of (immediate and long-term) reciprocity. This is critical information, as the conceptual framework has to account for the structure of motives of giving.

Chapter 3 introduces the conceptual framework of the dissertation. The framework accounts for the social evolution and the interplay between institutions and individuals/families in historical context that gave rise to different welfare types of modern welfare states; in turn, these welfare states represent a constraint and a major point of difference in family-transfer behavior across generations and over the adult life cycle. Based on the conceptual framework and in accordance with the specific dissertation aims, this chapter also presents the research hypotheses to be tested.

Chapter 4 introduces the data and analytic sample, defines outcome and explanatory variables to be used in the analysis, and introduces the analytic strategy. Chapters 5 and 6 present descriptive and multivariate results, respectively, of the analysis of family transfers across three European welfare regimes. Chapter 7 analyzes the origins of the differences in homeownership and co-residence across welfare regimes in order to illustrate the mechanism linking welfare regimes with family transfer behavior.

Finally, Chapter 8 discusses the findings, their implications, and study limitations. The discussion focuses on empirical, methodological, theoretical, and policy contributions and relevance of the dissertation, but it also defines the limits of the generalization from the dissertation findings. This chapter and the dissertation conclude with an extensive overview of the future research agenda.

Chapter 2: Background and Prior Research

This chapter provides an extensive overview of the relevant literature on the welfare state and the origins of welfare-regime typology and its use in the context of explaining private (primarily family) transfer behavior. This is essential for establishing whether it is appropriate to use a welfare-regime typology to analyze individual and family behavior across European countries. The chapter also summarizes the literature on the major explanations for intergenerational private transfer motives and the relationship between public and private giving with respect to alternative transfer motives.

WELFARE-STATE REGIMES AND FAMILY-TRANSFER BEHAVIOR

One of the major social characteristics of developed industrialized countries, the majority of which are mature Western democracies, is the existence of a comprehensive welfare state providing a social safety net for the needy population. However, even a very superficial survey of the major characteristics of different welfare states reveals that countries at a similar level of socioeconomic development and a similar age structure of population have significantly different welfare programs in terms of size and scope, funding sources, and income/wealth redistribution impact.

Anglo-Saxon countries largely pursue liberal economic policies with the market playing a clear central role and an expectation that individuals will provide for themselves by earning income commensurate with their skills. For the minority who are unable to do so, the government provides very modest, often means tested, support with a very limited level of income redistribution within and across generations toward the

needy. Conversely, Northern European countries limit the role of the market in determining individual welfare and emphasize the concept of social solidarity. All in need are provided for, regardless of their potential to contribute to the welfare of the society. At the same time, though, all who can work and contribute are expected to do so, given that the generosity of the welfare system can be preserved only with (close to) full employment. As a result, female labor force participation is comparatively the highest in these countries.

Countries of Continental Europe emphasize the role of the state in providing for the needy, but within the context of the existing social structure, where both social contributions and social support are based on an individual's social class. Consequently, this model promotes preservation of more traditional gender roles in the labor market and in family life. While the welfare state is fairly large, its redistributive impact is limited. These societies have comparatively large, efficient, and respected bureaucratic apparatuses necessary for the efficient functioning of the system, which emphasizes the centrality of the government as exemplified by countries such as Germany or France.

Finally, Southern European countries emphasize the primacy of family in taking care of its dependent members. Consequently, while they share the same goal as Continental European countries to preserve and promote the current social structure, Southern European countries have a more limited welfare state both in scope and generosity, and the level of redistribution is comparatively small. Except for some aspects of the welfare state such as healthcare, these countries do not have a broadly defined guarantee of minimum social protection. Because of the strong emphasis on family, promoting traditional gender roles is among the key features of these societies, resulting in persistently low female labor force participation rates, even as women's educational

attainment has dramatically increased in recent decades and is now as high, if not higher, than men's average level of education across these countries.

The origins of all modern welfare states can be traced back to two major sources. The first contemporary social security system was established as a part of Bismarck's reforms in Germany at the end of the nineteenth century. Motivated by the threat of the then antigovernment Social Democratic Party, which arguably took on itself the cause of labor unions, as well as by traditional paternalistic role of Germany as a source of welfare provision for its population, Bismarck implemented reforms aimed primarily at replacing the earned income of individuals leaving the labor market when reaching certain age (Fay, 1950). Therefore, in its pure form, the Bismarck social policy is characterized by its nonuniversal character: it focuses on wage earners alone. It is implicit that others would continue using other mechanisms (primarily intrafamilial transfers) available for provision of old-age care. Theoretically, this system does not provide for substantial redistribution in the society, because benefits are directly and positively related to previous earnings, but is primarily focused on smoothing consumption over the lifetime of employed individuals. An alternative model was developed in the mid-twentieth century, which put emphasis on the reduction or prevention of poverty. Promoted by Lord William Beveridge (1942), this model is based on universal provision of (generally) flat benefits financed from general taxation. However, as benefits covered all retired people, they tended to be smaller than in Bismarck's system.

Researchers on comparative welfare states have used this basic Bismarck-Beveridge dichotomy to develop and refine the typologies of the welfare state that take into account both the quantity of welfare support as well as the differences in delivery mechanisms. Such categorization has been developed with the primary goal of facilitating empirical research in this nascent scientific field that should ultimately lead to the

construction of theories as the field of comparative welfare state research matures, but is at present more limited in scope (Arts & Gelissen, 2002). Arguably the most well known is Esping-Andersen's (1990) typology of welfare states.

This typology is founded on the idea that welfare provision by the state is conditioned by the unique roles of the market and the family, and that welfare state policies actively contribute to the system of social stratification; welfare provision does not seek to merely decrease the level of inequality in a society. According to Esping-Andersen, the welfare state is a concept that represents more than just a sum of spending for various welfare programs. The defining element of the welfare state is its class character: welfare states that rely on strong middle-class support tend to be larger and their social roles undisputed, whereas welfare states that rely on a broad and often fractured coalition of disparate social groups are smaller and their usefulness and very existence often questioned. In practice, Esping-Andersen defines welfare-state regime types based primarily on the level of decommodification the regime provides to individuals, that is, how successful each regime is in reducing the need of individuals to rely on the market for their well-being. He recognizes the following welfare-regime types across the developed Western countries: social democratic (e.g., Scandinavian countries), liberal (e.g., Canada, Australia, and the United States), and conservative (e.g., Germany, France, and Italy).

The social democratic welfare state is characterized by high level of taxes as a foundation for a comprehensive social policy targeting all categories of the needy, including the elderly. The result is a relatively high level of income replacement for retirees and a low overall level of income inequality in the society, that is, a high level of decommodification. The liberal welfare state shares one characteristic with the social democratic welfare state: reliance on taxes for financing social expenditures. However,

due to comparatively small tax rates, expenditures for social policy programs are low, with only a modest level of income replacement for the elderly and a generally higher level of income inequality in the society. Means-tested social programs are very common features of social policy across liberal welfare states. The conservative welfare state is characterized by a stronger reliance on social security contributions than taxes to pay for social expenditures, which in the case of old-age pensions, results in a fairly high level of income replacement. However, this welfare regime type does not emphasize equality and a high level of decommodification, but rather preserving the social class order through welfare policies.

In practice, countries can also opt for a combination of elements from multiple welfare states, so Switzerland is sometimes considered to be a hybrid between conservative and liberal welfare states, while the Netherlands is claimed to include substantial features of all three major welfare-state regimes (Brandt et al., 2009). The Netherlands is arguably the most difficult case. It was originally identified as a social democratic country by Esping-Andersen (1990), but authors like Visser & Hemerijck (1997) group it with conservative countries. The majority of welfare-state typologies grouped the Netherlands either as a conservative or "undecided" regime type, but some more recent literature (e.g., Glaser, Tomassini, & Grundy, 2004) reemphasized that in its major characteristics, the Netherlands is more similar to Nordic (social democratic) countries than to its immediate neighbors. Therefore, investigating this issue and deciding on the appropriate grouping of the Netherlands will be important for the subsequent analysis of welfare-state regimes and their link with private transfers.

Furthermore, Esping-Andersen's original typology was modified very early to include a traditional (Southern European or Mediterranean) welfare state as a separate type of welfare regime (Leibfried, 1993; Ferrera, 1996; Bonoli, 1997). The traditional

welfare state is characterized by a predominant reliance on social security contributions as a source of revenue for social expenditures, but lower overall social expenditures than a conservative welfare state. Because the overwhelming majority of the literature agrees on the usefulness of distinguishing traditional from conservative welfare regime, the dissertation follows this well-established practice.

Given the welfare-regime typology is founded on the idea that groups of countries share similar institutional characteristics (such as public welfare spending, social services provision, the tax system, and the relevant legal framework), it is critical to confirm these are indeed the sources of differentiation between different welfare regimes. Table 2.1 summarizes main welfare regime characteristics by country. The results reveal that taxes, legal frameworks, and certain types of transfers (i.e., discretionary spending) contribute most to welfare-regime differentiation.

Table 2.1: Welfare Regime Characteristics, by Country

	Old Age and Survivor ¹ (%)	Health (%)	Incapacity (%)	Family (%)	Education (%)	Active Labor Market Programs (%)	Total Without Pensions and Healthcare (%)	Social Services Employment (%)	Gini Index (Before Taxes and Transfers) ²	Gini Index (After Taxes and Transfers) ²	Legal Obligations to Help Elderly Parents ²
Social Democratic											
Denmark	7.3	6.5	4.6	3.3	7.0	1.3	16.1	18.2	0.417	0.232	No
Sweden	9.5	6.6	5.4	3.4	6.0	1.1	15.8	15.9	0.432	0.234	No
Conservative											
Austria	12.7	6.8	3.2	2.6	5.0	0.7	11.5	8.6	0.433	0.265	Yes
Belgium	9.0	7.3	2.3	3.1	5.3	1.2	12.0	12.2	0.494	0.271	Yes
France	12.8	7.5	1.9	3.7	4.9	0.9	11.5	10.8	0.485	0.288	Yes
Germany	10.7	7.8	2.9	2.7	4.0	0.7	10.4	11.4	0.499	0.285	Yes
Netherlands	5.5	6.0	3.6	2.8	4.9	1.1	12.4	15.7	0.426	0.284	No
Switzerland	6.7	5.6	4.1	1.4	4.9	0.6	11.0	11.5	0.409	0.303	No
Traditional											
Greece	12.0	5.9	0.9	1.1	4.1	0.2	6.2	5.3	0.454	0.321	Yes
Italy	14.1	6.6	2.1	1.4	3.8	0.5	7.7	6.9	0.557	0.352	Yes
Spain	8.5	6.1	2.5	1.5	3.8	0.7	8.5	6.1	0.461	0.317	Yes

¹ Includes non-cash transfers (e.g., housing benefits)

² Data for Spain and Switzerland are from late 2000s and for the other countries from mid 2000s

Source: OECD, 2012; Schmid et al., 2012.

Levels of discretionary welfare spending follow the expected geographic gradient: a high level of provision in social democratic countries, moderate across conservative countries, and relatively low in traditional countries. This is particular for family and education spending, but also for disability and employment support, as well as the level of employment in social services that serves as a rough approximation for the provision of practical help and care (as opposed to cash transfers). Furthermore, the redistributive effects of taxes and transfers show a modest, but important, level of distinction across welfare regimes. While Gini indexes before taxes and transfers are fairly similar across all welfare regimes, once taxes and transfers are accounted for, the familiar geographic gradient emerges with social democratic countries having a comparatively low level of inequality (around 0.23), conservative countries a slightly higher level (0.27 - 0.30), and traditional countries the highest (0.32 - 0.35). Finally, grown children in social democratic countries do not have a legal obligation to help their elderly parents; the opposite is true of traditional countries, while across conservative countries the results are mixed, which again supports the distinction between the three welfare regime types.

On the other hand, major entitlement welfare spending programs—pensions and healthcare—do not appear to be the source of distinction between welfare regimes in Europe, given that spending fluctuates across countries without any clear pattern, and this is consistent with findings in prior literature (Padamsee, 2005). The case of healthcare spending is unique because in the majority of developed countries, healthcare is now considered a basic human right and provided universally to all citizens. Consequently, any difference in its provision across the welfare regimes is likely to be small. However, the results in Table 2.1 may also be partly misleading as they do not take into account the age composition of population, which is particularly important for major entitlement

programs. Moreover, closer inspection of the characteristics of these programs, in particular public pensions, reveals that even similar levels of welfare spending may be associated with profound underlying differences in the character of the programs. Table 2.2 documents these differences for public pension programs, arguably the single most important entitlement spending program of any mature welfare state.

Table 2.2: Characteristics of Public Pension Programs, by Country

	Statutory Normal Retirement Age		Qualifying Criteria for Retirement Benefit			Early Retirement Age		Pensionable Age ¹¹		Contribution Rates (% of Earnings)		Net replacement rate ¹² (% of Earnings)	
	Men	Women ¹	Coverage (Years)	Contribution (Years)	Residence	Men	Women ¹	Men	Women ¹	Employer	Employee		
Social Democratic													
Denmark	67				Yes ³	None ⁷		65		None	None	32.6	
Sweden	65		30				61	65		7.00	17.21	31	
Conservative													
Austria	65	60	25	15			63.5	58.5	65	60	12.55	10.25	89.9
Belgium	65		45				60		60		8.86	7.50	52.1
France	65		40				60		60.5		9.90	6.75	60.4
Germany	67			5			63		65		9.80	9.80	56
The Netherlands	65		50 ⁴				None ⁸		65		5.70	19.00	33.1
Switzerland	65	64		45 ⁵			None ⁹		65	63	4.90	4.90	38.2
Traditional													
Greece	65			12.3			60		57		13.33	6.67	111.2
Italy	66	62 ²		20			63 ¹⁰		59		23.81	9.19	71.7
Spain	65			15 ⁶			61		65		4.70	23.60	84.9

¹ Data for women presented only if different from men.

² 66 by 2018.

³ For 40 years between ages 15 and 65.

⁴ Between ages 15 and 65.

⁵ 44 for women; the minimum of 1 year for partial pension.

⁶ 35 for full pension.

⁷ Pension proportionally reduced if less than 40 years of residence.

⁸ Reduced benefit if not in the system the whole time between 15 and 65.

⁹ Reduced for less than full qualifying years of contribution.

¹⁰ Any age with more than 42 years of contribution for men or 41 for women; 63 for those who joined the system in 1996 and later.

¹¹ OECD defines pensionable age as the age when a person reaches minimum number of years of continued work (assuming first started working at age 20) to qualify for full pension benefits.

¹² From public pension for an individual with mean earnings.

Source: U.S. Social Security Administration, 2012; OECD, 2012.

While on the surface (e.g., looking at normal and early retirement age or qualifying criteria for pension benefits), public pension programs do not exhibit any apparent geographic or welfare-state-regimes pattern, current policies with all their unique legal and socioeconomic aspects produce fundamentally different outcomes. Pensionable age, defined by the OECD as the age when a person reaches minimum number of years of continued work (assuming she first started working at the age of 20) to qualify for full pension benefits, suggests Greece and Italy have pension systems in place that encourage workers (or at least do not discourage them) to choose an earlier exit from the labor force. Net replacement rates in social democratic welfare states are fairly small and in conservative welfare states mostly modest, suggesting the retirement security in many of these countries depends on a combination of various sources rather than public pensions alone, while the net replacement rates in traditional countries are high. These are countries where private retirement plans, mandatory or voluntary, are small or nonexistent.

Table 2.3: Characteristics of Labor Markets, by Country

	Female Labor Force Participation Rate	Employment Gap ¹ (%)	Youth Unemployment Rate	Difference Between Youth and General Unemployment Rates
Social Democratic				
Denmark	76	6.6	14.2	6.5
Sweden	76.7	5.5	22.9	15.3
Conservative				
Austria	69.3	11.6	8.3	4.1
Belgium	61.8	11.6	18.7	11.5
France	66.1	8.8	22.1	12.8
Germany	70.8	11.6	8.5	2.5
The Netherlands	72.6	11.1	7.7	3.3
Switzerland	76.4	11.9	7.7	3.6
Traditional				
Greece	57.6	21.3	44.4	26.5
Italy	51.1	22.2	29.1	20.6
Spain	66.8	15.1	46.4	24.7

¹ Employment gap is the difference between male and female labor force participation rates.

Source: OECD, 2012.

Labor market differences across countries add further evidence to the usefulness of using a welfare-state regime typology, given that both work and retirement characteristics are largely determined by the structural context provided by welfare regime institutions (Table 2.3). Both female labor force participation and the employment gap between men and women follow a clear geographic gradient, with the highest female labor force participation and the lowest employment gap in Northern Europe and the exact opposite in Southern European countries, with the results for Continental Europe somewhere in the middle. Similarly, Southern European countries have extremely high youth unemployment and the highest difference between youth and general unemployment in the midst of high levels of general unemployment. Youth

unemployment and the difference between youth and general unemployment are the lowest in Continental European countries, with the exception of France and Belgium, which more closely resemble Northern European countries, especially Sweden.

The results in Tables 2.1–2.3 are consistent with the findings of Börsch-Supan, Brugiavini, and Croda (2009), who examined the role of social security institutions for work and retirement trends in Europe. Their findings clearly support the notion that work and retirement differences between countries are primarily accounted for by institutional (i.e., welfare regime) differences, whereas demographic and health differences are only of secondary importance as explanatory factors.

Using this typology as a framework for cross-national comparisons of different types of intergenerational support in Europe, researchers found a consistent geographical gradient of family transfers with the largest, but least frequent, transfers on average in Southern Europe and smallest, but most frequent, transfers in Northern Europe, and documented sharp differences in co-residence of grown children with parents across welfare regimes (e.g., Albertini & Kohli, 2012; Kohli & Albertini, 2007). Many studies suggest that the exchange of nonfinancial help and care between family generations across Europe can be best explained using the welfare regime framework (e.g., Brandt et al., 2009, Deindl & Brandt, 2011; Haberkern & Szydlik, 2010; Igel & Szydlik, 2011). Geerts and Van den Bosch (2012) find substantial variation in the utilization of a formal care system across European countries. Similarly, focusing on the elderly in their last year prior to death, Hank and Jürges (2010) find the least reliance on family and the most on the welfare state for care in Northern Europe and the opposite result for Mediterranean countries, while countries geographically located between these two regions exhibited mixed patterns of support. Welfare-state typology has also been used to study the

prevalence of the "young old," that is, people older than the legal retirement age, who are in good health and without legal responsibility to care for another person (e.g., Komp, van Tilburg, & Broese van Groenou, 2009). Findings suggest that countries with the same welfare-regime type have similar proportions of the "young old" in their population, although the mechanism linking the welfare regime with this outcome remains unclear.

However, the use of a welfare-regime typology to describe patterns of family transfers does not have unequivocal support in the literature. Attias-Donfut et al. (2005) find only partial confirmation of the expected North-South gradient in various types of private transfers across welfare regimes, while Schenk, Dykstra, and Maas (2010) suggest that parental financial transfers to children vary significantly across countries, but do not exhibit patterns consistent with welfare-regime typology. Also, while utilization of formal care exhibits a familiar cross-country pattern, all countries apply similar criteria in allocating care, with the priority given to those with the highest need and/or living alone (Geerts & Van den Bosch, 2012). Dykstra and Fokkema (2011) advocate against using a welfare-regime typology in the analysis of families and offer an alternative typology of late-life family types that is based on the characteristics of parent-child dyads (geographic proximity and frequency of contact), prevalent norms of family obligation, and preferred types of transfers (i.e., financial or various nonfinancial types of transfers). Each type in Dykstra and Fokkema's classification can be identified across all European countries. However, it seems that this late-life family typology only supplements the welfare-regime typology at the within-country level; it does not necessarily challenge it at the between-country level of analysis where welfare-regime typology still represents a useful, albeit imprecise, approximation. Suanet, Broese van Groenou, and van Tilburg (2012), on the other hand, do not dismiss the relevance of the welfare-regime characteristics in

accounting for family-transfer dynamics, but support broader conceptualization of societal determinants of private transfers that also includes cultural, socioeconomic, and demographic components in addition to the welfare regime. Importantly, Attias-Donfut and Ogg (2009) document some level of convergence in the provision of intergenerational support across European countries and, while recognizing the existence of the North-South European gradient of transfers, raise the possibility it may become increasingly irrelevant in the future.

Another important consideration regarding different welfare-state regimes is what constitutes a welfare state, that is, what policies, programs, and regulations should be included in its definition. For example, there is a widespread notion that the United States has a welfare state that is fairly small and very limited in generosity compared to various European welfare-state regimes. However, Alber (2010) shows that the overall social spending in the United States does not lag behind European countries once taxation of social benefits, provision of indirect tax benefits, and government-mandated private benefit schemes are taken into account. If voluntary private social spending is included, the United States places among the largest social spenders. This obviously largely remains an unresolved issue, and resolving it will advance the quality of research and policy, especially taking into account that there is a clear shift in Europe toward consumer choice, personal responsibility, and labor-market participation, as elements that are traditionally more associated with the U.S. welfare state. As for now, it is only certain that the concept of the welfare state is evolving over time and across societies not unlike those very societies that at least partly redefine themselves with every new generation.

Welfare-regime typology has been critical for understanding institutional variations among the welfare states (Tepe & Vanhuysee, 2010). It has also found

extensive application in the analysis of the public-private link in intergenerational transfers, and it proved useful in explaining differences in individual intergenerational transfers behavior across countries. For example, recent research has found significant gender differences in the impact of welfare-state policies that critically impact the way informal intergenerational support is provided (Schmid, Brandt, & Haberkern, 2012), and can account for the different involvement of daughters and sons in care for their parents both within and across countries.

However, despite substantial empirical support for the use of welfare-regime typology in the study of family transfers, the explanation of the causes of a link between the two remains limited. While in some cases there is almost an implicit assumption that family transfers correspond to welfare-state regimes and no explicit effort is made to justify why there is more to this link than just correlation, this issue has been addressed in some of previous research. Kalmijn and Saraceno (2008) find children in familistic societies more responsive to parental needs than children in individualistic societies, which corroborates Reher's (1998) finding of the weak vs. strong family geographic gradient that broadly corresponds to welfare-regime typology. Motel-Klingebiel et al. (2005) recognize that social values and path dependency may play an important role in the variation of outcomes from similar inputs. Similarly, Brandt et al. (2009) considers the welfare state as one of cultural-contextual structures that provide a framework for intergenerational transfers.

Arguably, the most serious consideration of the link between welfare and family-transfer regimes can be found in Albertini and Kohli (2012) and Albertini, Kohli, and Vogel (2007), who offer an explanation why the family-transfer regime corresponds to the welfare regime. These studies establish that structures, institutions, and family culture

linked closely with family solidarity are also linked with welfare regimes. Culturally, they argue there is a clear difference between the familistic South and individualistic North of Europe, a notion supported by Hank (2007), who finds grown children and parents in Mediterranean countries on average live closer and have more frequent contact. Institutionally, Albertini, Kohli, and Vogel claim that family policy as a part of the institutional context affects private transfers, but that it is also directly related with the welfare-regime type. Structurally, they argue the most important factors are household composition and the issue of co-residence between adult children and parents. Cultural, institutional, and structural factors represent macro-level, distal causes of intergenerational transfers that affect micro-level characteristics of parents, children, and their relationships, which are the direct determinants of transfer behavior. While providing a convincing framework to account for the general correspondence between the welfare regime and family-transfer regime typologies, this account still stops short of explaining how the link between the two regimes emerged. Overwhelming evidence exists to show that using a welfare-regime typology to describe family transfers is empirically justified; this account, however, does not provide a convincing justification that it is also theoretically justified.

The current explanations of the link between welfare regimes and family-transfer regimes are not completely satisfying because the original welfare-regime idea has its theoretical foundations in structural-functionalist perspective that is in this issue primarily focused on social and economic variables, and the interaction of the state with the economy. Consequently, the welfare-regime approach is primarily interested in such issues as the level of decommodification, social stratification, or employment (Flaquer,

2000). On theoretical grounds, it may be difficult to justify why it would be appropriate to use it in other contexts, including private intergenerational transfers.

The tendency of uncritical reliance on the welfare-state-regime perspective in the emerging international comparative research has been criticized in the literature (e.g., Bamba, 2007). Work by Pfau-Effinger (2005) demonstrates that the comparative welfare-state analysis is not complete if it focuses only on institutions and (social) actors without regard for the specific contextual factors of each country, including cultural and historic experiences. In that regard, comparative studies of intergenerational transfers that emphasize social and family values, different cultures, and path dependency hint at the most plausible way in which welfare-regime and family-transfer regime typologies could be linked. For example, in their analysis of public attitudes toward welfare-state policies, Blekesaune and Quadagno (2003) find that different social challenges across nations lead to different understanding of the underlying social problems and the nature of the relationship between individuals and institutions, a key component shaping individuals' attitudes about the appropriate welfare policies. However, Blekesaune and Quadagno fall short of fully exploring this important issue, and make ad-hoc modifications of the welfare-regime framework beyond the tenets and the scope of the original formulation of the welfare-regime idea.

The most important alternative to Esping-Andersen's welfare-regime typology is the "families of nations" typology proposed by Castles (1993). In some sense, this typology is founded on the idea that history and circumstances do matter: language, religion, legal tradition, and various formative historical events form individual preferences and institutional structures, ultimately resulting in public policies with common features across countries with similar experiences. Beyond structural links

characteristic for Esping-Andersen's typology, therefore, Castles's approach gives equal weight to shared values, experiences, and identity. In this approach, it is possible to distinguish between English-speaking, Nordic, German-speaking, and Mediterranean families of nations as well as several nations that exhibit mixed characteristics and cannot be easily identified to belong to a single family. Ultimately, this typology results in a division very similar to Esping-Andersen's, but the foundational principles are at least partly different. Importantly, Castles recognizes that various regional and international agreements have the potential to affect the nature of different "families of nations," but he also posits that there is no evidence that the interaction of these agreements with the underlying characteristics of different "families" will result in a convergence that would ultimately make the distinction between the "families of nations" disappear.

PRIVATE INTERGENERATIONAL TRANSFERS MOTIVES

At the individual and family level, intergenerational transfers are shaped by a host of factors, and motives for giving have an important role. Unfortunately, as it has already been explained in the previous chapter, there is currently no direct information on motivations available in SHARE or in other surveys for all the types of intergenerational family transfers; this information is given only for money transfers. Even in the case of money transfers, where information on reasons to make a transfer is collected for every parent and grown child making transfers, the results may not fully reflect the true underlying motives, because of limitations of the question, which offers only a limited number of categories of reasons to give, and focuses only on the main as opposed to all motives for a transfer, and does not probe individuals who responded they gave for "no

specific reason" further in order to determine whether there is still some vague and unspecified notion of need that partly motivates these individuals to give, or if they truly give for no reason (but arguably the joy they get from the act of giving). This limitation inevitably constrains the scope of inference, as without the data that fully reveals the motivations, one cannot completely account for the nuanced nature of human psychological and cognitive processes, and resulting preferences, desires, or motivations.

However, the data track individual actions, providing information on whether individuals give/receive transfers, what type of transfers they give/receive, when they give/receive them, and to/from whom. While the full spectrum of underlying transfer motives is not revealed with this information, the data still provide valuable insight in the underlying psychological context, because certain actions can be consistent only with certain, broadly defined transfer motives like need. At the same time, this means that the available data does not allow researchers to completely determine the full character of transfer motives. Rather, the data allows only a much more modest goal, that of revealing if true (unobserved) transfer motives are consistent or inconsistent with the observed act of giving. In this setup, inconsistency between acts and motives implies certain motives are not important, but consistency does not prove that such motives are truly important, only that they may be important. While limited, this information is still important, because major alternative theories on motives for giving make different predictions about the likelihood, magnitude, and timing of transfers between individuals/family members as well as about the nexus of public and private (family) transfers. Such information is critical to establish whether the conceptual model of giving over the life cycle and across family generations is consistent with the empirical evidence on family giving, as any

conceptual model of family giving has to be built on a certain set of assumptions, including the assumption on the major operative motive for giving.

Need-Based Motives of Intergenerational Transfers

The first major group of explanations of intergenerational transfer motives is based on the idea that relative needs determine who are going to be transfer donors and recipients. Historically, the oldest explanation of what motivates giving is arguably the old-age security hypothesis. Relevant for the period preceding the introduction of public retirement programs, it posits that private intergenerational wealth transfers from parents to children represented an investment with the expectation that children would "pay it off" by providing for parents once they reach old age. The implicit assumption is that wealth predominantly flows from children to parents, and therefore it is rational for parents to have multiple offspring (Caldwell, 1976; Leibenstein, 1957). Given this basic idea, Nugent (1985) proposed a list of conditions under which the old-age security hypothesis is valid: nonexistent or insufficient government social security schemes, nonexistent or only rudimentary financial institutions and capital markets, and several other factors related to culture and (family) tradition in different societies. Therefore, this hypothesis is primarily relevant for less developed and developing countries. Some scholars argue it might also be relevant in developed countries, if family ties are strong. Researchers often use Italian pension reform in the 1990s as a natural experiment to test the relevance of the old-age security hypothesis (Attanasio & Brugiavini, 2003; Billari & Galasso, 2009; Bottazzi, Jappelli, & Padula, 2006). For example, Billari and Galasso

(2009) find lower expected future private pension benefits to be related to an increase of more than 10% in the probability of having a child.

Complementing the old-age security hypothesis, the insurance hypothesis posits that private intergenerational transfers can be motivated by insurance against financial adversities where the risk is spread across family members. While theoretically this should mean that the insurance hypothesis is valid only in the absence of a public support system, as the public system can spread the risk across a much larger pool of people, there is evidence against this assertion. Kotlikoff and Spivak (1981) show that families can successfully substitute the public system as an insurance mechanism even under the unrealistic assumption that the public system functions optimally (i.e., there is no information asymmetry between the parties involved or high costs of setting up and running the system). The parental repayment hypothesis (Becker & Tomes, 1976) builds on the old-age security hypothesis by taking into account the quality, in addition to the number, of children. This hypothesis posits that parents' investment in their children is commensurate with their children's underlying abilities, as this should maximize the return on the investment. The implicit expectation is that children are going to repay the investment by providing their parents with old-age support.

Arguably, the most important and the most well known of need-based explanations of motives of private transfers, the altruism hypothesis (Becker, 1974; Barro, 1974), posits that family is regarded by its members as an institution in which each individual values the consumption of others as much as her own consumption, resulting in (perfect) consumption smoothing across family members. Individuals earning more than the average in the family are net donors, whereas individuals earning less than the average in the family are net receivers of transfers. As individuals' income and wealth

increase, their level of transfers to less well-off family members increases as well (Zissimopoulos, 2001), and this finding holds both across developed (Lowenstein & Daatland, 2006) and developing countries (Cox, Galasso, & Jimenez, 2006). Generally, the importance of family members' needs and intrafamilial solidarity has been well documented in the literature (Grundy, 2005; Ikkink, van Tilburg, & Knipscheer, 1999; Künemund, Motel-Klingebiel, & Kohli, 2005; McGarry & Schoeni, 1995; Silverstein, Conroy, Wang, Giarrusso & Bengtson, 2002; Villanueva, 2005).

One of the major implications of the altruism hypothesis is that public transfers are largely ineffective in targeting individuals as they displace private transfers, but empirical findings on this are ambiguous at best. Hence, Andreoni (1990) proposed a modification to the altruism hypothesis, the warm-glow giving hypothesis, which accounts for the fact that transfer donors might care about their own utility in addition to transfer recipients' utility. This hypothesis therefore implies only partial displacement of private by public transfers, as private transfer donors still continue to enjoy benefits from the act giving regardless of the size of public transfer recipients receive. It finds some support in experimental settings (Chan, Godby, Mastelman & Muller, 2002). Also, findings by Roll and Litwin (2009) suggest that the act of giving to children may positively impact the mental health of parents, but it remains unclear if such a result is intended, in which case it would support to the warm-glow giving hypothesis. If unintended, it is therefore completely consistent with otherwise altruistic character of this type of transfers.

Finally, contingency theory is closely related to the altruism hypothesis, but more common in the field of sociology, unlike the altruism hypothesis that is primarily associated with the economics tradition. Contingency theory contends that sharing

resources across generations is contingent upon the recipient's needs for assistance (Fingerman, Miller, Birditt, & Zarit, 2009). Due to the central role of needs for the flow of transfers, the implications of contingency theory are virtually indistinguishable from altruism. Another important sociological theory that supplements altruism is resource-depletion theory, which claims that parents with multiple children and/or living elderly parents (i.e., facing increased demand on resources) will provide fewer transfers to each individual child (Blake, 1981, Fingerman et al., 2009).

Reciprocity-Based Motives of Intergenerational Transfers

An alternative to need-based explanations of the motives of giving are various explanations based on the idea of reciprocity (Gouldner, 1960). However, unlike need-based explanations that are in essence very similar and therefore hard to distinguish empirically, reciprocity-based explanations are more diverse, depending on the notion of what constitutes reciprocity in giving. In a narrower sense, reciprocity is a form of payment for services, which generally entails commensurate values and simultaneity of each party's transfer. In a broader sense, reciprocity can refer to repayment for the receipt of a transfer. Repayment can occur with a time lag, does not require symmetry in value, and can be nominally made to a third party. This is especially relevant for the family context (Kohli & Künemund, 2003).

The main competing explanation to the altruism hypothesis in economics literature is the exchange hypothesis (Cox, 1987). It posits that parents and children engage in exchange where one party provides services or other forms of help that are "paid for" by transfers from the other party, which is fairly close to the notion of

reciprocity in its narrower sense. Several papers examining the altruism and the exchange hypotheses find support for the latter (Cox & Jakubson, 1995; Cox & Rank, 1992). However, in practice, the exchange does not mean strictly equal giving between generations. The elderly are observed to give more to their adult children than to receive from them (Grundy, 2005), although it should be recognized that this finding fails to account for public transfers that are predominantly flowing in the opposite direction. In the context of bequests, strategic bequest motives advanced by Bernheim, Shleifer, and Summers (1985) are the equivalent of the exchange motive. The main difference is that by postponing payments, transfer donors hope to extend the period of control over the actions of transfer recipients, thereby arguably gaining more in utility than by simple inter vivos exchange.

While the altruism-exchange dichotomy dominates in the economic literature, in recent years it has been increasingly recognized that reciprocity in its broader form has an important role in intergenerational transfers that goes beyond the notions of exchange or altruism, and in some sense even bridges the gap between the two major competing explanations of transfer motives. This is especially true for "indirect reciprocity," that is, the exchange between multiple (three or more) generations that requires some level of altruism to be perpetuated in the situations of asymmetric values exchanged between generations (Arrondel & Masson, 2001). Also, Arrondel and Masson (2001) notice the possibility of negative reciprocity, where undesirable (transfer) behavior can be met with a similar (i.e., undesirable) response, which further distinguishes reciprocity from exchange based on purely rational economic foundation.

In recent years, economists have started exploring the concept of reciprocity and acknowledging its importance for developing more realistic models of transfer behavior

and human economic behavior in general. There is a burgeoning literature in the fields of experimental economics and game theory emphasizing the importance of reciprocity in explaining human relationships (Berg, Dickhaut, & McCabe, 1995; Bolton & Ockenfels, 2000; Cox, 2004; Dufwenberg & Kirchsteiger, 2004; Falk & Fischbacher, 2000). As noted by Fehr and Gächter (2000), human behavior very often deviates from the norm of self-interest and pure return-maximizing behavior that dominates in the economic literature. Bowles and Gintis (2004) and Fehr, Fischbacher, and Gächter (2002) show how reciprocal behavior (i.e., willingness to exhibit cooperative behavior if treated fairly and to punish defectors from the norm of voluntary cooperation even if this results in personal expense) based on established social norms has the potential of explaining both the perpetuation of these norms over successive generations as well as different economic phenomena that cannot be accounted for by models based on self-interested behavior of individuals. Moreover, Bowles and Gintis (2004) propose that reciprocal behavior might have been evolutionarily favored and that humans might actually be genetically predisposed to act reciprocally and advance the interest of a group over the interests of any single individual. However, recent results from an experiment by Konow (2010) show that transfer behavior is even more complex than previously considered: when giving, people act according to the prevailing social norms that emphasize equity and need as the important determinants of transfers, but they feel no better than people who are allowed to avoid this socially instilled norm of giving, that is, who are allowed to act selfishly.

Arrondel and Masson (2001) have developed a two-dimensional typology of intergenerational reciprocity. In their framework, reciprocity can be upward or downward with respect to the direction of transfers, and backward-looking (i.e., based on the

transfer behavior of previous generations) or forward-looking (i.e., based on the expected transfer behavior of future generations) with respect to the time dimension of transfers. While classical economic theory based on self-interested behavior would find it difficult to explain why this framework could function over time, given incentives for selfish individuals to default on their transfer obligations, family tradition as a motive for transfers might be able to account for the viability of the described transfer framework. This hypothesis is founded on the idea that long-term reciprocity between family generations is ensured by an implicit social contract (Hashimoto, 1996; Silverstein et al., 2002). Therefore, children receiving more from their parents are expected to give more to their children.

While this pattern of intergenerational reciprocity in transfers is largely true for bequests, it is weaker in the context of inter vivos transfers where needs seem to be at least equally important as family tradition (Ikkink et al., 1999). Forward-looking transfers play a particularly important role for perpetuating the desired behavior across generations and therefore upholding the unwritten social contract. A prominent example of such transfers is the so-called demonstration effect (Cox & Stark, 2005), which refers to parents helping their adult children (for example with a down payment to buy a house or an apartment) so that the adult children can start their own families and have children. In turn, adult children, who have become young parents, have an incentive to provide help to their elderly parents in order to demonstrate to their young children the appropriate way of caring for elderly parents, with the expectation they will receive the same level of care once they get old. While the empirical evidence is still limited, some studies like Arrondel and Masson (2001) find support for the existence of the demonstration effect.

While family tradition or “family ideology” seems to play an important role in intergenerational transfers, its effect is likely not uniform across all individuals in a society (Angel, 2008). One potentially important line of division is income and/or wealth: exchange among families in the upper echelons of society is more common than in the rest of society (Fritzell & Lennartsson, 2005). What particularly complicates the picture of family traditions and filial norms in the study of intergenerational transfers, though, is the constant and ever-increasing change to which long-held traditions are subjected in the modern world. Therefore, it comes as no surprise to see different authors using words like “disagreement and confusion” (Goldscheider, Thornton, & Yang, 2001), “a crisis of legitimacy” (Sundström, Johansson, & Hassing, 2002), or “contradictory and paradoxical effects” (Attias-Donfut, Ogg, & Wolff, 2005) to describe the reality of the interaction (and oftentimes struggle) between traditional values and the requirements of modern life.

Other Explanations of Intergenerational Transfers

There are multiple other explanations of intergenerational transfers that cannot be readily identified as either need- or reciprocity-based. One major group is different sociobiological motives. They refer mainly to gender, status of children (biological vs. stepchildren), and parents’ marital status and quality, as well as intersections of these characteristics. Studying intergenerational financial flows in Sweden, Fritzell and Lennartsson (2005) have found that unmarried women receive help more often than their male counterparts. Generally, women have been shown to exhibit somewhat stronger intergenerational financial bonds (Silverstein, Bengtson, & Lawton, 1997; Lye, 1996), though the difference is much more pronounced for mothers compared to fathers than for

daughters compared to sons. As for the status of children by birth—biological children vs. stepchildren—there is evidence that parents might favor their biological children in transfers, both in terms of unequal bequests (Light & McGarry, 2004) and unequal inter vivos transfers (Berry, 2008).

Furthermore, factors like mental health may affect transfers in ways unrelated to the underlying motives. Some research suggests that the cognitive performance of the elderly may drop precipitously in retirement (Rohwedder & Willis, 2010), and this in turn can negatively affect their ability to handle finances, which includes giving money to children. Moreover, cognitive abilities exhibit positive association with more information-intensive types of financial investments like stocks (Christelis, Jappelli, & Padula, 2010), which may over time affect parental wealth holding and composition, and ultimately affect their ability to give. While Roll and Litwin (2009) have noted an interesting possibility that the causation between cognition and financial transfers may be reversed, that is, that the act of giving may benefit parental mental health, the fact remains that recognizing true underlying motives for intergenerational transfers is further complicated by this and numerous other factors that may affect transfer patterns without being related to motivation in any meaningful way.

PUBLIC-PRIVATE NEXUS OF INTERGENERATIONAL TRANSFERS

The effectiveness of public intergenerational transfers in affecting the wellbeing of individuals depends on the motivation for private transfers. Altruism implies substantial displacement (i.e., crowding out) of private by public transfers, rendering relatively ineffective any public transfer targeting particular individuals. Empirical

estimates do support some level of displacement, but the magnitude differs across studies. Kang and Lee (2003) estimate the magnitude of the crowding out of private by public transfers in Korea to be between 70 and 100%. All other estimates in the literature are more moderate. Jensen (2003) found a moderate (25 to 30%) crowding out of private transfers by public pensions in South Africa. Cox and Jimenez (1992) estimated displacement of private transfers by the social security system in Chile to be in excess of 16%. Studying the effects of the unemployment insurance benefits on private transfers in the United States, Schoeni (2002) found evidence of partial (24 to 40%) crowding out, while Villanueva (2005) found more modest (8 to 11%) effects in his study of the United States, Germany, and the United Kingdom. Using data from HRS, SHARE, and ELSA, Hurd, Michaud, and Rohwedder (2008) estimated that increasing replacement rates (i.e., generosity) of public pensions for 10% is associated with a 10 to 20% decrease in wealth accumulation at retirement. This suggests a substantial crowding out of private savings by public transfers, which might be reflected in lower private intergenerational transfers as savings represent the source of private transfers.

Looking at patterns of help and care in the last year of life, Hank and Jürges (2010) find exclusive family support more prevalent in the less generous welfare states of Southern Europe, while institutional and non-kin support characterize the more generous welfare states of Northern Europe, which may suggest some level of crowding out of private by public support. Using data collected to evaluate a welfare program targeting some of the poorest communities in rural Mexico (PROGRESA), Attanasio and Ríos-Rull (2000) and Albarran and Attanasio (2003) also found some support for the conjecture that public transfers negatively affect private transfers. More generally, Cox et al. (2006) established that the elderly in countries with more developed and generous

public pension systems receive less support through private transfers. Overall, the literature gives some support for altruism as the transfer motive, but due to the relatively low degree of displacement of private by public transfers, there seems to be more to transfers than altruism. This also implies that government programs can likely be an effective redistribution tool, given that the complete or even near complete offset of public transfers by private intrafamilial flows can happen only under very specific circumstances (Kotlikoff, Razin, & Rosenthal, 1990).

The exchange hypothesis has different implications from the altruism hypothesis. As individual family members do not care for the consumption of others in the family, but only for maximizing their own utility in exchange with them, there is no consumption smoothing across family members and no crowding out of private by public transfers. Actually, the exchange hypothesis implies generous welfare states may even increase the likelihood of intergenerational transfers between older adults and grown children. Moreover, as only those individuals who have goods or services desired by others can engage in the exchange, public transfers to those who have less in the family should result in increased intrafamilial exchange of support (i.e., crowding in).

Examining the relationship between informal and formal help for the elderly in Norway, England, Germany, Spain, and Israel, Motel-Klingeibel, Tesch-Roemer, and von Kondratowitz (2005) conclude that increased informal help to the elderly in countries with less generous welfare states is accounted for by different personal and household characteristics, therefore rejecting the crowding-out hypothesis. Cox and Jakubson (1995) and Künemund and Rein (1999) find some evidence in support of crowding in of private by public transfers. Several recent studies give further support to the complementary character of public and family support: Leopold and Raab (2011), who explore the

relationship of private and public transfers in the study of concurrent financial exchanges across Europe, and Geerts and Van den Bosch (2012), who explore links between formal and informal long-term care, find that differences in public provision of support across European countries affect private intergenerational support.

It should be noted, though, that the crowding in and crowding out dichotomy might be a false one. Studying transfers of money and practical help between elderly parents and their adult children across Europe, Deindl and Brandt (2011) found private intergenerational transfers to be responsive to the generosity of public transfers. Rather than uniformly increasing or decreasing, private transfers tend to increase in the direction of those who, after public transfers, have relatively less, and decrease or completely halt in the direction of those whose relative position improved. Furthermore, once clear distinction is made between care, which is more intensive and based on need, and help, which is less intensive and based on opportunity to provide it, as two different types of support, it is apparent that the generosity of the welfare state (i.e., provision of adequate social and health services) is associated with a decrease in privately provided care and an increase in help (Brandt, Haberkern, & Szydlik, 2009; Igel, Brandt, Haberkern, & Szydlik, 2009). The same relationship holds for grandchild care, where the publicly provided childcare infrastructure is associated with the higher likelihood of grandparents providing sporadic grandchild care, but the lower likelihood of providing intensive care (Igel & Szydlik, 2011). Similarly, Bonsang (2009) demonstrates that informal care across European countries displaces the use of low-skilled formal domestic home care, while complementing high-skilled nursing and personal care. Furthermore, for highly disabled individuals, displacement between formal and informal care cannot be observed even for low-skilled home care. Therefore, family support is not crowded out by public support,

but rather it changes form in order to provide the optimal level and mix of various types of support across generations.

Substantial variation in the estimates of the direction and the magnitude of the relationship between public and private intergenerational transfers might be a consequence of mis-specified models that impose linear structure on the data, whereas the true character of the relationship might be decisively nonlinear. This is supported by Cox, Hansen, and Jimenez (2004), who explored the public-private nexus of intergenerational transfers in the Philippines. The strong and significant negative correlation they found for the poorest households completely disappears for medium- and high-income households. This implies that the crowding out suggested by the altruism hypothesis might be the dominant element of the public-private relationship of transfers for the least well-off households, where both transfer donors and recipients are objectively the needy, but that this relationship does not hold for middle- and higher-income households.

Finally, all studies of the effectiveness of government redistribution of resources suffer from the inherent problem of the unrealistic counterfactual—that is, the unrealistic measure of the distribution of income in the absence of government intervention, as observed by Jesuit and Mahler (2010). Therefore, even if the study of the relationship between public and private transfers can shed some light on the issue of the redistribution of resources across generations, it cannot provide the complete answer on the effects of government redistribution on welfare of private individuals and, more generally, different generations as it fails to account for the effects on private savings. Consequently, this research can, at best, provide only a part of the answer to this complicated issue.

In sum, the literature review shows that intergenerational family-transfer behavior and the relationship between public and private (family) transfers represent complex and multifaceted issues. With respect to intergenerational transfer motives, the literature proposes many explanations that can be largely divided into two major groups: need- and reciprocity-based explanations, where the latter in the narrow sense refers to direct and immediate exchange of commensurate value, and in the broad sense it can be indirect, with time lag, and no equal value of giving requirement. Regarding the public-private nexus in intergenerational transfers, prior research makes important contributions in establishing the empirical validity of alternative theories of intergenerational transfer motives, but it also demonstrates the limits of inference based solely on the information on individuals' acts of giving rather than direct information on the motives of giving. The literature review also demonstrates that public and private transfers are not only interrelated at national levels, but exhibit common characteristics across welfare-state regimes. While adding another layer of complexity to the analysis, this also represents an opportunity to learn from cross-national data and to strengthen the analysis on the character of private transfers in the context of different policy environments as well as unique historical experiences.

Modeling these various elements important for the analysis of the public-private nexus of transfers is challenging, and it requires a framework capable of capturing individual transfer behavior within the family and over the life cycle, while accommodating for the constraints at the country and welfare-regime level. Therefore, the next chapter describes the conceptual model that informs the link between the welfare state and family-transfer behavior, as well as the study of intergenerational family transfers in the context of overlapping generations.

Chapter 3: Conceptual Framework

Net transfers between older parents and grown children can be defined as the monetary value of various types of transfers (e.g., money, care and help, grandchild care, and co-residence) that parents give to children, less the monetary value of transfers they receive from children. While the concept may appear straightforward, there have been very few studies that consider transfers of money and time together, let alone that try to establish their net value, but their findings suggest this may be one of the most promising areas of research on intergenerational transfers. For example, Bonsang (2007) finds time and money transfers to often act as substitutes, while Attias-Donfut and Ogg (2009) suggest that age is associated with a gradual change in the pattern of various transfer exchanges, but the transition to retirement does not seem to be a pivotal event that substantially changes a prior transfer pattern over a short period of time. However, the only attempt to estimate net family transfers has been by Litwin et al (2008), who calculated their value for Germany and Israel.

There are several important elements that make such a study challenging, including identifying which types of transfers should be included in the net-transfers measure, deciding how various nonfinancial transfers should be monetized, and determining whether co-residence should be considered a unidirectional or bidirectional transfer. However, the largest obstacle to research on net intergenerational family exchanges may have been the lack of a coherent and flexible framework that can fit the complexity of simultaneous exchanges between multiple generations while accommodating for the key role of government as the major mechanism of public intergenerational redistribution of resources primarily through taxes and transfers, but

also through relevant legislation. Therefore, the main prerequisite for this research is establishing such a framework. In general, such a framework needs to include an explanation of how intergenerational family transfers are constrained by different individual and family characteristics as well as the social context. This chapter first describes the social constraints of intergenerational family transfers, and then defines how family members exchange support across generations and over the life cycle. It concludes with the research hypotheses to be tested.

SOCIAL CONTEXT OF INTERGENERATIONAL FAMILY TRANSFERS

One of the most challenging aspects of analyzing intergenerational family transfers is the fact that families are not isolated systems functioning independently from the rest of the society, but rather affected in important ways by the larger social context, and especially by public policies governing the intergenerational redistribution of resources. Therefore, before defining a framework for the analysis of intergenerational family transfers, it is imperative to describe the social context that governs and constraints individual transfer behavior within families, in particular the mechanism that links welfare-regime characteristics with family-transfer behavior.

The starting point is the recognition that social, economic, and political developments on the macro level as well as individual and family decisions on the micro level are not truly exogenous, but rather in interaction with and/or shaped by historical specificities (Flaquer, 2000), including sudden dramatic events (Castles, 2010). Consequently, the welfare-state typology with its structural-functionalist character and the main analytic focus on the relationship of state and economy, has to be expanded to

recognize these realities. The most promising way of doing so is to incorporate the foundations of the "families of nations" idea (Castles & Mitchell, 1993), into the existing welfare-regime typology. The value of Castles's framework has been recognized and verified in the literature (e.g., Obinger & Wagschal, 2001). Importantly, incorporating its principles into Esping-Andersen's typology does not discredit the basic Esping-Andersen framework, but rather expands its scope. Allowing elements like geography, language, culture, and, arguably most importantly, history to be prominent elements of the welfare-regime framework makes it possible to explore issues of why countries facing similar economic and demographic challenges opt for different policy responses, why people in different societies make different financial and time transfers to their family members, or even why individuals and government in some societies pursue strategies that do not maximize their welfare. With this modification, therefore, it is possible to understand the intricate interplay between historic experiences, governments/institutions, and individuals and families.

Figure 3.1: Relationships Among Historical Events, Individuals/Families, and Institutions

A: Early History: Emerging Institutions

B: Present Situation: Established Institutions

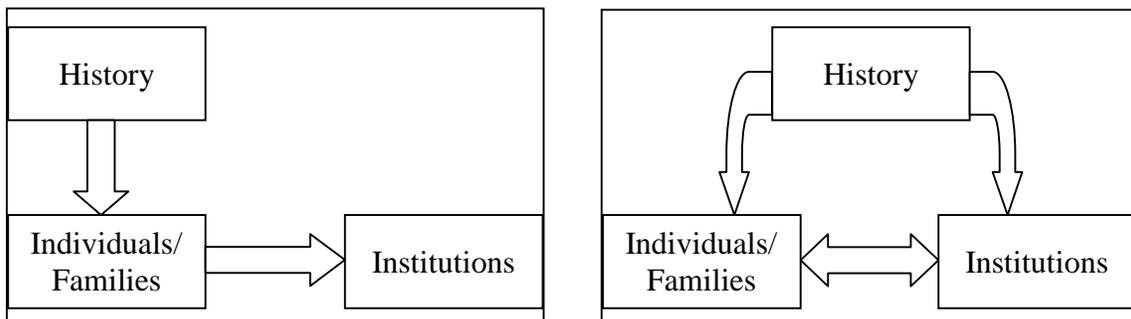


Figure 3.1 conceptualizes this relationship at a point in time. Figure 3.1.A shows that historic events and experiences, whether of global or local character, initially shaped behavior, expectations, values, and preferences of individuals and families, which were then reflected in the type of institutional arrangements emerging in a society. However, once initial institutions are established, the character of the relationships between the three (institutions, events, and individuals and families) irreversibly changes (Figure 3.1.B). Historical events and experiences now affect directly not only individuals and families, but also institutions, and there is mutual impact of institutions and individuals and families. While abrupt historic changes are possible, and indeed have often taken place throughout history, in the context of welfare state emergence and development in Western societies, they have been largely gradual and with a strong element of path dependency (Arts & Gelissen, 2002).

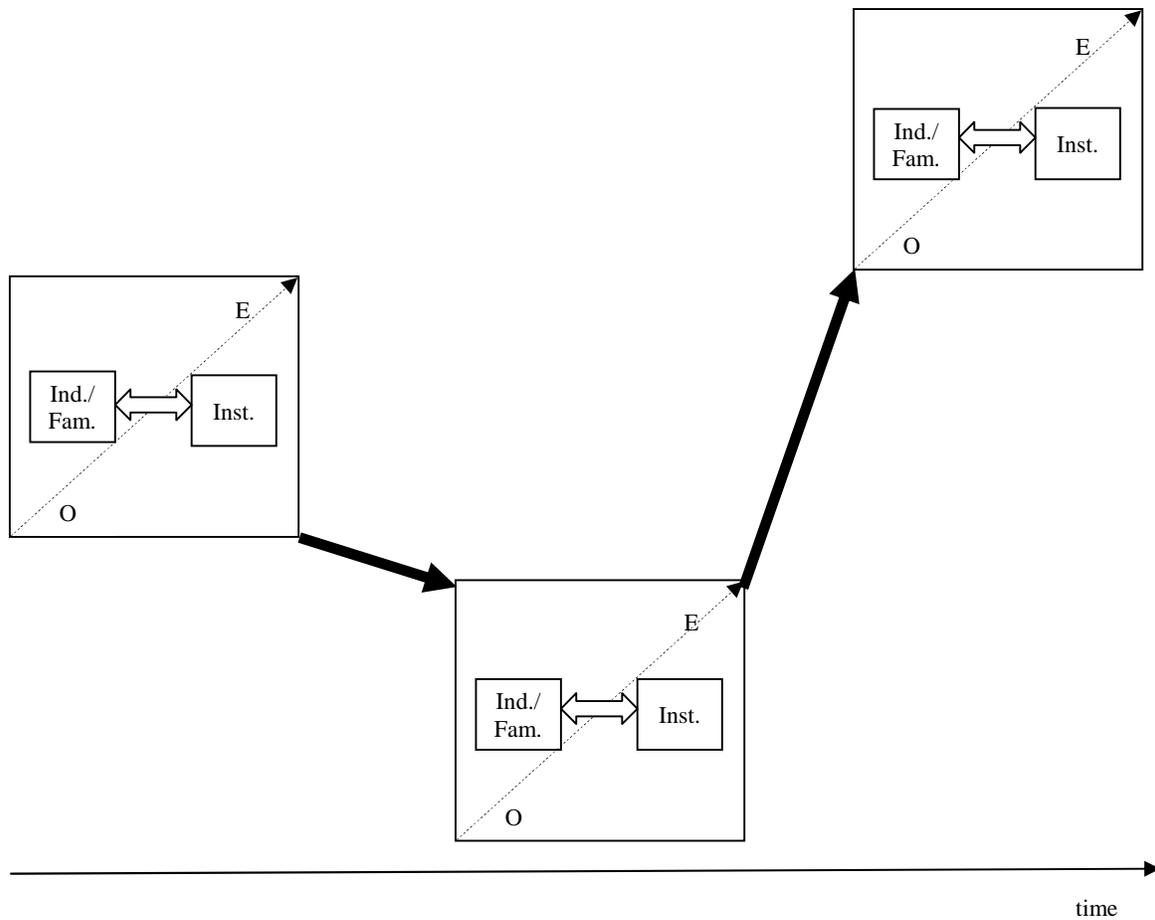
The scenario depicted in Figure 3.1 is relevant for virtually all modern societies, and it clearly points to the source of complexity in the analysis of any phenomena involving individuals or families embedded within a larger social context. It also provides a simple answer to the question why welfare-regime typology and family-transfer behavior are linked and why using a welfare-regime typology for the analysis of family-transfer behaviors is acceptable. For example, it seems reasonable to assume that a long period of political and institutional stability, high confidence in national institutions, overwhelming dominance of one part of the political spectrum (social-democracy) or comparatively small influence of the Lutheran Church on policy making have all contributed to make the countries of Northern Europe unique both in terms of welfare-regime characteristics and individual/family-transfer behavior, with strong reliance on the society as whole, represented through its institutions, to provide for each individual and

the expectation for all individuals to work in order to support this generous welfare system. Similarly, the history of fragmented states, which are often ruled by foreign dynasties irresponsible to the needs of local people, instability and lack of political freedoms, in some case even until the late 20th century, lack of institutional transparency and comparatively strong role of the Catholic Church on policy making have undoubtedly contributed to the development of the traditional system, where primary responsibility to take care for individuals rests with the family, and women are encouraged to assume traditional family roles rather than to participate in the labor market.

Figure 3.1.B also defines the limits of our understanding of the relationship between individuals and society: after such a long period of interaction between the two domains, it is very difficult to say to what extent individual preferences shape institutions and, conversely, to what extent those preferences are shaped by the institutions. For the purposes of this analysis, though, it is only important to understand that both individual/family domains and institutional/government domains exist in an environment where they constantly interact, and consequently welfare-regime typology is correlated with family-transfer behavior.

What remains unknown, though, is why some societies successfully adapt to certain historic events, while others fail to do so, or why some societies succeed in adapting to some events, but not to others. To answer this question it is necessary to expand the analysis from Figure 3.1 by describing the mechanism of social evolution in historical context. This is described in Figure 3.2. While the schematic refers to a single country, the findings can be generalized to multiple countries.

Figure 3.2: Social Evolution in Historical Context



Major events a society faces over time (e.g., plague, World War II, the Industrial Revolution, the Internet revolution, economic globalization, etc.) shift the box within which it operates in a random direction. Therefore, a society can be in a position of relative abundance in one period (left box), followed by a shift to a position of relative deprivation (middle box), and/or a position of great abundance (right box). These are objective conditions that are beyond the control of any society or individual. However,

within each box, a society can function completely inefficiently (points O in the bottom left corner of each box) or completely efficiently (points E in the upper right corner of each box). The assumption is that over time, if conditions do not change, societies become increasingly efficient as a consequence of repeated interactions of individuals and families with institutions, where both gradually evolve until they reach the optimum, that is, equilibrium point. The faster the society can adapt, the more time it is going to spend in or near the point of optimum, and the better off individuals and families are going to be.

While the direction of major historic events is random, the pace of scientific, economic, and arguably even social changes with global impact seems to be ever faster. Therefore, what becomes critical in the above framework for modern societies is how fast they can climb the slope of adjustment in any given box of set conditions. The shift from an O point to an E point can only happen if institutions and individuals evolve, yet both individuals/families and elected institutions (as a reflection of their collective preferences) can require a substantial period of time to make the necessary adjustments. Consequently, the role of the administration and judiciary is more important than ever before. These two elements of the institutional domain are the only parts of the system that can intensify the interaction with both the elected institutions and individuals in order to accelerate the pace of adjustment and reach the new point of optimal functioning. Therefore, building efficient administrative capacity and establishing the citizenry's high level of trust in institutions in general, and the administration and judiciary in particular, is becoming arguably the foremost task before modern societies. Conversely, a legacy of failed institutions likely represents one of the major impediments to development efforts

and, in the context of the framework in Figure 3.2, a major obstacle in the adjustment process.

An example of such difference in response to changing global circumstance in Europe could be the different adjustment strategies (or lack thereof) to the process of economic globalization over the past couple of decades. Some countries, primarily in Northern Europe decided to preserve their generous social policies, but also made large investments in children and youth as the foundation of the future labor force, encouraged lifelong learning for the current workers, and further increased efforts to foster high labor force participation among all working-age population. As a result, their productivity gains and innovativeness were large enough to offset cheaper labor-force competition from emerging economies, and in fact, they managed to thrive from increased global trade.

Countries of Continental Europe, especially Germany, followed a somewhat different model of adjustment, with a combination of modest limits to the growth of real wages, an efficient system of vocational training that is a joint government-industry effort which allows for the smooth transition of youth from education to the labor market (and which also helps keep a low youth unemployment rate), as well as increased emphasis on lifelong learning. As a result, Germany and majority of other Continental European countries remained highly competitive and continued to thrive in the new global economy.

The countries of Southern Europe, however, as of now have not managed to adapt to this new global reality, and the incompetence of political elites and the administration has certainly contributed in major ways to such development. The convergence of their economies with the more developed economies of Continental and Northern Europe

happened mostly in the form of increased incomes that were not based in equally large gains in productivity. Therefore, their industrial base started deteriorating, unemployment grew, and the economy increasingly depended on services and the construction sector, which was at least partly fueled by speculative capital. Social spending increased, but primarily to support retirees who enjoyed a comparatively high standard of living that was, however, increasingly unsustainable, especially given the dire demographic trends and fast-increasing old-age dependency ratios. These countries admittedly increased education spending, and the education level of their youth reached unprecedented levels, yet their qualifications did not match the needs of the economy, resulting in appallingly high youth unemployment rates, even before the recent global economic slump. The ongoing economic crisis in Europe, therefore, has not been the root cause of troubles of Southern European countries, but rather only exposed the failure of a social model to adjust to the new realities of the globalized economy.

While the framework developed in Figure 3.2 applies to any single society as well as to groups of countries that share similar historic experiences, it is important to recognize that to describe different societies in all their diversity of historic specificities would require adding another layer of complexity. First, at any given point in time, different countries or regions may be faced with different circumstances, which would require multiple boxes to be vertically positioned at any time point in Figure 3.2. For example, some countries were for a period of their history, colonies; others had colonies. Therefore, the fact of colonization had likely positioned the relevant box for most of colonies well below the one for their colonial masters. Moreover, while major changes move all societies in the same general direction, the slope of the change, that is, the relative impact the change has on different societies or groups of societies, may differ.

Consequently, the true global framework would appear much more complex, but the basic relationships explained in Figure 3.2 would still hold. Moreover, given that the analysis in this dissertation is limited to a sample of developed European countries that shared broadly similar historic experiences compared to the rest of the world, the basic framework can be considered sufficient to handle the analysis.

The advantages of using the modified welfare-regime framework depicted in Figures 3.1 and 3.2 to explain family-transfer behavior can be best described with an example. The most relevant is the apparent paradox of high homeownership rates and relatively elevated real estate prices in the South of Europe compared to the North and the West, while people in the South also have lower incomes and less available credit to buy real estate (and gifts are at a best poor substitute to efficient credit markets, according to Guiso and Jappelli (2002)). Simultaneously, co-residence of children with parents is a widespread phenomenon in Southern Europe. Symeonidou (1997), for example, even likens homeownership propensity in Greece to a fetish. In fact, according to the SHARE data (2006), more than 85% of Greeks owned a home, compared to fewer than 60% of Germans, Swedes, Swiss, or Dutch people, while all the latter nations are on average richer than Greece.

This issue is particularly important if one accepts the claim that the housing market is in important ways connected with the welfare state. Conley and Gifford (2006) emphasize the fact that social spending is negatively related with homeownership, and mediates the positive link between income inequality and homeownership, which implies homeownership may be a type of "self-social insurance." However, the example of Southern European countries shows that the relationship may be more complicated, as the homeownership rates expanded concurrently with increasing old-age spending (Flaquer,

2000). Also, homeownership has a substantial income-redistribution effect over the life cycle that favors the elderly over young adults who are likely to carry a significant household debt burden (Kemeny, 2005), which obviously has substantial impact on the flow of private transfers between generations.

Using the modified welfare-regime typology that accounts for unique historical developments in different countries while still tracking common trends that characterize various regimes and overarching trends that affect all the countries under study allows one to explain all of the observed trends. A history of political and economic instability can result in weak and unpredictable governments that are often perceived as rivals and not partners to citizens; a fragile economy, weak currency, undeveloped capital markets, and other developments result in a stronger reliance on family and a higher preference for homeownership than would otherwise be the case. On the other hand, even when none of these challenges is present, the historical experience of self-reliance and dislike for a strong central government with broad redistributive powers can also result in an ownership society, although the life-cycle distribution of the financial burden and resources may be different. Therefore, failing to account for historical specificities would almost certainly render the explanation of the observed trends in homeownership and co-residence of adult children with parents as well as their link with the public-private nexus of transfers virtually impossible. This example is discussed in detail in Chapter 7.

INTERGENERATIONAL FAMILY-TRANSFER FRAMEWORK

In order to describe family-transfer behavior, it is necessary to start with an individual-level model of transfers. A simple model of transfers at the individual level provided by Cox et al. (2004) is a useful starting point:

$$U_{\text{donor}} = U(C_{\text{donor}}, s, W(C_{\text{recipient}}, s)) \quad (1)$$

where U_{donor} = donor's utility

C_{donor} = donor's consumption

W = recipient's wellbeing

$C_{\text{recipient}}$ = recipient's consumption

s = recipient's services to donor.

Donor's consumption is defined as difference between donor's income and transfers given, $C_{\text{donor}} = I_{\text{donor}} - T$, while recipient's consumption is defined as the sum of recipient's income and transfers received, $C_{\text{recipient}} = I_{\text{recipient}} + T$. Recipient's services to donor represent a (potential) compensation for donors' transfers, and therefore they increase donor's utility, while decreasing recipient's wellbeing.¹

In the context of net family transfers, this model can be rewritten to accommodate the bidirectional flow of transfers:

$$U_p = U(C_p, T_c, W_c(C_c, T_c)) \quad (2)$$

$$U_c = U((I_p - T_p), T_c, W_c((I_c + T_p), T_c)) \quad (3)$$

where T_p = parents' transfer to a child

T_c = child's transfer to parents

and otherwise subscripts 'p' and 'c' mean "of parents" and "of children," respectively.

¹ Detailed explanation of this model can be found in Cox et al. (2004).

However, this model still needs to incorporate the relative level of need of parents and children in order to allow for the optimization of utility between the two generations:

$$U_p = U(\gamma_p, N, (I_p - T_p), T_c, W_c((I_c + T_p), T_c)) \quad (4)$$

where $N = N_p/N_c =$ relative needs of parents vs. children (i.e., necessary expenditures compared to pretransfer income for parents vs. children)

$\gamma_p =$ factor of parental care for relative needs of children vs. parents (where $0 < \gamma_p \leq 1$).

Therefore, the utility-maximizing equation for parents is:

$$U_p = N/\gamma_p * ((I_p - T_p) + T_c) + \gamma_p/N * ((I_c + T_p) - T_c) \quad (5)$$

and the analogous utility-maximizing function and corresponding equation for children would be:

$$U_c = U(\gamma_c, N, (I_c - T_c), T_p, W_p((I_p + T_c), T_p)) \quad (6)$$

$$U_c = 1/\gamma_c N * ((I_c - T_c) + T_p) + \gamma_c N * ((I_p + T_c) - T_p) \quad (7)$$

where $\gamma_c =$ factor of child's care for relative needs of parents vs. children (where $0 < \gamma_c \leq 1$).

This framework accommodates the whole range of possible redistributions within a family, given how each family member's values her own utility relative to the utility of other family members. The value of γ is assumed not to be able to reach exactly zero because of the assumption that each family member cares at least to some extent for other family members, because otherwise the whole concept of family in the model would be unnecessary. On the other end, the value of one implies that a family member values others' utility as much as her own, and will accordingly redistribute income until the optimal redistribution, based solely on objective assessment of relative needs, is achieved. This result would be broadly consistent with the prevalent conceptualizations

of altruism, while a higher relative valuation of one's own utility could be consistent with multiple alternative hypotheses.

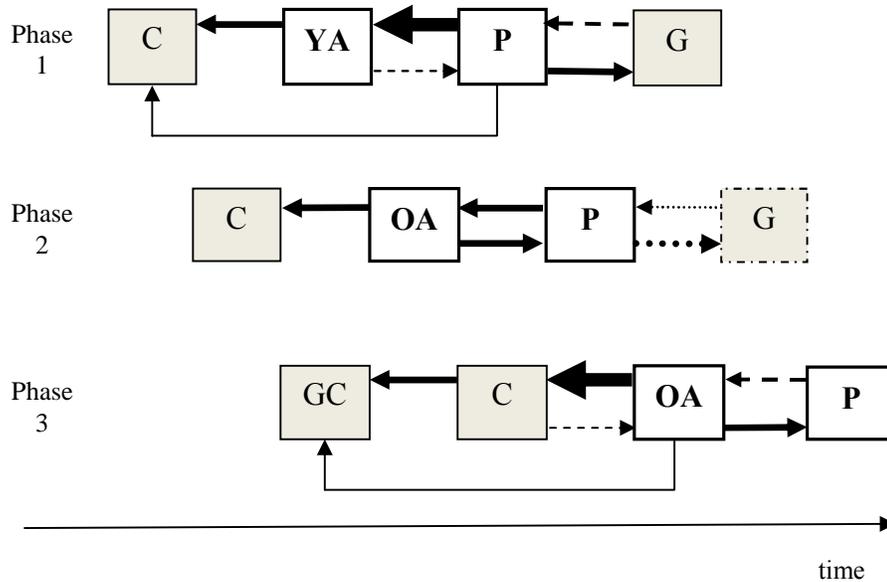
Given that parents' and children's factors γ_p and γ_c are independent, the model allows that parents and children have different motives for transfers, but it is reasonable to expect that over multiple rounds of transfers, each participant would become aware of the motivations of the other, thereby possibly prompting changes in behavior that would not be independent. However, this dynamic context, where family transfers would be treated as a "repeated game," is beyond the scope of this study, but it certainly represents a logical extension of the current framework. Another simplifying assumption is that family transfers do not have close market substitutes, which effectively makes children and parents engaged in a bilateral monopoly.

As far as the role of the government, the model can be extended to account for it. Taxes and public transfers either directly or indirectly affect the income of parents and children, but otherwise do not affect the utility-optimization process. The legal framework can affect the level of γ . An example would be a legal obligation for children to care for their elderly parents, where the legal system would effectively put a floor on the value of γ_c . However, this discussion of the role of government in the model implies that N , that is, the relative needs of parents and children, are not price-sensitive given that the intervention of government on the market is likely to affect prices of goods and services parents and children could exchange; in other words, the presence of government breaches the prior simplifying assumption of a bilateral monopoly. Therefore, functions and equations shown in (4) through (7) can be considered a special case of a more general model that would further correct N for price elasticity of need for a good or service. Even in this situation, the above specifications would be a realistic approximation of utility

maximization in every case with perfect (or very high) price inelasticity. Some examples include mandatory primary and/or secondary education that is common across many developed countries and life-saving medical procedures, among others.

The next step in defining the conceptual framework of family-transfer behavior is to build on the bilateral model of transfers and generalize it to multiple generations and to account for the passage of time, that is, to take a life-cycle perspective to the analysis of intergenerational family transfers. Therefore, this study defines a life-cycle overlapping-generations (OLG) model of family transfers. Following Hurd et al. (2007), it treats transfers as another consumption item, assuming that consumption and transfers vary over the life cycle, and taking into account specific circumstances facing transfer donors and recipients. This life-cycle model is specified for multiple overlapping generations, which allows making a distinction between two main types of families with middle-aged (preretirement age) parents (P) and young adult (YA) children, and families with older (post-retirement age) parents and older adult (OA) children—and their intergenerational transfer behavior, as depicted in Figure 3.3.

Figure 3.3: Typical Flow of Family Intergenerational Transfers Over the Adult Life Cycle



The OLG model primarily focuses on the relationship between respondents (i.e., parents) age 50 and older and their grown children (boxes P, YA, and OA in Figure 3). An arrow with a full line stands for a higher level of likelihood of a transfer flow, while a dashed arrow describes a less likely transfer flow, that is, while such transfer may happen, only a small proportion of individuals participate in it. The thickness of arrows, on the other hand, stands for the magnitude of a transfer flow given the level of likelihood.

During Phase 1 middle-aged parents (P) act as the pivotal generation, with respect to transfers for their children's (YA) education-related expenditures or for their transition to independent living and family formation (e.g., down payment for a house or an apartment). In addition, they often help their grown children by taking care of grandchildren (C). Simultaneously, this pivotal generation has frail elderly parents (G)

who might demand significant health-related financial and time transfers, but who can also be a source of wealth transfers to the pivotal generation in the form of "early" bequests as a part of the estate planning.

However, as the pivotal generation ages (Phase 2), most of their elderly parents die, while their grandchildren progress through childhood and toward early adulthood. Most importantly, as children progress from young to older adulthood (OA), their earnings potential rises while the pivotal generation gets older, which is likely to result in their increased need for health-related transfer receipts. With further passage of time, family generations reach Phase 3, during which grown children become the next pivotal generation, their children reach the phase of young adulthood and start having children on their own (GC), and now the elderly parents reach the phase of high frailty, thereby effectively closing the circle in this life-cycle model of multiple overlapping generations.

The OLG model presented in Figure 3.3 does not account for the welfare-state regime characteristics as the major constraint of intergenerational family transfers. Hence, it represents a situation that could be expected in the absence of any public redistribution of resources. This may still represent fairly accurately the reality of many developing and less developed countries, but for developed European countries with mature welfare states, it is reasonable to expect that public redistribution of resources across generations affects the type, likelihood, magnitude, and timing of transfers. The major question is how, and the rest of this dissertation is largely focused on answering that question.

RESEARCH HYPOTHESES

The underlying assumption of the conceptual framework of family-transfer behavior is that intergenerational family support is primarily determined by the relative needs of different generations and their ability to give. The more the welfare state meets individual needs, the less important need is as the primary motive of giving, and the joy of giving becomes relatively more important. Based on the conceptual framework and prior literature findings, this dissertation proposes four research hypotheses.

First, regarding individual types of transfers, financial transfers, and time transfers of practical help (most of which are less demanding tasks like assistance with transportation), shopping, paperwork, etc.) from parents to grown children are less common, but larger in magnitude in less generous welfare states, and more common, but smaller in magnitude in more generous welfare states (Hypothesis 1.A). Other transfers from parents to grown children—intensive grandchild care and co-residence (i.e., imputed rent value)—as well as financial and time transfers from children to parents are both more likely and larger in magnitude the less generous is a welfare regime (Hypothesis 1.B).

The hypotheses about the likelihood and intensity of various types of transfers (Hypotheses 1.A and 1.B) allow one to posit the hypothesis about the resulting total likelihood and net value of all transfers exchanged between older parents and grown children. Therefore, both the likelihood of making any transfer and the net value of transfers from parents to grown children are the largest in the least generous traditional welfare regime countries of Southern Europe and the smallest in the most generous social democratic welfare regime countries of Northern Europe, with the likelihood and net

value in conservative welfare regime countries of Continental Europe between these two opposites (Hypothesis 2).

In the context of the age pattern of net value of transfers between parents and grown children, the transfers exhibit a clear life-cycle pattern, where largest downward net value of transfers is from middle-aged parents toward young adult children, followed by decreasing net transfers as parents and children age, and ultimately becoming negative as parents reach advanced old age (Hypothesis 3.A). While this general pattern of net transfers is expected across all welfare-state regimes, public intergenerational redistribution of resources should affect the timing of the onset of different phases of net family-transfer behavior. Therefore, the more generous a welfare regime is, the later the transition happens from large to small and ultimately negative net transfers (Hypothesis 3.B).

The final research hypothesis is that, across different countries, the likelihood of parents and grown children to co-reside is positively related with the propensity to own real estate (Hypothesis 4). Given the history of significant political and economic instability, the experience of competitive devaluations of national currencies before the introduction of the euro (and, therefore, less confidence of the populace in one of the basic functions of money as a store of value), and less developed financial markets that could offer alternative investment opportunities, owning a home (or real estate in general) has long been the main available option for families and individuals to preserve economic value in countries of Southern Europe (as well as in many post-communist countries of Central and Eastern Europe). Therefore, in such societies, acquiring a home has become more important for young adults than establishing independent households, and when this standard was coupled with comparatively less available and affordable credit to buy a

home, it lead to higher co-residence rates as a part of the strategy to save sufficient money, in this case by not spending for rent, to be able to afford becoming a homeowner as soon as possible.

To summarize, this chapter introduced the conceptual framework that describes how family members exchange support across generations and over the life cycle. It also presented the social context of intergenerational family transfers, thereby explaining how private transfer behavior is constrained by welfare-state-regime characteristics. Finally, the chapter presented a number of research hypotheses to be tested. The next chapter describes data sources and the analytic sample. It defines and describes dependent and independent variables and introduces the analytic strategy.

Chapter 4: Data and Methods

DATA AND SAMPLE

Data for this study comes mainly from the Survey of Health, Ageing, and Retirement in Europe. This dataset is uniquely suited for the research on intergenerational transfers as it includes detailed data on the groups of primary interest—respondents and their grown children—including data on family structures and transfers of money and time. It also provides other important information on older parents and their grown children including demographic characteristics, health status, disability, employment status and job history, public transfers, retirement plans, housing information, and others.

SHARE is a cross-national panel study of more than 85,000 individuals aged 50 or over, designed after the Health and Retirement Study and the English Longitudinal Study of Ageing. Similar to these surveys, SHARE follows the steady-state design, meaning that in order to continue being representative of the population of interest it has to periodically supplement the sample with new respondents over the age of 50. The first wave of the study in 2004 included individuals age 50 and over from 12 countries, representing Northern (Denmark and Sweden), Continental (Austria, Belgium France, Germany, the Netherlands, and Switzerland), and Southern (Greece, Italy, and Spain) Europe, as well as Israel. Eleven European countries from the first wave of SHARE represent the core group of countries for which data is collected in all subsequent waves except Greece, which did not participate in the fourth wave.

The second (2006–2007) wave added to the sample three new countries: the Czech Republic, Ireland, and Poland. However, these countries are not included in the

analysis. Data for Ireland are not available for the third wave of the study. The Czech Republic and Poland, due to their different political and socioeconomic experience in the post–World War II period up until the fall of communism, merit a separate study that would assess whether there is need to expand the current welfare-regime framework to accommodate former communist countries, or whether they in large part follow the existing pattern of welfare regimes. However, this will be possible only when the sample of former communist countries in SHARE expands.

The third wave of SHARE survey, named SHARELIFE and conducted in 2008–2009, collected life-history data of approximately 30,000 individuals in thirteen countries. SHARELIFE attempts to link individuals' life histories and experiences with the institutional and welfare-state context in which those experiences occurred. Thereby, it supplements in important ways the "original" SHARE research by examining the link between public policies and private decisions and outcomes as well as the link between the past life experiences and present life decisions.

There are more than 28,000 individuals from the 11 countries of interest interviewed at each of the first two waves of SHARE, and about 24,000 interviewed at the retrospective third wave of the study. SHARE has detailed information on key predictors of intergenerational support, including demographics, health, personal income and assets, and government transfers. While it is in many respects similar to HRS and ELSA, SHARE has an added advantage of including data from multiple mature welfare states and various welfare regimes, thereby allowing the study of aging in societies with very diverse cultures, histories, and socioeconomic environments.

The fourth wave of the study, conducted from 2010 to 2012, represents the third wave of the "original" SHARE survey, and it became publicly available at the end of

2012. It includes enlarged samples for countries already participating in SHARE, and five new countries—Estonia, Hungary, Luxembourg, Portugal, and Slovenia—are added to the sample. The survey also includes a new module on social networks. These data make it possible to explore the longitudinal aspect of SHARE data in a more comprehensive way than it was the case thus far.

I use mainly data from the second (i.e., 2006-2007) wave of SHARE, although descriptive analysis of co-residence and homeownership includes retrospective data from the third wave. I limit the sample to the 11 countries that participated in the first and subsequent waves of data collection, that is, all of the original SHARE countries except Israel. The analytic unit is the parent-child dyad, and therefore each family with multiple children contributes multiple observations to the sample. The advantage of conducting dyadic-level analysis is that it allows for child and dyad-level characteristics to be included in the model, which would not be possible if the unit of analysis would be a respondent or a household. Families or individuals without children are not part of the analysis.

Given that the focus of the analysis is on the relationship between parents and their grown children, all dyads where children are younger than 18 are not part of the sample, which decreases sample size for 1,880 observations. Further limitation to the sample size: SHARE collects detailed information for only up to four children. Therefore, I dropped from the sample all possible dyads with five or more children (N=984), but fortunately only a small fraction of all parents have more than four children. Finally, as the focus of the analysis is on intergenerational transfers and in a small proportion of cases, the age difference between parents and children is fairly small, it is necessary to decide on the minimum appropriate age difference between the two generations to be

included in the study. The difference has to be large enough to be able to distinguish the two generations by age, but sufficiently small not to leave out a substantial subset of dyads that may be systematically different from the rest of the sample (e.g., teenage parents) and therefore inadvertently affect the results. Faced with the same issue, Bonsang (2007) applied 14 years of difference as the inclusion threshold, and I apply 12 years of difference, resulting in the exclusion of further 72 dyads. I choose two years smaller age difference primarily to avoid dropping from the sample a number of dyads representing early teen pregnancies that may systematically differ from others dyads on various characteristics while still preserving sufficient age difference between parents and children. However, the difference of 12 as opposed to 14 years is not likely to affect the results as it affects only 33 dyads or less than 0.1% of all dyads. Supplementary analysis shows that most of the grown children in the sample who are less than 14 years younger than their parents were born in 1960s and 1970s and the results are broadly consistent with the relevant data on the prevalence of early teen/childhood pregnancies across developed countries (UNICEF, 2001; Weiss, 2012). In sum, the initial sample of around 39,000 dyads has been restricted to 36,095 dyads, with full information available for all indicators of interest.

Country-level data on social policy indicators, social expenditures, and inequality come mostly from the Organisation for Economic Co-operation and Development (OECD), except for the data on pensions systems that come from the U.S. Social Security Administration. Data on average and minimum wages is from OECD and national statistical offices. Country-level demographic data come from the United Nations Population Division, while data on legal obligations of grown children to care for elderly parents come from Suanet et al. (2012). Stock market capitalization data and inflation

data are from the World Bank, while the exchange rate data come from the Bank for International Settlements (BIS) and the World Bank. Data on housing prices is from the BIS, European Central Bank (ECB), and Global Property Guide. Data on the political environment come from the Center for Systemic Peace's "Political Regime Characteristics and Transitions, 1800–2010" database and Freedom House's "Freedom in the World" country ratings database. Finally, data on perceived corruption, confidence in national institutions, and the perception of thriving come from the Gallup World Poll, while the information of the general level of trust come from the European Social Survey.

MEASUREMENT

Dependent Variables

The major challenge in estimating net family transfers is to define what types of nonfinancial transfers should be included in the outcome measure, that is, what outcomes plausibly have economic value for recipients. There are three net transfers measures estimated in this research: the first one includes money and time exchanged between parents and their grown children, the second one accounts for intensive grandchild care, and the most comprehensive definition also includes co-residence and imputed rent for co-resident children. As far as financial transfers, SHARE asks respondents whether they gave or received a financial (or material) gift valued at least 250 euros during the twelve months prior to the interview, and it subsequently asks about the value of up to three transfers.

Time transfers given to children or received from them include three major types of help exchanged in the twelve months prior to the interview: personal care, practical household help, and administrative paperwork. The intensity of time transfers is recorded in hours. Full information on time transfers, however, is only available for non-co-resident dyads, while in the case of co-resident dyads, only data on personal care is collected. Given systematic and substantial differences in the prevalence of co-residence across European countries, limiting analysis to non-co-resident children only would seriously affect the analysis, and the best solution is to impute missing information. I follow the approach suggested by Leopold and Raab (2011), who use the information on time transfers for parent-child dyads that occupy the same building, but run separate households, assuming they are the most similar in the sample to co-resident dyads. With this information, as well as data on demographic and socioeconomic variables that are subsequently included in the models of the likelihood and net value of transfers, it is possible to impute data in the multiple-imputations procedure. The same procedure is followed to impute missing values of other transfer measures of interest, as both results and theory suggest this approach may produce more accurate estimates than the mean value imputations used in Litwin et al. (2008). Using this procedure, I impute approximately one fifth of the values of the two net transfers measures that do not include co-residence between parents and grown children, and slightly over one third of the values of the net transfer measure that accounts for co-residence. Among predictors, income and making ends meet are the only other two variables with relatively larger proportion of imputed missing values—around 5% and 10%, respectively—while the proportion of imputed values for all other variables is very small and ranges between 0 and 2%.

Unfortunately, SHARE does not include detailed time sheets that would allow for a precise estimate of the extent of unpaid help. Following Litwin et al. (2008), I include all types of help in the calculation of likelihood and net intensity of transfers between parents and children, given that the emphasis in this analysis is on the economic value of time (service) provided for the recipient. However, the issue is how to most accurately monetize the value of time transfers for recipients. Litwin and his colleagues used the midpoint between minimum and average hourly wage in each of the two countries (Germany and Israel) for which they calculated net transfers. Given that the best approximation approach may be overly arbitrary because it is based on too little information about the actual hourly rates for the type of work provided by the group of people who do that work, I take a somewhat different approach.

In the descriptive analysis of transfers, I monetize time transfers using both prevailing minimum and average hourly wages in order to estimate the likely range within which the "true" value of transfers lies, rather than trying to pinpoint the exact value based on insufficient information. The expectation about the legal minimum hourly rate (whether it is national minimum or in its absence, the appropriate sectoral minimum) is that paying somebody below that rate would break national laws, and therefore this sets a fairly firm floor to the estimate. Regarding the average hourly wage, the expectation is that if the implicit reservation hourly wage for a family member providing support would be above the national average wage, the recipient of support would likely be able to find a price-competitive market alternative, and consequently the maximum hourly economic value of services for the recipient cannot be very different from the national average hourly wage rate.

In the inferential analysis, I include time transfers monetized only using the minimum hourly wage rate. The motivation is to provide as conservative estimates of net transfers as possible, in other words, to give as much of a weight in the estimates to transfers of money that are well defined and have been extensively studied, and to minimize the impact of various nonfinancial transfers. In this way, if the impact of accounting for nonfinancial transfers on the magnitude of net transfers across age is substantial, there can be more certainty about the significance of such an effect than in the case when the valuation of nonfinancial transfers is based on much less conservative methods of monetization.

The more inclusive measure of the likelihood of transfers and net value of transfers between parents and grown children accounts for intensive grandchild care. The minimum intensity threshold is 500 hours of care per year with an added condition that the care has to be provided weekly or more frequently in order to capture only the grandchild care that can be plausibly considered a substitute for formal childcare services. Monetizing grandchild care follows same principles established for other time transfers.

Finally, the most comprehensive outcome measure also accounts for co-residence of children with parents as a unique and important type of intergenerational nonfinancial help. However, there are several important issues that have to be resolved prior to including co-residence in the analysis. Relevant literature on transfers (e.g., Kohli and Albertini, 2007) treats co-residence in multiple ways: as bilateral transfers, that is, benefiting parents and children equally, as unilateral transfers benefiting children, or only as an explanatory factor in models of transfers without accounting for it in the outcome measure. Ideally, one should specify a model of co-residence that would establish for

each co-resident dyad how much of the benefits of sharing a household should be assigned to a child, and how much to parents, but given currently available data, there is not enough information to make such an estimate. However, it is possible to run a background model of co-residence to determine whether it is more strongly related with the characteristics and needs of parents or grown children (details available in Appendix A).

The results reveal that as they age, parents and children are less likely to live together. Among the most important findings for parents, they are more likely to co-reside with children if they are widowed, in poor health, and own the home; being divorced or receiving professional homecare decreases the likelihood. While there are other characteristics of parents that are statistically significantly correlated with co-residence, the magnitude is at best moderate. On the other hand, all of the children's characteristics are both highly statistically significant and of a large magnitude. Particularly important is children's marital status, where never married as well as separated, divorced, and widowed children are much more likely than their currently married counterparts to co-reside with parents. Also, children with full-time jobs and young children of their own are much less likely to co-reside with parents, as are daughters compared to sons.

Even after controlling for different characteristics of parents and children, welfare-state regimes account for much of the unexplained variance with parent-child dyads twice as likely to co-reside in conservative and more than ten times as likely to co-reside in traditional welfare states compared to social democratic welfare states. This suggests that some structural reasons may be important for explaining the difference in

co-residence across countries in addition to the key parent-, child-, and dyad-level characteristics.

Overall, the results suggest that while parents' characteristics do matter, children's characteristics outweigh them in terms of the magnitude of their importance. Consequently, the analysis treats co-residence as a unilateral transfer from parents to children, although this approach is still not satisfactory and is at best the "lesser of the two evils." In the models of net transfers without co-residence as part of the outcome measure, co-residence is included as a predictor variable, which is the alternative approach suggested in the relevant literature.

Another consideration regarding co-residence is estimating the value of imputed rent. I follow the same imputation methodology described for time transfers using the information on rents paid by SHARE respondents. In order to provide as conservative estimate as possible, I include rent values only for respondents from households consisting of two people at most. Furthermore, I divide the imputed rent in half, with the assumption that children who would have to find an alternative to sharing household with their parents, would likely try to limit their expenditures on rent by doubling up with their spouses, partners, or roommates rather than bear the full cost for a single person.

Finally, it is important to note that all net transfer values as well as values of control variables for income and wealth are transformed in order to decrease the effect of large values (rather than simply omitting them from consideration). However, as many parents have zero incomes or wealth, and net transfers can also be zero or negative, a simple log transformation is not applicable, and restricting the outcome variable to strictly positive values would severely bias the estimates. Moreover, log transformation assumes constant elasticity of net transfers to changes in predictors, which may give a

higher than desirable weight to observations close to zero where small absolute changes may represent very large relative changes.

The inverse hyperbolic sine (IHS) transformation represents an alternative to log transformation. It is defined for zero and negative values and interpreting results is akin to log-transformed variables (Burbidge, Magee, & Robb, 1988), albeit for sufficiently large values. IHS is defined as $h(x) = \log(\sqrt{x^2 + 1} + x)$, where $h(x)$ is approximately $\log(2x)$ for large positive values of x and $-\log(2x)$ for large negative values of x , while it is linear around the origin, which addresses the possible drawback of constant elasticity of the log transformation. The economic literature has been successfully using IHS transformation in recent years, especially in the context of measuring net wealth, income, and other concepts that are likely to assume nonpositive values (e.g., Georgarakos & Pasini, 2011; Kapteyn & Panis, 2003; Pence, 2006). While Box-Cox transformation is also defined for positive and negative values, the fact it is not defined for zero as well as the fact that IHS transformation according to Burbidge et al. (1988) provides a better fit to data, gives IHS transformation preference. The major drawback is more complicated interpretation, given that it changes across the spectrum of values.

Overall, it is important to notice that the goal of the outcome measures is not to determine the balance of transfers between parents and children across the adult life cycle precisely, but rather to establish a range of estimates and get a general sense of direction of changes in net transfers with age. While admittedly modest, these are the only goals that can reasonably be pursued given existing data limitations in SHARE.

Independent Variables

The independent variables used to predict the likelihood and net amount of transfers between parents and grown children include parental, child, dyad, and welfare-regime variables. Such an approach has been common in recent studies of intergenerational transfers in Europe (e.g., Albertini & Kohli, 2012; Deindl & Brandt, 2011).

Parental predictors include demographic, socioeconomic, and health variables. Demographic predictors are parental age (in years); gender; years of education; marital status (married and living with spouse, registered partnership, separated, never married, divorced, and widowed); and number of children. Age is the key independent variable, especially in the models of net intergenerational transfer amount, due to the expected nonlinear relationship of age and net transfers. The distinction between different marital-status categories, especially separation, divorce, and widowhood, is substantively important. For example, parents who become widows are more likely to receive transfers from children compared to married parents, while no such increase in the transfer likelihood is observed for divorced parents (McGarry & Schoeni, 1995).

Socioeconomic predictors include measures of parental financial wellbeing: income and wealth (both transformed using inverse hyperbolic sine transformation), and a self-rated indicator of the ability to make ends meet (categories include with great difficulty, some difficulty, fairly easily, or easily). While income and wealth represent an objective measure of the ability to give, the self-rated ability to make ends meet reflects an individual's impression of her wellbeing, and this may affect that person's perception

of relative needs across family generations and constrain or encourage family transfers regardless of the absolute financial resources at the person's disposal.

Finally, health predictors include an indicator of limitation in (usual) activities over the past six months, receipt of professional homecare variable, and variables for difficulties with the activities of daily living (ADL) and instrumental activities of daily living (IADL). While ADL and IADL difficulties variables capture health issues that are chronic in nature, the indicator of recent health limitation mostly captures acute conditions (regardless of whether they are going to have long-term health consequences), and the indicator of professional homecare is important as professional homecare may serve as a substitute for provision of intensive care by grown children. The importance of capturing both acute and chronic aspects of health limitations for describing transfer flows between older parents and grown children has been recognized in the literature (e.g., Litwin et al. 2008; Hurd et al, 2007), yet the most-used approach was to control only for self-rated health without further consideration how various aspects of health may affect family transfer behavior (e.g., Albertini & Kohli, 2012; Attias-Donfut, 2005).

Children's predictors include demographic and socioeconomic variables. The only children's socioeconomic predictor is the full-time employment indicator. Given that SHARE does not track children's income, this variable may serve as a crude proxy for their earnings from work. As most of grown children have not yet had time to accumulate sizeable wealth, their employment status may in large part determine their ability to help parents financially or, conversely, indicate their need to receive financial help from parents. Children's employment status has, therefore, been used extensively in the literature on family transfers in Europe (e.g., Albertini & Kohli, 2012; Brandt et al., 2009; Deindl & Brandt, 2011).

Children's demographic characteristics include gender; marital status (categories include married/in registered partnership, separated/divorced/widowed, and never married); and presence of any grandchildren. Unlike the parents' marital status variable, the children's marital status collapses multiple categories—most notably separated, divorced, and widowed—because comparatively few children have experienced such marital transitions, and results suggest that differences in transfers' likelihood and net value are primarily between the three major categories: single and never married, single and previously married, and partnered (either married or unmarried). This is similar to approach taken by Albertini and Kohli (2012); Berry (2008) distinguishes between married and single children, without a separate category for previously married (i.e., separated, divorced, or widowed) children.

Children's age is not included as the control variable given its high correlation—close to 0.9—with parents' age. Therefore, running models with both parents' and children's ages would result in the problem of high multicollinearity. Given that the change in the age of children is largely captured by the change in the age of parents, and that the research focus is on the simultaneous change in the age of parents and children (i.e., the dyad's "age"), including the age of parents in the model seems satisfactory. Also, the children's education-level information is available, but it is omitted from the final specification because it was not statistically significant in any of the model specifications.

The frequency of contact between parents and grown children is the key dyad characteristic: parents and children who have more frequent contact are expected to be more likely to exchange support. Categories include: daily or several times a week, between once a week and once a month, and rarely or never. In the models that do not

include co-residence as part of the outcome measure, co-resident children and parents are assumed to have daily contact and are the reference category.

Finally, the welfare-regime predictor is a categorical variable with three categories: social democratic welfare regime (reference category), conservative welfare regime, and traditional welfare regime. Alternatively, this variable is replaced with the set of variables that account for the main characteristics of welfare regimes including major social expenditures, social services employment level, the effects of the tax system, and the legal framework, which all may affect intergenerational redistribution of resources.

Major social expenditures include the shares of GDP spent on old-age and survivors' benefits and on healthcare benefits, both corrected for the appropriate old-age dependency ratio, as well as the shares spent on family policy and education, corrected for child dependency ratios. Correcting public-spending variables for the appropriate population structure results in the more accurate reflection of the true relative differences in the magnitude of intergenerational redistribution of resources, as otherwise spending on the elderly and children may reflect as much the underlying population structure as a society's commitment to support a dependent population. Therefore, public-spending variables reflect spending per dependent population of children and elderly rather than absolute GDP shares of spending. The social services employment level is defined as the percentage of social services employment in the total employment. Absolute difference in Gini index pre- and post-tax captures the redistributive impact of the tax system from those with higher to those with lower incomes, which closely corresponds to redistribution from the working-age population to the dependent population, of which the elderly are a major segment. Finally, legal-framework effects are captured by an indicator variable for legal obligation for grown children to provide care for their (frail) elderly

parents. Taken together, these variables represent the underlying characteristics of welfare regimes both more comprehensively and more accurately than in prior research.

ANALYTIC STRATEGY

The analysis begins with an overview of the unique characteristics of different institutional settings and people's attitudes toward family transfers and the public-private nexus of transfers in the countries of interest. The focus is on the description of various elements of public intergenerational transfer mechanisms in different countries. Social policy indicators include a comprehensive list of various social expenditures like old-age, health, family, unemployment, and other expenditures as well as the social services employment level. People's attitudes refer to the series of questions in SHARE that ask respondents about the intergenerational solidarity in families and familial duties as well as about the division of responsibility between family and the state in help, care, and financing of the elderly. This comprehensive overview allows one to position various welfare states more precisely along the welfare-state-typology continuum, and to account for any possible degree of overlap between characteristics of some welfare-state types. That is particularly important in the case of countries like the Netherlands or Switzerland, which seem to combine many different elements of multiple welfare regimes, and while they are usually grouped with other conservative welfare-regime countries, the validity of such choice has to be evaluated.

Next element in the analysis of intrafamilial transfers is a detailed overview of prevalence rates and absolute amounts of different types of transfers (financial, time, and other in-kind transfers, with the latter focusing on co-residence) across countries. These

transfers are stratified by age as well as by other important characteristics like children's gender because recent research suggest different impacts of welfare states on male and female grown children (e.g., Schmid et al., 2012). This part of the analysis also includes descriptive statistics on various other characteristics of parents, their adult children, and parent-child dyads that are included in subsequent models of net transfers. Part of these data come from SHARELIFE, the 2008 retrospective wave of SHARE, which is important in linking current preferences and decisions that individuals make with their past experiences and public institutional context.

Multivariate analysis begins by fitting models of the likelihood and the net value of transfers of money and time between parents and children across different ages and welfare-state regimes. The likelihood of family transfers is estimated with logistic regression. Given that both theory and previous research suggest that net transfers between parents and grown children are likely to fluctuate over the life cycle, it is necessary to explicitly model for nonlinearity, and a spline model provides the necessary balance between the flexibility to represent the relationship between an outcome and a predictor variable and relative simplicity in its implementation and interpretation. While there are various other estimation methods for nonlinear data, splines have several unique advantages. Unlike interrupted regression, splines assure continuity at knots where either the direction of the slopes changes or, in the case of curved lines, their rate of change changes. Compared to polynomial regression models, that is, regression models that include squared, cubed, and higher-order polynomials of the predictors of interest, spline models are generally superior, as they better capture sudden changes in slope with a lower dimension of higher-order polynomials, while with the increase in the dimension, polynomial regression models run the risk of high and even perfect multicollinearity.

However, it is also true that if the standard deviation is sufficiently large, knots may not be readily observable, and polynomial regression models may be preferred.

As previously mentioned, the unit of analysis is the parent-child dyad, as it allows to better account for the characteristics of the relationship between each child and her parents, as opposed to individual or family/household characteristics only. The main outcomes of interest are the incidence and the net value of private inter vivos financial transfers between parents and grown children. Independent variables include important demographic, economic, household, and health characteristics of parents and grown children, and characteristics of dyads (for example co-residence or frequency of contact between parents and children). The model controls for welfare-regime fixed effects, and alternatively for various key characteristics of welfare regimes related to major social policy expenditures, the effects of the tax system, and legal obligations regulating intergenerational family relationships, as these indicators represent a comprehensive measure of public support that either substitutes or complements family support.

I estimate two models: (1) a logistic regression of the likelihood of transfers between parents and children and (2) a piecewise linear spline regression of the net transfers from parents to children. The piecewise linear spline model has two knots (i.e., the threshold points at which the estimated slope of the relationship changes), as theory and preliminary analysis suggest that two knots should be optimal to describe the relationship between age and intrafamilial transfers. The two knots for the full sample are set at ages 70 and 80, because data show the decade between the two knots is the critical period when net transfers from parents to grown children shift from highly positive to low, neutral, and ultimately negative. The estimated models have the following general form:

$$T_{ijkl} = \beta_0 + a_i \beta_1 + (a_i - \tau_1) \beta_2 + (a_i - \tau_2) \beta_3 + P_i \gamma + C_j \delta + D_k \zeta + W_l \theta + \varepsilon_{ijkl}$$

where T_{ijkl} = likelihood or amount of transfers between parent i and child j in dyad k in country l

a_i = age of parent

τ_1 = first threshold point

τ_2 = second threshold point

P_i = characteristics of parents

C_j = characteristics of children

D_k = characteristics of parent-child dyads

W_l = characteristics of countries

ε_{ijkl} = error term

and $(a_i - \tau_m)$ is truncated at zero if $(a_i - \tau_m)$ is nonpositive (for $m = 1, 2$).

Given that prior research suggested possible differences in type, likelihood, and magnitude of transfers by welfare regime and children's gender, I fit models stratified by those characteristics. This analysis may help establish which, if any, of these characteristics might meaningfully affect the character of intrafamilial transfers.

Choosing the correct functional form of the model with a nonlinear structure can be challenging. Even in the case when both theory and data suggest the approximate shape of the relationship, it may take more than a simple visual inspection of the data to decide on the optimal model. For example, in this analysis it may be hard to distinguish at first between piecewise linear "cubic" structure, which is best approximated with linear spline model just described, and true cubic structure that would be better approximated with cubic spline or even cubic polynomial regression. Compared with the model just presented, cubic polynomial regression would include a_i^2 and a_i^3 variables, but no

threshold points, while the cubic spline model would also define threshold points τ_1 and τ_2 that would represent change in the a_i^3 , unlike in the linear spline model where they modify variable a_i . In order to find the best-fitting model for the data, I run alternative model specifications, and do sensitivity tests of various polynomial vs. spline transfer functions, as well as of two threshold point spline vs. alternative number of threshold points. With these tests, it can be argued that the functional form is reasonably well verified.

Further important consideration is the possibility of unmeasured family characteristics associated with intrafamilial transfers like shared values and career or life aspirations, parental skills affecting children's success (but not captured by education), the level of closeness, and emotional "transfers" between family members affecting independent variables in the model. If this is the case, the model estimates may be biased. However, as long as these unmeasured family characteristics are fixed on a family level, that is, shared equally across all children, a fixed-effects modeling approach can successfully control for them and give unbiased model estimates. This estimation strategy, though, comes at a price: estimating within-family differences requires limiting the sample to families with at least two children, and parental characteristics cannot be included in the model, as they are assumed to be fixed across children in the family. However, a substantial number of families in the sample have more than one child, and the effects of parental characteristics can still be included in the model in interactions with some of the independent variables if that would substantively improve model specification. Alternatively, parental characteristics can be controlled for by estimating a separate model for selected subgroups of respondents. Children and parent-child dyads characteristics are controlled for in the model. The resulting model of the likelihood of

transfers (T_{ijkl}) for child j in dyad k in family i residing in country l , fit using conditional (fixed-effects) logistic regression, is:

$$T_{ijkl} = (\alpha_i + P_i \beta) + (\gamma_l + W_l \psi) + C_j \delta + D_k \zeta + \varepsilon_{ijkl}$$

where α_i = fixed family-specific (i.e., parent) effect

γ_l = fixed country-specific effect

This chapter focused on introducing SHARE and other sources of data and describing the sample used in this study. It presented a detailed description of the outcome variables, and described parent, child, dyad, and welfare-regime characteristics included as independent variables in the models. The analytic strategy section provided a description of the steps to be taken in the analysis of intergenerational family transfers. The analysis begins with the presentation of the descriptive results in Chapter 5, and is followed by a description of multivariate results in Chapter 6.

Chapter 5: Examination of Financial and Nonfinancial Transfers Across Three Welfare Regimes

This chapter presents descriptive data on family transfer attitudes and behaviors across social democratic, conservative, and traditional welfare-state regimes. The descriptive analysis has two main objectives: first, to check the extent to which the empirical data corroborate the underlying assumptions of the conceptual framework described in Chapter 3, and second, to address the first of aim of the dissertation by exploring financial and nonfinancial transfers between parents and grown children across the three welfare regimes in Europe.

The first objective is important because both the specification of the model of net transfers between parents and grown children across the adult life cycle and the interpretation of findings depend on the validity of the conceptual framework. The framework suggests net transfers from parents to grown children are likely nonlinear with a relatively high positive value for middle-aged parents and young adult children, followed by a decrease in net transfers as parents and children age, and ultimately becoming negative when parents reach advanced old age and their children middle age. It also suggests that public intergenerational redistribution of resources can affect this pattern of transfers by delaying the onset of the transition from high to low and negative net transfers in addition to decreasing the magnitude of net transfers. The framework, therefore, informs the modeling strategy and the validity of both is inextricably linked. This chapter examines whether the empirical data are consistent with the conceptual framework by describing how individual attitudes toward giving and transfer behavior are associated with the welfare-regime characteristics, identifying the major motives for

financial transfers between parents and grown children (given these are the only transfers for which the motive is directly observed), and examining how much of different types of support parents and children exchange. The findings should be informative with respect to the underlying assumption of relative needs as the major cause of intergenerational family transfers over the life cycle.

With respect to the second main objective of the chapter, the analysis estimates the likelihood and intensity of giving of individual types of transfers between parents and grown children, and further stratifies the analysis by age and children's gender. This analysis is followed by the calculation of the total likelihood of participation in the intergenerational exchange of family support and the net value of intergenerational family transfers, which depicts how the likelihood and intensity of transfers depend on the types of transfers included in the measure of transfers. Previous research (e.g., Albertini et al. 2007; Bonsang, 2007; Brand et al. 2009) indicates that different types of family transfers follow different patterns across European countries. Therefore, including or excluding different types of transfers from the calculation of the balance of intergenerational (family) transfers may significantly affect the inference about the public-private nexus of intergenerational transfers. For example, parents are more likely to provide intensive grandchild care (e.g., Hank & Buber, 2009) and to co-reside (e.g., Isengard & Szydlik, 2012) with their children in Southern Europe than in Northern Europe. Therefore, not accounting for intensive grandchild care and/or co-residence may substantially affect the inference about the linkages between welfare regime characteristics and family transfer behavior. While there may be valid reasons to adopt different definitions of what should be recognized as transfers between parents and children, it is important to describe the implications of making different choices.

Finally, the chapter presents characteristics of the sample to be used in the multivariate analysis in Chapter 6. This includes sample means of parental, child, and dyad predictors for the full sample, stratified by welfare-state regime, as well as figures depicting the relationship between age and net transfers, which is in the primary focus of subsequent multivariate analysis.

ATTITUDES TOWARD STATE AND FAMILY SUPPORT

With this in mind, the first step in the analysis of family transfers and their relationship to welfare-state regimes is to establish the links between the welfare-regime typology and individual attitudes about (1) the duties of parents and grandparents toward children and grandchildren and (2) the primary responsibility of state or family to care for the elderly. If individual attitudes follow the welfare-regime typology, this would indicate that such a typology might be appropriate for use in the analysis of intergenerational family transfers. Table 5.1 summarizes attitudes of individuals across the countries of interest.

Table 5.1: Attitudes Toward Family Transfers and Shared Public-Private Responsibility in Supporting the Elderly, by Country

	Parents and Grandparents Responsibilities for Children and Grandchildren Care (%)					Family vs. State Responsibilities for Elderly Care (%)			
	A	B	C	D	Average	E	F	G	Average
Social Democratic	78.3	75.5	25.9	40.5	55.0	5.4	8.3	4.4	6.0
Denmark	67.7	75.2	15.7	34.6	48.3	3.0	3.4	1.8	2.8
Sweden	88.8	75.8	36.1	46.4	61.8	7.8	13.1	7.0	9.3
Conservative	64.9	76.4	34.9	55.4	57.9	10.4	27.8	17.0	18.4
Austria	72.9	69.5	30.8	52.7	56.5	10.2	38.3	21.4	23.3
Belgium	64.6	78.1	41.8	56.5	60.2	11.5	22.3	15.8	16.5
France	70.3	85.7	48.1	70.1	68.6	10.3	12.5	11.1	11.3
Germany	54.1	82.3	36.7	71.9	61.2	14.7	43.0	26.7	28.1
Netherlands	67.0	68.6	22.0	25.4	45.7	4.7	13.1	5.6	7.8
Switzerland	60.7	74.0	29.9	56.0	55.1	10.9	37.6	21.2	23.2
Traditional	88.9	87.7	57.8	73.6	77.0	15.9	43.8	43.7	34.5
Greece	90.8	90.5	58.3	78.2	79.4	9.5	54.3	66.6	43.5
Italy	88.5	86.5	60.2	78.7	78.5	15.9	40.2	31.4	29.2
Spain	87.4	86.1	54.9	63.9	73.1	22.3	37.0	33.0	30.7

N = 17,580 (smaller than wave 2 sample because not all respondents asked to do drop-off questionnaire, but instead did vignettes)

Note: percent agreeing or strongly agreeing (questions A-D), percent in favor of totally family or mainly family (questions E-G).

Questions A-D:

(A) Parents' duty is to do their best for their children even at the expense of their own well-being;

(B) Grandparents' duty is to be there for grandchildren in cases of difficulty (such as divorce of parents or illness);

(C) Grandparents' duty is to contribute towards the economic security of grandchildren and their families;

(D) Grandparents' duty is to help grandchildren's parents in looking after young grandchildren.

Questions E-G: Who – the family or the state – should bear the responsibility for each of the following:

(E) Financial support for older persons who are in need;

(F) Help with household chores for older persons who are in need such as help with cleaning, washing;

(G) Personal care for older persons who are in need such as nursing or help with bathing or dressing.

Source: SHARE 2006; own calculations.

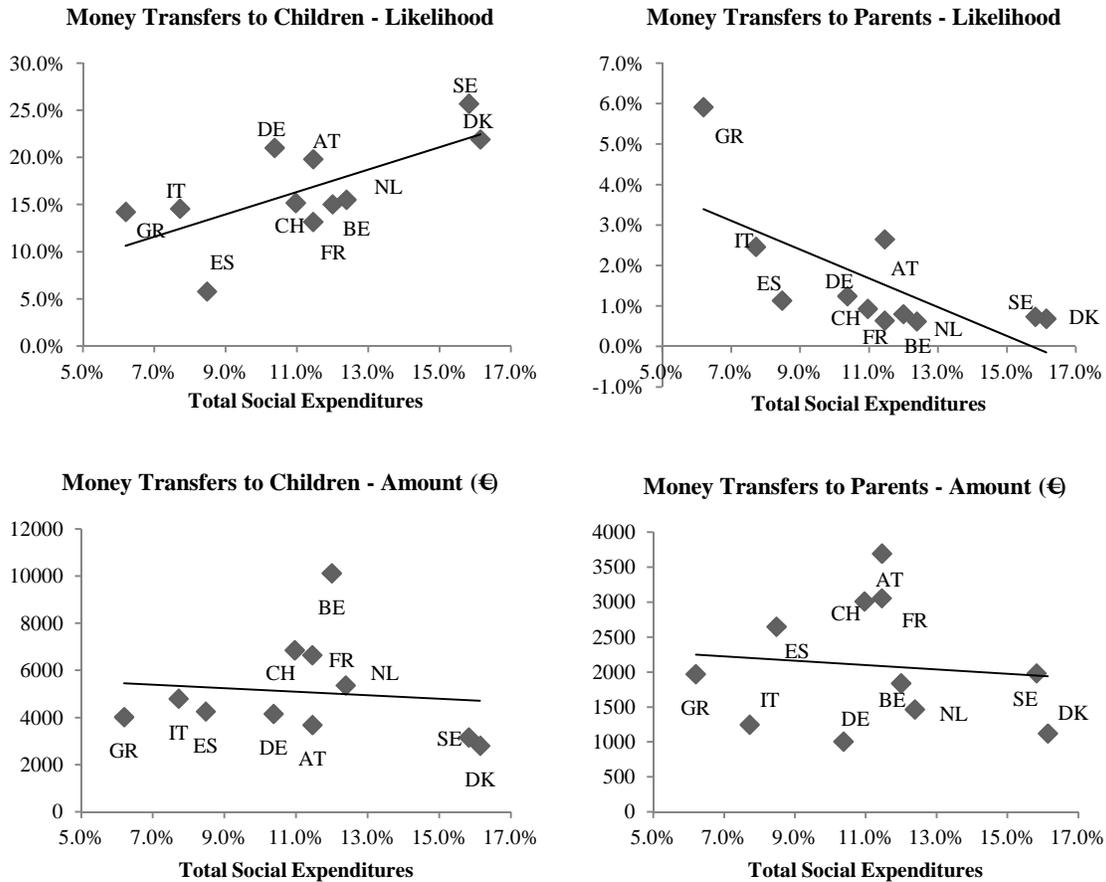
The majority of people across all welfare regimes considers that parents/grandparents have certain responsibilities toward their children/grandchildren. However, this sense of responsibility is particularly strong among people in the traditional welfare regimes of Southern Europe. Moreover, while the difference is overall relatively small between individuals in social democratic welfare-regime countries of Northern Europe and conservative welfare-regime countries of Continental Europe, there is a substantially higher percentage in Continental Europe of those who consider it part of the grandparents' duty to look after grandchildren and contribute to their economic security.

In terms of attitudes across countries regarding primary responsibility in supporting the elderly, the differences are even starker. A small minority of individuals in social democratic countries (4 to 8%) considers either financial or practical help to the elderly to be the primary responsibility of the family, whereas the proportion of people with such an attitude in conservative countries is about three times as high, and in traditional countries almost six times. The differences are much larger in terms of practical help and care provided to parents, especially in traditional countries, than in terms of financial help to parents where the welfare-regime gradient is still clear, but less pronounced. Overall, the cross-national differences in individuals' attitudes suggest that using the welfare-regime typology to analyze family transfers behavior is a useful approach for understanding the effects of policy on public-private nexus of intergenerational transfers.

FAMILY TRANSFERS AND SOCIAL WELFARE SPENDING

Figures 5.1 through 5.4 depict the relationships of different types of transfers between parents and grown children with some of the welfare-regime characteristics such as spending on social programs and social services employment. The association of intergenerational family transfers with public (intergenerational) redistribution of resources would add further support to the claim that private transfer behavior corresponds to welfare-state regimes in important ways. Figures depict financial transfers between parents and grown children and total (discretionary) social spending (Figure 5.1), time transfers of care and help and total social services employment (Figure 5.2), intensive grandchild care and family policy and education spending (Figure 5.3), and co-residence of grown children and parents and total social spending (Figure 5.4).

Figure 5.1: Likelihood and Amount of Financial Transfers Between Parents and Children vs. Total Social Expenditures (Excluding Pensions and Healthcare)

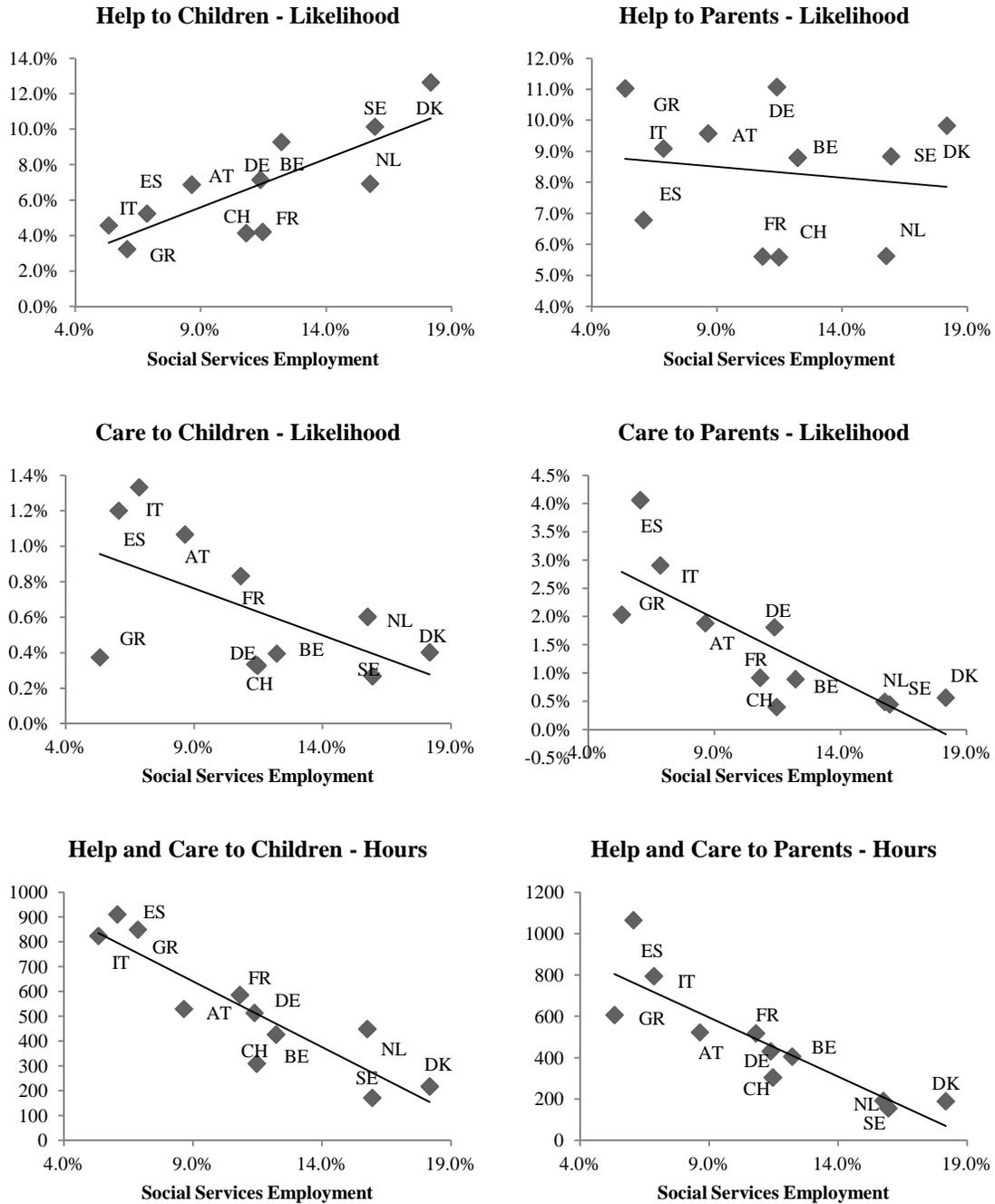


Source: SHARE, 2006; OECD, 2012.

The relationships shown in these figures reveal that intergenerational family transfers, regardless of the type of transfers, correspond fairly well to the welfare-regime typology. The likelihood of money transfers from parents to children, shown in Figure 5.1, almost uniformly increases as one moves from the South to the North of Europe, tracking well the increases in discretionary social expenditures across countries, while the opposite is true for money transfers from children to parents that are negatively correlated

with public discretionary social spending. The amount of money transferred does not indicate a clear pattern, but that is mostly due to the fact that the incomes and wealth across Europe tend to be smaller in Southern European countries compared to Continental and Northern European countries in particular. Therefore, if these absolute transfer amounts were expressed as a percentage of parents' (or children's) income, the magnitude of money transfers would follow the same geographic gradient.

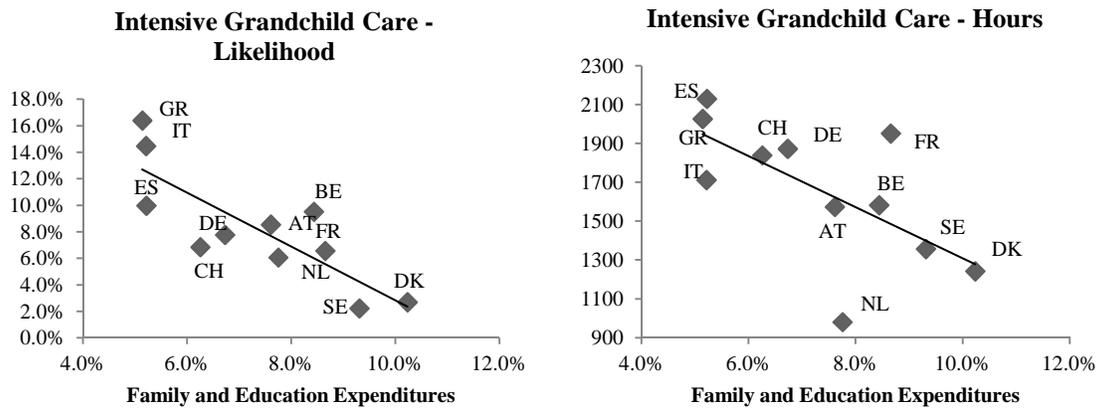
Figure 5.2: Likelihood and Amount of Time Transfers Between Parents and Children vs. Social Services Employment



Source: SHARE, 2006; OECD, 2012.

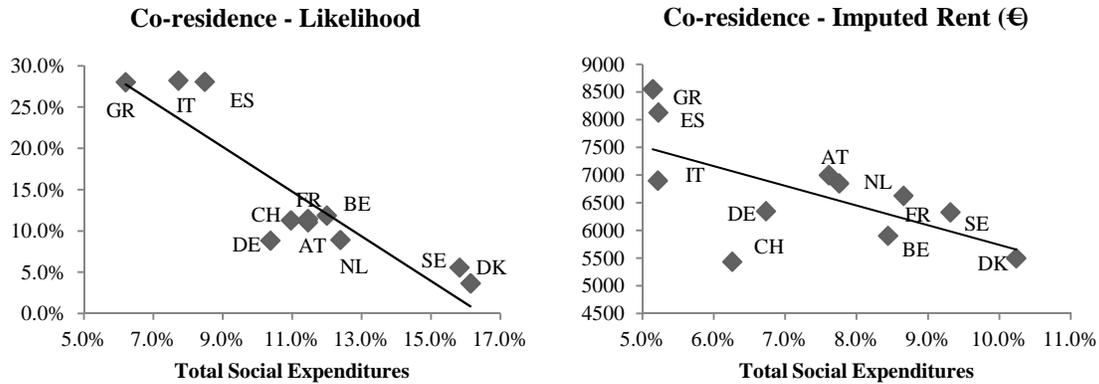
Figure 5.2 reveals that less intensive help to children becomes less prevalent from North to South of Europe and is positively correlated with social services employment, a strong indicator of the availability of public provision of practical (professional) support to individuals in need, while the relationship for help from children to parents is not as strong. Conversely, the likelihood of more intensive care and the intensity (i.e., number of hours) of help and care parents give to children and vice versa are all strongly negatively correlated with social services employment level. These findings correspond well with previous findings (e.g., Brandt et al., 2009) of specialization in the provision of intergenerational time resources, with the primary responsibility of professional providers for medically and time-demanding care and primary responsibility of families for less time intensive help, where the welfare state provides such support.

Figure 5.3: Likelihood and Amount of Intensive Grandchild Care vs. Family and Education Social Expenditures



Source: SHARE, 2006; OECD, 2012.

Figure 5.4: Likelihood of Co-residence and Imputed Rent Value vs. Total Social Expenditures (Excluding Pensions and Healthcare)



Source: SHARE, 2006; OECD, 2012.

Finally, Figures 5.3 and 5.4 show that nonfinancial types of transfers are most common in traditional welfare regime countries of Southern Europe, followed by conservative welfare regime countries of Continental Europe, while being least likely across social democratic welfare regimes in Northern Europe. The likelihood and hours of intensive grandchild care are negatively correlated with expenditures on family policy and education (that represent the extent of government redistribution toward children), and they follow the geographic gradient from fairly large in Northern Europe to comparatively small in Southern Europe. Similarly, the likelihood of parents and grown children co-residing and the imputed rent amount are negatively correlated with discretionary social expenditures, and follow the same geographic gradient.

PARENT-CHILD TRANSFER MOTIVES

Prior research (e.g. Albertini & Kohli, 2012; Deindl & Brandt, 2011) suggests that family transfers across European countries may follow different patterns, because in traditional welfare states there is a need to supplement insufficient public transfers. In social democratic and somewhat less in conservative welfare states, transfers are comparatively more a function of family bonds, and there is a less objective unmet need where family has to make transfers to supplement insufficient government support. The results presented thus far are consistent with this explanation, but they rely only on people's general attitudes and transfer behavior, without eliciting direct information on motives for making intergenerational family transfers. The results in Table 5.2 present this information for the transfers of money between parents and grown children across the three welfare regimes in Europe.

Table 5.2: Reasons for Family Transfers Between Parents and Children, by Welfare Regime

	Transfers to children (%)		
	Social Democratic	Conservative	Traditional
To meet basic needs	19.4	16.2	27.0
To buy or furnish a house or apartment	12.1	19.5	8.1
To help with a large item of expenditure	11.6	10.3	6.2
For a major family event (birth, marriage, etc.)	7.0	12.9	15.7
To help with a divorce	1.2	0.9	0.7
To help following a bereavement or illness	0.4	1.2	0.8
To help with unemployment	1.4	1.8	3.5
For further education	8.3	7.4	11.6
To meet a legal obligation (e.g. alimony)	0.3	1.0	1.0
No specific reason	27.2	23.5	18.7
Other reason	11.2	5.4	6.7
Total number of children receiving transfer	2,257	2,311	1,173
	Transfers to parents (%)		
	Social Democratic	Conservative	Traditional
To meet basic needs	17.2	22.1	54.2
To buy or furnish a house or apartment	5.2	9.0	3.4
To help with a large item of expenditure	5.2	2.8	3.0
For a major family event (birth, marriage, etc.)	19.0	22.1	5.4
To help with a divorce	0.0	0.0	0.3
To help following a bereavement or illness	6.9	0.7	7.8
To help with unemployment	0.0	0.0	0.7
For further education	0.0	1.4	1.7
To meet a legal obligation (e.g. alimony)	0.0	2.1	0.0
No specific reason	24.1	30.3	12.5
Other reason	22.4	9.7	10.8
Total number of parents receiving transfer	58	145	295

Source: SHARE, 2006.

The results depict the complexity of the underlying motives of providing (financial) support between family members, but also suggest that most of the giving is primarily motivated by some objective need across all welfare regimes. However, there are some important welfare-regime differences—meeting basic needs is the single most important reason for family transfers in traditional welfare states, whereas in social democratic and conservative welfare states, the relative majority of parents and grown children gives for "no specific reason." This is consistent with the claim that a substantial part of transfers between parents and children in more generous welfare regimes is not conditioned by need, but may represent a material expression of emotional closeness. There are two important methodological caveats, though. First, the category "no specific reason" may have been interpreted by some respondents as no specific need rather than no need at all, which may result in an overestimation of the share of people who really gave without any perceived need on the part of recipients. Second, the questionnaire limits the respondents to selecting only a single reason for making a transfer, and this does not allow for the full complexity of the underlying motives to be revealed. Even so, these data reveal important information regarding the true motives for intergenerational family transfers and give support to the life-cycle model of intergenerational family transfers presented in Chapter 3 that assumes family members exchange support based on their relative needs and ability to give.

Although it is clear that relative needs primarily determine financial transfer flows between parents and grown children, this does not completely preclude the possibility that transfer recipients "repay" transfer donors by providing other types of support. With the motivation to explore this possibility, Table 5.3 expands the consideration of different motives of transfers by exploring how family generations make various transfers.

Table 5.3: Intergenerational Exchange of Support, by Type of Transfer

	Money to Children (%)		Time to Children (%)		Grandchild Care (%)		Co-residence (%)		Planned Bequest (%)						
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes					
Money to Parents	1.5	1.3	1.4	1.8	1.6	1.9	1.5	1.3	1.5	1.4	+				
Time to Parents	9.3	9.3	7.8	30.4	***	11.1	8.9	*	8.2	15.0	***	10.3	8.9	**	
Inheritance Received	10.4	19.1	***	11.4	16.0	***	9.0	9.9	11.6	12.5	5.9	13.9	***		
Inheritance Expected	12.3	24.2	***	13.8	19.3	***	6.0	13.7	***	12.7	21.7	***	7.4	16.7	***

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

First, money transfers from children to parents do not differ between children who receive any type of transfers from parents and those who do not. Time transfers from children to parents are more likely if children receive time transfers from parents or if they co-reside with parents, but are less likely if they receive grandchild care, and show no difference if children receive money transfer from parents. These results, therefore, do not provide support for parents and children engaging in an immediate reciprocation in family transfers. However, it is possible that transfer recipients may reciprocate to transfer donors at some later point in time, but cross-sectional data cannot capture such transfer behavior. On the other hand, parents who already received inheritance, and especially those expecting to receive it in the future, are much more likely to make a transfer to children. Also, receiving or expecting inheritance is positively related with the plan of leaving a bequest.

HOW FAMILIES MAKE TRANSFERS

Given the empirical evidence largely supports the life-cycle model of giving presented in Chapter 3, it is now possible to turn to exploring the main objectives of the dissertation. The first objective is to explore financial and nonfinancial transfers between parents and grown children across the three welfare regimes in Europe. Toward this end, I describe the pattern of family transfers between parents and grown children stratified by age (Table 5.4) and children's gender (Table 5.5). Table 5.4 provides a comprehensive overview of the likelihood and the magnitude of different types of family transfers by parents' age.

Table 5.4: Transfers Between Parents and Children, by Age of Parents and Welfare Regime

Money	50-69		70-79		80+		Total	
	Likelihood (%)	Amount (€)	Likelihood (%)	Amount (€)	Likelihood (%)	Amount (€)	Likelihood (%)	Amount (€)
To Children								
Social Democratic	29.0	2695	15.6	4364	15.0	4135	24.3	3038
Conservative	21.8	5297	11.5	5236	7.5	4849	17.2	5258
Traditional	14.9	5096	6.2	2878	6.7	3115	11.4	4601
To Parents								
Social Democratic	0.5	2686	1.1	705	1.0	658	0.7	1677
Conservative	0.9	1445	1.1	3052	1.5	1489	1.0	1887
Traditional	2.2	1492	2.2	1870	3.5	1945	2.3	1677
N	23226		8639		4230		36095	
Time	Likelihood (%)	Hours	Likelihood (%)	Hours	Likelihood (%)	Hours	Likelihood (%)	Hours
	To Children							
Social Democratic	14.3	193	7.9	150	2.5	339	11.3	191
Conservative	8.0	520	5.2	510	2.8	454	6.6	514
Traditional	6.9	762	3.6	969	3.3	1531	5.5	864
To Parents								
Social Democratic	6.4	110	9.8	256	21.9	197	9.3	170
Conservative	5.6	262	9.7	273	21.5	765	8.9	438
Traditional	6.3	603	12.6	839	21.5	1210	10.1	860
N	23226		8639		4230		36095	
Intensive Grandchild Care	Likelihood (%)	Hours	Likelihood (%)	Hours	Likelihood (%)	Hours	Likelihood (%)	Hours
	To Children							
Social Democratic	3.7	1336	1.4	1177	0.1	1081	2.4	1308
Conservative	12.9	1783	3.7	1873	0.5	1300	7.3	1792
Traditional	22.8	1823	8.6	1866	2.0	2509	13.0	1864
N	10220		6677		3510		20407	
Co-residence	Likelihood (%)	Imputed Rent (€)	Likelihood (%)	Imputed Rent (€)	Likelihood (%)	Imputed Rent (€)	Likelihood (%)	Imputed Rent (€)
	To Children							
Social-Democratic	7.0	3073	0.7	2805	1.1	2563	4.9	3049
Conservative	14.0	3256	3.6	2994	4.0	3158	10.1	3228
Traditional	37.3	3787	13.9	3738	18.1	3480	28.1	3754
N	23226		8639		4230		36095	

Source: SHARE, 2006.

Both the likelihood and the amount of money transfers from parents to children are substantially higher compared to transfers children make to parents across all welfare-state regimes and all age groups. The likelihood of downward transfers falls with age and is strongest across all age groups in social democratic countries and weakest in traditional countries. Conversely, the likelihood of upward transfers increases with age and follows the reverse geographic gradient (i.e., decreasing as one moves from the South to the North of Europe). The amount of monetary gifts does not exhibit a clear welfare-regime pattern.

The likelihood of time transfers follows a similar pattern to money transfers, with the transfer likelihood decreasing downward and increasing upward as parents and children age. However, an important difference between time and money transfers is that children are equally or (at parents' advanced old age) even substantially more likely to spend time helping parents, whereas money overwhelmingly flows from parents to children across the adult life cycle. While the likelihood of making any type of time transfer does not differ substantially across the welfare-state regimes, the intensity, measured in hours of help and care provided, reveals a clear linear pattern of relatively few hours given/received in social democratic countries, more in conservative countries, and the most in traditional countries, where parents and children who make time transfers on average spend three to six times more hours helping. Therefore, going from the North to the South of Europe, parents and grown children are increasingly likely to engage in more intensive types of help and care.

The likelihood and the magnitude of intensive grandchild care noticeably increases from the North to the South of Europe. In all welfare regimes, however, the likelihood falls sharply with age, which reflects the fact that most of grandparents' care is

directed to very young grandchildren. The likelihood of co-residence follows the same North-South geographic gradient, but, unlike grandchild care, co-residence increases for parent-child dyads with advanced-old-age parents after falling precipitously for younger age groups. However, given that these are cross-sectional data, it is impossible to distinguish to what extent this slight increase in the likelihood of co-residence possibly reflects increased needs of either children or frail elderly parents for help, and to what extent it may be a cohort effect.

Prior research suggests transfers between parents and children may differ by the gender of children (Schmid et al., 2012; Silverstein et al. 1997). This study builds on this observation, examining various types of transfers that should make it easier to recognize the sources of possible daughter-son differences in transfers and the relative contribution of different types of transfers to this difference.

Table 5.5: Transfers Between Parents and Children, by Gender of Children and Welfare Regime

Money	Male Child		Female Child	
	Likelihood (%)	Amount (€)	Likelihood (%)	Amount (€)
To Children				
Social Democratic	22.9	3269	25.7	2834
Conservative	17.0	5583	17.5	4930
Traditional	11.0	4444	11.8	4755
To Parents				
Social Democratic	0.7	1470	0.7	1894
Conservative	0.9	2181	1.1	1638
Traditional	2.6	1681	2.1	1672
N	18353		17742	
Time				
	Likelihood (%)	Hours	Likelihood (%)	Hours
To Children				
Social Democratic	11.0	216	11.7	168
Conservative	5.9	536	7.3	496
Traditional	4.6	810	6.4	907
To Parents				
Social Democratic	10.2	121	8.4	228
Conservative	8.5	434	9.2	441
Traditional	8.1	798	12.2	905
N	18353		17742	
Intensive Grandchild Care				
	Likelihood (%)	Hours	Likelihood (%)	Hours
Social Democratic	1.8	1269	2.9	1331
Conservative	5.5	1531	8.9	1939
Traditional	11.5	1816	14.4	1898
N	9575		10832	
Co-residence				
	Likelihood (%)	Imputed Rent (€)	Likelihood (%)	Imputed Rent (€)
Social Democratic	5.8	2987	3.9	3141
Conservative	12.1	3183	8.0	3298
Traditional	30.5	3723	25.7	3793
N	18353		17742	

Source: SHARE, 2006.

The results in Table 5.5 show that neither the likelihood nor the amount of money transfers between parents and children follows a clear pattern by children's gender. The only difference, albeit very small, is that daughters are somewhat more likely to receive money from parents than sons. On the other hand, daughters are more likely than sons to receive practical care and help to/from parents across welfare state regimes, with the difference being the largest in Southern followed by Continental and Northern Europe. Results for the practical care and help provided by children to parents are similar except for Northern European countries, where sons are more likely to make time transfers to parents. Their transfers are of much lesser intensity than daughters' transfers, however. Intensive grandchild care follows the same gender pattern as the provision of care and help, but the magnitude of the difference in the likelihood of grandchild care is even larger. Conversely, sons are substantially more likely to co-reside with parents.

TYPES OF TRANSFERS AS DETERMINANTS OF PARENT-CHILD EXCHANGE OF SUPPORT

The next step in the analysis of intergenerational family transfers across the three welfare regimes in Europe is to explore the net exchange of support between parents and grown children. Table 5.6 depicts changes in the total likelihood and net transfer amount across welfare state regimes as the definition of transfers expands from money transfers only (the narrowest definition); transfers of money and time; transfers of money and time with intensive grandchild care included; and, finally, transfers of money, time, intensive grandchild care, and co-residence (the broadest definition).

Table 5.6: Total Transfer Likelihood and Net Transfer Amount, by Transfer Definition and Welfare Regime

Total Transfers Likelihood (%)	Money	Money and Time		Money, Time, and Intensive Grandchild Care		Money, Time, Intensive Grandchild Care, and Co-residence	
Social Democratic	24.5	35.9		36.7		39.3	
Conservative	17.2	26.4		29.5		36.5	
Traditional	15.1	24.7		29.9		49.7	
Net Transfers (% of Parents' Income, PPP)		Minimum Wage	Average Wage	Minimum Wage	Average Wage	Minimum Wage	Average Wage
Social Democratic	7.6	6.1	6.4	7.3	8.6	7.7	8.9
Conservative	11.6	8.1	7.8	12.9	18.3	12.8	17.3
Traditional	13.2	5.2	0.1	14.5	24.6	16.4	22.0

Source: SHARE, 2006; own calculations.

The decision about the types of transfers to be included in the measurement of the likelihood of transfers has a major impact on the results. The likelihood of a money transfer clearly follows the North-South gradient already discussed in this study and previous literature, and including care and help exchanged between parents and grown children does not change that ordering, although it substantially increases the proportion of parent-child dyads participating in transfers. However, once intensive grandchild care and co-residence are included, the likelihood of transfers in traditional welfare states of Southern Europe becomes the highest; social democratic and conservative welfare states of Northern and Continental Europe lag behind. These results confirm findings from the prior research (e.g., Kohli & Albertini, 2007) about co-residence being the major type of transfer in Southern Europe. Failing to account for co-residence can confound the relationship between welfare-regime characteristics and private transfers in Europe. Also, the results suggest that nonfinancial transfers between parents and children are important across all European countries and that, according to broader definitions of transfers, at least one-third to one-half of all children in Europe engage in some type of exchange with their parents.

Table 5.6 also presents net transfer amounts estimates calculated as the percentage of average parents' income exchanged between parents and grown children. The data reveal that net money transfers benefit most children in traditional welfare-regime countries. Yet, once the intensity of care and help exchanges is included, children in traditional welfare-regime countries provide much more intensive help and care to their parents than children in conservative and especially social democratic welfare states. Under this definition, net transfers benefit grown children the least, as, on average, they receive only between 0 and 5% of average parents' income in traditional welfare-regime

countries and approximately between 6 and 8% across other welfare-state regimes. However, accounting for the financial value of intensive grandchild care and/or imputed rent for grown children co-residing with their parents increases net transfers from parents to children yet again, and makes them similar to the estimates for the narrowest definition of net transfers that includes only the exchange of money.

Overall, the exchange of support between parents and grown children results in a net downward transfer of resources. Children in the traditional welfare states of Southern Europe benefit the most (receiving approximately 15 to 25% of average parents' income), their counterparts in conservative welfare states of Continental Europe receive less (13 to 18%), and those in social democratic welfare states of Northern Europe get the least (7 to 9%). In absolute amounts, though, the differences would be smaller, because the average incomes are higher in Northern and Continental than in Southern Europe. Therefore, transfers between parents and grown children are nontrivial, both in terms of the likelihood and the economic value provided. They primarily benefit children, and are particularly important in countries where the role of the family has traditionally been more important relative to the role of the welfare state. Nevertheless, intergenerational family transfers remain an important component of intergenerational redistribution of resources across all welfare regimes.

ANALYTIC SAMPLE DESCRIPTION

Finally, before turning to the multivariate analyses, it is important to describe the characteristics of the analytic sample. Table 5.7 describes sample means of all predictors for the full sample and is stratified by welfare-state regimes.

Table 5.7: Sample Means, All Countries and Stratified by Welfare Regime

	All Countries	Social Democratic	Conservative	Traditional	
Parents' characteristics					
Age (Years)	66.6	65.8	66.4	67.2	***
Female	0.580	0.548	0.569	0.604	***
Education (Years)	9.9	11.8	11.3	7.2	***
Marital status					
Married	0.661	0.614	0.642	0.702	***
Partnered	0.007	0.057	0.004	0.004	***
Separated	0.013	0.006	0.014	0.012	***
Never married	0.014	0.020	0.018	0.005	***
Divorced	0.065	0.122	0.085	0.023	***
Widowed	0.240	0.182	0.237	0.255	***
Making ends meet					
Great difficulty	0.115	0.039	0.073	0.199	***
Some difficulty	0.290	0.148	0.235	0.408	***
Fairly easily	0.363	0.357	0.400	0.298	***
Easily	0.232	0.455	0.291	0.095	***
Income (€)	30,265	32,195	33,851	23,681	***
Financial wealth (€)	46,664	93,699	56,294	22,761	***
Number of children	2.90	2.88	2.90	2.90	***
Number of ADLs	0.252	0.190	0.226	0.305	***
Number of IADLs	0.227	0.189	0.190	0.298	***
Recent health limitation	0.626	0.561	0.651	0.591	**
Professional homecare	0.087	0.073	0.107	0.055	***
Child's characteristics					
Female	0.488	0.502	0.490	0.483	*
Marital status					
Married or partnered	0.559	0.588	0.540	0.589	
Separated, divorced or widowed	0.077	0.082	0.094	0.046	***
Never married	0.364	0.330	0.366	0.365	***
Working full-time	0.666	0.710	0.651	0.686	***
Any grandchildren	0.560	0.609	0.572	0.532	***
Dyad contact					
Daily or several times a week	0.667	0.578	0.577	0.838	***
Once a week to once a month	0.279	0.377	0.350	0.138	***
Rarely or never	0.055	0.045	0.073	0.023	***
N	36095	7467	18538	10090	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

Sample means describe the main characteristics of parents and grown children. Stratifying it by welfare-state regimes and testing for statistical significance of differences in sample means reveals that the three groups of countries differ with respect to most parent and child characteristics. This suggests it may be important to stratify models of transfers by welfare-state regime in order to determine if the process of giving is fundamentally different across different welfare regimes.

Parents in the sample on average are slightly less than 67 years old and are more likely to be women than men, with parents in traditional welfare regime countries being above sample average and in the other two welfare regimes below sample average on these two characteristics. Being currently married followed by being widowed are the two most common marital statuses across all welfare regimes, but they are particularly dominant in traditional welfare-regime countries, where close to 96% of all parents are in one of these two statuses, whereas parents in social democratic welfare states are much more likely than in parents in other countries to be divorced (more than 12%) or partnered (close to 6%). Parents across welfare-state regimes differ substantially in their socioeconomic status. While the average educational attainment is close to 10 years, parents in traditional welfare states of Southern Europe have only 7 years of schooling on average. Moreover, close to 61% of them reported having either some or great difficulty making ends meet, whereas the proportion of such parents in conservative and social democratic welfare state regimes is substantially smaller, around 31% and less than 19%, respectively. Parents in traditional welfare states have roughly 40% lower incomes compared to parents in other welfare states. They have about 1.5 times less nonhousing wealth than parents in conservative welfare states and over 4 times less nonhousing wealth compared to parents in social democratic welfare states. They are also in worse

health, reflected by a higher number of ADL and IADL disabilities, yet they are also less likely to receive professional homecare.

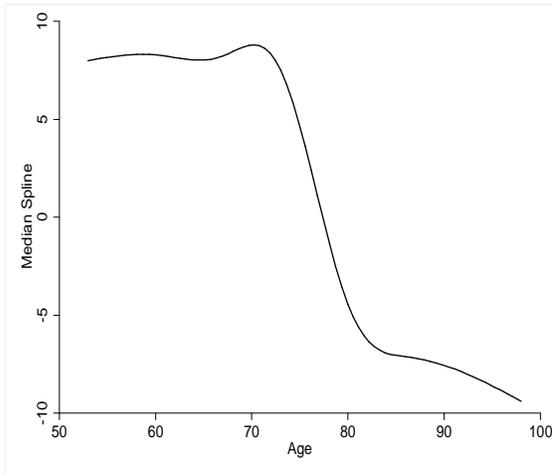
Regarding the children's and dyads' characteristics, while majority of the children are currently married, a substantial minority (over one-third) has never been married, and this proportion is somewhat higher in conservative and traditional welfare states. At the same time, children in traditional welfare states are least likely to have experienced separation, divorce, or widowhood. Children in social democratic countries are most likely to have full-time employment and to have children of their own. Finally, children in traditional countries are much more likely to have very frequent contact with their parents (about 84% of them contact parents daily or several times a week) than their counterparts across other welfare state regimes, but the likelihood of no or rare contact with parents is relatively small across all welfare regimes in the sample.

I now turn to the second aim of the dissertation. First, I describe how net transfers between parents and grown children change over the adult life cycle. Figure 5.5 depicts the relationship between parents' age and the two outcome measures: net transfers of money, time and intensive grandchild care (Figure 5.5.A); and net transfers of money, time and intensive grandchild care, and imputed rent for co-resident parent-child dyads (Figure 5.5.B).

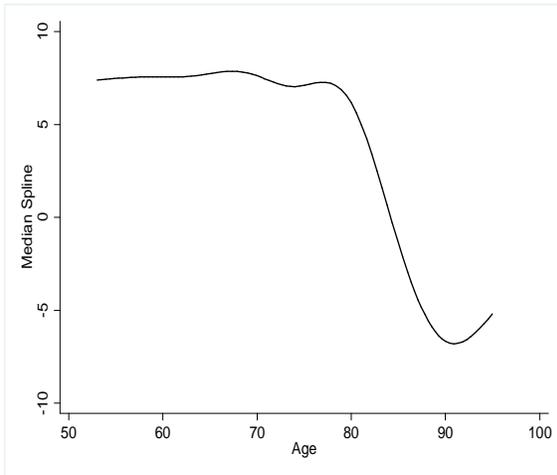
Figure 5.5: Bivariate Correlations of Age and Net Transfers

A: Net Transfers of Money, Time, and Grandchild Care

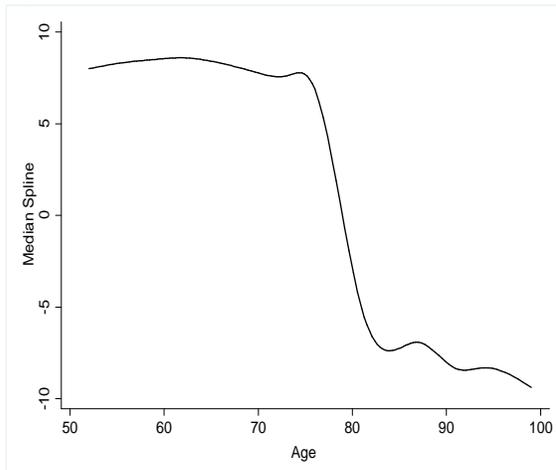
i) All Countries



ii) Social-Democratic Countries



iii) Conservative Countries



iv) Traditional Countries

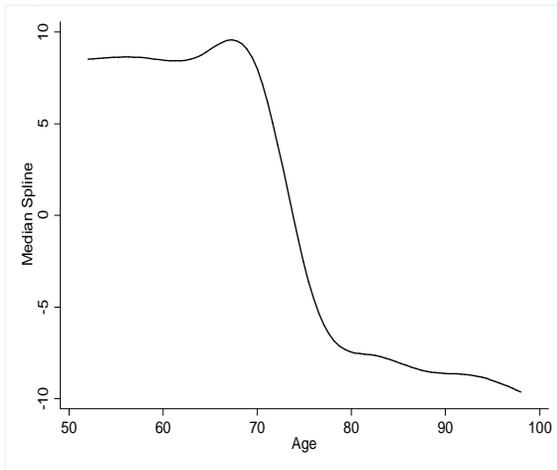
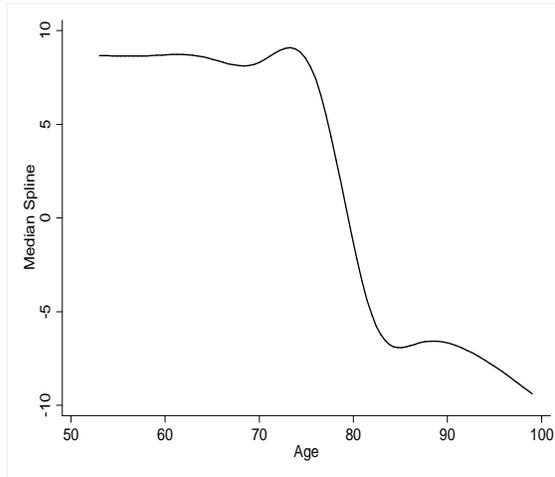


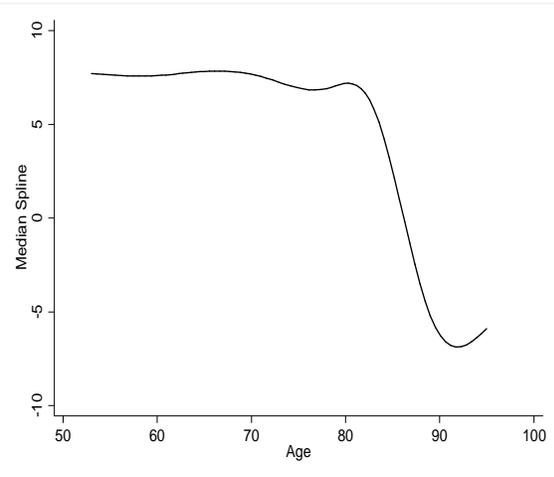
Figure 5.5 continued.

B: Net Transfers of Money, Time, Grandchild Care, and Imputed Rent

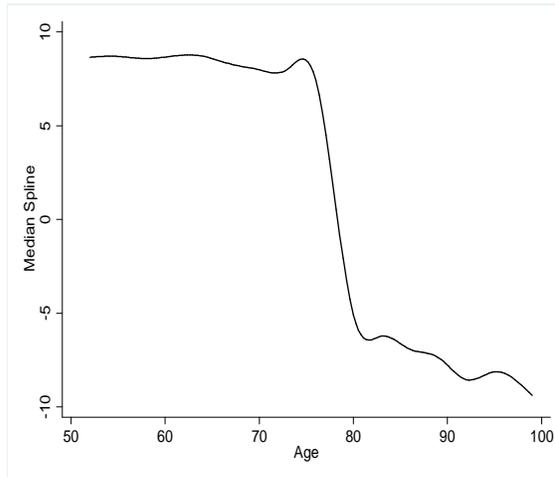
i) All Countries



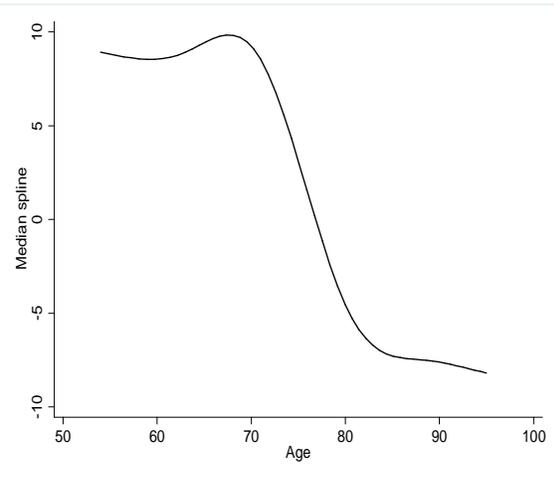
ii) Social-Democratic Countries



iii) Conservative Countries



iv) Traditional Countries



Source: SHARE, 2006; own calculations.

The figures reveal that across all welfare-state regimes parents give their grown children more than they receive from them until parents reach advanced old age. Parents become net recipients only in their mid- to late 70s (in Southern and Continental

European countries), or even early 80s (in Northern European countries). Generally, the time between the parents' early 70s and early 80s is when the major shift in net transfers (i.e., the change from positive to negative net transfers) occurs, which may suggest that intergenerational transfers do not undergo an immediate change in pattern at the age when most of parents retire (in their early to mid-60s), but rather that this happens at a later stage in life. This finding is consistent with the proposed life-cycle model of transfers. It should be recognized, though, that there are fairly few parents older than 90 in the sample, so the results at the very high end of the age distribution are not necessarily very reliable. Also, at least some of the decrease in net transfers from elderly parents to grown children could be attributed to parents' loss of the executive function rather than the underlying change in needs (Rohwedder & Willis, 2010). Finally, the relationship of age with net transfers is very similar for the two outcome measures, which suggests that accounting for imputed rent does not alter the nature of the relationship, although it increases the age when net transfers between parents and grown children start decreasing and ultimately become negative.

The descriptive analyses shed light on several important issues. First, they described individual attitudes toward the public-private division of responsibility in taking care for dependent generations (i.e., children and the elderly), family-transfer behavior and public transfers across welfare regimes, and major motives for money transfers between parents and grown children. They are consistent with the life-cycle model presented in Chapter 3 both in terms of family giving across generations over the life cycle and the constraining effects of public intergenerational redistribution of resources through transfers, taxes, and the legal framework. Furthermore, the chapter presented a detailed overview of various types of intergenerational family transfers and

how they are constrained by parents' (and children's) age as well as children's gender across three welfare regimes in Europe. It also depicted how different the inclusion or exclusion of different types of transfers from the definition of total transfers exchanged between family generations can significantly alter the findings about the likelihood and intensity of intergenerational family transfers across different welfare state regimes. The analyses, therefore, provide the answer to the first of the three research questions. Finally, the chapter concludes by presenting important characteristics of the analytic sample. Chapter 6 examines the age-related transfer practice in greater detail and identifies the determinants of the likelihood and net transfer amount between parents and grown children across welfare state regimes.

Chapter 6: Determinants of Transfer Likelihood and Net Value Across Three Welfare Regimes

Previous research on intergenerational transfers between older parents and grown children in Europe (e.g., Attias-Donfut et al., 2005; Deindl & Brandt, 2011) depicts a complex landscape where the institutional and social contexts constrain the parent-child exchange relationship and result in significant differences in the likelihood, intensity, and types of intergenerational family transfers across countries. Even though the likelihood and magnitude of financial and nonfinancial transfers across countries substantially differ, their relative change across the adult life cycle seems to follow a similar pattern. Parents in countries as different as Sweden, Austria, or Spain are likely to provide more support to their young adult children than they receive from them, but as children and parents age, the balance of support changes so that parents who reach advanced old age start receiving more support from their middle-aged children than they give in return. What remains largely unexplained is how social context and institutional characteristics constrain the overall balance of family transfers over the life cycle, that is, if and how the likelihood and net value of transfers over the adult life cycle differ across societies belonging to different welfare-state regimes. This is the second research objective of the dissertation.

The analysis first presents the results of the logistic regression for the likelihood of (any) transfers between parents and grown children and the threshold (linear spline) regression for their net value for the full sample. Next, the models are stratified by welfare regimes and children's gender, as suggested by theory and prior research as well as descriptive empirical evidence from the previous chapter. Finally, the fixed-effects

model of the likelihood of transfers is fitted for the subset of families with multiple children in order to explore differences between siblings (rather than unrelated children) and control for unobserved heterogeneity at the family level. All models are fit for the two broadest definitions of transfers—transfers of money, time, and intensive grandchild care as well as transfers of money, time, intensive grandchild care, and co-residence—as presented in the previous chapter.

FAMILY-TRANSFER BEHAVIOR MODEL RESULTS

Table 6.1 presents the results of logistic regressions of the likelihood of family transfers and threshold regressions of the net value transfers for the two alternative measures of transfers. Based on the descriptive results, visual inspection, and the search over the whole spectrum of age values, thresholds are set at the ages of 70 and 80. For each outcome, the first set of models controls for welfare-state regimes, while the second set of models replaces them with controls for the major elements of the welfare state that affect intergenerational redistribution of resources, including certain categories of social spending (on pensions, healthcare, family policy, and education), the level of social services employment, the overall redistributive impact of the tax system, and the legal obligation for grown children to care for their frail elderly parents. These variables determine the extent to which the individual elements of the welfare state affect the nature of transfers between older parents and grown children.

Table 6.1: Transfer Likelihood and Net Value, All Dyads

	Transfers of Money, Time, and Grandchild Care				Transfers of Money, Time, Grandchild Care, and Co-residence			
	Likelihood (Odds Ratio)	Net Value	Likelihood (Odds Ratio)	Net Value	Likelihood (Odds Ratio)	Net Value	Likelihood (Odds Ratio)	Net Value
Parents' Characteristics								
Age	0.98 ***		0.98 ***		0.97 ***		0.97 ***	
Age<70		-0.12 ***		-0.11 ***		-0.07 ***		-0.06 ***
70<Age<80		-0.40 ***		-0.41 ***		-0.36 ***		-0.37 ***
Age>80		-0.20 *		-0.20 **		-0.20 *		-0.20 **
Female	1.04	-1.01 ***	1.03	-0.99 ***	1.02	-0.79 ***	1.01	-0.76 ***
Education	1.02 ***	0.13 ***	1.02 **	0.15 ***	1.01 *	0.05 *	1.01	0.06 **
Marital Status (Ref. Married, Living With Spouse)								
Partnered	0.77	-0.18	0.80 *	-0.30	0.59 *	0.01	0.59 *	0.04
Separated	1.10	1.16	1.14	1.22	0.81	0.84	0.82	0.80
Never Married	0.88	-0.99	0.94	-1.18	0.92	0.44	0.97	0.24
Divorced	1.09	-0.89 +	1.12	-0.93 +	0.88	-0.69 +	0.89	-0.76 +
Widowed	1.33 ***	-1.34 ***	1.32 ***	-1.37 ***	1.29 ***	-1.09 **	1.28 ***	-1.12 **
Making Ends Meet (Ref. Great Difficulty)								
Some Difficulty	0.99	-0.10	0.99	-0.10	1.11	0.05	1.11	0.05
Fairly Easily	0.96	0.49	0.96	0.52	1.04	0.33	1.03	0.33
Easily	1.23 *	1.27 *	1.24 *	1.29 *	1.24 *	0.90 *	1.24 *	0.88 *

Table 6.1 continued.

IHS(Income)	1.06	*	0.09		1.06	**	0.07		1.05	**	0.08		1.05	**	0.07	
IHS(Financial Wealth)	1.04	***	0.21	***	1.04	***	0.19	***	1.03	***	0.13	***	1.03	***	0.11	***
Number of Children	0.75	***	-0.18		0.77	***	-0.23	*	0.78	***	-0.05		0.79	***	-0.12	
Number of ADLs	1.07		-0.60	*	1.06		-0.58	*	1.04		-0.49	+	1.03		-0.48	+
Number of IADLs	1.09	*	-0.53	*	1.11	*	-0.53	*	1.11	**	-0.50	*	1.12	**	-0.51	*
Recent Health Limitation	1.20	***	-1.11	***	1.17	***	-1.07	***	1.10	**	-0.91	***	1.08	*	-0.87	***
Professional Homecare	0.96		-1.06	*	1.10		-1.40	**	1.02		-1.46	**	1.13		-1.80	***
Child's Characteristics																
Female	1.08	+	-0.09		1.09	*	-0.13		0.89	**	-0.36	*	0.89	**	-0.38	*
Marital Status (Ref. Married or Partnered)																
Separated, Divorced or Widowed	1.15	+	0.11		1.13		0.15		1.41	***	0.24		1.38	***	0.25	
Never Married	1.13	+	0.32		1.12	+	0.33		2.41	***	1.35	***	2.43	***	1.30	***
Working Full-Time	0.83	***	0.12		0.86	**	0.05		0.63	***	-0.03		0.64	***	-0.07	
Any Grandchildren	1.42	***	1.91	***	1.44	***	1.88	***	1.06		0.89	**	1.07		0.86	**
Dyad Contact (Ref. Co-Residing)*																
Daily or Several Times a Week	1.16		0.79		1.13		0.82									
Once a Week to Once a Month	0.60	**	0.96	+	0.58	**	1.01	+	0.34	***	-0.58	**	0.33	***	-0.54	*
Rarely or Never	0.24	***	2.40	***	0.23	***	2.41	***	0.13	***	0.57		0.13	***	0.58	

Table 6.1 continued.

Welfare Regime (Ref. Social Democratic)

Conservative	0.76	***	0.05		0.83	***	0.16	
Traditional	0.76	***	1.46	***	1.25	***	1.71	***
Pensions			1.02	***	0.01		1.00	0.05 **
Healthcare			0.81	***	0.37	**	0.92	*** 0.58 ***
Family Policy			1.07	**	-0.34	***	1.00	-0.36 ***
Education			1.05	***	-0.14	**	1.07	*** -0.06
Social Services								
Employment			1.11	***	-0.21	*	1.01	-0.38 ***
Legal Care Obligation			3.77	***	-3.53	***	1.50	+ -4.77 ***
Gini Index Difference			0.93	***	0.25	***	1.01	0.34 ***
N	36095		11234		36095		14713	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

*For the broader definition of transfers ref. category is “daily or several times a week.”

Source: SHARE, 2006.

The models reveal comparable results for both net-transfer measures as the direction of the relationship, with almost all covariates unchanged. There are very few changes in terms of their statistical significance, especially for children's characteristics. The only noticeable difference is in terms of the magnitude of some of the coefficients. It should be emphasized, however, that due to uncertainties inherent in the measurement of transfers between parents and children, the magnitudes of coefficients for any predictor in the model are imprecise. Hence, the interpretation of the results focuses primarily on the direction and the statistical significance of predictors, and to a lesser extent on the magnitude.

Age is correlated with the lower likelihood of transfers between parents and children. Therefore, parents and children are less likely to make transfers as they get older. Furthermore, the likelihood of participating in transfers is larger for parents who are more educated and economically better off as well as those who are in poor health or widowed, while it decreases with the number of children and these results are the same for both outcome measures.

Among children's characteristics, the likelihood of giving/receiving money, time, and grandchild care is slightly higher for daughters as well as never married, separated, divorced, and widowed children, albeit with only marginal statistical significance. The likelihood is substantially higher for children with children of their own, while it is lower for children with full-time jobs. Once co-residence is accounted for, however, the likelihood becomes lower for daughters, reflecting the descriptive finding that sons are more likely to co-reside with parents. Also, both the magnitude and the statistical significance dramatically increase for the coefficients on children's marital status and to a lesser extent on children's work status, indicating how strongly children's needs are

correlated with the likelihood of co-residing with parents. Regardless of whether co-residence is included in the outcome measure, the less contact parents and children have, the less likely they are to engage in giving.

Consistent with the descriptive results from Chapter 5, the likelihood of giving money, time, and grandchild care is significantly lower in countries with either conservative or traditional welfare regimes, yet once co-residence is accounted for, the likelihood of transfers in traditional welfare states becomes the highest. This large increase in intrafamilial transfers for traditional welfare states can be attributed to the fact that child co-residence is a ubiquitous phenomenon across Southern European countries. In terms of the major welfare-state characteristics, healthcare spending is negatively correlated with transfer likelihood, while other types of public spending are positively correlated with this outcome, which suggests that the likelihood to give is not crowded out by public transfers. Legal obligation to care for parents substantially increases the likelihood of transfers between older parents and grown children.

Net transfers over the adult life cycle follow the pattern suggested by the bivariate correlations of age and net transfers: it decreases with age, especially for parents age 70 and older. Accounting for co-residence as downward transfer does not change the shape of the relationship, but it further moderates its magnitude, especially for parents age 50 to 69, who are most likely to have their younger adult children co-residing with them. The importance of co-residence for net transfers diminishes substantially for older age groups. While equally likely to participate in exchange with children, parents from female-headed households are comparatively more likely to be recipient of transfers than parents from male-headed households, albeit the magnitude of this difference somewhat diminishes if co-residence is counted as a transfer. More educated and wealthier parents give more to

children, although the magnitude of the difference with less well-off parents decreases when co-residence is accounted for. Any health issue parents have negatively affects net transfers: ADL and IADL difficulties as well as recent health-limiting experiences and receipt of professional homecare are correlated with parents giving less to children and/or receiving more from them. Similarly, net transfers are also negatively associated with parents being widowed or divorced, albeit for the latter group only marginally statistically significantly.

There is no statistically significant difference in the net transfer amount of money and time parents give to daughters and sons. However, if co-residence is included in the net transfer measure, daughters receive less net support from parents than sons, which can be attributed to higher rates of co-residence of sons with parents across conservative and especially traditional welfare states. Also, being never married is negatively associated with net transfers from parents to children, as never-married children are substantially more likely to live with their parents. Conversely, grown children having children of their own is positively associated with net transfers from parents to children. While children having rare contact with their parents are much less likely to participate in intergenerational exchange than co-resident children, the net amount they receive seems substantially larger. However, if co-residence is included in transfers, the difference in net transfer between children with frequent and rare contact with parents disappears. Overall, the results are consistent with the need and the ability to give as the driving force of parents' and children's exchange behavior.

Finally, net transfers in conservative countries are not significantly different from those in social democratic countries, but in traditional countries of Southern Europe, they are substantially higher regardless of the definition of transfers, which confirms previous

findings about the stronger intensity of transfers in traditional welfare states compared to other welfare-state regimes. Higher healthcare spending and larger generational redistributive impact of the tax system are correlated with an increase in net transfers, indicating that elderly parents who enjoy adequate healthcare and receive larger transfers from the government either have more resources to share with their children or less need to seek help from them. On the other hand, spending on family policy and education as well as the level of social services employment and the legal obligation to care for frail elderly parents are negatively correlated with net parent-child transfers. In countries with generous spending on family policy and education, it is reasonable to expect grown children to have less need for parental financial help, as some of the major expenditures they incur are related with higher education and family formation. Also, a higher level of social services employment, which implies more provision of various in-kind services primarily related to intensive types of care for dependent populations at the either end of the population distribution, is related with a decreasing net value of transfers. Statistically significant negative correlation between net transfers and a legal obligation to care for parents suggest that the legal framework may be an effective instrument of generational redistribution of resources.

MODEL RESULTS BY WELFARE REGIME

The results in Table 6.2 present net transfers by welfare regime. Tables 6.2.A-C analyze the age pattern of transfers across different welfare regimes as the results for the pooled sample (presented in Table 6.1), and the descriptive results in Chapter 5 support stratifying the analysis by welfare state regimes.

Table 6.2: Transfer Likelihood and Net Value, by Welfare Regime

A: Social Democratic Countries

	Transfers of Money, Time, and Grandchild Care		Transfers of Money, Time, Grandchild Care, and Co-residence	
	Likelihood (Odds Ratio)	Net Value	Likelihood (Odds Ratio)	Net Value
Parents' Characteristics				
Age	0.98 ***		0.98 ***	
Age<80		-0.06 **		-0.06 **
Age>80		-0.27 **		-0.28 **
Female	0.98	-0.75 ***	0.96	-0.76 ***
Education	1.03 **	0.10 **	1.03 *	0.09 **
Marital Status (Ref. Married, Living with Spouse)				
Partnered	0.78	-0.13	0.79	-0.13
Separated	0.78	2.61	0.74	2.27
Never Married	0.88	0.03	0.84	-0.12
Divorced	1.09	-1.28 **	1.06	-1.19 **
Widowed	1.42 **	-0.94 +	1.41 **	-1.01 +
Making Ends Meet (Ref. Great Difficulty)				
Some Difficulty	1.21	-0.67	1.12	-1.27
Fairly Easily	1.42	0.27	1.28	-0.51
Easily	1.56	0.61	1.37	-0.21
IHS(Income)	1.06	0.24	1.06	0.25
IHS(Financial Wealth)	1.13 ***	0.32 ***	1.11 ***	0.25 ***
Number of Children	0.81 ***	-0.21 +	0.82 ***	-0.15

Table 6.2 continued.

Number of ADLs	0.96		0.06		0.97		-0.01	
Number of IADLs	1.32	***	-1.22	**	1.31	***	-1.17	**
Recent Health Limitation	1.16	*	-0.48	*	1.14	*	-0.45	*
Professional Homecare	1.17		-0.52		1.17		-0.56	
Child's Characteristics								
Female	1.00		0.30		0.91		0.16	
Marital Status (Ref. Married or Partnered)								
Separated, Divorced or Widowed	1.08		0.28		1.13		0.40	
Never Married	1.10		0.01		1.29	**	0.30	
Working Full-Time	0.87	+	-0.48	*	0.76	***	-0.62	**
Any Grandchildren	1.07		0.31		0.99		0.10	
Dyad Contact (Ref. Co-Residing)*								
Daily or Several Times a Week	1.48	+	0.72					
Once a Week to Once a Month	0.90		1.10		0.52	***	0.10	
Rarely or Never	0.16	***	3.81	**	0.09	***	2.73	*
N	7467		2741		7467		2932	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 6.2 continued.

B: Conservative Countries

	Transfers of Money, Time, and Grandchild Care		Transfers of Money, Time, Grandchild Care, and Co-residence	
	Likelihood (Odds Ratio)	Net Value	Likelihood (Odds Ratio)	Net Value
Parents' Characteristics				
Age	0.98 ***		0.97 ***	
Age<70		-0.09 ***		-0.08 ***
70<Age<80		-0.47 ***		-0.43 ***
Age>80		-0.24 **		-0.28 **
Female	1.04	-1.09 ***	1.01	-1.05 ***
Education	1.04 ***	0.13 ***	1.02 *	0.06
Marital Status (Ref. Married, Living with Spouse)				
Partnered	0.90	0.13	0.91	0.16
Separated	1.18	0.87	1.05	0.74
Never Married	0.77	-1.17	0.96	0.24
Divorced	1.18	-0.91	0.98	-0.81
Widowed	1.37 ***	-1.25 *	1.34 ***	-1.11 *
Making Ends Meet (Ref. Great Difficulty)				
Some Difficulty	1.10	0.61	1.11	0.53
Fairly Easily	1.07	1.34	1.01	0.94
Easily	1.33 *	1.99 *	1.17	1.42 *
IHS(Income)	1.07	0.12	1.06	0.11
IHS(Financial Wealth)	1.08 ***	0.29 ***	1.07 ***	0.18 **

Table 6.2 continued.

Number of Children	0.77 ***	-0.27 *	0.81 ***	-0.11
Number of ADLs	1.00	-0.37	1.01	-0.32
Number of IADLs	1.15 *	-0.68 *	1.15 *	-0.82 **
Recent Health Limitation	1.16 **	-0.90 ***	1.08	-0.87 ***
Professional Homecare	0.97	-1.18 *	1.01	-1.16 *
Child's Characteristics				
Female	1.01	-0.03	0.83 ***	-0.38 +
Marital Status (Ref. Married or Partnered)				
Separated, Divorced or Widowed	1.18 +	-0.13	1.23 *	-0.11
Never Married	1.23 *	0.57	1.75 ***	1.10 **
Working Full-Time	0.78 ***	0.26	0.61 ***	0.04
Any Grandchildren	1.35 ***	1.59 ***	1.04	0.87 **
Dyad Contact (Ref. Co-Residing)*				
Daily or Several Times a Week	1.34	0.15		
Once a Week to Once a Month	0.74	0.43	0.38 ***	-0.51 *
Rarely or Never	0.31 ***	1.47 +	0.15 ***	0.26
N	18538	5475	18538	6768

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 6.2 continued.

C: Traditional Countries

	Transfers of Money, Time, and Grandchild Care		Transfers of Money, Time, Grandchild Care, and Co-residence	
	Likelihood (Odds Ratio)	Net Value	Likelihood (Odds Ratio)	Net Value
Parents' Characteristics				
Age	0.98 ***		0.97 ***	
Age<65		-0.18 ***		
Age<70				-0.07 **
65<Age<75		-0.30 ***		
Age>70				-0.21 ***
Age>75		-0.21 *		
Female	1.07	-0.74	1.04	-0.32
Education	1.00	0.14 ***	0.99	0.05
Marital Status (Ref. Married, Living with Spouse)				
Partnered	0.47	0.36	0.07 ***	0.66
Separated	1.06	0.78	0.49 *	0.55
Never Married	2.59 +	-1.58	1.78	0.25
Divorced	1.14	0.67	0.85	0.42
Widowed	1.30 *	-1.43 *	1.27 *	-1.02 *
Making Ends Meet (Ref. Great Difficulty)				
Some Difficulty	0.98	-0.41	1.13	0.04
Fairly Easily	0.97	-0.27	1.10	0.03
Easily	1.01	0.80	1.15	0.57

Table 6.2 continued.

IHS(Income)	1.04	*	0.13	1.06	**	0.07
IHS(Financial Wealth)	1.01		0.16	1.01		0.12
Number of Children	0.70	***	0.06	0.72	***	0.09
Number of ADLs	1.15	*	-0.89	1.09		-0.64
Number of IADLs	1.00		-0.36	1.08		-0.28
Recent Health Limitation	1.31	***	-1.64	1.17	**	-1.12
Professional Homecare	1.12		-0.71	1.00		-1.41
Child's Characteristics						
Female	1.23	**	-0.10	0.97		-0.44
Marital Status (Ref. Married or Partnered)						
Separated, Divorced or Widowed	1.26		0.95	1.92	***	1.24
Never Married	0.85		-0.54	5.38	***	2.01
Working Full-Time						
Any Grandchildren	0.94		0.04	0.63	***	-0.04
	1.70	***	2.94	1.30	**	1.19
Dyad Contact (Ref. Co-Residing)*						
Daily or Several Times a Week	0.81		0.50			
Once a Week to Once a Month	0.26	***	0.26	0.17	***	-1.67
Rarely or Never	0.14	***	3.66	0.07	***	1.93
N	10090		3018	10090		5013

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

While the likelihood of participating in the giving/receiving of various types of transfers is uniform across welfare regimes, the results for net transfers are slightly different. In conservative welfare states of Continental Europe, net transfers follow the same pattern as described for the full sample in Table 6.1, but in social democratic and traditional welfare states, net transfers follow somewhat different patterns. In social democratic welfare states, net transfers decrease very slowly with age until parents reach advanced old age and start falling more rapidly only after the age of 80. In the traditional welfare states of Southern Europe, net transfers from parents to children for the youngest group of parents (i.e., ages 50 to 69) are decreasing substantially faster than in other welfare regimes, and the transition from relatively high to low, and ultimately negative, net transfers starts earlier, too. As far as the other covariates, the results are very similar to those presented for the full sample, although fewer coefficients are statistically significant, which can be in large part attributed to relatively small sample sizes for social democratic and traditional welfare state regimes.

Overall, the results for conservative welfare states are the most similar to the results for the full sample. Including co-residence in the outcome measure affects primarily the results for children's and dyad's characteristics, while very few changes are associated with parents' characteristics. These results are consistent with the findings from the background model of co-residence (Appendix A) that children's characteristics are the most important determinants of the likelihood of co-residence between parents and grown children. Furthermore, including co-residence in the outcome measure is associated with large changes in the values of predictors in traditional welfare states, moderate changes in conservative welfare states, and small changes in social democratic

welfare states, which again reflects the relative importance of co-residence across different welfare state regimes.

MODEL RESULTS BY CHILDREN'S GENDER

Table 6.3 presents the likelihood and net value of transfers stratified by children's gender. Previous literature (e.g., Schmid et al., 2012; Brandt et al., 2009) finds the exchange of various types of support to follow a gendered pattern with, for example, daughters providing more intensive care to parents than sons. Descriptive results suggest that the gender differences may possibly extend to the overall likelihood and especially the intensity of total net transfer between parents and grown children.

Table 6.3: Transfer Likelihood and Net Value, by Children's Gender

A: Male Children

	Transfers of Money, Time, and Grandchild Care				Transfers of Money, Time, Grandchild Care, and Co-residence			
	Likelihood (Odds Ratio)		Net Value		Likelihood (Odds Ratio)		Net Value	
Parents' Characteristics								
Age	0.98	***			0.97	***		
Age<70			-0.13	***			-0.07	***
70<Age<80			-0.26	***			-0.22	**
Age>80			-0.35	**			-0.36	**
Female	1.06		-1.19	***	1.05		-0.86	***
Education	1.03	**	0.13	**	1.01		0.02	
Marital Status (Ref. Married, Living with Spouse)								
Partnered	0.73		-0.29		0.57	*	-0.15	
Separated	0.79		-0.71		0.53	*	-0.73	
Never Married	0.94		-1.15		1.02		0.44	
Divorced	1.21		-1.06	+	0.94		-0.99	+
Widowed	1.35	***	-1.20	*	1.22	*	-1.19	**
Making Ends Meet (Ref. Great Difficulty)								
Some Difficulty	1.04		-0.65		1.12		-0.33	
Fairly Easily	0.97		0.23		1.02		0.14	
Easily	1.30	*	1.04		1.28	*	0.65	
IHS(Income)	1.07	*	0.11		1.04	*	0.08	

Table 6.3 continued.

IHS(Financial Wealth)	1.03 *	0.22 ***	1.03 **	0.13 ***
Number of Children	0.75 ***	-0.12	0.79 ***	0.04
Number of ADLs	1.07	-0.88 **	1.04	-0.81 *
Number of IADLs	1.05	-0.34	1.08	-0.27
Recent Health Limitation	1.13 *	-0.92 ***	1.02	-0.70 **
Professional Homecare	0.93	-1.30 +	1.00	-1.45 *
Child's Characteristics				
Marital Status (Ref. Married or Partnered)				
Separated, Divorced or Widowed	1.04	0.17	1.34 *	0.56
Never Married	1.07	0.09	2.30 ***	1.24 ***
Working Full-Time				
Any Grandchildren	0.74 ***	-0.27	0.52 ***	-0.27
	1.42 ***	1.49 ***	1.11	0.44
Dyad Contact (Ref. Co-Residing)*				
Daily or Several Times a Week				
	1.22	0.96		
Once a Week to Once a Month	0.66 *	1.49 *	0.32 ***	-0.29
Rarely or Never	0.28 ***	2.19 *	0.13 ***	0.12
Welfare Regime (Ref. Social Democratic)				
Conservative				
	0.75 ***	0.33	0.85 *	0.47 *
Traditional	0.71 ***	1.75 ***	1.21 *	1.92 ***
<hr/>				
N	18353	5364	18353	7446

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 6.3 continued.

B: Female Children

	Transfers of Money, Time, and Grandchild Care				Transfers of Money, Time, Grandchild Care, and Co-residence			
	Likelihood (Odds Ratio)		Net Value		Likelihood (Odds Ratio)		Net Value	
Parents' Characteristics								
Age	0.98	***			0.97	***		
Age<70			-0.12	***			-0.08	***
70<Age<80			-0.52	***			-0.49	***
Age>80			-0.10				-0.07	
Female	1.03		-0.83	**	0.98		-0.71	**
Education	1.02	*	0.14	***	1.02	*	0.07	*
Marital Status (Ref. Married, Living with Spouse)								
Partnered	0.81		-0.10		0.60	*	0.16	
Separated	1.34		1.85		1.11		1.59	
Never Married	0.85		-0.77		0.81		0.35	
Divorced	0.97		-0.79		0.81		-0.43	
Widowed	1.32	**	-1.48	**	1.35	***	-1.01	+
Making Ends Meet (Ref. Great Difficulty)								
Some Difficulty	0.93		0.34		1.12		0.42	
Fairly Easily	0.96		0.68		1.08		0.52	
Easily	1.17		1.42	*	1.24	+	1.13	*
IHS(Income)	1.05	+	0.07		1.06	*	0.09	
IHS(Financial Wealth)	1.04	***	0.20	**	1.03	**	0.13	*

Table 6.3 continued.

Number of Children	0.74 ***	-0.21	0.77 ***	-0.13
Number of ADLs	1.07	-0.38	1.04	-0.21
Number of IADLs	1.12 *	-0.62 *	1.13 *	-0.63 *
Recent Health Limitation	1.27 ***	-1.29 ***	1.19 ***	-1.16 ***
Professional Homecare	1.00	-0.89	1.04	-1.43 *
Child's Characteristics				
Marital Status (Ref. Married or Partnered)				
Separated, Divorced or Widowed	1.22 *	0.07	1.42 ***	-0.01
Never Married	1.16	0.41	2.48 ***	1.40 ***
Working Full-Time				
Any Grandchildren	0.88 *	0.34	0.69 ***	0.15
	1.46 ***	2.24 ***	1.05	1.32 ***
Dyad Contact (Ref. Co-Residing)*				
Daily or Several Times a Week	1.11	0.70		
Once a Week to Once a Month	0.55 ***	0.46	0.36 ***	-0.83 *
Rarely or Never	0.20 ***	2.67 *	0.13 ***	1.14
Welfare Regime (Ref. Social Democratic)				
Conservative	0.77 ***	-0.17	0.81 **	-0.09
Traditional	0.82 *	1.22 **	1.33 ***	1.55 ***
N	17742	5870	17742	7267

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

The results reveal that the likelihood of transfers is similar for male and female children. The exception is parent's health, because both IADL disabilities and (recent) health issues increase the likelihood of transfers for female-child dyads, but not for male-child dyads. Net transfer value, however, exhibits larger difference by children's gender. With age, it becomes ever more negative for male-child dyads, whereas for female-child dyads it first decreases at a very moderate pace, approximately equal to the observed rate for male children, followed by a sharp decline for parents' age group 70 to 79, and finally becoming insignificant for the oldest age group (i.e., parents age 80 years and older). This pattern is consistent with the descriptive results showing that daughters provide more practical help to parents than sons as parents reach old age, while intensive grandchild care—which benefits relatively more daughters—simultaneously decreases. On the other hand, co-residence, which primarily benefits sons, decreases with age, and financial transfers from sons to parents (that are on average larger than the transfers from daughters to parents) increase with age, which are trends consistent with the observed results for male-child dyads.

While net transfers are negatively correlated with female-headed households, the magnitude is larger for male-child dyads than female-child dyads. The category of widowed heads of households is negatively related with net transfers from parents to all children, but significantly different depending on the transfer measurement. Not accounting for co-residence, negative correlation between parents' widowhood and net transfers is larger for daughters than sons. However, including co-residence decreases the magnitude of the correlation for daughters and not for sons. Furthermore, parents' socioeconomic status is positively correlated with net transfers to children, but more for female- than male-child dyads. All of parents' health covariates are negatively related with net transfers, but ADLs and the receipts of professional homecare are relatively

more important for male-child dyads, whereas IADLs and parents' recent health limitations are more important for female-child dyads.

Among adult children's characteristics, having children of their own is associated with substantially higher net transfers from parents for all children, but the magnitude is much larger for daughters compared to sons, regardless of the definition of transfers, suggesting that daughters and their children may benefit more from the exchange with the parents than sons and their children. Finally, net transfers are larger in conservative than social democratic welfare states for male-child dyads, but exhibit no difference for female-child dyads. They are also statistically significantly larger for both female- and male-child dyads in traditional compared to social democratic welfare states, but the magnitude for male-child dyads is substantially larger than for female-child dyads. These results suggest that net transfers between parents and sons follow much more clearly the North-South European geographic gradient of increasing relative transfer values than net transfers between parents and daughters.

FAMILY FIXED-EFFECTS MODEL

Table 6.4 shows the results of the family fixed-effects model of the likelihood of transfers between older parents and grown children. The particular advantage of this model is that it allows controlling for all the (fixed) characteristics of parents, even the unobserved ones that may bias the model estimates otherwise. It also compares siblings instead of unrelated children, which is the case in previous models. On the other hand, the model can include only dyads from families with more than one child, which substantially affects the sample size.

Table 6.4: Likelihood of Transfers: Family Fixed-Effects

	Likelihood of Transfers of Money, Time, and Grandchild Care		Likelihood of Transfers of Money, Time, Grandchild Care, and Co- residence	
Age	0.98	***	0.95	***
Female	1.16	***	0.89	**
Marital Status (Ref. Married or Partnered)				
Separated, Divorced or Widowed	1.22	**	1.67	***
Never Married	1.08		2.55	***
Working Full-Time	0.86	***	0.70	***
Any Grandchildren	1.97	***	1.53	***
Dyad Contact (Ref. Co-Residing)*				
Daily or Several Times a Week	0.84			
Once a Week to Once a Month	0.29	***	0.20	***
Rarely or Never	0.09	***	0.06	***
N	14390		16604	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

These results are consistent with the logistic regression results for the likelihood of transfers for the full sample presented in Table 6.1. Therefore, it is possible there are no important unobserved parental characteristics missing from the previous model specifications. With that said, the estimates of the family fixed-effects model are sharper, and the statistical significance of covariates increases compared to previous models.

The results confirm that daughters are more likely to give and/or receive support from parents, excluding co-residence. When co-residence is included in transfers, the likelihood of any support given or received between parents and children is higher for sons due to their comparatively high probability of co-residing with parents. Furthermore, separated, divorced, and widowed children are significantly more likely than currently

married or partnered children to exchange support with parents, whereas never-married children are similar to married and partnered children in all types of transfers except that they have a much higher likelihood of co-residing with parents. Having full-time employment is associated with a lower likelihood and having children with a much higher likelihood of participating in the support exchange with elderly parents. Finally, the fewer the contacts children and parents have, the less likely they are to give to each other. Comparing how the coefficients on the likelihood of transfers change with the inclusion of co-residence, it is possible to say that an average child co-residing with parents is likely to be relatively younger, male, unmarried (either never married or separated, divorced, or widowed), and without children or full-time job.

The results of the multivariate analyses in this chapter clearly show a nonlinear relationship of net value of intergenerational family transfers with the age of parents (and children): Net transfers are generally high for middle-age parents and young adult children, but they sharply decrease as parents grow older and children reach middle age, and ultimately become negative for parents reaching advanced old age. Both the likelihood and the net value of total support exchanged between older parents and grown children vary substantially by welfare-state regimes, and the net value of transfers also exhibits difference by children's gender, thereby supporting descriptive findings of welfare regime and gender differences in parents-children transfers from the previous chapter. While Chapters 5 and 6, therefore, empirically demonstrate the usefulness of using the welfare regime framework to study family transfer behavior, what remains to be done is to explain the mechanism linking the two. This is the focus of the next chapter.

Chapter 7: Co-residence and Homeownership Across Three Welfare Regimes

This chapter describes how co-residence of parents and grown children, as a unique type of intergenerational family transfers, may be a function of the propensity to own a home. Given that homeownership propensity is at least partly a function of housing policy, and housing policy is an important element of social and economic policy, it is possible to describe how societal circumstances affect parents' and grown children's decision to share a household. This is consistent with the conceptual framework presented in Chapter 3, which describes how societal (i.e., macro-level) circumstances affect individual and family (i.e., micro-level) decisions.

The chapter first presents how previous literature addressed the issues of using a welfare-regime typology to describe family giving behavior. This is followed by an illustration of how the link between co-residence and homeownership may be important in understanding the link between family-transfer behavior and welfare-state regimes. Next is the depiction of various proximate (i.e., economic) and distal (i.e., political and historical) causes of differences in the propensity of homeownership that are related to differences in parent–grown child co-residence rates across the three welfare regimes in Europe. The chapter ends with an overview of unintended social consequences of using co-residence as a strategy to facilitate homeownership.

Using a welfare-regime typology to investigate intergenerational family transfers has become a standard approach in the literature, but there are important dissenting opinions (e.g., Dykstra & Fokkema, 2011, Schenk, Dykstra, & Maas, 2010). While such opinions do not invalidate the use of the welfare-regime typology to describe family-transfer patterns across countries, they raise an important question: Beyond the fact that

welfare regimes and family transfers behavior are correlated, is there a compelling substantive link between them that could justify using the welfare-regime framework for analyzing family transfers, or is there a need for an independent family-transfer-behavior framework? Unfortunately, most of the comparative family-transfers literature have thus far failed to address this basic issue, or have addressed it in a relatively superficial way by assuming (arguably correctly) that shared institutions, legal framework, economic conditions, social norms, culture, and other common elements in a society influence individual and family behavior. The literature has not explored or explained the mechanism that links the social with the individual and family domains.

The most notable exception to this is the work of Kohli and Albertini (2007, 2012), which acknowledged the need to bridge the two domains and developed an explanatory framework that includes structural, institutional, and cultural factors at the macro and micro levels that decisively shape intergenerational transfers. Kohli and Albertini recognized that micro-level explanations are incomplete, but that macro-level explanations do not account for the exact effects on micro (i.e., individual and family) level, and that exploring how macro factors are mediated by micro factors is key to understanding the family-transfer regime and evaluating the appropriateness of using a (modified) welfare-regime framework as its fair approximation. According to these studies, what links the two frameworks on the structural level, at least when it comes to demographic structure and household composition, is co-residence of grown children with older parents. On the cultural level, family norms and values represent the link between the two frameworks, while on the institutional level, the link between the two frameworks is family policy. The analysis in Chapters 5 and 6 already showed the importance of incorporating family policy in any consideration of the determinants of family transfers, but it has also revealed that the institutional framework has a much

broader impact on family transfers, including the importance of healthcare and education spending as well as the importance of the redistributive impact of tax systems and the legal framework regulating family transfers.

On the other hand, while the notion of family ideology may appear to be a useful variable for describing otherwise unexplained variation in family transfers between countries, nations or regions, in reality it is not dissimilar from incorporating another error term in the model that stands for various underlying (unobserved) distal factors that shape people's behavior over the long run, most notably the accumulated historical experience that shaped both family values and institutions as well as their interaction. All else equal, therefore, individuals and families do not differ across societies, that is, in isolation from their respective societies and the accumulated social and family experiences over generations, people have essentially same needs and aspirations for themselves and their family members. This view, consistent with the conceptual framework presented in Chapter 3, considers prevalent family values and norms a rational response to the underlying historical specificities of each society (which include the opportunities and constraints of the institutional setup as well as various relevant structural elements), with the ultimate goal of achieving similar objectives for family members across different societies. People are, on average, rational actors who act in their own and their families' best interest, which implies that family culture is a rational response to the prevailing socioeconomic conditions and existing institutional setup in a society developed over generations and subsequently perpetuated over generations, albeit always subject to (mostly small and slow, but constant) changes.

Consequently, family values and norms should not be considered in any part an independent element shaping intergenerational transfers, but rather a mediator between unique experiences and conditions facing different societies over time and the

predominant pattern of family behavior, including transfers across generations. This approach, hence, clarifies the true nature of the macro-micro link in family transfers, as it identifies the key role of historical experience that interacts with social institutions and structures, resulting in a unique set of circumstances facing individuals and families who over time develop a response mechanism (i.e., family culture) that allows them to maximize their wellbeing, given constraints and opportunities. It is also consistent with Jo's (2011) approach to culture as the stable context for policy making, rather than a causal determinant of social policies or a foundational principle of welfare systems.

HOMEOWNERSHIP AND HOUSING POLICY AS DETERMINANTS OF CO-RESIDENCE

The model of co-residence, first introduced in Chapter 4, reveals that unmarried sons without a full-time employment and children of their own are the most likely to co-reside with parents. Also, parents who are in poor health, widowed, and own a home have higher likelihood of co-residing with grown children, while the likelihood is lower for parents who are divorced or receiving professional homecare. While parents' characteristics are, hence, statistically significant determinants of co-residence, the magnitude of the coefficients for children's characteristics is substantially larger than for parents' characteristics, suggesting that children's characteristics are substantively more important determinants of co-residence.

Nevertheless, even after controlling for a comprehensive list of parent, child, and dyad characteristics, substantial welfare-regime differences in co-residence rates persist, thereby suggesting the existence of important underlying structural differences between groups of countries in Europe relating to grown children and older parents' decision to

share a household. Explaining how co-residence as a micro-level strategy is linked with the macro-level context, therefore, holds promise of providing an insight into the nature of the apparent correspondence and underlying links between welfare-state regimes and family-transfer behavior. A possible explanation is that co-residence represents a rational family-level strategy in Southern European countries, where the propensity to own a home is high due to a unique combination historic circumstances and a socioeconomic environment that favors the relative safety of real estate over alternative investments (or the lack of any alternatives serving similar economic functions altogether), coupled with underdeveloped credit markets necessary to facilitate home buying for young adults without much accumulated wealth. Therefore, similar to Anglo-Saxon countries, Southern European countries seem to promote homeownership as a form of social security, but while the former group achieves it by encouraging and facilitating buying of homes, the latter achieves it through housing policies and market conditions that offer no alternative (Elsinga & Hoekstra, 2005). At the same time, housing policies in more generous welfare states of Northern and Continental European countries promote well-developed and regulated rental markets, with an important social housing component, as there is no need to encourage a social security component of homeownership. These states facilitate labor mobility by promoting renting over buying. This chapter explores this proposition of factors associate with parents' and grown children's decision to form a joint household.

Table 7.1: Co-residence, Homeownership, and Property Affordability

	Co-residence (%)	Homeownership (%)	Price/Square Meter (€)	Price/GDP per Capita (%)	Rent*/Square Meter (€)
Denmark	3.7	63.7	3983	9.0	15.7
Sweden	5.6	56.5	4552	9.7	15.8
Social Democratic	4.6	60.1	4268	9.3	15.7
Austria	11.1	60.4	4158	10.6	15.6
Belgium	11.9	77.7	2753	8.5	10.3
France	11.4	71.6	13380	43.3	36.3
Germany	8.8	57.0	3704	11.8	11.5
Netherlands	8.9	59.9	4496	11.0	18.2
Switzerland	11.3	58.4	8868	13.3	31.5
Conservative	10.6	64.2	6227	16.4	20.6
Greece	28.0	85.4	6229	28.9	10.2
Italy	28.2	76.8	7213	27.8	19.5
Spain	28.1	87.2	4022	17.6	11.4
Traditional	28.1	83.1	5821	24.8	13.7

* The available data refers to rents per square meter for an apartment of 120 square meters situated in the wider center of a country's capital (except for the Netherlands and Switzerland, represented by Amsterdam and Zurich, respectively).

** France represents an outlier, as prices for buying and renting in Paris as one of the premier global real estate markets (together with London, New York, Hong Kong, and a handful of other major cities in the world) do not reflect best the national trends in the real estate market.

Source: SHARE, 2006; Global Property Guide, 2012.

Across Europe, high rates of co-residence can be found in countries that have high rates of homeownership (and low rates of renting), while low rates of co-residence are characteristic of countries with low rates of homeownership (and high rates of renting), as documented in Table 7.1. By itself, high co-residence rates may be consistent with the private credit market limitations, in particular comparatively larger required down payment in Southern compared to Continental and Northern Europe (Chiuri & Jappelli, 2003). Similarly, individual wealth and credit-quality constraints are related with the

lower rates of homeownership (Barakova, Bostic, Calem & Wachter, 2003) and borrowing constraints can affect the timing of homeownership (Guiso & Jappelli, 2002). Nevertheless, none of these explanations can simultaneously account for the high rates of both co-residence and homeownership in Southern Europe compared to Continental and especially Northern Europe. In fact, limited access to mortgage debt is found to account for no more than 20% of the North-South difference in co-residence rates across European countries (Martins & Villanueva, 2006). Data further show that even in countries with traditionally well-functioning private credit markets like Australia, the rates of co-residence between parents and grown children have generally risen over the past several decades (Cobb-Clark, 2008), underscoring the fact that while credit markets are an important determinant of the parent-child co-residence and homeownership rates, there must be other structural differences between countries that can explain the observed trends in co-residence and homeownership.

A part of the explanation may be that the housing policy in Southern European countries provides little public housing and relies on families to fulfill this role. In fact, housing policy in these countries has historically been regarded primarily as an instrument of the economic policy (i.e., the construction sector providing jobs and contributing to the economic growth), while little effort has been made to use it as an instrument of the broader social policy framework (Allen, Barlow, Leal, Maloutas, & Padovani, 2004). At the same time, though, the private rental sector in Southern European countries is comparatively developed and the laws have historically provided strong protections for tenants (Elsinga & Hoekstra, 2005), or even controlled rental prices in an attempt to use the private rental sector as an unofficial substitute for insufficient social housing (Allen et al, 2004). Although this policy has over time negatively impacted the supply of private rental property, it is still an important element of the

overall housing mix, and, financially, renting seems to be a viable alternative to owning. Therefore, rental market limitations in Southern Europe appear to be insufficient to explain the full difference in propensity to own and co-reside across welfare regimes in Europe.

The other part of the explanation may be that high homeownership propensity is characteristic of countries with limited investment alternatives due to the historical heritage of political instability and weak institutions that resulted in the lack of economic and legal security and transparency. This environment causes low levels of confidence in institutions and interpersonal trust, which is the transmission mechanism between social or macro-level circumstances and individual or micro-level behavior. The result is an investment strategy, perpetuated across generations, which focuses on homeownership and which includes, as a generally accepted part of the strategy of achieving homeownership, saving money for down payments or loan repayments and responding to suboptimal functioning of the mortgage market (Chiuri & Jappelli, 2003), alongside co-residence. Therefore, understanding homeownership trends and preferences that arise in the context of a certain mix of opportunities and constraints characteristic for each society is the key step in explaining co-residence differences across countries and therefore linking the family-transfer regime with the broadly defined concept of welfare-state regimes or families of nations. This is an important extension of Esping-Andersen's (1990) welfare-state-regime framework as housing policy was not explicitly part of his original formulation (see Chapter 2).

Since the 1970s, housing policy researchers have challenged the notion that rising wealth and living standards lead to higher homeownership rates always and everywhere. Most notably, Kemeny (1978, 1980) noted that both levels and trends of homeownership across countries at comparable levels of economic development considerably differ.

According to Kemeny, social policies, including housing policy, create incentives that favor homeownership or renting. If buying a home is socially preferred to renting, this is likely to lead to the substantial redistribution of resources of an individual over the life cycle, as the cost of buying is especially high in young adulthood when incomes are relatively low. By old age, most individuals in these societies live in mortgage-free homes. Therefore, homeownership represents a form of private old-age insurance. In turn, there is little support for a high level of taxation and intergenerational redistribution among the working-age population, and this dynamic creates a direct link between homeownership and welfare state generosity.

This idea finds support in the empirical work of Castles (1998), or more recently Elsinga and Mandic (2010), whereas Doling and Horsewood (2005) suggest evidence is mixed, especially in terms of causality between homeownership and welfare-state generosity. Somerville (2000, 2005), however, challenges Kemeny's idea on theoretical grounds, stating that housing policy and housing decisions by individuals are related with the wider social context and have a strong element of path dependency. Therefore, the relationship and especially the causal link of homeownership and the welfare state are not universal phenomena. This criticism is valid, insofar as one interprets Kemeny's thesis to mean that the shrinking provision of public support leads to increased homeownership, which in turn (further) erodes the support for various social policies. An alternative interpretation would acknowledge the possibility that unique historical events and experiences over time shaped institutions and individual preferences, including homeownership preferences and housing policies, which are perpetuated over time and across generations in a path-dependent way described by Somerville, but are also in a constant interaction as their relationship over time inevitably evolves into a symbiotic existence, noted by Kemeny (2005).

This interpretation requires closer consideration of the links between homeownership and welfare-state policies. Generally, empirical evidence suggests that the primary function of homeownership is a private substitute for (or supplement to) insufficient public old-age insurance (Conley & Gifford, 2006), and is consistent with comparatively higher levels of inequality in a society and limited public efforts to lower its level (Kurz & Blossfeld, 2004). Therefore, the theory suggests there should be a trade-off between homeownership rates and the level of public intergenerational redistribution of resources. The recent experience of such Southern European countries as Greece, Italy, and Spain shows, however, that periods of simultaneous expansion of old-age public pensions and growing homeownership can happen, but only at a substantial social cost (Castles & Ferrera, 1996). While this trend is indeed difficult to reconcile with the traditional thesis (Kemeny's) of linking homeownership to the welfare state, the proposed alternative interpretation imbedded within the larger conceptual framework of this dissertation allows for the possibility that preferences for homeownership (formed over a long period of time and transmitted across generations) can support growth in homeownership even as public pension provision expands. If such expanded pension provision proves sustainable in the long run, preferences may eventually start to adapt and the apparent "paradox" disappear.

Results in Table 7.1 depict how the propensity to own a home varies across countries. Basic economic theory suggests demand for a good should be a function of its price given the underlying level of preferences. The real estate affordability index, measured as the price of real estate relative to GDP, suggests that real estate is least affordable in traditional welfare states, followed by conservative welfare states, and finally social democratic welfare states, where buying real estate is relatively the cheapest. Moreover, the mortgage-market imperfections and, on average, larger required

down payments in Southern Europe skew the distribution of homeownership toward older individuals, as young adults postpone their first home purchase (Chiuri & Jappelli, 2003), and inter vivos transfers from parents are at best poor substitutes for efficient credit markets (Guiso & Jappelli, 2002). However, homeownership rates are by far the highest in Southern Europe, followed by Continental and Northern Europe, where homeownership rates are about 20 or more percentage points lower, although buying real estate is roughly two to three times more affordable. Therefore, it is apparent that the propensity of owning real estate substantively differs across countries. Differences in the affordability of renting, as shown in Table 7.1, are not of such magnitude to plausibly account for the large difference in homeownership across Europe, even if one acknowledges there may be other elements of the rental market structure beyond the cost of renting that make it an unattractive alternative (Kemeny, 2005).

Before presenting an alternative explanation of the possible source of variation in homeownership across countries, it is important to establish whether the described differences are some new or temporary phenomenon or a pattern perpetuated across generations. This is particularly important given the increasing availability of credit in Southern European countries (particularly in years leading up to the recent economic crisis) as a consequence of financial liberalization and lower interest rates since the introduction of a single European currency (Pareja-Eastaway & Sanchez-Martinez, 2010), which may have facilitated buying real estate over the past decade. Data in Table 7.2, however, reveal that homeownership among parents of respondents was approximately between one-half and two-thirds higher in the traditional welfare states compared to the social democratic and the conservative welfare states, respectively. The differences in renting rates among respondents' parents are the mirror image of those in the homeownership rates. Therefore, the observed patterns are broadly similar to those

currently observed for the SHARE respondents. Also, the mean age at establishing the first independent household for respondents moving out of their parents' home was the lowest in Northern Europe, followed by Continental and, ultimately, Southern Europe. High current rates of co-residence between respondents and their children (as depicted in Table 7.1) suggest a similar geographic gradient persists for the current generation of young adults, too, and, consequently, this does not seem to be a temporary phenomenon. What follows is a description of proximate and distal causes that can account for the persistent differences in homeownership propensity across different European countries and regions and also explain why co-residence may be an important element of the family strategy to facilitate home acquisition for young adult children.

Table 7.2: Retrospective Data on Homeownership, Parental Homeownership, and Non Real Estate Financial Investments

	Mean Age at First Home	Parents Homeowners (%)	Parents Renters (%)	Stocks/Mutual Funds Investments (%)	Total Investments* (%)
Denmark	19.9	47.0	46.5	59.2	81.2
Sweden	21.2	42.5	49.7	77.2	90.6
Social Democratic	20.5	44.7	48.1	68.2	85.9
Austria	23.1	51.9	38.4	19.9	53.6
Belgium	24.0	48.0	43.1	46.4	75.5
France	22.6	34.1	49.8	39.6	68.0
Germany	23.1	39.8	54.4	38.4	70.6
Netherlands	23.7	31.6	62.7	34.0	60.7
Switzerland	23.8	42.6	53.2	47.7	74.4
Conservative	23.4	41.3	50.3	37.7	67.1
Greece	25.9	93.2	5.5	6.5	9.5
Italy	25.6	45.9	38.0	19.6	29.0
Spain	26.2	65.6	22.0	17.3	30.5
Traditional	25.9	68.2	21.8	14.5	23.0
N	22294	23911	23911	22710	22765

*Includes stocks, mutual funds, private pensions, and life insurance

Source: SHARELIFE, 2008.

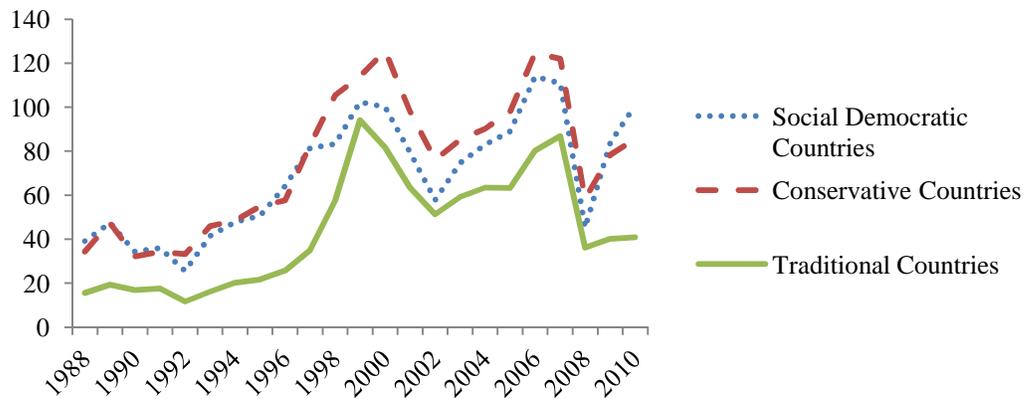
PROXIMATE CAUSES OF DIFFERENCES IN HOMEOWNERSHIP RATES

The argument for the link between homeownership and co-residence rests on the assumption that co-residence is a part of the larger strategy of acquiring a home in societies where investment alternatives are limited (and housing policy does not actively support acquisition of homes, through, for example, affordable mortgage loans). Table 7.2 depicts differences in non-real estate investments among SHARE respondents across Europe. In complete opposition to trends in homeownership, over two-thirds of all

respondents in social democratic countries have at least some investments in stocks and mutual funds, followed by one-third of respondents in conservative countries, and less than 15% of respondents from traditional countries. Broadening the definition to include private pensions and life insurance does not change the results dramatically; over six in seven respondents in social democratic welfare states has at least some investment, whereas the same is true of the two-thirds of conservative welfare states' respondents and less than one-fourth of the traditional welfare states' respondents. As prior research established, the mortgage market conditions are less favorable in the traditional welfare states of Southern Europe than in the other two groups of countries (e.g., Chiuri & Jappelli, 2003), and this corroborates the claim that the rate of co-residence is a function of the underlying homeownership propensity and the character of obstacles to acquiring it.

While the lack of non-real estate investments is undoubtedly correlated with high homeownership and vice versa, a more important question is whether they can be accounted for by the same set of explanatory factors, which would suggest they are also substantively linked. Figures 7.1 through 7.3 present an initial attempt to start answering this question by accounting for the economic factors that have likely directly contributed to such investment strategy.

Figure 7.1: Stock Market Capitalization (% GDP), by Welfare Regime



Source: World Bank, 2011.

By definition, market capitalization represents the total value of shares issued by publicly traded companies. The level of stock market capitalization relative to gross domestic product (GDP) has been primarily used as a very crude indicator of the valuation (overvaluation vs. undervaluation) of a stock market. However, it is also possible to argue, all else equal, that in countries with higher capitalization to GDP ratio, people have more opportunities to invest in stocks and, on average, more of them are directly or indirectly invested in the stock market. Figure 7.1 shows that the total stock market capitalization in traditional welfare-regime countries has been historically lagging behind social democratic and conservative welfare regimes countries by about 10 to 40% points of GDP, and in recent years that were marked by the financial crisis that hit Southern European countries particularly hard, the spread increased to 40 to 60% points of GDP. This finding further support results from the retrospective SHARELIFE survey showing very low prevalence of non-real estate investments among people in Southern European traditional welfare states and suggests that the development and the depth of stock markets in these countries is lagging behind the levels observed for Continental and

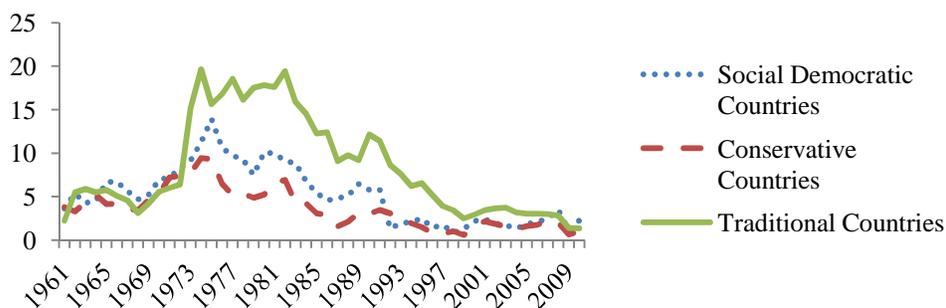
Northern European countries (as well as behind the levels observed in the United States, the United Kingdom, and other countries belonging to the liberal welfare-regime type that are not in the primary focus of this dissertation).

Guiso, Sapienza, and Zingales (2008) link these differences to the average level of trust in each country, as low levels of trust imply a lower expected average return due to increased perceived probability that contracts would not be honored. Hong, Kubik, and Stein (2004) recognize the unique contribution of sociability (i.e., the extent of social networks and social interactions) to stock market participation through information dissemination, which lowers entry and participation costs. Testing these two explanations across the same sample of European countries included in this dissertation (again, with the exception of Greece), Georgarakos and Pasini (2011) find the two concepts affect stock market participation in distinct ways. In countries with a low general level of trust, regional variation in trust is strongly associated with the stock market participation rates, while no such link is observed in countries where the level of trust is already high. Social networks and interactions play a more prominent role in countries where stock ownership is widespread and average trust high so that people are both more likely to be in contact with individuals already invested in the stock market and more likely to act based on information obtained from the stock market participants.

In addition to stock market penetration, important economic factors shaping investment decisions are long-term trends in inflation (Figure 7.2) and the value of national currency (Figure 7.3). Figure 7.2 shows the trend in inflation rates across the countries of interest over the period of the last half-century. Generally, inflation was moderate until the early 1970s due to fixed exchange rates system established in Bretton Woods after World War II, followed by a spike in prices over the next decade, which can largely be attributed to the oil price shock and the unraveling of the Bretton Woods

arrangements, but steadily falling thereafter and reaching historically low levels since the introduction of the euro. However, behind this general trend there is a substantial difference by welfare regimes. While conservative countries never experienced a double-digit inflation and social democratic countries faced it only briefly, traditional welfare regime countries suffered approximately two decades of double-digit inflation, with the levels approaching 20% for about half of that period. Even after the inflation rates started falling, the inflation remained somewhat higher across countries of traditional welfare regimes compared to others.

Figure 7.2: Inflation, by Welfare Regime



Source: International Monetary Fund, 2011.

The standard explanation of the reason why conservative countries, especially its core composed of (predominantly) German-speaking countries, had consistently low inflation rates in the post–World War II era is based on Germany’s very low tolerance toward inflation; this attitude invariably arose from the effects of hyperinflation in Germany in 1920s. However, even a basic descriptive analysis of trends across European countries reveals that Switzerland enjoyed relative price stability throughout the 20th century, while also maintaining one of the lowest inflation rates, while countries like Italy

or Greece experienced very high rates of inflation in the first half of the 20th century, without this resulting in low inflation rates thereafter. An alternative explanation emphasized the role of dominant-party ideology and the tradeoff between inflation and unemployment, with the assumption that left-leaning governments would tolerate higher inflation. The empirical evidence does not support this assertion. What appears to better explain country differences in inflation rates are various institutional factors, like the level of strike activity, which is positively related with the level of wage pressures; central bank independence from political influence that results in more effective use of monetary policy to maintain price stability; and the level of government expenditures relative to the economy as a proxy to determine how easy it is for fiscal policy to affect price levels (Busch, 1993). Obviously, these elements are often perceived as mutually reinforcing and their totals across countries track well against the ordering of welfare regimes by average inflation rates.

While a moderate level of inflation may even be beneficial for an economy and a sign of healthy underlying growth, persistently elevated inflation rates may pose significant costs to the economy as uncertainty increases, credit markets suffer, and income and wealth redistribution negatively affect those living on fixed income, not to mention that international competitiveness may shrink if other countries experience lower inflation rates. The effects of the increased uncertainty on financial markets and people's savings and investment decisions are particularly important for the analysis of homeownership. If people are afraid of continued high inflation and possible inflation shocks that would not be offset by sufficiently higher interest rates, they may be less willing to save in domestic currency. For the same reason, bonds that are usually issued at a fixed interest rate may become an undesirable and comparatively risky investment.

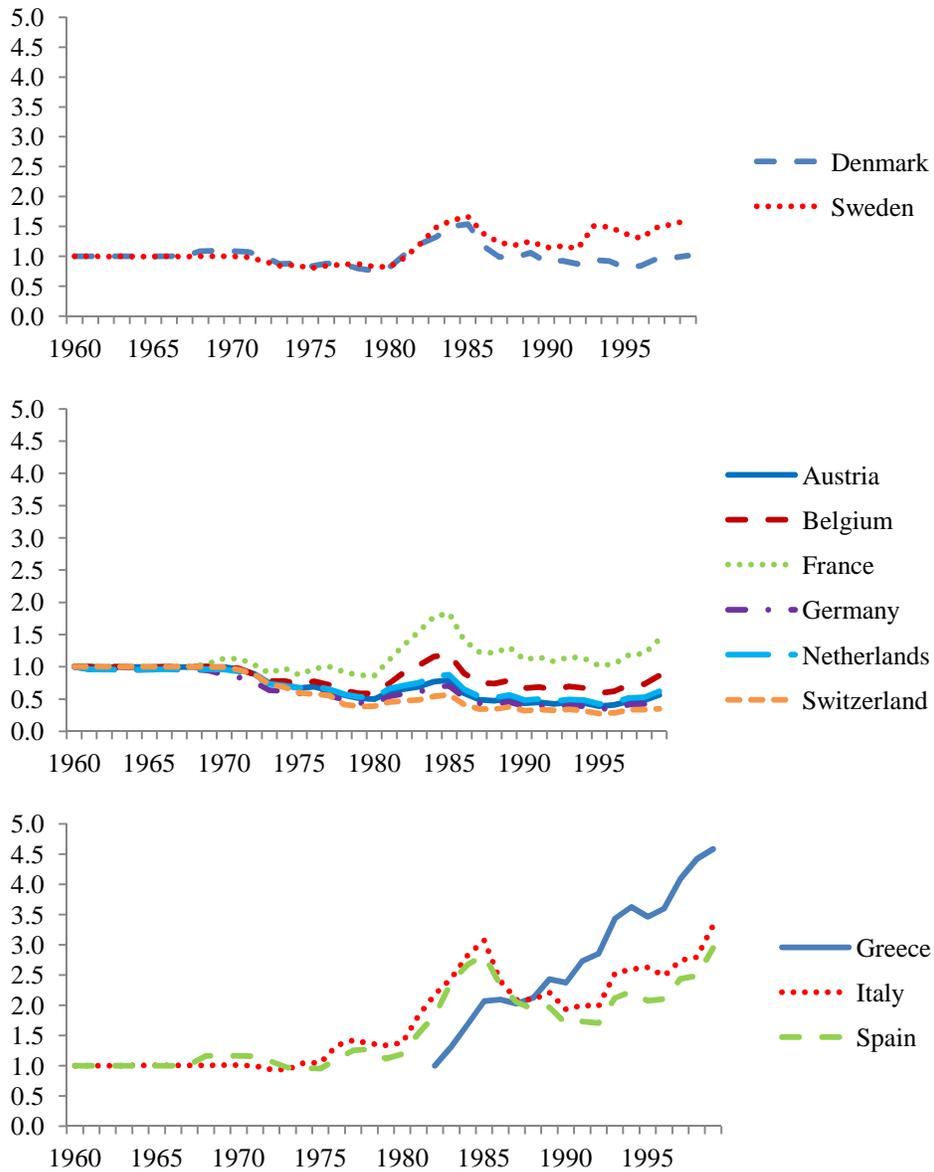
Real estate investment arguably fares better in such an unstable environment, and it has long been considered as a possible strategy to hedge (i.e., protect) against inflation.

In the basic model proposed by Gordon (1962), real estate is considered a perfect hedge against inflation due to its long-term character and the fact that the income it provides—rent or imputed rent—adjusts for inflation. While such a simplistic model is undoubtedly limited because it does not account for depreciation in real estate value (e.g., aging of a property) over time or account for the situation in which inflation in real estate prices outpaces general inflation, subsequent studies of the inflation-hedging effectiveness of real estate against other asset classes provided support to the basic idea that the real estate investment offers better, but not perfect, protection in such an environment. Bond and Seiler (1998) found that residential real estate has substantial advantage over financial assets in protecting against both expected and unexpected inflation, but Barkham (2012) suggests real estate to be a good hedge only against expected inflation. In the case of unexpected inflation, it offers only partial protection during generally low inflationary periods, and no protection if unexpected inflation occurs during high inflationary periods. Quan and Titman (1999) established that the real investment indeed offers a good long-term protection against inflation, but a fairly poor short-term (i.e., year-to-year) hedge. In a comprehensive study of inflation sensitivity of different asset classes between 1978 and 2011, Case and Wachter (forthcoming) find real estate investment to outperform alternative investments—commodities, U.S. equities (measured by the S&P 500 Index), U.S. Treasury Inflation Protected Securities, and gold—under a variety of different scenarios, which makes it an indispensable segment of any well-balanced inflation-protected investment portfolio.

Closely linked with inflation is the exchange rate. If the theory of purchasing power parity holds and current account deficits are unsustainable in the long run,

countries with higher inflation, all else equal, should experience a decline in the value of their currencies. This would result in an increase in import prices and decrease in export prices, thereby countering upward inflationary pressures of rising labor costs and balancing the current account. Given that this type of adjustment may be politically easier for governments than undertaking structural economic reforms and increasing competitiveness through improved productivity, it has been often pursued as a strategy in countries with a less than fully independent central bank and monetary policy (Busch, 1993). Ultimately, however, the rising prices of imported goods are built into higher domestic inflation rates, and there is always a danger for prices to start spiraling out of control.

Figure 7.3: Stability of Exchange Rates vs. US\$ (1960=1), by Country



Source: World Bank, 2011.

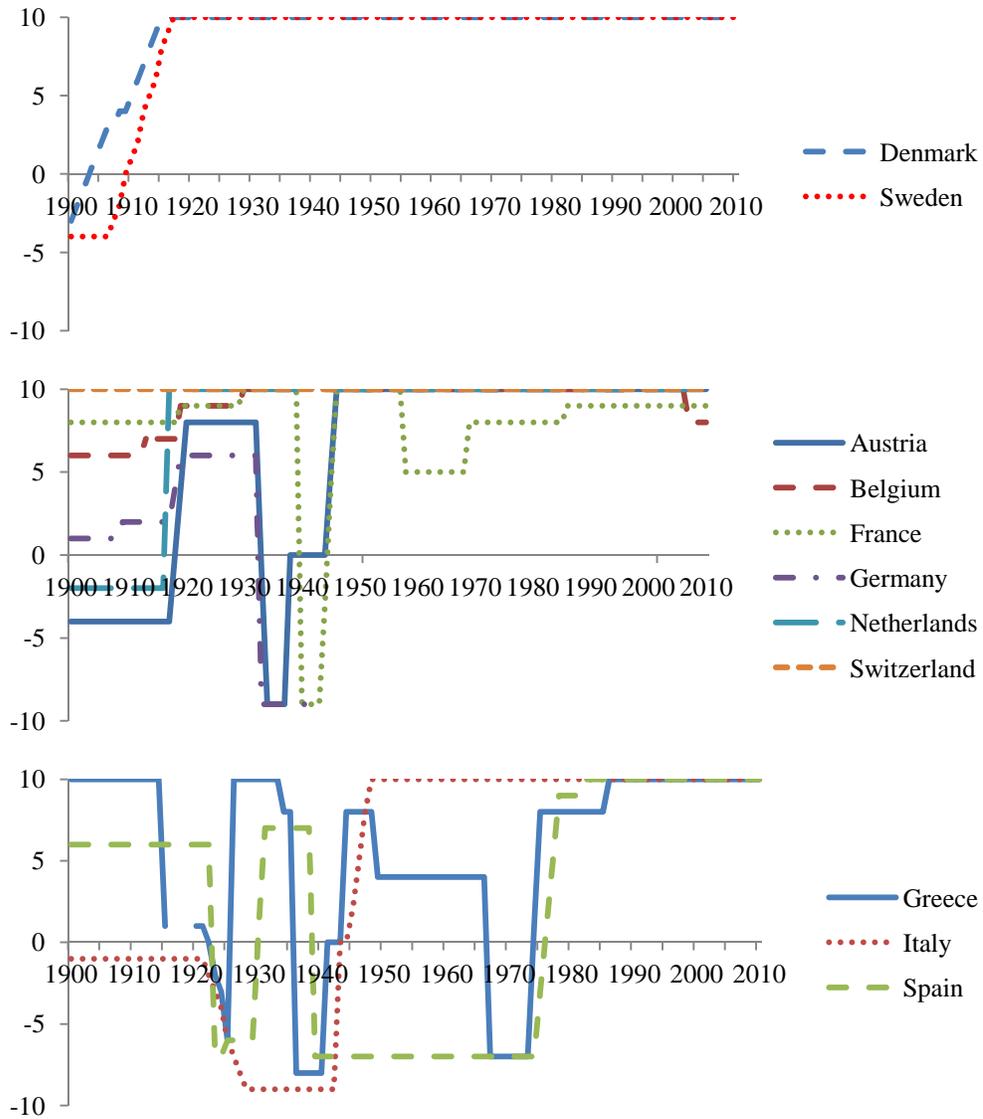
Figure 7.3 shows that the exchange rates between the currencies of social democratic welfare states and the U.S. dollar remained stable, and in the case of conservative welfare states, even substantially appreciated (with the exception of France)

in the four decades prior to the introduction of the euro. The traditional welfare states of Southern Europe, on the other hand, experienced a very sharp decline in their currencies' values during the 1980s and 1990s, with the case of Greece being particularly dramatic, which is broadly in line with their comparatively higher inflation rates. However, the trend of depreciation in Southern European countries was strong and even accelerating throughout the 1990s, even as the inflation rates decreased dramatically, which may suggest the exchange rates were also affected by some other of the possible determinants like the trade balance and terms of trade (the ratio of import to export prices), economic policies and stability, and others. Whatever the explanations, the fact that, in addition to high inflation, the relative value of domestic currency to major foreign currencies decreased could have further negatively affected the appeal of saving in domestic currency relative to real estate, which did not suffer any such loss in value over time.

DISTAL CAUSES OF DIFFERENCES IN HOMEOWNERSHIP RATES

While the economic variables represent the most important proximate causes for differences in the propensity to own a home, which is the key element for understanding differences in co-residence rates across countries, the most important distal causes that shape long-term social and economic conditions are the level of political freedom (defined in terms of the character of political participation, the chief executive recruitment process, and the effectiveness of the system of checks and balances) as well as the stability of political system. Figure 7.4 depicts how the level of political freedom changed across countries since the beginning of the 20th century.

Figure 7.4: Level of Political Freedom and Political System Stability



Source: Polity IV Project, 2011

The measure ranges from -10 to +10, where -10 equals fully institutionalized autocracy, and +10 equals fully institutionalized democracy. Characteristics of autocracy include severely limited political participation; chief executives' recruitment from the political elite and their appointment according to clearly defined, often hereditary, rules

of succession; and the lack of serious oversight of the executive by the legislative and judicial branches of government or involvement of nongovernmental organizations and other elements of civil society. Countries with scores between -10 and -6 fit this description. Democratic countries, on the other hand, are characterized by open and competitive political participation in accordance with set institutionalized procedures, recruitment of chief executives through open and competitive elections, and a well-functioning system of checks and balances between different branches of government as well as an important role for civil society. Countries with scores between +6 and +10 broadly fit this description. Finally, countries with scores between -5 and +5 combine, to various degrees, characteristics of autocracies and democracies, and are called anocracies. In these countries central authority is weak or even nonexistent, and political elites have only limited ability to secure the continuity of the political system, which results in the inherent instability of the system in these states that may often lead to violence. Due to its unstable character, anocracy is often just a transitional phase between autocracy and democracy.

Social democratic countries of Northern Europe have enjoyed both the highest level of political freedom and political stability for a full century. In Continental Europe, the picture is more mixed. Switzerland enjoyed the highest level of political freedom throughout the whole period since 1900s, and the Netherlands and Belgium transitioned to full political freedom fairly early in the 20th century. Germany and Austria had a very turbulent first half of the 20th century, experiencing both periods of democracy and autocracy, which culminated with the ascent of Nazism, but have enjoyed stability and full political freedom ever since. France had the most distinct pattern among conservative welfare states as it enjoyed a high, but less than full, level of political freedom practically throughout the whole period since 1900s except for a brief stint of full autocracy—the

Vichy regime—during World War II. Countries of Southern Europe with traditional welfare regimes have had the most turbulent political experience. Both Spain and Greece had to endure multiple abrupt transitions between democracy and autocracy, with a stable, full level of democracy achieved only in 1970s and 1980s, respectively. While Italy has enjoyed a high level of democracy since the end of World War II, it experienced, together with Spain, the longest period of institutionalized autocracy (more precisely, fascism) among the countries in the sample, and it is unique as a country in that it had no experience with institutionalized democracy at any point before the end of World War II. Also, some authors claim that Italy's post-World War II democratization was only partial due to the continued strong presence of clientelism in politics and an administration that resulted in the lack of transparency and accountability (Allen et al., 2004).

The measure of stability over time does not take into account the level of instability within a democratic regime. An example of this is a comparison of Sweden and Italy, where both countries are treated as having the highest level of political freedom during the whole second half of the 20th century, yet for the most of this period, there was one ruling party in Sweden (Social Democratic Party) and governments were stable, whereas Italy was characterized by frequent changes of governments and governing coalitions. If political stability is more important for economic activities than the type of regime (Alesina, Ozler, Roubini, & Swagler, 1996; Huntington, 1968), this may make results presented in Figure 7.4 misleading.

However, Przeworski (2004) notes that political instability has quite different implications in democracies and autocracies or dictatorships. While instability and occasional or even frequent changes of government are inherent to democracies and the history shows such instability does not substantially hamper economic growth prospects,

autocracies/dictatorships are established with the goal of preserving stability of the system by suppressing dissenting opinions, and any major changes generally involve a breakdown of the existing structure of government, which negatively affects economic activity. Therefore, Figure 7.4 captures the instability of nondemocratic regimes well, as their instability mostly leads to transition directly to democracy or to anocracy as an intermediate phase, whereas electoral outcomes that lead to government changes in democracies are rightly not considered to be politically destabilizing, because such "instability" represents the essential feature of democracy. This approach finds support in Feng (1997), who described an indirect positive effect of democracy on economic growth through its impact on regime and governing party changes.

Historical study of the role of federalism in the United States and the United Kingdom from 18th through 20th century as well as federalist tendencies underpinning the recent ascent of China (Weingast, 1995) helps to further refine the argument about the importance of political freedom and stability by defining desirable characteristics of political institutions that foster economic growth and development. Ultimately, the ideal institutions and political systems are those that have enforcement mechanisms necessary to protect political and economic rights, which is reflected in the level of long-term political stability. Simultaneously, the power of the executive branch in such political systems has to be limited in a way that prevents any infringement on private property rights and prevents the state from directly or indirectly confiscating wealth from individuals without their explicit or tacit consent. As only mature democratic countries with well-established systems of checks and balances fit this description, it is not surprising that these countries have achieved the highest level of economic development in the long run.

Taking all of these elements into account, it is obvious that both the high level of political freedoms and the stability of a political system over long periods of time are necessary for long-term market development and economic growth. They are the key ingredients for supporting a credible and independent monetary policy authority as well as for creating the climate favorable to the development of financial markets and more sophisticated savings and investments instruments. Under such circumstances, individuals are encouraged to undertake a variety of investments, as the institutions provide an environment where investment risks are commensurate with possible payoffs.

The opposite is true when long-term political stability is missing. Under such political systems, individuals are not encouraged to maximize risk-adjusted returns on their capital, but they are primarily focused on preserving whatever wealth they have by avoiding any riskier investments as much as possible. To large extent, the level of perceived political risk is such that it trumps in importance any consideration of economic risks and returns. Investing in real estate, short of the risk of outright nationalization characteristic of communist regimes (which is unlikely in any of the countries in the sample), is among very few possibilities to protect against such risks and, as already discussed, it is the only asset class serving the dual role of providing housing while preserving wealth and providing the private alternative to public old-age security system that is likely perceived as risky as the underlying political system that services it. Importantly, even if traditional bank savings in these countries do not substantially lag behind savings in long-term stable countries, much of the trend in savings can be explained as saving for down payments to buy real estate (Guiso & Jappelli, 2002).

In sum, a high propensity of homeownership is characteristic for countries with few investment alternatives due to the historical heritage of political instability and weak institutions, and with it a related lack of economic and legal security and transparency.

Many of these societies experienced long periods of foreign rule characterized with little regard for needs of the local population. As a result, people in these countries have historically relied more on an informal network of family and close friends than on the state for various types of support. Mediterranean countries and in particular specific regions (e.g., Sicily) represent typical examples of such historic experience (Therborn, 1993). These communities are characterized by a comparatively high risk of widespread systemic corruption, and they also face low levels of confidence in institutions and even low interpersonal trust, as shown in Table 7.3.

Table 7.3: Perception of Corruption, and General and Institutional Trust, by Country

	Corruption Index	Confidence in National Institutions Index	High Trust in Others (%)
Denmark	14.9	75.3	88.8
Sweden	20.2	64.6	83.7
Social Democratic	17.5	69.9	86.3
Austria	43.9	60.5	61.8
Belgium	53.5	45.6	68.6
France	53.7	59.2	55.8
Germany	61.4	53.4	61.1
Switzerland	33.9	70.6	79.7
Netherlands	34.0	71.7	74.2
Conservative	46.8	60.2	66.9
Greece	88.6	43.8	40.4
Italy	76.4	49.1	..
Spain	75.2	50.2	61.9
Traditional	80.1	47.7	51.2

Source: Gallup, 2012; European Social Survey, 2010.

People in countries with the social democratic welfare regime have a low perception of corruption in their societies, and with it, a related high degree of confidence in national institutions, which can be in large part related to the stability of the political system coupled with the highest level of political freedom enjoyed for at least the last century. Furthermore, people in these societies have an exceptionally high general level of trust in other people, and the combination of these elements is beneficial both for the economic activity due to the skittish nature of capital and investments necessary for development in the long run, as well as the promotion of public good, given the confidence of citizens that the government is promoting their welfare. Consequently, their general commitment to follow government policies is high even if they may have to make some sacrifice in the short run. It should be noted, however, that the measure of trust is likely to some extent a function of the institutional environment that is more directly reflected in the measures of corruption and confidence in institutions (Fehr, 2009). Therefore, it comes as no surprise that the three measures in Table 7.3 exhibit a degree of correlation.

Conservative welfare states show more mixed results. The perception of corruption is ranging from relatively low (about one-third) in Switzerland and the Netherlands, interestingly the two countries that have very similar political freedom and stability profiles as the social democratic welfare regime countries, to roughly around one-half in the rest of the countries. The majority of people has high trust in others, albeit markedly less than in the social democratic countries. The degree of confidence in national institutions is fairly high, with Belgium being the only country where the majority of people lack confidence in the institutions. This low confidence rating comes as no surprise given the general dysfunctionality of the Belgian political system, which is plagued by the frequent inability of Francophone (Wallonia) and Dutch-speaking

(Flanders) political elites to compromise and further burdened by an exceedingly complex and expensive system of government.

Finally, traditional welfare regime countries of Southern Europe exhibit results that are effectively a mirror image of those observed for Northern European countries. An overwhelming majority of people perceives corruption to be widespread in their societies and, as a result, national institutions do not enjoy broad support, which undoubtedly undermines their credibility and arguably hinders their ability to enact and promote any necessary economic and social reforms. Also troubling is a relatively low level of trust in other people, which only adds to the general level of insecurity in a society and may at least partly explain comparatively low levels of private economic enterprise, including small and medium-size business activity that is the backbone of employment and the source of middle-class prosperity, even in the most advanced economies. As Georgarakos and Pasini (2011) have recently shown, the lack of trust represents a serious impediment to information dissemination among (potential) investors and raises doubts that contracts would be honored.

Confidence in national institutions in Mediterranean countries has likely further deteriorated in recent years, as the deepening recession and the inability of political elites to tackle it has exposed underlying structural problems. Southern European economies are facing high and rising unemployment, especially youth unemployment that is reaching levels of close to 50% in some countries; unsustainable public debt levels; and an elevated risk of world financial markets losing confidence in the ability of these countries to repay their debts. As many sophisticated higher-yielding investment options and financial instruments critically depend on well-functioning and trustworthy institutions that can provide safe institutional environments and credible legal-protection mechanisms to investors, such troubling developments can only exacerbate an already

negative situation and effectively result in a vicious cycle that is hard to undo. In a such situation, even though real estate may also be losing in value and become more illiquid (i.e., less readily convertible to cash) than usual, the fact that owning a home plays a role of private (family-provided) social insurance in addition to investment may still account for the relatively high propensity to own a home in Southern Europe.

While so far the instability in these countries has been more economical than political in nature, its protracted nature makes it increasingly likely to spill over into the political arena. In fact, recent electoral successes of nonestablishment parties such as the radical left party SYRIZA in Greece and populist party Movimento Cinque Stelle in Italy or mass protests over the past several years in Spain led by the Indignados movement (i.e., Movimiento 15-M) show growing dissatisfaction with the political establishment and possibly suggest that an increasing number of citizens in Southern Europe have a strong preference for overhauling the current political system and renegotiating the social contract. With these states' long and less-than-fortunate history of economic and political instabilities, it is hard to foresee all the long-term ramifications the current situation may have on Southern European societies, social relationships, and the character and extent of social policy.

SOCIAL IMPLICATIONS OF DIFFERENCES IN CO-RESIDENCE RATES

As the discussion of social and economic environment suggests, high homeownership propensity and widespread co-residence of grown children and parents may represent an effective individual-level strategy to cope with the structural opportunities and constraints in traditional welfare regime countries. They may have also

contributed to a number of developments that are socially suboptimal. Table 7.4 summarizes some of them: delayed family formation, a subreplacement total fertility rate (TFR), and a low proportion of people who feel they are successful and thriving in their countries.

Table 7.4: Proportion of Never Married Population, Total Fertility Rate, and Life Satisfaction

	Single / Never Been Married (%), 2010	Total Fertility Rate, 2009	Total Fertility Rate Difference 2009- 1984	Thriving* (%), 2008 and 2012	
Denmark	21	1.84	0.44	82	71
Sweden	21	1.94	0.29	68	69
Social Democratic	21	1.89	0.37	75	70
Austria	24	1.39	-0.13	57	61
Belgium	19	1.83	0.29	56	56
France	29	1.99	0.18	49	39
Germany	22	1.36	-0.03	38	43
Netherlands	23	1.79	0.30	68	62
Switzerland	29	1.50	-0.03		
Conservative	24	1.64	0.10	54	52
Greece	27	1.53	-0.29	44	14
Italy	27	1.41	-0.07	42	25
Spain	30	1.40	-0.33	60	31
Traditional	28	1.45	-0.23	49	23

Source: OECD, 2012; *Gallup, 2012.

What is important to observe is that already substantial differences between Southern European countries on one side and Continental and Northern European countries on the other have further widened in recent years. Postponing family formation, characteristic of all developed countries, but especially across the Mediterranean region,

has particularly deleterious effects in traditional countries where social norms are such that the overwhelming majority of children are still born in marriages. The fact that the TFR somewhat recovered in Northern European countries and either recovered or stopped falling across most of Continental Europe suggests that the social climate and the institutional environment evolved in a way that allowed people living in these countries, at least to some extent, to decouple traditional marriage and childbearing, albeit with some exceptions. No such policy adjustment to new realities can be deduced from the trends in Southern Europe, however. Family formation and childbearing decisions differences across societies, which are likely affected by a complex matrix of underlying socioeconomic conditions, are an example of how the mechanism of interaction between institutions and families/individuals functions in practice.

Also, the mean actual TFR in social democratic countries and some conservative countries like France, Belgium, and the Netherlands is reasonably close to the desired mean number of children, whereas in other countries, and especially across traditional welfare regime countries, the difference between desired and ultimately realized fertility is very large (Testa, 2006). Moreover, in 2006, for women in the 25 to 39 age group, around 40% in Greece and Spain and over 55% in Italy were childless. The only other countries in the sample with similarly high (around 40%) proportion of childless women were Denmark and Austria, while all other countries had the proportion of childless women age 25 to 39 somewhere between 20% and 30% (Testa, 2006). Part of the explanation of why some countries have been more successful in preventing (or partially recovering from) a deep fall below replacement TFR is that they experienced a slight increase in the birth rates among women age 30 and older over the past several decades, whereas other countries recorded a decrease in TFR for this age group of women in

addition to a falling TFR for women younger than 30 across all developed countries (d'Addio & d'Ercole, 2005).

These trends cannot be explained by changing social values and growing individualism, as very low levels of fertility are related primarily with the unique features of social institutions (Bagavos & Martin, 2001). Morgan (2003) observes that in countries with fertility rates well below the replacement level, there is usually much more wrong than the low fertility, in other words, that low fertility is just a sign of institutional and structural features that do not provide the support necessary for a successful work-family balance given the new and ever-evolving socioeconomic environment. Eurobarometer data on reasons for women age 40 and older who did not fulfill their desired fertility from age 20 reveal that while individual health problems, lack of partner, and change in priorities are among the leading reasons in social democratic welfare-regime countries, and conservative countries are fairly similar (albeit work requirements feature more prominently as an impediment to childbearing), the situation in traditional welfare-regime countries is substantially different (Testa, 2006). Only in Greece are financial problems the most important factor influencing the decision to have fewer children—although financial issues are important in Spain, too. Work requirements, cost of children, and lack of time are all relatively more important across Southern European countries than in the rest of the sample (Testa, 2006). The major lesson: Women in Northern European countries mostly have the number of children they desire, and almost any remaining difference between desired and realized fertility is attributable to personal circumstances. The situation across Continental Europe is similar, although the issue of work-family balance may to some extent be affecting the realized fertility. In Southern Europe, the situation is quite the opposite, as obstacles to childbearing are much more likely to be

structural/institutional in nature than across other European regions represented in the sample.

These results are consistent with relative differences in social spending on the elderly (i.e., 65 and older) and nonelderly. While old-age spending has experienced strong growth in all developed countries since the end of World War II (Myles & Pierson, 2001), social spending on programs benefiting the nonelderly expanded at a slower pace and less evenly across countries. Accounting for differences in demographic structures, Italy, Spain, and Greece have the highest social spending on the elderly relative to the nonelderly among OECD countries, while social spending in Nordic countries and the Netherlands is much more age-neutral (Lynch, 2001). This is reflected in social spending data previously presented in Table 2.1. Family and education spending follow a geographic gradient from high spending in social democratic welfare-regime countries to low spending in traditional welfare-regime countries, while old-age security spending follows the opposite pattern.

A major consequence of the Southern European welfare and, even more broadly, social model is that in the long run it may contribute to undermining the economic competitiveness and the viability of the welfare state. Where institutions should have adjusted to the changing reality facing societies, families, and individuals, they have continued with the learned models of behavior that do not seem adequate for the new reality. Modern families increasingly rely on two earners rather than on a single male breadwinner, women are as well or better educated than their male peers and they increasingly pursue careers (while many still desiring motherhood, too), and nontraditional family types are gaining in importance. In that regard, Riley's (1994) assertion that social structures—institutional, organizational, and even cultural—

throughout the 20th century failed to keep pace with fast changes in human lives seem to be particularly true of Southern European countries.

As a consequence, people in traditional welfare-regime countries increasingly report they are not able to fulfill their aspirations and thrive, whereas the results are more positive for conservative and in particular social democratic welfare regime countries. The difference has become particularly dramatic over the past several years, as the social and economic models in traditional welfare states of Southern Europe faced de facto failure and these states showed an inability to cope with their underlying long-term structural problems, which were only fully exposed by the recent financial crisis. While individuals and especially institutions in these countries seem to have been very slow in recent years and decades to adjust to the new global economic reality, along the lines of the adjustment described in the conceptual framework presented in Chapter 3, the necessary adjustment and rebalancing is likely underway at this very moment, but in an abrupt and often uncontrolled way, with an economic cost that is already high for many. Unfortunately, this is a clear example of the failure of institutions to anticipate and recognize global social and economic changes and to be proactive in facilitating the adjustment of their societies to the new realities.

In sum, the analysis in this chapter described the transmission mechanism between social (macro) level circumstances and individual (micro) level behavior. It explained how the underlying historic circumstances including political freedom and stability impact institutional and economic environments, which in large part shape individual preferences for homeownership (and, related with it, co-residence) as one of the important types of family transfers. The analysis also described how the interaction of the institutional framework and policy choices with family- and individual-level preferences and behaviors could affect some of the basic determinants of the long-run

prosperity of a nation. Thus, it seems justified to consider the forces that directly shape welfare-regime types to be the same ones than indirectly affect family-transfer behavior and, consequently, using the typology developed for the analysis of welfare-state types in order to analyze family-transfer behavior seems both theoretically and practically appropriate. Finally, the next chapter summarizes the dissertation and discusses its empirical, methodological, theoretical, and policy contributions. It also describes the limitations of the empirical analyses conducted in the dissertation and concludes with an extensive overview of future research.

Chapter 8: Summary and Discussion

At the time when rapid aging and declining old-age dependency ratios are increasingly becoming a global phenomenon and a major challenge to the long-term sustainability of public social security programs and public spending for dependent populations in general, many countries are considering entitlement reforms and other changes that should invariably make public redistributive policies sustainable in the long term. However, public redistributive policies and programs as well as various proposals to reform them are traditionally founded on the basis of the relationship between a government and an individual member of a society with little, if any, consideration for the fact that those individuals live in families, that they exchange support with other family members that undoubtedly has economic value, and that any measure affecting the welfare of one family member is likely to have ramifications for others in the family. Without this consideration, it is impossible to make a precise assessment of the overall impact of public policies affecting intergenerational redistribution of resources. This omission to account for the full social impact of intergenerational family transfers may result in suboptimal and even misguided reforms. I addressed this oversight by exploring the true character of intrafamilial intergenerational relationships and how they interact with public intergenerational transfers and policies.

This dissertation had three major research aims. First, to examine and compare financial and various nonfinancial transfers between older parents and grown children, and to calculate their net value across social democratic, conservative, and traditional welfare state-regimes in Europe. Next, to determine the likelihood and the net value of transfers between parents and grown children over the adult life cycle across the three

European welfare regimes. Finally, to explain the mechanism that links welfare-regime characteristics with family-transfer behavior.

The dissertation began with an extensive overview of the relevant literature on welfare-regime typology and family-transfer behavior, motives for private intergenerational transfers, and the public-private link in intergenerational transfers, identifying major contributions made to these areas of research as well as some of the gaps that require further study. Next, a conceptual model framed the subsequent analysis by describing the mechanisms that govern social change, and family and individual transfers over time. This was followed with an overview of the Survey of Health, Ageing, and Retirement in Europe (SHARE) as the main source of data for the dissertation, and the description of the variables and the analytic approach.

The analysis began with a descriptive chapter focusing on the characteristics of welfare regimes, family-transfer behavior, transfer types and characteristics, and the links between public spending and family transfers. Multivariate analysis focused on establishing whether and how net family transfers vary over the adult life cycle, whether and how welfare-regime characteristics are associated with the likelihood and net value of family transfers, and what transfer motives are consistent with the observed pattern of transfers. The penultimate chapter focused on the linkages between welfare-state-regime typology and family-transfer behavior, using the example of co-residence and homeownership to describe the mechanism that links macro characteristics of a welfare regime and the political and historical context of a country with the individual preferences shaping family transfers and family-level utility-maximizing behavior.

In sum, this dissertation makes an important contribution by assessing net family transfers between parents and grown children over the adult life cycle and across countries with different welfare regime policies of intergenerational redistribution of

resources. The results clearly indicate that any type of public intervention into generational distribution of resources is met with secondary intergenerational redistribution on family level, and this information should become an integral part of any future assessments of entitlement reforms or reforms of public transfers and the tax system in general. Combined with the data on public transfers' inflows and outflows over the life cycle, which are part of generational accounting in the National Transfer Accounts project, these findings can allow policymakers to make more precise assessments of the redistribution effects of different policies and to tailor the policies for the desired result.

EMPIRICAL FINDINGS

There are several important empirical contributions of this dissertation. First, the analysis demonstrates how both the likelihood and net transfers between older parents and grown children critically depend on the definition of transfers, that is, what types of transfers are included in the measurement of transfers. Furthermore, the results suggest that net transfers between parents and grown children are nonlinear over the adult life cycle, and that welfare-regime characteristics represent an important constraint of the likelihood and intensity of parent-child transfers. Finally, the results are consistent with need being an important determinant of family-transfer behavior.

Transfers Measurement

Regarding money transfers, the likelihood of transfers has a clear geographic gradient, with the highest likelihood in the social democratic welfare-regime countries of Northern Europe (where approximately 25% of parent-child dyads participate in exchange of financial support) and the lowest in the traditional welfare-regime countries of Southern Europe (where the result is around 15%). Conversely, the intensity of transfers, expressed as a percentage of parents' annual income and corrected for purchasing power parity in different countries, is the lowest in social democratic countries (less than 8% of parents' income) and the highest in traditional countries (more than 13%). While these results are consistent with the prior findings, the inclusion of nonfinancial transfers in the calculation of the likelihood and net transfer value makes a substantial difference.

Adding help and care that parents and children exchange both increases the likelihood of transfers and somewhat reduces the relative difference between welfare regimes (now ranging from 25% of parent-child dyads exchanging support in traditional and 26% in conservative countries to 36% in social democratic countries). Net transfers substantially decrease as children give more help and care to elderly parents than they receive from them, especially in the traditional countries of Southern Europe. Using minimum and average wages across different countries to calculate the approximate monetary value of time transfers and adding it up with the data on money transfers, net transfers in traditional countries are now the lowest (between 0% and 5%), in social democratic countries they are over 6%, and in conservative countries around 8% of parents' annual income.

The results are consistent with Hypothesis 1.A, which states that financial transfers and transfers of practical help from parents to grown children are less common, but larger in magnitude in less generous welfare states, and more common, but smaller in magnitude in more generous welfare states. However, they also reveal that giving is more balanced in less generous welfare states, resulting in the lower net value of transfers from parents to grown children even though the intensity of both upward and downward family giving is larger.

To include the value of intensive grandchild care, which can be considered a functional alternative to daycare, as well as the value of co-residence of parents and children, estimated at imputed rent rates, in the definition of family transfers further changes the results. Adding intensive grandchild care, defined as weekly or more frequent care of grandchildren for a total of at least 500 hours per year, to the parent-child transfer measure increases the likelihood of transfers to about 30% in traditional and conservative countries, and less than 37% in social democratic countries, therefore further reducing the difference across welfare regimes. On the other hand, because older parents provide intensive grandchild care more often in traditional welfare-regime countries of Southern Europe and this type of transfer benefits their grown children, total net transfers once again follow the geographic gradient initially established for money transfers, with the intensity being the lowest in social democratic countries (between 7% and 9% of parents' income), approximately double in conservative countries (between 13% and 18%), and the highest in traditional countries (between 15% and 25%).

Accounting for co-residence, the likelihood of transfers increases even further, especially in the traditional welfare regime countries of Southern Europe, where it represents the major type of intergenerational transfer. Under this broadest definition of transfers between parents and children, the likelihood of transfers ranges from 37% in

conservative and 39% in social democratic countries to roughly 50% in traditional countries. Therefore, compared to the narrowest definition, the likelihood of transfers under the broadest definition increased around 60% in social democratic countries, more than doubled in conservative countries, and more than tripled in traditional countries. On the other hand, including co-residence (i.e., imputed rent) in the definition of net transfers did not substantially change their intensity compared to the results adding only intensive grandchild care, suggesting that for many of co-residing parent-child dyads, co-residence is the only type of transfer. Therefore, the net value remains the lowest in social democratic countries (8% to 9% of parents' income), higher in conservative countries (13% to 17%), and the highest in traditional countries (16% to 22%).

Therefore, the analysis of the likelihood and financial value of intensive grandchild care provision and co-residence between parents and grown children reveals they are more likely and larger in magnitude the less generous is a welfare regime, which is consistent with Hypothesis 1.B. The overall likelihood of parents and grown children participating in the exchange of any type of support and the net estimated financial value of the support parents give to children both follow a geographic gradient from the largest in the least generous traditional welfare regime countries to the smallest in the most generous social democratic welfare regime countries as predicted by Hypothesis 2. More generally, comparisons of the intensity of transfers under different definitions of transfers show how the estimates based either solely on transfers of money or transfers of money and time may substantially underestimate how much grown children benefit from the exchange of various types of transfers with their parents.

These results are largely confirmed in the models of family transfers where the likelihood of family transfers is lower in conservative and traditional welfare-regime countries compared to social democratic countries if co-residence is not accounted for as

a type of transfer, but once it is included, traditional countries have a significantly higher and conservative countries a somewhat lower likelihood of transfers than social democratic countries. Regardless of the definition of transfers, conservative countries exhibit no statistically significant difference in net transfers compared to social democratic countries, whereas traditional countries have consistently higher net transfers (i.e., on average children benefit more from the exchange with parents).

Adult Life-Cycle Model Findings

The results of multivariate analysis provide strong support to the Hypothesis 3.A that net transfers between parents and children exhibit a clear nonlinear pattern over the adult life cycle, as they follow an inverted S pattern with a relatively large and positive value of net transfers at least until parents reach their early 70s, followed by a sharp decline and ultimately reaching a negative value sometime when parents reach 80 years or more. While this is an important general finding for the full sample of parent-child dyads from 11 European countries, there are important differences by gender of children and welfare-state regime.

The described pattern is true for female-child dyads more than male-child dyads, given that the coefficient on net transfers for male-child dyads is increasingly negative as parents and children grow older. This is likely reflecting the fact that as sons age, they are less likely to co-reside with parents, but may also be partly attributed to the fact that older sons make larger financial transfers to elderly parents than older daughters. On the other hand, intensive grandchild care that benefits daughters more than sons, decreases most for parents age 70 and older, and parents in this age group also start having a larger need

for practical help, which is primarily provided by daughters. This explains why female-child dyads experience a stronger decrease in net transfers earlier than male-child dyads.

There are further gender differences in the intergenerational giving of support between older parents and grown children. While female- and male-headed parental households are equally likely to engage in support exchanges with their children, a greater fraction of female- than male-headed households are net recipients of support. Female-child dyads are more likely to participate in the exchange of different types of support except co-residence than male-child dyads, while there is no difference in the intensity of transfers by children's gender. However, once co-residence is accounted for, male-child dyads become more likely to participate in the exchange than female-child dyads, and net transfers favor sons compared to daughters. In addition to age differences between female- and male-child dyads in net transfers, daughters are more likely to help parents with IADL disabilities or parents facing recent (within the six months prior to the interview) limitations in their usual activities, and among the children who help, they provide more hours of help than sons. Conversely, parents provide more grandchild support, both in terms of likelihood and intensity, to their daughters than sons. Finally, while children of either gender working full-time are less likely to exchange support with parents, the magnitude is larger for sons than daughters.

By welfare-state regime, conservative countries follow the same age-net transfers pattern as the full sample, whereas in traditional countries net value becomes negative at a younger age, and in social democratic countries at an older age than for the full sample, suggesting a difference in the timing of financial and nonfinancial transfers exchanged between parents and children across different groups of countries. While in the traditional welfare-regime countries of Southern Europe, children may receive more overall from their parents, they also give more (primarily in the form of practical help and care) to

elderly parents. On the other hand, grown children in social democratic welfare regime countries of Northern Europe overall benefit less from the exchange with their parents compared to their peers across other welfare regimes, but they remain net recipients of transfers until an older age than children in other countries. Given population structures are broadly similar across these countries (U.S. Census Bureau, 2013) and therefore cannot account for the net transfer differences, it is likely they reflect how welfare-state regime characteristics affect family-transfer behavior. This finding gives support to the Hypothesis 3.B that, the more generous a welfare regime, the later family transfers from parents to children over the adult life cycle will transition from large and positive to small and ultimately negative.

The study shows important differences across various institutional features of the welfare state in the likelihood and net amount of intergenerational intrafamilial transfers. Pension spending seems to be largely neutral in terms of its effect on family transfers, with only a small positive effect on transfers from parents to children. Healthcare spending is associated with the lower likelihood of transfers, possibly because parents do not have to rely on children to provide them with practical help and care, which is also consistent with the finding that healthcare spending positively affects net transfers from parents to children. Family policy and education expenditures are associated with the higher likelihood of family transfers, possibly because this frees up young parents' resources, including the limited time they have, to spend for competing (i.e., parental) needs that would otherwise remain unmet, as the priority would be given to children. Higher family policy and education expenditures are associated with a decrease in net family transfers, which can be explained either with children providing more support to parents than they would otherwise or parents decreasing their transfers to children (including intensive grandchild care) as the government meets those needs.

The level of social services employment is related with higher likelihood and lower net value of family transfer. Higher likelihood of participating in intrafamilial intergenerational exchange is consistent with prior findings that giving of less intensive help between parents and children may be encouraged by the public provision of more intensive care (e.g., Deindl & Brandt, 2011). On the other hand, the lower net value of intergenerational family transfers suggest that the public provision of childcare services and other public time transfers benefiting grown children that would otherwise be provided by parents is larger than the corresponding public-care services provided to frail elderly that would have been provided by their grown children. Legal obligations to care for elderly parents increase the likelihood of transfers and decrease the net value due to increased transfers from grown children to elderly parents. Net of other elements of intergenerational public spending, the effectiveness of the tax system in the redistribution of resources does not affect the likelihood of family transfers, but it is positively associated with the value of net transfers from parents to children. Therefore, in countries where governments redistribute more from the working-age population with higher incomes toward dependent population groups that have lower incomes (e.g., Scandinavian countries), net family transfers are going to favor children more than their parents.

Another key finding is that transfers between parents and children are consistent with need as the major operating motive for intrafamilial intergenerational transfers. Consistently across all the models for the likelihood and net transfer value, dyads whose members have larger disparity in their relative needs and the ability to give are more likely to engage in intergenerational exchange of support, and net transfer values suggest that intergenerational intrafamilial transfers always benefits family members with larger relative needs. While observing only transfer behavior and not having direct information

on the true underlying motives of giving between parents and grown children limits the scope of inference and makes it impossible to account for the complexity of human desires, preferences, and motivations, the information on transfer behavior still provides valuable information, as it is broadly consistent with need, the major operating motive of giving implicit in the conceptual model of the flow of family support over the life cycle introduced in Chapter 3.

Transfer behavior also appears consistent with family tradition, given that parents who received or expect to receive inheritance are more likely to provide different types of support to their grown children as well as to plan leaving them a bequest. However, without direct information, it is impossible to ascertain to what extent this is due to the fact that the inheritance altered the need-opportunity structure between family members or if it is due to family members being encouraged primarily by a sense of obligation to give (i.e., an implicit social contract upheld across generations of a family).

On the other hand, the transfer behavior of parents and grown children is not consistent with immediate reciprocity. Money transfers from grown children to older parents are no statistically different for parents who provide any type of support to their children and those who do not provide it. Furthermore, transfers of help and care from grown children to older parents are not statistically different for parents who give money to their children compared to other parents, and parents providing grandchild care are actually less likely to receive time transfers from their children. However, it is possible that reciprocating transfers happen over time (i.e., that transfer recipients "repay" transfer donors at some later point in time), but the cross-sectional nature of the data restricts findings to simultaneous reciprocating behaviors.

In sum, the results clearly indicate that the family may indeed function as a utility-maximizing unit, where an increase in public transfers to one generation is

consistently met with the redistribution of family support from that generation to another one. Therefore, this is another piece of evidence consistent with the notion that the needs and the ability to give are the main determinants of family transfers as well as that individuals do not care only about their utility, but also about the utility of their family members, which precludes the possibility of public transfers fully displacing family transfers. The two types of transfers do interact, and family transfers change as a result of this interaction, but there is no evidence, empirical or theoretical, that public transfers can fully replace family transfers.

THEORETICAL CONTRIBUTIONS

There are several important theoretical contributions of this dissertation: 1) developing the life-cycle model of intergenerational family transfers, 2) expanding the individual utility-maximizing function to include family members' needs and preferences, and 3) modifying welfare-state regime typology to accommodate unique aspects of family-transfer behavior across countries. First, the life-cycle model of intergenerational family transfers applies the logic of the life-cycle model of consumption and saving in the context of multiple overlapping family generations to describe how one generation exchanges support with other generations from the time of early childhood to advanced old age. The model clearly shows that the generation with the most resources is the net giver, while traditionally dependent generations—children and the elderly—are net recipients of intergenerational family transfers. However, the model also accounts for the fact that the pivotal generation of parents remains a net giver of family transfers until relatively old age, that is, well past the retirement age, until their health substantially

deteriorates and their children reach middle age, which represents a temporal shift from the standard model of transfers and a longer phase of being net recipient of transfers early in life (while a shorter net recipient phase late in life).

In the context of different welfare-state regimes, the life-cycle model of intergenerational family transfers accommodates the impact of public policies on the likelihood, timing, and intensity of family giving across generations. Given that the public intergenerational redistribution of resources affects the relative needs of family generations, this results in a secondary redistribution of resources at the family level. Therefore, using this model to assess net family-transfer behavior over the life cycle provides policymakers with information about the ways in which families redistribute resources and, consequently, supplement, substitute, or in some cases even reverse the redistributive effects of public policies. Moreover, given that net family transfers are affected by changes in public policies, policymakers can choose whether, through public spending, tax policy, or legislation, they want to financially empower parents relative to children or vice versa. While either option is a legitimate policy choice as long as it enjoys explicit or implicit popular support through the democratic mandate given to policymakers, the lesson is that policymakers' actions have important consequences on each family's internal dynamics and, by extension, larger social dynamics.

Second, the dissertation clearly demonstrates, both theoretically and empirically, the advantages of considering family a key element of individual utility-maximizing behavior. This approach contextualizes the bidirectional flow of transfers between parents and grown children across different welfare regimes. As individuals care for other family members, the individuals increase their utility not only when they benefit personally, but also when other family members benefit. Therefore, intrafamilial redistribution based on the relative needs of family members (i.e., transfers from those

who have relatively more to those who have relatively less) maximizes each family member's individual utility. The relative welfare of each family member determines the family intergenerational exchange; this explains why even in countries where public transfers to individuals are very generous, there are still many private intrafamilial transfers.

Third, the dissertation modifies and expands the original Esping-Andersen welfare-state-regime typology framework (1990) in order to accommodate for the unique challenges of explaining family-transfer behavior. The welfare-regime typology has been originally developed to describe major differences and similarities in the institutional structures across countries. The fact it has since been propagated to new areas of application including intergenerational family transfers behavior (e.g., Albertini & Kohli, 2012; Hank & Jürges, 2010) is a testament to its usefulness, yet using the welfare-regime typology beyond the original institutional context requires careful consideration if, why, and how it is theoretically appropriate to use it.

With this task in mind, future research should expand the original welfare-regime typology framework by incorporating some of the foundational principles of the "families of nations" typology framework, in particular the idea that historical specificities like shared historical events and experiences, shared language, religion, and legal tradition condition individual behavior and policy choices across societies (Castles, 1993). Such modification makes it possible to explain why differences in family-transfer regimes across countries emerged, why they are broadly similar to welfare-state regime typology, and how some seemingly suboptimal (at least from purely economic perspective of maximizing individual and social welfare) transfers can be explained. Using this approach, particular attention is given to explaining the mechanism linking welfare-

regime framework, appropriate for explaining macro-level structural and institutional factors, with family-transfer behavior.

This approach is illustrated by explaining why co-residence of parents and grown children is such a ubiquitous phenomenon across Southern European countries, where it represents the most important type of intergenerational family transfer. It is far less common across Continental and Northern European countries. The explanation focuses on the role of homeownership propensity as a determinant of co-residence preferences, and the results confirm a positive relationship between homeownership propensity and parent-child likelihood of co-residence, as suggested by Hypothesis 4. The analysis establishes a direct link between historical circumstances, which affected political stability and the level of political freedom, with institutional credibility and economic performance that in turn shaped individual investment preferences, including preference for owning real estate. Therefore, because a direct path links distal and proximate causes of family-transfer behavior, using a modified welfare-state-regime typology to describe patterns of family transfers across countries seems not only empirically, but also theoretically, valuable.

Finally, a broader conceptualization of the welfare-regime framework is also reflected in a more comprehensive definition of the key welfare-regime components to be included in models of family transfers. The majority of relevant literature focuses on the major items of government intergenerational spending and/or the level of employment in social services. In addition to including those public-spending characteristics, however, this dissertation also takes into account the important intergenerational redistributing effects of the tax system and legal framework. This approach finds strong empirical confirmation.

More generally, the framework developed in this dissertation as well as the empirical findings clearly show that policies condition individual and family behavior, which has implications for a society's success, or lack thereof. The example of the linkage between homeownership and co-residence clearly demonstrates how, given historical context, certain policy choices can increase homeownership propensity and, in the absence of efficient policies to facilitate home acquisition for young adults, propagate young adults' co-residence with parents as a part of private strategy to acquire real estate. Choices have consequences, of course, and there is evidence that some policy choices are associated with more favorable social outcomes; others, more adverse ones, given the larger historical context. This dissertation provides both theoretical and empirical foundations for policymakers to assume the role of catalysts of social change, with the goal of achieving the optimal functioning of a society under the current sets of objective (i.e., historic) constraints. Building administrative capacity largely independent of political influence and establishing a high level of confidence in the administration and institutions in general are key to the success of such an effort, and can assure that societies thrive even in a world of rapid changes.

METHODOLOGICAL CONTRIBUTIONS

An important methodological contribution of this dissertation is the method of monetizing nonfinancial transfers, imputing missing information where necessary, and ultimately calculating net family transfers (see pp. 191–194 for the summary of the results of the new measurement). Compared to the net transfers calculation methodology applied by Litwin et al. (2008), which to date represents the only attempt at calculating

net transfers in the relevant literature, there are several expansions and improvements. First, instead of using the midpoint between minimum and average hourly wages in each country to assess the value of time transfers and grandchild care, I calculate two net transfer values, using both minimum and average hourly wages to establish a range of estimates of the true value of net transfer. For modeling purposes I use the conservative estimate based on the minimum hourly wage. What is unknown is the elasticity of demand for nonfinancial transfers between elderly parents and grown children, and whether there is any "overuse" of time transfers, given they are provided free of charge. Without this information, it is impossible to make a precise assessment of the "true" economic value of time transfers between parents and children, and this invariably results in the lack of robustness in models as discussed earlier. However, using the minimum hourly wage at least assures that there are no legal market alternatives that would be more price-attractive and that the potential overestimation of the economic value of such transfers is minimized. Given that the imprecision is inherent in the measurement of net transfers, it seems prudent to make as conservative an estimate as possible.

Furthermore, unlike in Litwin and his colleagues' approach, the measure of net transfers in this dissertation includes only intensive grandchild care that is likely to be a functional substitute for professional childcare. This assures, for example, that occasional short visits of grandchildren to their grandparents and vice versa, which may be purely emotional in nature and benefit grandparents as much if not more than children or grandchildren, are not arbitrarily counted as elderly parents' transfers to their grown children. Also, where information on transfers is missing, Litwin and his colleagues simply impute mean values for each age group, whereas in this dissertation, I apply a more robust multiple-imputation technique. Specifically, for time transfers between co-resident parent-child dyads that are not available in SHARE, I follow Leopold and Raab's

(2011) approach, using time-transfer information for the dyads living in the same building, but in separate households, as they are likely to be similar to the co-resident dyads. Similarly, it imputes rent values for the co-resident dyads, which are then used in calculating the most comprehensive measure of family transfers.

Besides improvements in the measurement of transfers (i.e., construct validity), this dissertation explicitly models the observed nonlinearity in net transfers over the adult life cycle, an improvement over the previous studies, the majority of which impose a linear relationship between age and family transfers. I use spline regression to best describe the nonlinear character of this relationship. The analysis suggests that using spline regression, at least in the context of the models estimated in this dissertation, is superior to alternatives such as polynomial regression or interrupted regression, and the results are as readily interpretable as they would be otherwise.

Finally, the dissertation makes several smaller, yet important methodological contributions. While most studies focus on individuals or households as the units of analysis, this dissertation uses parent-child dyads. This context allows accounting for the child's and the dyad's characteristics in addition to parents' characteristics, which improves the model fit and the scope of generalization. In order to decrease the disproportionate impact of large values on their distribution, net transfers as well as income and wealth data are transformed using inverse hyperbolic sine (IHS) transformation. Unlike more commonly used log transformation, IHS is defined for zero and negative values, which makes it an appropriate choice for this type of analysis.

STUDY LIMITATIONS

This study has several data limitations. Most importantly, the analysis relies on cross-sectional data that preclude establishing a causal link between the variables of interest. In particular, the age effect, which is of primary interest, may be confounded with the cohort effect. The reason is that a one-dimensional dataset where the data collected refer to a single point in time does not allow to determine what part of the observed change in the variable of interest can be attributed to the age group a person belongs to independently from any possible influence that would affect all individuals born in a particular year. Having longitudinal data would help in addressing this issue, but they were not available at the time of the analysis.

In addition, some of the transfer data, such as transfers of practical help between parents and co-resident children or the implicit rent value for co-resident children, are not available in SHARE and the values had to be imputed. This invariably introduces some level of imprecision in the estimates of the likelihood and especially the net value of transfers. Furthermore, the procedure of monetizing nonfinancial transfers by using minimum and average hourly earnings across different countries is arbitrary and imprecise by design. Unfortunately, there is no available data that would help establish more precisely the perceived economic value of nonfinancial transfers for transfer recipients, and consequently, result in more precise estimates of the true economic value of nonfinancial transfers exchanged between parents and grown children. Therefore, the current measure represents at best a very general approximation.

The lack of data and the resulting imprecision of transfer measures, especially unavailability of longitudinal data, result in an important limitation for the empirical analysis of the motives of transfers. Cross-sectional data can capture only immediate

reciprocation of one generation for the receipt of support by another generation of the same family, for example, older parents giving money to children who provide them with care, or grown children giving money to parents who provide intensive grandchild care. However, it is possible that support received at the time of need does not result in immediate reciprocation, but rather at a later time. For example, children who received substantial support from mid-age parents for higher education–related expenses or for buying their first home may provide more intensive money and/or time transfers to their elderly parents in need. Therefore, without the availability of longitudinal data on parents and children over time, it is not possible to account for long-term family-transfer behavior. Also, while elderly parents with mental health issues and constrained ability to manage money may be the net recipients of children's support, this dissertation cannot distinguish whether this happens only because of their objectively greater need for help, or because the mental health issue constrains their giving beyond the level suggested by the difference in relative needs of elderly parents and grown children.

Furthermore, the dissertation focuses on the three out of the four major welfare state regimes, leaving out the liberal welfare state regime. This limits the scope of generalization of the empirical findings of the dissertation. The liberal welfare-state regime includes some of the most important developed countries in the world (e.g., the United States, Canada, Australia), whose social welfare model has had a significant impact on the establishment and evolution of the welfare state well beyond the borders of those countries. This fact makes it particularly important to examine the impact of liberal and neoliberal policies on the public-private nexus of transfers.

Finally, the SHARE data in this study come from 2006 wave, which is prior to the onset of the most recent recession that is still underway throughout much of the European continent. Interestingly, the extent and impact of the recession has been very uneven

across countries (OECD, 2013). While social democratic and conservative countries largely escaped its worst consequences, and some countries even continued to thrive and improve job and life prospects of their citizens, the social system in traditional countries has unraveled in many aspects. It is likely these countries may have to undergo serious and painful reforms if they are to survive and continue serving the needs of citizens for decades to come. Some of the major weaknesses of the social-welfare model and the institutional framework supporting it across Southern Europe, which were identified throughout this dissertation, have been fully exposed. However, the 2006 wave of SHARE cannot capture the effect, if there is one, of these events on the transfer behavior of parents and their grown children across Europe. For example, with growing youth unemployment and increased fiscal pressure on the working-age population, parental transfers to children may be even more important than before the economic crisis. Thus, cutting public support to current retirees, one of possible austerity measures that is being implemented in the countries hardest hit by the crisis, is likely to be even more devastating for the welfare of families than it would have been if the same measures were implemented in the precrisis period.

FUTURE RESEARCH AGENDA

There are numerous ways to extend the research on the effects of aging on family-transfer behavior across different welfare regimes. First, in December 2012 SHARE made publicly available the first release of the fourth wave of its study (or the third longitudinal wave, given that 2008 SHARELIFE was a retrospective study of the SHARE sample). Therefore, there are now three observation points—2004, 2006, and 2010—

available for respondents and their families from the core group of European countries included in this dissertation (with the exception of Greece, which did not participate in the last wave of SHARE). This makes it possible for the first time to analyze longitudinal data and capture the evolution of family transfers over time, albeit limited to a relatively short period of, at best, six years. However, this is an improvement over cross-sectional studies that have thus far characterized the analysis of SHARE data and will address many of the current study limitations.

The 2010 wave of SHARE was conducted in the midst of the deepest recession to hit Europe, albeit not equally across the whole continent, since the Great Depression (OECD, 2013). Comparison of the 2004 and 2006 waves with the 2010 wave, offers, therefore, a unique opportunity to explore if and in what way the crisis impacted family exchange of support. While data collected for the 2010 wave do not cover the whole period of time when the fiscal austerity measures were implemented across countries such as Spain or Italy, it may be sufficient to indicate how these measures will likely affect the welfare of families, that is, it may be possible to broadly estimate the true incidence of the economic burden of fiscal austerity for different family generations given changes in family flows of resources during the crisis compared to the precrisis period.

Furthermore, the fourth wave of SHARE offers an exciting opportunity to broaden the research in several ways. While Greece, as already mentioned, did not collect data in this wave, Portugal, another of the countries belonging to the traditional welfare regime, has joined the survey. Three more countries, Estonia, Hungary, and Slovenia, also joined the survey in 2010 wave, while data have been collected in Poland and Czech Republic since 2006 wave. Therefore, there is now a large group of post-communist (i.e., transitional) countries in SHARE.

An important research question, then, is whether they constitute a distinct welfare regime and exhibit separate pattern of family transfer behavior. Conversely, if there are similarities in institutional and individual/family patterns of behavior between "new" and "old" SHARE countries, it would be important to determine to which welfare regime each of newly joined countries belong. These new countries span large geographic areas—from North to South Central Europe —and have diverse religious and ethnic backgrounds, but they share recent historical experience of half a century of communism. Moreover, in the more distant past, major parts of the territory of these new SHARE countries, with the exception of Estonia, were part of the Austro-Hungarian Empire. As a consequence, Slovenia, for example, may be similar either to neighboring Austria and other conservative welfare-regime countries, or neighboring Italy and other traditional welfare-regime countries, or be quite distinct from either of these two regimes and share more features in common with Hungary, Czech Republic, and other post-communist Central European countries.

The fourth wave of SHARE also includes a broader measure of the social network of older respondents including family members, relatives, neighbors, friends, and other people important in the respondents' social network. Therefore, the fourth wave of study provides detailed information on both intrafamily and nonfamily exchanges of private intergenerational support. Inasmuch intrafamilial exchanges of support represent the majority of private intergenerational transfers, focusing on family transfers may have been adequate, yet family transfers do not represent all private intergenerational transfer flows. The new information collected in SHARE wave four remedies this shortcoming from earlier waves of data collection.

Another possibility for broadening the cross-national research entails using multiple "sister" studies of SHARE in order to explore welfare and family-transfer

regime characteristics in non-Western societies. Some of the studies that would be useful in this respect include the Japanese Study of Aging and Retirement, Korean Longitudinal Study of Aging, Chinese Health and Retirement Longitudinal Study, Longitudinal Aging Study in India, or Mexican Health and Aging Study, all of which provide data on older individuals and their families collected following the methodology that is broadly consistent with the methodology in SHARE and other major longitudinal surveys of the elderly.

But perhaps the most important extension of the current research is to expand it to include the United States and the longitudinal data from the Health and Retirement Study (HRS). There are several important potential contributions of including the United States in the research and using HRS data. First, previous analyses of welfare regimes have not included countries belonging to the liberal welfare-state regime (of which the United States is the prime exemplar) in estimates of net family transfers, seriously limiting the scope of generalization of empirical findings. As already described, the liberal social-welfare model has had major influence on the evolution of welfare states, especially in recent decades. This fact makes it particularly important to examine the impact of this welfare regime type on the public-private nexus of transfers.

A critically important aspect of analyzing net family transfers in the United States is to use the longitudinal files that consist of panel data that span two decades of family-transfer behavior across the adult life cycle. These data make it possible to track changes, if any, in support exchange over time for the same group of older parents and grown children and to separate age effects, the primary research focus of the study, from cohort effects while accounting for period effects, that is, to separate changes across individuals belonging to different age groups from changes across individuals born in the same year and account for changes affecting simultaneously all age groups across time,

respectively. Although the literature has long suggested that the solution to age-period-cohort conundrum cannot be purely statistical (Glenn, 2007), recent advancement in statistical methods allow consistent solutions to the identification problem without the need to rely on arbitrary constraints to the model parameters (e.g., Yang, Fu, & Land, 2004; Yang & Land, 2008). Moreover, the longitudinal character of HRS distinguishes between transitory and persistent family intergenerational support while controlling for any unobserved heterogeneity in individual transfer behavior over time as noted in earlier studies (e.g., Zissimopoulos & Smith, 2009; Hurd, Smith, & Zissimopoulos, 2007).

The availability of panel data is particularly relevant for the empirical analysis of the motives of transfers. Cross-sectional data can capture only immediate reciprocation of one generation for the receipt of support by another generation of the same family. Support received at the time of need may not result in immediate reciprocation, but rather at a later point in time. For example, children who received substantial support from middle-aged parents for higher education-related expenses or for buying their first home may provide more intensive financial and/or time support to their elderly parents in need of assistance. Therefore, in the absence of observing the behavior of the same cohort of parents and children over time, it is not possible to assess the extent to which family-transfer behavior over time corresponds to different motives of intergenerational transfers.

The analytic focus on the United States also presents an opportunity to refine the methodology of monetizing nonfinancial types of intergenerational transfers. Instead of relying solely on minimum and average wages across countries of interest, future research can also take into account the prevailing market prices for different types of professional care. With this information, it is possible to establish a more comprehensive and precise range of estimates of net family transfers.

However, harmonizing HRS and SHARE data on family transfers requires certain adjustments to the methodology applied in this dissertation. Appendix D summarizes relevant SHARE and HRS questions on family financial and nonfinancial transfers. The most important difference between the two questionnaires is that HRS does not collect information on time transfers from parents to children. While such transfers are not very common, as parents mostly help their children by giving money or providing grandchild care or co-residence and, therefore, do not contribute very much to net intergenerational family transfers, it would be necessary to adjust the estimates of net value for European countries to acknowledge this difference and make them comparable to the estimate for the United States.

HRS contains data on practical help from all children to parents, but SHARE tracks practical help given only from non-co-resident children to parents, and this information was imputed for the purposes of calculating net family transfers in this dissertation. Using the same imputation methodology to estimate co-resident children's practical help in HRS and comparing it with the original HRS data for co-resident children offers a possibility to test and validate the imputation methodology applied with the SHARE data.

In terms of financial transfers, SHARE limits the minimum amount of money transfers to €250, whereas HRS applies a cutoff at \$500. Throughout most of the period since the introduction of the euro, the exchange rate between the U.S. dollar and the euro was significantly below 2 to 1, which suggests that the minimum value of transfer cutoff point for European countries will have to be adjusted upward accordingly. Also, while both SHARE and HRS ask reinterviewed respondents about the financial transfers given or received since the previous wave of each respective study, new respondents in SHARE report money transfers over the last twelve months, whereas new HRS respondents report

the transfers in the two years preceding the interview, another difference that will have to be accounted for in harmonizing HRS and SHARE data for future research.

Finally, future research will be able to draw on newly released data from the National Transfer Accounts (NTA) project that measure production, consumption, savings, and transfer flows over the life cycle and across countries (Lee & Mason, 2011). NTA data is currently available for the following countries of interest: Austria, Germany, Spain, Sweden, and the United States. This subsample covers all four welfare-state regime types typically tracked in the literature. Particularly important for the study of intergenerational transfer flows are data on taxes paid and public transfers received for different age groups. These data can be used to calculate net public transfers (i.e., public transfers received and taxes paid) for different age groups, while the HRS and SHARE data can be used to make estimates of net family transfers by age groups. As a result, it will be possible to compare family and public intergenerational transfer flows by age groups and incorporate age-specific information on public transfers into models of family transfers. This approach will provide a deeper understanding of the public-private nexus of intergenerational transfers.

Once all of the above-mentioned research is complete, it would finally be possible to start exploring the effects of the public-private nexus of transfers on incentives and disincentives for retirement savings. While the researchers have already made some important contributions (e.g., Hurd, Michaud, & Rohwedder, 2008), it is clear that data used in previous studies were insufficient to establish strong causal links between public policies and individual (and family) behavior, and thus this data could not explain the intricacies and implications of the public-private relationship in intergenerational transfers.

In conclusion, this dissertation has developed a framework for analyzing family-transfer behavior across the life cycle in the context of different welfare regimes. It has expanded and improved the measure of net transfer value and estimated how public policies constrain the exchange of support between older parents and grown children. While important, these contributions represent just the foundation for the future research into the causes and consequences of public and private intergenerational redistribution of resources across countries. At the time when population aging, economic downturns, fiscal austerity measures, high unemployment, and a growing (sense of) inequality threaten the existing social contract across many developed, primarily European, countries, and populist and radical movements are on the rise, the optimistic vision of permanent incremental social betterment through successful individual adaptation to the challenges and opportunities of modern era, as proposed by Giddens (1998), seems under threat. If the promises societies have made to current and future generations are to be kept, it is important to use limited resources in the most efficient way. Hence, the importance of research on the public-private nexus of intergenerational transfers will inevitably increase in years to come.

Appendix A: Model of Co-residence

Table A.1: Co-residence of Parents and Grown Children

Likelihood of Co-residence		
Parents' Characteristics		
Age	0.73	***
Age^2	1.00	***
Female	1.06	
Education	0.95	***
Marital Status (Ref. Married, Living with Spouse)		
Partnered	0.25	*
Separated	0.73	
Never Married	0.96	
Divorced	0.47	***
Widowed	1.36	**
Making Ends Meet (Ref. Great Difficulty)		
Some Difficulty	1.18	
Fairly Easily	1.06	
Easily	0.75	*
IHS(Income)	1.05	*
IHS(Financial Wealth)	1.01	
Not Employed	0.83	*
Homeowner	1.23	*
Number of Children	0.87	***
Number of ADLs	1.04	
Number of IADLs	1.30	***
Recent Health Limitation	0.89	*
Professional Homecare	0.73	*
Co-resident Elderly Parent	1.30	
Child's Characteristics		
Female	0.71	***
Marital Status (Ref. Married/Partnered)		
Separated/Divorced/Widowed	4.53	***
Never Married	15.03	***
Working Full-Time	0.40	***
Any Grandchildren	0.35	***

Table A.1 continued.

Welfare Regime (Ref. Social Democratic)		
Conservative	2.04	***
Traditional	10.39	***
<hr/>		
N	36095	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

Appendix B: Bivariate Correlations of Predictors with Transfer Likelihood and Net Value Measures

Table B.1: Bivariate Correlations of Predictors and Outcome Variables

	Transfers Of Money, Time, and Grandchild Care				Transfers Of Money, Time, Grandchild Care, and Co-residence			
	Likelihood		Intensity		Likelihood		Intensity	
Parents' Characteristics								
Age	-0.0484	***	-0.4125	***	-0.1864	***	-0.4295	***
Female	0.0168	**	-0.1512	***	0.0037	+	-0.1354	***
Education	0.0833	***	0.2436	***	0.0808	***	0.1846	***
Marital Status								
Married	0.0002		0.2954	***	0.0631	***	0.2879	***
Partnered	-0.0119	*	0.0363	***	-0.0284	***	0.0218	**
Separated	-0.0122	**	0.0044		-0.0079	+	0.0097	+
Never Married	-0.0021		0.0141	+	-0.0002		0.0149	*
Divorced	-0.0035		-0.0127	+	-0.0289	***	-0.0266	***
Widowed	0.0096	*	-0.3389	***	-0.0424	***	-0.3246	***
Making Ends Meet								
Great Difficulty	-0.0326	***	-0.1184	***	-0.0061	**	-0.068	***
Some Difficulty	-0.0325	***	-0.1106	***	0.0073	+	-0.0592	***
Fairly Easily	-0.0062		0.0189	*	-0.016	***	0.0073	
Easily	0.0659	***	0.172	***	0.0143	**	0.1049	***
Income	0.046	***	0.1937	***	0.0595	***	0.1709	***
Financial Wealth	0.0473	***	0.1314	***	0.0363	***	0.0822	***
Number Of Children	-0.1614	***	-0.0698	***	-0.1816	***	-0.0594	***
Number Of Adls	0.0249	***	-0.3236	***	-0.0138	**	-0.3053	***
Number Of Iadls	0.0312	***	-0.3556	***	-0.004		-0.3327	***
Recent Health Limitation	0.0285	***	-0.3536	***	-0.0296	***	-0.3364	***
Professional Homecare	0.0107	*	-0.2315	***	-0.0303	***	-0.2439	***
Elderly Parent Health								
All Parents Died Excellent, Very Good, or Good	-0.0229	***	-0.1755	***	-0.109	***	-0.187	***
Fair or Poor	0.0159	***	0.102	***	0.0749	***	0.1131	***
Fair or Poor	0.0149	**	0.1292	***	0.0712	***	0.1313	***
Child's Characteristics								
Female	0.0446	***	0.0146	+	0.0023		-0.0212	**
Marital Status								

Table B.1 continued.

Married or Partnered	0.0019		-0.058	***	-0.2044	***	-0.1954	***
Separated, Divorced or Widowed	0.0134	**	-0.0565	***	-0.0264	***	-0.0778	***
Never Married	-0.0096	*	0.094	***	0.2283	***	0.237	***
Working Full-Time	-0.0383	***	-0.0266	**	-0.1063	***	-0.0607	***
Any Grandchildren	0.0383	***	-0.07	***	-0.1715	***	-0.2091	***
Dyad Contact								
Daily or Several Times a Week	0.1546	***	-0.0052	+	0.2945	***	0.0886	***
Once a Week To Once a Month	-0.1043	***	0.0027		-0.2297	***	-0.0871	***
Rarely or Never	-0.1159	***	0.0087		-0.1579	***	-0.0132	+
Welfare Regime Characteristics	-0.0518	***	-0.0915	***	0.0756	***	0.0261	***
Pensions Expenditures	0.0042	+	-0.0598	***	0.0535	***	-0.0127	***
Healthcare Expenditures	-0.0217	***	0.0666	***	-0.1157	***	-0.0135	***
Family Policy Expenditures	0.0278	***	0.0748	***	-0.0834	***	-0.0279	***
Education Expenditures	0.0751	***	0.0329	***	-0.0006		-0.0403	***
Social Services Employment	0.0317	***	0.1071	***	-0.0868	***	-0.0042	
Legal Care Obligation	-0.0226	***	-0.0922	***	0.0599	***	-0.0136	
Gini Index Difference	0.0507	***	-0.0182	+	0.0147	**	-0.0592	***
N	36095		36095		36095		36095	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

Results confirm that all predictors of interest are statistically significantly correlated with the outcome measures. This is important as it gives some further support for the inclusion of the predictors in the models beyond the fact that all these variables seem substantively important for explaining family transfer behavior and that most of them were used in similar contexts in prior research. Importantly, welfare regime characteristics hypothesized to be important predictors of the likelihood and net transfers are indeed statistically significantly correlated with the outcome measures.

Appendix C: Sensitivity Analysis

There are two important elements of the presented modeling approach and model estimates that require careful consideration: the value of using inverse hyperbolic sine transformed values of the outcome measure of net transfers, and the appropriateness of choosing a spline regression as opposed to the standard multiple regression with higher order polynomials for the predictor of interest as well as using two knots instead of one (or, conversely, three or more) knots in the spline regression.

One of the major issues in the analysis of wealth, income or, in the context of this analysis, transfer data is that they are almost always skewed with a non-negligible number of extreme observations at either end of the distribution. The standard way of addressing such problem is to take a log transformation in order to bring the distribution closer to the middle and therefore limit the weight of the extreme observations on any model results and inference. Unfortunately, log transformation is not defined for zero and therefore all such observations, usually a nontrivial proportion, would have to be dropped from consideration. One solution is to artificially inflate the amount to some minimum positive value, say \$1, in order to keep the observations in the sample, but, except practical usefulness, it is hard to justify such an approach.

Even bigger problem is the fact that net wealth or net transfers often have negative values, which also cannot be handled by the log transformation, and represents the essential information for the inferential analysis. Therein lies the strength of the inverse hyperbolic sine transformation as it is defined for both zero and negative values while still providing the same data handling benefit as the log transformation. However, using it comes at a price given that the interpretation of coefficients is not as

straightforward except for the very large values where it approximates the interpretation for the log transformed variables, and very small absolute values (i.e., in the area around the origin) where it is roughly linear. Given that this analysis does not focus on the precise estimates of the model for net transfers, but rather the direction and the shape of the relationship between predictors, in particular age, and the outcome, this is not a major drawback. Nevertheless, it is important to examine how much this approach improves the fit of the model for net transfers compared to alternative approaches.

Table C.1 presents the results for the multiple regression of the two measures of net transfers on age and other predictors using two alternative approaches: running the model using untransformed values of the outcome measure for the full sample, and then using the constrained sample that drops the upper and lower 1% of the sample in order to remove the most extreme values from the sample. The latter strategy is another common approach in the literature that avoids the drawbacks of the log transformation, but at the same time it arbitrarily drops a subset of observations from the sample, which can be considered a practical yet certainly less than ideal solution. The expectation is that the latter approach should give results that are more similar to the results of the regression using inverse hyperbolic sine transformed values than running the regression on the full sample with the original values of the outcome variables.

Table C.1: Net Transfer Value, OLS Model Results

	Transfers of Money, Time, and Grandchild Care				Transfers of Money, Time, Grandchild Care, and Co-residence			
	Full Sample		Middle 98% of the Sample		Full Sample		Middle 98% of the Sample	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Parents' Characteristics								
Age								
Age<70	-8	3	-24	-15	19	28	-13	-5
70<=Age<80	-364 ***	-366 ***	-249 ***	-251 ***	-350 ***	-354 ***	-221 ***	-224 ***
Age>=80	-309 +	-312 +	-177 **	-184 **	-286 *	-288 *	-140 *	-144 *
Female	-174	-142	153	193	-220	-186	67	106
Education	126 +	156 *	81 *	105 **	91 +	111 *	43 +	56 *
Marital Status (Ref. Married, Living with Spouse)								
Partnered	-347	-526	-651	-737	-76	95	-375	-268
Separated	173	292	622	642	779	822	1143	1112
Never Married	-84	-393	139	-62	416	141	412	204
Divorced	-1585 *	-1579 *	-1166 **	-1181 **	-1282 *	-1304 *	-934 **	-971 **
Widowed	148	165	-606	-602	115	106	-370	-393
Making Ends Meet (Ref. Great Difficulty)								
Some Difficulty	-183	-181	-600	-587	-244	-230	-411	-395
Fairly Easily	85	157	-344	-306	-13	43	-260	-234
Easily	604	745	387	446	487	600	242	288

Table C.1 continued.

IHS(Income)	387	380	22	12	270 +	263 +	46	38	
IHS(Financial Wealth)	164 *	145 +	138 **	128 **	123 *	111 *	105 **	99 **	
Number of Children	-245	-311	-68	-124	-250 +	-305 +	-103	-148	
Number of ADLs	-840 *	-851 *	-447 *	-449 *	-777 *	-777 *	-322 +	-323 +	
Number of IADLs	-1114 *	-1138 *	-354 +	-376 +	-971 *	-992 *	-274	-286 +	
Recent Health Limitation	-1163 ***	-1086 **	-574 **	-501 *	-849 **	-793 *	-439 *	-392 *	
Professional Homecare	202	-281	-634	-999 *	-150	-514	-693 +	-978 *	
Child's Characteristics									
Female	979	899	37	-22	694	667	8	-12	
Marital Status (Ref. Married or Partnered)									
Separated, Divorced or Widowed	391	498	151	197	340	391	-20	-18	
Never Married	1512	1541	190	161	1334	1265	457	372	
Working Full-Time	1489 **	1290 *	192	68	1037 **	958 *	63	9	
Any Grandchildren	3499 ***	3428 ***	2289 ***	2213 ***	3262 ***	3220 ***	1949 ***	1894 ***	
Dyad Contact (Ref. Co-residing)*									
Daily or Several Times a Week	1299	1487	553	661					
Once a Week to Once a Month	786	1060	-265	-126	-481	-369	-1004 ***	-955 ***	
Rarely or Never	856	1039	247	344	-570	-516	-586	-572	

Table C.1 continued.

Welfare Regime (Ref. Social-Democratic)								
Conservative	2757	***	1548	***	2432	***	1529	***
Traditional	3583	***	2603	***	3070	***	2492	***
Pensions		-26		9		7		3
Healthcare		745 *		493 ***		507 +		339 **
Family Policy		-604 **		-395 ***		-434 *		-319 ***
Education		-304 +		-164 ***		-261 +		-147 **
Social Services Employment		-275		-218 +		-157		-117
Legal Care Obligation		-3181		-2449 *		-1624 +		-916
Gini Index Difference		425 *		206 *		243 +		103
<hr/>								
N	11234		10984		14713		14403	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

The results suggest that the extreme observations indeed have substantively important influence on the relationship between various predictors, including age, and net transfers. Before parents reach age 70, there is no statistically significant correlation of net transfers and age. This is followed by relatively sharp drop in net transfers for the age group 70-79, and continues, albeit at the more moderate pace, for the oldest old. Once the extreme observations are omitted, the magnitude of the estimates decreases for parents 70 and older, and especially 80 and older, resulting in the age – net transfers relationship that broadly resembles the one described by the model with the transformed values of the outcome variables.

As far as other predictors, they mostly follow the same pattern of moderation in the estimated coefficients for the model with the limited sample as opposed to the full sample. Also, the direction of the estimated significant coefficients is the same as in the models with the transformed values of the outcomes, but overall there are more predictors that do not reach any of the conventional statistical significance thresholds including female household headship, widowhood, and making ends meet easily among parents' characteristics, being female or never married among children's characteristics, and either not having or having only rare contacts with parents.

Conservative welfare regime indicator is statistically significant and the coefficient only slightly smaller than for Traditional welfare regimes in the models using the original values of net transfers, while it becomes insignificant once the model is fit to the transformed values of net transfers. While indicators for pension spending and legal obligation to care for frail elderly are not significant, all of the coefficients for the indicators describing the welfare regime characteristics have the expected direction and the magnitudes are broadly consistent across the models. This confirms that family and

education policy, healthcare spending, and the general redistributive impact of taxes and transfers on the level of inequality are among the major elements driving the difference in the likelihood and net transfers between older parents and grown children across different welfare state regimes. The evidence for the importance of the legal framework regulating family-transfer behavior is somewhat more limited, which may in large part reflect the inadequacy of the indicator included in the model, but it suggests that the legal framework may also play an important role in accounting for the substantial difference in transfer behavior across various welfare state regimes.

Table C.2 presents the results of running various tests in order to establish if the regression with higher order polynomials is superior to spline regression and whether the choice of one knot could provide better fit than the current specification with two knots. Results for tests including 3 or more knots and the 5th- or higher-order polynomials were not substantively important to be included in the summary table. The likelihood-ratio tests suggest including up to quartic expression for age predictor is likely justified, and they also unequivocally support the notion that two knots (or three distinct line segments) better describe the relationship between age and the net transfers than a single knot and two line segments. Whether the spline regression with two knots is superior to the multiple regression with the 4th-order polynomial expression for age is somewhat less clear, although the results of the tests as well as more straightforward interpretation of the spline regression provide support for the chosen specification over its alternatives.

Table C.2: Model Specification Tests

Function type	Transfers of Money, Time, and Grandchild Care			Transfers of Money, Time, Grandchild Care, and Co-residence		
	Likelihood-Ratio Tests	AIC	BIC	Likelihood-Ratio Tests	AIC	BIC
Quadratic	13.22***	71867.16	72102.3	18.12***	89009.7	89245.28
Cubic	18.57***	71855.94	72098.43	33.88***	88993.57	89236.75
Quartic		71839.37	72089.22		88961.7	89212.47
One Knot	13.49***	71848.61	72083.75	17.61***	88985.34	89220.92
Two Knots		71837.11	72079.61		88969.74	89212.91
N		11234			14713	

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: SHARE, 2006.

Appendix D: Comparison of SHARE and HRS Questionnaires

Table D.1: SHARE and HRS Transfer-Related Questions

	Health and Retirement Study	Survey of Health, Ageing and Retirement in Europe
<p>Financial Transfers <i>From Parents to Children</i></p>		
<p>Main Question</p>	<p>Including help with education but not shared housing or shared food (or any deed to house) since previous wave/in the last two years, did you or your (late) husband/wife/partner give financial help totaling \$500 or more to children (or grandchildren)? Def.: By financial help we mean giving money, helping pay bills, or covering specific types of costs such as those for medical care or insurance, schooling, down payment for a home, rent, etc. The financial help can be considered support, a gift or a loan.</p>	<p>Now please think of the time since the last interview (or the last twelve months). 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 euros or more? Def: By financial gift we mean giving money, or covering specific types of costs such as those for medical care or insurance, schooling, down payment for a home. Do not include loans or inheritances.</p>
<p>Related Questions</p>	<p><i>To which child (or grandchild) did you or your (late) husband/wife/partner give the largest amount? If grandchild: Which of your children is the parent of that grandchild? Did you or your (late) husband/wife/partner give about the same amount to more than one child (or grandchild)? Which children (or grandchildren)? Since last interview/In the past two years, did you or your (late) husband/wife/partner give financial help totaling \$500 or more to any other child (or grandchild)? About how much did that amount to since previous wave/in the last two years?</i></p>	<p><i>To whom did you or your husband/wife/partner provide such financial assistance or gift? (INSTRUMENT ALLOWS TO GO THROUGH THE "GIVE" LOOP UP TO THREE TIMES)</i></p>

<p><i>From Children to Parents</i></p> <p>Main Question</p> <p>Related Questions</p>	<p>Since previous wave/In the last two years, did you or your (late) husband/wife/partner receive financial help totaling \$500 or more from children (or grandchildren)?</p> <p><i>Which child (or grandchild) gave you or your (late) husband/wife/partner the largest amount? If grandchild: Which of your children is the parent of that grandchild?</i></p> <p><i>Did more than one child give you or your (late) husband/wife/partner about the same amount? Since last interview/In the last two years, did you or your (late) husband/wife/partner receive financial help totaling \$500 or more from any other child (or grandchild)?</i></p> <p><i>About how much did that amount to since previous wave/in the last two years?</i></p>	<p>Please think of the time since the last interview (or the last twelve months). Not counting any shared housing or shared food, have you or your husband/wife/partner received any financial or material gift or support from any person inside or outside this household amounting to 250 euros or more?</p> <p><i>Who has given you or your husband/wife/partner a gift or assistance?</i></p> <p><i>(INSTRUMENT ALLOWS TO GO THROUGH THE "GIVE" LOOP UP TO THREE TIMES)</i></p>
<p><i>Time Transfers From Parents to Children</i></p> <p>Main Question</p>	<p>-</p>	<p>Now I would like to ask you about the help you have given to others. In the time since the last interview/In the last twelve months, have you personally given any kind of help listed on this card to a family member from outside the household, a friend or neighbour? Which family member from outside the household, friend or neighbour have you helped most often?</p>

<i>Related Questions</i>	-	<p><i>Which types of help have you given to this person? 1. personal care, e.g. dressing, bathing or showering, eating, getting in or out of bed, using the toilet; 2. practical household help, e.g. with home repairs, gardening, transportation, shopping, household chores; 3. help with paperwork, such as filling out forms, settling financial or legal matters</i></p> <p><i>In the time since the last interview/the last twelve months, how often altogether have you given such help to this person?</i></p> <p><i>About how many hours altogether did you give such help on a typical day/in a typical week/in a typical month/in the last twelve months?</i></p>
<i>Main Question</i>	-	<p><i>Let us now talk about help within your household. Is there someone living in this household whom you have helped regularly during the time since the last interview/the last twelve months with personal care, such as washing, getting out of bed, or dressing? Who is that?</i></p>
<i>Related Questions</i>	-	-
<i>Grandchild care</i>		
<i>Main Question</i>	<p>Did you or your (late) husband/wife/partner spend 100 or more hours in total since previous wave/in the last two years taking care of grandchildren (or great-grandchildren)?</p>	<p>During the time since the last interview/the last twelve months, have you regularly or occasionally looked after your grandchildren without the presence of the parents?</p>
<i>Related Questions</i>	<p><i>Which of your children is the parent of those grandchildren (or great-grandchildren)? Roughly how many hours altogether did you spend {looking after grandchildren}?</i></p>	<p><i>From which of your children are the grandchildren you have looked after?</i></p> <p><i>On average, how often did you look after the child(ren) in the time since the last interview/the last twelve months?</i></p> <p><i>About how many hours did you look after the child(ren) on a typical day/in a typical week/in a typical month/in the last twelve months?</i></p>

<p><i>From Children to Parents</i></p> <p>Main Question</p>	<p>From RAND file: A child (or child-in-law or grandchild) helps with the respondent's ADLs (dressing, walking, bathing, eating, getting in/out of bed, toileting), IADLs (meal preparation, grocery shopping, making phone calls, taking medication), managing money, or doing household chores, errands and transportation. [Series of individual questions in the original HRS questionnaire.]</p>	<p>Thinking about the time since the last interview/the last twelve months, has any family member from outside the household, any friend or neighbour given you or your husband/wife/partner any kind of help listed on this card? Which family member from outside the household, friend or neighbour has helped you or your husband/wife/partner most often in the time since the last interview/the last twelve months?</p>
<p>Related Questions</p>	<p><i>From RAND file: Number of days children help respondent last month. Total hours children help respondent last month.</i> [Series of individual questions in the original HRS questionnaire.]</p>	<p><i>Which types of help has this person provided in the time since the last interview/the last twelve months? 1. personal care, e.g. dressing, bathing or showering, eating, getting in or out of bed, using the toilet; 2. practical household help, e.g. with home repairs, gardening, transportation, shopping, household chores; 3. help with paperwork, such as filling out forms, settling financial or legal matters.</i> <i>In the time since the last interview/In the last twelve months, how often altogether have you or your husband/wife/partner received such help from this person?</i> <i>About how many hours did you or your husband/wife/partner receive such help altogether on a typical day/in a typical week/in a typical month/in the last twelve months from this person?</i></p>
<p>Main Question</p>	<p>-</p>	<p>Is there someone living in this household who has helped you regularly during the time since the last interview/the last twelve months with personal care, such as washing, getting out of bed, or dressing? Who is that?</p>
<p>Co-residence</p> <p>Main Question</p>	<p>From RAND file: Whether a child is co-resident with the respondent.</p>	<p>Where does child live?</p>

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