Health, Ageing and Retirement in Europe

First Results from the Survey of Health, Ageing and Retirement in Europe

April 2005

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1 Introduction

By Axel Börsch-Supan

This book is about the lives of Europeans aged 50 and over. It paints a picture of their health, their families and social networks, their economic situation and their happiness. It shows the large variation of life circumstances in each country, and it reveals striking differences as well as similarities across the European countries.

Two observations form the background for this book. First, Europe has an enormous wealth in its diversity of cultures, histories and policy approaches. More than any other continent, Europe is blessed with large cultural, historical and political differences even within small distances. Comparing countries and regions to simply observe how these differences have shaped the behaviour of the European citizens is a fascinating task; understanding the mechanisms through which culture, history and public policy affects all of us, is even more fascinating.

Second, Europe is ageing. "Old Europe", as an outside observer has put it, is the continent already with the highest proportion of elderly citizens, and the population ageing process will continue for the better part of this century. Understanding how the ageing process will affect us all, and how it affects the people in the European countries differently, because their culture, their historically grown societal structures and their public policy approaches differ, is an important task for researchers in economics, social sciences and public health in order to turn the challenges of population ageing in Europe into chances for Europe.

Understanding ageing and how it affects individuals in the diverse cultural settings of Europe is the main task of SHARE, the Survey of Health, Ageing and Retirement in Europe. SHARE has already collected data on the individual life circumstances of about 22,000 persons aged 50 and over in 11 European countries, ranging from Scandinavia to the Mediterranean and data collection is still going on. SHARE has made great efforts to deliver truly comparable data, so we can reliably study how differences in cultures, living conditions and policy approaches shape the quality of life of Europeans just before and after retirement. This book presents the first results from SHARE. It is a first step to better understand where we are, where we are heading to, and how we can influence the quality of life as we age – both as individuals and as societies.

Ageing affects all of us, both as individuals and as societies. Section 1 introduces what we can learn from SHARE about population ageing, while Section 2 shows the interaction among health, economic and sociological issues in individual ageing. Section 3 describes the development process of the SHARE data and presents the current data, its richness and its limitations. Section 4 provides a summary of our first results. This introduction ends with an outlook where SHARE wants to go, and a big Thank You to all our sponsors and helpers.

1.1 Population Ageing in Europe

Ageing is one of the greatest social and economic challenges of the 21st century for the European societies. Of the world regions, Europe has the highest proportion of population aged 65 or over; only Japan has a similar age structure. This already high proportion of older individuals will increase to a level, which is historically unprecedented. Currently, about 16 percent of the EU15 population are aged 65 or over. According to the baseline projection of Eurostat, this percentage will almost double to more than 28 percent in the year 2050. This increase will place a heavy financial burden on society through pay-as-you-go financed pension, health and long-term care systems.

The international scope of SHARE helps enormously to understand how to cope with

this challenge because we mainly learn from differences. And the SHARE countries do not only differ in their policies and cultures, but very basically already in their demographics. Although all European countries age, they differ in the speed at which this is happening and in where they are today. Figure 1 depicts the variety of population ageing processes:

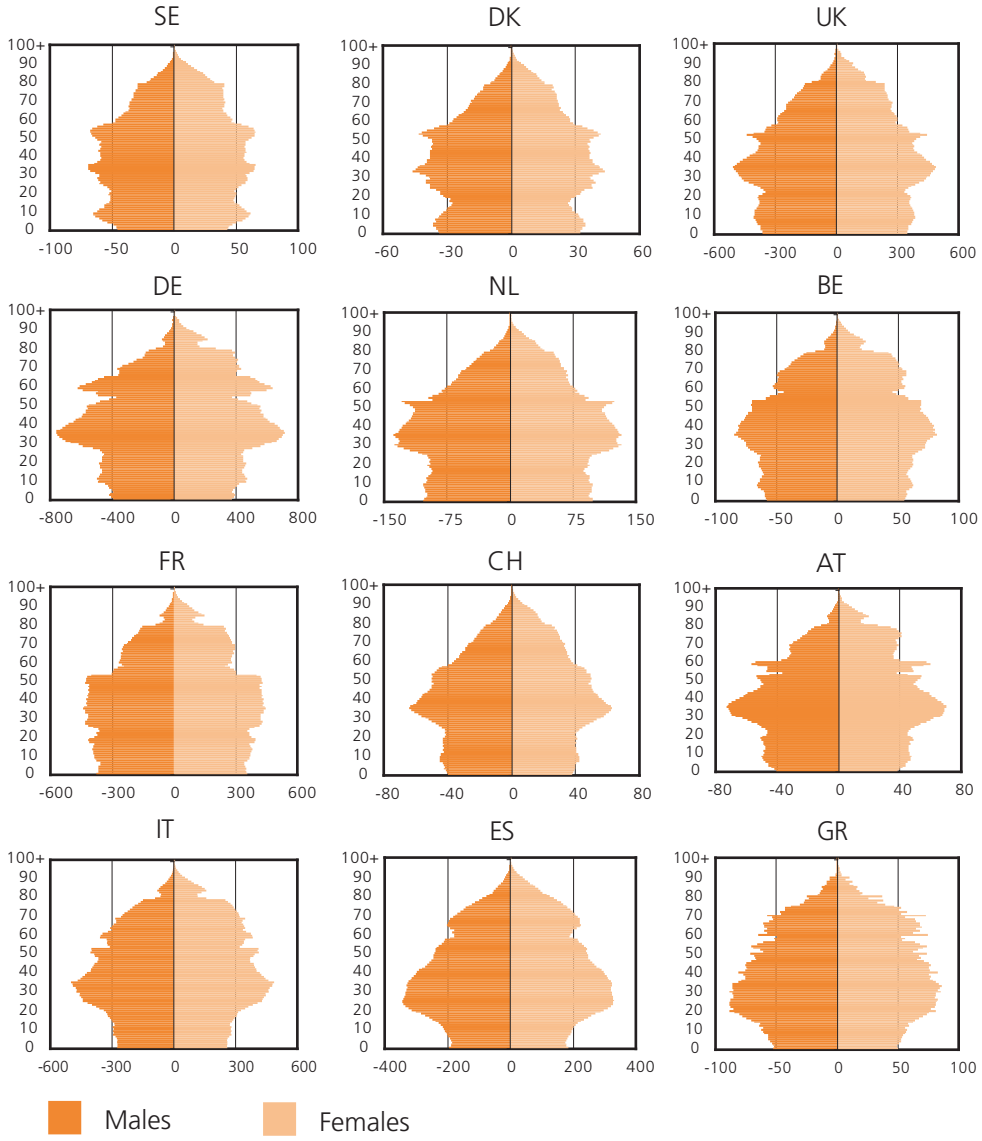

Figure 1 Population pyramids in the SHARE countries, 2000

Source: Eurostat: Population by sex and age on 1st January of each year

None of these are really population pyramids, but the difference between, say, France and Sweden on the one hand, and Germany and Italy on the other hand is striking. While France and Sweden have no "dent" in their base due to still high fertility, the young generation in Germany and Italy is only about half the size as the largest baby boom cohort. Spain and Greece follow Italy, but with a delay of about 5 and 10 years, respectively. Germany reveals particularly deep scars from two wars and a depression; they are much less pronounced in Switzerland.

Not only the status quo but also the changes are different. As Figure 2 shows, the European population structure mutates from a diamond shape in 2000 to an urn shape in

the year 2050. In fact, this urn shape will be characteristic of all European countries. There are striking differences, however, in Eurostat's population projections. In France, depicted in the middle of Figure 2, the base of newly born children in 2050 will be almost as broad as the large cohort of 50-year-olds, while Italy, due to its low birth rates, features an ever-decreasing cohort size.

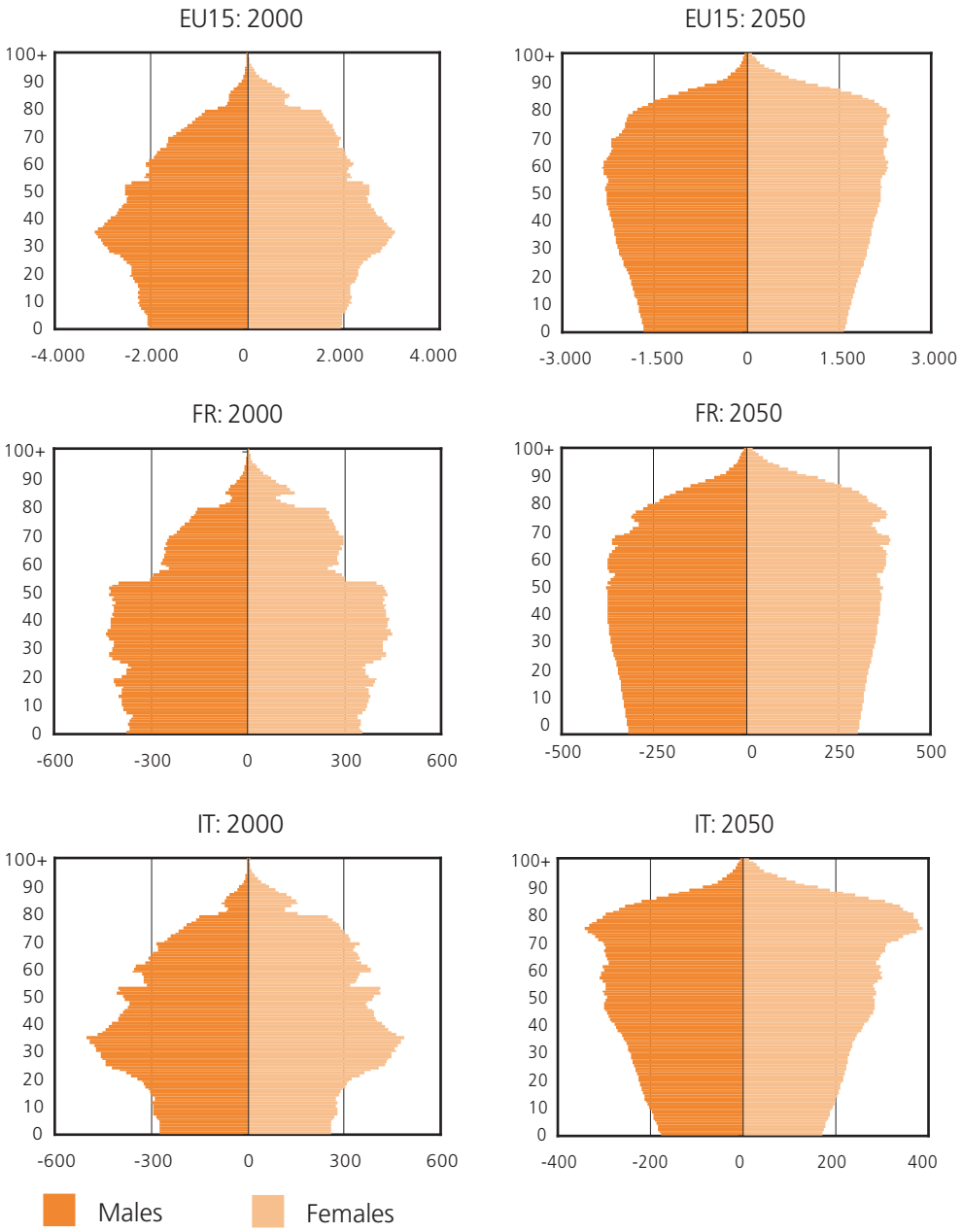

Figure 2 Population Ageing in the EU, France and Italy, 2000-2050

Source: Eurostat: Population by sex and age on 1st January of each year. Population projections – baseline scenario (Eurostat projections 1995, revision 1999)

As is well-known, two developments cause this ageing process: low fertility and a secularly increasing life expectancy. The Mediterranean countries and Germany have very low fertility, while France, the UK, Belgium, the Netherlands and the Scandinavian SHARE countries feature relatively high birth rates, see Figure 3.

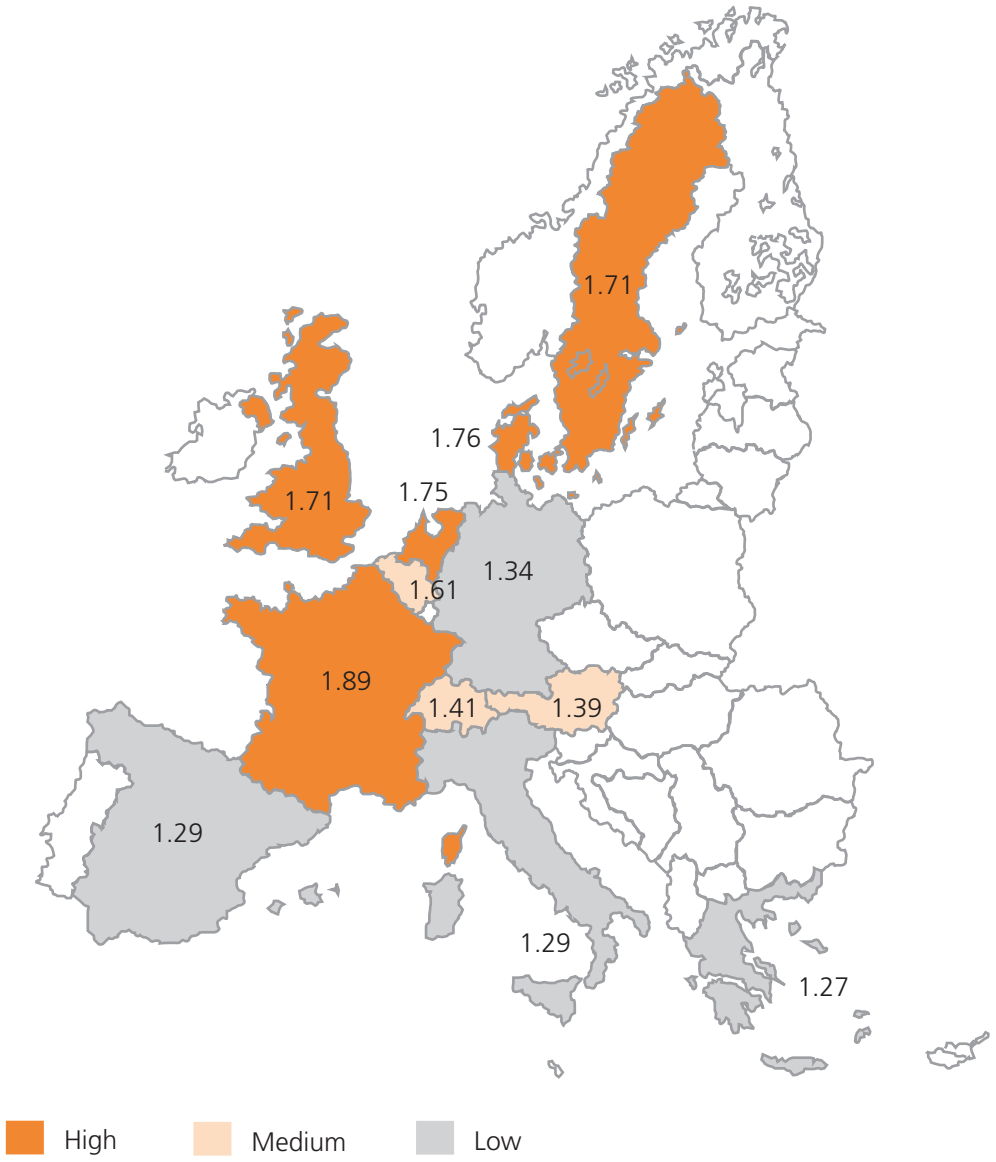

Figure 3 *Total fertility rates, 2003*

Source: Eurostat. Note: The total fertility rate indicates the number of births in a woman's life.

Differences in life expectancy are equally dramatic. A Swiss new born girl is expected to live almost four years longer than her Danish counterpart, and this difference is almost as large between Denmark and its neighbour Sweden, see Figure 4. We need to understand what is hidden behind these striking differences (genetics, life styles, or health care provision?) in order to better understand human ageing. The SHARE data will contribute to this understanding.

The force of population ageing, i.e. the combination of few births and long lives, is best expressed as the demographic old age dependency ratio, see Figure 5.

It relates the number of elderly, here somewhat arbitrarily defined as aged 60 and over, to persons of working age, defined as ages between 20 and 59, both following a widespread convention. Italy has the highest old age dependency, while Spain faces the steepest increase. Denmark will need another 15 years to reach the extent of population ageing Italy already has. Learning from this variety, and being able to anticipate what will happen in one country by looking at another country is an important task for SHARE.

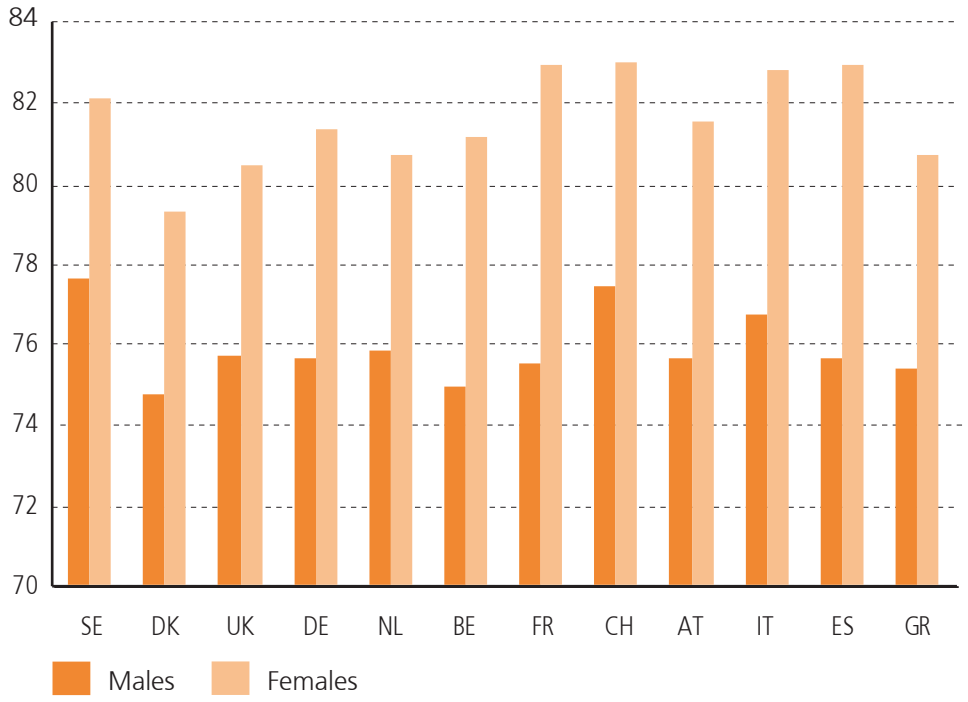

Figure 4 Life expectancy at birth, 2001

Source: OECD Health Data 2004 3rd edition

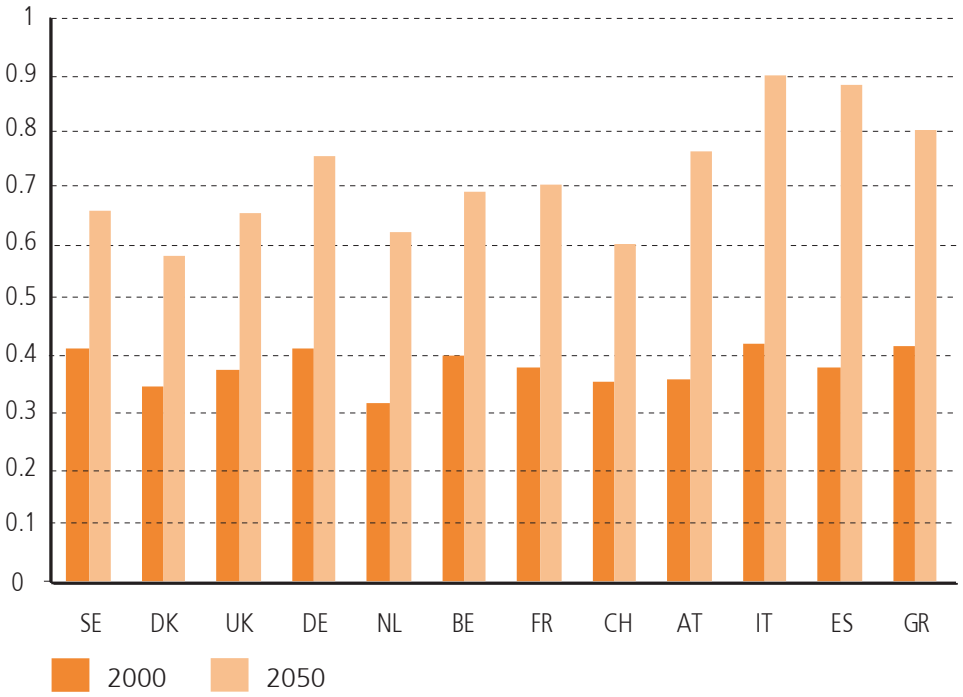

Figure 5 Old age dependency ratio, 2000 and 2050 (population 60 and over to population 20 to 59 years)

Source: Eurostat, see figure 3

The dependency ratio has received so much attention because it almost immediately translates into the tax and contribution burden of social expenditures related to ageing, such as pensions, health and long-term care. The "almost", however, is an important qualification. Demography is not everything. In fact, labour force participation is an important mediating factor between demographics and the social expenditure burden. Moreover,

there is an enormous variation in the design of the pension, health and long-term care systems within Europe. SHARE lets us study how these different systems affect health conditions, economic circumstances and the working of family and social networks in Europe.

A key variable is employment because employed persons pay the bulk of taxes and contributions. Employment rates vary a great deal in Europe and among the SHARE countries. Differences are most significant for old-age employment, defined for individuals between age 55 and 64, see Figure 6:

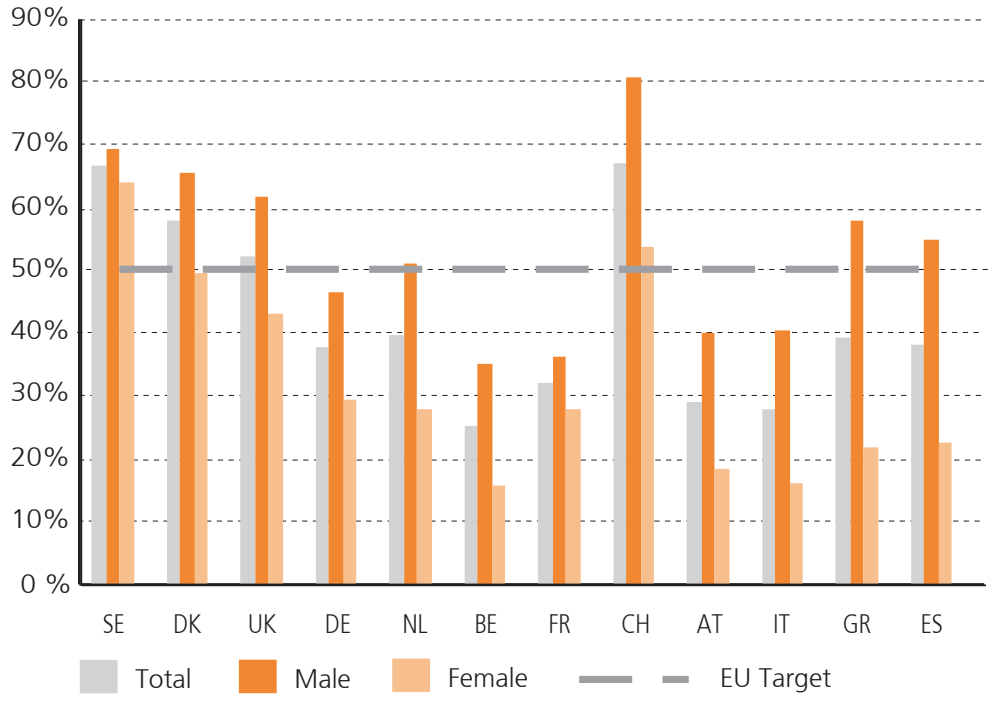

Figure 6 Employment rates of workers aged 55-64, 2001, and the employment targets according to the Lisbon and Stockholm summits

Source: Eurostat, EU Labor Force Survey

Figure 6 also shows that only Sweden, Denmark and the UK – and the non-EU country Switzerland – exceed the employment targets according to the Lisbon and Stockholm summits. Belgium, France, Austria and Italy are far below those targets. Understanding these differences is not straightforward. An obvious candidate explanation is the retirement age generated by the pension system. As Figure 7 shows, this is not the full explanation. While Sweden, Denmark and the UK have indeed the latest average exit age from the labour force and Belgium the lowest, Figures 6 and 7 do not exhibit a close proportionality. Understanding the labour force participation of older workers and the pathways to retirement is another important task to be supported by the SHARE data. It is ideally suited for such research because SHARE is the first data set that provides truly comparable international micro data on labour force participation together with key explanatory factors such as health and work place conditions.

The generosity of public pension systems is the third component – in addition to demographics and old-age labour force participation – explaining public pension expenditures. Figure 8 shows their large variation across Europe.

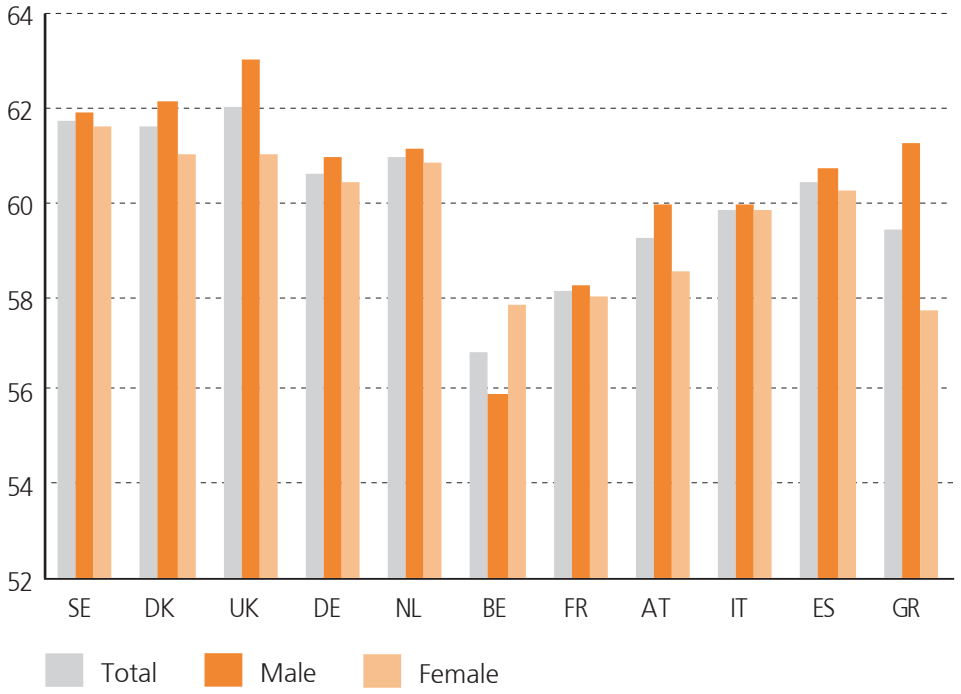

Figure 7 Average exit age from labour force, 2001

Source: Eurostat, EU Labor Force Survey

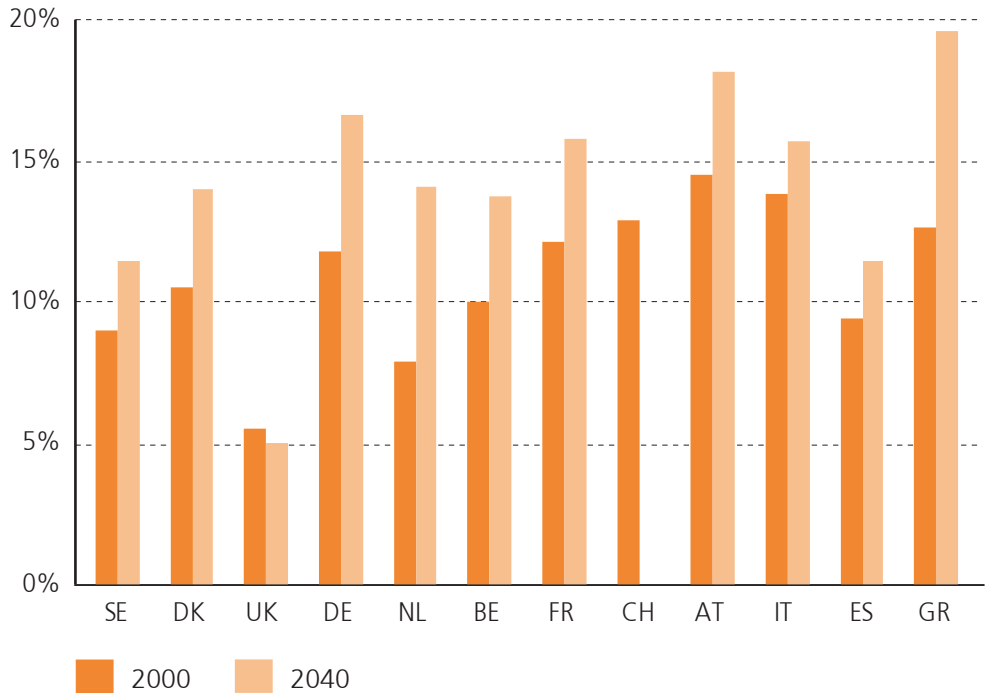

Figure 8 Public pension expenditures as percentage of GDP, 2000 and 2040

Source: Economic Policy Committee/ECFIN/655/01-EN final. CH: Eurostat: ESSPROS

Current public pension expenditure ranges from about 5 percent of gross domestic product (GDP) in the UK to almost 15 percent in Austria. The variation in projected future pension expenditures is equally dramatic: the UK features long-run declining public pension expenditures, while Eurostat projects Greece to spend almost 20 percent of GDP solely for public pensions.

One should not forget, however, that public pension systems are also an important social achievement. In most EU-countries, poverty rates among the elderly are relatively low, see Figure 9, in many countries substantially lower than among families with children. In general, Europe can be proud to have poverty rates among the elderly substantially below the rate in the United States. Disturbing, however, are countries, which have high public pension expenditures and nevertheless high poverty rates, such as Belgium and Greece. SHARE provides the data to understand who those poor elderly are, and which implications old-age poverty has for their health and well-being conditions.

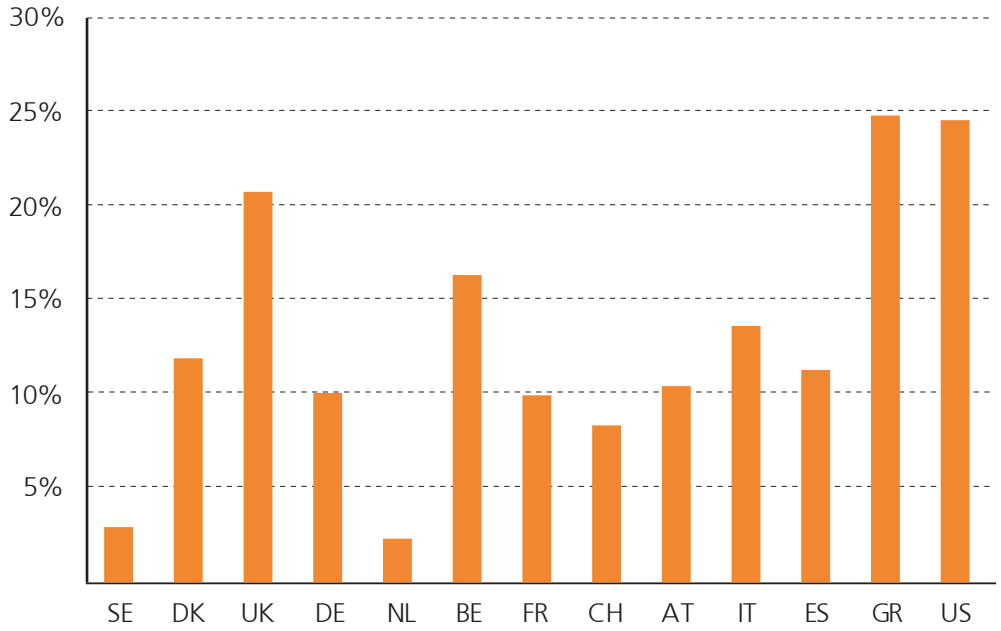

Figure 9 Poverty rates among people aged 65 and over, 2000 (percentage with household net income below 50% of median income)

Source: Luxembourg Income Study

Measuring health along with economic and social circumstances is one of the big strengths of SHARE. In addition to several health measures, SHARE also carries information on health care utilisation and the quality of health care provided to the SHARE respondents. Once more, the international scope of SHARE is helpful because it uncovers large differences across the European countries involved in SHARE.

Let us take the grand picture first. Figure 10 displays public and private health expenditures per capita. They range from about 1,200 Euro in Greece and Spain to almost 3,000 Euro in Denmark and exceed 4,000 Euro in Switzerland.

A crucial question is whether these different expenditure shares are reflected in better or worse health care. At least at first sight, however, it is not clear that what you pay is also what you get. Figure 11 takes a very rough measure for the output of health care, namely life expectancy (from Figure 4), arguably the ultimate goal of a health care system. Figure 11 shows virtually no correlation between the health expenditure share with life expectancy.

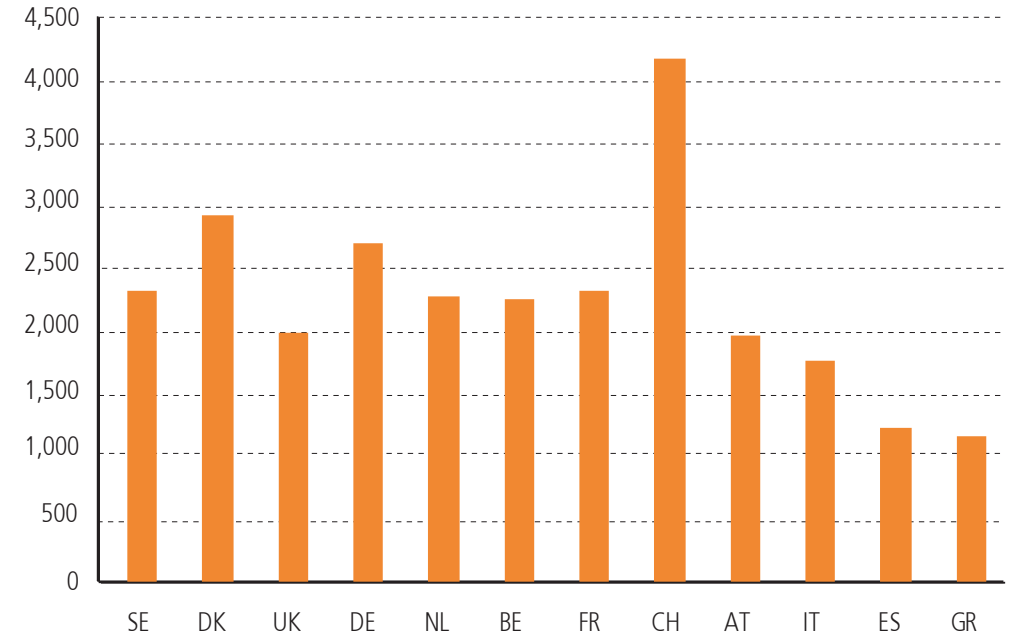

Figure 10 Health expenditures per capita, in Euro p.a., 2001

Source: OECD Health Data 2004, 3rd edition

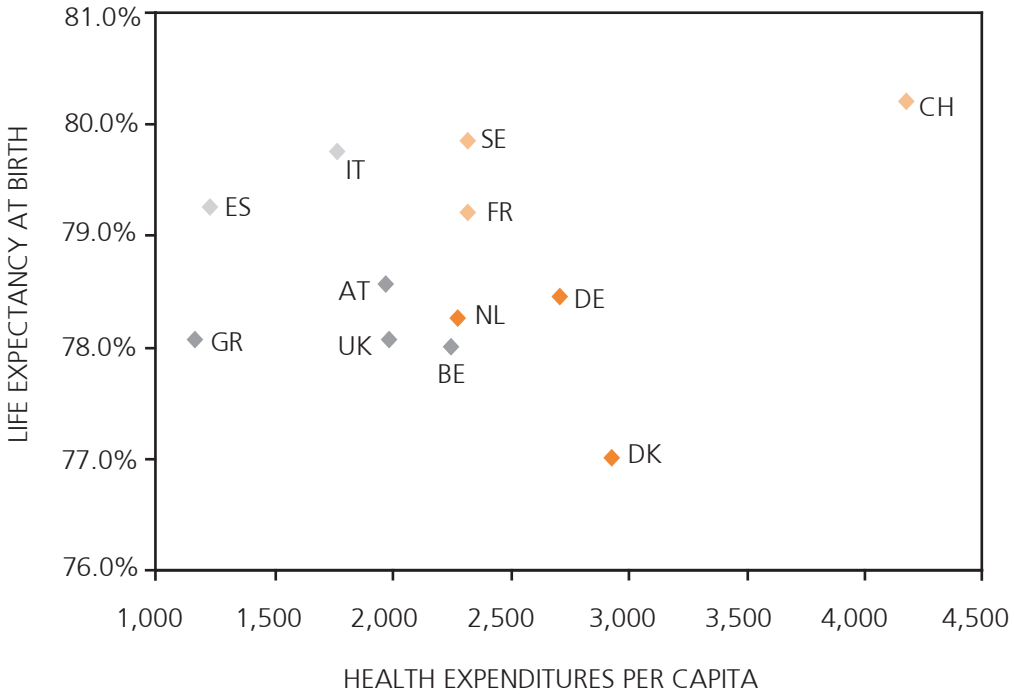

Figure 11 Health care expenditures and life expectancy

Source: OECD Health Data 2004, 3rd edition

One can categorise the SHARE countries and the UK into four broad categories, see Figure 12: countries in which the health expenditure share is roughly in line with life expectancy – either countries with high health care expenditures and good results in terms of life expectancy, such as France, Sweden and Switzerland, or countries with low expenditures and low life expenditures, most prominently the UK, but also Greece, Austria and Belgium. There are also countries which manage to have well above average life expectancy

but spend a smaller share of GDP on health care, such as Italy and Spain. Most disturbing, however, are the countries in which life expectancy is low, but health care expenditures are nevertheless above average: the Netherlands, Germany and Denmark:

Figure 12 Health expenditures and life expectancy

Source: OECD Health Data 2004, 3rd edition

Pension and health care reform are high on the agenda of policy makers. There is much talk about cost cutting measures, thus reducing public services. We will make substantial progress on these social systems, however, only if we understand the mechanisms which relate costs and services provided. As the bird's eye pictures in this introductory section have shown, these relationships are not at all straightforward.

1.2 Individual Ageing: Health, Economics and Social Networks

Ageing affects all of us. As the European populations are ageing, we will age with them. SHARE sheds much light on the individual circumstances of ageing. We are concerned about declining health and deteriorating productivity and worry about how life will look like after retirement. Ageing is an emotional topic because it affects us so deeply. After a period of stability for most individuals during midlife, retirement and old-age are new phases of life with renewed uncertainty. Part of this uncertainty stems from the great variety of individual ageing processes. Some age much earlier than others, some stay healthy and alert until long, others face serious illnesses. The variation of individual circumstances increases dramatically with age. Added uncertainty also comes from the fact that ageing itself changes. The striking increase in life expectancy reflects that a 70-year-old today is not the same as a 70-year-old 50 years ago when life expectancy was about 10 years lower. Rather, this 70-year-old person today is more like a 60-year-old person two generations ago.

Ageing affects all domains of an individual's life. Retirement changes the economic circumstances and how time is spent. Health and health care becomes an increasing concern. The individual's role in the family changes as support given and received intensifies. These domains are strongly linked. This is the reason why SHARE is a multidisciplinary enterprise with a strong emphasis on looking always from at least three angles: economics, health, and social networks, most importantly the family. Figure 13 symbolises SHARE's holistic approach:

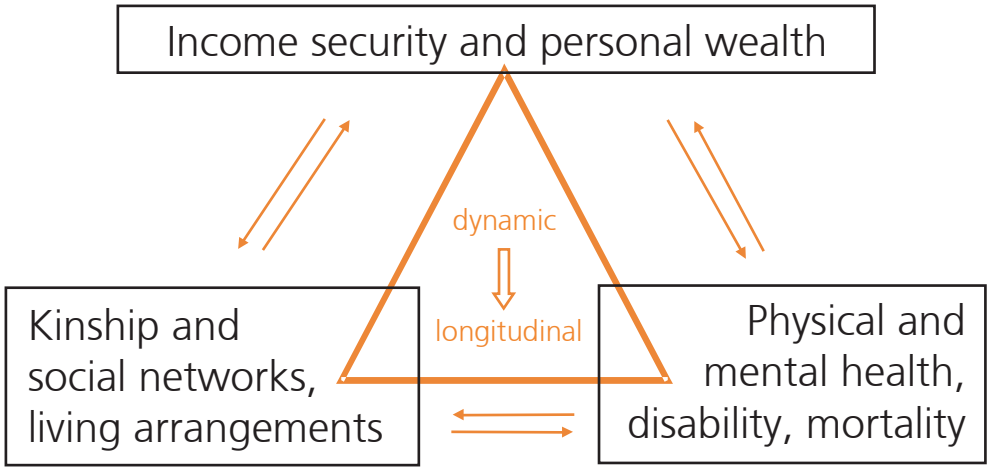

Figure 13 Economic, health, and social factors in the well-being of the elderly

Three examples may underline this point. Economic status expressed by income and wealth is strongly correlated with health and well-being of the elderly. For example, there is much evidence that wealthier persons live longer than poorer persons. The direction of causality, however, is not well understood. Wealthier people may be able to afford more health care and thus remain longer healthy, once older. On the other hand, less healthy people may have been hampered in their earnings ability and career chances, ending up as less wealthy elderly. Without an understanding of this causality we will not understand whether we should allocate scarce tax euros to improved health care for the less healthy or to more generous income support for the less wealthy.

Another bi-directional link is between health and family/social networks. A "healthy" social environment keeps elderly longer physically and mentally fit. In turn, health events such as a stroke often precipitate a change in living arrangements such as a move to children or into a nursing home. Again, understanding the linkages is important in times of population ageing when the supply of family help, namely the number of children per elderly, will decline, causing the demand for state-provided help to increase.

Yet income security and the social environment are also linked, providing the third link in the triangle of Figure 13. On the one hand, a well working social network is a resource also in an economic sense, providing money and in-kind support for the less well-to-do elderly. In turn, income and wealth position are strong determinants of where the elderly will live. Poverty often comes with social exclusion, doubly worsening the quality of life. These linkages are strongly affected by public policy such as income maintenance programs, old-age and disability pensions as well as housing policies.

SHARE is designed to shed light on all three corners of the triangle as well as the bi-directional linkages among them. SHARE is a truly multidisciplinary study, which was created to foster cross-fertilisation across disciplines which have historically ignored each other. In addition to its cross-national breadth, SHARE's fascination also stems from the richness of the picture that SHARE paints in three equally important domains of everyday life: economic circumstances, health and well-being conditions, and the integration into family and social networks.

SHARE is a complex study for another reason: the data reflects three rather distinct phases of life. While there is no unambiguous and clear-cut border between these phases, they are easy to describe:

- Phase 1 is the time before retirement. Most of these respondents are married; many have their children still at home; often both parents are working. These respondents do not particularly like to be associated with research on the elderly and they are busy, not easily interviewed. About a third of our respondents are in this phase. Labour force participation is an important aspect of their lives, and SHARE spends a lot of effort to understand it.

- Phase 2 is the time after retirement. Most of these respondents are still married; it is an active and mostly healthy time with some travelling, especially for the well-to-do. These respondents have time and are the most easily interviewed in our sample. Savings and consumption pattern change with the transition to retirement. SHARE tries to document these changes, and the changes in social and family life which go along with them.

- Our oldest old live in Phase 3. Diversity is largest, in particular concerning health and how respondents cope with old age and frail health. Interviews often take a long time, but most often, these respondents are alone and, once confidence is ascertained, like to talk about their lives. About a tenth of our respondents are in this phase. SHARE supplies a broad set of health and well-being measures to help researchers understand the needs of the oldest old.

These distinct phases were taken into account when we designed the SHARE questionnaire. This required a complex routing scheme. It is also important to keep these three distinct phases in mind when interpreting the SHARE data.

1.3 How SHARE Was Created

The vision of SHARE rests on the combination of three features which make SHARE innovative and unique in the world: a longitudinal survey with genuine multidisciplinarity and a truly cross-national design. We have stressed the multidisciplinary nature in the previous section and the power of cross-national comparisons in Section 1.1. We will come back to the need for a longitudinal survey design further below.

The combination of these three design features is a scientific challenge. We have employed state-of-the-art technology. For example, to meet all country specific institutional and linguistic requirements in a single common design, the SHARE team has developed together with CentERdata a set of innovative software instruments such as translation and survey management tools.

The innovations of SHARE rest on many shoulders. The combination of an interdisciplinary focus and a longitudinal approach has made the English Longitudinal Survey on Ageing (ELSA) and the US Health and Retirement Study (HRS) our main role models. Without the pioneering work of HRS and ELSA, SHARE could not have been created in such a short time. Co-operation among SHARE, HRS and ELSA is close and ongoing, and an important design consideration for SHARE was to carry a large set of data strictly comparable to HRS and ELSA such that cross-national comparisons can be extended from Continental Europe to the Anglo-Saxon countries.

We have learned from national ageing studies such as the German "Alterssurvey" and the Italian Longitudinal Survey on Ageing. We also have learned from the cross-national data sets on single issues, notably the European Community Household Panel (ECHP), its successor, the Survey of Income and Living Conditions (SILC), the European Social Survey (ESS), and the various health surveys collected by the WHO.

SHARE began the design phase in January 2001. A first English-language questionnaire was finished in spring 2001 and piloted in the UK with support from the National Centre of Survey Research in London. The questionnaire was then improved and translated to all SHARE member languages, including language variations such as Belgian Dutch and Swiss French. The survey was pre-tested on a large scale in all countries during June 2003. This dress rehearsal completed the design phase, and the first wave of data was collected between April and October 2004. Supplementary data collection is still going on.

SHARE has an open access policy for its data. We strive to release the data as early as possible to the interested research community, even before it has undergone extensive checking which easily takes more than another year. This first data release will be available to all researchers free of charge in about April 2005, together with a web-based user support system.

The articles in this book are based on an earlier and incomplete release of the SHARE data, created in November 2004, see Chapter 7. The French data are only partial, and the November release did not contain Belgian data. While we have done a host of cross-checks, an extensive consistency and plausibility check of all data with a subsequent imputation process is work still to be done. All results in this book are therefore preliminary.

Chapter 7 in this book briefly describes the main methodological features of SHARE. Further details are provided in a separate technical reports volume which will be published

in the first half of 2005. Some important points are worth mentioning right at the outset: All descriptive results in this book are based on weighted data; no weights have been used in the regression analyses. The weights are calibrated to precisely reflect each country's age and gender proportions. While response rates are high and very similar across the entire age range, the data does not include the institutionalised population, except for Denmark and Sweden. Future waves of SHARE will document the transitions into institutions such as nursing homes and assisted living.

1.4 The Main Messages of SHARE

The analyses in this book provide a wealth of insights about individual and population ageing. Some results have been shown in one country or another; SHARE is able to draw an internally consistent picture throughout Europe. Some results are known to specialists; SHARE puts them into a broader context and links them to facts from other disciplines. What follows is a selection of highlights that will be spelled out in more detail in the contributions to this book. It is meant to provide a taste for the SHARE data, and to encourage researchers to download the data and continue the analyses. Most results are descriptive. The true power of SHARE will unfold when multivariate analyses will follow which take advantage of the unprecedented richness of the SHARE data in several dimensions at the same time.

On data quality:

- First and foremost: SHARE represents the population of individuals aged 50 and over in Europe well; the results in this book rest on reliable data. Comparisons with three prominent other European surveys, the quarterly European Union Labour Force Survey (EU-LFS), the European Community Household Panel (ECHP) and the European Social Survey (ESS) show that the SHARE data produces very similar distributions of key concepts such as employment, income, education and health.

On physical and mental health:

- There is a clear North-South gradient in various health measures (both subjective self-assessed and physical measures) and income: the elderly in the North are better off financially and are in better health. However, this does not translate into corresponding mortality differences.

- Within countries there is a strong relation between health (and health behaviour) and socio-economic status. For instance, individuals with a low education are 70% more likely to be physically inactive, and 50% more likely to be obese than individuals with a higher education.

- Prevalence of current depression rises with age in most SHARE countries and is higher among women than among men. Particularly the southern European countries show a large gender gap with huge depression prevalence rates among elderly women. Both past and current depression are significantly larger among unmarried respondents than among married respondents.

- There is a clear negative association between depression and income or wealth in the northern countries, but such an association is completely absent in the south of Europe.

- Cognitive ability is strongly associated with education – the higher educated are more cognitively able than the lower educated. Cross-country differences between cognitive impairment rates seem quite well in line with cross-country differences in education level. The cross-national evidence suggests strong long-run effects of investing into education.

On health care services:

- Differences in out-of-pocket medical expenditures illustrate the cross-country differences in health care systems, complementing what we have seen in Figures 10-12. In Germany, Sweden, Denmark and Greece, more than 80% of SHARE households had at least some out-of-pocket expenditure in the past 12 months. In France, Spain, and the Netherlands, the percentage is less than 45%.

- There is a strong relationship between the level of education and several, but not all, indicators of health services utilisation in Europe. It is crucial to investigate the effect of education on utilisation in the light of other factors that may act as confounding.

- SHARE is the first survey that includes indicators of quality of care to older persons collected with the same questionnaire all across the general population of European countries. Most quality of care indicators suggest that there is room for improvements in European quality of care. E.g., too few general practitioners (in their role as case managers) periodically ask about drugs. From a preventive perspective, there is a lack of geriatric assessments and screening tests.

On well-being:

- Health is not the only aspect of happiness. SHARE also employs an innovative measurement of "well-being". All countries reveal a positive relation between well-being and education level and between well-being and income, confounding the already complex relationship between health and socio-economic status.

On labour force participation:

- Institutional differences in welfare systems clearly affect the distribution and the age pattern of labour market participation and retirement. Countries where early retirement is allowed and/or is generous see a high prevalence of early retirees (typically southern countries, but also Austria and France).

- There is potentially huge unused labour capacity in countries such as Austria, Italy and France where "healthy" individuals are not in the labour force.

- Quality of employment during the pre-retirement years (low control at work, mismatch between high effort and low reward) varies considerably across European countries, with a clear North-South gradient. Quality of employment is strongly associated with well-being: lower quality of employment goes along with higher prevalence of poor self-rated health and depression.

- Retirement ages and exit routes into retirement vary a great deal across countries. For example, the prevalence of disability insurance in the early retirement window varies from about 16% in Denmark to about 3% in Greece. There are no discernible cross-country differences in demographic composition or health status which can explain this large variation.

- Work for pay is not everything: 10% of the age group 65-74 does volunteer work, and in the Netherlands this is even more than 25%. In Spain and Greece less than 4% report to do volunteer work in all age groups. Across all SHARE countries, there is a remarkable consistency in the association of a broad range of individual characteristics, such as health and well-being, with volunteering.

On family and social networks:

- For present elderly Europeans the family has remained a strong provider of institutional and everyday integration. The historical decline of marriage has not yet reached them directly. The multi-generational structure of the family remains remarkably stable. Geographical proximity – and thus the potential for everyday support – is still high.

- There is a pronounced North-South gradient with respect to rates of co-residence and frequency of contact among adult family generations. Few women aged between 50 and 65 in 2004 in the southern countries are in paid employment, so they are currently available to undertake family tasks.

- The amount of hours spent helping others or looking after grandchildren is substantial. To the extent that these services must be bought in the marketplace if they were not provided by the respondents, the economic value of family help is of a sizeable magnitude.

- Intergenerational transfers are a major source of household wealth. Across all countries, about 30 percent of all households have ever received a large gift or inheritance larger than €5,000. The distribution of inheritances is very unequal. In terms of amounts inherited, the top 5% of households have received about two thirds of all inheritances.

- Intergenerational transfers exhibit a strong North-South gradient: younger respondents in the North receive more from parents, while older respondents in the South are more frequently recipients from their children.

On socio-economic status:

- International differences in income appear less strong when the rental value of owner-occupied housing, differences in purchasing power, and differences in taxation are brought into the picture.

- Financial poverty is still serious in some countries. It is, however, often alleviated by non-financial resources. For instance, imputed rent has a considerable influence in limiting poverty, especially in the South. Likewise, living close to one's children, in the same household or the same building, remains a very important mechanism of social solidarity with an important poverty alleviation role, not only in the South but also in Germany.

- Due to housing wealth, total net worth varies much less than total financial wealth across Europe. A high percentage of households hold virtually no financial assets. Asset ownership exhibits considerable variability across countries, as bonds, stocks and mutual funds are much more popular in Nordic than in Mediterranean countries. Exposure to financial risk is higher in Sweden and Switzerland, and comparatively low in southern Europe.

- The SHARE data on consumption, the first of its kind, has revealed surprising and puzzling differences across countries. The level of food consumption is much lower in the northern countries (Sweden and Denmark) than elsewhere. This is the opposite of what we would expect since incomes in the northern countries are higher than in the southern countries. Only some of the observed cross-country differences can be explained by the relative price of food.

- In all countries wealth inequality is higher than income inequality, and income inequality is higher than consumption inequality. Huge differences appear between the more egalitarian northern countries and the rest of European countries participating in SHARE.

1.5 Where Do We Go from Here?

These first and mostly descriptive results show the unprecedented richness of the SHARE data in three equally important domains of everyday life: economic circumstances, health and well-being conditions, and the integration into family and social networks. We now encourage researchers to download the data and continue with multivariate and behavioural analyses, since SHARE is meant to be an infrastructure for all researchers in public health, economics and the social sciences.

The European Commission has identified population ageing and its social and economic challenges to growth and prosperity to be among the most pressing challenges of the 21st century in Europe. Responding to the March 2000 Special European Council in Lisbon, a Communication by the European Commission to the Council and the European Parliament calls to "examine the possibility of establishing, in co-operation with Member States, a European Longitudinal Ageing Survey." The SHARE data collected in the autumn of 2004 and presented in this book are the baseline for such a longitudinal survey.

From its beginning SHARE is designed to be a longitudinal survey. While the results presented in this book are fascinating due to their cross-national and multi-disciplinary character, a deeper understanding of ageing is only possible when we observe individuals as they age over time, adapting to changed health, economic and family circumstances.

The time dimension is essential because it allows new insights in several respects. First, ageing is a process, and not a state. Processes need to be observed over time. Observing two individuals of different age at the same time is no substitute for observation the same person at two ages, since the two persons have been born in different years and thus have experienced other times.

Second, the time dimension provides a crucial handle to detect causality which is not possible in a single wave of data. Causality is easiest detected if one can establish that an event happened after the cause. In a single wave, however, a sequence of events is impossible to detect.

Third, the European Union is undergoing rapid institutional change. Some countries have enacted dramatic pension reforms. All countries are working on health care reform. A host of incremental labour market reforms is going on. Data with time dimension let researchers observe the reaction to those changes, e.g. the choice of a later retirement age or higher old-age savings in response to pension reform, different health service utilisation and corresponding health status changes in response to health care reform, and possibly higher labour force participation in response to labour market reforms. With longitudinal data, Europe with its huge policy diversity represents a "natural laboratory" in which we can learn a great deal about the effects of public policy on the behaviour and the well-being of its citizens.

The most important next step is therefore to design a follow-up to the current baseline data, and start creating the European Longitudinal Ageing Survey that the European Council in Lisbon has been asking for.

SHARE represents much of Europe, but it does not include new EU members and the UK. SHARE plans to collect data from new accession countries in the next wave. Moreover, we will keep in close co-operation with the English Longitudinal Study on Ageing (ELSA). We are planning to create a joint set of SHARE and ELSA data in order to extend the geographic scope of data that is based on internally consistent and strictly comparable definitions across Europe.

We will also keep in close co-operation with the US Health and Retirement Study (HRS) and close the triangle of SHARE, ELSA and HRS by adding the large subset of comparable HRS data to the joint SHARE-ELSA data set, enabling comparisons between Continental European and Anglo-Saxon countries.

Other countries are contemplating similar studies. Israel has adopted the SHARE questionnaire for a SHARE-Israel survey in the summer of 2005. Korea, one of the countries with the fastest population ageing processes, is starting to design a longitudinal survey on ageing which will follow SHARE.

1.6 Acknowledgements

Foremost of those who deserve recognition are the participants in the study. They have given generously of their time in the SHARE interview. As editors and authors of this book, and particularly as researchers, we hope that participating in the interview has been of interest to them and that the value of this work is apparent - and, of course, that they will continue to participate in the study.

The SHARE data collection has been mainly funded by the European Commission through the 5th framework programme (project QLK6-CT-2001-00360 in the thematic programme "Quality of Life" programme area). We thank Maria Theofilatou and Kevin McCarthy for their continuing support of SHARE. The analytical work in this book has also been funded through the 5th framework programme, under the project name of AMANDA ("Advanced Multidisciplinary Analysis of New Data on Ageing", QLK6-CT-2002-002426). AMANDA will also support further behavioural analyses to be based on the next releases of the SHARE and ELSA data sets. Substantial co-funding for add-ons such as the intensive training programme for SHARE interviewers came from the US National Institute on Ageing (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG- 4553-01 and OGHA 04-064). We thank Richard Suzman for his enduring support and intellectual input. Some SHARE countries also had some extent of national co-funding, and three countries – Austria (through the Austrian Science Foundation, FWF), Belgium (through the Belgian Science Policy Administration) and Switzerland (through BBW/OFES/UFES) – were mainly nationally funded.

SHARE is large enterprise. About 150 researchers from at least 16 countries are currently involved in SHARE. SHARE has been on a very tight time and monetary budget. It has been the enthusiasm and the hard work of these many researchers that have made SHARE and this book of first results possible. The editors and authors of this book thank them all.

The core of the SHARE day-to-day management took place at the Mannheim Research Institute for the Economics of Ageing (MEA) and at CentERdata.. We thank Marcel Das, Karsten Hank, Hendrik Jürges, Oliver Lipps, Marie-Louise Kemperman, Stephanie Stuck, Corrie Vis and Bas Weerman for their work. They formed the backbone of the SHARE enterprise.

SHARE has greatly profited from external advice. SHARE's role models – HRS and ELSA – were represented in an advisory board with Michael Hurd, Jim Smith, David Weir and Bob Willis (HRS) and James Banks, Carli Lessof, Sir Michael Marmot and James Nazroo (ELSA). John Rust, Norbert Schwarz, Jon Skinner, Beth Soldo, Clemens Tesch-Römer formed a review board that carefully examined the SHARE survey instrument. Without their intellectual and practical advice, and their continuing encouragement and support, SHARE would not be where it is now.

SHARE also received much professional help. CentERdata at Tilburg designed a set of innovative software tools for SHARE; the Survey Research Center (SRC) of the University of Michigan at Ann Arbor developed a Train-the-Trainer programme; the Zentrum für Umfragen, Methoden und Analysen (ZUMA) at Mannheim provided us with professional help in survey organisation and survey translation. We always kept in close contact with the professional survey agencies – IMAS (AT), PSBH (BE), MIS Trend (CH), Infas (DE), SFI Survey (DK), Demoscopia (ES), INSEE (FR), KAPA Research (GR), DOXA (IT), TNS NIPO (NL), Intervjubolaget (SE) and NatCen (UK) – and thank their representatives for a fruitful cooperation.

All authors of this book want to thank the working groups for their input into questionnaire development and data preparation, and the country teams for their help in collecting the data. In addition, authors want to thank Lisa Callegaro, Enrica Croda, Caspar Looman, Franco Mariuzzo, Theo Mitrakos, George Papadoudis, Alberto Dal Piai, Roberta Rainato, Thomas Strobel and Stephanie Stuck for their excellent research assistance in preparing contributions for this book.

Last but not least, we owe thanks to Jorge Gonzalez-Chapela who managed the edition of this book with great diligence and patience. Melanie Lührmann gave him advice in design issues, and our production team – Johannes Bayer, Karolin Konstanzer, Sylvia Krieg, Benedikt Kuhn and Christoph Noe – formatted and designed this book. We thank all of them for their hard work.

2 Who Are Our 50+ Olds?

Ed. Axel Börsch-Supan

2.1 Our Sample: 50+ in Europe

Axel Börsch-Supan and Franco Mariuzzo

Release 1 of SHARE presents fascinating insights into the lives of more than 22,000 Europeans aged 50 and over. The main fascination is the diversity of our respondents. The data encompasses individuals from the North of Scandinavia to the southern parts of the Mediterranean. It includes 50-year old working couples (who do not particularly like to be associated with research on the elderly) as well as centenarians. Based on the current preliminary release of the SHARE data, our youngest respondent is a 26 year old spouse of a Danish sample person, and the oldest respondent is a 104-year old widower in Spain.

The core question to be answered in this contribution is: Can we trust these fascinating data? Does our sample represent the population aged 50 and over, so we can rely on it to draw conclusions about their employment, income, health and family status?

SHARE makes a great effort to make our sample a true image of the population aged 50 and over. These efforts are briefly summarised in Chapter 7 and detailed in the technical report on SHARE. We take three steps: First, we carefully select a random sample in each country; second, we apply strict field work procedures to maximise the response rates; third, we compute weights which reflect the age and gender distribution of the nearest official statistic, usually a micro-census by the country's national statistical office.

SHARE does a good job in capturing the three phases of the life after age 50 (pre-retirement, post-retirement, and oldest age) as documented by the response rates which are fairly equal across all three phases. Among those who are still working the response rate is only 0.5 percentage points lower than on average, while the oldest old have a higher response rate by about one percentage point. But whatever the effort of selecting a sample to be a smaller scale picture of its target population, some discrepancy between the distribution of the sample and that of its underlying population will arise. This contribution sheds some light on the representativeness of our SHARE sample and verifies its validity by comparing our SAMPLE to other data sources in order to strengthen our confidence in the results presented in this book.

Ideally, we would like to compare our SHARE sample to 2004 census data. Most SHARE countries, however, did not have a census in 2004, and some past censuses have been collected quite some time ago. Instead, we use three sources of survey data as a yard stick of comparison:

- The European Union Labour Force Survey (EU-LFS, a quarterly survey; the latest available quarter in most countries is the third quarter of 2004),
- The European Community Household Panel (ECHP, wave 7 in 2000),
- The European Social Survey (ESS, wave 1 in 2002).

Since these surveys are samples themselves and not censuses, discrepancies will arise simply due to sampling variability. Given the sample size of SHARE and the comparison surveys, discrepancies smaller than 9 percent are not statistically significant and are likely to be pure chance effects. If there is a larger discrepancy, this must not be a problem with SHARE since each survey has its advantages and disadvantages, EU-LFS, ECHP and ESS as well as SHARE. Each survey applies slightly other procedures, has slightly different

question formats for our comparison variables etc. As a matter of fact, however, we will see that the key statistics about employment, income, education and health are very similar and rarely statistically different, which is good news for all four surveys.

The distribution of demographic variables in our sample is approximately identical to the population distribution because all analyses in this book use weights calibrated to match population demographics (see Section 7.4). In the sequel, we choose four key non-demographic variables—employment, income, education and health—as variables of comparison.

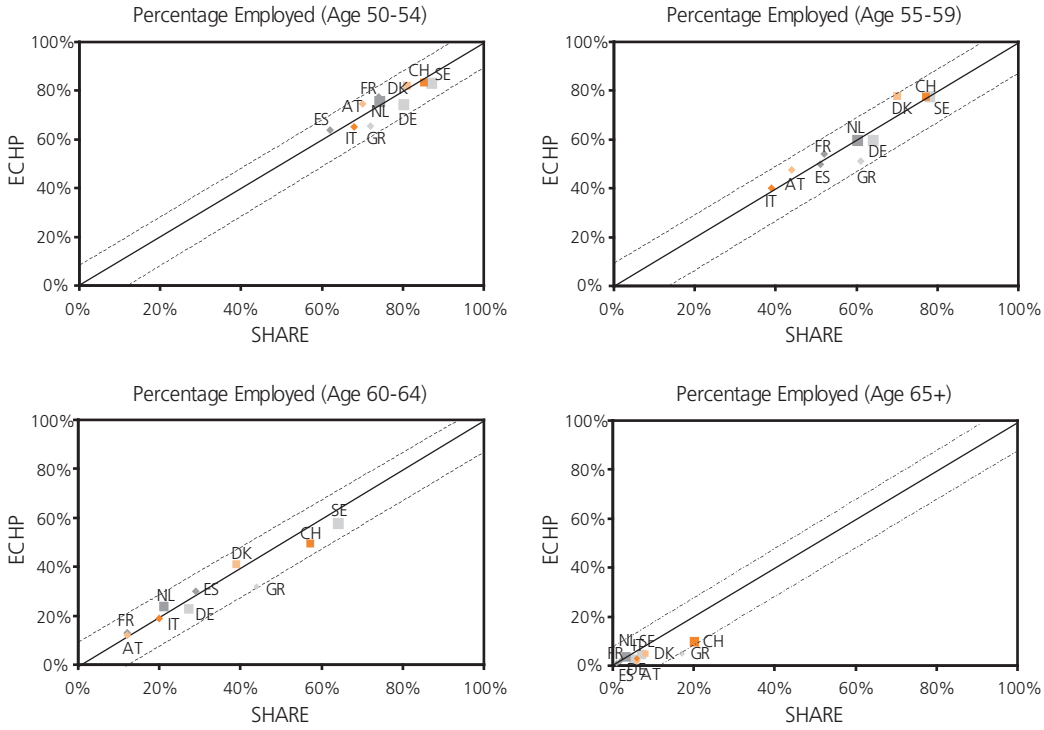

Figure 1 Labour Force Participation in SHARE 2004 and the EU-LFS, 2003/2004

Labour Force Participation

The definition of "employed" in SHARE encompasses all individuals who declared to have done any kind of paid work during the last four weeks, including self-employed, working for family business, have been temporarily away from seasonal or regular work. The matching definition in the European Union Labour Force Survey (EU-LFS) includes all persons who during the reference week worked at least one hour for pay or profit, or were temporarily absent from such work.[1]

Figure 1 compares the employment measures separately for four age categories. On the horizontal axis, the percentage of employed individuals in SHARE is depicted, while the vertical axis presents the corresponding share in the EU-LFP. The two dashed lines mark the interval of insignificant differences. Only points outside the dashed lines represent statistically significant differences between the two surveys.

We do not find any significant difference between the two surveys, with the exception of a barely significant very low employment among Greeks aged 60 and more in the EU-LFS, relative to the SHARE sample. The on average slightly higher employment rates in SHARE are most likely due to the longer reference period in SHARE: it is the last four weeks rather than the current week in the EU-LFS. We conclude that the comparisons in Figure 1 show that SHARE represents well the still employed, and does not over-represent

the retired and disabled who are more likely to be at home and have fewer competing demands on their time.

Income

Income is not a straightforward measure to compare between two surveys. There is net income and gross income; the difference is not clearly defined since some taxes are unknown at the time of survey because tax returns are due later. There is household income and individual income. Most importantly, however, income consists of many components. Detailed surveys ask for each component, but these components differ between surveys, requiring a tedious computation of comparable income measures. SHARE uses a very extensive list of possible income sources, capturing more income sources than most surveys. For this preliminary analysis, we therefore concentrate on the fraction of income recipients rather than the income itself.

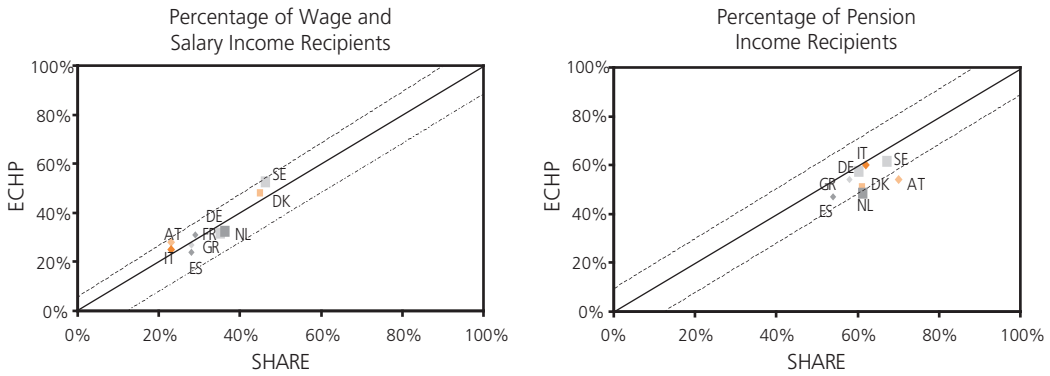

Figure 2 Percentage of income recipients in SHARE 2004 and ECHP 2000

Figure 2 is set up like Figure 1. It compares the percentage of recipients of wage and salary income (left) and the percentage of recipients of pension income (right) between SHARE and the European Community Household Panel (ECHP). There is a four year time gap between the two surveys which would make income in monetary terms hard to compare—another reason, to compare the percentages of income recipients rather than income itself.

There is no significant difference in the percentage of wage and salary earners, but SHARE displays significantly more recipients of pension income. This is a clear reflection of the fact that SHARE uses an extensive list of possible public and private pension incomes, therefore picking up on average about 5 percent more pension income recipients than the ECHP.

Education

Education is another difficult variable to compare across countries and surveys since educational institutions are very country specific and not straightforward to define. One way to enable international comparisons is to make usage of one of the commonly agreed upon educational codes, such as the ISCED97 code. SHARE uses this definition, as does the European Social Survey (ESS). We distinguish three aggregated categories (no or only primary education, completed secondary education, and tertiary education with at least one degree). Figure 3 shows the comparison of the first two categories. The third category

(tertiary degree) is not depicted because it is much rarer and displays very small differences between SHARE and ESS.

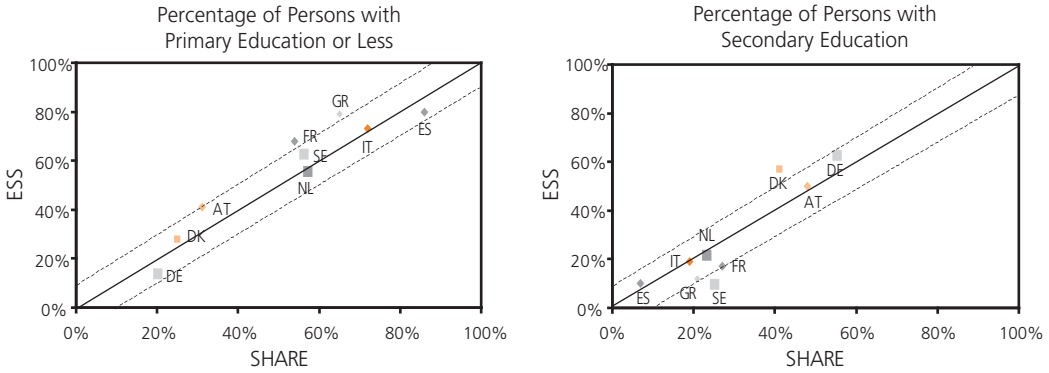

Figure 3 *Percentage of individuals with primary/secondary education in SHARE 2004 and ESS 2002*

The resulting measures in the two surveys are fairly similar. The ESS reports higher percentages of individuals with little education in France and Greece than SHARE, while ESS has more individuals with secondary education in Denmark, and less in Sweden, as reported in SHARE. These last differences, however, are just barely statistically significant.

Health

While health is a key variable to understand the quality of life and the well-being of the elderly, it is a very complex and multidimensional variable, and thus impossible to capture in a single variable. Most general purpose surveys employ self-reported health as an approximation of the subjectively perceived health status, in Europe usually coded as very good, good, fair, bad and very bad. We use this health measure in our comparison. It is measured in three surveys with an almost identical formulation: in SHARE, ESS and ECHP. Figure 4 displays the percentage of individuals reporting good or very good health in those three surveys.

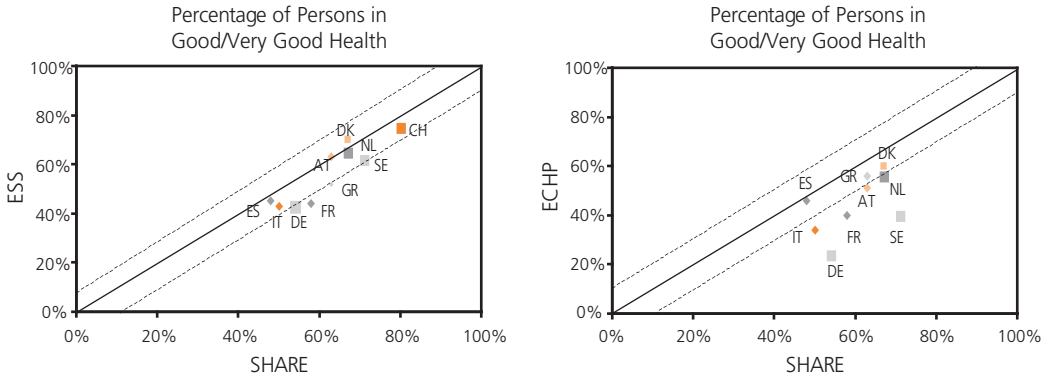

Figure 4 *Percentage of individuals with good and very good health category in SHARE 2004, ESS 2002, and ECHP 2000.*

Figure 4 shows that SHARE and ESS offer a very similar picture of the health status, SHARE only a bit more positive than ESS. The same is not true for the ECHP survey which reports a much lower percentage of good health. Which survey should we trust?

The percentages of ECHP respondents who report good health in Germany is extremely low (24%). This appears implausible even though it is well-known that Germans tend to paint the world in a greyer picture than individuals from other countries. We tend to trust the ESS and SHARE data more in this respect than the health data collected in the ECHP.

Conclusions

Comparisons with three prominent other European surveys, the quarterly European Union Labour Force Survey (EU-LFS), the European Community Household Panel (ECHP) and the European Social Survey (ESS), have shown that the SHARE data produces very similar distributions of key concepts such as employment, income, education and health. Where we detected significant deviations, we could explain them by the more detailed way in which SHARE measures these concepts. SHARE represents the population of individuals aged 50 and over in Europe well; the results in this book rest on reliable data.

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[1] *The comparison data refer to the average of quarters 2004.Q2 and 2004.Q3 in Denmark, France, Netherlands and Sweden; 2004.Q2 in Austria, Italy and Spain; the average of 2003.Q2 and 2003.Q3 in Greece; and 2003.Q2 in Germany and Switzerland.*

2.2 Who Are the Oldest-Old?

Karen Andersen-Ranberg, Inge Petersen, Jean-Marie Robine, and Kaare Christensen

Why the Interest in Oldest-Old?

Owing to a substantial decline in the age-specific mortality of the oldest-old (80+ year) within the last 50 years this age group has become the fastest growing age segment in most European populations. Even though the reductions in mortality at these ages have usually been smaller than that below age 80, the cumulative effect of the change has been an increase in the number of the very oldest (Kannisto 1994). Most of this increase is due to improvements in economic and social conditions and to ongoing medical advances (Riley 2001). This is well illustrated by the "natural experiment" of the German unification. Following the unification of East and West Germany (1989-1990), mortality in the East declined toward prevailing levels in the West, especially among the elderly (Gjonca 2000; Vaupel 2003). Thus, factors associated with mortality in older people seem to be highly influenced by changeable environmental factors.

Who Are Our Oldest-Old?

The group of oldest-old in SHARE is defined as participants aged 80 or older (80+). In all, 1,732 oldest-old participated (8.8% of all 50+ participants). Among these 2/3 (n=1,113) are in the age range 80-84 years (80-84y), and the remaining 1/3 is 85 years or older (85+y). The mean age for all oldest-old participants is 84.3 years (range 83.7 to 84.8 years in the different countries). For details see Table 2A.2 in the Appendix to this chapter. The participation rate varies from 32% to 57%. All are living in their own home or together with their family. The sample design did not allow for the inclusion of institutionalised persons. The present results are derived from weighted data.

How Did the Oldest-Old Comply with the Study?

With advancing age, older people suffer more from various conditions which could hinder participation, e.g. cognitive impairment, visual and hearing impairments, low educational level, frailty due to disease. Thus, in order to enhance the participation of the oldest-old, the SHARE study questionnaire was designed in a way that would allow for the individual to use a proxy, either partially or completely. In general, the oldest-old had a high participation rate in the various parts of the questionnaire, i.e. either alone or together with a proxy. Pure proxy interviews were less than 10% (data not shown). According to the interviewers' opinion, the overall willingness to answer the questions was very good or good among approximately 75% of the oldest-old SHARE participants.

Where Do the Oldest-Old Live and How Is Their Social Network?

A little more than half (56%) of the SHARE oldest-old population live alone, while around one fourth (27%) live as a couple (Table 2A.2). The remaining proportion (16%) lives with their family, most often with a child, but unevenly distributed within the SHARE countries. In general, a North-South gradient is observed with a lower proportion of oldest-old living together with their family in the most northern SHARE countries, intermediary proportions in the more continental SHARE countries, and the highest proportions in the most southern SHARE countries. Thus Sweden, Denmark, and the Netherlands have only 3-6% living together with their family, while Italy and Spain have 22% and 37%, respectively (Table 2A.2). One marked difference in this general North-South pattern is

Greece, which has the same proportion as the northern countries (8%). Nevertheless, the general pattern is to be expected, given the cross-national differences in nursing home accessibility (more nursing homes in the more northern countries) and cross-cultural differences in caring for family members. But in all SHARE countries the children of the oldest-old are the far most important group to help their parents, accounting for about one third of the help given (Table 2A.2), but with some cross-national differences. Adding the proportion of oldest-old living with their family, which in most cases is a child, oldest-old in the most southern SHARE countries (Spain and Greece) get the greatest support from their children.

Only between 1/5 to 1/4 of home-dwelling oldest-old are socially active in the sense of doing either voluntary work, caring for a sick or disabled adult, providing help to family, friends and neighbours, attending educational courses, being active in social clubs (including sports clubs), religion or politics (Table 2A.3). For all SHARE oldest-old, the main social activity during the past month was caring for a sick or disabled adult (12.2%), followed by providing help to others (9.5%). The same proportion has religiously related activities (9.3%), while sport and social club activities engage a smaller number (7.2%). Educational or socio-political activities were all negligible (~1%) among oldest-old in SHARE. However, rather large differences exist between the various countries. Oldest-old Greeks are more likely to care for a sick or disabled adult (32.2%) and to provide help to others (19.4%) than Spaniards and Italians. The largest variance is seen regarding religious organisation, where almost half (42%) of oldest-old Greeks are active compared to 0 to 11 % in almost all other SHARE countries with the exception of Austria (18.9%). Also, being member of a social club, including a sports club shows some country differences, as Danes and Dutchmen are much more engaged (21.5% and 19.0%, respectively) than Italians, Greeks, Spaniards, and Austrians (~1-3%).

How Healthy Are the Oldest-Old?

In general, morbidity is increasing with advancing age, and more so in females than in males (Nybo 2001). Thus, oldest-old are expected to have a higher number of diseases and chronic conditions compared to younger persons. In SHARE about 1/3 of the oldest-old report having no long-term health problem/illness (Table 2A.4). The well-known female preponderance of higher morbidity is apparent in SHARE too, with larger proportions of men reporting having no long-term health problems and no limitation in activities compared to women (Men: 34.3% and 30.3%, respectively; women: 30.3% and 24.3%, respectively). But in contrast to what could be expected, within the oldest-old age group, persons aged 85 and over report themselves to be healthier than their younger counterparts in the age range from 80 to 84 years regarding most self-reported health measures. E.g. having no limitations with everyday activities is reported by 40% of men aged 85 and over, while the corresponding figure among the 'younger' men aged 80 to 84 is 29% (Table 2A.4). The same pattern is observed in reporting 'no long-term health problems', having 'only 0-1 symptom' or 'only 0-1 chronic diseases' (Table 2A.4) and in both sexes, but with generally lower proportions among women. In line with this is the declining mean number of self-reported chronic diseases with advancing age groups (80-84 to 85+) in both men and women (Table 2A.4). Consequently, one could be tempted to interpret the results as a stabilisation of the otherwise increasing prevalence of diseases from age 50 and onwards, and following this a similar stabilisation in the prevalence of disability. However, this is not the case. When using Activities of Daily Living (ADL) and Instrumental Activities of Daily

Living (I-ADL) as measures of disability, lower proportions of subjects report having no disabilities with advancing age groups. The pattern is similar in both sexes, but at a lower level and with a greater decline in women compared to men, e.g. 71.4% of 80 to 84 year old and 66.9% of 85+ year old men have no limitations in ADL, while the corresponding figures in women are 76.6% and 46.7% (Table 2A.4). The accelerated decline in ADL functions in women compared to men has been shown in other studies on old and oldest-old (Andersen-Ranberg et al. 1999). The same figures for I-ADL are 58.8% and 50.8% in men, respectively and 55.2% and 43.2% in women, respectively. Likewise, the mean number of ADL limitations is increasing with advancing age groups (Table 2A.1).

It is well recognised that cognitive functions decline with advancing age, and the SHARE population is no exception. Mathematical skills, orientation, verbal fluency, and word recall decline over the age range of 80 to 85+ (Table 2A.4; data not shown for verbal fluency or word recall), but interestingly there is a marked difference between the high proportion of subjects being almost fully orientated (i.e. allowing for one fault) and the rather low proportion demonstrating good arithmetic skills. At age 85+ about 75% are still well functioning in orientation, while the corresponding proportion of subjects being well functioning in arithmetic skills is 13%. While the proportions are sex-specific equal regarding orientation, the opposite is true when it comes to arithmetic skills where 85+ year old men are doing better than 85+year old women, 18.7% and 10.7%, respectively (Table 2A.4).

The proportions of oldest-old having no depressive symptoms are also declining with advancing age groups, especially in men.

Being healthy can be defined in many ways, but using the definition of being independent in ADL, I-ADL, and mobility (HEALTHY), around 16% of the SHARE oldest-old are healthy, but with significant differences between men and women (Table 2A.4). In line with the sex-specific differences regarding self-reported chronic diseases and symptoms, oldest-old men according to the above definition of being healthy are in a healthier state than their female counterparts, 21.9% and 12.5% respectively. But rather large variations exist cross-nationally. 40% of Swiss men can be defined as HEALTHY, while much lower proportions are found among German and Greek men (14% and 15%, respectively) (Table 2A.3). Among women the highest prevalence of being HEALTHY is again among the Swiss, while the lowest proportions are found among Greek women (22.8% and 4.1%, respectively).

Although only a small proportion of SHARE oldest-old can be defined as HEALTHY a rather large proportion of oldest old can manage activities of daily living (ADL) without limitation, in other words, a large proportion of oldest-old is not severely disabled. However, with advancing age groups the variance in number of limitations in ADL is increasing too. The largest proportions of those having 1 to 6 limitations are constituted by the persons aged 85 and over, and a high number of limitations become more frequent with advancing age (Figures 1 and 2), which is comparable to other studies (Andersen-Ranberg et al. 1999). However, as institutionalised people are not included in this survey, these results must be interpreted cautiously regarding the level of the proportions. Also the cross-sectional nature of these data makes it difficult to distinguish between age and cohort effects.

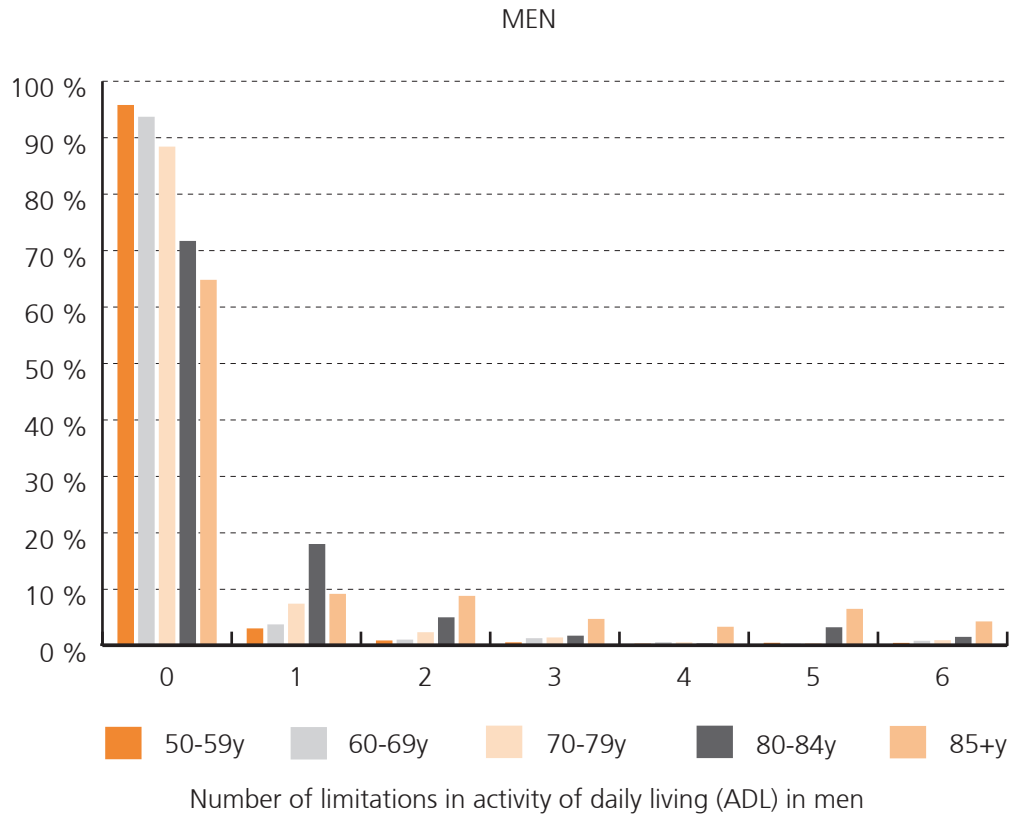

Figure 1 *Age group specific proportions of men with 0 to 6 limitations in activity of daily living (ADL)*

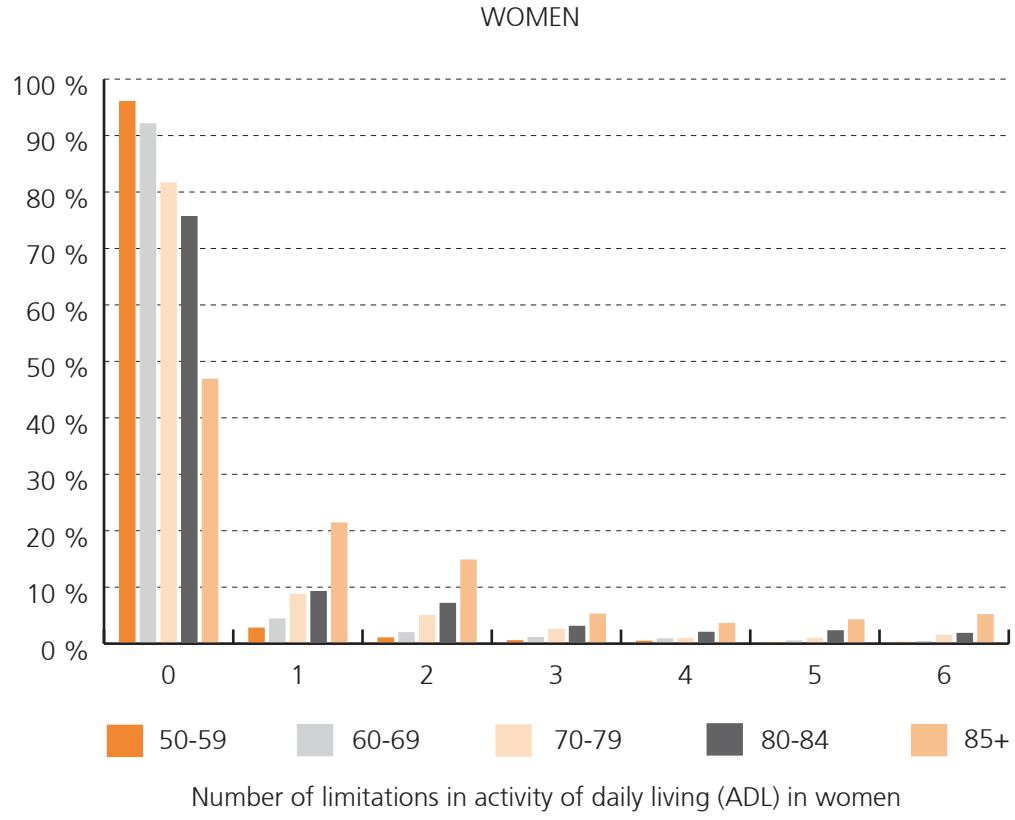

Figure 2 *Age group specific proportions of women with 0 to 6 limitations in activity of daily living (ADL)*

How Much Health Care Do the Oldest-Old Have or Need?

Help from other persons is mainly determined by an individual's physical or cognitive ability to respond to the demands of everyday life, while culture-determined sex dependent differences, e.g. cooking and laundering, are less important. Impairments in mobility, ADL, and I-ADL will reflect declining ability to live independently, and thus a need for help, either personal or practical. The rather low proportion of oldest-old being healthy does not necessarily mean that the remaining about 80% are all unable to live independently, but there is, though, a gap from 80% being "NON-HEALTHY" to the proportion of subjects getting help with personal care (23.8% for men and 22.1% for women) or both personal care and practical help (31.7% for men and 32.5% for women) (Table 2A.4). Interestingly, while the proportion of healthy subjects remains stable with advancing age groups the proportion of oldest-old receiving personal care and practical help increases.

What Is the Socio-Economic Status of the Oldest-Old?

Socio-economic status evaluated by the household income and the annual individual income has no clear North-South gradient (Table 2A.3). While the lowest values of annual PPP-adjusted total individual gross income exist in Spain and Greece (€9,106 to €9,032 respectively), the top 3 highest ranging countries are The Netherlands, Austria, and France, with €40,021, €31,542, and €29,050, respectively. However, looking at the country-specific means of total household income (taking into account the number of household persons), Greece is lying remarkably low (€10,059), and much lower than the second lowest ranking country, Spain (€16,469), while the top three ranking countries are The Netherlands (€52,521), Switzerland (€46,284), and France (€41,049).

Do the Oldest-Old Have Any Expectations for the Future?

Asking the oldest-old about their chance of living 10 more years is interesting. On a scale from zero to a hundred per cent chance, 15.6% of 80-84 year old and 26.5% of 85+ year old answered zero chance, while 20.0% and 24.6%, respectively gave it a fifty-fifty chance. But yet another 25.6% and 13.1%, respectively, actually rated themselves to have more than a fifty percent chance. Not surprisingly, the highest chances were given by the 'youngest', i.e. 80-84 year old, but noteworthy are the almost similar proportions (20-24%) of a fifty-fifty chance rating in the two age groups, i.e. 80-84 year and 85+ year old persons (data not shown).

What Can the SHARE Oldest-Old Tell Us?

The SHARE data on oldest-old are consistent with present national studies on ageing people with increasing proportions of people with disabilities, and increasing proportions demanding more personal care and practical help with advancing age and female gender. But interestingly, self-perceived health measurements show increasing proportions of oldest-old reporting no difficulties or limitations with advancing age groups. The exclusion of institutionalised persons may explain some of this, but other reasons are likely too. For instance, validity is low for self-report of medical diagnoses, even in disabled non-institutionalised persons, being especially true for less apparent diseases, while hip fractures, Parkinson's disease, diabetes, cancer, and disc diseases are more readily remembered (Simpson et al. 2004). Also ageism, i.e. the underdiagnosing of diseases in very old people, may contribute to the lower prevalence of self-reported diseases and long-term health problems (de Craen et al. 2003). Declining cognitive functions may also explain

fewer complaints with advancing age among oldest-old. Finally, the fact that the very oldest (85+) have survived most of their fellow birth cohort members may lead to the feeling of being especially strong and healthy. This could certainly affect the questions of self-perceived health.

Although the SHARE data on oldest-old are the first to show cross-national differences in a wide range of health measurements, interpretations must be done cautiously. Weights may be less accurate for the oldest-old. Important is also the fact that institutionalised persons were excluded by sample design 'favouring' the more northern SHARE countries, which have more nursing homes than in the south.

The SHARE data set is very valuable for further longitudinal studies in order to shed light on the determinants of health and survival in the rapidly growing population of the oldest-old. SHARE shows an intriguing North-South gradient in various health, social, and economic outcomes which, however, is not reflected in oldest-old mortality and life expectancy. Cross-national analyses cannot give the reason for these disparities, but a longitudinal study will provide an excellent opportunity for understanding the determinants of ageing and survival among the oldest-old.

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2.3 Housing and Living Arrangements

Martin Kohli, Harald Künemund, and Tanja Zähle

The Increasing Importance of Housing in Old Age

Housing and living arrangements are central aspects of the welfare position of individuals and households. They provide action spaces and dimensions of meaning all through the life course but with varying emphasis in the different stages of life (cf. Motel et al. 2000). The transition to retirement greatly increases the importance of one's home because the references and daily routines of the world of employment disappear (Matthes 1978). This is even more the case in advanced age when restrained physical mobility increasingly makes for a concentration of daily activities in and around the home. Everyday life in old age is above all life at home (Saup 1993).

Housing thus becomes a primordial concern for the elderly. Differences in housing may explain over-all patterns of well-being and health. Many studies show that residential moves occur mostly at younger life stages, and that the willingness to move decreases with age. The desire to remain in one's familiar surroundings may be counterproductive if they are ill adapted to the needs of advancing age. Here again, however, the 'satisfaction paradox' of old age implies that even where living conditions are deficient their subjective valuation may remain positive. The reasons are habituation effects, attempts to keep up positive self-perceptions, and adaptive (downward) regulation of goals and yardsticks for comparison.

Young and old adults attach different meanings and projects to their accommodation (Dittmann-Kohli 1995): For the young, the projections are positive (a larger apartment, a house of one's own), while for the old, thinking about the future revolves around the fear of loss. Loss of one's home is linked to loss of one's independence, and the dominant concern becomes one of attempting to keep both as long as possible. There are exceptions such as those of retirement migration—people actively embracing the new possibilities for mobility offered by retirement, and moving to more attractive (usually more southern) destinations (King et al. 2000). But for them as well the new home in the sun—and the fear of having to relinquish it eventually—becomes the centre of gravity.

The home is moreover the place where the family convenes. It may be a family home acquired from previous generations or furnished with their belongings, and which may eventually become the centrepiece of the bequest to one's own descendants. Investing in home ownership may be a specific form of family investment.

At present, there exist only very few cross-national studies that allow for a comprehensive assessment of these issues. SHARE presents a unique opportunity for studying housing and its most important correlates in a strictly comparative frame across Europe. The task of this contribution is to give some basic information on housing and living arrangements of the elderly European population covered by SHARE. We will present descriptive findings concerning ownership status, residential mobility, size and equipment of residences and their immediate environment, and the potential for remaining in one's home even with physical impairments.

The Benefits of Home Ownership

Home ownership has many advantages. Ownership is associated with larger and better-equipped homes. Since mortgage payments as a proportion of household income are usually decreasing over time, ownership for the elderly increasingly confers some measure

of economic and emotional security. It offers living free of rent or at lower costs, and thus acts as an income buffer in times of need, and it allocates the control over staying or moving to the owner. It also increases a person's stake in his or her community. Last but not least owners have the possibility of transferring their property to their descendants.

The link between home ownership and economic well-being merits some further comments (cf. Kurz and Blossfeld 2004). As the life-time costs of ownership are skewed—high at the beginning, low in old age—home ownership and pensions may to some extent be seen as alternative routes to social security in old age (Castles 1998). In a society where home ownership is widespread, public old-age pensions can be smaller (Kurz and Blossfeld 2004:7). The extent and life-time distribution of home ownership thus becomes one of the main dimensions of social inequality.

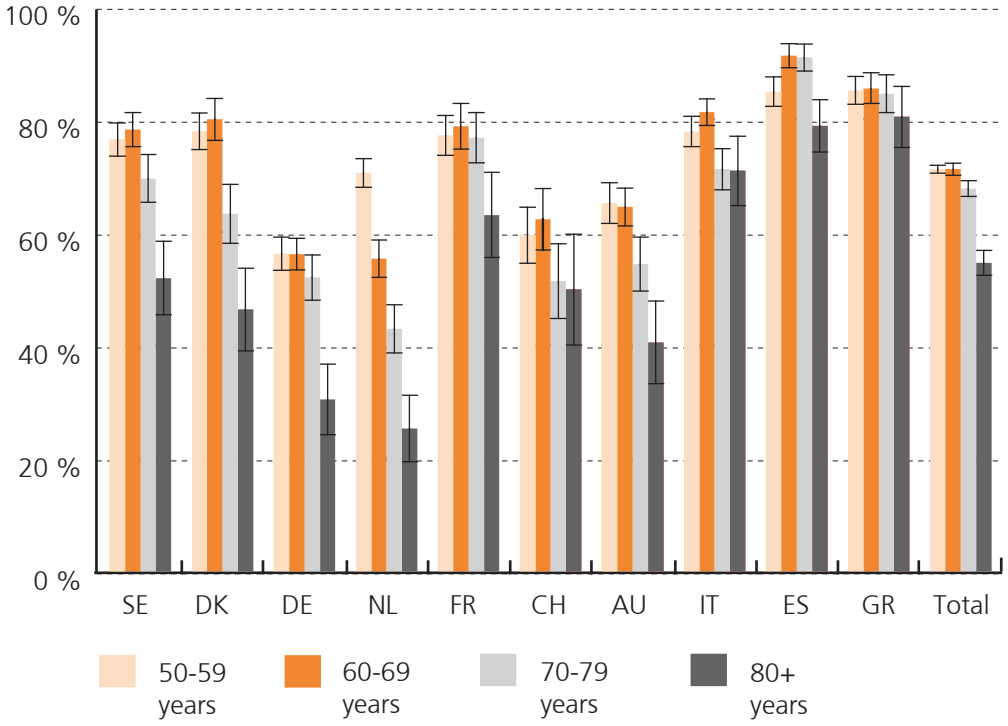

Figure 1 Ownership (percentages by country and age group)

Note: Vertical brackets indicate the size of confidence intervals at the .05 level

SHARE respondents were asked if they live as an owner, a member of a cooperative (in some countries), a tenant, a subtenant, or rent free (Figure 1 and Table 2A.5 in the Appendix to this chapter). For making the results comparable between countries we have recoded members of a cooperative to ownership and those benefiting from "usufruit total" (existing only in France) to the rent-free-category.

Ownership rates among the European elderly range from 53 percent in Germany to 87 percent in Spain. There exist three groups of countries partially linked to the types of welfare state regimes usually distinguished in the literature. The first group is made up by the Mediterranean countries with very high rates of ownership (more than three quarters of the elderly population) and only between 5 to 15 percent of tenants. France also belongs to this group even though is has a somewhat higher share of tenants. Sweden and

Denmark belong to the second group of countries, both with 72 percent owners and 26 percent tenants. In the central European countries of Austria, Switzerland, the Netherlands and Germany, owners make up only slightly more than half of the population and many people (between 27 percent in Austria and up to 40 percent (in the Netherlands) live as tenants.

Ownership rates generally decrease with age. In the high ownership countries of southern Europe this is least the case; the oldest age groups are almost at the same level as the middle and younger ones, indicating a long-term stability of ownership acquisition. Here home ownership is so wide-spread among the elderly that it may indeed function as an alternative form of social security. In Scandinavia and especially in the Central European countries the decrease by age is steeper. The most extreme difference is found in the Netherlands; among the respondents over 80 only a quarter live in their own accommodation, while among those aged 50 to 59 it is 70 percent. This seems to reflect a more recent expansion of ownership. In virtually all Western countries, the unprecedented economic boom decades of the 1950's and 1960's saw a rise of ownership rates. "Households profited from rising incomes and inflation, which reduced the real costs of their mortgages and increased the value of their houses" (Kurz and Blossfeld 2004:14). An alternative explanation of the age difference in ownership rates would be that ownership rights have already been transferred from the older to the younger generations. Given what we know from smaller studies, this alternative seems less likely, but in the absence of longitudinal data a valid conclusion is not possible. There are also some differences by gender. In all countries women have lower ownership rates than men, and correspondingly live more often as a tenant. These findings need to be explored further, particularly with regard to more detailed socio-economic and socio-demographic characteristics of the respondents. At this point, we can ascertain the effect of family structure: controlling for age, owners are much more likely to be married.

Home ownership is associated with the distribution of private assets (cf. Contribution 6.3). Real estate holdings make up a large part of private wealth. In the Mediterranean countries their share is especially high. This is usually explained by the lack of attractive alternatives given the less developed financial markets. It seems equally plausible, however, to link this to the strong family tradition of these countries (cf. Contribution 4.1). Investment in home ownership—first but also second and subsequent homes—means investment in tangible property that can be bequeathed to one's descendants as a family holding and an opportunity to live a family life. Homes moreover may be a focus of family memory and family gatherings. Some studies show that homes are less freely disposed of by heirs than financial wealth.

This link is corroborated by the patterns of property acquisition (Table 2A.6). In Scandinavia and the Netherlands property acquisition is an overwhelmingly individualised process, with more than nine tenths of owners saying that they have acquired their property solely through their own means. In the 'strong family' countries of Southern Europe this proportion is lower, ranging from 62 percent in Italy to 73 percent in Spain. In Italy 21 percent have received their property as a bequest, 2 percent as a gift, and 11 percent have had help from their family.

Size, Residential Mobility, and Quality of Equipment

The size of the accommodation is covered by asking the respondents about the number of rooms for the household members' personal use. This includes bedrooms but excludes bathrooms, kitchen, hallways, or rooms which are let.

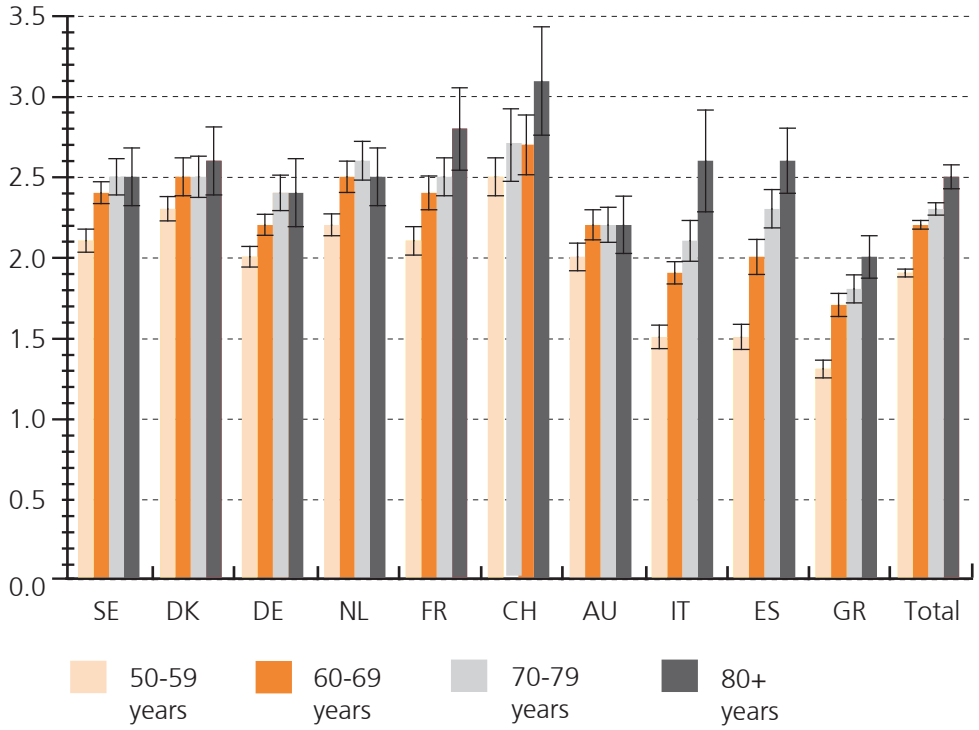

Figure 2 Rooms per person (means by country and age group)

Note: Vertical brackets indicate the size of confidence intervals at the .05 level

Our findings show that across all countries the number of rooms per person increases with age, and across all age groups is lower for men than for women (Figure 2 and Table 2A.7). This may be an effect of having the children move out, and especially of becoming widowed. Country means of rooms per person range from 1.6 in Greece to 2.7 in Switzerland. Undersupply thus does not seem to be a general problem. But particularly in the southern European countries the differences between age groups are sizeable, reflecting both the later age of children at leaving the parental home, and the more massive onset of widowhood. In these countries the 50-59 year olds have only 1.3 to 1.5 rooms per person at their disposition, compared to 2 to 2.6 rooms for those aged 80 and over. Table 2A.8 demonstrates that at the level of distribution among households there are indeed problems. If we define undersupply as less than one room per person and oversupply as more than three rooms, we find that in Greece almost thirty percent of the 50-59 year olds live in a situation of undersupply. This again decreases by age, so that in the oldest age group the rate of undersupply is down to 5 percent.

Oversupply may seem to be a happier situation, but it also may present problems of social isolation or excessive costs. The total proportion living in a situation of oversupply is twice that of undersupply, 11 vs. 5 percent. This proportion increases to one fifth in the oldest age group.

Residential mobility has been assessed by asking for years spent in the present accommodation (Figure 3 and Table 2A.10). Results show the obvious age effect, but it is smaller than expected, with a mean difference of 17 years between the oldest and the youngest group. Overall, the elderly Europeans have been living for 25 years in their present home, with Sweden, Denmark and the Netherlands at the lower end, and Austria, Italy and Spain at the upper.

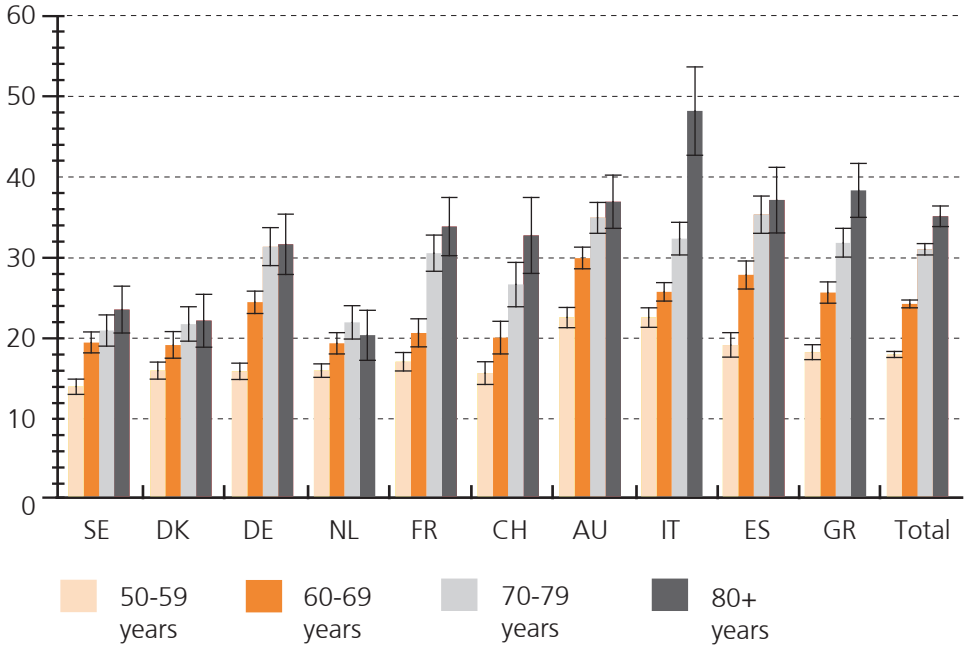

Figure 3 Years living in accommodation (means by country and age group)

Note: Vertical brackets indicate the size of confidence intervals at the .05 level

Special Provisions for Coping with Physical Impairments

In the perspective of ageing populations, a further important point covered by SHARE concerns the supply with special provisions that assist persons who have physical impairments or health problems. As mentioned above, this is also a key question for the elderly themselves: whether they can remain in their home even with limited physical mobility. A case in point is the risk of falling, increasingly recognised as one of the main barriers for being able to maintain one's own home.

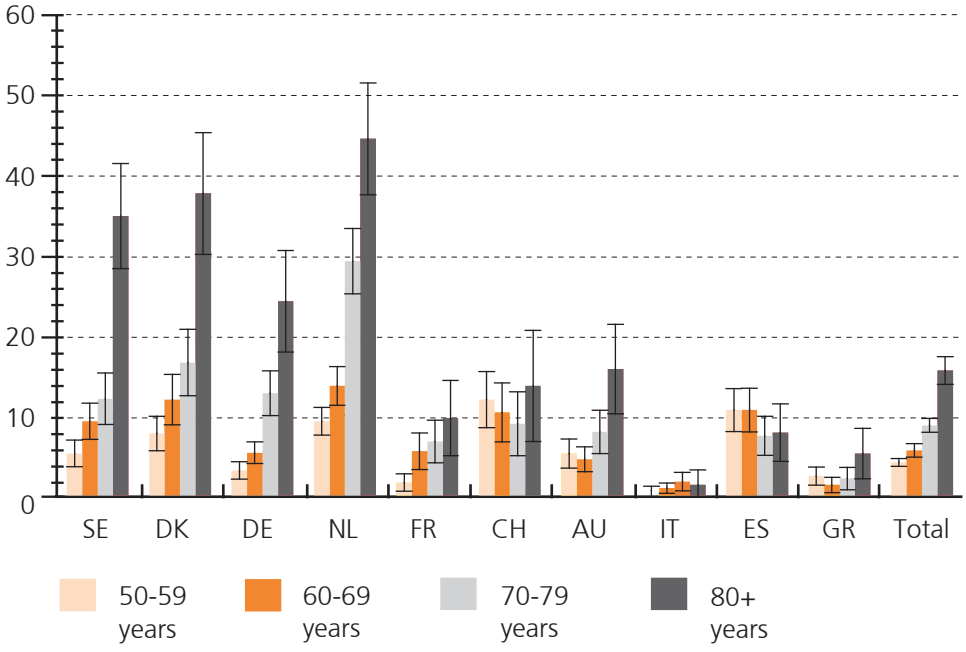

Figure 4 Special features for persons with physical impairments or health problems (percentages by country)

Note: Vertical brackets indicate the size of confidence intervals at the .05 level

SHARE does not collect detailed lists of special features but asks a general question on the presence of such equipment. Not surprisingly, those 80 and over on average live almost four times more often in households with special features than those aged 50-59, but even for them the overall proportion with 16 percent remains fairly low, see figure 4. This overall proportion hides important differences between countries. The highest provision for physical impairments is found in the Netherlands where close to one half of the population 80 and over live in accommodations thus equipped, followed by Denmark and Sweden, while Italy and Greece are lowest with 1 and 5 percent, respectively. This may again be linked to the strong family traditions in the South, where services provided by co-residing or close family members may be expected to make up for impairments instead of technical features of the physical environment. With further survey waves we will be able to determine whether at comparable levels of disability, special physical equipment and family help are indeed equally effective alternatives for maintaining elderly disabled people at home.

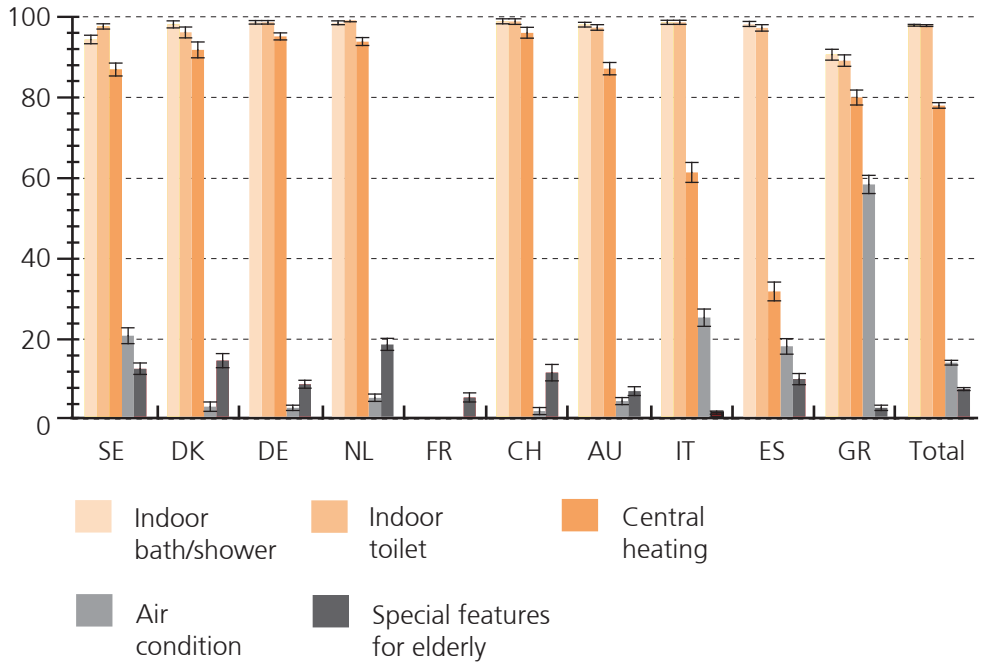

Figure 5 Equipment (percentages by country)

Note: Vertical brackets indicate the size of confidence intervals at the .05 level

Another dimension concerns more general housing equipment which also may be critical for the ability of the elderly to remain in their home: an indoor bath or shower and toilet, central heating, and/or air conditioning. In this respect, our results paint a surprisingly positive picture (Figure 5 and Table 2A.11). Almost 100 percent of our respondents have an indoor bath or shower and toilet for their household's personal use. The only slight exception is Greece where this proportion amounts to 91 percent. Differences between countries, age groups and gender are obviously rather small. Toilet and bath therefore do not seem to be a limiting factor for being able to remain at home. Some more variation exists with regard to central heating facilities where differences between countries are larger. They correspond closely with the variation in climates and needs, so that one would not

readily rate them as indications of deficiencies. While in the Central and Northern countries central heating exists in nine tenths of the cases or more, the corresponding figure for Italy is 61 percent, and for Spain, 31 percent. It should however be noted that this is indeed perceived as a deficit by many in these countries (Table 2A.15).

The final point to be covered here is the quality of the immediate environment. It is an important dimension of living standards in addition to the size and equipment of the home. Here again, our findings give a mostly positive account (Table 2A.14). 85 percent of the respondents are satisfied with the supply of facilities such as pharmacies, medical care and shopping for groceries, 77 percent with the possibilities for public transport. Further analyses will link these perceived deficits with the available assessments of objective conditions.

What Is To Be Concluded?

In conclusion, we emphasise three points:

- Overall there are good housing conditions well into old age, with size increasing, and deficiencies—including those of the immediate environment—not much higher than among middle-aged adults.

- Home ownership is typically associated with larger and better-equipped homes. It may moreover provide an important form of economic and social security. Since ownership rates are lower in old age, however, there is less security for the current elderly. Further studies will show whether future cohorts of elderly people will be better off in this respect.

- In most countries—especially so in the South—there is a clear deficit of special provisions that assist persons with physical impairments or health problems. This creates a considerable risk of having to move out of one's home eventually. Housing policy should focus on making up for this deficit.

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2.4 The Number of Living Children

Maite Martínez-Granado and Pedro Mira

The number of living children that SHARE respondents have is clearly an important aspect of their lives. Children are a major source of support and therefore the number of living children is of particular interest as a potential determinant of the quality of life in old age. Furthermore, geographical and historical variation in European life-cycle fertility is presumably well represented in the SHARE data. The goal of this contribution is to present an overview of the number of living children of SHARE respondents with a special focus on the number of living children ever born to women, by age and country.

Information Available in SHARE

In the *CHILDREN* module SHARE respondents were first asked about the total number of living children they had both in and outside the household, and whether all of them were natural children. In the case of couples this module was administered only to the first person in the couple doing the interview, the *family respondent*. The number of living children in this case explicitly includes those of the *current* spouse or partner and not just those of the respondent, and a natural child in the second question is a child of *both* members of the couple. For every living child, information was then collected on their birth year, and for up to four children additional information was obtained including their type, i.e., whether they were natural children, stepchildren, adopted or fostered children of either (or both) members of the couple. Therefore, even in the case of couples information at the level of the individual respondent can be recovered[1].

Since most respondents in the sample are married to another respondent and in their first union we would not expect the distributions of the number of living children to vary greatly by sex. In what follows, we focus on women over the age of 50 and we refer to men only for noteworthy differences.

Type of Children

Table 2A.17 in the Appendix to this chapter presents the distribution of female respondents according to the type of living children they have. 14 % of respondents have no living children of any type, and this proportion is much higher (23%) among the oldest old. The proportion of men with no children is the same as for women, but for men it is the youngest ones that are most likely to have no children. Although sample sizes in each country-age cell are not large enough for very precise inferences, the same pattern can be seen in most SHARE countries as well as in the ELSA study in the UK. Among respondents who have children, most of them (96%) only have natural children, and very few have fostered or adopted children. The proportion of respondents who have stepchildren is not very large, but some interesting differences emerge across sexes, countries and age groups which reflect a weakening of the traditional family structure consisting of a couple with children in a stable first union. Men (3.5%) are more likely to have stepchildren them than women (2.2%), younger respondents more likely than the older ones, and respondents in the two Scandinavian countries much more likely than those in Spain and Italy. If we take all of these categories together we see that around 15% of Scandinavian male respondents aged 50-54 have stepchildren.

Number of Natural Children, by Age and Country

Figure 1 displays the (locally smoothed) mean number of natural living children by age and country (see Table 2A.18 in the Appendix for the whole distribution). Looking across age groups, we find that for the whole sample as well as in most countries the age profile is hump-shaped, with women in the middle age groups (60-75) having the highest number of natural children. This is almost certainly a reflection of the baby boom - baby bust cycle in fertility rates in Europe after World War II. As for the oldest women in the sample (75 and over), their fertile years overlapped with World War II and its immediate aftermath, and furthermore as a consequence of the war in some countries women suffered a relative shortage of potential husbands. However, it should be noted that differences across age groups in our sample may reflect not only true differences in fertility behaviour across generations, but also a) selective attrition of respondents, i.e., potential respondents died, and those who died may have had a different number of children than those who survived to be interviewed, and b) differences in the proportion of children that have survived.

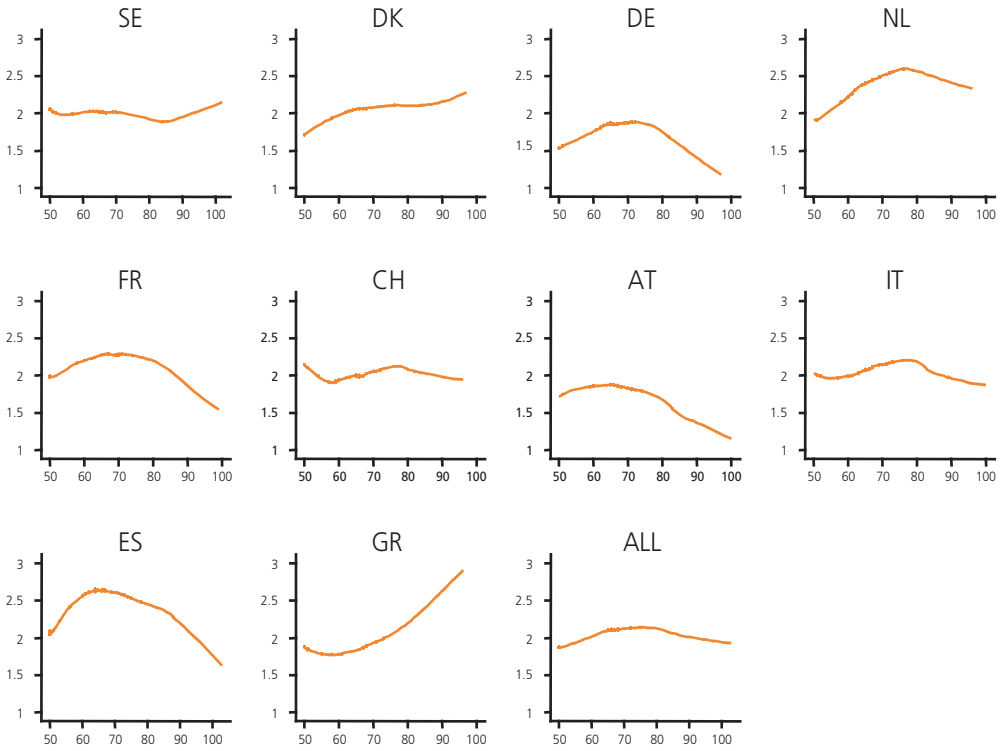

Figure 1 Natural living children (y-axis), by age (x-axis) and country (females)

Note: Locally weighted regressions

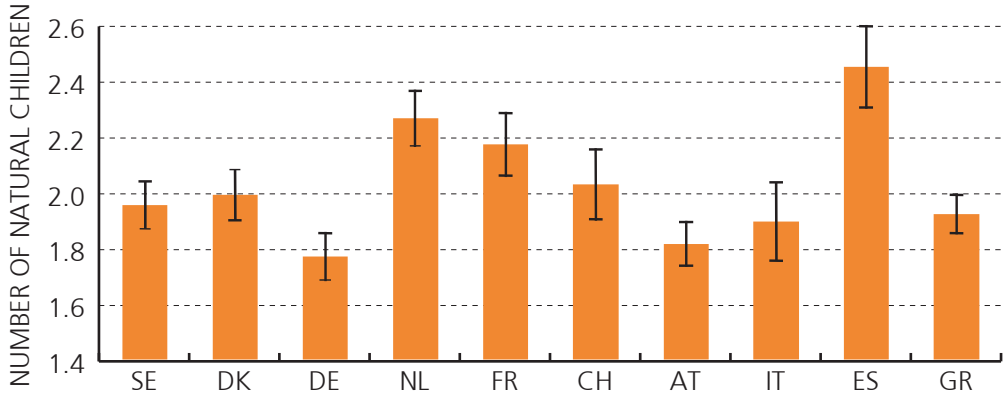

Figure 2 Number of natural living children, by country

Comparing across countries in Figure 2, we find large differences, with women in Spain (2.46) and The Netherlands (2.27) having had by far the highest fertility, and those in Germany (1.77) and Austria (1.82) the lowest. These differences in the mean number of children across countries are somewhat smaller for younger women. In particular, the decline in the number of natural children seen in the youngest age groups is especially marked in the two countries, Spain and The Netherlands, which had the highest fertility overall.

The proportion of women with 3 or more natural children alive is 30% overall, but it reaches almost 50 % in several age groups in Spain and The Netherlands. At the other end of the distribution, 16% of women have no natural children alive, and this proportion is much higher for the oldest old.

Note that for respondents or couples who had more than four children, some of which were not natural children, we estimate a lower bound on their number of natural living children. There are few respondents in this category, around 1% of the whole sample, so the downward bias introduced in our estimates of the mean number of natural living children is likely to be small. Interestingly, the number of respondents of this type is larger in the two Scandinavian countries and among younger respondents. For instance, it reaches 9% for Swedish males aged 50-54. This probably reflects the higher prevalence of couples whose members are not in their first union.

The Number of Natural Children, Education and Health

We end with a preliminary exploration of the correlation between the number of living children and a few key socio-economic and health indicators in the SHARE data.

Figure 3 compares the mean number of natural children that are alive for women across three broad education categories: primary at most, secondary and some college. Our data confirm the well documented negative relationship between education and fertility: for all 50+ women, the mean number of children falls from 2.32 to 1.87 and 1.65, respectively. Across countries (not shown in the graph), Sweden is the only exception to this pattern. For men, there is not such a strong and robust (across countries) relationship between education and the number of children.

Turning to the relationship between the number of living children and health measures, we selected three binary indicators of mental and physical health. EURODCAT is one if the respondent has clinically significant symptoms of depression (a score greater than 3 in the EURO-D scale), zero otherwise. The variable CHRONIC2 is one if the respondent reports suffering from two or more chronic diseases and zero otherwise. Variable SPHEU2

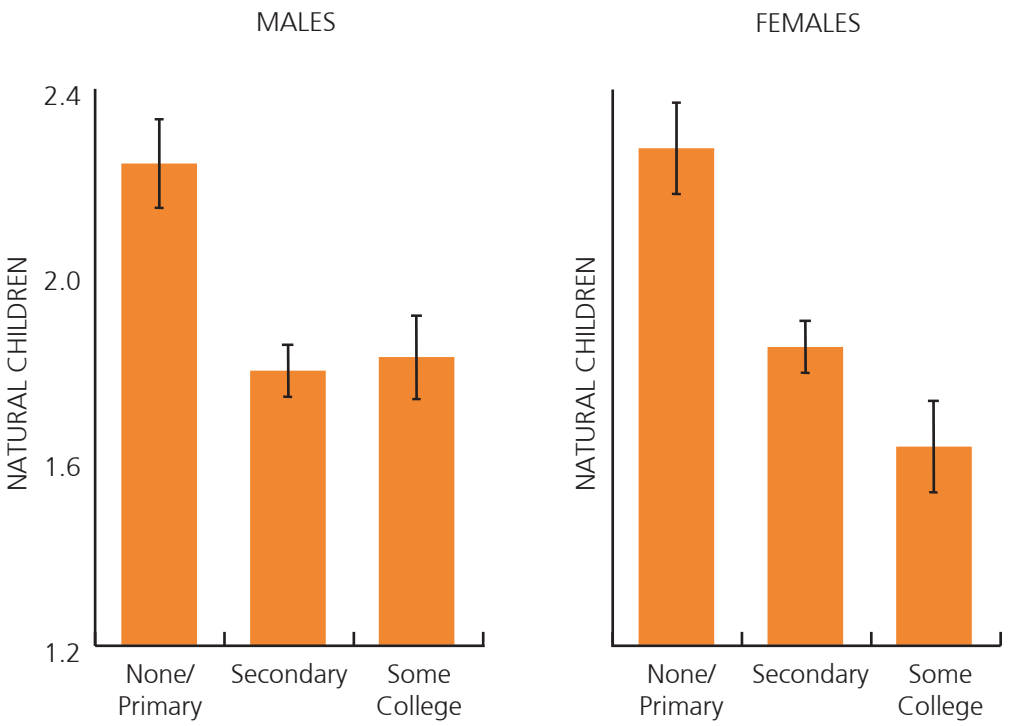

Figure 3 Number of natural children by education and sex

Note: the educational categories correspond to a grouping of the ISCED-97 created by SHARE. The first group includes no education and primary education; the second group includes lower and upper secondary education as well as post-secondary but non tertiary education; the third group includes first or second stage of tertiary education.

dichotomises the European version of self-perceived health scale into two categories: (0) good or very good health and (1) less than good health. Table 2A.19 reports the ratios in the probabilities of observing a value of 1 for EURODCAT, CHRONIC2 and SPHEU2 for women who had any number of children N and N-1 children ("odds ratios"). As an example, the value of 1.086 shown at the top of the last column of the table means that having an additional child is associated with an 8.6% increase in the probability that a woman will suffer from chronic diseases. Alternatively, odds ratios of 1.0 or 0.7 would mean that the probability is the same or 30% lower. We find that the prevalence of depression, chronic diseases and poor self-perceived health increases with the number of natural living children for both women and men. This correlation may be explained by common factors such as age or socio-economic status which relate systematically to both health and fertility. For instance, we know that less educated women tend to have more children and poorer health. In Table 2A.19 we also obtained the odds ratios controlling for education, age group and country. Although the odds ratios are smaller, a negative (partial) correlation between the number of children and health is still measured for both men and women, overall and within most countries. This issue deserves further investigation.

Conclusions

- Significant geographical and historical variation in life-cycle fertility is represented in the SHARE data. Across countries, the average number of natural living children that female respondents have ranges from 1.77 in Germany to 2.46 in Spain. The baby boom of the 1950's and 1960's is reflected in the higher number of children of women aged 60-75.

- One out every four women over the age of 80 has no living children.

- We confirm the well known negative correlation between education and the number of natural children that women have. We also find a negative correlation between measures of physical and mental health and the number of natural children in the SHARE data. This issue deserves further investigation, although it can partly be explained in terms of common factors such as age, country and education.

References

Marmot, M.; J. Banks; R. Blundell; C. Lessof; and J. Nazroo. 2003. *Health, wealth and lifestyles of the older population in England: The 2002 English Longitudinal Study of Ageing.* Institute for Fiscal Studies.

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1 *Note that SHARE did not collect full fertility histories of female respondents: the birth years of natural children are available only for those children who were alive at the time of the interview. To the extent that we are interested in social relationships and in sources of support in old age collecting information on all living children, natural or not, is more important than collecting full fertility histories.*

APPENDIX

Tables on Who Are Our 50+ Olds?

Table 2A.1 **Mean Number of Limitations in Mobility, Activities in Daily Living (ADL), Instrumental Activities of Daily Living (I-ADL) and Chronic Diseases by Sex and Age-Groups in Oldest-Old.**

	Men			Women		
Age group	80-84	85+	Total	80-84	85+	Total
N	444	206	650	669	413	1082
Mobility						
mean score[1]	2.94	3.08	2.99	3.64	3.98	3.78
CI*	2.41;3.48	2.27;3.88	2.54;3.43	3.28;3.99	3.20;4.77	3.41;4.15
SD**	0.27	0.41	0.23	0.18	0.40	0.19
ADL						
mean score[1]	0.55	1.05	0.72	0.54	1.25	0.82
CI*	0.37;0.74	0.55;1.56	0.51;0.93	0.38;0.69	0.97;1.53	0.67;0.97
SD**	0.10	0.26	0.11	0.08	0.14	0.07
I-ADL						
mean score[1]	1.07	1.92	1.34	1.18	1.96	1.49
CI*	0.75;1.38	1.17;2.66	1.02;1.67	0.94;1.42	1.49;2.44	1.26;1.72
SD**	0.16	0.38	0.16	0.12	0.24	0.12
Chronic diseases *mean number*	2.26	1.99	2.17	2.46	2.14	2.33
CI*	1.95;2.57	1.68;2.30	1.94;2.41	2.22;2.70	1.68;2.61	2.09;2.58
SD**	0.16	0.16	0.12	0.12	0.24	0.12

Notes: Confidence intervals (CI) and standard deviations (SD). [1]*The higher score the more limitations/ disabled.*

Table 2A.2 **Oldest-Old's Demographics, Care-Giving and Socio-Economic Status by Country**

	SE	DK	NL	DE	FR	AT	CH	ES	IT	GR	All 80+
N	207	152	178	183	160	169	98	234	151	200	1732
Participants rate, % [1]	42	57	54	51	- [2]	48	32	36	35	56	46
Male proportion, %	38.6 [31.8;45.4]	33.2 [25.7;40.7]	33.0 [25.4;40.6]	24.1 [16.9;31.3]	35.9 [28.4;43.3]	27.2 [20.5;33.9]	34.6 [25.4;43.8]	30.1 [22.6;37.7]	30.1 [18.5;41.7]	36.2 [29.5;42.9]	29.1 [25.2;33.1]
Mean age	84.8 [84.2;85.4]	84.3 [83.8;84.9]	83.7 [83.1;84.3]	84.2 [83.5;84.9]	83.9 [83.2;84.6]	84.0 [83.4;84.6]	84.5 [83.8;85.2]	84.7 [83.9;85.4]	84.0 [82.9;85.1]	84.7 [84.1;85.3]	84.3 [83.9;84.6]
Aged 80-84, Men %	42.9 [33.4;52.4]	37.0 [27.0;47.0]	38.3 [28.7;47.9]	26.7 [17.7;35.8]	36.5 [27.7;45.3]	28.1 [20.1;36.1]	38.3 [25.6;51.1]	28.7 [19.2;38.1]	33.8 [20.7;46.8]	39.3 [30.5;48.2]	31.2 [26.4;36.0]
Aged 85+, Men %	33.8 [24.2;43.4]	27.8 [16.6;38.9]	23.1 [11.2;35.0]	18.9 [6.9;30.9]	34.1 [20.1;48.1]	25.0 [12.7;37.3]	30.1 [16.9;43.2]	32.2 [20.1;44.3]	24.2 [3.7;44.6]	31.9 [21.7;42.0]	25.7 [18.9;32.4]
Living alone, %	66.3 [60.1;72.5]	64.4 [56.7;72.1]	62.7 [55.0;70.4]	64.9 [57.3;72.6]	53.4 [45.7;61.2]	66.7 [59.5;73.9]	53.3 [43.2;63.3]	39.2 [30.6;47.7]	50.7 [36.2;65.1]	65.7 [59.1;72.3]	56.2 [52.7;60.8]
Living as a couple, %	31.1 [25.2;37.0]	29.8 [22.5;37.0]	34.3 [26.9;41.8]	26.7 [19.8;33.6]	37.1 [29.6;44.6]	20.0 [13.9;26.1]	39.5 [29.7;49.3]	24.0 [17.8;30.3]	27.8 [17.1;38.5]	26.6 [20.5;32.7]	27.4 [23.7;31.0]
Living w/family, %	2.6 [0.0;4.7]	5.8 [1.9;9.8]	3.0 [0.0;5.3]	8.4 [4.6;12.1]	9.4 [4.9;14.0]	13.3 [8.1;18.5]	7.2 [1.9;12.4]	36.8 [29.1;44.5]	21.6 [12.4;30.7]	7.7 [3.9;11.5]	16.4 [13.5;19.3]
Personal care from HH, %	16.9 [8.4;25.4]	21.5 [7.1;35.8]	10.5 [2.4;18.6]	31.2 [19.2;43.1]	25.5 [13.0;38.0]	43.6 [28.0;59.2]	11.9 [0.0;24.6]	37.8 [27.9;47.6]	38.2 [23.3;53.2]	34.0 [21.7;46.2]	33.3 [27.5;39.1]
Personal care from HH or PCG, %	9.9 [5.5;14.3]	24.0 [16.4;31.5]	15.1 [8.3;21.9]	22.1 [14.8;29.5]	32.6 [24.6;40.6]	22.8 [16.1;29.6]	5.2 [0.2;10.2]	31.5 [23.6;39.4]	23.2 [11.9;34.6]	10.4 [6.0;14.8]	22.5 [18.6;26.5]
Pract.help or personal care (HH or PCG), %	36.7 [29.0;44.3]	60.0 [51.4;68.7]	48.7 [39.1;58.2]	28.0 [20.0;35.9]	54.5 [46.0;62.9]	32.7 [25.2;40.2]	6.3 [0.9;11.6]	41.7 [33.2;50.2]	29.2 [16.7;41.7]	11.1 [6.5;15.6]	32.3 [27.9;36.7]
Getting help from children, %	39.4 [31.2;47.5]	28.9 [20.6;37.2]	30.9 [21.2;40.6]	43.6 [34.2;53.0]	40.0 [31.4;48.6]	28.6 [21.4;35.9]	19.5 [10.2;28.7]	20.6 [13.3;27.9]	14.9 [5.4;24.4]	50.5 [43.2;57.9]	30.4 [25.8;35.0]

Notes: Numbers (n), means and proportions (%). 95% Confidence Intervals in brackets [ ]. HH=Household; PCG=Professional Care-Giver. [1] Derived from the work of De Luca and Peracchi: Survey participation rate in the 1. wave of SHARE. [2] Data missing from France.

Table 2A.3 **The Oldest-Old's Social Activities and Socio-Economic Status by Country**

	SE	DK	NL	DE	FR	AT	CH	ES	IT	GR	All 80+
N	207	152	178	183	160	169	98	234	151	200	1732
Social activities, all %	33.8 [26.7;40.9]	36.3 [28.2;44.5]	32.9 [24.3;41.4]	26.2 [18.5;34.0]	32.7 [25.1;40.3]	29.3 [22.3;36.2]	36.7 [26.8;46.6]	19.8 [12.9;26.8]	4.9 [1.0;8.8]	52.4 [44.9;59.9]	22.4 [18.9;25.9]
Caring for sick or disabled adult %, [1]	20.5 [14.5;26.6]	23.9 [16.7;31.1]	21.2 [13.7;28.7]	14.3 [8.2;20.4]	17.7 [11.5;23.9]	16.5 [10.8;22.1]	23.9 [15.1;32.7]	10.0 [4.5;15.5]	0.7 [0;2.1]	32.2 [25.3;39.2]	12.2 [9.6;14.8]
Religious activities	8.6 [4.2;13.1]	4.2 [0.4;8.0]	6.2 [1.5;10.8]	8.9 [4.1;13.8]	5.4 [1.8;9.1]	18.9 [12.9;24.9]	11.9 [5.2;18.6]	14.6 [8.3;21.0]	0.2 [0 ;0.6]	42.8 [35.4;50.2]	9.4 [7.1;11.6]
Sports and social clubs, %, [1]	11.0 [6.2;15.7]	21.5 [14.5;28.5]	19.0 [11.6;26.3]	10.7 [5.3 ;16.0]	14.3 [8.6 ;20.0]	3.0 [0.4;5.7]	13.8 [6.8 ;20.8]	3.3 [0.7 ;5.9]	1.1 [0;3.2]	1.5 [0;3.3]	7.2 [5.1;9.2]
Helping family and friends, %, [1]	14.6 [9.4;19.8]	11.1 [5.6;16.6]	14.6 [8.4;20.7]	13.4 [7.2;19.5]	12.2 [6.9;17.6]	15.2 [9.7;20.8]	16.2 [8.6;23.7]	4.2 [0.9;7.5]	2.3 [0;4.9]	19.4 [13.5;25.4]	9.5 [7.1;11.9]
HEALTHY[2] Men, %	25.8 [16.9;34.7]	30.4 [18.0;42.8]	39.7 [27.3;52.1]	14.4 [1.8;27.0]	29.6 [17.4;41.8]	35.6 [21.6;49.6]	40.5 [25.1;55.9]	18.0 [5.1;30.9]	23.6 [6.1;41.1]	15.8 [7.5;24.1]	21.9 [15.7;28.1]
HEALTHY[2] Women, %	12.4 [5.7;19.2]	17.3 [9.3;25.4]	13.0 [5.2;20.9]	9.6 [3.9;15.3]	10.0 [4.1;15.9]	17.1 [10.4;23.7]	22.8 [11.8;33.8]	11.2 [4.7;17.7]	17.1 [0.2;33.9]	4.1 [0.6; 7.7]	12.5 [7.8;17.2]
Yearly PPP-adj. total indiv. gross income, €, mean	23828 [10079-37577]	14130 [10972-17289]	40021 [17120-62922]	16972 [13104-20840]	29050 [14738-43362]	31542 [17993-45092]	18428 [12691-24166]	9106 [3699-14512]	16891 [2270-31512]	9032 [5333-12731]	17348 [13251-21445]
Yearly HH-size adj. Gross HH-income, €, mean	32873 [17182-48565]	25266 [20605-29928]	52521 [29058-75985]	24191 [18865-29517]	41049 [28765-53333]	38157 [24675-51640]	46284 [36877-55692]	16469 [9724-23214]	22342 [11815-32868]	10059 [7636-12482]	24995 [21314-28676]

Notes: Proportions (%) and means. 95%-Confidence Intervals in brackets [ ]. HH=Household; [1] CI truncated at 0%. [2] Not being limited in (a) mobility, (b) Activities of Daily Living (ADL), and (c) Instrumental Activities of Daily Living (I-ADL)

Table 2A.4 **Proportions of Well-Functioning and Healthy Oldest-Old by Sex and Age Groups.**

	Men			Women		
Age group	80-84	85+	Total	80-84	85+	Total
N	444	206	650	669	413	1082
No limitation in activities (GALI) [1] %	29.0 [21.9;36.2]	40.3 [25.7;54.9]	32.7 [25.7;39.8]	22.9 [17.5;28.2]	26.5 [16.0;37.1]	24.3 [19.0;29.6]
No long-term health problems [2] %	33.5 [24.9;42.1]	35.9 [22.4;49.3]	34.3 [27.0;41.5]	25.5 [19.8;31.1]	37.6 [25.3;49.9]	30.3 [24.0;36.6]
Top 2 Self-perceived health (excellent-poor) %	35.4 [27.4;43.4]	36.0 [22.6;49.5]	35.6 [28.6;42.6]	27.4 [21.7;33.1]	29.6 [21.1;38.2]	28.3 [23.5;33.1]
Top 2 Self-perceived health (very good-very bad) %	13.7 [6.5;21.0]	19.1 [6.3;31.8]	15.5 [9.0;21.9]	7.6 [4.8;10.3]	9.1 [4.8;13.4]	8.2 [5.8;10.5]
0-1 chronic disease %	39.3 [30.6;48.0]	43.8 [29.4;58.2]	40.8 [33.2;48.3]	35.0 [28.2;41.7]	44.7 [33.0;56.4]	38.9 [32.5;45.3]
0-1 symptoms of disease %	41.6 [33.2;50.0]	44.3 [30.2;58.4]	42.5 [35.2;49.9]	34.2 [27.8;40.6]	38.0 [25.7;50.3]	35.7 [29.4;42.0]
No limitations in Mobility %	22.9 [16.5;29.3]	25.6 [11.8;39.4]	23.8 [17.5;30.1]	13.6 [9.6;17.6]	23.2 [9.4;37.0]	17.4 [11.1;23.8]
No limitations in ADL %	71.4 [62.9;79.9]	66.9 [53.9;79.8]	69.9 [62.8;77.0]	76.6 [71.1;82.0]	46.7 [35.6;57.7]	64.7 [58.7;70.7]
No limitations in I-ADL %	58.8 [49.6;68.0]	50.8 [36.6;64.9]	56.2 [48.6;63.8]	55.2 [48.3;62.1]	43.2 [31.3;55.2]	50.4 [44.4;56.5]
No depressive symptoms (EURO-D) %	70.5 [62.7;78.3]	59.0 [44.2;73.7]	66.6 [59.3;73.9]	48.8 [41.8;55.8]	46.9 [34.8;59.0]	48.1 [41.7;54.4]
Well-functioning in orientation [3] %	91.7 [88.1;95.2]	74.8 [62.6;86.9]	86.0 [81.1;91.0]	84.5 [78.9;90.1]	74.7 [66.5;82.8]	80.6 [76.0;85.2]
Well-functioning Arithmetic skills [3] %	28.2 [20.7;35.7]	18.7 [8.7;28.7]	25.0 [19.0;31.0]	22.3 [16.7;27.9]	10.7 [6.3;15.2]	17.7 [13.7;21.7]
Being HEALTHY [4] %	21.4 [15.2;27.7]	22.8 [8.9;36.7]	21.9 [15.7;28.1]	11.7 [8.0;15.3]	13.8 [3.5;24.2]	12.5 [7.8;17.2]
Getting help with personal care %	22.1 [13.8;30.3]	26.7 [14.3;39.1]	23.8 [16.9;30.7]	18.2 [12.4;23.9]	27.7 [19.3;36.2]	22.1 [17.3;26.8]
Getting practical help or personal care %	27.1 [18.7;35.5]	39.8 [25.8;53.9]	31.7 [24.3;39.2]	26.6 [20.3;33.0]	41.0 [30.9;51.1]	32.5 [27.2;37.9]

Notes: Confidence Intervals in brackets [ ]. *[1]GALI: Limitations because of a health problem in activities people usually do (past 6 months at least). [2] Long-term health problems, illness, disability or infirmity. [3] ≤ 1 fault. [4] Not being limited in (a) mobility, (b) Activities of Daily Living (ADL), and (c) Instrumental Activities of Daily Living (I-ADL)*

Table 2A.5 **Ownership Status**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
„Do you live as an owner, a main tenant, a subtenant, or do you live rent free?“ (Question HO02)															
Sweden															
Owner	75.4	69.0	72.0	78.7	74.2	76.4	79.1	77.4	78.2	75.4	65.1	69.5	56.2	49.1	51.9
Tenant	23.0	29.6	26.6	20.6	24.6	22.6	19.4	21.0	20.2	22.8	34.2	29.3	39.6	48.5	45.0
Subtenant	.5	.5	.5	.2	1.2	.7	.3	.0	.1	.0	.3	.2	2.8	.0	1.1
Rent free	1.0	.9	1.0	.5	.0	.2	1.2	1.7	1.4	1.7	.3	.9	1.4	2.4	2.0
Denmark															
Owner	74.9	69.7	72.1	76.0	79.7	77.9	79.9	80.2	80.1	73.2	55.2	63.3	52.9	43.3	46.4
Tenant	23.8	28.8	26.5	21.9	17.9	19.9	18.8	19.8	19.3	26.8	44.1	36.4	47.1	53.7	51.6
Subtenant	.0	.2	.1	.0	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
Rent free	1.3	1.3	1.3	2.1	1.8	2.0	1.3	.0	.7	.0	.7	.4	.0	2.9	2.0
Germany															
Owner	57.0	49.0	52.6	53.6	59.0	56.2	58.4	54.1	56.2	61.9	45.4	52.0	54.9	22.7	30.4
Tenant	35.9	40.0	38.1	42.0	37.1	39.6	36.6	38.2	37.4	24.8	40.0	33.9	26.0	49.9	44.2
Subtenant	.6	.8	.7	.9	.7	.8	.2	.6	.4	.9	.0	.3	.0	2.5	1.9
Rent free	6.5	10.3	8.6	3.5	3.3	3.4	4.8	7.1	6.0	12.4	14.6	13.8	19.1	25.0	23.5
Netherlands															
Owner	59.5	53.1	56.0	71.1	70.0	70.5	57.4	53.4	55.3	44.5	41.7	42.9	33.1	22.2	25.3
Tenant	38.3	42.0	40.3	26.8	29.3	28.1	40.7	43.5	42.1	53.6	53.7	53.7	61.4	57.4	58.5
Subtenant	.1	.2	.2	.0	.2	.1	.3	.0	.1	.0	.0	.0	.0	1.2	.9
Rent free	2.2	4.7	3.5	2.1	.5	1.3	1.7	3.1	2.4	1.9	4.6	3.4	5.5	19.2	15.4
France															
Owner	79.6	73.0	76.0	80.6	74.2	77.2	81.5	76.3	78.8	77.8	75.9	76.7	73.7	57.0	63.1
Tenant	16.8	20.9	19.0	17.0	22.1	19.7	17.0	21.9	19.5	15.2	14.6	14.9	19.3	28.0	24.8
Subtenant	.0	.1	.1	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
Rent free	3.6	5.9	4.9	2.4	3.4	2.9	1.5	1.9	1.7	7.0	9.6	8.4	7.0	15.0	12.1

Table 2A.5 (cont.) **Ownership Status**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Switzerland															
Owner	63.1	52.6	57.5	64.3	54.6	59.5	64.9	59.9	62.3	54.9	48.6	51.4	70.0	39.4	49.9
Tenant	33.4	41.2	37.6	34.4	44.3	39.3	31.2	35.4	33.4	36.1	39.9	38.2	30.0	46.5	40.8
Subtenant	.5	.2	.4	.7	.6	.6	.8	.0	.4	.0	.0	.0	.0	.0	.0
Rent free	3.0	5.9	4.6	.7	.6	.6	3.2	4.6	3.9	9.0	11.5	10.4	.0	14.1	9.3
Austria															
Owner	64.2	57.5	60.5	66.4	64.1	65.2	67.2	62.1	64.5	62.1	48.8	54.4	37.0	41.9	40.5
Tenant	25.3	28.6	27.1	25.7	28.4	27.1	23.8	26.2	25.1	21.7	30.2	26.6	45.7	33.9	37.3
Subtenant	2.3	3.1	2.8	2.1	2.7	2.4	2.5	3.0	2.7	1.9	2.5	2.2	4.3	5.6	5.3
Rent free	8.1	10.8	9.6	5.7	4.8	5.2	6.5	8.7	7.7	14.3	18.6	16.8	13.0	18.5	17.0
Italy															
Owner	78.6	74.8	76.5	75.8	79.8	77.8	81.9	80.9	81.3	79.5	65.2	71.2	77.2	68.2	70.9
Tenant	14.1	15.6	14.9	18.8	14.6	16.7	12.6	13.2	12.9	11.9	19.0	16.0	2.5	16.9	12.5
Subtenant	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Rent free	7.3	9.6	8.6	5.4	5.6	5.5	5.5	6.0	5.8	8.5	15.8	12.8	20.4	15.0	16.6
Spain															
Owner	88.2	86.7	87.4	83.3	86.4	84.9	91.1	91.6	91.3	93.5	89.2	91.0	85.6	76.0	78.9
Tenant	5.4	4.9	5.1	7.7	5.0	6.3	3.0	3.0	3.0	2.4	5.4	4.1	10.5	7.0	8.0
Subtenant	.0	.2	.1	.0	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
Rent free	6.4	8.2	7.4	8.9	8.1	8.5	6.0	5.5	5.7	4.1	5.4	4.9	3.9	17.1	13.1
Greece															
Owner	86.4	83.3	84.7	84.8	85.5	85.2	87.4	84.0	85.6	86.6	83.1	84.6	89.1	75.6	80.5
Tenant	9.1	9.1	9.1	11.9	11.0	11.4	9.0	10.2	9.6	6.3	7.2	6.8	3.9	4.4	4.2
Subtenant	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Rent free	4.5	7.6	6.2	3.3	3.5	3.4	3.6	5.8	4.8	7.0	9.7	8.6	7.0	20.0	15.3
Total															
Owner	71.6	66.2	68.6	70.2	72.1	71.2	72.4	70.1	71.2	73.8	63.4	67.8	68.2	48.7	54.6
Tenant	22.7	25.3	24.1	25.3	23.4	24.4	23.2	24.2	23.7	17.8	25.1	22.1	20.1	32.1	28.5
Subtenant	.3	.4	.3	.4	.5	.4	.2	.3	.3	.3	.1	.2	.3	1.0	.8
Rent free	5.5	8.2	7.0	4.1	4.0	4.1	4.2	5.4	4.8	8.1	11.4	10.0	11.4	18.2	16.1

Notes: Survey of Health, Ageing and Retirement 2004. Release 0, weighted (member of a cooperative = owners, France: "usufruitier total" = rent free).

Table 2A.6 **Property Acquisition**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
„How did you acquire this property?“ (Question HO011)															
Sweden															
Solely with own means	91.0	91.8	91.5	90.9	91.9	91.4	93.8	93.5	93.6	87.3	90.7	89.1	90.4	89.6	89.9
With help form family	3.0	1.6	2.3	4.3	2.4	3.4	1.8	.9	1.4	2.3	2.1	2.2	2.5	.0	1.1
As a bequest	2.8	4.0	3.4	2.8	4.9	3.8	1.5	1.6	1.5	5.2	3.6	4.3	2.5	8.4	5.9
As a gift	.8	.5	.7	.6	.3	.4	1.1	.6	.9	1.2	1.0	1.1	.0	.0	.0
With other means	2.3	2.0	2.2	1.4	.5	1.0	1.8	3.4	2.6	4.0	2.6	3.3	4.6	2.0	3.1
Denmark															
Solely with own means	91.7	92.3	92.0	93.5	93.5	93.5	92.7	90.1	91.4	86.1	92.2	89.0	.	93.6	92.3
With help form family	3.1	2.8	2.9	2.8	1.6	2.2	2.7	4.4	3.6	3.6	3.3	3.5	.	1.8	3.2
As a bequest	1.1	1.1	1.1	.0	.8	.4	.5	1.3	.9	4.8	.8	2.9	.	2.7	1.8
As a gift	.6	.5	.5	.4	.3	.4	1.2	1.2	1.2	.0	.0	.0	.	.0	.0
With other means	3.6	3.3	3.5	3.3	3.8	3.5	2.9	3.0	2.9	5.5	3.7	4.6	.	1.8	2.8
Germany															
Solely with own means	64.0	60.9	62.4	62.7	60.6	61.6	63.9	63.0	63.4	65.2	60.9	63.0	.	51.7	59.4
With help form family	10.4	12.1	11.3	11.6	12.0	11.8	10.2	13.3	11.7	8.9	8.2	8.5	.	18.7	14.6
As a bequest	18.0	18.0	18.0	15.1	12.9	14.0	18.1	16.2	17.2	23.8	28.3	26.2	.	23.3	20.2
As a gift	1.8	2.6	2.2	3.1	3.7	3.4	1.4	2.6	2.0	.7	.8	.7	.	1.7	1.0
With other means	5.7	6.4	6.0	7.5	10.8	9.2	6.4	4.9	5.6	1.4	1.9	1.7	.	4.6	4.7
Netherlands															
Solely with own means	91.8	91.8	91.8	93.2	91.5	92.3	92.2	93.2	92.7	85.2	93.3	89.7	.	.	87.3
With help form family	1.7	1.2	1.4	1.4	1.2	1.3	2.4	1.0	1.7	2.1	1.7	1.9	.	.	.0
As a bequest	1.4	2.4	1.9	1.1	2.0	1.6	1.5	1.9	1.7	2.1	2.5	2.3	.	.	6.4
As a gift	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.	.	.0
With other means	5.1	4.6	4.8	4.3	5.3	4.8	3.9	3.9	3.9	10.6	2.5	6.1	.	.	6.4

Table 2A.6 (cont.) **Property Acquisition**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
France															
Solely with own means	83.8	84.4	84.1	84.3	89.9	87.2	88.9	84.1	86.5	75.6	78.0	76.9	85.7	80.7	82.8
With help form family	4.1	3.6	3.8	6.4	3.7	5.0	1.8	4.3	3.1	4.1	4.0	4.0	2.4	.0	1.0
As a bequest	9.8	9.5	9.6	6.4	4.1	5.2	8.0	8.6	8.3	17.1	16.0	16.5	11.9	15.8	14.1
As a gift	.4	.7	.5	.0	.5	.2	.6	1.8	1.2	.8	.0	.4	.0	.0	.0
With other means	1.9	1.9	1.9	2.9	1.8	2.4	.6	1.2	.9	2.4	2.0	2.2	.0	3.5	2.0
Switzerland															
Solely with own means	76.9	76.7	76.8	80.0	79.6	79.8	74.2	70.9	72.6	75.5	75.1	75.3	.	.	80.5
With help form family	7.8	8.7	8.2	5.6	5.9	5.7	10.0	12.3	11.1	7.8	10.4	9.2	.	.	8.2
As a bequest	8.0	7.7	7.9	6.7	3.2	5.1	7.0	10.9	9.0	11.8	11.4	11.6	.	.	9.4
As a gift	.7	1.2	1.0	.0	1.1	.5	2.5	1.3	1.9	.0	2.0	1.1	.	.	.0
With other means	6.5	5.6	6.1	7.7	10.2	8.9	6.3	4.6	5.4	4.9	1.1	2.9	.	.	1.9
Austria															
Solely with own means	69.2	69.8	69.5	66.1	67.8	67.0	66.8	70.5	68.7	82.0	73.7	77.7	.	65.4	63.7
With help form family	7.9	7.9	7.9	8.6	7.0	7.8	8.8	8.0	8.4	5.0	10.2	7.7	.	5.8	5.8
As a bequest	18.1	17.0	17.5	18.3	15.9	17.1	19.8	17.9	18.8	12.0	13.6	12.8	.	25.0	26.2
As a gift	2.5	2.4	2.4	3.8	4.2	4.0	1.8	1.2	1.5	1.0	1.7	1.4	.	1.9	3.0
With other means	2.3	3.0	2.7	3.2	5.1	4.2	2.8	2.4	2.6	.0	.8	.4	.	1.9	1.4
Italy															
Solely with own means	61.1	61.9	61.6	56.1	67.6	62.1	66.5	64.2	65.2	64.7	67.3	66.1	52.5	30.6	37.8
With help form family	12.1	10.9	11.4	13.0	7.5	10.1	12.1	14.1	13.2	11.6	8.7	10.1	9.3	14.9	13.1
As a bequest	19.5	22.1	20.9	20.3	16.9	18.6	15.4	18.6	17.2	20.2	18.9	19.5	31.0	51.3	44.6
As a gift	2.9	1.8	2.3	5.6	3.0	4.3	1.8	.6	1.1	1.0	2.1	1.6	.7	1.5	1.2
With other means	4.3	3.3	3.8	5.0	5.0	5.0	4.3	2.5	3.3	2.6	3.0	2.8	6.5	1.6	3.2
Spain															
Solely with own means	74.4	71.9	73.0	76.5	71.0	73.6	75.1	76.5	75.9	72.1	69.0	70.3	71.1	70.6	70.8
With help form family	5.2	9.1	7.4	2.6	8.0	5.5	9.3	9.7	9.5	4.9	11.2	8.5	3.3	6.4	5.4
As a bequest	14.9	14.7	14.8	15.5	16.8	16.2	10.4	9.0	9.6	18.0	16.7	17.3	17.9	17.4	17.6
As a gift	2.0	1.1	1.5	1.7	1.3	1.5	1.7	.9	1.2	2.0	.6	1.2	3.9	1.9	2.5
With other means	3.5	3.2	3.3	3.7	2.9	3.3	3.5	3.9	3.7	2.9	2.5	2.7	3.8	3.7	3.7

Table 2A.6 (cont.) **Property Acquisition**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Greece															
Solely with own means	66.2	62.8	64.4	62.1	64.4	63.3	71.1	67.5	69.2	67.0	57.6	61.7	60.9	53.8	56.6
With help form family	12.8	14.7	13.8	16.5	16.7	16.6	8.8	8.5	8.6	12.4	19.0	16.1	15.3	18.2	17.1
As a bequest	14.9	16.5	15.7	11.9	10.8	11.4	16.5	19.4	18.0	15.7	19.2	17.7	19.1	19.1	19.1
As a gift	1.8	2.4	2.1	3.5	3.2	3.3	.5	1.7	1.1	1.9	1.4	1.6	.0	4.8	2.9
With other means	4.2	3.7	3.9	5.9	4.8	5.4	3.2	2.9	3.0	3.0	2.9	2.9	4.7	4.1	4.3
Total															
Solely with own means	72.0	70.8	71.3	71.5	73.8	72.7	73.7	71.8	72.7	70.6	70.0	70.3	70.7	59.1	63.4
With help form family	8.0	8.7	8.4	8.5	7.6	8.0	8.1	10.1	9.2	7.5	8.2	7.9	6.4	9.6	8.4
As a bequest	14.3	15.1	14.8	12.6	11.2	11.9	12.9	13.4	13.1	18.2	18.4	18.3	18.0	26.8	23.5
As a gift	1.7	1.5	1.6	2.5	2.1	2.3	1.3	1.4	1.4	1.1	.9	1.0	1.0	1.4	1.2
With other means	4.0	3.8	3.9	4.9	5.3	5.1	4.0	3.3	3.6	2.7	2.4	2.5	3.9	3.1	3.4

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.7 **Number of Rooms and Rooms per Person (means)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
„How many rooms do you have for your household members' personal use, including bedrooms but excluding kitchen, bathrooms, and hallways?" (Question HO032)															
Sweden	4.1	3.7	3.9	4.4	4.0	4.2	4.2	4.0	4.1	3.9	3.4	3.6	3.5	2.9	3.1
Denmark	4.3	4.0	4.1	4.6	4.3	4.4	4.2	4.3	4.3	3.9	3.6	3.7	3.5	3.2	3.3
Germany	4.0	3.7	3.9	4.2	4.1	4.2	3.9	3.8	3.8	3.9	3.6	3.7	3.8	2.9	3.1
Netherlands	4.3	4.1	4.1	4.5	4.5	4.5	4.2	4.2	4.2	4.0	3.8	3.9	3.4	2.9	3.1
France	4.3	4.2	4.2	4.5	4.4	4.5	4.4	4.1	4.2	4.1	4.1	4.1	4.0	3.7	3.8
Switzerland	4.7	4.5	4.6	5.0	4.8	4.9	4.6	4.5	4.6	4.4	4.0	4.2	4.7	4.1	4.3
Austria	3.9	3.6	3.7	4.0	3.9	4.0	3.9	3.7	3.8	3.9	3.2	3.5	2.9	2.8	2.8
Italy	3.8	3.7	3.7	3.8	3.9	3.8	3.9	3.7	3.8	3.7	3.4	3.6	3.4	3.8	3.7
Spain	4.2	4.2	4.2	4.1	4.3	4.2	4.3	4.2	4.2	4.3	3.9	4.1	3.8	4.2	4.1
Greece	3.2	2.9	3.0	3.3	3.2	3.3	3.2	3.0	3.1	3.0	2.8	2.9	2.8	2.3	2.5
Total	4.0	3.9	3.9	4.2	4.1	4.2	4.0	3.9	3.9	3.9	3.7	3.8	3.7	3.4	3.5
„How many rooms do you have for your household members' personal use, including bedrooms but excluding kitchen, bathrooms, and hallways?" (Question HO032)															
Sweden	2.2	2.4	2.3	2.1	2.2	2.1	2.3	2.5	2.4	2.4	2.5	2.5	2.5	2.5	2.5
Denmark	2.3	2.6	2.5	2.3	2.4	2.3	2.4	2.7	2.5	2.4	2.6	2.5	2.3	2.8	2.6
Germany	2.1	2.3	2.2	1.9	2.1	2.0	2.1	2.3	2.2	2.3	2.5	2.4	2.1	2.5	2.4
Netherlands	2.2	2.5	2.4	2.1	2.3	2.2	2.3	2.6	2.5	2.3	2.8	2.6	2.4	2.5	2.5
France	2.2	2.5	2.3	2.0	2.2	2.1	2.3	2.5	2.4	2.2	2.7	2.5	2.5	3.0	2.8
Switzerland	2.5	2.8	2.7	2.4	2.6	2.5	2.4	2.9	2.7	2.6	2.8	2.7	3.1	3.2	3.1
Austria	2.0	2.2	2.1	1.9	2.1	2.0	2.1	2.3	2.2	2.2	2.3	2.2	1.9	2.3	2.2
Italy	1.8	2.0	1.9	1.5	1.5	1.5	1.8	2.0	1.9	2.1	2.2	2.1	2.1	2.9	2.6
Spain	1.8	2.1	2.0	1.5	1.5	1.5	1.9	2.0	2.0	2.2	2.4	2.3	2.1	2.8	2.6
Greece	1.5	1.8	1.6	1.3	1.4	1.3	1.5	1.9	1.7	1.6	2.0	1.8	1.9	2.0	2.0
Total	2.0	2.3	2.1	1.8	1.9	1.9	2.1	2.3	2.2	2.2	2.4	2.3	2.2	2.7	2.5

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.8 **Under and Oversupply with Housing Space**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Less than 1 room/person	1.5	.2	.8	2.9	.2	1.5	1.2	.5	.8	.0	.0	.0	.0	.0	.0
More than 3 rooms/person	12.0	13.4	12.8	9.4	10.0	9.7	10.4	14.2	12.4	13.6	14.1	13.9	21.9	18.3	19.7
Denmark															
Less than 1 room/person	.7	.6	.6	1.0	.3	.6	.8	.4	.6	.0	.0	.0	.0	2.4	1.6
More than 3 rooms/person	12.1	17.4	14.9	8.4	10.4	9.4	14.1	22.3	18.2	18.8	20.3	19.6	8.5	23.2	18.5
Germany															
Less than 1 room/person	1.6	1.2	1.4	2.9	1.8	2.4	.8	.6	.7	.7	1.2	1.0	1.3	1.2	1.2
More than 3 rooms/person	8.2	11.9	10.3	6.0	8.9	7.4	8.5	11.1	9.9	13.1	14.2	13.7	5.1	16.6	13.8
Netherlands															
Less than 1 room/person	1.2	.6	.9	2.5	.7	1.6	.3	.3	.3	.0	.7	.4	.0	.6	.4
More than 3 rooms/person	10.1	18.1	14.4	8.4	13.2	10.9	8.6	18.2	13.5	12.9	25.7	20.2	19.9	19.9	19.9
France															
Less than 1 room/person	3.9	2.8	3.3	7.1	6.1	6.6	3.5	.9	2.2	.6	1.0	.8	.0	1.0	.6
More than 3 rooms/person	10.6	17.9	14.6	9.1	10.9	10.0	10.5	17.7	14.2	10.8	23.1	17.7	17.5	29.0	24.8
Switzerland															
Less than 1 room/person	1.3	.8	1.0	2.6	1.5	2.0	.0	.0	.0	1.1	1.0	1.0	.0	.0	.0
More than 3 rooms/person	18.3	25.1	21.9	15.0	22.0	18.5	13.4	23.9	18.8	25.5	27.3	26.5	35.6	32.1	33.3
Austria															
Less than 1 room/person	4.9	4.2	4.5	9.3	6.9	8.0	2.2	3.7	3.0	4.3	2.9	3.5	.0	.8	.6
More than 3 rooms/person	9.5	11.4	10.6	9.6	9.6	9.6	8.4	13.4	11.0	13.0	11.6	12.2	4.3	9.8	8.2
Italy															
Less than 1 room/person	12.5	8.9	10.5	24.0	16.9	20.4	6.3	3.1	4.5	4.8	9.0	7.2	3.6	3.8	3.8
More than 3 rooms/person	5.5	12.7	9.6	4.2	4.1	4.1	5.2	11.0	8.5	8.1	15.9	12.7	5.2	29.8	22.4

Table 2A.8 (cont.) **Under-and Oversupply with Housing Space**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Spain															
Less than 1 room/person	8.4	6.3	7.2	14.7	12.9	13.8	6.9	3.6	5.1	3.2	2.6	2.9	1.0	4.1	3.2
More than 3 rooms/person	8.1	14.1	11.6	3.5	3.1	3.3	7.1	13.8	10.9	14.7	16.1	15.6	11.6	32.1	25.9
Greece															
Less than 1 room/person	20.1	11.3	15.3	35.3	22.1	28.5	15.9	6.6	10.9	6.2	6.0	6.1	5.0	5.0	5.0
More than 3 rooms/person	3.6	4.7	4.2	2.2	2.2	2.2	3.7	6.1	5.0	3.6	7.4	5.8	10.3	2.3	5.2
Total															
Less than 1 room/person	5.8	4.1	4.9	10.5	7.7	9.1	3.6	1.9	2.7	2.2	3.3	2.8	1.4	2.2	1.9
More than 3 rooms/person	8.5	13.8	11.4	6.4	8.0	7.2	8.1	13.1	10.8	11.8	16.9	14.8	11.3	23.5	19.8

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.9 **Type of Building**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Farm house	7.0	4.4	5.6	7.4	4.8	6.1	7.0	5.3	6.1	8.0	3.4	5.3	4.7	3.2	3.8
1 or 2 family or row house	60.5	53.5	56.7	61.5	59.8	60.6	66.6	61.7	64.1	55.9	46.0	50.1	50.2	37.4	42.3
Building with 3+ flats	31.4	39.1	35.6	31.1	35.4	33.3	26.4	32.5	29.6	34.4	50.0	43.4	39.5	43.0	41.7
Special house for elderly	1.0	3.0	2.1	.0	.0	.0	.0	.5	.2	1.8	.7	1.1	5.6	16.4	12.2
Denmark															
Farm house	8.5	5.2	6.7	11.1	7.8	9.4	8.1	5.1	6.6	5.5	3.3	4.3	3.2	.8	1.6
1 or 2 family or row house	70.5	66.1	68.2	70.4	73.6	72.0	75.3	72.2	73.8	71.0	56.9	63.4	50.2	47.1	48.1
Building with 3+ flats	19.5	25.5	22.7	18.5	18.2	18.4	16.6	22.7	19.7	20.9	35.0	28.6	33.3	37.5	36.2
Special house for elderly	1.5	3.2	2.4	.0	.4	.2	.0	.0	.0	2.5	4.8	3.8	13.3	14.6	14.2
Germany															
Farm house	4.4	4.2	4.3	3.0	4.1	3.5	4.8	2.7	3.7	6.5	7.4	7.1	5.1	2.5	3.2
1 or 2 family or row house	61.3	55.0	57.9	61.6	57.9	59.8	58.9	56.1	57.4	63.4	51.3	56.1	68.9	52.5	56.4
Building with 3+ flats	33.8	38.7	36.5	35.4	37.4	36.4	35.7	40.8	38.4	29.6	38.8	35.1	23.5	36.7	33.5
Special house for elderly	.5	2.1	1.3	.0	.5	.3	.6	.4	.5	.4	2.5	1.7	2.5	8.3	6.9
Netherlands															
Farm house	2.7	1.8	2.2	3.1	1.9	2.5	2.0	1.8	1.9	3.3	1.8	2.4	2.2	1.2	1.5
1 or 2 family or row house	74.7	66.5	70.2	80.7	80.6	80.6	78.4	74.2	76.2	59.4	54.0	56.3	62.5	32.0	40.5
Building with 3+ flats	18.6	20.9	19.8	15.3	16.6	15.9	17.4	19.3	18.4	29.2	31.1	30.3	15.4	20.6	19.1
Special house for elderly	4.0	10.9	7.7	1.0	.9	.9	2.2	4.7	3.5	8.1	13.1	11.0	19.9	46.2	38.9
France															
Farm house	4.5	4.0	4.2	4.0	3.4	3.7	3.5	2.8	3.1	6.3	7.0	6.7	5.3	2.0	3.2
1 or 2 family or row house	71.1	66.0	68.3	73.1	67.4	70.1	72.0	67.4	69.6	71.5	67.3	69.2	57.9	56.0	56.7
Building with 3+ flats	23.8	29.5	27.0	22.9	29.2	26.3	24.5	29.8	27.3	20.3	24.6	22.7	35.1	40.0	38.2
Special house for elderly	.6	.5	.5	.0	.0	.0	.0	.0	.0	1.9	1.0	1.4	1.8	2.0	1.9
Switzerland															
Farm house	9.1	6.9	8.0	7.1	7.5	7.3	11.2	8.3	9.7	11.3	5.1	7.8	7.7	5.4	6.2
1 or 2 family or row house	50.7	45.8	48.1	53.9	47.9	50.9	48.9	42.5	45.6	46.7	45.3	45.9	49.7	47.3	48.1
Building with 3+ flats	39.5	46.3	43.2	39.0	44.6	41.8	39.9	48.4	44.3	41.0	48.6	45.2	37.4	43.7	41.5
Special house for elderly	.6	.9	.8	.0	.0	.0	.0	.8	.4	1.1	1.0	1.0	5.1	3.6	4.1

Table 2A.9 (cont.) **Type of Building**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Austria															
Farm house	8.0	7.4	7.7	7.1	4.8	5.9	8.0	8.7	8.4	10.6	9.1	9.7	4.3	7.2	6.4
1 or 2 family or row house	57.3	53.4	55.1	57.9	56.6	57.2	58.5	53.5	55.8	57.1	53.7	55.2	45.7	44.0	44.5
Building with 3+ flats	34.4	38.8	36.9	35.0	38.6	36.9	33.4	37.9	35.8	31.7	37.2	34.9	47.8	45.6	46.2
Special house for elderly	.2	.4	.3	.0	.0	.0	.0	.0	.0	.6	.0	.3	2.2	3.2	2.9
Italy															
Farm house	6.0	3.4	4.6	7.2	3.4	5.3	1.5	1.0	1.2	5.3	5.2	5.3	20.3	5.5	10.0
1 or 2 family or row house	47.5	49.5	48.6	48.3	49.8	49.1	47.6	47.1	47.3	45.7	46.3	46.0	48.8	60.3	56.8
Building with 3+ flats	46.4	47.1	46.8	44.5	46.8	45.7	50.8	51.9	51.4	49.0	48.5	48.7	30.9	34.2	33.2
Special house for elderly	.1	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0
Spain															
Farm house	4.8	3.4	4.0	3.6	1.8	2.7	5.2	5.9	5.6	6.1	5.0	5.5	5.4	.0	1.6
1 or 2 family or row house	55.6	54.0	54.7	46.3	49.3	47.9	59.7	52.7	55.8	64.4	56.3	59.6	57.5	61.4	60.2
Building with 3+ flats	39.6	42.1	41.1	50.1	48.6	49.3	35.2	41.0	38.5	29.6	37.8	34.4	37.2	38.6	38.2
Special house for elderly	.0	.4	.2	.0	.3	.2	.0	.3	.2	.0	.9	.5	.0	.0	.0
Greece															
Farm house	3.1	3.5	3.3	.5	.8	.7	2.9	2.7	2.8	4.1	5.9	5.2	14.0	8.0	10.2
1 or 2 family or row house	49.7	50.1	49.9	38.8	37.1	37.9	53.9	55.9	55.0	59.3	56.9	57.9	57.3	55.9	56.4
Building with 3+ flats	47.1	46.4	46.7	60.7	62.1	61.4	43.2	41.4	42.2	36.6	37.2	36.9	28.7	35.3	32.9
Special house for elderly	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.5
Total															
Farm house	5.1	3.9	4.4	4.5	3.5	4.0	4.2	3.1	3.6	6.1	6.0	6.1	8.5	2.9	4.6
Farm house	59.5	55.8	57.4	59.2	57.7	58.4	59.9	56.3	58.0	60.1	53.7	56.4	57.7	53.9	55.0
1 or 2 family or row house	34.9	38.8	37.0	36.2	38.5	37.4	35.5	40.2	38.0	32.8	38.5	36.1	31.2	36.7	35.0
Building with 3+ flats	.6	1.5	1.1	.1	.3	.2	.4	.4	.4	1.0	1.7	1.4	2.7	6.5	5.4
Special house for elderly	.6	1.5	1.1	.1	.3	.2	.4	.4	.4	1.0	1.7	1.4	2.7	6.5	5.4

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.10 **Years in Accommodation (means)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
"How many years have you been living in your present accommodation?" (Question Ho034)															
Sweden	18.5	17.8	18.1	13.5	13.8	13.6	19.3	19.0	19.1	23.0	19.0	20.6	25.7	21.8	23.2
Denmark	18.9	17.9	18.4	16.3	14.7	15.6	20.6	16.6	18.8	22.2	20.7	21.4	20.3	22.5	21.8
Germany	22.9	23.8	23.4	15.0	16.2	15.5	24.6	23.6	24.1	33.1	29.7	31.0	.	29.0	31.3
Netherlands	18.4	18.2	18.3	14.8	16.4	15.6	19.9	18.1	19.0	22.4	21.0	21.6	24.2	18.5	20.0
France	22.0	24.2	23.1	17.0	16.5	16.7	18.9	21.7	20.3	28.9	31.4	30.2	34.5	33.0	33.5
Switzerland	20.2	21.4	20.7	15.8	14.6	15.3	20.3	18.8	19.7	25.2	27.3	26.3	.	31.7	32.4
Austria	27.5	30.5	29.1	21.0	23.3	22.2	28.4	30.7	29.6	34.3	34.9	34.6	.	37.6	36.6
Italy	26.6	30.2	28.6	22.7	21.6	22.2	24.6	25.9	25.4	31.7	32.2	32.0	39.9	50.5	47.9
Spain	26.7	28.6	27.8	17.6	19.9	18.8	26.4	28.2	27.5	34.7	35.2	35.0	41.8	34.8	36.8
Greece	24.3	26.8	25.7	16.6	19.2	17.9	24.5	26.0	25.3	31.2	31.6	31.5	38.8	37.6	38.0
Total	23.5	25.5	24.6	17.3	18.0	17.6	23.5	24.2	23.9	30.9	30.5	30.7	36.7	34.2	34.8

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.11 **Equipment of the Accommodation**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
„Does your accommodation have…?" (self-administered questionnaire, question Q30_a-f)															
Indoor bath/shower only for household's personal use															
Sweden	93.3	95.6	94.6	93.5	95.1	94.3	93.5	96.2	94.9	90.6	95.0	93.1	96.9	96.7	96.8
Denmark	97.6	99.1	98.4	98.2	98.8	98.5	98.2	100-	99.1	96.5	99.1	97.9	.	.	96.0
Germany	99.1	98.8	98.9	98.2	98.8	98.5	99.8	99.5	99.6	99.4	98.6	98.9	.	96.9	97.7
Netherlands	98.7	98.8	98.8	98.9	99.8	99.4	98.8	99.2	99.0	98.9	97.7	98.2	95.9	96.6	96.4
Switzerland	98.7	99.7	99.2	97.5	99.2	98.4	100.0	100.0	100.0	98.7	100.0	99.4	.	100.0	100.0
Austria	98.3	98.3	98.3	98.4	98.7	98.6	99.0	98.6	98.8	98.5	98.1	98.3	93.0	95.9	95.0
Italy	98.8	99.0	98.9	97.6	99.1	98.3	99.6	98.6	99.0	99.3	99.5	99.4	.	.	99.3
Spain	97.5	99.1	98.5	97.3	99.5	98.4	100.0	99.4	99.7	97.6	98.8	98.3	91.2	98.5	96.3
Greece	90.3	91.2	90.8	91.2	91.8	91.5	88.7	89.9	89.3	89.7	92.5	91.3	95.0	90.5	92.3
Total	98.0	98.3	98.2	97.4	98.5	97.9	98.8	98.6	98.7	98.1	98.4	98.2	97.4	97.2	97.3
Indoor flushing toilet only for household's personal use															
Sweden	97.6	98.2	97.9	97.2	98.5	97.9	97.8	98.0	97.9	97.8	98.7	98.3	97.9	97.5	97.6
Denmark	96.2	96.5	96.4	97.2	95.7	96.5	94.3	95.5	94.9	96.7	99.1	98.0	.	.	97.4
Germany	99.0	98.8	98.9	98.7	98.8	98.8	99.0	99.5	99.2	99.1	99.1	99.1	.	96.9	97.7
Netherlands	99.4	99.4	99.4	99.1	99.8	99.5	99.4	99.7	99.6	100.0	99.2	99.6	100.0	97.5	98.3
Switzerland	98.7	99.4	99.1	97.5	99.2	98.4	100.0	99.1	99.5	98.7	100-	99.4	.	100.0	100.0
Austria	96.9	98.1	97.6	96.4	97.1	96.8	97.6	98.9	98.3	98.5	98.6	98.6	90.5	96.9	94.8
Italy	99.4	98.5	98.9	99.3	97.2	98.3	99.6	98.9	99.2	99.0	99.3	99.2	.	100.0	100.0
Spain	97.0	97.8	97.5	97.6	94.6	96.1	97.1	98.3	97.8	97.6	100.0	99.0	91.2	100.0	97.3
Greece	89.2	89.3	89.3	92.6	91.8	92.2	89.4	88.6	89.0	85.6	88.1	87.0	80.1	85.6	83.3
Total	98.1	98.1	98.1	98.2	97.5	97.8	98.3	98.4	98.4	98-	98.7	98.4	96.8	97.6	97.3

Table 2A.11 (cont.) **Equipment of the Accommodation**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Central heating															
Sweden	87.1	87.1	87.1	85.3	83.6	84.5	86.0	83.8	84.9	93.3	92.6	92.9	85.4	93.3	90.3
Denmark	92.3	91.7	92.0	89.5	84.2	86.9	95.1	94.3	94.7	91.7	97.8	95.1	.	.	98.7
Germany	95.2	95.6	95.4	95.8	94.6	95.2	95.0	96.5	95.8	94.0	94.9	94.6	.	96.9	96.5
Netherlands	93.4	94.6	94.1	94.8	95.0	94.9	93.8	94.5	94.1	91.5	95.4	93.7	87.8	92.4	91.0
Switzerland	96.8	95.9	96.3	97.5	97.0	97.2	98.1	94.4	96.2	94.8	97.2	96.1	.	.	93.3
Austria	88.9	86.1	87.3	91.3	89.3	90.2	91.1	87.1	89.0	84.2	81.9	82.9	73.8	81.4	79.0
Italy	61.3	61.0	61.2	59.5	58.6	59.1	60.1	63.8	62.1	61.8	63.8	63.0	.	.	60.8
Spain	33.1	30.2	31.4	39.2	34.0	36.6	35.1	28.4	31.3	24.3	27.1	26.0	22.9	31.1	28.6
Greece	83.2	77.3	80.0	87.7	85.5	86.6	84.7	78.1	81.1	79.4	67.6	72.5	62.7	68.0	65.8
Total	78.7	77.3	78.0	79.6	77.6	78.6	81.2	79.7	80.4	73.5	73.8	73.7	76.2	77.3	77.0
Air Condition															
Sweden	17.4	22.9	20.3	13.5	18.6	16.2	13.8	24.2	19.2	20.9	29.2	25.4	34.4	21.7	26.6
Denmark	3.3	1.7	2.5	3.7	1.4	2.6	1.0	.0	.5	6.0	3.9	4.9	.	.	3.9
Germany	2.2	2.2	2.2	3.4	.9	2.2	1.1	2.7	1.9	2.4	4.8	3.8	.	.0	.0
Netherlands	4.2	5.1	4.7	2.7	3.7	3.3	2.1	4.7	3.4	8.3	6.4	7.2	12.7	9.2	10.3
Switzerland	1.8	.9	1.4	.9	.0	.4	3.0	.0	1.5	.0	.8	.4	.	.	7.1
Austria	4.2	3.7	3.9	5.2	4.3	4.7	3.8	3.9	3.9	3.8	4.3	4.1	2.4	.0	.8
Italy	27.7	22.4	24.8	28.6	22.2	25.4	28.3	30.4	29.4	29.9	18.3	23.1	.	.	6.7
Spain	19.4	16.3	17.6	28.1	26.9	27.5	18.9	13.9	16.0	9.9	11.8	11.1	5.9	6.2	6.1
Greece	61.7	55.2	58.2	71.8	70.2	71.0	63.5	55.1	59.0	49.4	41.7	44.9	30.3	32.7	31.7
Total	14.3	12.8	13.5	16.3	14.4	15.4	12.8	14.3	13.6	14.6	12.4	13.3	8.7	5.0	6.2
Balcony, terrace or garden															
Sweden	93.6	94.8	94.2	92.6	96.6	94.7	93.5	95.9	94.8	93.8	94.5	94.2	96.9	88.7	91.8
Denmark	92.9	94.2	93.6	93.3	96.5	94.8	92.5	91.5	92.0	96.0	95.9	96.0	.	.	88.0
Netherlands	95.6	94.9	95.2	96.4	96.4	96.4	96.2	94.7	95.5	95.8	92.2	93.8	86.3	94.9	92.3
Germany	81.9	79.7	80.7	86.1	86.6	86.4	78.2	83.9	81.2	80.1	72.2	75.4	.	65.2	69.4
Austria	85.9	82.7	84.1	85.7	82.8	84.2	90.1	86.0	87.9	82.7	79.3	80.6	67.4	78.1	74.6
Switzerland	97.3	96.8	97.1	96.3	97.7	97.0	98.6	96.7	97.6	99.4	96.5	97.9	.	94.5	93.9
Italy	93.9	94.6	94.3	94.6	92.6	93.6	95.5	96.8	96.2	91.3	93.8	92.8	.	.	94.5
Spain	77.3	74.2	75.5	84.4	82.3	83.3	79.5	71.7	75.0	69.8	68.1	68.8	56.7	73.2	68.2
Greece	98.4	97.8	98.1	98.6	98.1	98.3	97.7	97.8	97.8	99.3	97.6	98.3	97.9	97.4	97.6
Total	87.3	85.9	86.5	90.0	89.8	89.9	86.2	88.0	87.2	85.1	81.8	83.1	82.3	77.3	78.8

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted (no data for France).

Table 2A.12 **Special Features for Persons with Physical Impairments or Health Problems**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
„Does your home have special features that assist persons who have physical impairments or health problems?“ (Question HO033)															
Sweden	10.3	13.5	12.0	4.6	5.7	5.2	8.7	9.6	9.2	9.6	13.7	12.0	33.1	35.6	34.7
Denmark	11.3	16.3	14.0	7.1	8.3	7.7	10.9	13.0	11.9	14.3	18.3	16.5	29.1	41.3	37.5
Germany	6.2	9.6	8.1	3.3	2.9	3.1	4.4	6.0	5.3	11.6	13.4	12.7	20.4	25.3	24.1
Netherlands	12.4	22.9	18.1	7.8	10.5	9.2	9.2	17.9	13.6	21.6	34.8	29.1	30.9	49.6	44.3
France	4.3	5.2	4.8	1.2	2.0	1.6	5.0	6.0	5.5	7.6	6.0	6.7	7.0	11.0	9.6
Switzerland	10.4	11.5	11.0	11.7	12.0	11.9	12.0	8.6	10.3	5.4	11.7	8.9	10.3	15.3	13.6
Austria	5.3	7.3	6.4	4.3	6.0	5.2	4.0	5.0	4.5	8.1	7.9	7.9	10.9	17.6	15.7
Italy	.8	1.2	1.0	.2	1.0	.6	.7	1.0	.9	1.6	1.8	1.7	2.6	.8	1.3
Spain	10.6	8.5	9.4	12.6	8.8	10.6	9.6	11.4	10.6	8.7	6.5	7.4	10.7	6.6	7.8
Greece	2.0	2.4	2.2	2.6	2.1	2.4	1.4	1.3	1.3	.6	3.2	2.1	5.5	5.0	5.2
Total	5.9	7.7	6.9	4.1	4.2	4.1	4.9	6.2	5.6	8.1	9.1	8.7	13.1	16.5	15.5

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.13 **Accumulation of Equipment Deficiencies (indoor bath/shower, toilet, central heating/air condition)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
One feature missing	13.6	12.3	12.9	14.5	15.3	14.9	15.7	14.6	15.1	12.8	9.3	10.8	6.3	5.1	5.5
Two features missing	1.3	1.0	1.1	1.9	1.3	1.6	.4	.6	.5	2.2	.0	1.0	.0	2.5	1.6
All three features missing	1.4	.9	1.2	1.6	1.1	1.3	1.8	1.2	1.5	.0	.5	.3	2.1	.8	1.3
Denmark															
One feature missing	9.2	9.9	9.6	12.0	17.2	14.6	6.4	7.2	6.8	11.2	5.0	7.7	.	.	.0
Two features missing	2.1	1.5	1.8	1.2	2.0	1.6	2.6	1.5	2.0	1.9	.0	.9	.	.	4.0
All three features missing	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.	.	.0
Germany															
One feature missing	5.2	4.8	5.0	4.2	5.6	4.9	6.0	3.6	4.7	6.0	6.9	6.5	.	3.1	3.5
Two features missing	.5	1.1	.9	1.3	1.2	1.2	.0	.5	.2	.0	.9	.6	.	3.1	2.3
All three features missing	.2	.0	.1	.0	.0	.0	.2	.0	.1	.6	.0	.2	.	.0	.0
Netherlands															
One feature missing	5.6	5.3	5.4	4.5	5.0	4.8	5.0	6.1	5.6	8.5	4.6	6.3	6.8	5.9	6.2
Two features missing	.5	.7	.6	.0	.2	.1	.6	.0	.3	.5	1.5	1.1	4.1	2.5	3.0
All three features missing	.6	.2	.4	.9	.0	.4	.6	.3	.4	.0	.0	.0	.0	.8	.6
Switzerland															
One feature missing	3.2	4.6	3.9	2.5	3.0	2.8	1.9	6.6	4.3	5.2	4.2	4.7	.	5.8	6.4
Two features missing	1.3	.3	.8	2.5	.8	1.6	.0	.0	.0	1.3	.0	.6	.	.0	.0
All three features missing	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.	.0	.0
Austria															
One feature missing	10.0	13.1	11.7	7.9	10.0	9.0	8.9	12.1	10.6	15.0	17.7	16.6	14.3	16.8	16.0
Two features missing	1.9	1.1	1.5	1.6	1.3	1.4	1.7	.8	1.2	.8	.9	.9	9.5	2.1	4.5
All three features missing	.6	.6	.6	.8	.6	.7	.0	.5	.3	.8	.5	.6	2.4	1.1	1.5
Italy															
One feature missing	26.9	30.4	28.8	24.4	32.1	28.3	28.0	25.8	26.8	31.5	28.8	29.9	.	.	36.7
Two features missing	.5	1.0	.8	.7	1.7	1.2	.0	.5	.3	1.0	.7	.8	.	.	.7
All three features missing	.1	.3	.2	.0	.2	.1	.4	.6	.5	.0	.0	.0	.	.	.0

Table 2A.13 (cont.) **Accumulation of Equipment Deficiencies (indoor bath/shower, toilet, central heating/air condition)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Spain															
One feature missing	54.2	60.1	57.6	45.3	52.0	48.6	52.1	61.6	57.5	68.2	64.0	65.7	63.7	67.4	66.3
Two features missing	.9	1.7	1.3	1.0	2.2	1.6	1.7	1.7	1.7	.0	1.2	.7	.0	1.5	1.1
All three features missing	1.7	.0	.8	1.0	.0	.5	.0	.0	.0	2.4	.0	1.0	8.8	.0	2.7
Greece															
One feature missing	16.6	18.6	17.7	12.2	12.5	12.4	16.5	18.6	17.6	20.3	23.5	22.2	31.0	29.5	30.1
Two features missing	5.5	4.5	5.0	3.8	3.9	3.9	5.3	3.7	4.5	7.5	5.4	6.3	10.1	8.0	8.9
All three features missing	1.0	2.2	1.6	.3	1.3	.8	1.0	2.5	1.8	1.5	2.7	2.2	3.1	3.2	3.2
Total															
One feature missing	17.2	19.4	18.4	14.9	18.5	16.7	15.6	16.7	16.2	23.8	23.0	23.3	19.1	21.8	21.0
Two features missing	1.0	1.3	1.2	1.2	1.5	1.4	.6	.8	.7	.9	1.1	1.0	1.4	2.6	2.2
All three features missing	.5	.3	.4	.3	.2	.3	.4	.4	.4	.7	.2	.4	1.8	.3	.7

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted (no data for France).

Table 2A.14 **Infrastructure in the Surrounding of the Accommodation**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
„Sufficient supply of facilities such as pharmacy, medical care and grocery?“ (self-administered questionnaire, question q32_a)															
Sweden	85.9	84.3	85.0	87.0	85.2	86.1	85.1	84.2	84.6	85.4	82.4	83.7	85.1	84.8	84.9
Denmark	91.7	88.2	89.8	91.7	88.7	90.2	93.3	88.0	90.4	89.2	86.7	87.8	.	.	91.1
Germany	83.3	82.5	82.9	85.7	86.4	86.0	83.4	83.7	83.6	80.1	79.1	79.5	.	75.8	76.0
Netherlands	91.6	91.7	91.7	91.7	94.2	93.1	92.8	91.2	92.0	89.2	89.5	89.3	92.8	87.9	89.4
Switzerland	91.1	90.8	91.0	88.3	92.8	90.5	92.9	91.7	92.3	94.6	85.7	89.9	.	91.8	91.2
Austria	90.4	87.6	88.9	92.8	89.5	91.0	89.0	88.1	88.5	89.8	85.4	87.2	87.8	84.7	85.7
Italy	86.6	85.6	86.0	84.5	86.8	85.7	91.6	90.4	90.9	86.8	80.7	83.2	.	.	74.1
Spain	83.1	79.7	81.2	86.2	85.0	85.6	86.6	71.6	77.9	77.0	78.0	77.6	74.7	86.0	82.9
Greece	90.5	88.6	89.5	91.8	94.2	93.0	91.3	85.8	88.3	89.1	85.9	87.3	83.2	84.8	84.1
Total	85.8	84.4	85.1	86.8	87.8	87.3	87.2	85.0	86.1	83.7	81.0	82.1	78.4	80.3	79.7
“Sufficient possibilities for public transport?” (self-administered questionnaire, question q32_b)															
Sweden	75.3	74.8	75.0	74.8	71.2	73.0	76.1	76.7	76.4	75.6	80.2	78.1	73.9	72.5	73.0
Denmark	83.4	81.3	82.3	77.2	77.5	77.3	89.8	84.9	87.1	85.9	82.4	83.9	.	.	85.7
Germany	73.6	75.8	74.8	72.1	74.4	73.2	75.8	75.6	75.7	73.3	77.6	75.9	.	76.5	74.8
Netherlands	86.0	85.1	85.5	85.8	86.6	86.2	85.4	84.6	85.0	84.1	87.8	86.3	97.1	75.6	82.1
Switzerland	88.2	89.3	88.8	85.9	89.7	87.8	88.8	91.2	90.0	90.7	84.6	87.4	.	92.1	92.2
Austria	79.5	81.4	80.6	77.9	78.2	78.1	76.2	80.2	78.4	88.9	84.0	85.9	82.9	89.7	87.5
Italy	74.3	75.4	74.9	74.9	76.5	75.7	74.2	73.7	73.9	73.5	78.9	76.7	.	.	68.5
Spain	71.6	73.4	72.6	72.7	77.3	75.0	78.4	69.7	73.4	65.1	73.1	70.0	64.3	71.6	69.6
Greece	82.5	81.4	81.9	85.7	87.4	86.6	81.7	80.1	80.8	76.8	77.1	76.9	84.6	74.9	78.9
Total	75.8	77.0	76.5	75.5	77.7	76.6	77.3	76.1	76.7	74.4	78.4	76.8	74.7	74.9	74.8

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted (no data for France).

Table 2A.15 **Evaluation of the Accommodation**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
"Not enough space" (self-administered questionnaire, question q31_a)															
Sweden	9.1	12.8	11.1	7.0	18.0	12.7	10.4	8.9	9.6	10.4	9.9	10.1	10.7	11.9	11.4
Denmark	25.1	24.1	24.6	20.5	18.5	19.5	21.4	24.4	23.0	29.3	29.7	29.6	.	.	44.2
Germany	5.9	4.3	5.0	9.5	4.6	7.1	4.9	3.1	4.0	1.3	5.0	3.5	.	5.6	4.3
Netherlands	8.2	7.8	8.0	8.3	7.3	7.8	9.0	8.7	8.9	7.5	6.4	6.8	4.7	10.1	8.5
Switzerland	5.6	6.3	6.0	7.9	7.4	7.7	2.1	3.8	2.9	6.3	9.3	7.9	.	.	3.5
Austria	6.3	5.7	5.9	6.9	6.3	6.5	5.7	5.7	5.7	5.4	4.9	5.1	9.8	5.2	6.7
Italy	16.3	16.6	16.4	23.2	19.2	21.2	11.6	14.9	13.4	13.6	17.0	15.6	.	.	8.7
Spain	20.0	19.2	19.5	21.8	21.8	21.8	22.8	18.7	20.4	17.9	16.1	16.8	6.8	20.6	16.8
Greece	26.6	25.0	25.7	27.4	24.8	26.1	28.0	25.9	26.9	20.9	24.8	23.2	31.3	22.8	26.2
Total	11.7	11.2	11.4	14.9	12.4	13.7	9.9	9.9	9.9	9.7	11.7	10.8	7.1	10.3	9.3
"Costs too much" (self-administered questionnaire, question q31_b)															
Sweden	21.9	23.9	22.9	23.9	25.2	24.5	22.4	20.6	21.5	20.8	26.5	23.9	14.9	23.4	20.0
Denmark	9.7	10.7	10.2	9.2	7.9	8.6	7.6	15.5	11.9	10.5	11.3	11.0	.	.	10.2
Germany	18.1	16.2	17.0	22.9	14.8	18.9	18.4	16.2	17.3	7.7	21.1	15.7	.	11.9	12.1
Netherlands	19.4	19.0	19.2	17.2	16.8	17.0	22.7	22.2	22.4	21.7	19.7	20.5	9.5	17.8	15.4
Switzerland	13.1	11.3	12.2	14.2	16.8	15.5	13.0	6.5	9.8	11.3	8.9	10.1	.	8.7	10.0
Austria	14.5	16.0	15.3	15.3	16.9	16.1	15.4	15.9	15.6	13.3	17.3	15.7	7.5	10.4	9.5
Italy	32.3	33.4	32.9	32.1	36.1	34.1	34.5	38.8	36.9	30.5	27.1	28.5	.	.	22.6
Spain	22.8	20.3	21.3	24.2	28.8	26.5	25.0	19.2	21.6	19.8	18.7	19.1	17.3	6.1	9.1
Greece	23.2	20.4	21.7	29.1	25.5	27.3	20.7	20.1	20.4	19.8	16.6	18.0	10.3	12.0	11.3
Total	21.9	21.1	21.4	24.2	22.5	23.4	22.5	22.3	22.4	18.0	21.5	20.0	15.9	12.8	13.7

Table 2A.15 (cont.) **Evaluation of the Accommodation**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
"Not enough light" (self-administered questionnaire, question q31_c)															
Sweden	8.1	8.7	8.4	5.4	8.2	6.8	8.6	8.0	8.3	12.3	10.0	11.0	8.5	9.5	9.1
Denmark	20.1	22.2	21.2	13.8	16.1	15.0	19.2	23.6	21.6	19.2	28.0	24.2	.	.	44.3
Germany	9.4	9.5	9.4	9.7	9.2	9.4	10.2	9.9	10.1	6.7	10.2	8.8	.	8.4	8.5
Switzerland	5.8	7.2	6.5	6.5	6.2	6.3	5.7	5.5	5.6	5.0	10.2	7.8	.	8.9	7.4
Austria	10.4	11.2	10.8	11.0	12.9	12.0	9.3	12.7	11.1	12.6	6.7	9.1	7.5	10.5	9.6
Italy	8.3	8.6	8.5	7.3	9.3	8.3	11.9	6.5	8.9	6.2	10.7	8.8	.	.	6.0
Spain	12.5	16.7	15.0	9.9	21.9	16.1	17.2	11.4	13.8	12.8	15.0	14.2	10.1	18.3	16.1
Greece	11.5	12.6	12.1	11.1	11.5	11.3	10.8	12.3	11.6	12.7	12.8	12.8	13.7	17.3	15.8
Total	9.2	10.2	9.8	8.5	10.6	9.6	10.6	9.2	9.9	8.1	11.0	9.8	9.4	10.3	10.0
"Insufficient heating or cooling facilities" (self-administered questionnaire, question q31_d)															
Sweden	13.9	13.6	13.8	14.9	15.0	14.9	19.4	8.6	13.8	7.0	13.5	10.5	7.5	20.9	15.4
Denmark	14.6	19.1	17.0	10.7	19.9	15.3	10.2	19.0	15.0	23.1	16.2	19.1	.	.	28.1
Germany	6.7	4.8	5.7	9.5	4.4	7.0	6.1	4.8	5.4	3.8	7.8	6.2	.	1.6	1.2
Netherlands	6.9	6.7	6.8	4.5	5.6	5.1	6.6	6.4	6.5	10.7	6.5	8.2	13.2	12.1	12.4
Switzerland	3.7	5.2	4.5	4.0	4.5	4.3	2.7	5.5	4.1	4.2	5.7	5.0	.	5.8	5.3
Austria	9.2	8.7	8.9	11.7	7.6	9.5	7.5	8.7	8.1	7.8	7.7	7.8	10.0	15.1	13.4
Italy	12.6	12.1	12.3	11.5	9.6	10.5	15.4	14.2	14.7	12.4	12.5	12.5	.	.	9.2
Spain	23.9	24.9	24.5	19.7	24.4	22.1	22.3	25.1	24.0	30.9	25.8	27.8	28.4	23.6	25.0
Greece	22.8	28.4	25.8	16.3	22.8	19.6	24.2	25.1	24.7	30.8	39.5	35.8	29.3	33.6	31.9
Total	11.5	11.4	11.4	11.4	10.2	10.8	11.1	11.1	11.1	12.9	14.0	13.5	9.9	10.3	10.2

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted (no data for France).

Table 2A.16 **Monthly Rent Payment in euros, PPP-Adjusted, Incl. Services and Charges (means)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden	462	462	462	505	462	481	463	472	468	440	432	435	413	404	407
Denmark	464	444	452	466	469	467	437	434	436	423	445	437	.	409	429
Germany	485	455	468	517	496	508	461	459	460	463	388	410	.	471	463
Netherlands	554	526	538	597	531	561	558	504	529	519	509	513	488	589	558
France	539	464	494	574	493	524	.	493	512	.	.	482	.	.	387
Switzerland	627	603	613	659	647	652	617	565	589	586	503	538	.	.	665
Austria	367	366	366	367	399	385	379	343	359	.	367	370	.	350	336
Italy	437	437	437	452	538	491	500	551	529	.	.	300	.	.	.
Spain	.	291	346	.	.	.	.	.	.	.	.	.	.	.	.
Greece	481	433	455	519	510	515	.	.	445	.	.	.	.	.	.
Total	490	458	472	520	501	510	482	475	478	461	390	415	407	445	437

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 2A.17 **Types of Living Children, by Country and Age**

		AGE GROUP							
COUNTRY		*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75-79*	*80+*	*Total*
SE	*No children*	0.084	0.071	0.047	0.081	0.120	0.164	0.171	0.104
	Only natural ch.	0.753	0.718	0.810	0.800	0.826	0.771	0.808	0.782
	Has adopted/foster ch.	0.044	0.040	0.043	0.019	0.012	0.025	0.005	0.027
	Has stepchildren	0.106	0.167	0.114	0.095	0.042	0.041	0.010	0.085
DK	*No children*	0.137	0.057	0.066	0.071	0.069	0.139	0.188	0.104
	Only natural ch.	0.751	0.827	0.730	0.827	0.883	0.798	0.758	0.791
	Has adopted/foster ch.	0.025	0.031	0.044	0.017	0.000	0.000	0.000	0.019
	Has stepchildren	0.082	0.081	0.149	0.065	0.040	0.049	0.026	0.074
DE	*No children*	0.162	0.102	0.136	0.114	0.124	0.223	0.166	0.146
	Only natural ch.	0.792	0.844	0.798	0.845	0.832	0.752	0.774	0.805
	Has adopted/foster ch.	0.009	0.016	0.008	0.017	0.012	0.021	0.016	0.014
	Has stepchildren	0.037	0.044	0.046	0.023	0.032	0.000	0.030	0.031
NL	*No children*	0.172	0.074	0.078	0.137	0.121	0.103	0.172	0.123
	Only natural ch.	0.793	0.876	0.866	0.811	0.883	0.875	0.767	0.836
	Has adopted/foster ch.	0.003	0.011	0.017	0.000	0.000	0.000	0.000	0.005
	Has stepchildren	0.021	0.039	0.030	0.029	0.000	0.022	0.022	0.024
FR	*No children*	0.113	0.059	0.093	0.090	0.112	0.154	0.199	0.116
	Only natural ch.	0.810	0.888	0.870	0.880	0.879	0.824	0.717	0.836
	Has adopted/foster ch.	0.007	0.007	0.000	0.030	0.000	0.000	0.008	0.007
	Has stepchildren	0.049	0.033	0.037	0.010	0.000	0.011	0.038	0.028
CH	*No children*	0.099	0.164	0.166	0.158	0.041	0.112	0.166	0.132
	Only natural ch.	0.865	0.811	0.774	0.827	0.939	0.853	0.834	0.841
	Has adopted/foster ch.	0.030	0.025	0.014	0.000	0.000	0.000	0.000	0.012
	Has stepchildren	0.005	0.000	0.045	0.029	0.000	0.017	0.000	0.013
AT	*No children*	0.139	0.134	0.124	0.167	0.124	0.128	0.239	0.149
	Only natural ch.	0.847	0.849	0.831	0.796	0.839	0.835	0.761	0.823
	Has adopted/foster ch.	0.000	0.016	0.031	0.011	0.000	0.018	0.000	0.013
	Has stepchildren	0.015	0.000	0.009	0.016	0.007	0.009	0.000	0.008
IT	*No children*	0.072	0.147	0.127	0.147	0.164	0.110	0.430	0.175
	Only natural ch.	0.928	0.842	0.860	0.842	0.836	0.859	0.508	0.807
	Has adopted/foster ch.	0.000	0.005	0.000	0.000	0.000	0.000	0.034	0.006
	Has stepchildren	0.006	0.007	0.002	0.015	0.000	0.014	0.007	0.007
ES	*No children*	0.159	0.081	0.080	0.084	0.121	0.103	0.226	0.129
	Only natural ch.	0.843	0.915	0.911	0.879	0.842	0.848	0.755	0.851
	Has adopted/foster ch.	0.003	0.000	0.000	0.000	0.010	0.000	0.000	0.002
	Has stepchildren	0.000	0.000	0.000	0.000	0.006	0.010	0.011	0.004
GR	*No children*	0.089	0.106	0.117	0.153	0.092	0.091	0.079	0.105
	Only natural ch.	0.900	0.882	0.850	0.833	0.918	0.885	0.914	0.882
	Has adopted/foster ch.	0.005	0.000	0.011	0.000	0.000	0.000	0.007	0.004
	Has stepchildren	0.010	0.012	0.022	0.014	0.000	0.024	0.000	0.012
TOTAL	*No children*	0.132	0.102	0.115	0.119	0.127	0.152	0.233	0.140
	Only natural ch.	0.829	0.857	0.839	0.846	0.850	0.817	0.717	0.821
	Has adopted/foster ch.	0.008	0.010	0.008	0.011	0.005	0.008	0.013	0.009
	Has stepchildren	0.028	0.029	0.030	0.020	0.013	0.010	0.020	0.022

Note: Weighted individual observations

Table 2A.18 Distribution of Natural Living Children, by Country and Age

		AGE GROUP							
COUNTRY		*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75-79*	*80+*	*Total*
SE	Mean	1.942	1.933	2.030	2.020	1.982	1.771	1.971	1.958
	0	0.128	0.119	0.085	0.128	0.132	0.197	0.186	0.138
	1	0.216	0.159	0.162	0.186	0.180	0.197	0.205	0.186
	2	0.344	0.460	0.467	0.357	0.420	0.402	0.301	0.389
	3+	0.313	0.262	0.286	0.329	0.269	0.205	0.307	0.286
DK	Mean	1.765	1.960	1.964	2.137	2.294	2.095	1.963	1.994
	0	0.176	0.067	0.142	0.110	0.069	0.188	0.226	0.139
	1	0.150	0.185	0.126	0.153	0.171	0.191	0.146	0.159
	2	0.475	0.496	0.422	0.411	0.391	0.306	0.300	0.411
	3+	0.200	0.251	0.310	0.326	0.369	0.315	0.328	0.290
DE	Mean	1.596	1.707	1.807	1.940	2.116	1.612	1.647	1.772
	0	0.179	0.134	0.168	0.133	0.136	0.244	0.199	0.170
	1	0.256	0.288	0.198	0.227	0.300	0.222	0.334	0.260
	2	0.382	0.385	0.389	0.340	0.245	0.335	0.226	0.330
	3+	0.183	0.193	0.245	0.299	0.319	0.199	0.241	0.240
NL	Mean	1.783	2.145	2.212	2.566	2.928	2.322	2.357	2.271
	0	0.186	0.092	0.104	0.154	0.121	0.118	0.221	0.144
	1	0.184	0.141	0.126	0.057	0.086	0.155	0.072	0.122
	2	0.375	0.481	0.424	0.336	0.227	0.317	0.280	0.361
	3+	0.255	0.286	0.346	0.452	0.566	0.410	0.427	0.373
FR	Mean	2.058	2.158	2.207	2.320	2.290	2.440	1.924	2.177
	0	0.162	0.079	0.112	0.120	0.121	0.165	0.267	0.147
	1	0.190	0.250	0.187	0.220	0.224	0.165	0.206	0.208
	2	0.310	0.349	0.383	0.250	0.280	0.230	0.183	0.287
	3+	0.338	0.322	0.318	0.410	0.374	0.440	0.344	0.358
CH	Mean	2.129	1.848	1.733	2.082	2.404	2.023	2.084	2.033
	0	0.115	0.189	0.196	0.187	0.061	0.147	0.166	0.153
	1	0.134	0.114	0.184	0.151	0.202	0.256	0.248	0.177
	2	0.458	0.432	0.425	0.301	0.292	0.276	0.240	0.358
	3+	0.294	0.265	0.195	0.361	0.445	0.321	0.346	0.311
AT	Mean	1.759	1.925	1.796	1.855	1.898	1.927	1.551	1.818
	0	0.139	0.151	0.156	0.177	0.146	0.156	0.246	0.166
	1	0.255	0.194	0.271	0.220	0.263	0.239	0.254	0.242
	2	0.372	0.403	0.347	0.328	0.372	0.266	0.304	0.346
	3+	0.234	0.253	0.227	0.274	0.219	0.339	0.196	0.246
IT	Mean	2.063	1.856	1.887	1.887	2.169	2.366	1.213	1.898
	0	0.075	0.158	0.140	0.165	0.164	0.141	0.451	0.188
	1	0.227	0.152	0.199	0.217	0.189	0.171	0.187	0.191
	2	0.460	0.468	0.412	0.320	0.330	0.352	0.144	0.357
	3+	0.237	0.221	0.249	0.298	0.318	0.335	0.218	0.265
ES	Mean	2.104	2.455	2.748	2.658	2.530	2.652	2.262	2.457
	0	0.166	0.081	0.097	0.118	0.151	0.123	0.274	0.152
	1	0.103	0.124	0.071	0.116	0.099	0.128	0.163	0.117
	2	0.400	0.342	0.362	0.282	0.268	0.355	0.185	0.310
	3+	0.331	0.453	0.470	0.484	0.483	0.394	0.378	0.421
GR	Mean	1.812	1.739	1.796	1.838	2.023	2.006	2.390	1.925
	0	0.094	0.106	0.131	0.153	0.092	0.115	0.079	0.111
	1	0.209	0.188	0.169	0.201	0.143	0.205	0.122	0.178
	2	0.523	0.568	0.496	0.426	0.525	0.400	0.432	0.486
	3+	0.173	0.139	0.205	0.220	0.239	0.281	0.367	0.226
TOTAL	Mean	1.866	1.970	2.004	2.094	2.236	2.125	1.783	1.998
	0	0.150	0.120	0.139	0.141	0.138	0.175	0.268	0.162
	1	0.206	0.200	0.179	0.196	0.211	0.186	0.227	0.201
	2	0.395	0.413	0.398	0.322	0.298	0.326	0.214	0.340
	3+	0.249	0.267	0.283	0.341	0.353	0.314	0.291	0.297

Note: Weighted individual observations

Table 2A.19 **Health Conditions and the Number of Natural Children (odds ratios)**

Dependent variable		Explanatory variables	Males	Females
CHRONIC2	(1)	Number of natural children	1.088*	1.086*
(2+chronic conditions)	(2)	(1) plus education dummies	1.068*	1.044*
	(3)	(2) plus cohort dummies	1.036*	1.038*
	(4)	(3) plus country dummies	1.039*	1.037*
EURODCAT	(1)	Number of natural children	1.093*	1.059*
(EURO-D >3)	(2)	(1) plus education dummies	1.064*	1.015
	(3)	(2) plus cohort dummies	1.055*	1.018
	(4)	(3) plus country dummies	1.045*	1.015
SPHEU2	(1)	Number of natural children	1.107*	1.054*
(Self-reported health	(2)	(1) plus education dummies	1.081*	1.004
is good or very good;	(3)	(2) plus cohort dummies	1.054*	1.000
European Scale)	(4)	(3) plus country dummies	1.070*	1.011

Note: * denotes that the odds ratio is different from 1 at a 5% significance level

3 Health and Health Care

Ed. Johan Mackenbach

3.1 Physical Health

Johan Mackenbach, Mauricio Avendano, Karen Andersen-Ranberg, and Arja R. Aro

Introduction

'Ageing' is usually defined as the progressive loss of function with advancing age, and increasing rates of health problems including mortality are one of its main manifestations (Kirkwood and Austad 2000). Due to improvements in living standards, public health interventions and innovations in medical care, average life expectancy at birth has spectacularly increased during the twentieth century, to reach levels of around 75 years for men and 80 years for women throughout Western Europe (White 2002). Although most people develop some health problems long before the age of dying, there is large variability within and between populations in 'healthy ageing', as shown by comparisons of 'health expectancies' (years of life lived in good health) between European countries (Perenboom, van Oyen and Mutafova 2002) and between socio-economic groups within countries (Sihvonen, Kunst, Lahelma et al. 1998).

SHARE offers excellent opportunities for studying the prevalence of age-related health problems in Western Europe, for looking at variations in this prevalence between populations and population subgroups, and for analysing the consequences of health problems for other domains such as employment and health care utilisation. This contribution introduces the main indicators of physical health that have been studied in SHARE, and presents some basic data on the prevalence of health problems among its respondents.

Data and Methods

SHARE has measured a wide range of indicators of physical health, which we have grouped in four categories: summary measures; diseases and symptoms; limitations in functioning; and limitations in activities of daily living.

The summary measures include a single-item question on self-perceived health, in both a 'European' version with answer categories ranging between 'very good' and 'very poor', and a 'North American' version with answer categories ranging between 'excellent' and 'poor'. The first has been recommended by the World Health Organisation (European Office), the second has been used by the Health and Retirement Survey (HRS) and by ELSA. Also, two general questions on long-term health problems and on activity limitations (the so-called Global Activity Limitation Index (GALI) (Robine and Jagger 2003) were included.

SHARE has also asked respondents whether they had a chronic disease diagnosed in their life-time, and whether they were suffering from symptoms lasting at least six months. To answer these questions, respondents could choose from lists with 14 named diseases and 11 named symptoms.

Limitations in functioning were measured by self-reports on mobility sensory functioning, and other aspects of physical functioning (Nicholas, Huppert, McWilliams, et al. 2003.), but also by measurements of grip strength and walking speed (the latter was measured only among those aged 76 and older). Grip strength was measured using a handheld dynamometer (Smedley, S dynamometer, TTM, Tokyo, 100 kg) twice in both hands. The gender specific analysis used the maximum of the four grip strength measurements. Grip strength is a strong predictor of functional limitations and disability (Rantanen et al. 1999). The test involved recording the time taken by respondents to walk a distance of 250 meters at their usual walking pace. The 'time walked' was recorded at two examinations.

Only those who successfully completed both walks were entered into the analysis. Walking speed was calculated adding the two times and lengths and calculating the speed. As a measure of functional limitations, a walking speed of 0.4 m/s or slower was used as the cut-off point (Nicholas, Huppert, McWilliams and Melzer 2003).

Finally, limitations in activities of daily living were measured by self-reports. Both 'activities of daily living' (ADL; dressing, getting in/out bed, eating, etc.) and 'instrumental activities of daily living' (IADL; preparing a meal, shopping, making telephone calls, etc.) were included (Nicholas, Huppert, McWilliams, et al. 2003).

Prevalence of Physical Health Problems

It will come as no surprise that the prevalence of physical health problems among the elderly is high (Table 1). Around 40% have some degree of activity limitation due to health problems, and almost 50% report that they have some long-term health problems. Around 40% of respondents rate their health as less than 'good', and 10% even rate their health as 'poor' or 'very poor'.

Both self-reported chronic diseases and symptoms were very common: more than two-thirds have had at least one chronic disease diagnosed during their life-time, and around 40% report to have had two or more chronic diseases diagnosed. Similar numbers of individuals report at least one current symptom, or two or more current symptoms. Equally important, of course, is the fact that a sizeable fraction of the SHARE respondents (around a third) report no chronic disease at all, or no symptom at all. The most commonly reported chronic diseases were arthritis, diabetes and heart disease; many respondents also reported hypertension and high cholesterol, which are important risk factors for heart disease and other problems of the cardiovascular system. The most commonly reported symptoms were pain (nearly half of the respondents!), sleeping problems, and swollen legs (see Tables 3A.1-3A.3 in the Appendix to this chapter).

While around 50% report no mobility or other functioning limitations at all, many respondents do report one or more limitations. Mobility limitations (e.g. climbing stairs, stooping and kneeling) are common and found in up to a third of the population, but eyesight, hearing and chewing problems also have a rather high prevalence. Grip strength measurements were successfully done in almost all respondents. The average value of the maximum grip strengths measured for the left and right hands respectively, is presented in Table 1. Around 20% of those aged 76 years and older had a walking speed of equal to or less than 0.4 m/sec, which is regarded as an indication of severe limitations in mobility (ELSA report).

Although SHARE only includes the non-institutionalised population, many respondents do report some limitations in (instrumental) activities of daily living. Around 10% report one or more limitations in activities of daily living, while around 17% report one or more limitations in instrumental activities of daily living. Many respondents also indicate that they do not receive adequate help with these activities.

Analysing the consequences of these health problems for other domains such employment and health care utilisation will be the topic of subsequent reports, but it is already clear from these first results that the consequences must be substantial.

Table 1 General Physical Health Measures Among Men and Women Aged 50 Years and Older in 10 European Countries

Health measure	Levels	Men	Women
Summary measures			
Self-perceived health (European version)	Less than 'good'	39.5 (37.6-41.4)	47.5 (45.6-49.3)
Long-term health problems	Yes	50.4 (48.4-52.3)	55.2 (53.3-57.0)
Activity Limitations (GALI)	Severely limited	13.0 (11.8-14.3)	15.3 (14.0-16.7)
Diseases and symptoms			
Chronic diseases	2 or more diseases	38.6 (36.7-40.5)	48.8 (44.0-47.7)
Symptoms	2 or more symptoms	30.4 (28.6-32.1)	46.8 (44.9-48.6)
Limitations in functioning			
Mobility and functioning	1 or more limitations	42.7 (40.9-44.6)	59.5 (57.7-61.3)
Grip strength	Mean max grip strength	43.0 (42.7-43.2)	25.9 (25.7-26.0)
Walking speed (76+ years)	Equal or lower than 0.4 m/sec	17.2 (13.0-22.5)	26.6 (21.1-32.9)
Limitations in activities of daily living			
ADL limitations	1 or more limitations	9.2 (8.1-10.4)	12.5 (11.3-13.7)
IADL limitations	1 or more limitations	11.8 (10.6-13.1)	21.1 (19.6-22.6)

Variations by Age and Gender

Almost all physical health problems are strongly age-related: their prevalence usually rises steeply with age, in a linear, sometimes even exponential fashion. It is important to mention a few caveats, however. First, because of the exclusion of the institutionalised population, which forms a larger fraction of the population in the oldest age-groups, the steepness of the age-gradient is likely to be even greater than we observe in SHARE. Second, because of the cross-sectional character of these base-line observations, this so-called age-gradient actually mixes age and cohort effects. The oldest group is not only older, but is also part of another generation and has therefore gone through a different life-course, which may have affected the prevalence of its health problems. Because we expect age effects on health to be generally stronger than cohort effects, we will keep using the term 'age-gradient', but with this caveat in mind.

Age-gradients of specific chronic diseases are shown in Figure 1. Particularly steep age-gradients (prevalence in the 80+ group more than 5 times higher than in the 50-59 year age-group) are seen for several specific chronic conditions and symptoms: stroke, cataract,

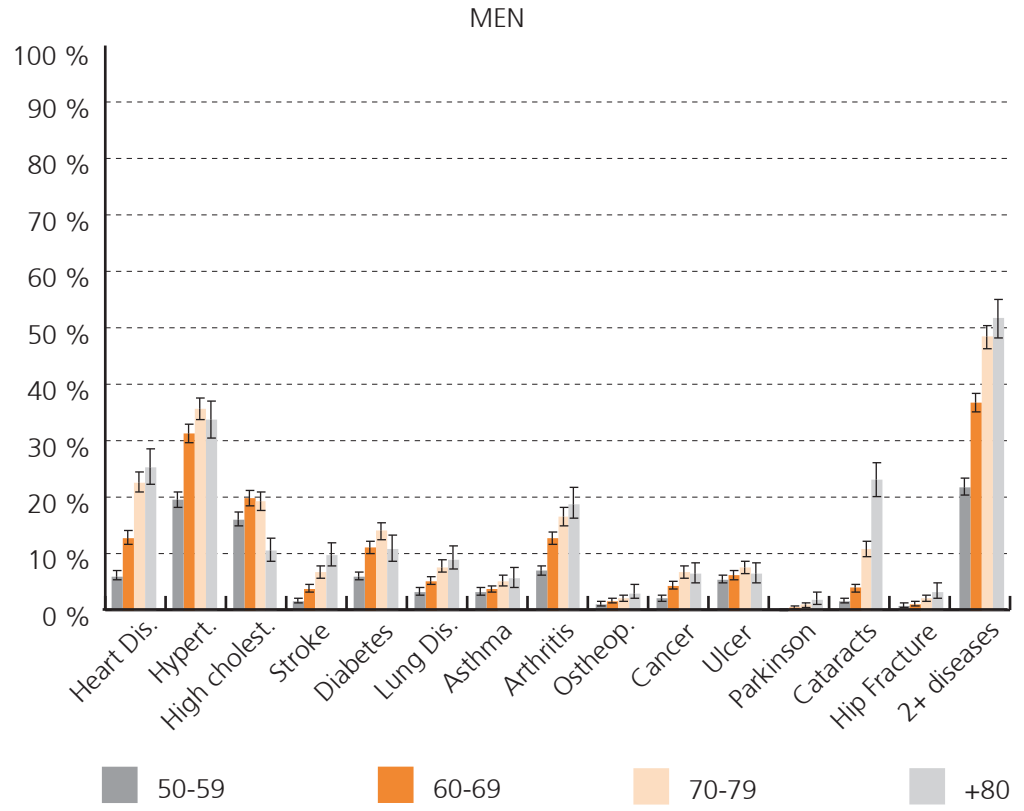

Figure 1a *The prevalence of self-reported chronic diseases according to age among men aged 50 years and older in 10 European countries*

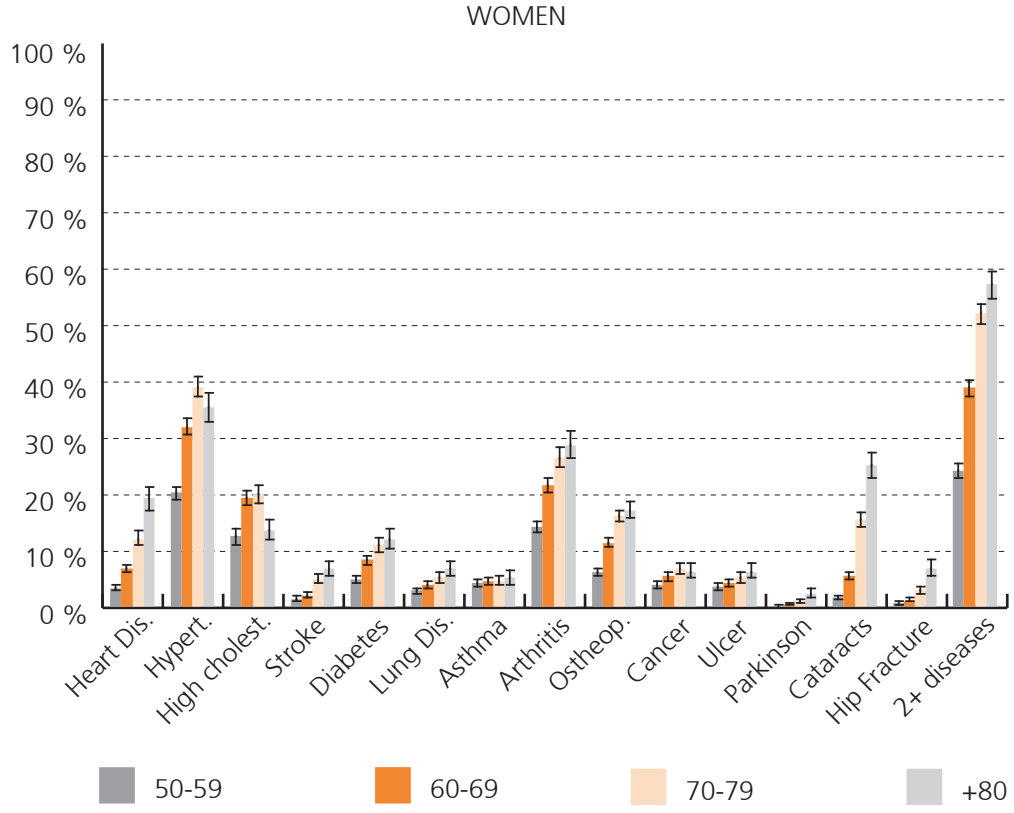

Figure 1b *The prevalence of self-reported chronic diseases according to age among women aged 50 years and older in 10 European countries*

(fear of) falling down, incontinence. Shallow gradients (prevalence in the 80+ group less than 2 times higher than in the 50-59 year age-group) are seen for high cholesterol, asthma, coughing, sleeping problems, stomach problems. While some of these patterns may be determined by cohort effects, it is likely that most reflect variations between conditions in the age-relatedness of incidence, recovery or survival. It is well-known that the incidence of cataract rises steeply with age, while that of asthma does not, and that blood pressure and serum cholesterol often spontaneously decline at advanced ages (Oliver 1999). In the latter case, the age-related decline may also be partly due to less cholesterol testing at advanced ages.

In general, limitations in mobility and other aspects of physical functioning, and in (I)ADL limitations also show very steep age-gradients. Among the oldest old, the prevalence of many separate limitations is higher than 30%, sometimes even higher than 50%. This is likely to be the result of several factors. Among the oldest old, not only have specific health problems a higher incidence and lower recovery rate, as we have noted above. Also, the oldest old are more likely to have accumulated several specific health problems in the same person, which may reduce their ability to retain functionality despite the presence of disease. Finally, because of a non-specific, age-related decline of functional reserve capacity of the body, the same specific health problem will more easily produce functional limitations in the oldest old (Fried, Tangen, Walston et al. 2001).

Health differences between men and women have often been characterised as 'men die quicker but women are sicker' (Lahelma, Martikainen, Rahkonen et al. 1999). The higher mortality rates among men cannot yet be observed in SHARE, but the higher morbidity rates among women are clear enough (Table 1 and Figure 1). Almost without exception, prevalence rates of health problems are between 25 and 50% higher among women than among men. There are just a few exceptions, particularly for specific diseases. Here we find that several potentially fatal conditions (heart disease, diabetes, lung disease, …) are more frequent among men, while the other conditions are more frequent among women. Men are more prone to develop fatal disease, partly because of their risk-taking behaviours, while women are more prone to develop non-fatal and often incapacitating diseases. As a result, women generally have higher needs for health and social care services.

Variations Between Countries

SHARE offers interesting opportunities for looking at differences between countries in the prevalence of health problems. There are huge differences between countries on the general indicators of physical health: self-perceived health, long-standing health problems, and activity limitations. For self-perceived health, such differences have been noted before: for example, Germans tend to rate their health more negatively than Dutch or Danes, and the same applies to Italians and Spaniards as compared to French and Greeks. It is likely that these differences at least partly reflect differences between national cultures in thresholds for reporting less than 'good' health. Section 3.3 describes an attempt to adjust for these differences in threshold.

Some between-country differences are also found for the specific indicators of physical health. As an example, we present the results for walking speed and grip strength, which are less likely to be affected by cultural differences in reporting. For both measures there is a clear indication in the data for a North-South gradient within Europe, with a higher prevalence of low walking speed and grip strength in the South than in the North. Figure 2 illustrates this on the basis of walking speed. In Spain, Italy and Greece average walking speed is clearly lower than in Denmark and Sweden, with the 5 continental countries in-between.

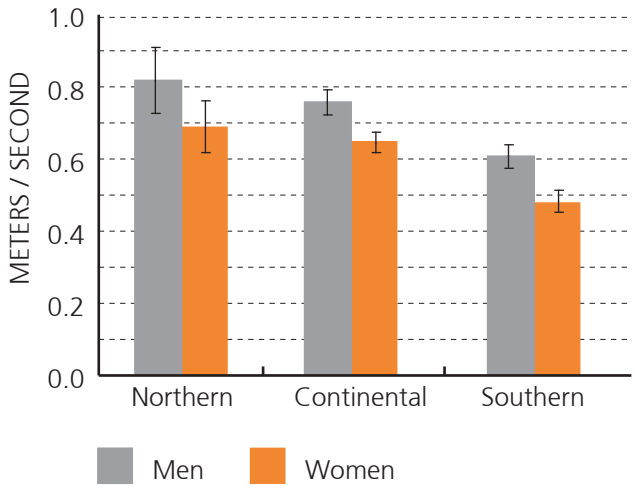

Figure 2 The prevalence of walking speed less than or equal to 0.4 meters per second among men and women aged 76 years and older in Northern (DK, SE), Continental (NL, DE, AT, CH, FR) and Southern (IT, ES, GR) Europe.

The grip strength measurements in SHARE show an age-dependent decline over the entire age-range (see Figure 3). These data also show indications for a North-South gradient, with the highest scores in northern and continental countries, and the lowest scores in southern countries. It is interesting to note that the high life expectancies observed in the three Mediterranean populations represented in SHARE are not mirrored by their walking speeds and grip strengths—perhaps the low mortality rates have permitted relatively frail people to survive in these countries. Further analyses of determinants of walking speed and grip strength, and of associations between these measures and health outcomes, particularly in a future follow-up study of SHARE participants, will provide good opportunities for gaining a better understanding of the nature of between-country differences in health.

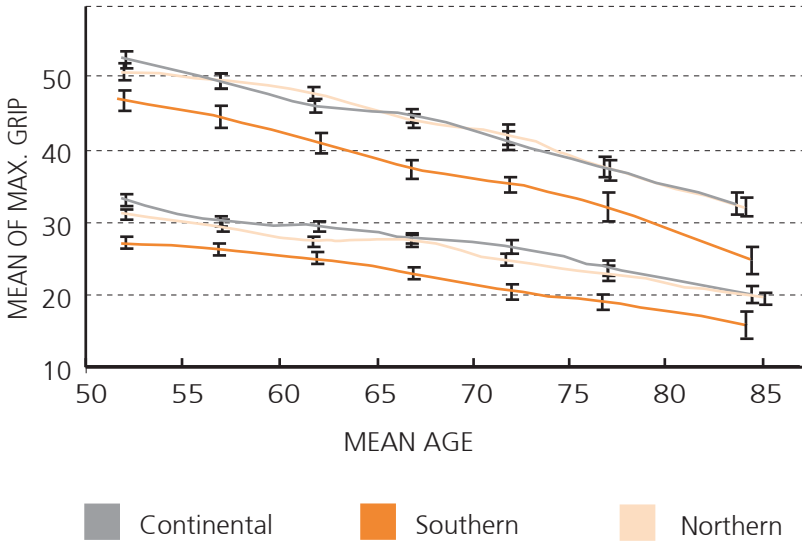

Figure 3 Grip strength by age among men and women in Northern (DK, SE), Continental (NL, DE, AT, CH, FR), and Southern (IT, ES, GR) Europe

Conclusions

- SHARE is a unique data source that provides quantitative estimates of the prevalence of a wide variety of physical health problems among the elderly in Western Europe.

- Among the elderly, the prevalence of physical health problems is high, but there is substantial variation within and between populations that suggests a potential for health gains in the future.

- Further study, using longitudinal approaches, is necessary to identify the determinants of physical health problems among the elderly, and to contribute to the development of interventions that will alleviate their substantial disease burden.

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3.2 Socio-Economic Disparities in Physical Health in 10 European Countries

Mauricio Avendano, Arja R. Aro, and Johan Mackenbach

Introduction

During the last few decades, European countries have attempted to solve one of the oldest problems in modern societies: the health gap between the rich and the poor. At the international level, the WHO (World Health Organisation) has initiated numerous campaigns and spent considerable efforts to eliminate these disparities. However, socio-economic differences in health do not only prevail across Europe, but also seem to exist in all dimensions of health: Individuals with a lower socio-economic status have more health problems, face more disability and live shorter than those with a more privileged socio-economic position (Cambois, Robine and Hayward, 2001; Huisman, Kunst and Mackenbach, 2003). Furthermore, the health gap between the rich and the poor may be increasing with recent changes in European policy (Mackenbach et al., 2003). Thus, health disparities remain an unacceptable outcome in current European society and should be further examined. SHARE represents a unique opportunity to explore the nature and magnitude of health disparities in Europe.

This contribution presents an overview of socio-economic disparities in physical health in Europe. Elderly populations experience a wide array of health problems; added to the detrimental impact of ageing, those in the lower classes experience an even larger burden of morbidity and disability. We collected data on a wide array of physical health problems and were able to explore how socio-economic status may have an impact on specific diseases or functional aspects of health. SHARE is one of the first studies to collect data on socio-economic and health variables using a standard instrument across many European countries.

Methods and Measures

Data were collected on physical health and socio-economic status indicators in 10 European countries. We used two complementary indicators of socio-economic status: Educational level and household income. Individuals were first classified into national education schemes based on the highest level of education reported and then reclassified into three equivalent categories: Levels 0-2 (pre-primary, primary and lower secondary education), 3 (upper secondary education) and 4-6 (post-secondary education) of the ISCED (international standard classification of education) (UNESCO 1997). Household income was defined as the sum of the income of each individual member of the household and the income received by the household overall. Income was divided into quintiles. In order to adjust for household size, we divided the value of income by the square root of the number of persons in the household (Buhrman, Rainwater, Schumaus and Smeerding 1988; Huisman et al. 2003).

In order to illustrate socio-economic disparities in health, we calculated age and country adjusted odds ratios. This measure compares the risk of diseases between the lower and middle/high educational groups, as well as between the two upper and two lower quintiles of income. An odds ratio of 1 indicates that there are no differences between the two groups, whereas an odds ratio higher than 1 indicates a higher risk among lower than among higher socio-economic groups. An odds ratio below 1 suggests that those with a higher socio-economic position have a higher risk than those with a lower socio-economic position.

A Larger Burden of Physical Health Problems Among the Lower Socio-Economic Status Groups in Europe

Results from SHARE clearly indicate that men and women with a lower socio-economic status have a worse physical health than those with a higher socio-economic position (Figure 1). Among both men and women, a low educational level or income is associated with a higher risk of reporting less than good self-perceived health, long-term problems, as well as activity limitations due to health problems. This pattern applies to both educational level and income. For most physical health problems, socio-economic disparities are of a similar size among men and women (Figure 1).

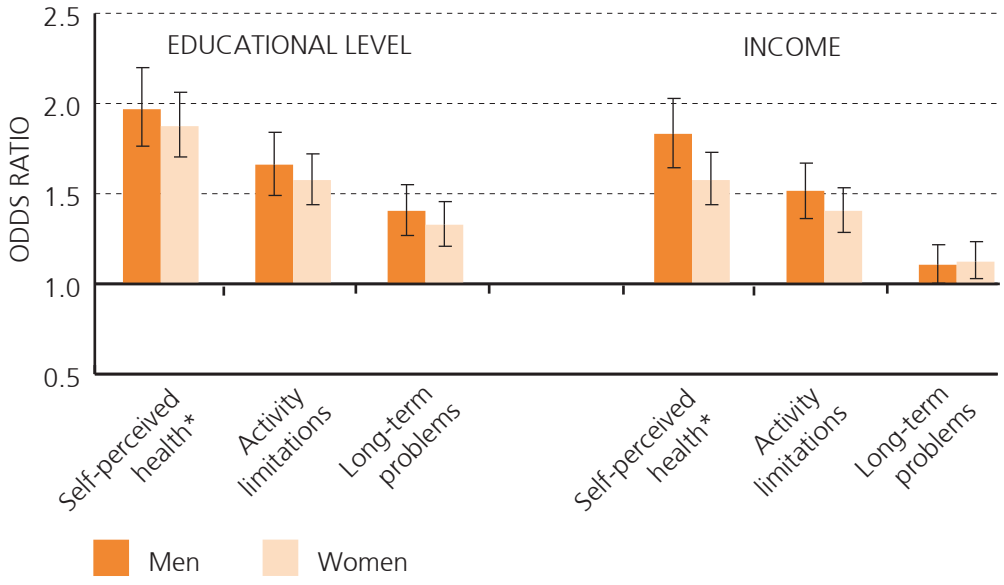

Figure 1 Odds ratio of general physical health measures according to socio-economic status among men and women in 10 European countries

*Note: *Less than good self-perceived health*

Individuals were asked whether they had ever been diagnosed with a number of specific chronic diseases. Figure 2 shows that the prevalence of reporting two or more chronic diseases was higher among lower than among higher educational level groups. The largest educational disparities existed in chronic lung disease, ulcer, diabetes and arthritis among men. Among women, the largest educational disparities existed in diabetes, stroke, chronic lung disease and heart disease. A similar pattern was observed for income (see Table 3A.4 in the Appendix to this chapter). This probably reflects the fact that the lower socio-economic groups smoke more, have a worse diet and generally a worse risk factor profile than those with a higher socio-economic position (Cavelaars, Kunst and Mackenbach 1997).

In contrast, those in the highest income groups had a higher prevalence of cancer than those in the lowest income groups (Table 3A.4). It should be noted that the prevalence of cancer depends on both cancer incidence and case-fatality. Previous research has shown a higher cancer incidence and case-fatality among lower than higher socio-economic groups (Schrijvers, Coebergh, van der Heijden and Mackenbach 1995). That is, cancer is more

incident among the lower classes, and furthermore these patients have a shorter survival than those in the higher classes. The combination of both higher incidence and case-fatality rates among the lower classes may in turn produce a lower prevalence of cancer among

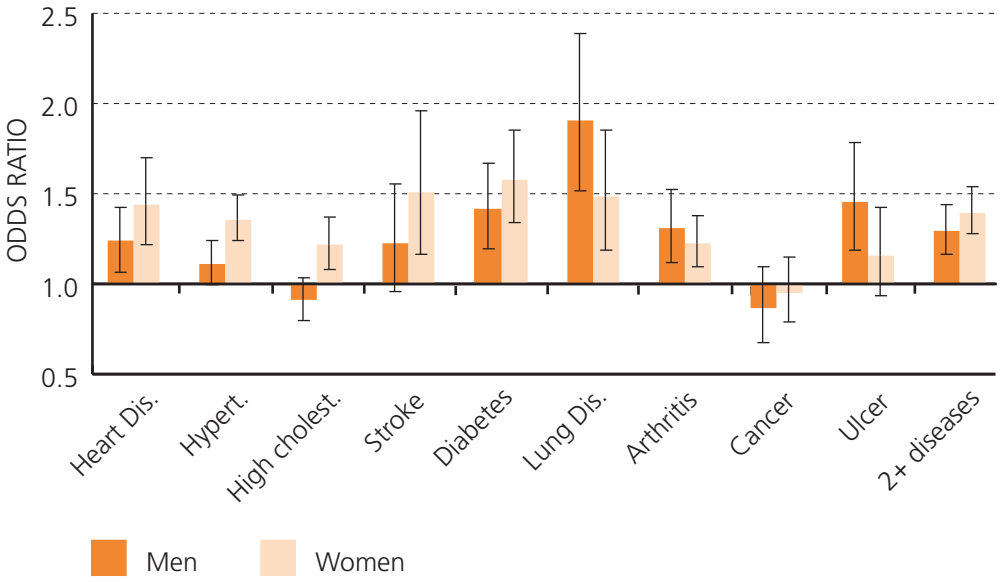

Figure 2 Odds ratio of chronic diseases according to educational level among men and women in 10 European countries

lower than among higher socio-economic groups. This hypothesis needs to be further examined using longitudinal data.

The prevalence of reporting two or mores symptoms was also higher among individuals with a lower than those with a higher socio-economic status (Tables 3A.5 and 3A.6). Individuals with a lower educational or income level report more symptoms such as pain, heart problems, breathing problems, coughing and fear of falling than their higher socio-economic counterparts. It is astonishing to confirm that the lower socio-economic groups have consistently 30% to 65% higher risk of these symptoms than those in a more privileged socio-economic position.

A Lower Socio-Economic Status Associated with More Functioning Limitations Among the Elderly

Physical functioning is an important dimension of health, as it reflects the ability of individuals to perform normally in a society. Figure 3 shows that individuals with a lower educational level are more likely to experience limitations with mobility, arm or fine motor functions. Similarly, the prevalence of eyesight, hearing and chewing problems was higher among those with a lower than among those with a higher educational level. A similar pattern was also observed for income (Table 3A.7).

Walking speed and grip strength are strong predictors of mortality and objective measurements of physical functioning (Rantanen et al. 1999). Interestingly, the pattern for these outcomes was the same as for other health outcomes in SHARE: those with a lower socio-economic position are more likely to be in the lowest quartile of grip strength, as opposed to those with a higher socio-economic position (Figure 3, Table 3A.7). Walking speed was assessed among those aged 76 years and above only. Although confidence in-

tervals were wide among men, we observed large educational level disparities in walking speed among women (Figure 3).

Similarly, men and women with a lower socio-economic status are considerably more

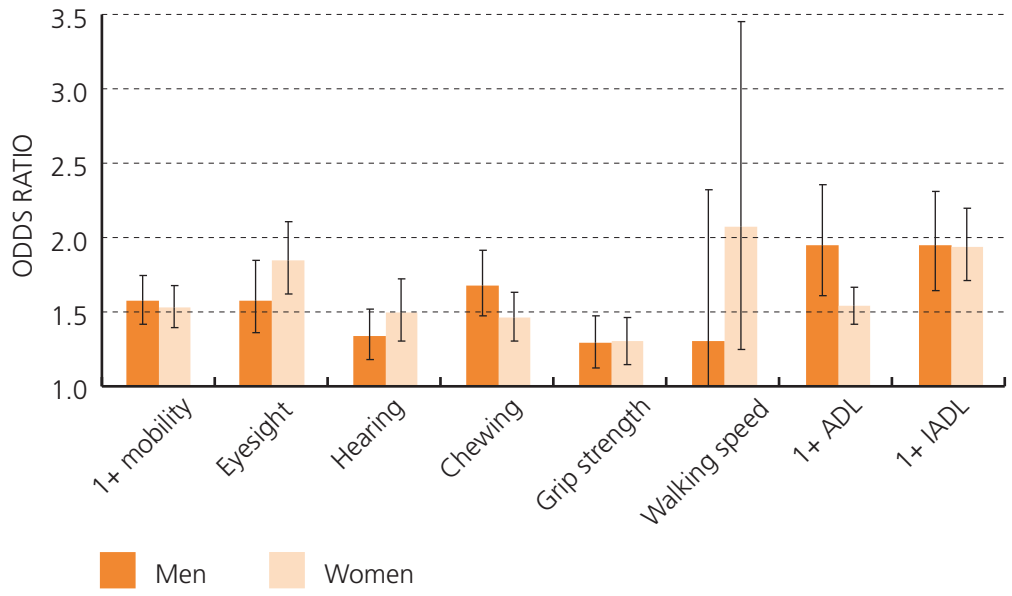

Figure 3 Odds ratio of functioning limitations and limitations with activities of daily living according to educational level among men and women in 10 European countries

likely to experience limitations with activities of daily living (ADL) such as dressing and bathing than individuals with a higher socio-economic status (Figure 3, Table 3A.7). They are also more likely to face limitations with instrumental activities of daily living (IADL) such as preparing hot meals and making telephone calls. This further reflects the higher burden of physical limitations among those with a lower socio-economic status.

Consistent Socio-Economic Disparities in All European Countries

Further to providing estimates for Europe as a whole, SHARE offers a unique opportunity to compare countries. Figure 4 presents odds ratios of less-than-good self-perceived health according to educational level in each country. The consistency of the pattern is once again astonishing: In all countries, men and women with a lower educational level perceive their health as less-than-good more often than those with a higher educational level (Figure 4). The same pattern was observed for income (Table 3A.8), although no clear disparities were observed in Spain, Switzerland and Austria. Nevertheless, these findings further illustrate that across Europe, the most disadvantaged socio-economic groups have a higher prevalence of physical health problems than those with a higher socio-economic status.

Conclusions

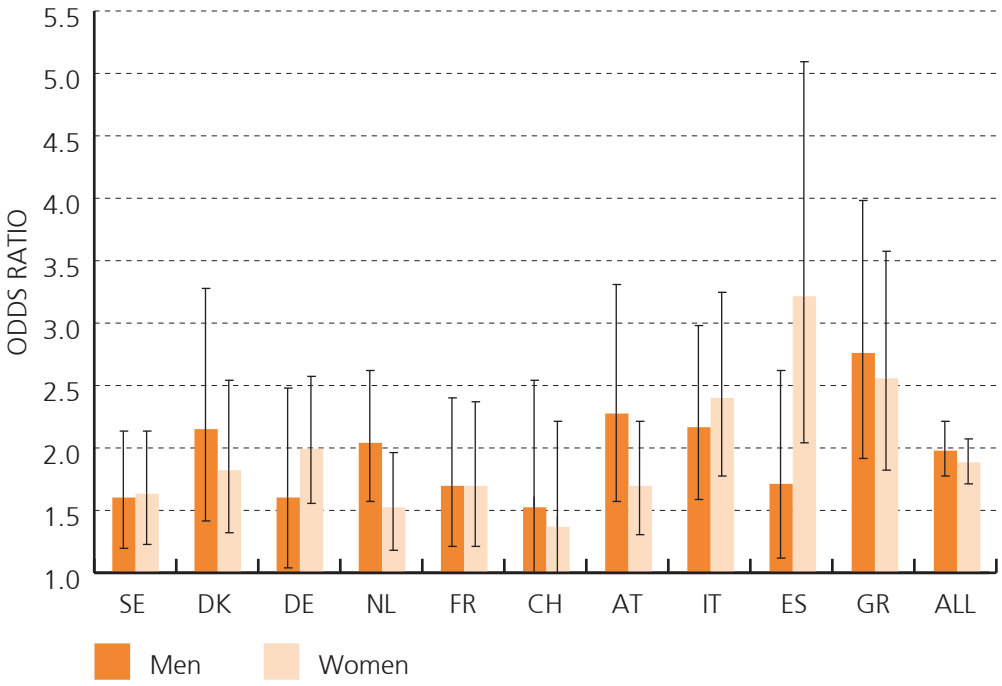

Figure 4 Odds ratio of self-perceived health according to educational level among men and women in 10 European countries

Results from SHARE suggest that large socio-economic disparities in physical health exist across Europe. Furthermore, the lower socio-economic groups experience more limitations than their higher socio-economic counterparts. This is consistent with previous studies that have shown a health disadvantage among the lower socio-economic groups in Europe (Cambois et al. 2001; Huisman et al. 2003).

Healthcare systems across Europe rely on solidarity schemes aimed at providing 'access to good health' to all individuals. Thus, it remains the question of why socio-economic disparities in health exist in countries with universal healthcare systems. This may be due to the fact that health care utilisation disparities seem to play only a minor role in the origin of health disparities (van Lenthe et al. 2004). Instead, SHARE has shown that the lower socio-economic groups in Europe smoke more, are less physically active, and are more likely to be overweight or obese than those with a higher socio-economic status (see contribution on health behaviour). Former studies also show that consistent socio-economic disparities exist in other factors such as a healthy diet (Cavelaars et al. 1997). This suggests an enormous potential to reduce socio-economic disparities in health through risk factor prevention tailored towards the lower socio-economic groups.

However, it is likely that socio-economic differences in risk factors are indeed the result of a more structural difference between the rich and the poor. Former research indicates that socio-economic disparities in risk factors are largely the result of socio-economic disparities in adverse material circumstances (van Lenthe et al. 2004). Thus, health prevention may not be enough to reduce disparities in health: structural social policy changes may be required to achieve health equality across Europe.

The higher prevalence of health problems in the lower socio-economic groups is likely to result in higher utilisation of healthcare services among the poor. This has been observed in previous studies (van Doorslaer et al. 2000) and may contribute to increased costs and healthcare system financing problems in Europe. Therefore, future planning

should incorporate strategies to reduce these disparities. Similarly, the higher prevalence of health problems among the poor is likely to result in less labour force participation in these groups. Thus, tailoring interventions towards the lower classes may contribute to reduce the prevalence of factors such as health-related work absence. These policy interventions may contribute to minimise the negative consequences of health disparities in European countries during future decades.

Key Points

- Despite decades of universal healthcare coverage, large socio-economic disparities in physical health and functioning exist in all European countries.
- The potential consequences of health disparities on healthcare utilisation and labour participation require social and economic policies targeted towards the lower socio-economic groups.
- Longitudinal data are necessary to identify the causal factors that can be addressed in order to prevent socio-economic disparities in health among welfare European countries.

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3.3 Cross-Country Differences in General Health

Hendrik Jürges

Introduction

This contribution looks at variations in self-assessed general health between SHARE countries. Self-reports of health have proved to be useful indicators of an individuals' health, for example as predictors of mortality (Idler and Benyamini 1997). However, the comparability of self-reported measures across groups of individuals has been questioned in a number of studies (e.g. Groot 2000; Sen 2002; Lindeboom and Van Doorslaer 2003). One major concern with self-assessed health is that respondents do not perceive the health self-assessment scale given to them as absolute. Individuals with the same true health status may have different reference levels against which they judge their health. For instance, respondents may be likely to report „very poor" health only if they feel they are much less healthy than others of the same sex, age, education, or income. A common finding is that older respondents tend to have a „milder" view of their health, i.e. they tend to rate their health as better than otherwise comparable younger respondents (Groot 2000; Van Doorslaer and Gerdtham 2003). Thus self-reported health of young and old respondents may not be directly comparable, and the observed decline in self-reported health by age may underestimate the decline in true health. In fact, the effect of changing reference levels seems to be so strong that it is taken into account in some formulations of the self-assessed general health question (used e.g. in the BHPS): respondents are explicitly asked to self-report their health relative to other people of their own age.

In cross-cultural studies like SHARE, there are additional concerns. Respondents from different countries and cultures may not only have different reference levels of health, but response categories may also have different connotations. Self-reported health categories are verbal representations of different health states, which may not mean the same thing to all respondents. For instance, „excellent" is a term that is used in everyday parlance in the Anglo-Saxon world, but Germans would often consider „ausgezeichnet" as an ironic exaggeration, in particular if used in the context of health. A comparison of self-reported general health across countries has to take such differences in habitual language use into account.

Figure 1 shows the proportion of SHARE respondents who report to be in very good or excellent health by country. According to their subjective assessment, the healthiest elderly live in Denmark, Sweden, and Switzerland. Nearly 50% of the Danish respondents and more than 40% of the Swedish and Swiss respondents report to be in very good or excellent health. The least healthy are French, German, Italian, and Spanish elderly. The proportion of respondents in very good or excellent health is at around 20% and thus only about half as large as in the healthy countries.

In the light of these large cross-country differences, it is natural to ask if they can be taken at face value. If we find that Danes are much more likely to report excellent health than Germans, does that mean that Danes are really that much more healthy than Germans? Or are they simply more likely to report excellent health, even if they have about the same true level of health? Because much of the added value of SHARE comes from multi-disciplinary, cross-country comparisons, many of our future analyses depends on the existence of a good comparable summary measure of the respondents' overall health. SHARE has been especially designed to produce such a measure.

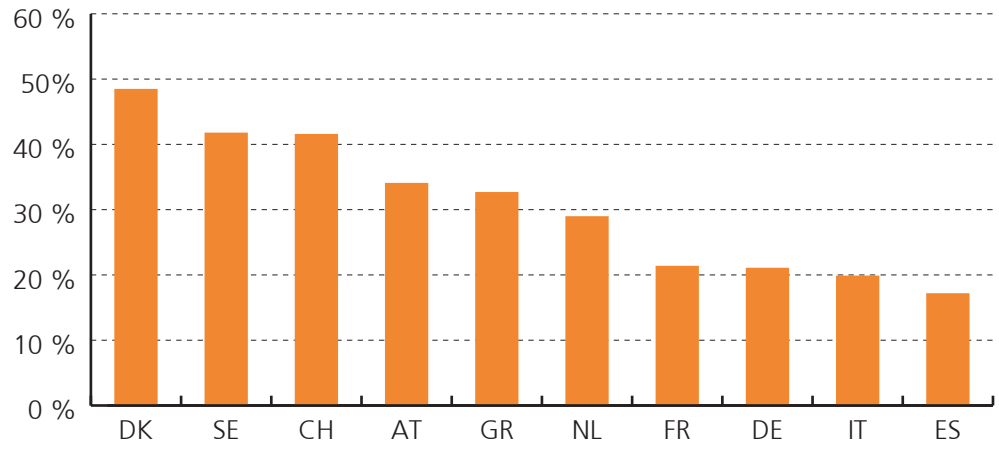

Figure 1 The proportion of respondents in very good or excellent health (by country)

The purpose of this contribution is to show how SHARE can be used to compute a health measure that is adjusted for possible cross-cultural bias of the kind described above. We also demonstrate the usefulness of this adjustment in a simple policy example where we study the cross-national relationship between health care expenditures and self-reported health. The example shows clearly that self-reports taken at face value can produce spurious results.

In addition what is presented in this contribution, SHARE offers a second, complementary way to purge our data from cross-country reporting bias. We have collected information on anchoring vignettes from a subset of respondents. Anchoring vignettes are short descriptions of people in different states of health which respondents are asked to rate on the same scale as they are asked to rate their own health (see King et al. 2004). Comparison of vignette ratings and own ratings will allow to correct each respondents' self-assessment for possible effects of response styles.

To ensure comparability with a large number of other surveys, SHARE contains two different versions of the self-reported health question. Both are 5-point scales. One ranges from „excellent" to „poor" (used e.g. in the U.S. Health and Retirement Survey), the other ranges from „very good" to „very poor" (used e.g. by WHO in numerous studies). To ease the exposition, we concentrate on the former version. Moreover, for the text and Figures, we treat the scale as dichotomous (very good or better versus good or worse health). However, the analysis described below was made using the original 5-point scale. Detailed results are shown in Tables 3A.9-3A.11 in the Appendix to this chapter.

Combining SHARE Health Data in a Single Index

The basic assumption underlying our analysis is that there is such thing as a „true" and comparable health status. This implies that one must be willing not to accept the respondent's own judgements as absolute (Sen 2002). Conceptually, we consider true health as a continuous, latent (i.e., unobservable) variable. When respondents answer survey questions about their health, they assess their true health (possibly with measurement error; see Crossley and Kennedy 2002) and project this value onto the scale provided. Equivalent econometric formulations are the ordered logit or probit models. Differences in language use that affect the relationship between true health and self-assessed health

can be interpreted as differences in the so-called thresholds or cutpoints between adjacent health categories.

As described in detail in other contributions of this volume, SHARE contains a wide array of information on health problems: self reported diagnosed chronic conditions, mental problems, physical symptoms (especially pain), or functional limitations. We also perform measurements and tests like grip strength, gait speed, and various cognitive tests. We use all available information in SHARE to compute a continuous health index for each individual. The idea of this index is to combine in a single number not only the prevalence of a large variety of conditions and limitations but also the effect of these conditions and limitations on the respondents' health. The health index is scaled such that it has a value of 0 for the respondent with the worst observed health and a value of 1 for respondents without any conditions, symptoms, or limitations („perfect health"). The presence of a condition or limitation reduces the value of the index by a specific amount. This amount (called disability weight) differs between conditions and symptoms and reflects their effect on health. For instance, Parkinson's disease has a larger weight than diabetes. The weights are assumed to be the same for each respondent (and hence the same across countries). We use disability weights that are specific to the SHARE population.

Figure 2 shows the distribution of the health index by country. The countries are sorted by the median value, shown as a circle, with the most healthy country (Switzerland) on the left and the least healthy country (Spain) on the right of the graph. The upper and lower bars indicate the 90th and the 10th percentile of the health distribution, respectively. Health inequality (measured by the ratio of the 90th to 10th percentile) is largest in Spain (1.77) and smallest in Switzerland (1.38). It is interesting to compare Figures 1 and 2. First, there are some changes in the countries' ranks. For instance, Sweden drops from 2nd to the 7th, while the Netherlands rises from 6th to 3rd rank. Both countries are now in a larger group with very similar median health.

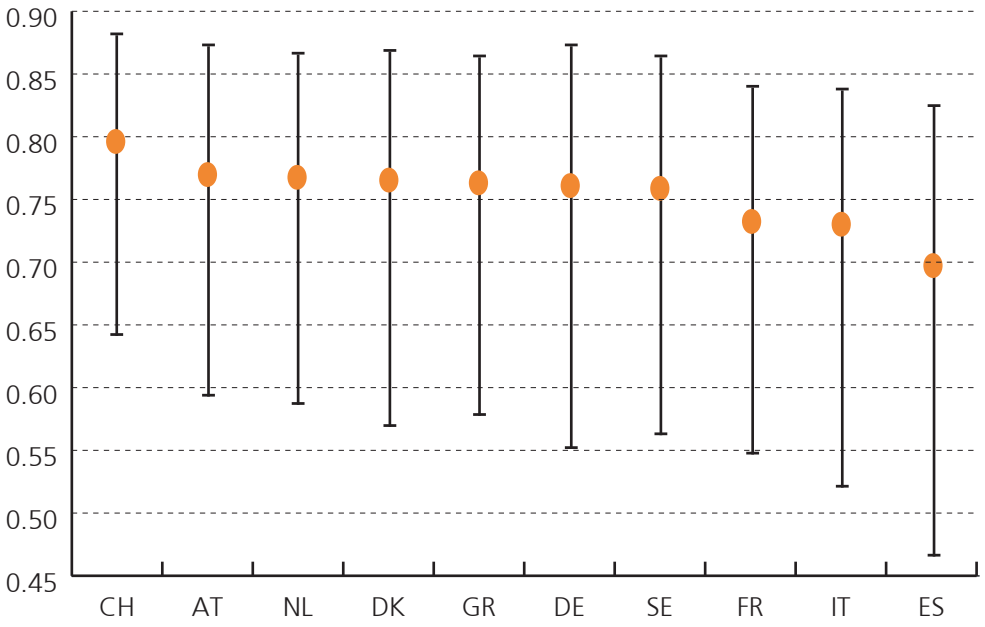

Figure 2 Distribution of standardised health index, by SHARE country

Cross-Country Differences in Response Styles

The next step of the analysis is to relate the health index values to the respondents' self-reported health levels. The idea is that each individual reports very good or excellent health only if his or her health index value passes a specific threshold value. In other words, these thresholds indicate how healthy respondents must be in order to state that they are, say in very good rather than in good health. As mentioned in the introduction, it is possible that this threshold varies systematically with the respondents' characteristics, for example age. Here, we are specifically interested in cross-country variations in thresholds. We compute country-specific reporting thresholds as the exact quantiles of the country-specific health index distribution that correspond to the proportion of respondents that report up to a specific health level. For example, 48.5% of all Danish respondents reported to be in very good or excellent health. The Danish reporting threshold between „good" and „very good" is thus computed as the 48.5th percentile of the Danish health index distribution, which is .77. Consider Germans as another example. Only 21.1 percent of them reported to be in very good or excellent health. The 21.1th percentile of the German health index distribution is .84. Germans need to be much healthier than Danes to claim that they are in very good health. In terms of disability weights, the difference is about one half heart attack.

The results for all countries are shown in Figure 3, ranked according to their computed good-to-very-good threshold. Figure 3 reflects differences in reporting styles across SHARE countries and can be used to predict the self-reported health level of a respondent of a specific health index in each SHARE country. For example, someone with a health index value of .79 would be predicted to report very good or better health in Denmark or Sweden but good or worse health in all other SHARE countries.

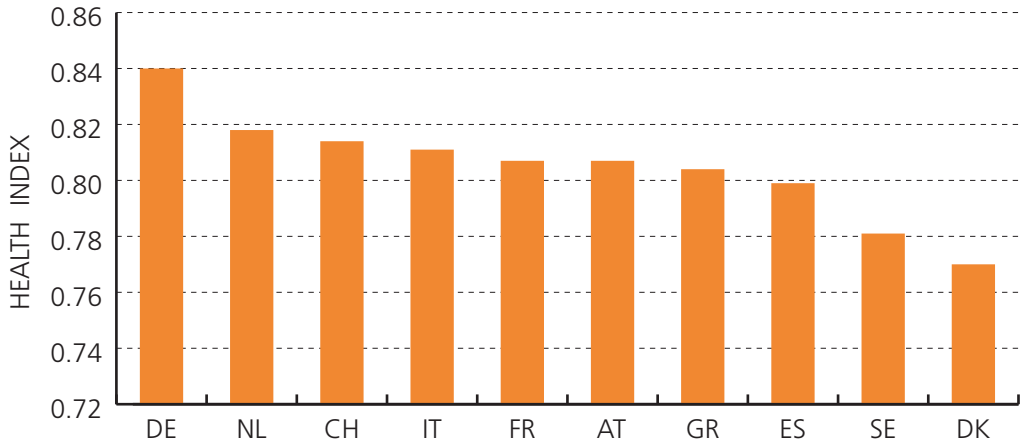

Figure 3 Health index cutpoints between good and very good health, by SHARE country

Self-Reported and Adjusted Health Levels

Given the health index and the reporting thresholds, it is straightforward to compute adjusted distributions of self-reported health. We simply need to use the same thresholds for each respondent. This could be some arbitrary value (such as .79, as we just used to explain in Figure 3), some specific country's value or the (unweighted) average across all

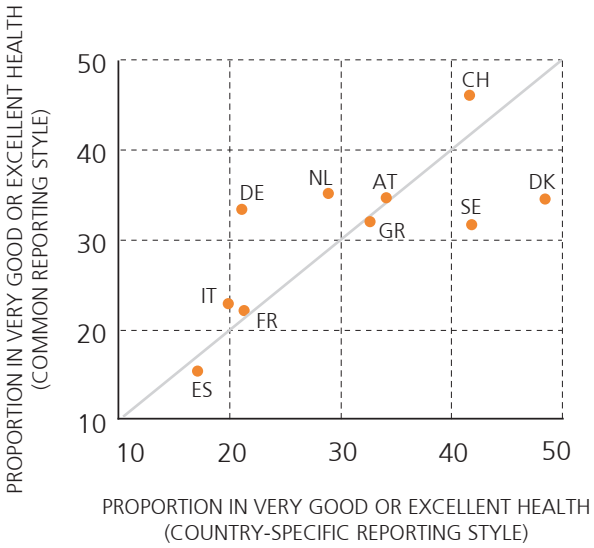

Figure 4 Self-reported and adjusted health levels

countries. Here, we use the SHARE average, that is we compute which health level a respondent would report, given his or her health index, if he or she behaved like the average SHARE respondent. Specifically, each respondent is assigned to very good or excellent health if his or her health index is above .805, and to good or worse health if below .805.

Figure 4 compares self-reported health levels with adjusted health levels. The x-axis shows the proportion of respondents in very good or better health given their country-specific reporting style. The y-axis shows the proportion of respondents in very good or better health if everyone showed the same reporting behaviour. Respondents in countries to the left of the 45°-line systematically undervalue their health compared to the SHARE average, respondents in countries to the right systematically overvalue their health. Considering what we have already seen above in Figure 3, the results are not surprising. Scandinavians have a more positive attitude towards their health. Germans, Dutch, and the Swiss are less positive. In the remaining countries (Mediterranean and Austria), differences between reported and adjusted health levels are unsystematic.

To illustrate what our adjustment of self-reported values achieves, consider again Denmark and Germany. Although there are huge differences in the distributions of self-reported health between Danes and Germans (nearly 27.4 percentage points), the difference in adjusted health levels are negligible (1.2 percentage points), and probably much more realistic. However, accounting for different response styles does not equalise all health differences. For instance, Spain remains at the bottom of the health distribution. Cross-country differences in self-assessed health thus partly reflect variations in reporting thresholds, but the data do also suggest some real between-country differences in physical health.

Demonstrating the Value of SHARE: A Simple Policy Example

Let us finally show the value of our adjustment for different reporting styles in a simple policy example. One of the major strengths of SHARE is the cross-country dimension of the data, which allows to exploit international differences in institutions for policy analyses. Let us assume that we are interested in the relationship between health care expenditures

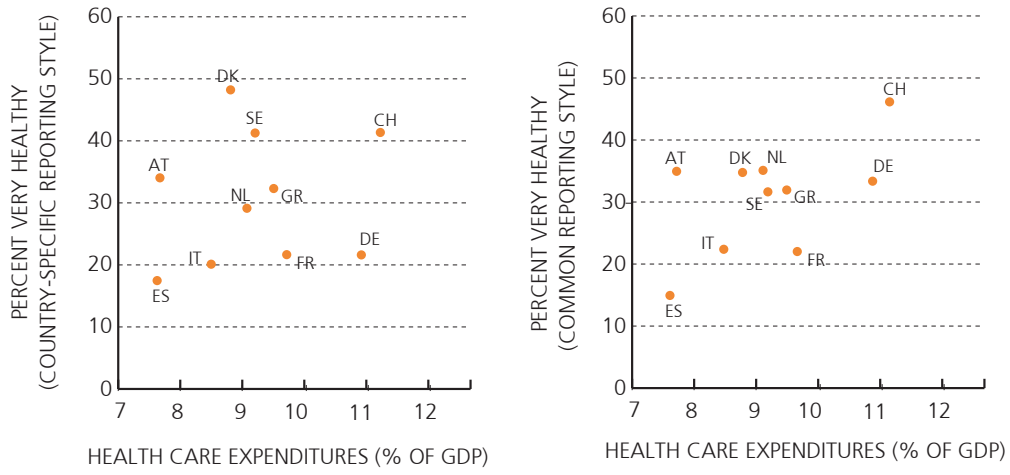

Figure 5 A policy example: General health and health care expenditures

and some simple but comprehensive measure of health. We start the analyses by looking at the relationship between health care expenditures in 2003 (as percentage of GDP – the data are taken from the OECD) and the proportion of elderly who are in very good or excellent self-assessed health (see left Panel in Figure 5). It appears as if there is no clear relationship between health expenditures and health outcomes. It might be positive, but very weakly. The picture changes if we consider our corrected self-reported health measure (see right Panel in Figure 5). The relationship between expenditures and health becomes positive. Linear regression analysis suggests that a one percentage point increase in health care expenditures is associated with a (statistically significant) 4.2 percentage point increase in the proportion of very healthy respondents. This result is robust in the sense that dropping any single (supposedly influential) country from the analysis does not change our finding that health care expenditures are more positively related to a health measure that is adjusted for differences in reporting styles. Of course, this simple example cannot replace a full-blown policy analysis, and it clearly cannot tell us whether 1% of GDP are well spent when it increases the proportion of very healthy elderly by 4.2 percentage points. However, it shows that a correction for cross-national differences in reporting styles does affect results significantly. One of SHARE's main assets is that it allows such corrections and prevents spurious policy conclusions.

Summary

This contribution looks at differences in self-reported health across SHARE countries and corrects these differences for differences in reporting styles. The main results are:

- Self-reported general health shows large cross-country variations. According to their self-reports, the healthiest respondents live in the Scandinavian countries and the least healthy live in Southern Europe.

- These differences are only partly reflected by differences in true health (measured by the prevalence of chronic conditions, by functional limitations, and objective health measures such as grip strength, and walking speed).

- Another part of the cross-country variation in self-reported health must be attributed to differences in reporting styles. The SHARE data allow to compute health measures that take differences in reporting styles into account. Such comparable measures are a necessity in cross-national, multidisciplinary analyses.

- If differences in reporting styles are taken into account, cross-country variations in general health are reduced but not eliminated.

It should be noted that longitudinal data will greatly benefit the kind of analysis presented in this contribution. First, we will be able to study changes in self-reported health at the onset of chronic diseases cross-nationally. Second, since we will be able to study the relationship of self-rated health and mortality cross-nationally. This will both significantly improve our understanding of the determinants of self-assessed health in different countries.

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3.4 Health Behaviour

Arja R. Aro, Mauricio Avendano, and Johan Mackenbach

Introduction

There is evidence on the importance of health behaviour such as non-smoking, moderate alcohol consumption and moderate physical activity, as well as weight control, to lower mortality and improve functional capacity, also among elderly (Adams et al. 1990; Davis et al. 1994). Further, we know that improving these factors brings health benefits (Johansson and Sundqvist 1999). The SHARE project provides an excellent opportunity to study the prevalence and associations of health behaviours among the ageing European population.

This contribution describes the prevalence of health behaviour such as smoking, alcohol consumption, and physical activity, and also body-mass-index among men and women, different age groups and different socio-economic groups in 10 SHARE countries.

Measures

Smoking (cigarettes, cigars, cigarillos, pipe) was asked 'having ever smoked at least for a year', 'current smoking', 'having stopped smoking', and 'number of cigarettes/pipes smoked'. Alcohol consumption was asked as 'frequency of consuming alcoholic beverages (beer, cider, wine, spirits or cocktails) in the last six months', and as 'frequency more than two of the drinks at a time'. Physical activity was asked as 'frequency of moderate physical activity' (such as gardening, cleaning the car, doing a walk) and 'vigorous physical activity' (sports, heavy housework, a job involving physical labour) using the questions of the English ELSA study. Self-reported height and weight were used to calculate the body-mass index (BMI, weight (kg) divided by the square of height (m^2). BMI equal or higher than 30 was used as a limit for obesity (World Health Organisation 2000), but also the cut-off of 25-29.9 for overweight, and that of 25+ for overweight/obesity were used.

Health Behaviour by Gender and Age

Over two thirds of men and over a quarter of women had smoked at least for a year in their lifetime. Twenty-four percent of men and 13% of women were current smokers (Table 1). Among men who had smoked, 63% had stopped; and the corresponding figure among women was 55%.

Among women 42% and among men 19% had consumed no alcohol during the last six months. Percentage of those who took alcohol more than the recommended level of two drinks almost daily was 26% among men, and 7% among women (Table 1). Abundant alcohol consumption is known to be harmful for health, but lately there has been a lot of discussion of potential health benefits of moderate alcohol consumption. Recently Sulander et al. (2004) have shown among elderly men evidence for the U-shaped association between alcohol consumption and functional ability.

Nine percent of men and 15% of women were physically inactive, since they did not do any moderate or vigorous physical activity (Table 1). We know that physical inactivity is associated with negative health outcomes. Men were more often overweight or obese (67%) than women (55%). The results of SHARE confirm the worrying trend of overweight as a public health problem, especially among men. Research has shown that obesity is related to metabolic syndrome with increased risk of diabetes type II and cardiovascular disease as well as risk of functional disabilities.

Table 1 Prevalence of Behavioral Risk Factors Among Men and Women Aged 50 Years and Above in 10 European Countries

Behavioural Risk factor	Levels	Men	Women
Smoking			
	Ever smoking 1+ years	64.0 (62.2-65.8)	27.2 (25.6-28.9)
	Current smoking	23.9 (22.3-25.6)	13.2 (12.0-14.5)
	Average number of years smoking (among the total population)	19.0 (18.6-19.4)	6.7 (6.4-6.9)
Alcohol drinking			
	Daily/5-6 times per day	42.1 (40.2-44.0)	17.8 (16.5-19.3)
	Never in the last six months	19.0 (17.6-20.6)	42.3 (40.5-44.2)
	Drinking daily or 5-6 days a week more than two glasses of alcohol	26.3 (24.6-28.0)	6.9 (6.0-7.9)
Low physical activity			
	Neither vigorous nor moderate physical activity	9.3 (8.3-10.5)	14.9 (13.7-16.3)
Body Mass Index			
	Overweight (BMI 25-29.9)	50.2 (48.2-52.1)	36.4 (34.6-38.2)
	Obesity (BMI 30+)	16.3 (15.0-17.8)	18.1 (16.7-19.6)
	Overweight or obesity (BMI 25+)	66.5 (64.7-68.3)	54.5 (52.6-56.4)

A declining age-gradient was found in current smoking for both genders (Figure 1). Among men of 50-59 years almost four in ten smoked, but only one in ten did so in the age group 80+. Here probably selective mortality explains partly the decline. In frequent alcohol consumption (more than two drinks a day, nearly every day) a general, declining age-gradient was also seen, although less steep than in smoking (see Tables 3A.12 and 3A.13 in the Appendix to this chapter). However, those in the age group of 60-69 years seemed to consume alcohol somewhat more than the other age groups. The steepest age-gradient was in sedentary lifestyle (defined as never engaging in neither moderate nor vigorous physical activity. Overweight and obesity were less common among the oldest (80+) age group, probably partly due to selective mortality. The found declining age-gradient in behavioural risk factors is in line with previous research (Adams et al. 1990; Sulander et al. Forthcoming).

Variations by Socio-Economic Status

Both educational level and income level (for the definition, please see the contribution on socio-economic disparities by Avendano et al., section 3.2) were used as indicators of the socio-economic status in studying social disparities in health behaviours, overweight and obesity. There were clear social disparities in favour of higher educational groups in physical activity and BMI (Figure 2.). Among men the similar disparities (although less prominent) existed in current smoking. More frequent alcohol consumption seemed to be more common among the higher educational groups. This association was even stronger among women. These disparities are similar to the findings from both Europe (Cavelaars

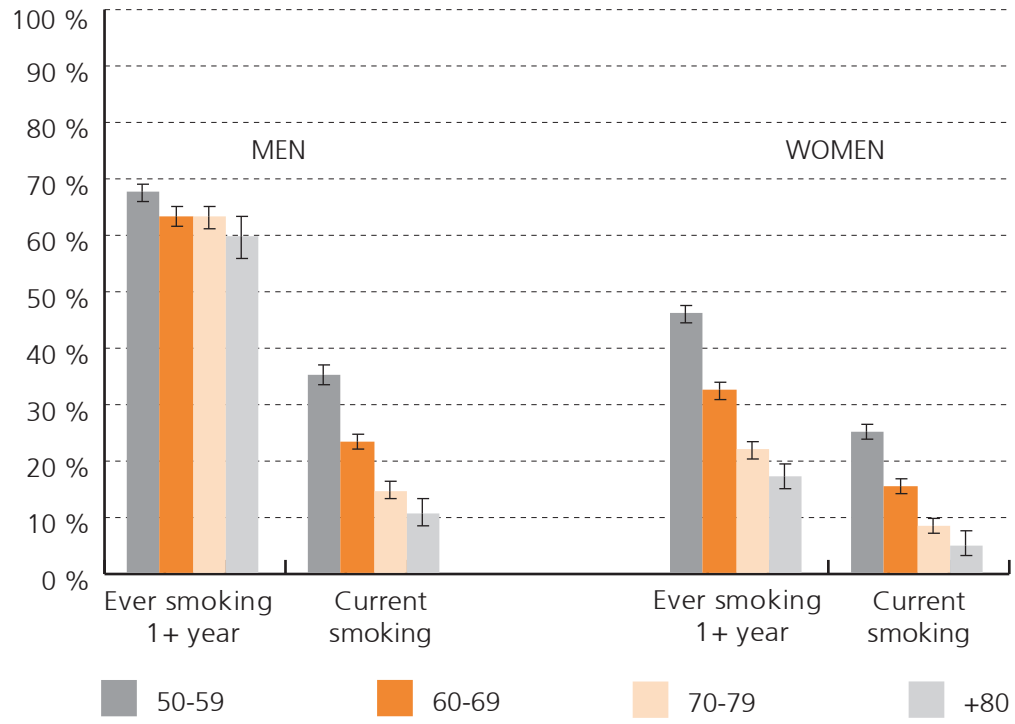

Figure 1 *Smoking behaviour according to age among men and women aged 50 years and older in 10 European countries*

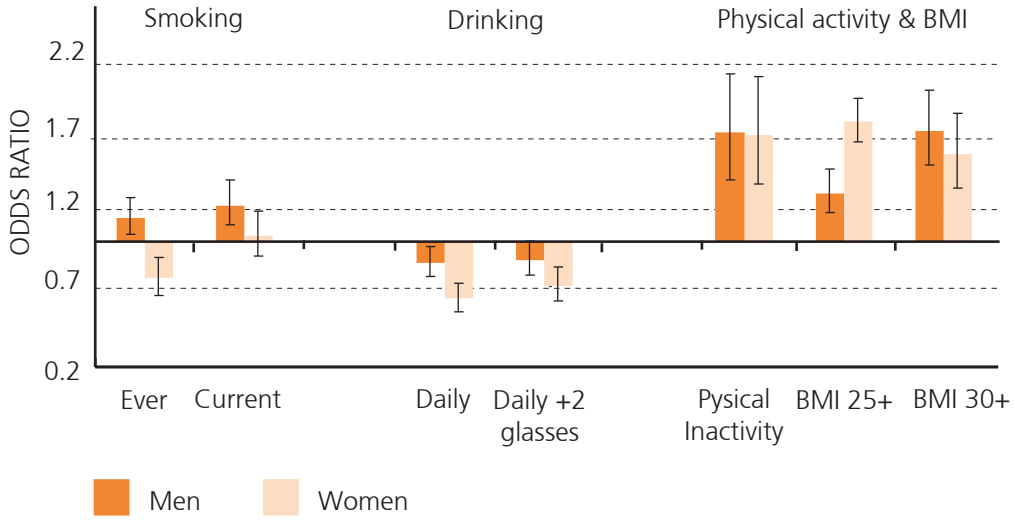

Figure 2 *Odds ratios of health behaviours comparing low vs. middle/high educational levels among men and women aged 50 years and above in 10 European countries*

et al. 2000) and the United States (Moore et al. 1999). Using income level as an indicator of socio-economic status (Table 3A.14) gave similar results, and current smoking among women was even more common among the lowest income group.

Variations Between Countries

All in all, the between-country differences in smoking were higher in having ever smoked and in the number of years smoked, and lower in current smoking. Countries like the Netherlands, Denmark, Sweden, and also Greece (in the numbers of years smoked), had the highest figures (Table 3A.15).

Over 30% of the French, Italian, and Spanish men reported having taken more than two drinks of alcoholic beverages daily or 5-6 times a week in the past six months (Figure 3). Among women this type of drinking was rather rare, but the highest percentages, about 10%, were reported in France, Italy, the Netherlands and Denmark. Consumption was highest in three southern European countries of France, Italy and Spain, but was clearly lower in Greece. On the other hand, the Netherlands and Denmark reported also rather high figures, whereas Sweden reported very low figure on this kind of frequent drinking.

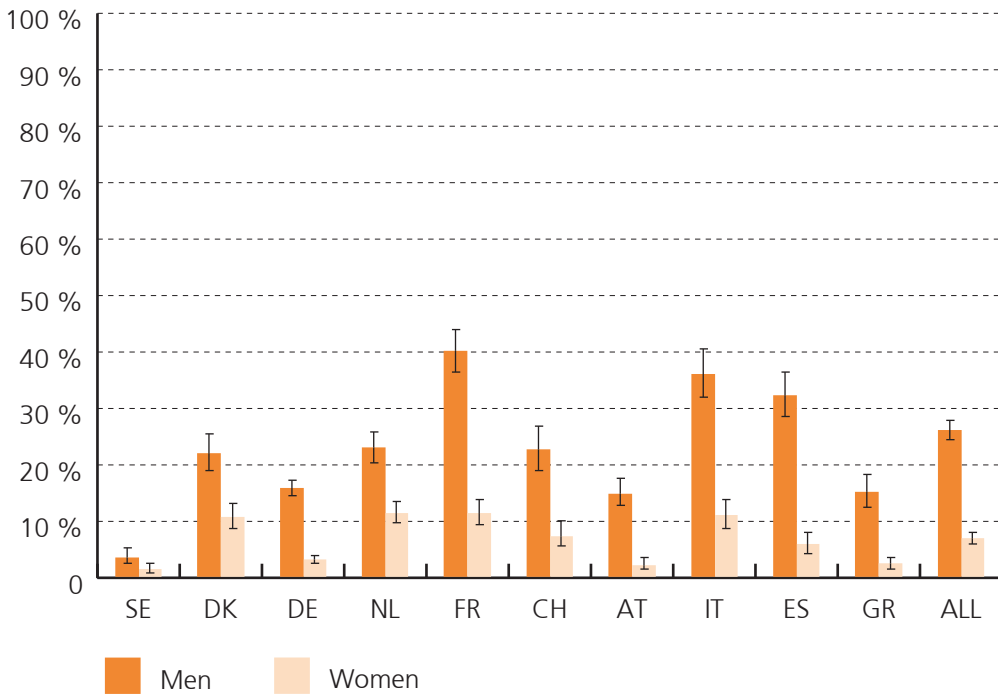

Figure 3 The prevalence of drinking more than two glasses of alcohol daily or almost daily among men and women aged 50 years and older in 10 European countries

One potential explanation for the low Swedish figures could be the used measure of (almost) daily consumption of two or more glasses of alcohol. This frequency question with rather low level of consumption does not probably capture the drinking habits especially in this Nordic country where bigger amounts of alcohol are consumed less frequently (Hemström et al. 2002). Other potential explanations could also be either high alcohol prices in the country, or reporting bias due to cultural attitudes towards drinking. The difference between Denmark and Sweden in health behaviours has been reported also earlier.

Percentages of sedentary behaviour among men and women were highest in Italy, Spain, France, and Austria and in these countries gender differences were bigger than elsewhere

(Table 3A.14). In all countries men were significantly more often overweight than women, and compared to the European average, Greek, Spanish and Austrian men were above the average, as were also Greek and Spanish women (Table 3A.14). It is interesting to note that these higher level of sedentary behaviour, overweight and obesity in several Southern European countries, contrast with extremely low levels of mortality from heart diseases.

Conclusions

The SHARE results on the high prevalence of behavioural health risk factors, especially overweight, among the elderly, are rather alarming. Health promotion (in its wide meaning of multi-sectorial activities such as nutritional policies, societal and social measures to create health promoting environments as well as health education) is needed to decrease the consequences like metabolic syndrome, diabetes and cardiovascular diseases, premature mortality, and decline in functional capacity. Socio-economic disparities in behavioural risk factors threaten the manifest European aim to decrease socio-economic inequalities. Between-country differences in health behaviours point for differential actions in different countries, but on the other hand also raise questions about increasing international research, and about international policies e.g. in food labels, and smoking policies in enhancing the health of the Europeans.

Key points

- Over weight and obesity are health threats in this European population 50+. This can have enormous effects on the prevalence of chronic disease during the future decades in Europe.
- Socio-economic disparities in favour of those better off exist in physical activity, overweight/obesity, and somewhat less in smoking.
- Between-country differences suggest a need for both culturally targeted efforts and international policies.

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3.5 Mental Health

Michael E. Dewey and Martin J. Prince

Introduction

Major depression is forecast by 2020 to have risen from the fourth to the second most burdensome health condition world-wide, taking into account both associated disability and premature mortality (Murray and Lopez 1997). Late-life depression, when defined according to the broad criterion of clinical significance, is a common disorder affecting 10 to 15 percent of the over 65 year old population (Beekman et al. 1999). The prevalence of more severe disorder e.g. major depression is substantially lower, but this category excludes common forms of late-life depression, particularly those associated with bereavement and physical co-morbidity. Longitudinal population-based studies suggest that incidence and maintenance rates are both high, balanced by a high mortality for those affected.

One of the clearest findings in psychiatric epidemiology is the excess of depression among women. The extent of this excess varies across the life course, increasing from puberty into mid-life, and then declining into late-life (Jorm 1987). The EURODEP consortium (Prince et al. 1999b) reported a clear cut excess of depression symptoms in older women in population-based studies from 13 out of 14 European centres. This association was consistently modified by marital status, with marriage being protective for men but a risk factor among women.

The effect of age upon depression is in some respects unclear. The general impression has been that the frequency of depressive symptoms and broader depressive syndromes either increases or remains stable with increasing age (Ernst and Angst 1995). However, for major depression, data from the United States suggested a lower prevalence for those over 65 years old (1.0 percent) than for those aged 45-64 (2.3 percent) and those aged 18-44 (3.4 percent) (Weissman et al. 1988). This may reflect measurement bias; older participants report as many depressive symptoms as younger participants, but are more likely to attribute them to physical causes, meaning that they are then excluded as a basis of diagnosing depression. Alternatively, it may be explained by the selective mortality of those most vulnerable to repeated severe episodes of depression (Ernst and Angst 1995). Van Ojen (1995) reported, among those aged 65 and over that the prevalence of a past history of depression decreased linearly with increasing age.

There have been reports from cross-sectional community surveys from a variety of cultures of associations between late-life depression and relative disadvantage in income, housing status, and education. These are, of course, highly correlated variables, and it will always be difficult to determine the effect of one, independent of the others. While the focus of much of this research has been upon socio-economic disadvantage as a risk factor for depression, the well recognised phenomenon of social drift may play an important part; people whose adult life has been scarred by depression may experience occupational and economic disadvantage.

Many studies have commented on the strength of the cross-sectional relationship between physical health variables and depression in older age. The strongest reported associations have generally been between depression and summary measures of disability. Longitudinal studies have now shown a very strong association between disablement at baseline and the subsequent onset of depression with the strongest effect of disability in those with the least social support (Prince et al. 1998, Schoevers et al. 2000). The population attributable fraction (the proportion of new cases that might notionally be prevented

if the risk factor were removed) was 0.69. Most studies agree that it is the level of disability associated with the health condition, rather than the nature of the pathology that determines the risk for depression (Ormel et al. 1997; Prince et al. 1998).

Methods

The SHARE schedules include the EURO-D scale which has been validated in an earlier cross-European study of depression prevalence, EURODEP (Prince et al. 1999a, Prince et al. 1999b). For the purposes of this contribution we defined clinically significant depression as a EURO-D score greater than 3. This cutpoint had been validated in the EURODEP study, across the continent, against a variety of clinically relevant indicators. Those scoring above this level would be likely to be diagnosed as suffering from a depressive disorder, for which therapeutic intervention would be indicated. Respondents were also asked about their past history of depression.

We estimated the prevalence of current depression by age, gender and country. We also examined associations between current and past depression and a number of demographic, economic, health and social functioning indicators, using logistic regression. In these analyses we always control for age, gender, country and marital status. We also included in the models both current depression and past history, in order to examine the independent effect of each.

Sampling weights were not applied, but we have taken account of the clustering into households. In the graphs we present the estimates from the models and a 95% confidence interval based on sandwich standard errors.

Results

1 The prevalence of depression

A full description of the prevalence of depression by age, gender and country is contained in Table 3A.16 in the Appendix to this chapter. A graphical summary is provided in Figure 1.

In every country women have a higher prevalence of depression than men, most markedly in France, Spain and Italy (a significant gender by country interaction). The prevalence of depression rises consistently with age. There are substantial differences in the prevalence of depression between the countries. Note the high prevalence in the four countries bordering the Mediterranean. In northern European countries the prevalence in men increases from around 10-15% at age 50 to 20-25% at age 75, and in women from 20-25% at age 50 to 35-40% by age 70. In southern European countries the prevalence in men increases from 10-20% at age 50 to 30-40% by age 75, and in women from 30-40% at age 50 to 50-70% by age 75.

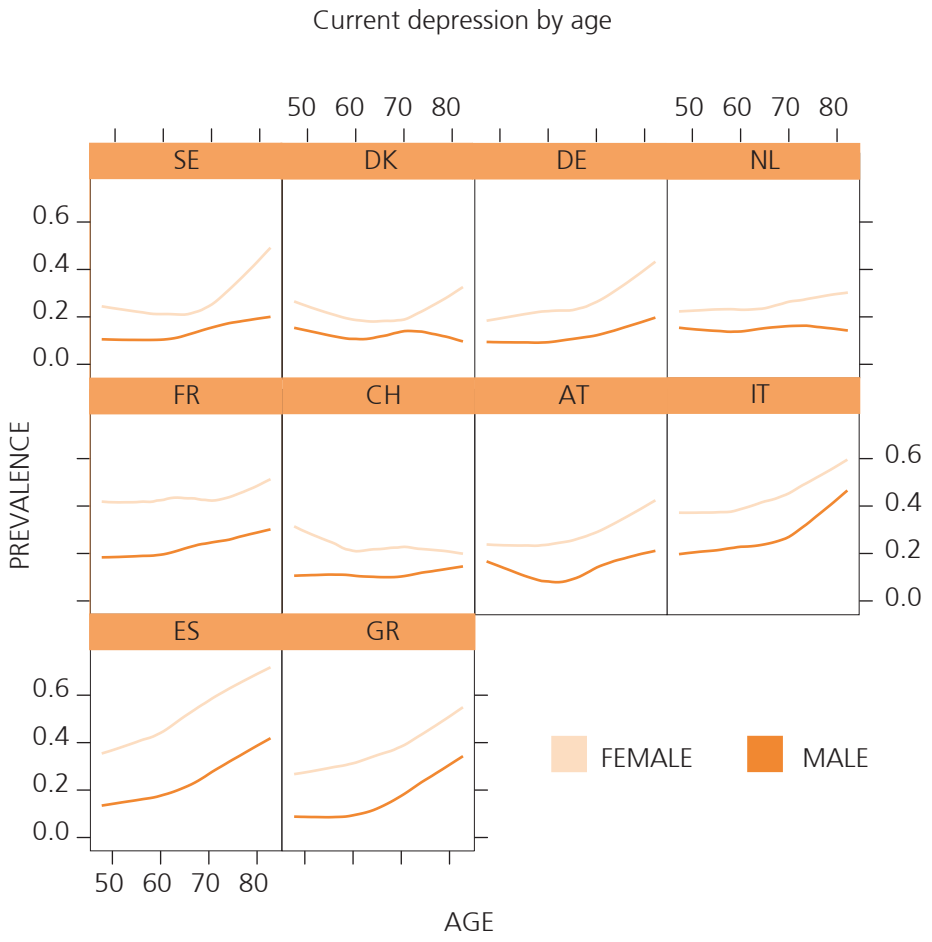

Figure 1 The prevalence of current depression by age, gender and country

2 Depression, marital status and residential status

Not being married and living alone were each consistently associated with past and current depression (Figure 2). Associations with past depression were in most countries more marked than those with current depression. We did not find the expected interaction between marital status and gender, the protective effect was equally apparent for men and women.

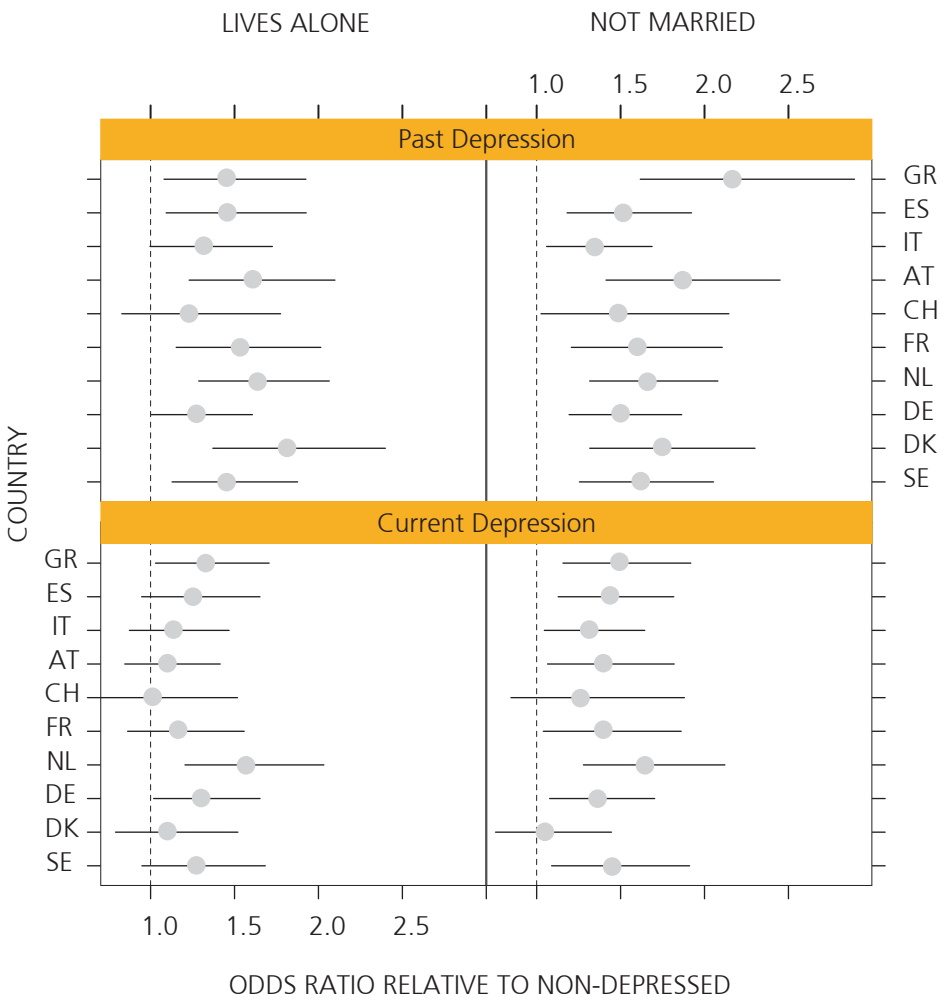

Figure 2 *The association between current and past depression and marital and residential status, by country*

3 Depression, income and wealth

We modelled individual income and household wealth as log-normally distributed outcomes. Outliers have been excluded. We controlled for age, sex and marital status. Figure 3 shows the effects. The x-axis indicates the predicted income of a person with depression/ past history of depression as a proportion of that of a non-case. Neither depression, nor a past history of depression were consistently associated with income. There were only non-significant trends toward income decrements in the two Scandinavian countries, Denmark and Sweden. However, there did seem to be effects on wealth, with decrements associated with depression observed in the Northern European countries, the Netherlands, Germany, Denmark and Sweden.

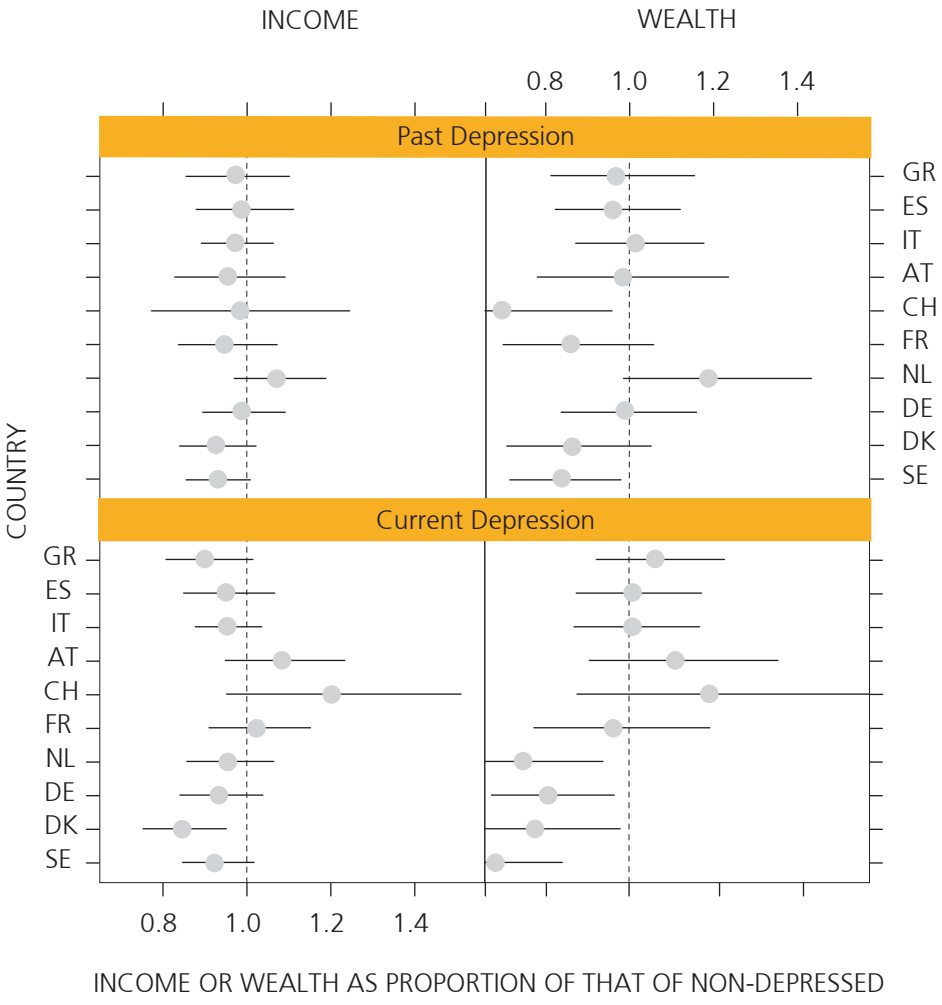

Figure 3 The effect of past and current depression upon income and wealth, by country

4 Depression and support

The effects of current depression, and a past history of depression upon giving and receiving either emotional, practical or financial support were modelled using logistic regression, controlling for age, sex and marital status. Figure 4 shows that depressed people are in general less likely to give support and more likely to receive it. Both of these effects are more evident for current than for past depression. The association between depression and receiving support is stronger in southern than in northern European countries. The negative effect of depression upon giving support is only evident in northern European countries.

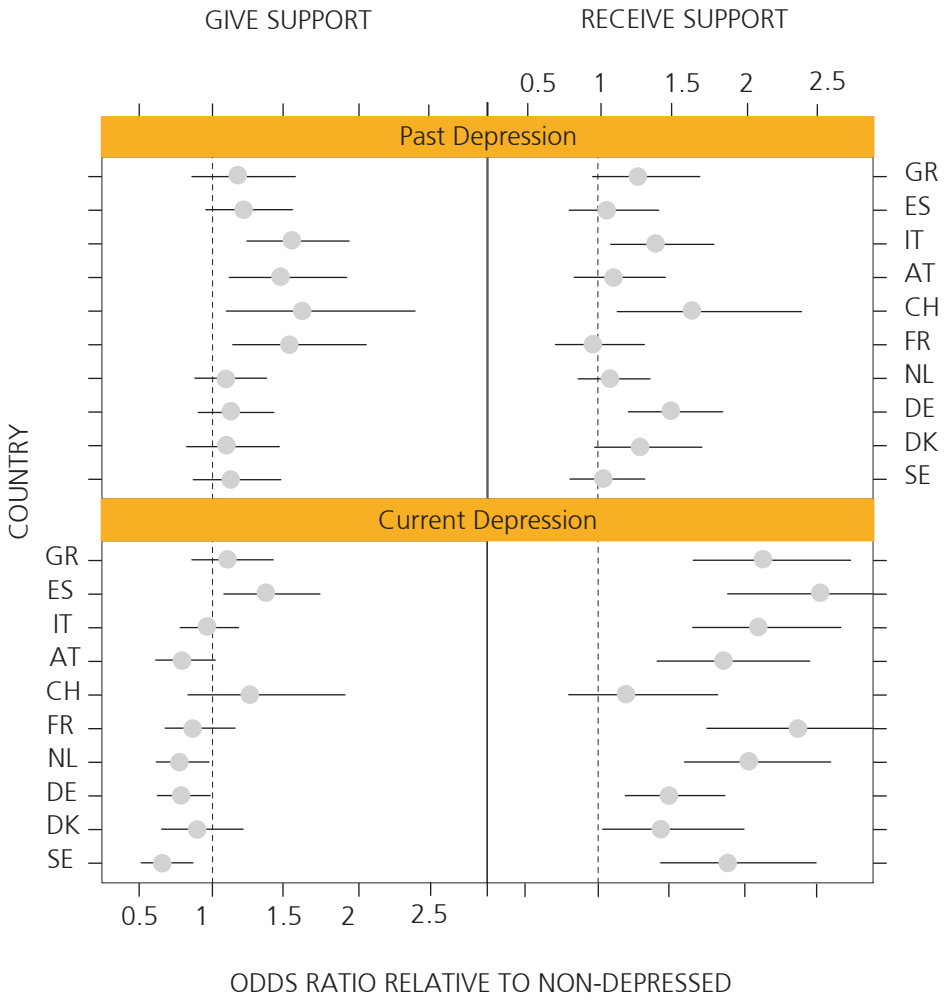

Figure 4 The associations between past and current depression, and giving support and receiving support, by country

5 Mental health and functioning

The effect of past and current depression upon performance of activities of daily living (ADL), performance of instrumental activities of daily living (IADL) and mobility were modelled using logistic regression, controlling for age, sex and marital status. Figure 5 shows consistent and very large effects on all of these for current depression with those with depression being two to six times more likely to report one or more ADL limitation, one or more IADL limitation and mobility limitation. The effect of past history of depression was much more modest, and indeed only generally apparent for mobility.

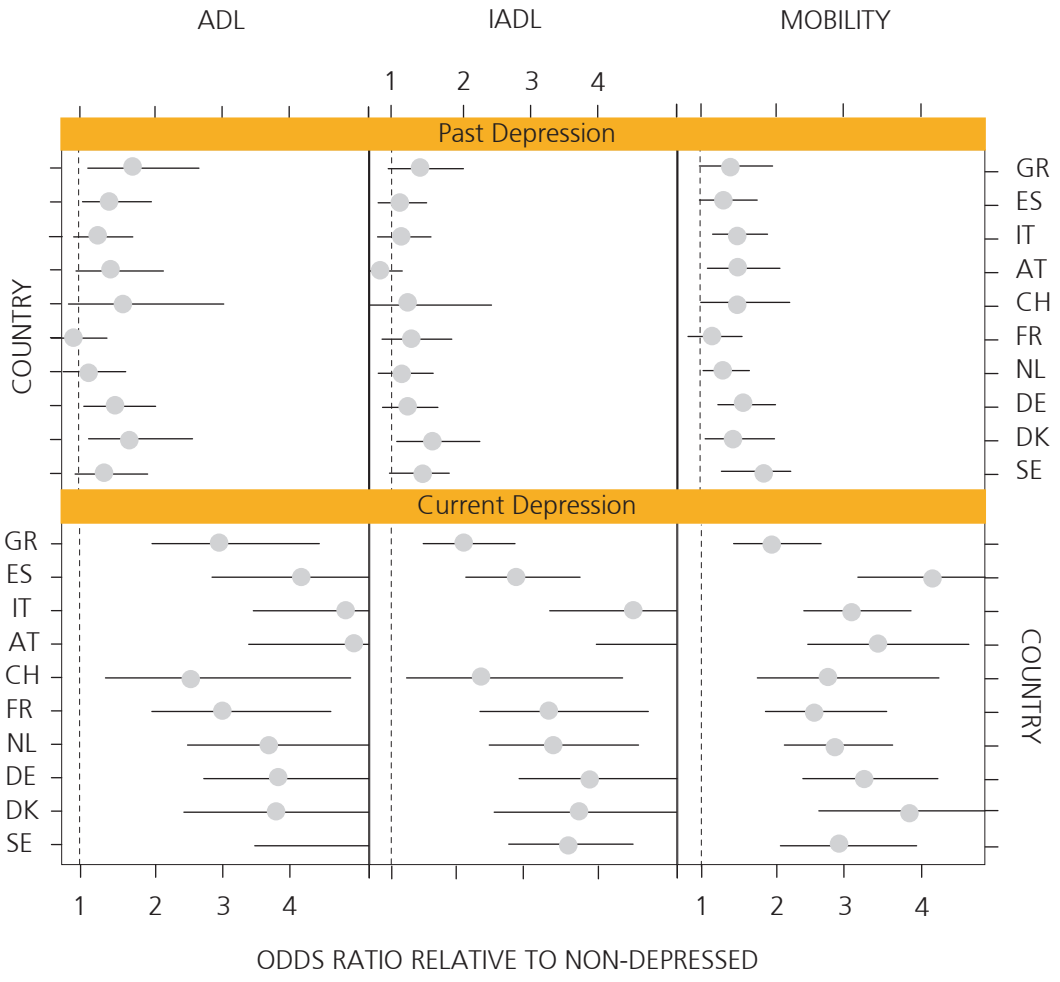

Figure 5 The associations between past and current depression, and indicators of functioning, by country

6 Mental health and physical health

The associations between past and current depression and self perceived health, physical symptoms and chronic illness were modelled using logistic regression, controlling for age, sex and marital status. Those with current depression had two to three times increased odds of reporting 2 or more chronic illnesses, and three to four times increased odds of reporting impaired health and 2 or more physical symptoms (Figure 6). The effects of past depression were again less marked with 1.5 to two times increased odds of reporting poor health.

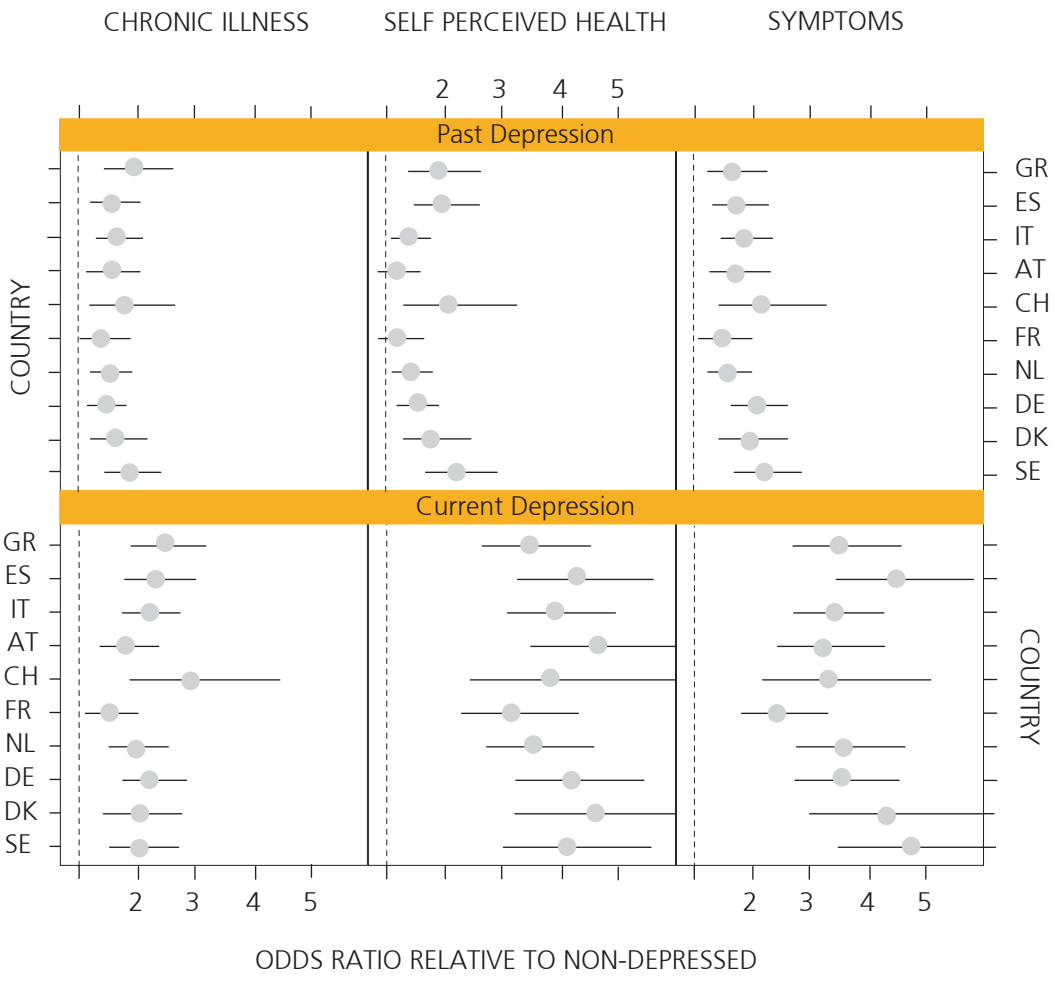

Figure 6 The associations between past and current depression, and physical health indicators, by country

Conclusion

Depression, consistent with previous observations (Prince et al. 1999b), is more prevalent among women, in older people, among those who are not married, and those who live alone. These associations are broadly consistent across the continent of Europe, with the exception that the female gender excess may be more prominent in southern European countries (this possibility was also suggested in the EURODEP consortium meta-analysis).

The negative impact of depression upon quality of life is underlined by the very strong associations between current depression, in particular, and impaired functioning and self-perceived health. Depression is a very disabling condition, equivalent in its impact to major chronic disorders such as rheumatoid arthritis. Associations between depression and impaired functioning are likely, however, to be bi-directional; previous prospective research has indicated that failing health and increasing disability are overwhelmingly important risk factors for the onset of depression. This would be consistent with our observation of stronger associations between poor health and current rather than past history of depression.

In our analysis we noted effects of current depression (more than past depression) upon wealth, rather than income. These were, moreover, only apparent in northern European countries. The association with current rather than past history of depression would suggest that the association is more likely to be in the direction of pre-existing socio-economic disadvantage influencing mental state, rather than the model previously proposed of impaired mental health across the life course leading to cumulative economic disadvantage. Were this to be the case, then the relative resilience of southern European populations to the psychological consequences of economic disadvantage are of interest and worthy of further exploration.

Some risk factors may be particularly salient for late-life depression, either because as in the case of poor health, disability or bereavement, they are a much more common exposure among the older population, or because they may impact differently upon those who are exposed depending on their age. There is already evidence to suggest that disability associated with declining health in older age may be a prime determinant of the prevalence, incidence and maintenance of late-life depression. There is a clear case for focusing in our investigations on those aspects of physical health status, cognition and social milieu which change most acutely in later life and best distinguish the life experience of older and younger adults.

- The SHARE dataset is unique in providing a comparison between countries using nationally representative samples. Previous studies used convenience samples or were of one country only.

- We have shown the relationship between various measures of social exclusion and depression. The variation between countries and in particular the North-South gradient suggests important structural mediators of this relationship.

- Although the differential effects of past and current depression provide clues about the direction of causation a fuller understanding will only come from longitudinal data.

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3.6 Cognitive Function

Michael E. Dewey and Martin J. Prince

Introduction

Cognition can be divided into different domains of ability, which can be tested separately; the most important of these are orientation, memory, executive function (planning, sequencing) and language. Cognitive function in midlife is known to be influenced by many factors—including but not limited to genes, home environment in childhood, education, and occupation. Most aspects of cognitive ability have been shown to be relatively stable across the early life course, reflecting the strong influences of heredity, early environment and education (Richards et al. 2004). Cognitive decline is first detectable in the fifth decade, but only then by sensitive, effortful tests of cognition (Schaie 1989; Schaie 1994). Memory is often affected first, and most prominently. Age-related decline from this point onwards is the rule—however, only a minority would go on to suffer from clinically significant dementia. The prevalence of dementia in Europe is around 2% for those aged 65-70, and doubles with every five year increase in age, reaching around 25-30% for all those aged 85 years and over (Lobo et al. 2000).

In SHARE, we have measured cognitive ability using simple tests of orientation, memory (registration and recall of a list of ten words), verbal fluency (a test of executive function) and numeracy (arithmetical calculations). We also asked participants to rate subjectively their reading and writing skills.

SHARE provides a unique opportunity to compare cognitive function in ageing populations across Europe.

- Between country differences may be linked to a variety of underlying mechanisms. Of particular interest here is the impact of education, either boosting performance or perhaps even protecting against age-related decline.

- Age-related cognitive impairment is generally considered to be an organic process, linked to neurodegeneration. We would therefore anticipate that the effect of age upon cognitive ability be similar across countries. The effect of gender may vary particularly if confounded by educational opportunity.

- The core cognitive abilities assessed in SHARE might be expected to have an impact upon the socio-economic success of participants, indexed for example by income and wealth. Of interest here, would be 1) whether any independent effect of cognitive function was discernible, having controlled for education and occupational status 2) the extent to which any such effects were consistent between European countries.

Methods

We report each cognitive test score, and self-reported reading and writing skills as a function of age, sex, country and educational level. Detailed results appear in Tables 3A.17-3A.23 in the Appendix to this chapter. We also examined the effect of poor cognitive performance on a number of other economic, health and social functioning measures. To simplify the presentation we focused on three key cognitive domains memory (recall), executive function (verbal fluency) and numeracy. For these analyses we have re-coded each of the cognitive measures to a binary variable with as near as possible to 7% scoring as

impaired (this approximates to 1.5 standard deviations below the mean, a generally agreed criterion for relative cognitive impairment). In these analyses we always adjust for the effects of age, sex, and education, and stratify for country. Additional variables are included as appropriate and are mentioned as each set of results is presented and discussed.

Sampling weights were not applied, but we have taken account of the clustering into households. In the graphs we present the estimates from the models and a 95% confidence interval based on sandwich standard errors.

Results

1 Prevalence of cognitive impairment

Tables 3A.17-3A.22 describe all six cognitive outcomes, by age, gender and country. Figure 2 summarises the prevalence of impairment in the three key cognitive outcomes by age and country. For each domain; verbal fluency, memory recall and numeracy; prevalence of impairment rises with age. The age-related increase in impairment was most striking for memory recall. There are clear country differences with the countries bordering on the Mediterranean tending to have higher prevalences. In a predictive model, including the effects of age, gender, education and country, much but not all of the effect of country on each of the three cognitive outcomes could be explained by education.

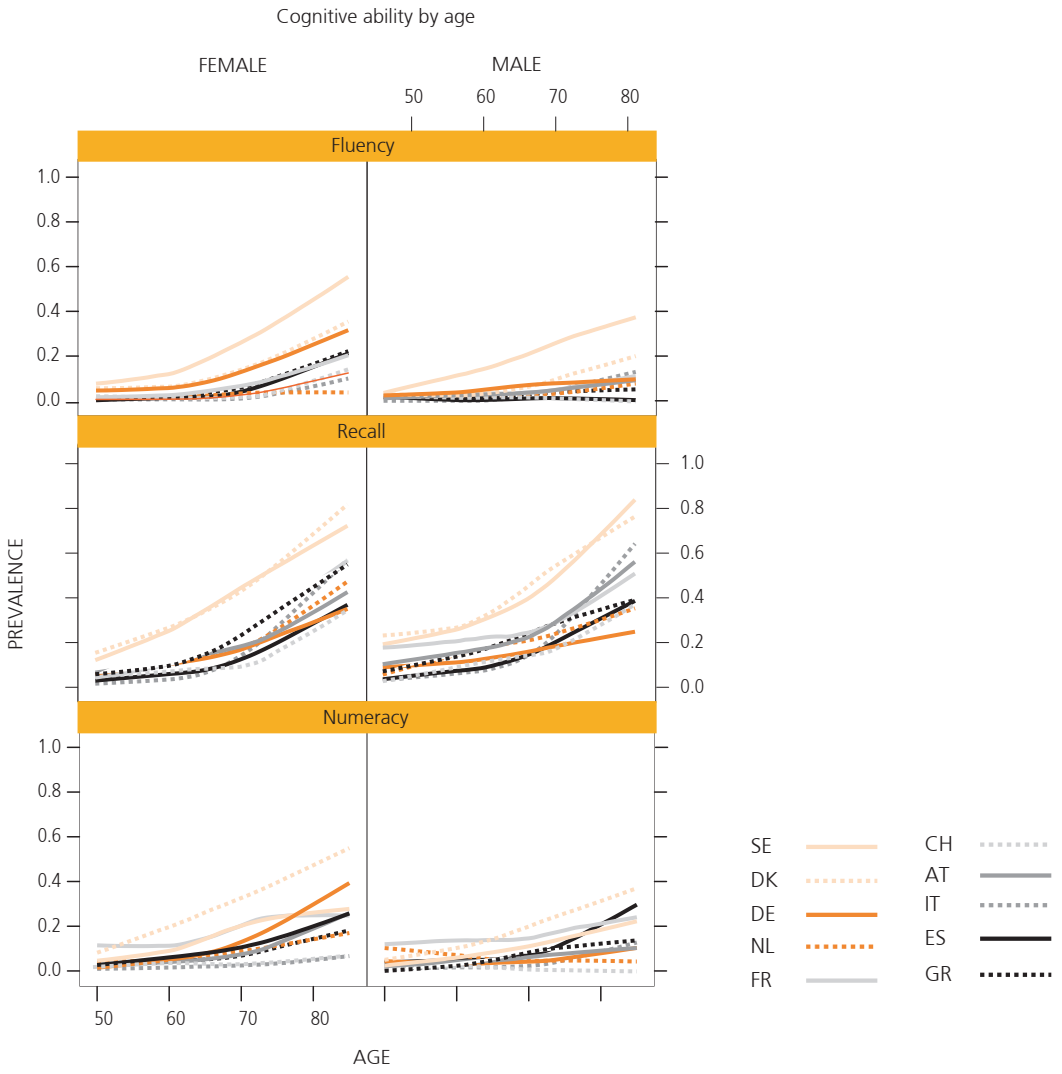

Figure 1 The prevalence of cognitive impairment, by age and country

2 Cognitive impairment and education

Cognitive function, however measured, was strongly and consistently associated with education. The effects of education were broadly similar between countries, with the exception of numeracy where the association between less than full secondary education and impaired numeracy was much stronger in Greece, Spain, Italy, France and Switzerland than in the other mainly northern European countries. This finding is not discussed further.

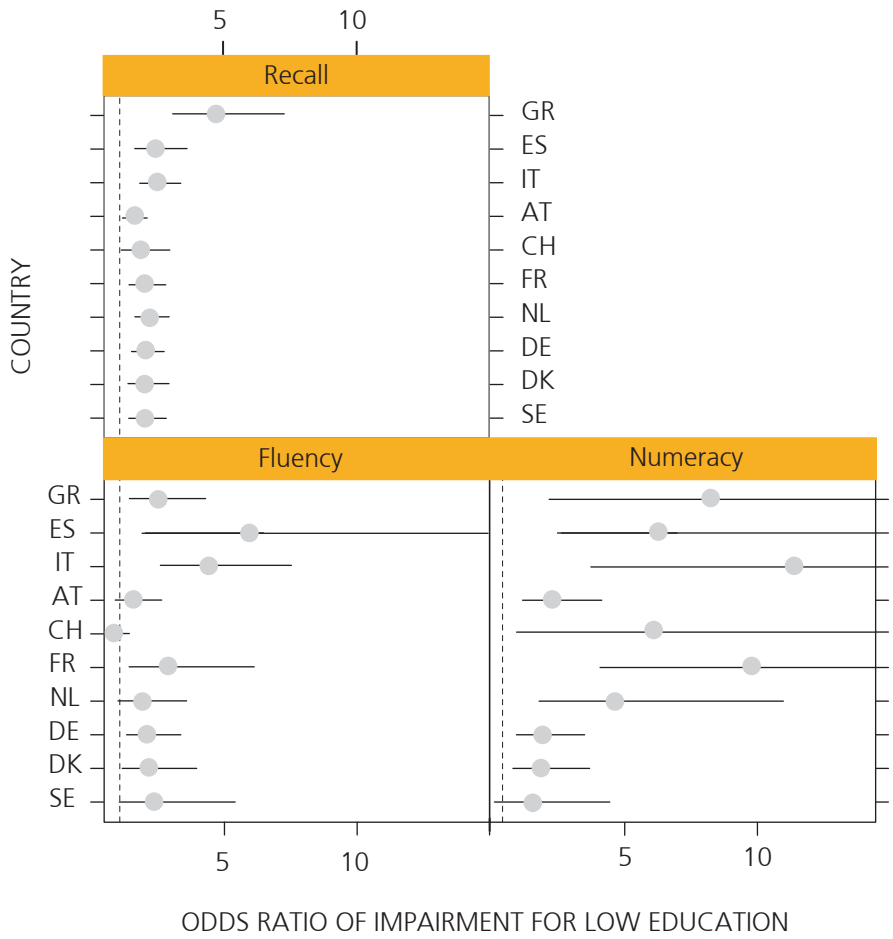

Figure 2 The association between education and cognitive impairment, by country

3 Cognitive impairment, income and wealth

We modelled individual income and household wealth as log-normally distributed outcomes with outliers excluded. The effect of cognitive impairment was estimated, controlling for age, gender, education and employment status. Consistently across Europe, people with cognitive impairment as measured by memory recall have lower incomes than those who are not impaired. The effect of impairment in numeracy and verbal fluency was apparent in some but not all countries. For household wealth, cognitive impairment was associated with marked reductions, but only in northern European countries (the Netherlands, Germany, Denmark and Sweden).

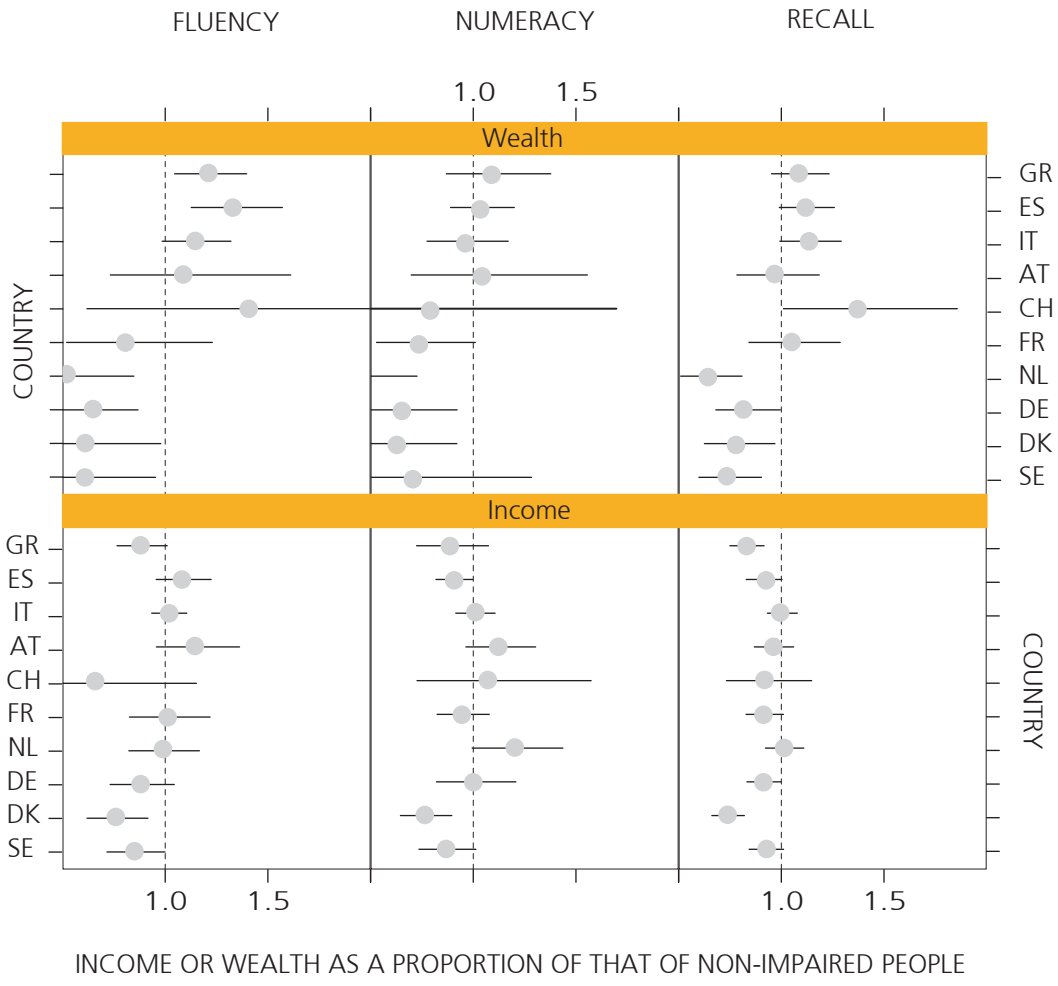

Figure 3 The association between income, wealth and cognitive impairment, by country

4 Cognition and support

The effect of relative cognitive impairment upon giving and receiving either emotional, practical or financial support was modelled using logistic regression, controlling for age, sex and education. Those with cognitive impairment were generally less likely to give, and more likely to receive support than others. The negative effect on giving support was less apparent in the southern European countries, Italy, Spain and Greece. The positive effect of receiving support was again perhaps more evident in these three Mediterranean countries.

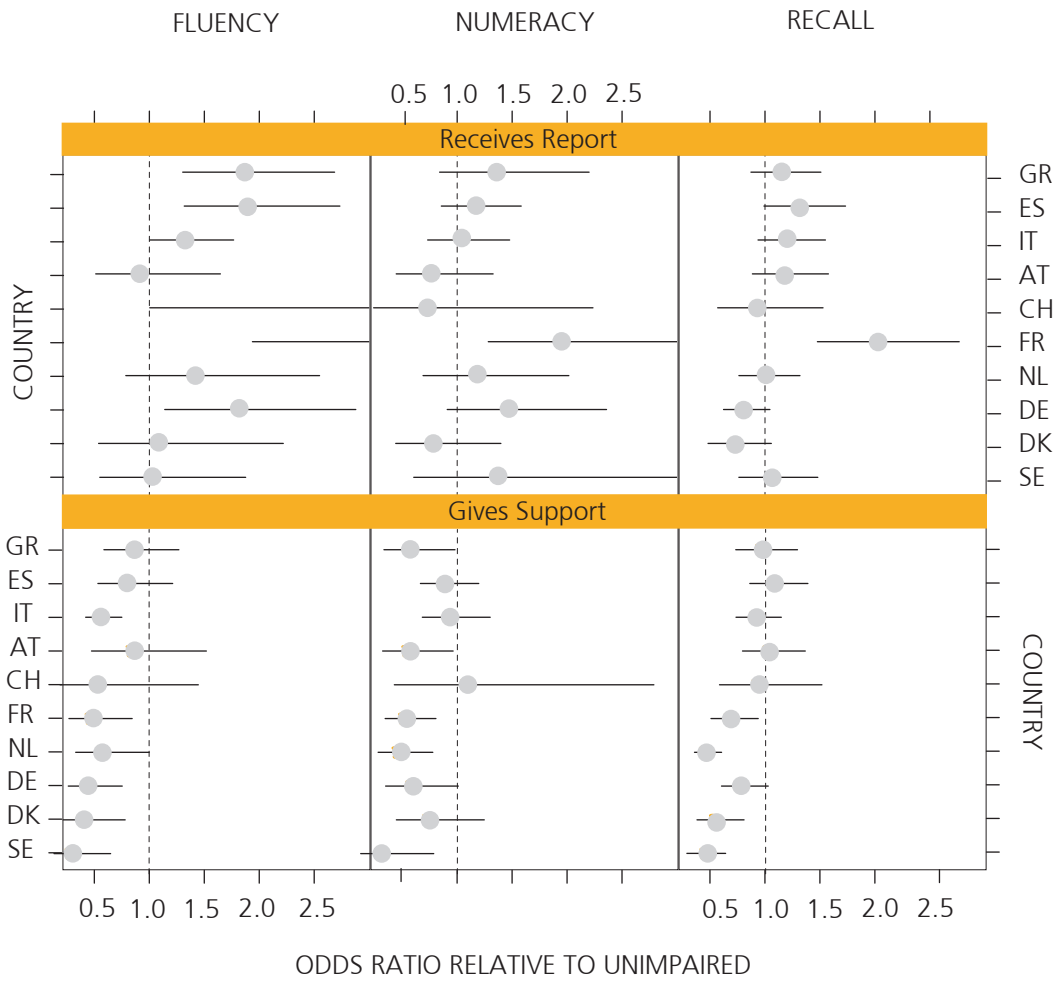

Figure 4 The association between cognitive impairment and support, by country

5 Cognition and functioning

The effect of relative cognitive impairment upon performance of activities of daily living (ADL), performance of instrumental activities of daily living (IADL) and mobility was modelled using logistic regression, controlling for age, sex and education. Impairment in verbal fluency, memory recall and numeracy were all strongly associated with one or more limitations in ADL and IADL. These effects were not however apparent in Greece. Mobility was less clearly influenced, with significant effects only being apparent in some Northern European countries.

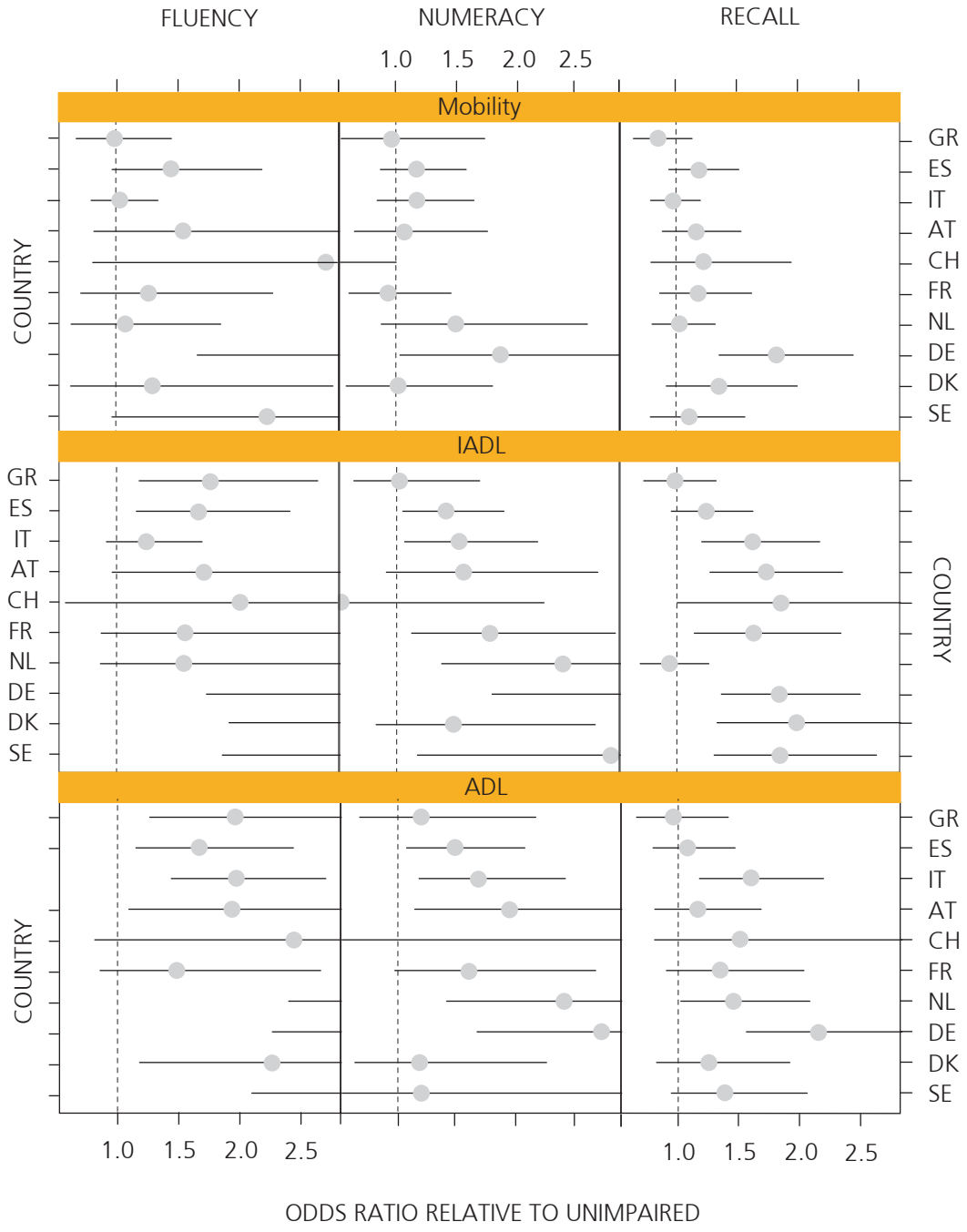

Figure 5 The association between cognitive impairment and indicators of functioning, by country

6 Cognition and health

The effect of relative cognitive impairment upon self perceived health, physical symptoms and chronic illness was modelled using logistic regression, controlling for sex, age and education. There were clear and consistent negative effects of relative cognitive impairment (each domain) upon self perceived health. Cognitive impairment was less reliably associated with having 2 or more physical symptoms, and there was no clear pattern of association with having 2 or more chronic physical illnesses.

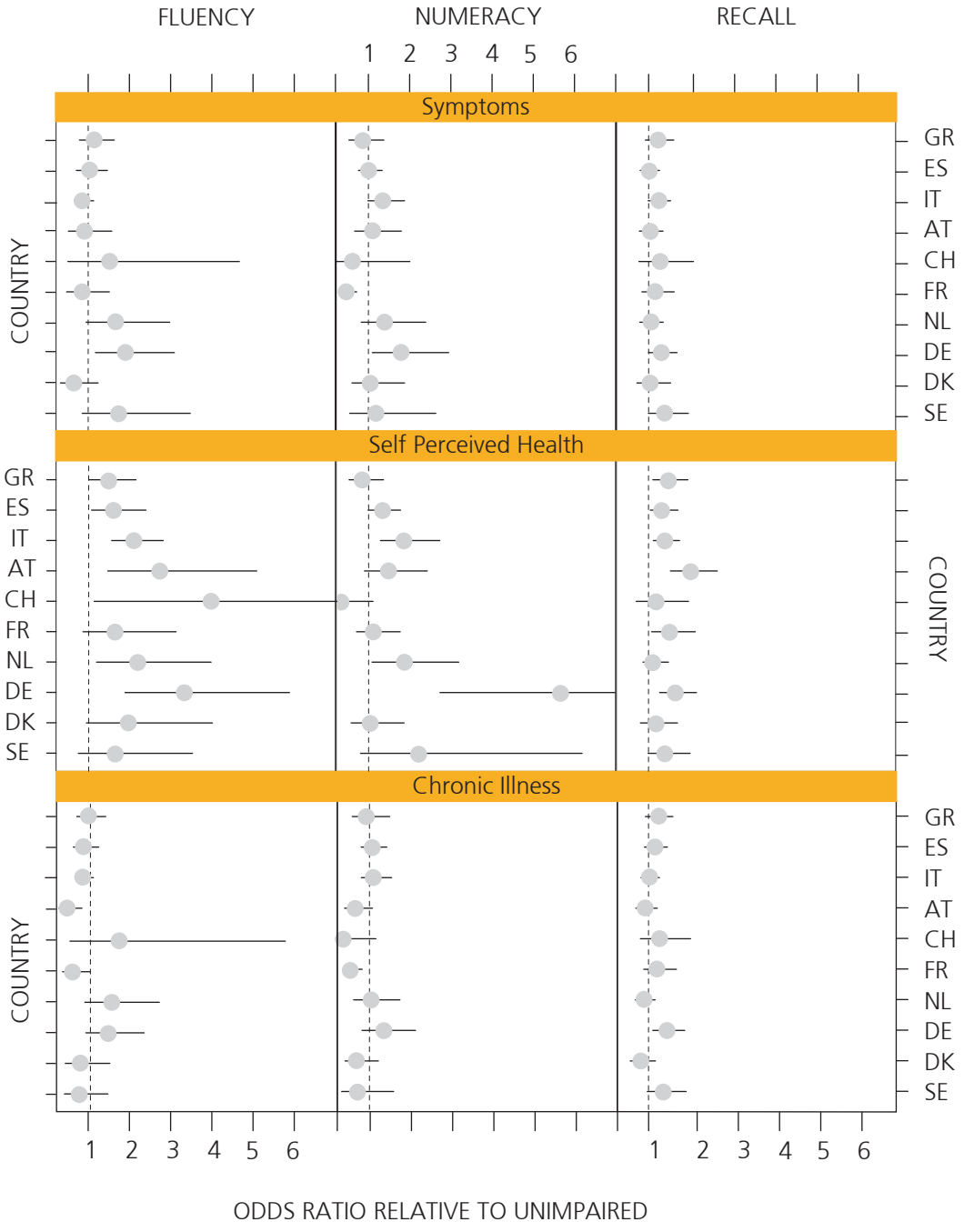

Figure 6 The association between cognitive impairment and health indicators, by country

Conclusion

The prevalence of cognitive impairment increases sharply with increasing age, across the continent of Europe. This most likely reflects the organic process of neurodegeneration; the progressive neuronal loss associated with normal ageing, together with the pathological processes of Alzheimer's Disease and cerebrovascular disease. Some of the variation in cognitive performance, particularly at younger ages, may relate to how intelligence and other cognitive abilities are acquired in early life, in particular the benefits of education, social and socio-economic advantage. Much of the between-country differences in cognitive performance in SHARE are explained by differences in educational experience. The Mediterranean countries, with the highest prevalences of relative cognitive impairment also have the lowest prevailing levels of education.

Relative cognitive impairment is associated with significant decrements in income and, at least in Northern Europe, household wealth. The associations were independent of education and current occupational status. Few studies have assessed these associations, and none with such detail as SHARE. The associations may reflect the cumulative effect of cognitive disadvantage over the life course upon career development and other opportunities for economic enhancement. Alternatively, decline in cognitive ability in later life may be associated with impairment in occupational functioning and consequent economic disadvantage.

Consistent with other literature, we have identified strong and fairly consistent associations between cognitive impairment and impaired functioning (limitations in ADL and IADL), poor self-reported health, and changes in the dynamic of giving and receiving support. Interesting differences emerged between southern and northern European countries. While conceding the risk of over-generalising, a pattern emerges in which relative cognitive impairment is more robustly associated in Northern Europe with reduced functioning, and more robustly associated in Southern Europe with receiving support. The obvious inference is that kin and non-kin social networks may be more intact in Southern Europe, hence allowing older people with cognitive decline to function at a higher level.

- The SHARE dataset is unique in providing information about cognitive functioning from nationally representative samples from more than one country.

- Although differences in the provision of education account for some of the North-South gradient they do not completely explain it.

- The relationship between cognitive functioning and economic disadvantage is intriguing but a fuller account must await longitudinal information about the pathway from working life to retirement.

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3.7 Out-of-Pocket Payments for Health Care Expenditures

By Alberto Holly, Karine Lamiraud, Hélène Chevrou-Severac, and Tarik Yalcin

This contribution will look at how out-of-pocket (OOP) payments for health care expenditures are distributed among the elderly in Western Europe. OOP payments refer to services partially covered or not reimbursed by the public or private insurance schemes. After providing a brief background on the insurance systems across Europe, we will focus on OOP payments looking at differences by age, gender and socio-economic status. Studying the factors associated with OOP payments is crucial to the extent that OOP payments may present a barrier to health care utilisation. Special attention will be paid to equity issues raised by health care financing through OOPs.

Background

As health insurance systems are very heterogeneous across countries involved in the SHARE survey, some background information is summarised in this section.

Health insurance schemes may be classified into public and private ones with reference to the pre-paid financial mechanism (Colombo and Tapay 2004). However, whatever the health insurance systems, the individuals face some OOP payments.

As far as public insurance is concerned, tax-based financing refers to the Beveridgian systems. Social contributions based on individual income level characterise Bismarckian systems. Only one country (Switzerland) has a private mandatory insurance system financed through premiums. Table 1 ranks countries by proportion of the general population paying OOP payments. We can notice that the majority of the population is covered by public health system across Europe. The two exceptions are Germany and the Netherlands: in these two countries, up to a threshold income, people have to be privately insured. Concerning private supplementary health insurance schemes, they are widely spread in France and the Netherlands. Given that almost all the general population is publicly or mandatory insured for health care, that, moreover, some people are privately insured, we should expect few out-of-pocket payments. It is not the case as shown by OOP payments ranging from 11 to 42% of health expenditures. The existence of OOP payments may threaten access to health care and raises the issue of equity in terms of financing. These problems are particularly crucial in the oldest population. The following paragraph deals with these matters. For the purpose of this analysis, the eligible reference person is selected within each household (N = 13,483). Descriptive statistics are performed with survey data methods. We would like to mention that the non-response rate is very low (lower than 0.01%) as far as the out-of-pockets variable is concerned.

Table 1 Background Information Related to Health Care Systems

	Out-of-Pocket (as % of health expenditures)	% population covered by Public/mandatory insurance	% population covered by Supplementary insurance	Financing public health systems
Germany	11%	90.9%	9.1%	Social Insurance
Denmark	16%	100.0%	28.0%	Tax financed
Netherlands	17%	75.6%	64.0%	Social Insurance
France	20%	99.9%	86.0%	Social Insurance
Spain	20%	99.8%	10.3%	Tax financed
Sweden	22%	100.0%	Negligible	Tax financed
Austria	24%	99.0%	31.8%	Social Insurance
Switzerland	30%	100.0%	29.7%	Privately financed
Greece	32%	100.0%	10.0%	Tax financed
Italy	42%	100.0%	15.6%	Tax financed

Source: OECD data cited in Colombo and Tapay (2004); WHO (2000); Swiss Federal Office of Public Health (2002).

Out-of-Pocket Payments

1 Distribution of out-of-pocket payments

OOP payments include non-refunded expenses for inpatient care, outpatient care, prescribed drugs and day care (nursing homes). As is shown in Figure 1, OOP payments for outpatient care and medicines contribute to more than 80% of the medical expenditures borne by the 50+ across the various health care systems. In all countries (except for the Netherlands and Sweden) drugs represent more than 50% of the total amount spent on OOP payments (up to 78% in Austria). To the contrary, payments for inpatient and day care represent very small parts of the financial burden related to medical expenditures. It may be worth keeping in mind that the financial mechanisms associated with OOP payments may differ across insurance systems. For example, a fee per day of hospitalisation is required in Austria, Germany, France, Spain, Sweden and Greece. For outpatient care small fees are required in Sweden. A voucher is needed in Austria. In all countries prescribed pharmaceuticals are submitted to OOP payments through various mechanisms, either a fixed fee per drug (Austria, Germany, Italy, Sweden and Denmark with cost-ceiling in the two last cases) or a co-insurance rate (France, Spain, and Greece for example). "Over the counter" drug sells, which are not refunded by definition, are more or less common depending on the health systems. Private health care can be poorly reimbursed by the National Health Systems (Italy, Greece, Spain). Some "unofficial" payments seem to occur in some countries. Finally the deductible represents another form of OOP. In Switzerland, the OOP payments take the form of a deductible and a co-insurance rate of 10% on all health care services up to a cost-ceiling per year. The privately primary insured Dutch and German people also face deductibles.

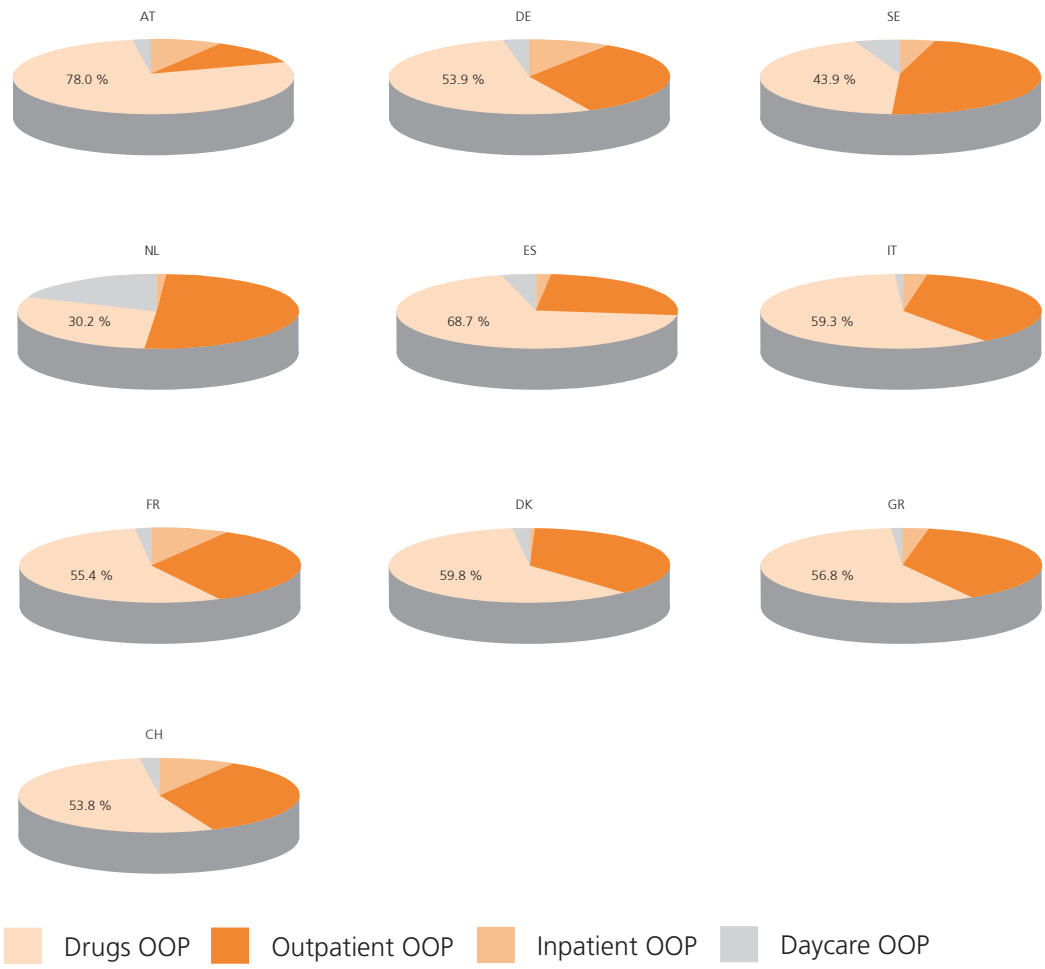

Figure 1 Distribution of OOP payments among different kinds of OOP

The analysis is divided into two parts. First, we will assess the proportion and characteristics of respondents 50+ having been faced with out-of-pockets over the past twelve months. In particular, the SHARE survey makes it possible for us to assess to what extent OOP payments are more likely to occur within certain subgroups characterised by age, gender, education level, health status or type of insurance package. Second, we will measure to what extent payments toward health care are related to ability to pay as expressed by income.

2 Factors associated with out-of-pocket payments

In most countries around 80% of the respondents paid health out-of-pockets. However, this proportion is substantially lower in the Netherlands, France and Spain where it amounts to 41.5%, 36.8% and 42.4% respectively (Table 2). Concerning Spain, this lower proportion is attributable to only 27% of the 65+ meeting OOPs, which results from the fact that retired Spanish people hardly pay for the medicines that are prescribed to them through the National Health System. Except for Spain, the proportion of people faced with positive out-of-pockets is higher among the elderly though not always in a significant manner. In all countries, it is also higher among female respondents and among those feeling in bad shape. Interestingly, not only are the elderly, those suffering from poor health

status and women more likely to meet OOP, they also face larger OOP (when OOP is positive) in a significant manner. Such relationships may be attributable to a higher health care use in the mentioned subgroups. Indeed, for example, the results show that more numerous outpatient visits are positively associated with greater OOP (Table 3). Note that no clear relationship is to be found between out-of-pockets and education level. To this re-

Table 2 Percentage of People Being Faced with Positive OOP Across Countries by Age Groups and Gender

	All	By age groups				By gender		
		50-65	65-75	75+	p	Female	Male	p
AT	75.8%	76.9%	73.1%	77.8%	0.23	76.0%	75.6%	0.87
DE	83.6%	77.8%	87.1%	89.9%	<0.01	86.7%	79.6%	0.01
SE	88.7%	85.7%	88.8%	93.5%	0.01	91.2%	85.6%	0.01
NL	41.5%	41.6%	34.7%	47.1%	0.01	44.1%	38.3%	0.04
ES	42.4%	64.3%	26.3%	27.3%	0.01	44.4%	39.7%	0.20
IT	79.0%	79.6%	79.6%	77.2%	0.82	81.7%	75.3%	0.07
FR	36.8%	34.2%	42.2%	35.8%	0.36	39.2%	34.8%	0.16
DK	81.7%	79.6%	81.5%	85.8%	0.10	83.8%	79.2%	0.06
GR	80.2%	72.0%	85.6%	86.5%	0.01	84.3%	75.4%	0.01
CH	69.0%	63.7%	71.3%	76.4%	0.01	75.8%	62.9%	0.01

Reading note: In Germany, 86.7% of females are faced with positive out-of-pockets versus 79.6% of males. The difference is significant.

Table 2 (cont.) Percentage of People Being Faced with Positive OOP Across Countries by Subjective Health and Education Level

	By subjective health			By education level			
	Good	Bad	p	Low	Secondary	Tertiary	p
AT	74.9%	77.3%	0.30		74.8%	80.3%	0.10
DE	76.6%	91.2%	0.01	89.2%	86.2%	75.8%	0.01
SE	84.3%	95.5%	0.01	89.7%	88.0%	89.3%	0.67
NL	36.3%	51.5%	0.01	39.4%	39.7%	49.7%	0.02
ES	45.8%	39.2%	0.09	36.7%	52.6%	65.1%	0.01
IT	72.6%	84.6%	0.01	79.0%	78.8%	80.6%	0.96
FR	35.4%	38.7%	0.31	31.0%	37.5%	50.3%	0.01
DK	78.1%	88.9%	0.01		81.3%	82.6%	0.61
GR	72.6%	91.7%	0.01	83.0%	77.4%	75.8%	0.02
CH	66.5%	79.1%	0.01	74.0%	67.5%	65.0%	0.21

Table 3 Mean OOP Payments (if OOP>0) (euros) According to Health Care Use

	By health care use in the last 12 months (number of visits)		
	[1,4]	[5,9]	+10
AT	525	939	705
DE	314	310	771
SE	354	632	857
NL	439	561	990
ES	558	878	636
IT	804	742	1125
FR	694	922	1871
DK	524	759	1322
GR	475	550	909
CH	990	1558	1954

Note: In this case, oop refer to oop related to outpatient care

spect, a multivariate analysis is needed to isolate the potential effect of this variable.

An interesting issue is the relationship between OOP and the coverage by any supplementary insurance. The question of interest is whether additional coverage protects against high expenditures or creates an incentive to consume more thus pushing the costs up. It turns out that in most countries, the proportion of people paying OOPs is not significantly different between those who have subscribed a supplementary insurance and those who have not. However, in Austria and Italy 50+ covered by a supplementary scheme have a higher probability of spending OOPs, whereas the opposite relationship is observed in Greece, France and to a lower extent in the Netherlands. Note that this finding for France and the Netherlands, combined with the fact that the coverage by any supplementary insurance is overwhelmingly widespread in these two countries, account for the fact that the French and the Dutch are less likely to be faced with OOPs. To go a step further, we can measure whether the supplementary coverage is associated with lower or higher OOPs among the subgroup of those having positive OOPs. Table 4 suggests that in Austria, Germany, Spain, Italy, and Denmark, people covered by a supplementary insurance meet higher OOPs. Furthermore, this relationship remains true across income quintiles. These results suggest that the supplementary insurance may induce people to make health expenditures. A further analysis would be necessary to understand health spending behaviours better.

Table 4 Relationship Between OOP Payments and the Coverage by Any Supplementary Insurance

	% people with PHI*	% people with positive OOP			Mean OOP if OOP>0		
		No**	Supp**	p	No	Supp	p
AT	24.43%	74.3%	82.2%	0.01	317	527	0.01
DE	13.07%	87.0%	82.6%	0.14	311	586	0.01
SE	9.30%	89.3%	85.8%	0.23	417	293	0.08
NL	67.63%	46.0%	40.5%	0.08	628	646	0.88
ES	8.36%	41.6%	51.6%	0.10	392	684	0.02
IT	7.61%	78.0%	92.2%	<0.01	513	793	0.01
FR	85.18%	46.0%	35.0%	0.02	543	533	0.94
DK	35.05%	80.8%	83.7%	0.24	450	604	0.03
GR	5.69%	81.2%	69.1%	0.01	421	356	0.45
CH	34.84%	56.0%	59.0%	0.75	1405	994	0.14

* private supplementary health insurance.
** supp (resp. no) = covered (resp. not covered) by supplementary health insurance.
Reading note 82.2% of people having a supplementary insurance met oop in Austria versus 74.3% of those not on supplementary aid.

3 Equity issues

From an equity perspective, it is worth assessing to what extent out-of-pocket payments for health care services are related to household ability to pay. Do health care payments account for an increasing proportion of ability to pay as the latter rises (progressive relationship)? Or, is it a regressive relationship in the sense that payments comprise a decreasing share of ability to pay? Though the policymaker's preferred relationship between health care payments and ability to pay will vary with his/her conception of fairness, quantification of the relationship is very interesting. We computed (Figure 2), for each country, out-of pocket payments for health care as a percentage of income by quintile groups of income. For the poorest respondent (first quintile), the share of out-of-pocket

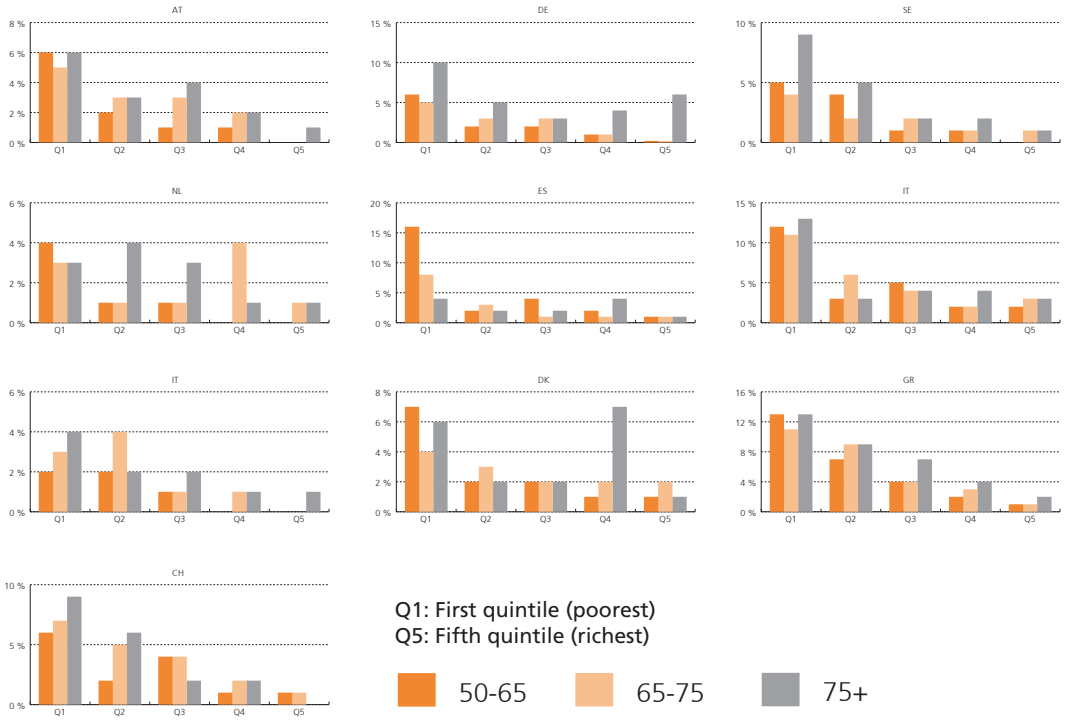

Figure 2 Distribution of out-of-pockets (as shares of total income) by income quintile

Reading note: In Austria, OOPs (as share of income) amounts to 6% of the income for the poorest [50-65]

payments varies a lot between countries. In a couple of countries (Denmark, Austria, Germany, Sweden, Switzerland) it claims around 6% of total income or even less (France and Netherlands). In South-European countries (Spain, Greece, Italy), this share is higher and comprised between 10% and 12%. Across all countries, there is a clear trend for this share to decrease with total income, thus revealing a regressive relationship. Such a trend was to be expected for out-of-pockets payments (Wagstaff et al. 1992, 1999). The analysis by income quintiles and age classes suggest that systems seem to be even more regressive in older sub-groups (but for Spain). In order to go beyond this preliminary analysis, a more comprehensive evaluation of progressivity in health care finance would require the examination of all sources of health care sector funding including direct and indirect taxes, social and private insurance.

The financing issue related to OOP is particularly crucial to the extent that out-of-pockets may present a barrier to health care utilisation, and in particular to outpatient care and drug consumption which represent the main OOP costs for the elderly. It turns out that access to health care is not jeopardised by costs. Indeed, the percentage of 50+ who forwent care (due to costs) over the last 12 months is very low (range: 1%-6% across countries). However in all countries this proportion is significantly higher in those declaring to be in bad shape (range: 4.5%-10.5%). This result can be worrying because those declaring to be in bad shape are probably those who need health care most.

In conclusion, SHARE is the first data set which permits new views on OOP payments by relating them to other fields such as age, gender, education level, health status, type of insurance package, and ability to pay as expressed by income. Our analysis shows that in most countries 50+ pay OOP payments essentially for drugs and outpatient care. OOPs increase with health care use and are heavier for the oldest, the less healthy and females. Across all countries, the poorest spend a higher share of their income on health expendi-

tures than the better-off. This regressive relationship is even sharper in southern countries, a result which gives prominence to the existence of a North-South gradient along this dimension. Although access to health care seems to be quite good for the elderly across Europe, our results tend to show that some needs are not met because of costs associated with health care use.

Given the evolving conditions to retirement in the European countries, the availability of a panel data on the 50-years-old and more would be extremely helpful. It would allow us to test some refined hypotheses on causal effects regarding the growth of OOP expenditures among the elderly through time.

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3.8 Health Services Utilisation in Older Europeans

Brigitte Santos-Eggimann, Julien Junod, and Sarah Cornaz

Introduction

The old age is characterised by a high prevalence of chronic diseases and by the coexistence, in individuals, of multiple morbidities. Although ageing individuals are very heterogeneous in terms of health status, ageing populations constantly need a large range of health services, from acute care to long term care. In the past decades, these special needs of older persons induced an increase in health services utilisation and they participated to the elevation of health care expenditures in industrialised societies.

Little is known concerning the way older people get their care in the variety of European health systems. Large international variations in health services utilisation have been documented by the Organisation for Economic Co-operation and Development, including in the adult population of European countries, but comparisons suffer a lack of homogeneity in data collection across countries (van Doorslaer and Masseria 2004). Recent work also described variations related to the level of income and education in adults of European countries from the age of sixteen (van Doorslaer et al. 2004). Although older persons account for a large proportion of health care expenditures, the extent to which their level utilisation is affected by personal characteristics, by the diversity of social health insurance coverage or by other features of health care systems remains unclear.

The SHARE survey provides original data specifically collected in older persons, using a common questionnaire designed to explore such hypotheses in European countries. This uniform data source is essential to study prospectively the evolution of health services utilisation with ageing in various countries. As a first step, we explored cross-sectional relationships between factors such as age, gender, subjective health or education and the utilisation of various types of health services (ambulatory care, medication, hospital and surgery) in Europe, based on release 0 data from the SHARE maintest performed in 2004 in 10 countries.

Measures and Analyses

Questions on health services utilisation were enclosed in the interview section of the SHARE maintest. Of the two models of the SHARE survey, the first wave of ELSA did not contain much information on health services utilisation but the HRS helped to formulate some of the questions on health services utilisation included in SHARE. All data collected in the health care section of the SHARE survey were self-reported. Most indicators of health services utilisation (medical contacts, contacts with general practitioners and with specialised physicians, visits to dentists or dental hygienist, hospital admissions, inpatient and outpatient surgery) were based on a twelve months recall. Participants were also asked about the drugs they currently take at least once a week, from a list of 14 drugs categories (drugs for high blood cholesterol, high blood pressure, coronary or cerebrovascular diseases, other heart diseases, asthma, diabetes, joint pain or joint inflammation, other pain, sleep problems, anxiety or depression, osteoporosis hormonal, osteoporosis other, stomach burns, chronic bronchitis).

Age was expressed in 10 years categories based on the year of birth (age achieved by the end of 2004). Subjective health was evaluated by a single question „*Would you say your health is… very good, good, fair, bad or very bad?*“ and answers were dichotomised into very good or good versus the three last answer categories. Education was first coded in

each country according to the 1997 UNESCO General Conference revised International Standard Classification and then further categorised across countries into four levels: None or primary, lower secondary, upper and post-secondary, first and second stage of tertiary.

Analyses of bivariate relationships between age, gender, subjective health or level of education with health services utilisation were performed on weighted data. The effect of education was then studied after adjustment for age and gender in unweighted multivariate regression models (logistic regression for dichotomous response variables, ordered logistic regression in case of response variables showing more than two levels); subjective health was finally introduced in our multivariate models beside age, gender and education.

Analyses were essentially conducted on the whole data set. Summarised crude estimates of health services utilisation by country are displayed in Tables 3A.24-3A.29 in the Appendix to this chapter.

Results

1 Ambulatory medical care

The number of reported medical consultations over the past twelve months is strongly related to age ($p<.0001$), as shown in Figure 1. The proportion of persons who did not consult at all ranged from 18% in the 50-54 years category to 6% at the age of 85+. At the opposite, seven consultations or more were reported by 19% in the first age category and by 52% at the age of 80-84; a lower proportion (42%) was recorded among the oldest persons.

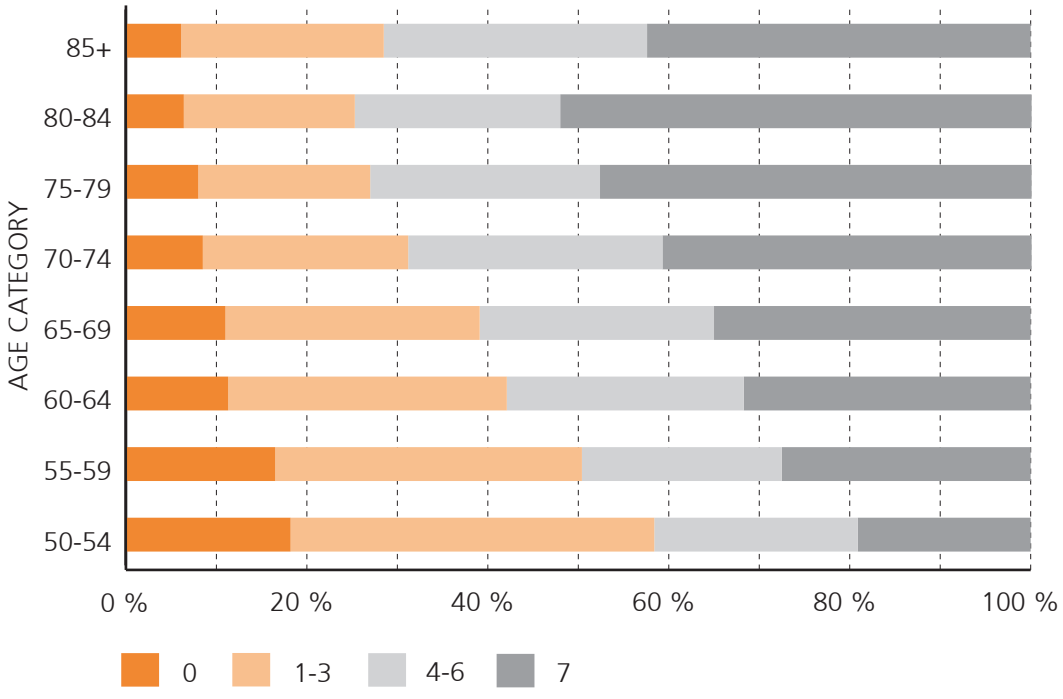

Figure 1 Distribution of the number of contacts with physicians in the past twelve months, by age

Gender is associated to the number of medical consultations ($p<.0001$): 16% of men did not consult at all, against 9% of women, and 32% of men consulted 1 to 3 times compared with 27% of women. A large number of contacts was more frequently reported in women (7+ visits in 38% of women and in 29% of men). As expected, a subjective health

rated as very good or good is inversely related to the distribution of the number of medical visits (p<.0001). There is also an inverse relationship between the level of education and the number of medical visits in the past twelve months (Figure 2, p<.0001). The effect of education persists after adjustment for age and gender; however, it seems to be explained by a better state of health in highest educational categories and it is no more significant

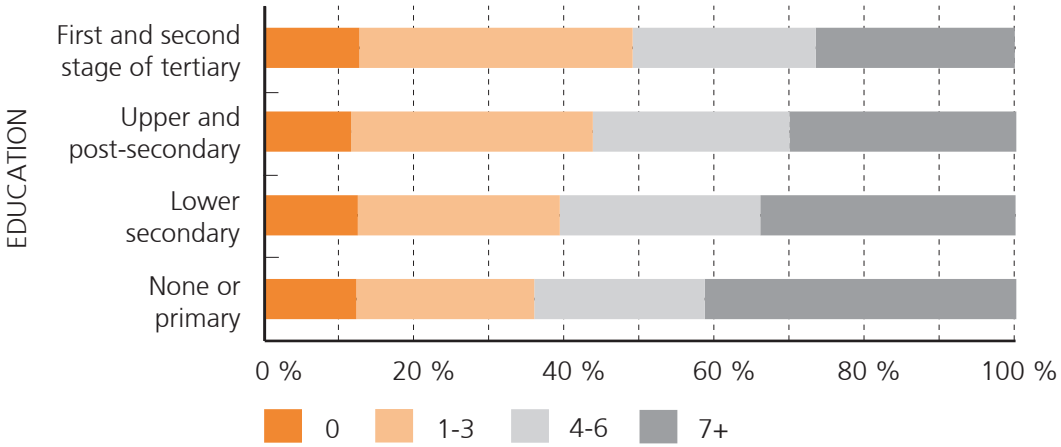

Figure 2 Distribution of the number of contacts with physicians in the past twelve months, by level of education

when this variable is also controlled.

Dental care is strongly associated with age (p<.0001) but not with gender: the proportion of persons who visited a dentist or a dental hygienist in the past twelve months is inversely related to the age category. While 63% of persons aged 50 to 54 had a contact, only 25% of individuals aged 85+ reported dental care. A good or very good health is significantly associated with a higher proportion of dental care report (52%, against 45% in persons with fair, poor or very poor subjective health, p<.0001). In addition, the level of education has a pronounced effect on the use of dental care: only 29% of persons with no education or an education limited to primary school had a contact in the past twelve months. Meanwhile, the proportion observed in persons with tertiary education reaches 73% (p<.0001). This effect is not explained by differences in perceived health: multivariate analyses confirm that both subjective health and education are associated with dental care in the past twelve months.

2 Medication

Age, gender, subjective health and the level of education are all related to the distribution of the number of medication categories taken at least once a week (p<.0001 in all comparisons). As shown in Figure 3, a majority of persons aged 50 to 54 do not take any drug from the 14 categories mentioned in the SHARE interview; at the age of 80-84, some 17% of individuals still reported that they take no drugs from this list. While 3% of the youngest participants mentioned drugs from 4 categories or more, the proportion in the 80-84 age group reaches 16%. The distribution of the number of medication categories in the oldest age group (85+), compared to that of individuals aged 80-84, is slightly shifted to the left. Men mentioned more frequently no medication than women (41%, against 32%) and women were more likely than men to report 2, 3 and 4+ categories of drugs. Although a favourable appreciation of health status is associated with a lower

consumption of medicaments, 9% of individuals in good or very good subjective health indicated that they regularly take medication from two categories or more.

The level of education is inversely associated with the reported medication (Figure 4). In the first category (no education or primary school), 27% of individuals indicated that they take none of the listed drugs and 12% mentioned 4+ categories. Among individuals with tertiary education, 46% do not take drugs from the proposed list and only 5% reported 4+ categories. The inverse relationship between education and medication is not totally explained by differences in age, gender and subjective health: when these factors are controlled, the lowest educational level is characterised by a higher level of medication compared to the three other categories.

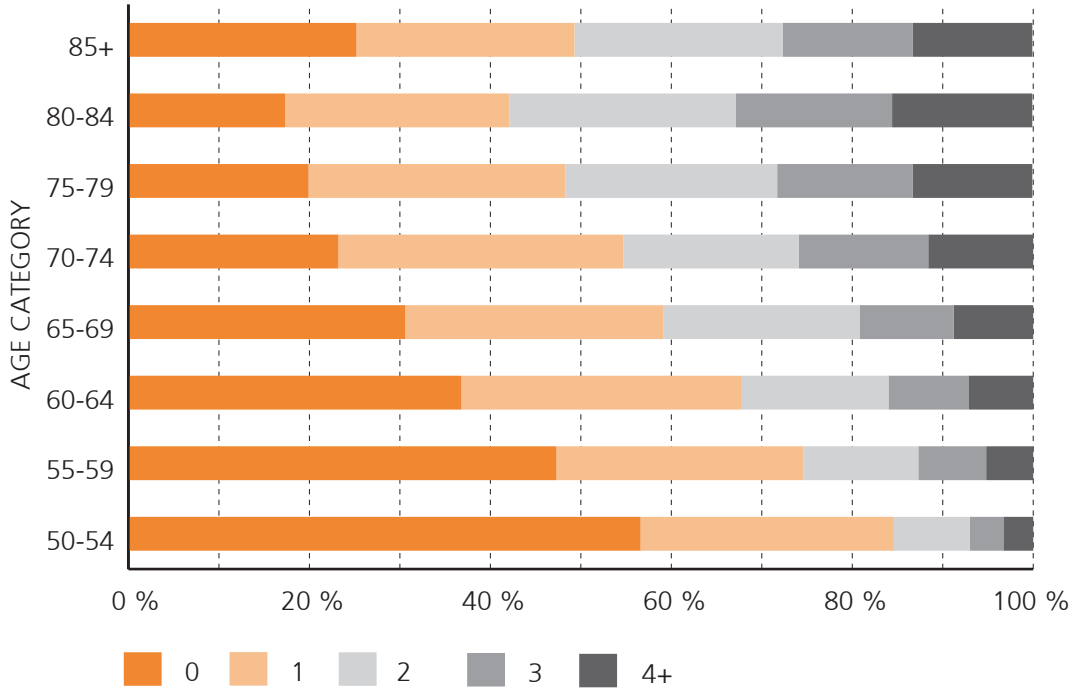

Figure 3 *Distribution of the number of medication categories taken at least once a week, by age*

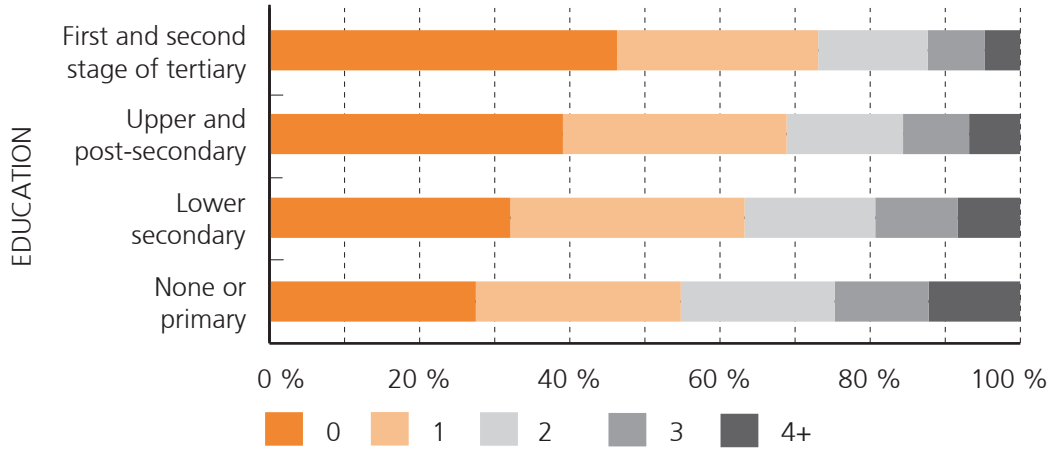

Figure 4 *Distribution of the number of medication categories taken at least once a week, by level of education*

3 Hospital stays

Contrasting with the use of ambulatory care, hospital admissions seem to be unrelated to gender. Overall, 15% of men and 14% of women experienced one or more overnight hospital stays in the past twelve months (p=.08). Figure 5, first of all, illustrates the fact that, at whatever age, a large majority was not admitted in a hospital. However, the proportion of unique or multiple overnight hospital stays is higher in the older age categories up to 80-84 years (p<.0001). At this age, more than one in five persons reported one or more hospital admissions over the last twelve months. The proportion of repeat hospitalisations reaches 8% at the age of 75-79; it is slightly lower in older age groups.

Some 7% individuals in good or very good subjective health experienced one hospitalisation and 1% reported multiple stays. In contrast, 14% mentioned one hospital stay and 7% indicated multiple hospital stays in the subgroup in fair, poor or very poor self-reported health (p<.0001). While the level of hospital use seems unrelated with education either bivariate analyses or in multivariate models adjusting for age and gender, when subjective health is also taken into account, the lowest level of education appears to be significantly associated with a lower level of hospital admission, compared to the three higher levels.

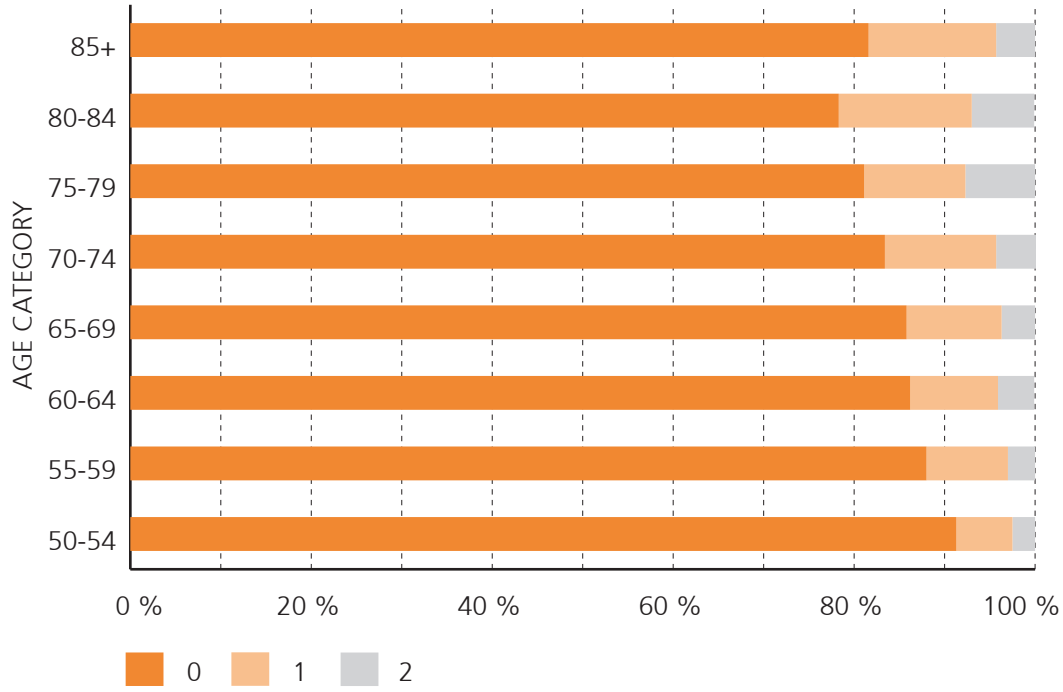

Figure 5 Distribution of the number of hospitalisations over the past twelve months, by age

4 Surgery

Reports of inpatient or outpatient surgery, like hospital stays, are not associated to gender, but they are related both to age (p=0.4) and to a negatively perceived health (p<.0001). Figure 6 illustrates the effect of age: whilst 9% of individuals aged 50-54 had inpatient or outpatient surgeries in the past twelve months, the proportion in the 75-79 age category is 14%. Lower rates are observed at the age of 80-84 (13%) or 85+ (9%). When age, gender and subjective health are taken into account, a higher education is associated with a more frequent report of surgery performed in the past twelve months.

5 The level of health services utilisation in participating countries

For all indicators of health services utilisation presented earlier in this contribution, countries differ significantly. Country-specific estimates are printed in Tables 3A.24-3A.29 and are briefly commented in this section.

Table 3A.24 suggests that the number of ambulatory medical consultations is rather low in Sweden, Denmark and Switzerland, where large proportions declared no visit or a number limited to 3 visits, and that it is higher in Germany, France, Italy and Spain. Among individuals who consulted at least once in the past twelve months, a very large majority reported at least one visit to their general practitioner or their health care centre (Table 3A.25); the proportion exceeds 90% in all countries except in Sweden (85%) and in Greece (82%). Visits to specialists are less frequently mentioned; proportions of individuals who reported at least one visit to specialists (among respondents who consulted physicians in the last year) is the lowest in Denmark (25%) and the highest in Germany (60%).

Table 3A.26 points to large differences in the proportion of persons who reported at least one visit to dentists or dental hygienists in the past twelve months. The lowest rates are recorded in Italy, Spain and Greece and the highest rates in Sweden, Denmark and Germany.

Variations also characterised the distribution of the number of drugs categories taken at least once a week (Table 3A.27), with large proportions of individuals reporting no medication in Sweden, Denmark, the Netherlands and Switzerland. Numerous categories were frequently reported in France, in Spain and, to a lesser extent, in Greece.

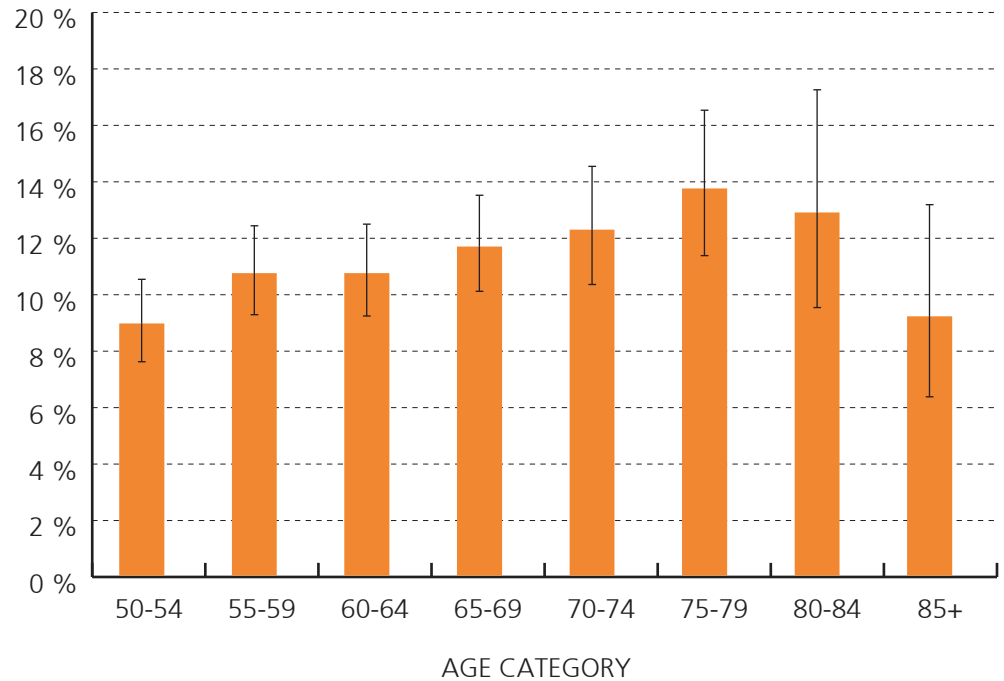

Figure 6 Proportion of persons with any inpatient or outpatient surgery in the past twelve months, by age

Proportions of persons reporting one or more overnight hospitalisations are the highest in Austria and in Germany (Table 3A.28). This last country is also characterised by the highest proportion of individuals who mentioned at least one inpatient or outpatient surgery in the past twelve months (Table 3A.29).

Conclusions

- First data from the SHARE maintest confirm the high level of health services utilisation in the old age: higher use is observed among older persons for ambulatory medical consultations, for medication, for hospital admissions and for surgery. It is worth noting that this effect of age seems to level off at the age of 80 and the oldest old (85+) reported, in most of these dimensions of health care, a lower utilisation. As expected, subjective health is strongly associated with all measures of health services utilisation. One remarkable exception to the effect of age and subjective health on health services utilisation is observed in the field of dental care. Although many older respondents may have lost their natural teeth, dental prostheses still require regular checks and adjustments. Reasons behind the sharp decrease recorded in the frequency of annual dental controls with age should be further investigated in the longitudinal perspective that is a major strength of the SHARE project.

- Women reported significantly more medical consultations and more medications than men. However, a same proportion of men and women reported dental care in the past twelve months and genders did not differ significantly in their hospital use or in their reports of surgical procedures.

- There is a strong relationship between the level of education and several, but not all, indicators of health services utilisation in Europe. It is crucial to investigate the effect of education on utilisation at the light of other factors that may act as confounding. Taking advantage of the multidisciplinary nature of SHARE, our analyses show that individuals with a lower education do not consult more frequently physicians in ambulatory care; their apparently higher consumption suggested by bivariate analyses is explained by other factors, including a poorer subjective health (see Section 3.2 for the relationship between socio-economic characteristics and health). The better educated consume a significantly lower number of drugs but, by contrast, they are much more likely to report dental care. Dental care is excluded from the coverage of many social health insurance systems, which might result in lower access for disadvantaged subgroups of the population. Further analyses of SHARE data will allow to investigate relationships between specific private insurances and the use care in each of the participating country and to interpret socio-economic differences in the level of dental care utilisation at the light of states‘ health policies. Other types of care are also related to the level of education, in spite of their coverage by most social health insurance systems: taking into account demographic characteristics and subjective health, persons in the lowest educational category reported significantly less hospital admissions and surgeries.

- Finally, a first sight at crude indicators of use at a country level points to variations that deserve more detailed investigation, taking into account differences in populations structure. Further work on the next data release will be based on multivariate modelling of health services utilisation in order to provide a better insight on international comparisons within Europe and to serve as a basis for health policy decisions.

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3.9 Quality of Health Care Delivered to Older Europeans

Brigitte Santos-Eggimann, Julien Junod, and Sarah Cornaz

Introduction

As populations age, health systems must adapt and develop approaches that meet the needs of frail patients with multiple chronic conditions. Geriatric assessment, prevention, rehabilitation and integrated care are key components of this evolution, in which the role of primary care physicians as case managers is central.

The need for indicators of quality of care delivered to the elderly in health care systems is recognised. The RAND Corporation developed indicators in the frame of the ACOVE project (Assessing Care Of Vulnerable Elders) as a system to evaluate the performance of health care systems (ACOVE Investigators 2001). These indicators were essentially elaborated for specific medical conditions and their measurement requires information from patients records (Wenger et al. 2003). The OECD also selected a set of indicators to measure quality of care at the level of health systems but these are not specific to older populations (Marshall et al. 2004). Recently, indicators of the quality of care delivered in health systems were measured in population-based surveys both in the older population of the USA (Okoro et al. 2005) and in the adult population of countries in the Commonwealth (Schoen et al. 2004). Similar international comparisons are lacking in Europe.

The purpose of this contribution is to describe indicators included in SHARE as a tool to compare the care provided to the elderly in European countries and to describe their relationship with age, gender or subjective health. The selected indicators were designed in order to check the quality of geriatric assessment considering some of its basic elements, without reference to specific diseases, as well as the compliance to clinical guidelines for diseases screening and prevention. Considering that age, per se, is a risk factor for multiple morbidities, frailty and disability, these indicators do not focus on patients with an explicit diagnosis but concern older persons in general.

Measures

Indicators of quality of care integrated in SHARE have been developed with the collaboration of D. Meltzer and N. Steel (ELSA project). They are measured based on self-reports and rely on straightforward aspects of medical consultations that are easily recognised by respondents, irrespective of their level of education. They are divided in three groups.

A first set of indicators was measured in respondents who declared that they have a general practitioner; they are indicators of geriatric assessment in primary care. Two of them concentrate on information collected by physicians and advise provided regarding physical activity; they are pertinent in all age categories. Two others concern the anamnesis of falls and the examination of balance by general practitioners; they are particularly relevant in the oldest age categories. One indicator is related to weight control, and another to the medical anamnesis of drugs, either prescribed by other physicians or bought over-the-counter; both are pertinent in all age categories. Respondents were asked whether their general practitioner takes information or gives advice on physical exercise, falls, balance, weight and drugs at each visit, at some visit or never. In this report, we considered as positive answers activities performed at each or at some visits.

A second set of indicators looked at screening and prevention. They concerned all respondents. Flu vaccination in the last year is particularly recommended in persons aged 65 and over; eye examination in the past two years is indicated in older persons owing to

the risk of glaucoma and the increasing prevalence of diabetes with age; mammograms every second year are recommended in women between ages 50 and 70; most guidelines recommend endoscopic examinations of colon / sigmoid from the age of 50 in men and women, with a frequency that varies, and we selected a ten year period as a conservative measure; the search for occult blood in stool is also advocated in the same age group for colon cancer screening.

The third set of indicators purported to study the quality of care in persons affected by a chronic condition. Joints pain was selected because its prevalence is high in populations 50 and over, and because it is essentially based on symptoms recognised by the individual (an alternative would have been hypertension but this firstly requires a medical diagnosis and its detection is by itself a first indicator of quality of care). Questions were limited to individuals who reported joints pain lasting at least six months, in upper or lower limbs, and who spoke to their general practitioner or to any other doctor about it. Physicians are expected to check joins, in some cases to suggest a drug treatment and in all cases to inform of side-effects of anti-inflammatories since many of them are bought over-the-counter. They can also prescribe physiotherapy or exercises and consider the possibilities offered by a specific surgery.

All indicators of quality of care were abstracted from the SHARE drop-off questionnaire. Additional information was available from the interview. Age was expressed in 10 years categories based on the year of birth (age achieved by the end of 2004). Subjective health was evaluated by a single question „Would you say your health is… very good, good, fair, bad or very bad?“ and answers were dichotomised into very good or good versus the three last answer categories.

Analyses of release 0 data from the SHARE maintest were conducted on a group of six countries characterised by a return rate of the drop-off questionnaire of at least two thirds by November 15, 2004 (Austria, Germany, Greece, The Netherlands, Sweden and Switzerland). Quality of care indicators were estimated in the whole data set and analysed in subgroups defined by age, gender and subjective health. At this stage, only bivariate analyses were performed.

Results

1 Geriatric assessment in primary care

Overall, 85% of respondents declared that they have a general practitioner or a doctor they usually turn to for their current health problems. The proportion is significantly associated with age ($p<.0001$): while 80% have a general practitioner in the first age category, the proportion reaches 91% at the age of 80 and over. Women reported more frequently than men having a general practitioner (87% against 82%, $p<.0001$) and individuals in fair, poor or very poor health had a usual doctor more often than individuals in good or very good subjective health (91% against 80%, $p<.0001$).

As shown in Figure 1, the fraction of persons reporting that their general practitioner asks them about the physical activity they have at least at some visits ranges between one half and two thirds, depending on age ($p=.02$). The proportion of respondents never asked about physical activity is the lowest at the age of 50-54 and the highest at 80 years and over. Only 40% in the first age category have been advised to exercise and, although the proportion is related to the age ($p=.009$), it does not pass beyond 54% in the oldest group. For both indicators, men seem to discuss physical activity with their primary care

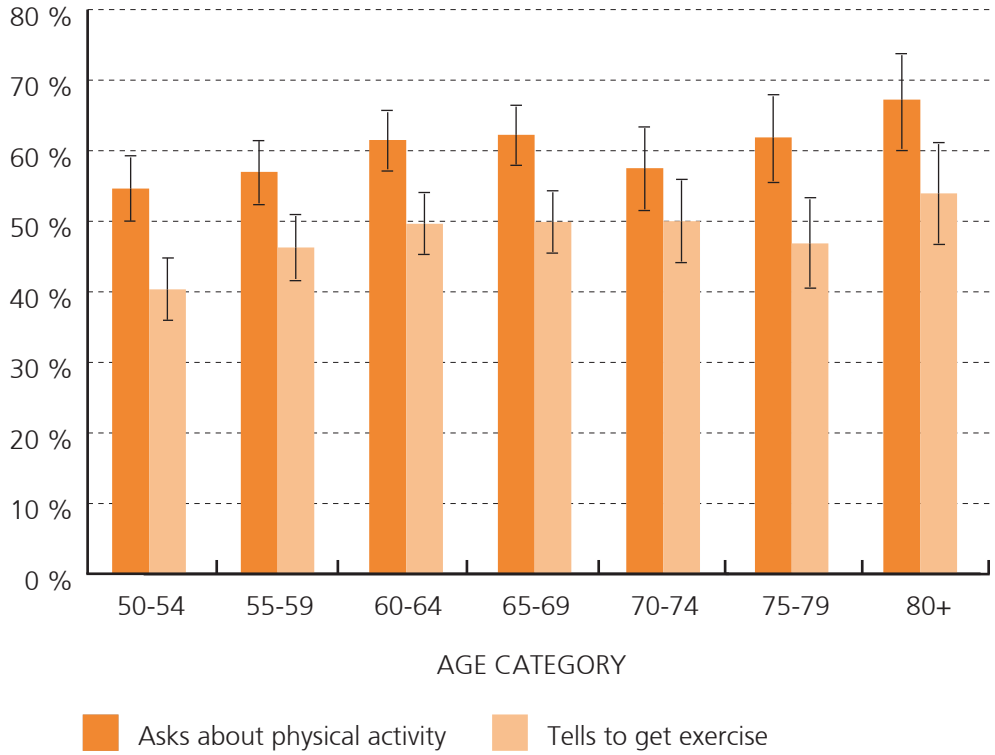

Figure 1 *Proportion of persons who have a general practitioner reporting that, at every visit or at some visits, he/she asks about physical activity or tells to get exercise*

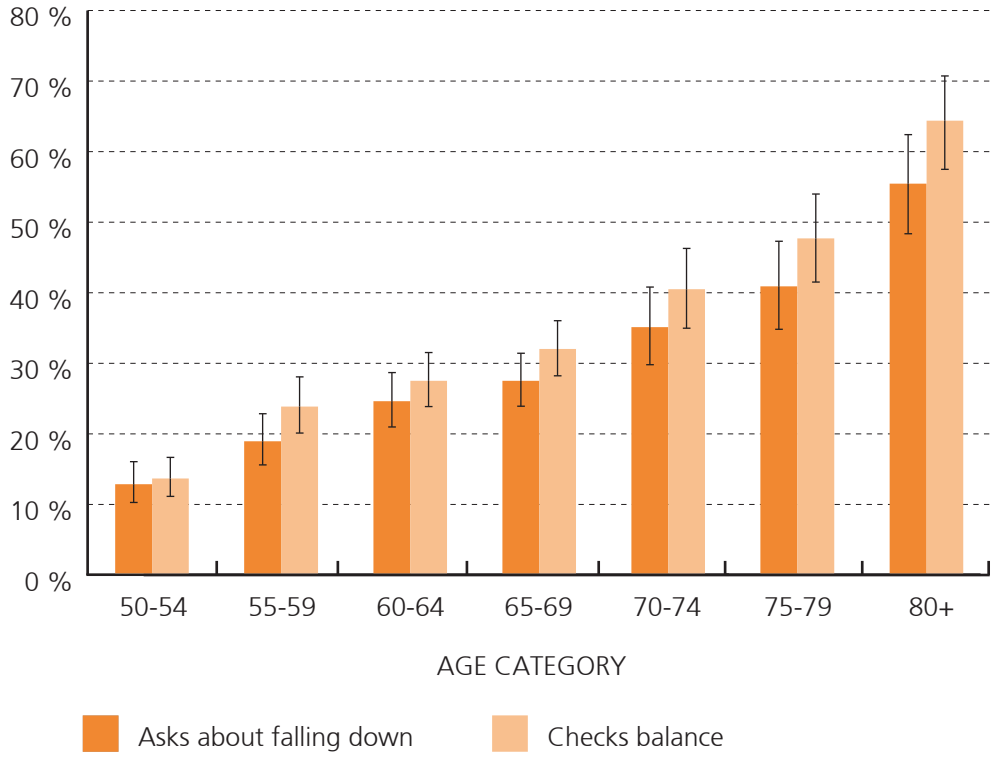

Figure 2 *Proportion of persons who have a general practitioner reporting that, at every visit or at some visits, he/she asks about falling down or checks balance*

physician more frequently than women (asking for physical activity: p<.0001 and advise to exercise: p=.0002). Individuals in fair, poor or very poor health are also more likely to discuss physical activity (p<.0001 for both indicators).

As can be expected, primary care physicians ask about falls and check balance more frequently in older age groups (Figure 2, p<.0001 for both indicators), which seems appropriate as physical frailty is age dependent. There are no differences between genders. However, a large fraction of respondents (still close to an half at the age of 80+) said that their general practitioner never asks about falls and only 64% of the oldest respondents reported that he or she checks balance at least at some visits. Individuals in good or very good subjective health are less likely to discuss about falls or to have their balance checked (p<.0001).

Weight loss is another manifestation of frailty in the old age and, as such, it is worth monitoring. Overweight is another reason and, owing to its multiple health consequences, it deserves consideration in a substantial proportion of the population aged 50 and over. As illustrated by Figure 3, weight check was more frequently mentioned in the older age groups (p<.0001) but it remained largely unsystematic. Only half of individuals aged 50 to 54 reported that their physician weighs them at least at some visits and, even at the age of 80 and over, one third declared that he or she never controls their weight. Genders do not differ significantly but weight is checked more often in the subgroup characterised by a negative subjective health (p<.0001).

Finally, drugs management is an essential part of geriatric medicine. With frequent multiple chronic conditions, many older persons take more than one drug (cf. Section 3.8 on health services utilisation). All are not prescribed by the general practitioner. Figure 3 shows that the usual physician asks about medication slightly more often in older ages

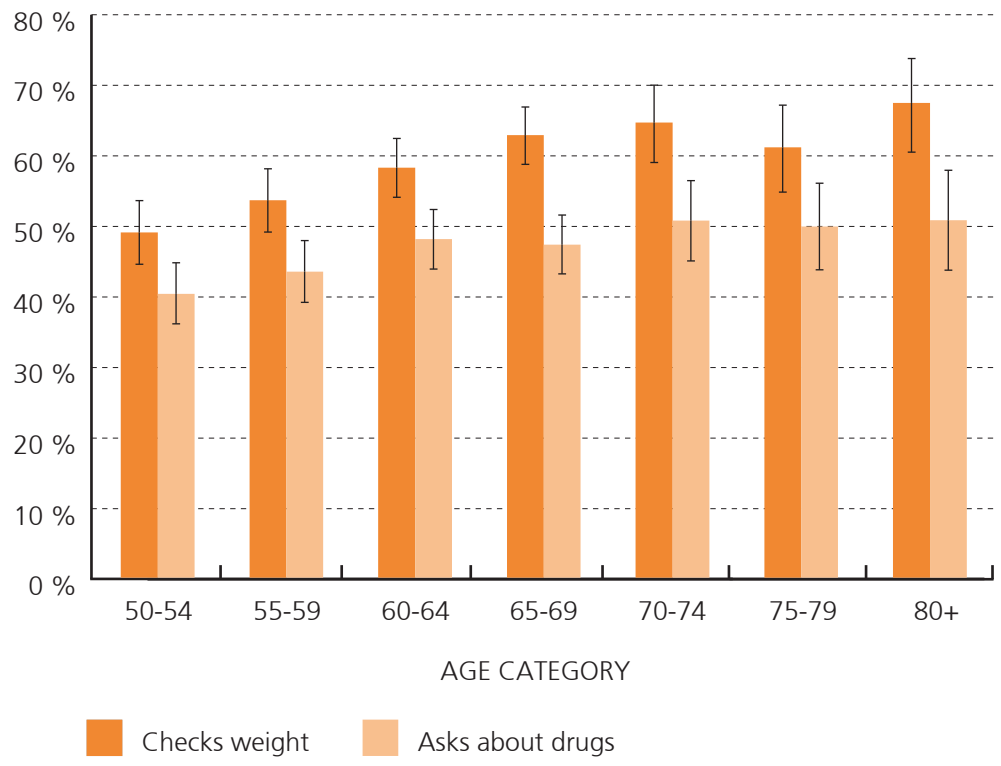

Figure 3 Proportion of persons who have a general practitioner reporting that, at every visit or at some visits, he/she checks weight or asks about drugs

groups (p<.02) but, in all age categories, the proportion is one half at most. Genders do not differ significantly and drugs are more frequently discussed, as expected, with individuals in fair, poor or very poor subjective health (p<.0001).

2 Screening and prevention

Flu vaccination in the last year is clearly related to the age (Figure 4, p<.0001), but coverage remains below 50% in all age categories except in the last one (53% at the age of 80+). Women reported more frequently than men a recent flu vaccination (p=.02) and a negative self-reported health is also associated to a higher proportion of vaccinated persons (p<.0001).

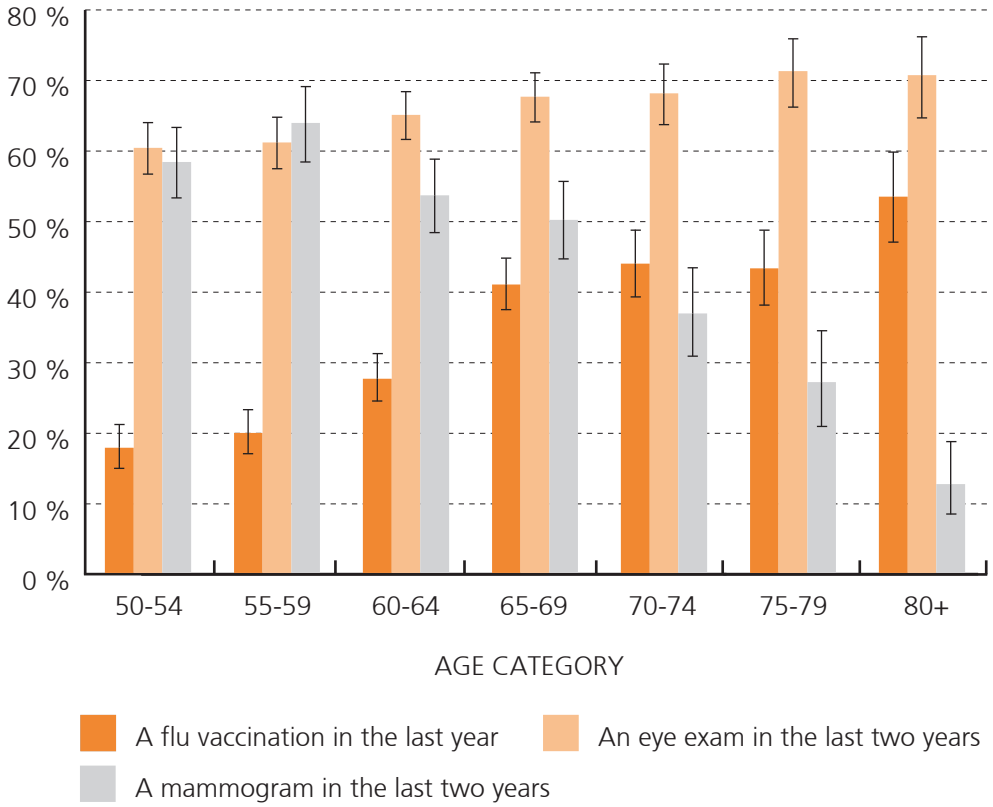

Figure 4 Proportion of persons reporting that they had a flu vaccination in the last year, an eye exam in the last two years, or a mammogram in the last two years

The same figure illustrates the increasing proportion, across age categories, of individuals reporting an eye examination in the past two years (p=.0005). It also shows that, in all age groups, at least three persons out of ten did not have their eyes controlled recently. Women mentioned an eye control more often than men (p=.0001) and a negative self-reported health is also positively associated with this indicator (p=001).

The highest rate of mammograms in the past two years is observed in the 55-59 age group, where it is limited to 64%. The proportion then decreases regularly with age and only half of women aged 65-69 years reported this exam. Women in good or very good subjective health are characterised by higher rates (p<.0001).

In all age categories, the proportion of persons who reported a colono / sigmoidoscopy in the past ten years is low (20% overall). It increases up to the 65-69 age category (25%)

and then remains stable up to the age of 75-79 years (p=.0002, Figure 5). Men and women do not differ but a higher proportion is recorded in the subgroup characterised by a fair, poor or very poor health (p<.0001). Screening for occult blood in stool in the last ten years was more often reported than endoscopies but it remains below 50% in all age groups. Here again, the proportion is related to the age (p<.0001) and it is the highest in the 65-69 age category. Gender (p=.1) and self-reported health (p=.04) cannot be considered as associated with this test.

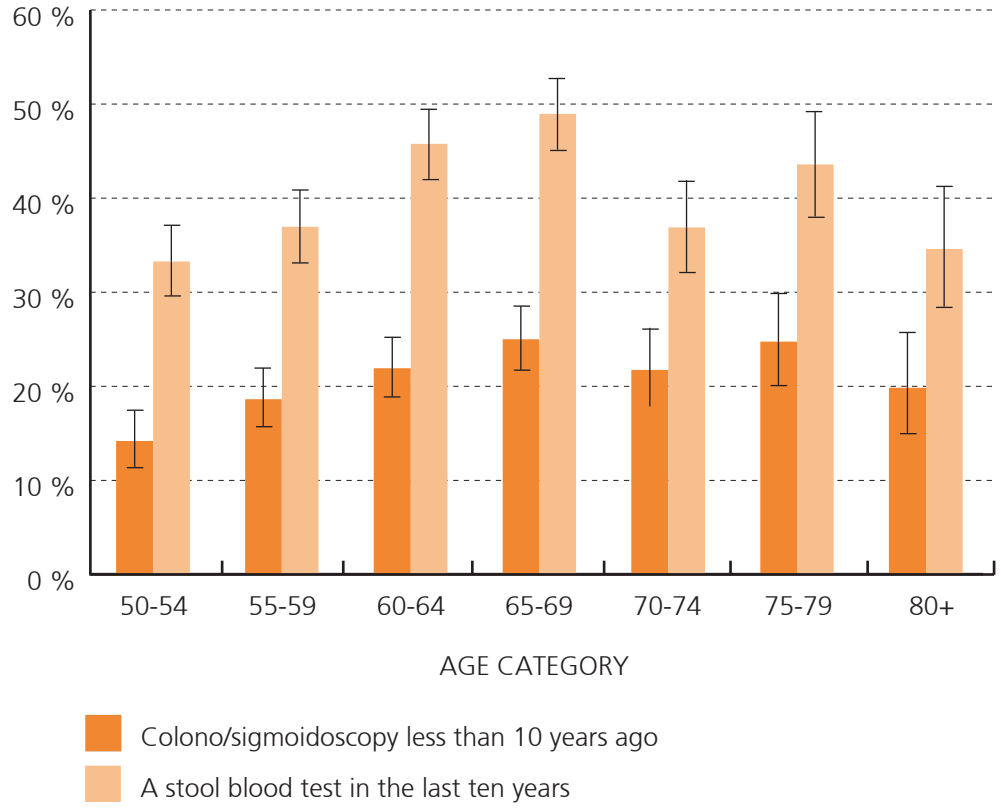

Figure 5 Proportion of persons reporting a colono/sigmoidoscopy less than 10 years ago or a stool blood test in the last ten years.

3 Quality of care in joints pain

Chronic joints pain is related to the age: 31% are affected between 50 and 54 years and 67% at the age of 80+. Women mentioned it more frequently than men (53% versus 40%) and, of course, it is also positively associated with a fair, poor or very poor self-reported health (66% versus 33%). A large majority of respondents who suffer chronic pain discussed it with physicians: the proportion ranges from 80% in the 50-54 years old to 90% at the age of 80+.

In most cases, physicians who heard about such pain checked the joints; there was no differences on this answer by age (Figure 6), gender or self-reported health. In a majority of cases, they suggested a drug treatment. Medication seems more frequently proposed in older age groups (p=.001), in women (p=.01) and in individuals in fair, poor or very poor subjective health (p<.0001). As most anti-inflammatory drugs can be both prescribed and bought over-the-counter, information concerning their side effects should be systematic in case of chronic joint pain. As shown in Figure 6, this was not the case for nearly half of the situations, irrespective of age. A larger proportion of men (p=.03) and of persons in

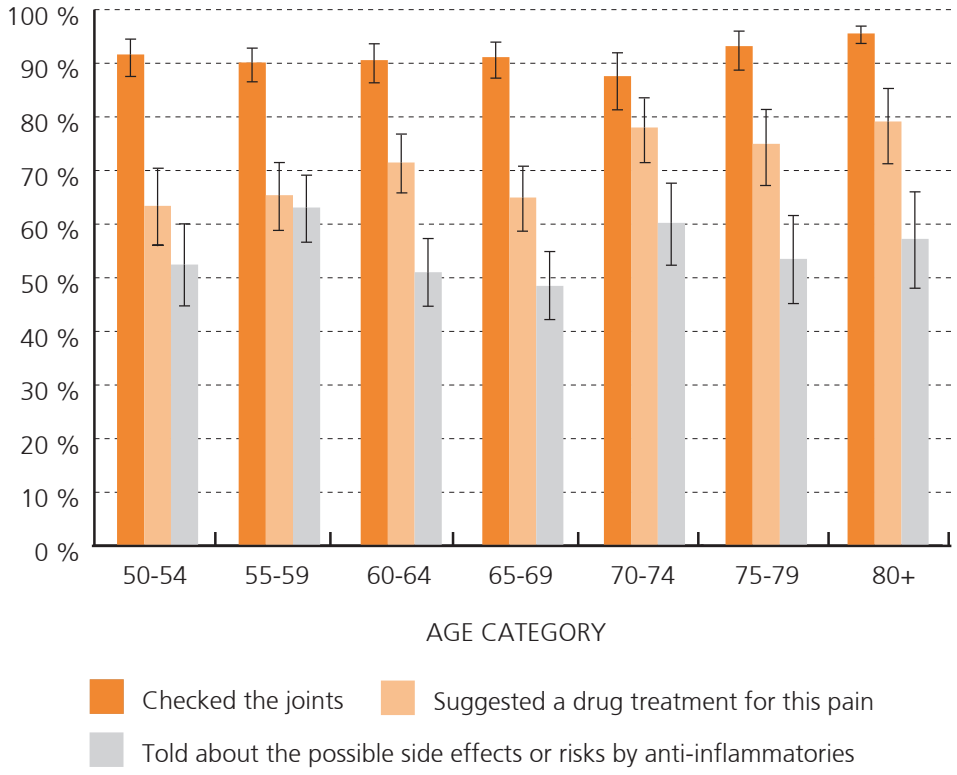

Figure 6 *Proportion of persons who told a doctor about joint pain in upper or lower limbs reporting that he/she checked the joints, suggested a drug treatment for this pain, or told about the possible side effects or risks from anti-inflammatories*

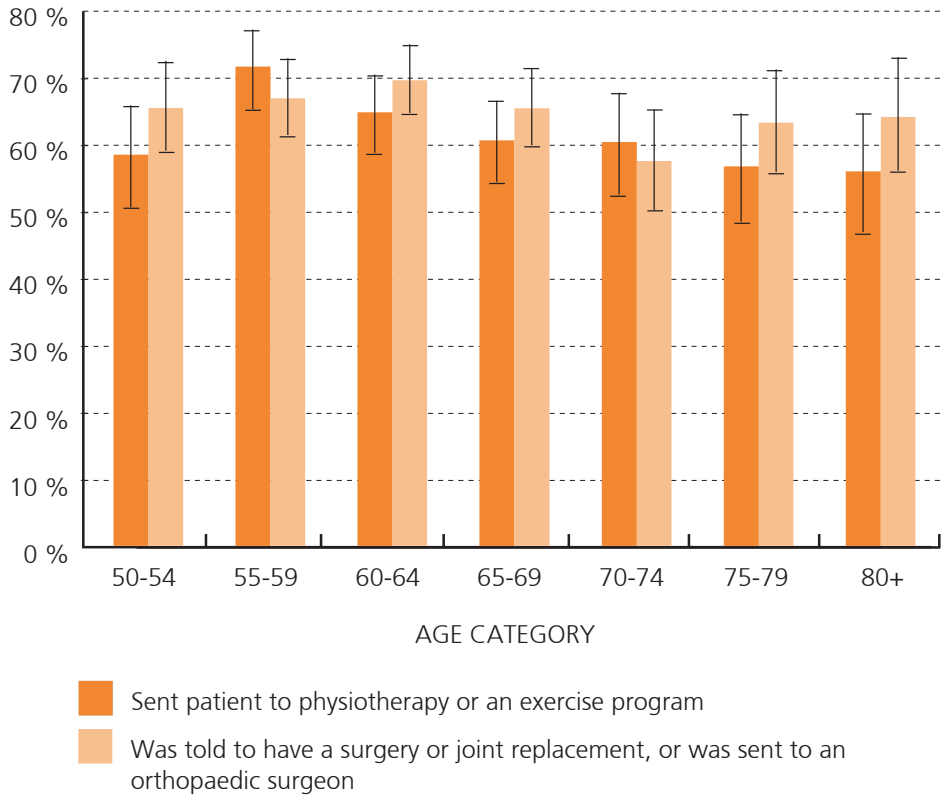

Figure 7 *Proportion of persons who told a doctor about joint pain in upper or lower limbs reporting that he/she was sent to physiotherapy or an exercise programme, was told to have surgery or joint replacement, or was sent to an orthopaedic surgeon.*

negative self-perceived health (p=.01) said that side effects have been discussed.

Physiotherapy or an exercise program was prescribed to 61% of cases and differences by age illustrated in Figure 7 are not statistically significant. Men and women present the same proportion and self-reported health does not seem to influence it either.

Finally, 24% of individuals with chronic joints pain who discussed it with physicians were told to have surgery or sent to an orthopaedic surgeon, a proportion that is similar in all age categories. It is not influenced by the age, the gender or the subjective health.

Conclusions

- SHARE is the first data base that includes indicators of quality of care to older persons collected with the same questionnaire in the general population of European countries. Its potential for the evaluation of health systems is very substantial, as information on respondents is available on a large variety of dimensions such as health or socio-economic conditions. This information is crucial to understand international differences, as is the expertise cumulated in SHARE and AMANDA working groups where all participating countries are represented.

- For most quality of care indicators, there seems to be room for improvements. While some of them need caution in their interpretation (e.g. weight check may be underreported because, in some cases, it is performed not by the general practitioner but by a nurse or another health professional who reports to the physician), there is little doubt that the general practitioner, as a case manager, should periodically ask about drugs. From a preventive perspective, both geriatric assessments and screening tests should be generalised.

- In particular, Europeans seem to experience very low rates of colon cancer screening, with only one person out of five reporting an endoscopy in the past ten years. In a recent publication, underuse was described in the US population with a coverage rate that exceeded half of the population at the age of 50+ (Chao et al. 2004).

- Few differences were registered between men and women and a negative subjective health was, in general, associated with higher levels of quality indicators except in the case of mammograms. These higher levels may result from more frequent contacts with the health care system in individuals in fair, poor or very poor subjective health.

- A detailed analysis by country will be the next step of our work based on release 1 data from the SHARE maintest; it will look at the effects of socio-economic variables on the quality of care received, taking advantage of the multidisciplinary nature of SHARE .

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APPENDIX

Tables on Health and Health Care

Table 3A.1 The Prevalence of Symptoms Among Men Aged 50 Years and Above in 10 European Countries

Symptoms	50-59	60-69	70-79	80-89	Total
Pain	41.8	43.2	45.3	49.7	46.3
	(40.1-43.6)	(41.4-44.9)	(43.1-47.5)	(46.0-53.4)	(44.5-48.3)
Heart problems	4.1	7.8	12.3	13.9	8.4
	(3.5-4.9)	(6.9-8.8)	(10.9-13.8)	(11.6-16.7)	(7.4-9.6)
Breathing problems	6.8	10.0	14.1	19.5	10.6
	(6.0-7.7)	(9.0-11.1)	(12.6-15.7)	(16.7-22.6)	(9.5-11.9)
Coughing	4.7	4.9	6.9	7.7	5.7
	(4.0-5.5)	(4.1-5.7)	(5.9-8.1)	(5.9-9.9)	(4.9-6.6)
Swollen legs	4.4	6.5	9.4	13.8	7.3
	(3.7-5.1)	(5.7-7.4)	(8.2-10.7)	(11.4-16.5)	(6.4-8.4)
Sleeping problems	11.8	10.5	13.3	16.9	13.4
	(10.8-13.0)	(9.5-11.7)	(11.9-14.9)	(14.3-19.9)	(12.2-14.8)
Falling down	0.8	1.5	2.9	8.8	2.1
	(0.5-1.2)	(1.1-2.0)	(2.2-3.7)	(6.9-11.1)	(1.7-2.8)
Fear of falling	1.6	2.8	6.4	16.1	4.8
	(1.3-2.1)	(2.3-3.4)	(5.4-7.6)	(13.5-19.0)	(4.1-5.7)
Dizziness	4.8	4.9	8.9	15.1	6.2
	(4.1-5.6)	(4.2-5.7)	(7.7-10.2)	(12.6-17.9)	(5.4-7.2)
Stomach problems	9.0	8.6	11.4	15.2	11.6
	(8.1-10.1)	(7.7-9.7)	(10.0-12.8)	(12.7-18.0)	(10.4-12.8)
Incontinence	0.8	2.5	6.8	12.5	3.3
	(0.6-1.2)	(2.0-3.1)	(5.8-8.0)	(10.3-15.2)	(2.7-4.1)
2+ symptoms	23.2	39.1	51.3	54.8	30.4
	(21.8-24.7)	(37.3-40.8)	(49.1-53.5)	(51.1-58.5)	(28.6-32.1)

Table 3A.2 The Prevalence of Symptoms Among Women Aged 50 Years and Above in 10 European Countries

Symptoms	50-59	60-69	70-79	80-89	Total
Pain	48.6	54.3	59.0	60.9	56.9
	(47.0-50.2)	(52.6-56.0)	(56.9-61.0)	(58.1-63.7)	(55.1-58.7)
Heart problems	3.2	5.7	10.5	14.2	7.7
	(2.7-3.8)	(5.0-6.5)	(9.3-11.8)	(12.4-16.4)	(6.7-8.7)
Breathing problems	7.2	10.1	15.3	18.1	11.8
	(6.5-8.1)	(9.1-11.1)	(13.9-16.8)	(16.0-20.4)	(10.7-13.1)
Coughing	4.2	5.3	6.6	8.4	5.6
	(3.6-4.9)	(4.6-6.1)	(5.7-7.7)	(6.9-10.1)	(4.8-6.6)
Swollen legs	12.6	16.7	23.1	29.4	20.8
	(11.6-13.7)	(15.4-18.0)	(21.4-24.9)	(26.9-32.1)	(19.3-22.3)
Sleeping problems	22.5	22.6	24.2	28.2	25.5
	(21.2-23.8)	(21.2-24.0)	(22.5-26.0)	(25.7-30.9)	(23.9-27.2)
Falling down	2.4	4.0	7.6	14.6	6.1
	(2.0-2.9)	(3.4-4.8)	(6.6-8.8)	(12-7-16.7)	(5.3-7.1)
Fear of falling	3.6	7.9	16.2	29.0	12.7
	(3.1-4.2)	(7.0-8.8)	(14.7-17.7)	(26.5-31.6)	(11.5-13.9)
Dizziness	8.2	10.7	14.6	20.5	11.8
	(7.4-9.2)	(9.7-11.8)	(13.2-16.1)	(18.3-22.9)	(10.7-13.1)
Stomach problems	13.9	15.0	17.1	19.8	16.8
	(12.8-15.0)	(13.8-16.2)	(15.6-18.7)	(17.7-22.2)	(15.5-18.3)
Incontinence	3.7	5.5	9.5	21.2	7.0
	(3.1-4.3)	(4.8-6.3)	(8.4-10.8)	(19.0-23.6)	(6.2-8.1)
2+ symptoms	5.4	43.9	58.8	64.6	46.8
	(4.7-6.1)	(42.3-45.6)	(56.8-60.8)	(61.8-67.3)	(44.9-48.6)

Table 3A.3 Self-Perceived Health, Long-Term Health Problems and Activity Limitations Among Men and Women Aged 50 Years and Above in 10 European Countries

Country	Men			Women		
	Less-than good SPH*	Long-term problems	Activity limitations	Less-than good SPH*	Long-term problems	Activity limitations
SE	33.9	52.8	43.4	39.9	57.3	49.6
	(30.6-37.4)	(49.2-56.4)	(39.8-47.0)	(36.5-43.5)	(53.7-60.8)	(46.0-53.2)
DK	30.7	57.2	45.2	32.5	60.2	49.2
	(27.1-34.6)	(53.2-61.1)	(41.1-49.3)	(29.2-36.1)	(56.5-63.7)	(45.5-52.9)
DE	45.0	57.4	48.7	48.2	60.7	54.1
	(42.9-47.1)	(55.3-59.4)	(46.6-50.8)	(45.9-50.4)	(58.5-62.8)	(51.9-56.3)
NL	31.2	40.6	40.3	34.0	46.3	52.4
	(28.3-34.3)	(37.5-43.8)	(37.3-43.5)	(31.1-37.0)	(43.2-49.4)	(49.3-55.4)
FR	38.0	52.9	37.5	38.4	51.8	41.1
	(34.3-41.8)	(49.0-56.7)	(33.8-41.3)	(35.1-41.8)	(48.3-55.2)	(37.7-44.6)
CH	17.5	37.9	31.3	22.5	41.2	37.8
	(14.1-21.6)	(33.3-42.6)	(27.0-35.9)	(19.0-26.4)	(37.0-45.6)	(33.6-42.1)
AT	36.0	39.5	43.4	40.3	43.1	49.4
	(32.7-39.4)	(36.1-42.9)	(40.0-46.9)	(37.4-43.2)	(40.2-46.0)	(46.4-52.3)
IT	44.5	54.4	34.3	54.7	48.1	44.2
	(40.0-49.0)	(41.0-50.0)	(30.1-38.7)	(50.5-58.8)	(44.0-52.3)	(40.1-48.3)
ES	41.1	56.4	39.8	53.1	62.7	47.0
	(37.2-45.1)	(52.4-60.4)	(35.9-43.8)	(49.5-46.8)	(59.1-66.2)	(43.4-50.6)
GR	32.7	34.7	27.0	44.3	41.6	36.2
	(28.9-36.8)	(30.8-38.8)	(23.4-31.0)	(40.9-47.7)	(38.8-45.0)	(33.0-39.5)
ALL	39.5	50.4	39.5	47.5	55.2	48.7
	(37.6-41.4)	(48.4-52.3)	(37.7-41.4)	(45.6-49.3)	(53.3-57.0)	(46.9-50.6)

Note: *Self-perceived health (very good, good, fair, bad, or very bad)

Table 3A.4 Odds Ratios of Chronic Diseases According to Income Among Men and Women Aged 50 Years and Above in 10 European Countries

Disease	Men		Women	
	Odds ratio	95% CI	Odds ratio	95% CI
Heart disease	1.27	1.10 - 1.46	1.26	1.07 - 1.48
Hypertension	.99	.89 - 1.10	1.16	1.06 - 1.28
High cholesterol	.94	.83 - 1.06	1.13	1.01 - 1.27
Stroke	1.56	1.23 - 1.99	1.21	.94 - 1.57
Diabetes	1.27	1.09 - 1.49	1.71	1.45 - 2.01
Lung disease	1.67	1.35 - 2.05	1.34	1.08 - 1.67
Arthritis	1.30	1.12 - 1.50	1.33	1.20 - 1.49
Cancer	.78	.61 - .98	.84	.70 - 1.02
Ulcer	1.21	1.00 - 1.46	1.22	.99 - 1.50

Table 3A.5 Odds Ratios of Symptoms According to Educational Level Among Men and Women Aged 50 Years and Above in 10 European Countries

Disease	Men		Women	
	Odds ratio	95% CI	Odds ratio	95% CI
Pain	1.36	1.23 - 1.51	1.25	1.14 - 1.36
Heart problems	1.38	1.14 - 1.67	1.23	1.02 - 1.48
Breathing problems	1.67	1.41 - 1.97	1.41	1.22 - 1.64
Coughing	1.52	1.21 - 1.90	1.31	1.07 - 1.60
Sleep problems	1.33	1.14 - 1.55	1.22	1.10 - 1.36
Fear of falling	1.63	1.24 - 2.13	1.44	1.22 - 1.70
Dizziness	1.39	1.13 - 1.71	1.50	1.30 - 1.74
Incontinence	1.36	1.03 - 1.81	1.26	1.05 - 1.51
2+ symptoms	1.54	1.37 - 1.73	1.42	1.29 - 1.55

Table 3A.6 Odds Ratios of Symptoms According to Income Among Men and Women Aged 50 Years and Above in 10 European Countries

Disease	Men		Women	
	Odds ratio	95% CI	Odds ratio	95% CI
Pain	1.13	1.02 - 1.24	1.14	1.04 - 1.24
Heart problems	1.43	1.19 - 1.70	1.13	.94 - 1.35
Breathing problems	1.64	1.39 - 1.92	1.61	1.39 - 1.87
Coughing	1.34	1.09 - 1.66	1.29	1.06 - 1.58
Sleep problems	1.34	1.19 - 1.60	1.10	.99 - 1.22
Fear of falling	1.07	.83 - 1.37	1.31	1.12 - 1.53
Dizziness	1.45	1.20 - 1.77	1.28	1.11 - 1.48
Incontinence	1.42	1.09 - 1.85	1.12	.94 - 1.34
2+ symptoms	1.49	1.34 - 1.66	1.25	1.14 - 1.37

Table 3A.7 Odds Ratio of Functioning Limitations and Limitations with Activities of Daily Living According to Income Among Men and Women in 10 European Countries

Limitations	Men		Women	
	Odds ratio	95% CI	Odds ratio	95% CI
1+ mobility	1.64	1.48 - 1.81	1.36	1.24-1.49
Eyesight problems	1.47	1.27 - 1.70	1.41	1.24-1.59
Hearing problems	1.10	.98 - 1.24	1.22	1.07-1.39
Chewing problems	1.48	1.31 - 1.68	1.47	1.32-1.64
Grip strength	1.52	1.34 - 1.73	1.40	1.25-1.58
Walking speed	1.15	.71 - 1.86	1.27	.84-1.92
1+ ADL	1.58	1.33 - 1.89	1.42	1.22-1.65
1+ IADL	1.70	1.45 - 2.00	1.46	1.30-1.65

Table 3A.8 Odds Ratios of Less-Than-Good Self-Perceived Health According to Income Among Men and Women Aged 50 Years and Above in 10 European Countries

Country	Men		Women	
	Odds ratio	95% CI	Odds ratio	95% CI
SE	1.87	1.35 - 2.59	1.74	1.29 - 2.35
DK	2.69	1.78 - 4.07	2.64	1.77 - 3.95
DE	2.37	1.84 - 3.06	1.81	1.41 - 2.31
NL	2.29	1.73 - 3.03	1.46	1.12 - 1.89
FR	2.07	1.42 - 3.01	2.17	1.54 - 3.07
CH	1.36	.74 - 2.48	1.15	.72 - 1.85
AT	1.33	.94 - 1.86	1.12	.84 - 1.50
IT	1.37	1.02 - 1.83	2.09	1.61 - 2.72
ES	1.37	.97 - 1.92	.96	.71 - 1.28
GR	1.91	1.33 - 2.75	1.78	1.30 - 2.43
ALL	1.84	1.65 - 2.04	1.58	1.44 - 1.74

Table 3A.9 Health Index Distribution

	Percentile				
Country	10	50	90	90th/10th-ratio	N
SE	0.56	0.76	0.86	1.54	1,840
DK	0.57	0.77	0.87	1.53	1,429
DE	0.55	0.76	0.87	1.58	2,089
NL	0.59	0.77	0.87	1.48	2,011
FR	0.55	0.73	0.84	1.54	1,292
CH	0.64	0.80	0.88	1.38	875
AT	0.59	0.77	0.87	1.47	1,713
IT	0.52	0.73	0.84	1.61	1,761
ES	0.47	0.70	0.83	1.77	1,143
GR	0.58	0.76	0.87	1.50	1,769

Table 3A.10 Thresholds for Self-Reported Health

Country	Poor to Fair	Fair to Good	Good to Very Good	Very Good to Excellent
SE	0.463	0.601	0.781	0.836
DK	0.530	0.680	0.770	0.842
DE	0.560	0.730	0.840	0.900
NL	0.515	0.704	0.818	0.859
FR	0.544	0.687	0.807	0.856
CH	0.542	0.695	0.814	0.870
AT	0.503	0.698	0.811	0.860
IT	0.556	0.709	0.807	0.874
ES	0.493	0.677	0.799	0.863
GR	0.536	0.709	0.804	0.876

Table 3A.11 **Self-Assessed Health Levels and Adjusted Health Levels**

	Poor		Fair		Good		Very Good		Excellent		
Country	Actual	Counter-factual	Actual	Counter-factual	Actual	Counter-factual	Actual	Counter-factual	Actual	Counter-factual	N
SE	3.8	7.1	9.9	23.8	44.5	37.4	22.9	21.7	18.9	10.0	1,840
DK	6.2	5.6	19.9	22.2	25.5	37.6	29.2	22.3	19.3	12.3	1,429
DE	10.7	7.8	29.9	22.8	38.3	35.9	16.6	20.5	4.5	12.9	2,089
NL	5.3	5.6	23.6	19.7	42.0	39.6	16.2	23.9	12.8	11.2	2,011
FR	9.8	8.3	23.9	26.1	44.9	43.6	15.2	17.5	6.2	4.6	1,292
CH	3.1	2.5	13.2	12.8	42.1	38.6	27.3	28.9	14.3	17.2	875
AT	6.6	5.3	22.4	17.8	37.0	42.2	24.6	22.1	9.5	12.6	1,713
IT	8.4	10.5	32.1	27.8	39.7	39.0	14.4	18.3	5.5	4.5	1,761
ES	12.3	15.8	32.2	32.0	38.4	36.9	13.9	12.2	3.3	3.1	1,143
GR	6.9	6.2	24.8	21.0	35.6	40.9	26.0	21.4	6.7	10.6	1,769

Table 3A.12 Behavioural Risk Factors According to Age Among Men Aged 50 Years and Above in 10 European Countries

Behavioural risk factor	50-59	60-69	70-79	80-89	Total
Drinking daily more than 2 glasses*	21.8 (20.4-23.3)	24.6 (23.1-26.1)	22.2 (20.4-24.1)	15.7 (13.2-18.5)	26.3 (24.6-28.0)
Low physical activity**	4.2 (3.5-4.9)	5.7 (5.0-6.6)	10.9 (9.6-12.4)	24.0 (21.0-27.3)	9.3 (8.3-10.5)
Overweight (BMI25-29.9)	50.0 (48.2-51.7)	52.6 (50.8-54.3)	49.2 (47.0-51.5)	43.5 (39.8-47.2)	50.2 (48.2-52.1)
Obesity (BMI 30+)	16.6 (15.3-17.9)	16.7 (15.4-18.0)	15.0 (13.5-16.7)	8.6 (6.7-10.9)	16.3 (15.0-17.8)
Overweight/obesity (BMI 25+)	66.5 (64.9-68.2)	69.2 (67.6-70.8)	64.3 (62.1-66.3)	52.0 (48.3-55.7)	66.5 (64.7-68.3)

Notes: * Drinking daily or 5-6 days a week more than 2 glasses of alcohol. ** Neither vigorous nor moderate physical activity

Table 3A.13 Behavioural Risk Factors According to Age Among Women Aged 50 Years and Above in 10 European Countries

Behavioural risk factor	50-59	60-69	70-79	80-89	Total
Drinking daily more than 2 glasses*	7.0 (6.2-7.8)	7.7 (6.9-8.7)	5.1 (4.3-6.0)	3.8 (2.9-5.0)	6.9 (6.0-7.9)
Low physical activity**	4.9 (4.2-5.6)	7.7 (6.9-8.7)	16.2 (14.7-17.7)	38.7 (35.9-41.5)	14.9 (13.7-16.3)
Overweight (BMI 25-29.9)	34.0 (32.5-35.5)	38.8 (37.2-40.5)	38.7 (36.7-40.7)	34.5 (31.7-37.3)	36.4 (34.6-38.2)
Obesity (BMI 30+)	17.7 (16.5-19.0)	19.6 (18.2-20.9)	19.8 (18.2-21.5)	12.1 (10.3-14.1)	18.1 (16.7-56.4)
Overweight/Obesity (BMI 25+)	51.7 (50.1-53.3)	58.4 (56.7-60.0)	58.5 (56.4-60.5)	46.5 (43.6-49.5)	54.5 (52.6-56.4)

Notes: * Drinking daily or 5-6 days a week more than 2 glasses of alcohol. ** Neither vigorous nor moderate physical activity

Table 3A.14 Behavioural Risk Factors According to Income Among Men and Women Aged 50 Years and Above in 10 European Countries

Behavioural risk factor	Men		Women	
	Odds ratio	95% CI	Odds ratio	95% CI
Ever smoking	.99	.89 - 1.09	.88	.79 - .97
Current smoking	1.43	1.27 - 1.60	1.21	1.07 - 1.37
Drinking daily	.82	.74 - .91	.58	.51 - .65
Drinking daily +2 glasses	.89	.79 - 1.00	.67	.56 - .80
Low physical activity**	1.80	1.50 - 2.16	1.60	1.37 - 1.86
Overweight/obesity (BMI 25+)	1.14	1.03 - 1.26	1.45	1.33 - 1.59
Obesity (BMI 30+)	1.43	1.26 - 1.64	1.59	1.41 - 1.79

Note: ** Neither vigorous nor moderate physical activity.

Table 3A.15 Health Behaviour Among Men and Women Aged 50 Years and Above in 10 European Countries

Country	Ever smoking	Current smoking	Overweight /obesity*	Low physical activity**	Ever smoking	Current smoking	Overweight /obesity*	Low physical activity**
SE	61.3 (57.7-64.7)	15.7 (13.3-18.5)	59.1 (55.5-62.6)	5.8 (4.3-7.7)	53.3 (49.7-56.9)	21.1 (18.2-24.2)	52.4 (48.7-56.0)	6.3 (4.9-7.9)
DK	72.8 (69.1-76.2)	31.5 (27.9-35.3)	59.3 (55.2-63.2)	8.0 (5.9-10.6)	57.7 (54.3-61.5)	29.5 (26.2-32.9)	45.2 (41.8-49.2)	8.4 (6.6-10.5)
DE	63.0 (60.9-65.0)	23.2 (21.5-25.0)	66.9 (64-9-68.9)	6.1 (5.1-7.3)	27.6 (25.6-29.6)	13.4 (11.9-15.0)	55.3 (53.1-57.5)	9.4 (8.2-10.8)
NL	77.1 (74.4-79.7)	26.4 (23.8-29.3)	61.3 (58.1-64.3)	6.8 (5.3-8.8)	48.1 (45.0-51.2)	20.5 (18.2-23.1)	53.8 (50.7-56.9)	10.4 (8.7-12.4)
FR	61.3 (57.4-64.9)	17.8 (15.0-20.9)	62.9 (59.1-66.5)	10.8 (8.6-13.6)	21.3 (18.6-24.3)	9.2 (7.4-11.5)	46.3 (42.8-49.8)	14.2 (12.0-16.7)
CH	55.3 (50.4-60.0)	20.5 (17.0-24.6)	60.4 (55.60-65.0)	3.2 (1.9-5.6)	34.7 (30.6-39.0)	18.4 (15.2-22.0)	42.1 (37.8-46.5)	4.0 (2.7-6.1)
AT	49.7 (46.3-43.2)	23.0 (20.3-26.1)	68.7 (65.4-71.9)	8.9 (7.0-11.1)	26.7 (24.2-29.5)	15.2 (13.2-17.5)	55.1 (52.1-58.1)	13.3 (11.5-15.5)
IT	63.1 (58.7-67.4)	22.6 (19.1-26.6)	66.2 (61.8-70.4)	16.8 (13.7-20.5)	29.4 (25.7-33.4)	15.1 (12.3-18.4)	54.2 (50.0-58.3)	25.3 (21.9-29.1)
ES	67.6 (63.7-71.3)	28.1 (24.6-31.9)	69.7 (65.7-73.4)	12.3 (9.9-15.2)	15.8 (13.2-18.7)	8.6 (6.7-11.0)	67.3 (63.6-70.8)	13.5 (11.3-16.0)
GR	64.5 (60.4-68.4)	31.9 (28.1-35.8)	70.5 (66.5-74.2)	7.3 (5.3-10.1)	26.2 (23.3-29.4)	17.9 (15.4-20.7)	64.5 (61.1-67.7)	8.1 (6.5-10.1)
ALL	64.0 (62.2-65.8)	23.9 (22.3-25.6)	66.5 (64.7-68.3)	93.0 (8.3-10.5)	27.2 (25.6-28.9)	13.2 (12.0-14.5)	54.5 (52.6-56.4)	14.9 (13.7-16.3)

Notes: * BMI 25+. ** Neither vigorous nor moderate physical activity

Table 3A.16 Euro-d Caseness by Country: Expressed as a Percentage of People of that Age-Group in that Country

		Currently depressed									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	25.1	23.1	21.3	24.6	39.6	23.9	21.9	39.5	40.2	29.9
	Male	13.0	15.9	10.1	15.1	21.3	10.5	13.8	21.4	16.7	9.5
60+	Female	21.6	18.2	25.2	24.3	44.9	24.1	24.5	41.4	55.1	34.8
	Male	12.3	11.4	12.6	16.9	21.4	9.9	8.0	23.0	23.1	10.8
75+	Female	42.1	28.2	44.3	37.0	45.2	27.2	35.6	46.6	71.8	47.3
	Male	19.4	18.8	25.1	20.4	26.7	19.2	20.0	32.1	37.5	28.3

Table 3A.17 Numeracy by Country: Expressed as a Percentage of People of that Age-Group in that Country

		score less then four									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	44.6	51.1	33.4	44.9	61.8	25.9	33.1	67.4	83.9	44.0
	Male	34.8	38.0	24.2	32.0	40.7	23.1	24.5	58.8	72.5	25.7
60+	Female	57.0	62.7	49.7	59.5	68.5	42.2	44.2	78.5	94.8	75.2
	Male	39.0	48.0	32.8	38.1	51.9	31.6	32.7	67.9	85.2	41.0
75+	Female	72.3	74.1	66.2	74.9	81.8	60.7	65.9	93.3	96.5	87.1
	Male	61.5	62.0	43.7	46.5	62.2	51.8	50.4	77.0	91.0	75.1

Table 3A.18 Self Reported Reading by Country: Expressed as a Percentage of People of that Age-Group in that Country

		poor, fair or good									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	13.5	13.9	33.4	52.4	41.1	24.1	18.3	55.7	68.5	36.5
	Male	21.4	28.1	39.4	50.2	33.9	29.2	22.9	54.9	55.3	33.7
60+	Female	15.9	24.7	50.6	59.9	47.8	39.6	35.1	67.2	83.3	69.6
	Male	25.8	30.6	50.8	60.5	47.8	40.3	33.6	63.5	78.3	53.0
75+	Female	39.0	42.6	73.3	60.3	53.2	56.3	61.5	81.4	87.1	85.0
	Male	43.2	42.8	70.9	58.2	55.6	54.3	47.7	82.6	87.9	80.5

Table 3A.19 Self Reported Writing by Country: Expressed as a Percentage of People of that Age-Group in that Country

		poor, fair or good									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	13.9	17.7	38.2	56.4	41.8	28.6	21.9	59.0	70.5	42.6
	Male	29.3	36.2	48.0	55.2	38.1	35.7	28.7	59.7	59.5	37.8
60+	Female	21.5	30.7	57.0	66.8	52.9	50.5	39.1	74.1	86.7	72.8
	Male	33.4	38.4	57.2	67.0	56.3	46.0	40.6	70.9	81.8	58.7
75+	Female	48.0	50.5	81.4	67.4	64.2	65.3	62.4	90.2	92.6	91.4
	Male	49.0	49.6	75.3	64.2	65.1	61.6	55.9	86.2	88.2	83.7

Table 3A.20 Orientation in Time by Country: Expressed as a Percentage of People of that Age-Group in that Country

		one or more errors									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	4.7	3.7	6.0	9.3	10.1	6.3	9.2	7.7	15.5	4.4
	Male	10.0	13.2	8.0	9.9	9.0	14.1	7.2	10.6	9.2	6.6
60+	Female	5.7	14.2	8.5	13.3	8.7	8.0	9.5	12.0	19.3	7.5
	Male	11.3	14.0	9.6	14.3	15.1	17.1	13.1	13.3	16.7	7.0
75+	Female	15.0	17.3	22.1	18.0	14.1	14.0	15.0	17.6	21.5	15.0
	Male	16.3	18.9	11.1	23.3	18.5	17.2	14.8	26.1	16.8	9.6

Table 3A.21 Word Learning Initial Score by Country: Expressed as a Percentage of People of that Age-Group in that Country

		4 or less									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	16.5	8.3	10.6	14.8	32.5	12.0	20.7	40.9	55.2	22.2
	Male	21.0	19.8	15.8	25.7	35.6	20.6	20.4	46.1	57.4	23.2
60+	Female	24.0	20.8	28.7	31.0	47.1	21.8	30.3	65.6	78.8	54.9
	Male	36.0	34.9	33.4	38.1	49.1	34.5	35.7	61.0	74.4	42.0
75+	Female	68.0	54.9	59.3	66.0	71.0	58.1	62.7	89.9	94.1	84.2
	Male	68.2	61.9	60.7	58.9	65.9	51.3	52.7	77.5	92.9	72.9

Table 3A.22 Word Learning Final Score by Country: Expressed as a Percentage of People of that Age-Group in that Country

		5 or more									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	60.3	61.3	51.4	52.9	35.3	57.5	42.9	24.5	23.0	35.3
	Male	46.8	44.9	44.0	38.3	28.2	47.5	41.8	21.2	15.3	31.0
60+	Female	43.6	47.4	29.0	40.9	20.6	45.3	28.8	12.6	5.9	18.5
	Male	28.2	33.1	25.0	23.2	14.8	26.8	28.0	12.0	7.3	17.1
75+	Female	15.2	19.7	11.5	19.2	9.7	14.1	13.8	2.2	1.7	2.4
	Male	11.8	8.4	12.8	16.3	5.6	15.3	14.5	7.2	0.0	7.8

Table 3A.23 Verbal Fluency Score by Country: Expressed as a Percentage of People of that Age-Group in that Country

		18 or less									
		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
50+	Female	18.9	21.6	29.8	31.5	40.5	20.6	25.5	68.6	68.2	73.0
	Male	22.8	26.2	31.6	37.7	38.3	35.9	30.5	64.7	67.1	68.5
60+	Female	25.9	37.7	47.5	50.1	55.9	39.3	42.8	80.6	86.5	89.7
	Male	28.7	36.0	42.5	47.1	43.8	44.4	41.0	73.1	74.8	76.5
75+	Female	58.4	60.3	79.1	72.8	74.9	65.9	69.0	96.4	93.1	97.4
	Male	59.3	56.1	58.4	64.8	72.6	67.7	61.5	89.4	94.6	97.2

Table 3A.24 Distribution of the Number of Contacts with Physicians Over the Past Twelve Months (% row)

	Number of contacts with physicians over the twelve past months				N	
Country	0	1-3	4-6	7+	Weighted	Unweighted
SE	24.2	47.9	18.2	9.6	604	1998
DK	18.3	43.3	21.8	16.6	348	1529
DE	7.7	28.4	27.5	36.4	5388	2275
NL	18.0	38.8	22.5	20.7	967	2155
FR	6.2	23.1	33.5	37.3	2742	1435
CH	15.9	45.7	20.4	18.1	420	942
AT	14.3	31.7	25.5	28.5	465	1892
IT	16.5	25.9	20.2	37.4	3575	1934
ES	12.1	27.6	20.1	40.2	2222	1310
GR	20.5	31.4	22.1	25.9	691	1953

Table 3A.25 Proportion of Persons Who Consulted Physicians in the Past Twelve Months Reporting at Least One Visit to Their General Practitioner or a Doctor at Their Health Care Centre

	At least one visit to the general practitioner or doctor at the health care centre	N	
Country	%	Weighted	Unweighted
SE	85.1	440	1527
DK	96.2	273	1250
DE	93.2	4777	2097
NL	92.9	762	1755
FR	95.2	2472	1345
CH	90.4	339	796
AT	94.8	383	1622
IT	93.4	2870	1618
ES	93.2	1876	1159
GR	81.9	526	1550

Table 3A.25 (cont.) Proportion of Persons Who Consulted Physicians in the Past Twelve Months Reporting at Least One Visit to a Specialist

	At least one visit to a specialist	N	
Country	%	Weighted	Unweighted
SE	44.9	440	1527
DK	24.8	273	1250
DE	60.2	4777	2097
NL	50.6	762	1755
FR	51.3	2472	1345
CH	42.9	339	796
AT	45.8	383	1622
IT	53.4	2870	1618
ES	50.2	1876	1159
GR	45.8	526	1550

Table 3A.26 **Proportion of Persons Who Visited a Dentist or a Dental Hygienist in the Past Twelve Months**

		N	
Country	%	Weighted	Unweighted
SE	75.7	608	2007
DK	75.9	350	1539
DE	72.1	5398	2281
NL	61.1	969	2159
FR	45.3	2741	1436
CH	68.3	420	942
AT	52.2	466	1898
IT	33.5	3608	1946
ES	26.4	2240	1319
GR	38.7	696	1967

Table 3A.27 **Distribution of the Number of Medication Categories Taken at Least Once a Week, Out of a List of 14 Drug Categories (% row)**

	Number of medication categories					N	
Country	0	1	2	3	4+	Weighted	Unweighted
SE	44.4	23.3	16.3	9.1	6.9	611	2021
DK	44.6	25.5	14.7	8.7	6.5	356	1572
DE	36.9	27.9	17.4	10.3	7.5	5419	2295
NL	45.9	27.7	13.5	6.7	6.1	976	2180
FR	27.7	28.5	20.1	11.4	12.2	2844	1493
CH	46.0	29.9	12.6	6.6	4.8	423	952
AT	39.2	29.3	16.4	9.2	5.9	472	1927
IT	36.6	30.4	16.0	9.5	7.5	3644	1961
ES	32.0	28.4	17.3	11.8	10.6	2287	1351
GR	32.2	29.5	19.6	10.8	7.9	699	1979

Table 3A.28 **Distribution of the Number of Overnight Hospital Stays in the Past Twelve Months (% row)**

	Number of overnight hospital stays			N	
Country	0	1	2+	Weighted	Unweighted
SE	86.5	9.7	3.9	607	2006
DK	87.1	7.5	5.4	350	1541
DE	83.1	11.9	5.1	5398	2281
NL	90.8	7.0	2.3	969	2160
FR	84.3	10.8	4.9	2742	1437
CH	88.2	9.1	2.7	420	942
AT	80.3	12.9	6.8	466	1897
IT	86.7	9.8	3.5	3606	1944
ES	88.7	8.3	3.0	2240	1319
GR	90.9	6.7	2.5	696	1967

Table 3A.29 **Proportion of Persons Reporting Any In- or Outpatient Surgery in the Past Twelve Months**

		N	
Country	%	Weighted	Unweighted
SE	10.7	607	2007
DK	12.7	350	1542
DE	13.8	5401	2282
NL	11.6	969	2160
FR	12.8	2742	1437
CH	10.5	420	942
AT	11.2	466	1898
IT	8.7	3607	1945
ES	8.4	2240	1319
GR	7.0	696	1967

4 Social and Family Context

Ed. Johannes Siegrist

4.1 Family Structure, Proximity and Contact

Martin Kohli, Harald Künemund, and Jörg Lüdicke

Current societal dynamics are putting family relations, especially those along the generational lineage, squarely on the political and scientific agenda (cf. Kohli 2004; Kohli and Künemund 2005). Contemporary ageing societies are age-graded and to a large extent age-segregated societies. Their institutions tend to be age-homogeneous (Uhlenberg and Riley 2000). Exchange and support among generations is critical for maintaining age integration. In this respect the family plays a special role—it is the prototypical institution of age-heterogeneity. The family links lives far beyond the co-residing nuclear unit, most prominently along the generational lineage. Moreover, the demographics of ageing societies—especially the increasing longevity and proportions of elderly people—address new demands to the family and its functions, e.g., in terms of support and care for the elderly. For societal welfare and welfare policy it becomes vital to assess the current state of the family and its likely evolution.

Common Themes and National Differences

Families in Europe today present many features common to all countries as well as massive differences among them. As to commonalties, we expect to find a weakening of marriage with increasing age but stability of intergenerational bonds. As to differences, we expect to find patterns of "weak" and "strong" family regimes.

Research on these themes is sometimes like fighting against windmills: raising empirical arguments against myths that seem to remain untouched by them. It is widely assumed that the modern welfare state has undermined family solidarity and the family itself. Increasing childlessness and fewer births, decreasing marriage and increasing divorce rates, increasing numbers of singles and the decrease of multigenerational co-residence—to name just a few widely known facts—may indeed indicate a weakening of the family and its functions. But despite the high intuitive plausibility of such interpretations in which large parts of the social sciences meet with common sense, it may turn out that the family has in fact changed but not diminished its role (cf. Künemund and Rein 1999).

Speculation about the future of the family has been a regular feature of modernisation, mostly with the assumption of a general decline of family bonds. This restrictive view was first transcended by research on the emotional and support relations between adult family generations. But it is only during the last decade that we have discovered again the full extent of the family as a kinship and especially a generational system beyond the nuclear household (Bengtson 2001) which ranges across several different types of "solidarity": spatial and emotional closeness, frequent contact, personal and instrumental support as well as massive flows of money and goods (cf. Contributions 4.2 and 4.3). SHARE provides the first possibility to chart the family generations on a European level.

The Ambivalence of Marriage

We first examine to what extent elderly Europeans are living together in bonds of marriage. In recent decades, the institution of marriage has been weakened by diminishing rates of ever getting married and increasing rates of divorce. Our findings show that the current elderly have not yet been strongly touched by this evolution (Figure 1 and Table 4A.8 in the Appendix to this chapter). Among the 50-59-year-olds 76 percent of the men and 71 percent of the women live as a married couple. There is a rise of divorce in the

younger cohorts but with ten percent of the 50-59-year-olds currently divorced it is still far below the levels of those now in their 30's or 40's. Some of them may remarry in the future, so that the proportion of, e.g., divorced 60-69-year olds ten years from now cannot be predicted solely on the basis of the evolution of divorce rates. There is also a rising proportion of never-married men, while among women the opposite patterns holds, with the oldest group having the largest proportion of never-married (12 percent), mainly due to the specific historical constellation of WWII and its aftermath.

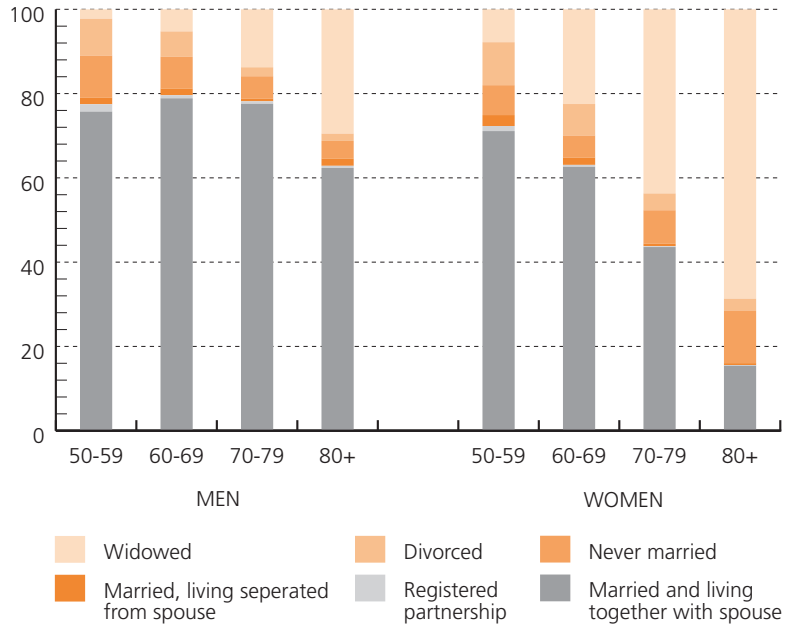

Figure 1 Marital status (percentages by age and gender)

But the most drastic pattern is that associated with the death of the marriage partner. The higher longevity of women—for life expectancy at birth it is currently about 7 years—and the fact that men in couples are on average about 3-4 years older than their wives translate into highly divergent trajectories for the two sexes as they grow older. The proportion of widowed men increases from 2 percent (50-59) to 30 percent (80 and older), that of widowed women from 8 to 69 percent. As a result, 63 percent of men but only 16 percent of women over 80 still live with a (married or registered) spouse. In some countries this loss of the marital bond is even more marked; among the women over 80 in Greece almost nine tenths are widowed, and only one tenth still live in marriage.

The Power of Generations

The family nucleus thus loses its impact with increasing age, especially among women. This is not the case, however, for the generational structure (Figure 2 and Table 4A.9). Even after several decades of low fertility most European elderly still have a family that spans several generations. Only 11 percent have no other generation alive. The proportion rises somewhat in the older groups, but is below 15 percent except for the women above 80 where—due to the specific burdens mentioned above—it rises to 25 percent. The most frequent constellation—between 50 percent in Germany and 59 percent in Spain—is that of three generations. Four-generation families have a share of 16 percent, while five-

generation families remain at a fraction of a percent. Even among the youngest group, the mean number of living children in all countries remains above or close to 2; Germany has the lowest number with 1.68 (Table 4A.10). The 'second demographic transition' to low fertility in Europe thus has not yet left its mark on parenthood among our cohorts. It does show in grandparenthood, with very low numbers among the youngest age group in some countries such as Greece, Spain, and Italy, even though it is unclear how many of

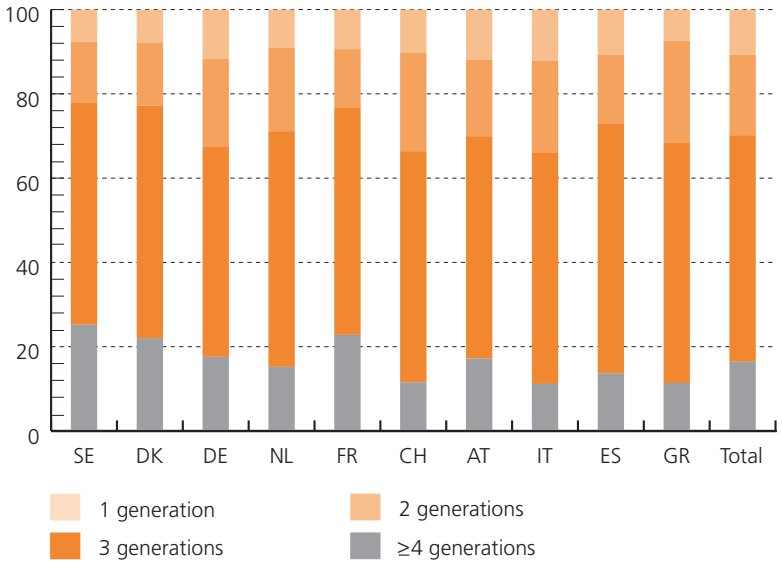

Figure 2 *Generational constellations (percentage by country)*

the 'missing' grandchildren will still be born.

How does this translate into actual exchange and support? The first question here is about co-residence with and geographical proximity to these other generations. This is the one piece of evidence that seems to support the 'modernisation' claim: In all Western societies, co-residence among adult family generations has decreased massively. Today, among the Europeans above 70 who have at least one living child, only 15 percent live together with a child in the same household (Table 4A.11). But by extending the boundaries of „togetherness" the situation turns out to be very different. If one includes parents and children living not only in the same household but also in the same house, the proportion rises from 15 to 29 percent, and by including the neighbourhood less than 1 km away, to 49 percent. 84 percent have a child living not farther away than 25 km. The preference now seems to be for 'intimacy at a (small) distance', small enough so that relations of exchange and support may function easily across the boundaries of the separate households (cf. Kohli et al. 2000). Thus, even the living arrangements are not very good evidence for the claim of a dissociation between parents and adult children. A similar result applies to the frequency of contact (Table 4A.12).

Weak and Strong Family Countries

In these dimensions, however, it is the variation among countries that comes into focus. At the European level, there are considerable differences between Scandinavia, Central

and Western Continental countries, and those of the Mediterranean. The latter are often grouped together as 'strong family countries', and contrasted with the 'weak family countries' of the Centre and North of Europe and of North America (Reher 1998). The strength or weakness refers to cultural patterns of family loyalties, allegiances, and authority but also to demographic patterns of co-residence with adult children and older family members and to organising support for the latter. The 'strong family countries' have had high fertility in the past but today, paradoxically, are those with the lowest fertility (Kohler et al. 2002), a state of affairs that is directly linked to the strength of their family tradition. While they have evolved, in conjunction with the other advanced countries, towards higher gender equity in education and the labour market, gender equity in the family and in public provisions for the family remains low. The dominant model, both culturally and in terms of welfare state incentives, is still that of the male breadwinner. The ensuing cultural lag in gender equity between the 'individual-centred' and the 'family-centred' worlds increasingly

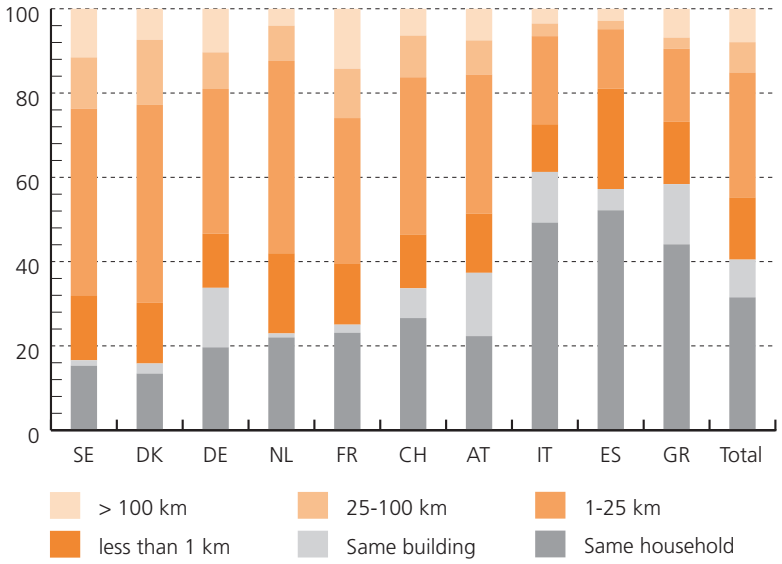

Figure 3 Proximity to nearest living child (percentages by country)

turns women away from motherhood (McDonald 2000).

As mentioned above, these trends have mostly not yet directly affected the SHARE cohorts. For them—and therefore also for the elderly in the near future—the pattern remains one of comparatively high marriage rates and low rates of childlessness. But they are affected in an indirect way, through the decreasing prevalence of marriage and childbearing among their children.

Our data demonstrate that there is not only a 'weak'-'strong' dichotomy but a North-South gradient, with the Scandinavian countries generally having the least traditional family structure, the Mediterranean countries (Spain and Italy more so than Greece) the most traditional one, and the other continental countries lying somewhere in-between. This already shows for the variation in marital status, e.g., divorce (Table 4A.8). Denmark and Sweden are at the top with 13 and 12 percent currently divorced, followed by Germany, Austria, France and Switzerland with 9 percent, the Netherlands with 6 percent, Greece

with 4 percent, and Italy and Spain with 2 percent. Massive differences occur with respect to co-residence (Figure 3 and Table 4A.11). The Mediterranean countries are characterised by very late (and increasing) ages of leaving the parental home among adult children. This is often interpreted solely as an effect of opportunity structures (employment and housing markets), but the variation among countries may also be explained by a cultural tendency towards closer intergenerational ties. While we are not able at this point to differentiate between those who have never left the parental home and those who have moved back later or have had their parents moving closer (cf. Attias-Donfut & Renaut 1994), the overall proportions are striking. In Denmark and Sweden, 13 and 15 percent of our respondents who have at least one living child live with a child in the same household, in the 'centre' countries this amounts to between 20 and 27 percent, but in Italy and Spain to 49 and 52 percent. Moving beyond the boundaries of the household yields a similar picture. Among the 50-59-year-old Mediterraneans, more than three quarters still have a child living at home with them. Among the oldest age group, the proportions are smaller but the differences between countries even larger: only 1 percent of the oldest Swedes and 4 percent of Danes live with a child, compared to 23 percent of Italians and 34 percent of Spaniards.

As in all such comparisons, differences should of course not be examined at the level of nation states only; there are important regional differences as well. In Italy and Spain, differences between North and South in terms of variables such as co-residence may be equally large as between countries, to the point where, e.g., northern Italy demographically may have more in common with other Western European countries than with the *mezzogiorno*. Another case in point are differences between native and migrant populations. In Germany, the mean number of grandchildren for our respondents is 2.05 among those who on November 1, 1989, lived in West Germany, 2.96 among those who lived in the GDR, and 3.78 among those who lived abroad and have migrated to Germany since then.

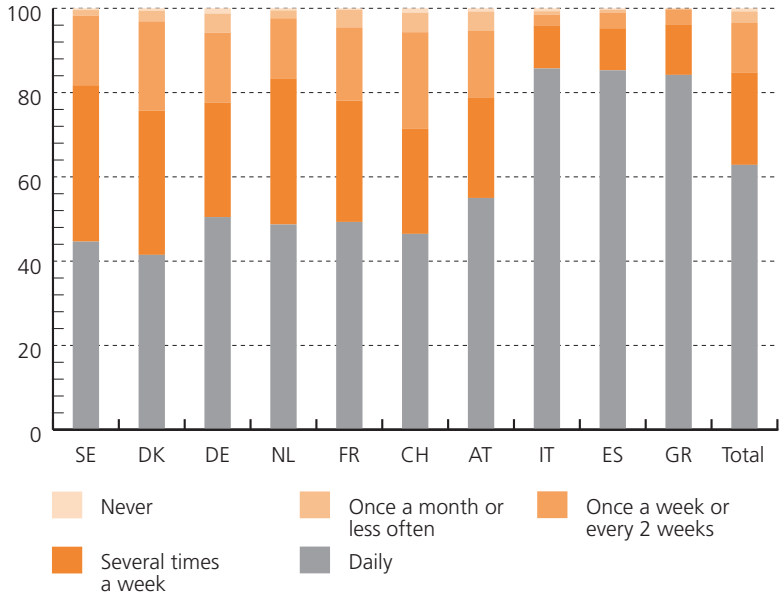

Figure 4 *Frequency of contact to most contacted child (percentages by country)*

Similar results as for proximity obtain for frequency of contact with children and parents. As a whole, they show that the adult generations in the family, even in countries with comparatively weaker family traditions and larger geographical distance, remain closely linked. Contact to the most contacted child (Figure 4 and Table 4A.12) is daily for 42 and 45 percent in Denmark and Sweden, respectively, and for between 47 and 55 percent in the central countries; the Mediterranean countries stand out with between 84 and 86 percent. In all countries 70 percent or more have contact at least several times a week; in the Mediterranean countries, it is 95 percent or more. There are those who have no contact at all to their living child or children but in no country do they make up more than one percent. In the older age groups contact is less frequent, but even among those over 80 at least three fifths (in Switzerland), and more than nine tenths (in the Mediterranean countries) are in contact with a child daily or several times a week.

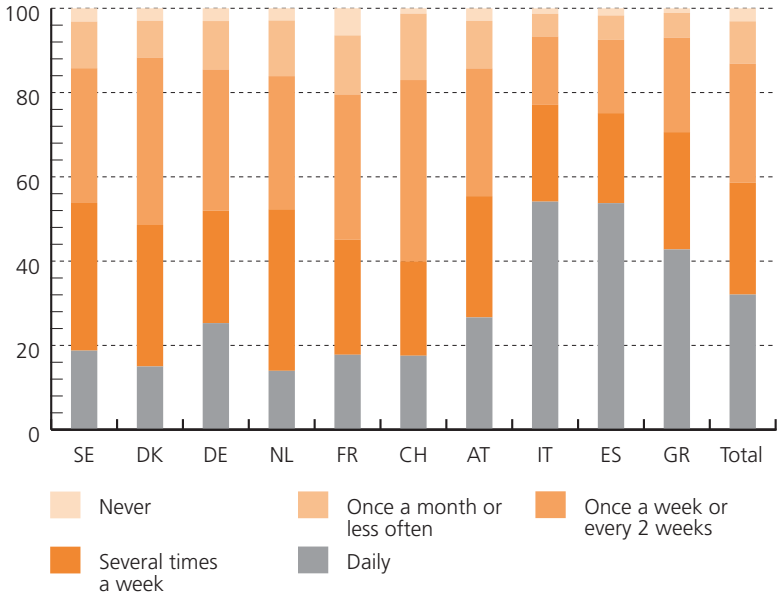

Figure 5 *Frequency of contact to most contacted parent (percentages by country)*

Contact with parents (Figure 5) is somewhat less frequent, partly because there are often several children of which only one lives close to their parents (cf. Konrad et al. 2002) and remains in close contact. There may also be some tendency to overreport contact with children and/or underreport contact with parents—a response pattern associated with the often-observed difference in the 'developmental stake' of parents and children (Giarrusso et al. 1995). It should be noted that the numbers here are restricted to own parents (parents-in-law are included only where they live in the same household). As to differences between countries, the Mediterranean countries again stand out, while there is no noticeable gap between Scandinavia and the Continent. Switzerland has the lowest proportion of contact with parents at least several times a week—corresponding to the fact that parents here most often live farther away as a result of international migration.

What Is To Be Concluded?

In conclusion, we emphasise four points:

- For present elderly Europeans the family has remained a strong provider of institutional and everyday integration. The historical decline of marriage has not yet reached them directly.

- The marriage bond weakens however with increasing age, and dramatically so for women.

- On the other hand, the multi-generational structure of the family remains stable. Even though co-residence of the elderly with their adult children has decreased, geographical proximity—and thus the potential for everyday support—is high. There are moreover high rates of frequent contact with each other.

- While this is true for Western Europe as a whole, there are important differences among the 'strong family countries' in the South and the 'weak family countries' in the North. The North-South gradient is especially noticeable with respect to rates of co-residence and frequency of contact among adult family generations.

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4.2 Family Support

Claudine Attias-Donfut, Jim Ogg, and François-Charles Wolff

Introduction

Older Europeans give and receive practical help to other family members in many ways. Some of the most important forms of help include caring activities such as helping a disabled family member with personal care or looking after grandchildren. Family help is not simply a private affair. Social policies that are adapted to the needs of families are vital for well functioning economies and more generally for promoting social cohesion. As Gosta Esping-Andersen notes, the building of successful welfare states for the twenty first century needs both to acknowledge changing family structures and to support the family (Esping-Andersen 2003). Much of what is known about family support at the European level is confined to transfers that take place within households. However, it is increasingly recognised that the contemporary family is no longer confined to a single household and that support between households is an important component of family help. For the first time, the SHARE data can address the question of how older Europeans give and receive support both within and between different households.

This contribution addresses three crucial areas of family support. The first is looking after grandchildren. In many countries, this task has been a traditional role of women. However, the changing pattern of women's labour force participation and the availability of alternative forms of childcare for parents strongly influence whether grandmothers look after their young grandchildren regularly. To what extent are European grandmothers implicated in the care of their grandchildren and how is this task combined with paid work? The second question addressed is the personal care that older people with health or disability problems receive from within and outside the family. As shown in the previous contribution, the different living arrangements of European countries determine the availability of intra-household support. Are older people with care needs who live alone disadvantaged in terms of accessing family support? The final question addressed in this contribution is the role of carers—in particular where one member of a couple is helping his or her partner or where an adult child is giving personal care to a parent. Under what conditions is care given and do these conditions differ between countries? And is there a time in the life course when individuals are caught between the dual tasks of caring for an elderly parent and looking after grandchildren?

Grandmothers Largely Involved in Looking After Grandchildren from the North to the South

Grandparents in SHARE were asked whether they had regularly or occasionally looked after their grandchildren without the presence of the parents during the past 12 months. The proportion of men and women who reported looking after grandchildren is identical—43% in both cases. Here, we focus exclusively on grandmothers. As shown in Figure 1, a prominent finding is that grandchild care is mostly uniform across all countries, with around one half of grandmothers having looked after their grandchildren regularly or occasionally within the past 12 months. Moreover, these rates are slightly higher in Sweden, Denmark, the Netherlands and France, where family ties are traditionally weaker than in the Mediterranean countries (cf. Contribution 4.1) and more alternative sources of child care provision are available. Some of this extra involvement by northern grandmothers may be explained by a higher proportion of the grandchildren's parents who are single or

separated. Grandmothers in Denmark for example, are much more likely to have children who are single parents than in the continental and southern countries. However, this is not the case in the Netherlands, where rates of looking after grandchildren are the highest. The most likely explanation for this high level in the northern countries is that grandmothers—who themselves often are in paid employment—are helping the grandchild's mother to combine both work and family commitments.

Although there is little variation between the countries in the rates of grandchild care, when the regularity of this task is examined a different story is told. This is shown in Figure 2, where it can be clearly seen that a gradient from low to high frequencies of weekly grandchild care runs from the northern to the southern countries. Among grandmothers involved in weekly grandchild care, Italian, Greek—and interestingly Swiss—grandmothers are more than twice as likely to be heavily involved in grandchild care.

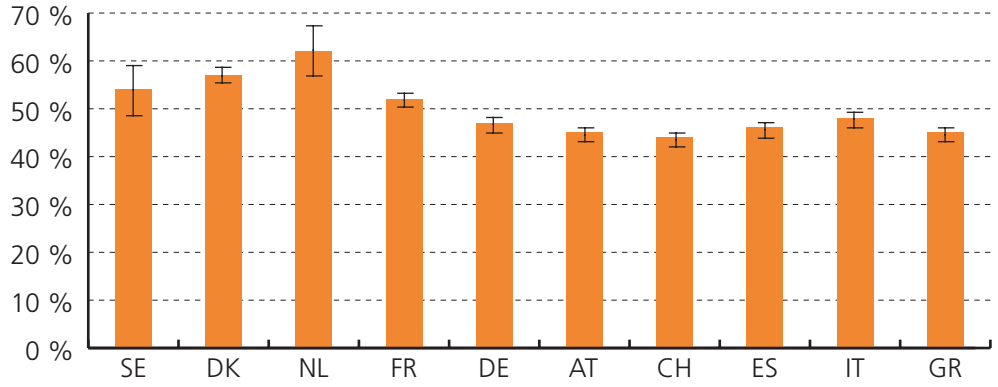

Figure 1 Percentage of grandmothers who have looked after their grandchildren regularly or occasionally during the past 12 months

What can explain these striking differences in the intensity of grandmothers being involved? Although cultural patterns are likely to be present (for example more 'familism' in Mediterranean countries) patterns of supply and demand such as the availability of grandmothers and the need for young parents to solicit their parents for childcare are likely to

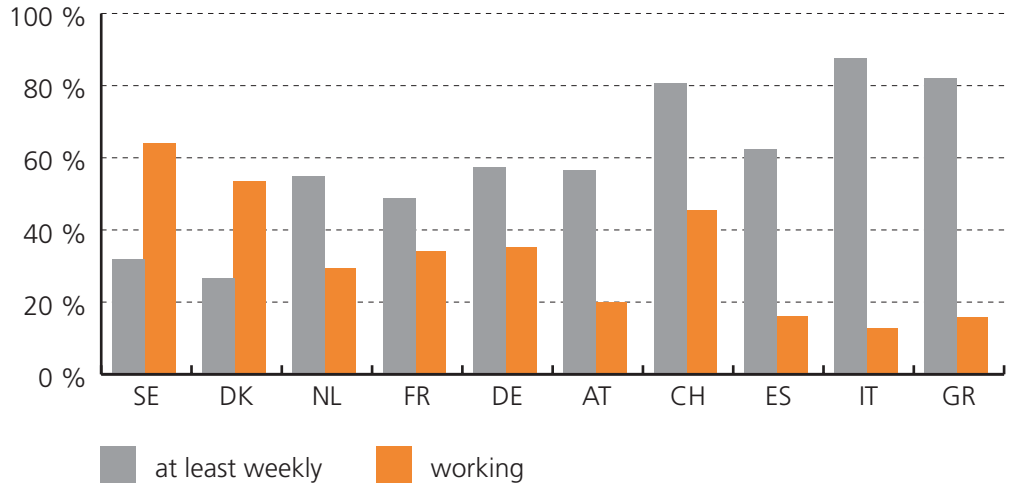

Figure 2 Percentage of grandmothers reporting looking after their grandchildren at least weekly, and percentage of grandmothers who are in paid employment. (Base: grandmothers aged <65 having looked after grandchild in the past 12 months)

be important factors. As shown in Figure 2, more than half of the grandmothers below the age of 65 in Sweden and Denmark are in some form of paid employment compared to only one in ten grandmothers in the Mediterranean countries. In countries with high rates of women in the labour force, intensive grandchild care rates are low, whereas in countries where grandmothers are mostly not in paid employment, rates of intensive grandchild care are high. The lack of alternative sources of childcare other than the family in the southern countries (and to a certain degree in the continental countries) also influences patterns of grandchild care. Different residential patterns of parents and children may also explain these differences—in the southern countries, where there are high rates of close geographical proximity between older parents and their adult children (especially among lower social class groups), grandparents looking after grandchildren is a much cheaper alternative than other sources. In summary, country differences in rates of looking after grandchildren are due to a combination of the supply side factors (availability of grandparents and childcare resources outside the family) and demand factors (the need for young mothers to ask for help, which is dependent on whether they are in paid employment).

Living Arrangements Strongly Influence Patterns of Family Care-Giving

As shown in Contribution 3.1, the prevalence of health problems for older Europeans rises steeply with age. This fact implies a greater need for help among the oldest age groups with personal care tasks such as getting dressed, washing and bathing and getting to the toilet. As demonstrated in Figure 3, after the age of 50 the proportion of respondents who have received some form of personal care such as dressing, bathing or showering, eating, getting in or out of bed, or using the toilet during the past 12 months rises gradually up to the age of 75 and steeply thereafter. At every age, rates of having received personal care are higher than rates of disability (having severe limitations), with differences becoming larger with increasing age. After the age of 80, more than two-thirds of respondents have been given some help for their personal care and the SHARE data show clearly that this task is provided first and foremost by other family members.

Helping an individual with personal care is often a heavy, not to mention intimate load for family members. Who are these givers of personal care and how do the different patterns of living arrangements in Europe shape the pattern of care giving? Figure 4

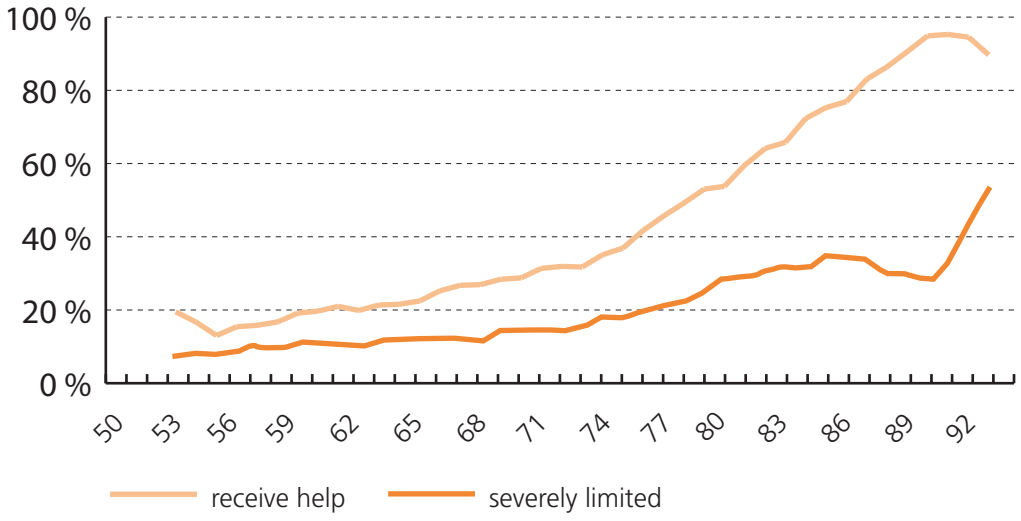

Figure 3 Proportion of respondents who receive help with personal care and who are severely limited

shows that the network of care-givers within the household for respondents indicating that they have received personal care follows closely the pattern of intergenerational co-habitation outlined in the previous contribution. In Denmark for example, personal care within households is almost uniquely undertaken by spouses, whereas in Spain children and other family members are more involved than spouses. As well as reflecting household composition, this pattern of care-giving may also be influenced by the different cultural expectations concerning the roles of spouses and children—in the Mediterranean countries the expectations placed on co-resident daughters to provide personal care may be higher than those placed on spouses, especially where personal care is given to an elderly father.

Living arrangements therefore shape patterns of care-giving. So given that a much higher proportion of older people live alone in the northern and continental countries, to what extent might they be isolated from their family or other forms of social support? This is

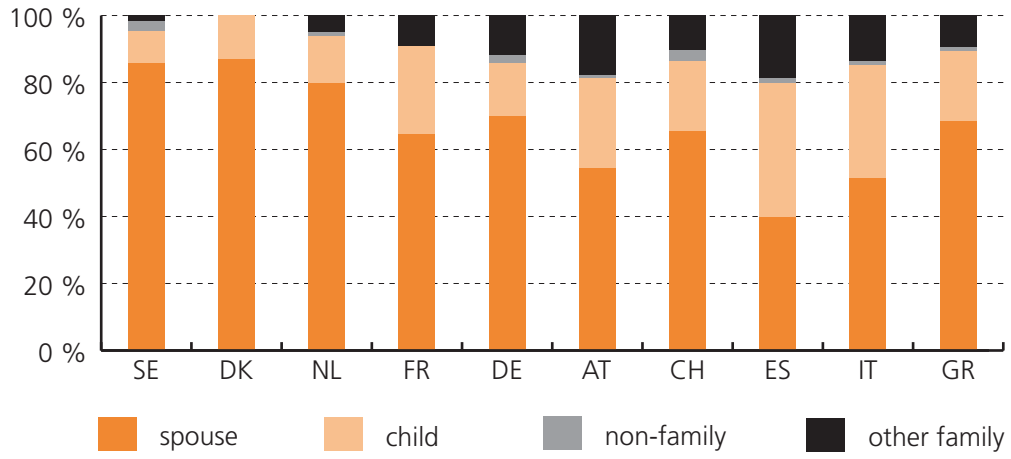

Figure 4 Network of people who help with personal care within the household

an important question for social policy, as the heat wave that affected the lives of many older people living alone in France during the summer of 2003 clearly demonstrated. The SHARE data show that considering all forms of help, older people living alone are more likely to receive help than those living with others. For example, one-third of the respondents living alone received help with personal care or practical tasks during the past 12 months, although these rates were significantly lower in Spain, Italy and Switzerland (but interestingly, not in Greece). It would seem that the strong dimension of family support that is manifest in Spain and Italy is weakened when older people are living alone and that these two countries may not have the infrastructure in place that facilitates solo living in old age. This finding supports the 'complementarity' thesis, whereby a mixture of public, voluntary and other forms of civic support does not erode family support (Kunemund and Rein 1999). Instead, family members are 'freed' from the more arduous tasks of intensive personal care (undertaken by professional services) and are able to devote more time to other family relationships (Daatland and Herlofson 2003). Living alone in countries where service levels are low appears to be a more risky living arrangement than in the northern and continental countries (with the exception of Switzerland). The question of whether older Europeans living alone are isolated from their family or more generally socially excluded is an important social policy question that can be addressed by further analysis of

the SHARE data on intergenerational transfers.

Further evidence of the impact of living arrangements on social support is shown in Figure 5. Here, sources of help outside the household that are non-family are presented for respondents living alone. The SHARE data show that although in all countries the main source of support are children, this is supplemented in the northern countries by non-family sources of support including an array of professional services as well as friends and neighbours. Moreover, older people in the northern European countries (whether living alone or not) are more likely to have received help from someone outside the household (including professional services) than in the southern countries. However, support in the northern countries to older people living alone is more likely to be provided occasionally rather than frequently. These inter-country differences clearly reflect a mix of cultural and institutional differences as well as pointing to the importance of social networks for older people living alone.

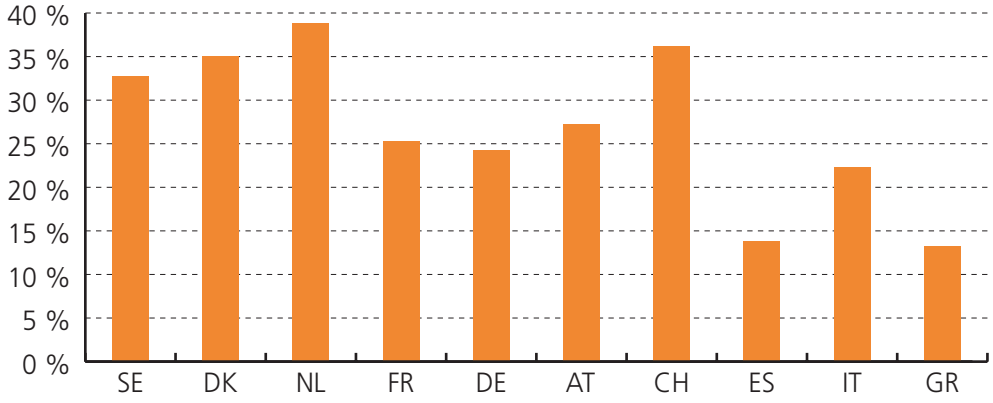

Figure 5 Proportion of respondents living alone who receive non-family help with personal care of practical tasks

Giving Help Decreases with Age, but Care-Giving Remains Constant

The final question addressed in this contribution is the flip side of receiving care—care-giving. With increased life expectancy, the probability that adult children will encounter a time when their elderly parents need help is also increasing. However, this moment may arise when individuals have a number of competing obligations, such helping their own children to achieve independence, looking after grandchildren and for many European women doing some form of paid work. About one in ten respondents indicate that they have given some form of personal care to a family member during the past 12 months and about one in three respondents have given some form of help (personal care within or outside the household, practical help outside the household) during the past 12 months. Figure 6 shows that while rates of giving general forms of help and personal care to a parent decrease significantly with increasing age, levels of giving personal care remain constant with age—between the age of 50 and 65 individuals are involved in personal care mainly with their elderly parents, and thereafter with their spouses. Figure 6 also shows that between the ages of 50 and 65, individuals face a particularly busy time as far as family support is concerned.

The Pivot Generation Is More Prominent in Northern Countries

The pressures that care-givers below statutory retirement face with competing demands from different family members is commonly invoked as being the burden of the baby-

boomer generation. For the first time, the SHARE data is able to determine precisely in a European context what several commentators have referred to as the 'sandwich' or 'pivot' (Attias-Donfut 1995) generation. This generation is commonly defined in demographic terms as being situated between an ascending generation (elderly parents) and descending

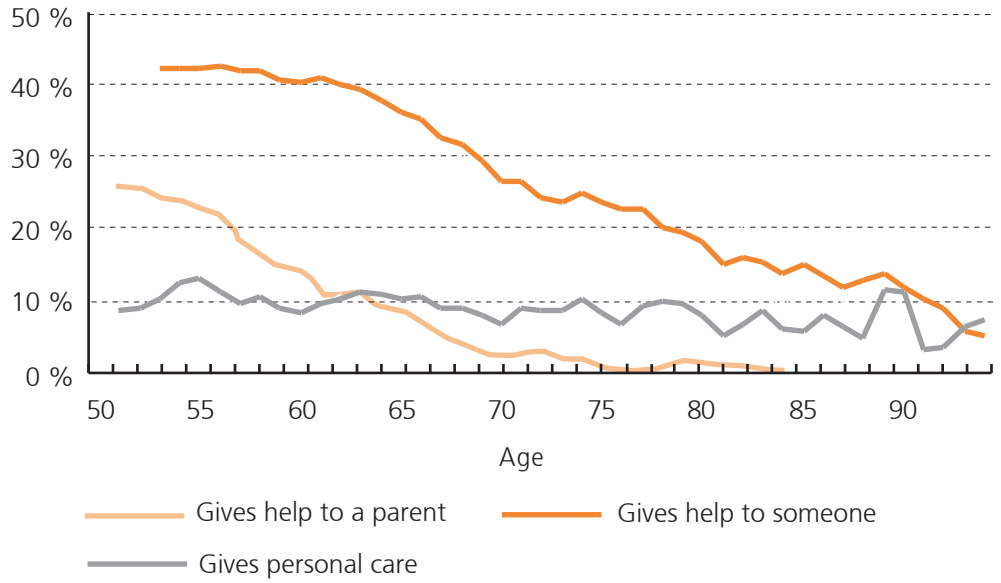

Figure 6 *Percentage of respondents who give help*

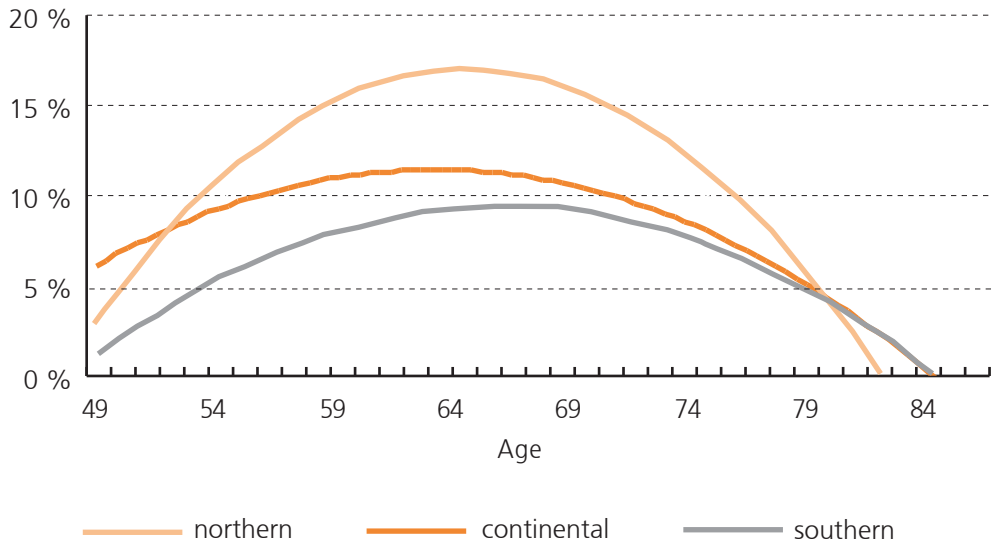

Figure 7 *The 'pivot' generation by age and country groups*

generations (adult children and grandchildren). More accurately, the 'pivot' generation represents those individuals who are undertaking tasks for their elderly parents as well as helping their adult children in the early stages of their family life—notably with looking after grandchildren. The pivot generation is numerically very high at the present time and this has given rise to concerns about their ability to combine multiple family tasks whilst at the same time staying longer in the labour-market.

The SHARE data show that despite the relative high numbers of individuals belonging to the pivot generation (having at least one parent and one adult child alive) about one in

five individuals belong to what we term the 'active' pivot generation—the time in the life stage when both elderly parents and adult children need support. This is evident in Figure 7, which shows the rates of individuals who report having given some form of help to a parent during the past 12 months and who look after grandchildren at least weekly. The data have been grouped by countries to show both different rates of the existence of the active pivot generation and the age at which individuals are most likely to belong to it. Individuals in the northern countries are more likely to be active pivot family members than in other countries, and this difference is in part due to the fertility and mortality characteristics of the specific birth cohorts within countries. But in all countries, individuals in their sixties are most likely to be active pivot family members, with a slight tendency for this to arise in the early sixties in continental countries, mid-sixties in the northern countries and late sixties in the Mediterranean countries.

The finding that the active pivot generation is situated in age groups that are traditionally associated with statutory retirement has important social policy implications. Do these individuals exercise choice in becoming more involved in these family activities when they retire or do the demands made upon them by family members in need coincide with the cessation of paid work? By examining in detail the interaction between these factors—unpaid work within the family, the health and disability status of elderly parents and retirement decisions among care-givers—the longitudinal dimension of the SHARE data will throw important light on how comprehensive social policies can enable family members to combine private and public lives.

Conclusion

In all the European countries in SHARE, older people are at the centre of a complex exchange network within the family where they both give and receive support. Roles change over the life course. For instance between the age of 50 and 65 individuals are involved in personal care mainly with their elderly parents, and thereafter with their spouses. But in all countries, individuals in their sixties are most likely to be active pivot family members. However patterns of support differ between countries, revealing a strong North/South European divide: a higher proportion of older people are involved in family support in the northern and continental countries, whereas in the southern countries help and support tends to be confined to a few individuals within the immediate family who are more intensely involved as either the givers or receivers of care. As a consequence, older people living alone are more likely to be given support in the northern countries. These country differences can be explained by three main factors:

- In the southern countries, rates of cohabitation and the geographical closeness between older parents and their adult children is much higher than in other countries. So family support is focussed around this immediate kin group. In the northern countries, where intergenerational cohabitation is rare, family support tends to revolve around different households.

- Few women aged between 50 and 65 in 2004 in the southern countries are in paid employment, so they are currently available to undertake heavy family tasks.

- The 'welfare mix' of services, much more developed in northern countries, releases family members from the heavy duties of family support for close kin (such as personal

care of a parent or looking after grandchildren). Older people therefore have more opportunity to devote their time to other types of social contact that are less arduous but arguably equally important for intergenerational solidarity. Families are therefore not weakened if other sources take on some of the roles of caring. This is an important finding that is made possible only by comparable data such as in SHARE. Further work in this area will be able to address some of the key policy implications concerning the mix of welfare services within countries.

These explanations need to be tested against the evidence from longitudinal data. Will family support, both by and for older people, continue to evolve in the same way as we have outlined in this contribution? How does caring evolve in the life course of individuals and changing family structures? What kinds of events may alter patterns of family support? And perhaps most important of all, how does reciprocity—the key to all systems of family support—operate under conditions of rapid social and demographic change? The first wave of SHARE data provides the building blocks to begin these analyses and future waves will provide critical insights into this important aspect of ageing.

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4.3 Financial Transfers

Claudine Attias-Donfut, Jim Ogg, and François-Charles Wolff

Introduction

Current debates on the growing numbers of older people sometimes portray this demographic trend as a financial burden for society. Older people are seen as a drain on resources, particularly in terms of state pensions and health care. But this negative perception ignores the role that older people have in helping their children through difficult financial periods or the potential for the downward transfer of wealth within families. Previous research has shown the importance of financial intergenerational transfers within the family and their consequences for capital accumulation and wealth inequality (Arrondel and Masson 2001). This research has begun to show that the bulk of private money transfers between the generations occurs inter vivos—in other words from living family members and not in the form of inheritance wealth. Determining whether older Europeans give and/or receive financial help from their family and social network is therefore a central task for designing social policy that promote intergenerational solidarity (Bengtson and Achenbaum 1993).

In the previous contribution, it was shown that practical help can take many forms. The same is true for financial transfers by older Europeans. Such transfers can be made directly by cash or in the form of gifts and in these cases the value of the transfer can be ascertained or estimated. In other cases, financial transfers are indirect with the donors often paying a third party on behalf of the recipient (an example would be a parent paying for the university fees of a child, or an adult child paying for the residential care fees of an elderly parent). The SHARE survey is designed to capture both of these types of financial transfers. In this contribution we focus on financial transfers that have occurred during the past 12 months. SHARE respondents were asked 'Not counting any shared housing or shared food, have you or your husband/wife/partner given or received any financial or material gift or support to any person inside or outside this household amounting to 250 euros or more?' The interviewer was given instructions to include the giving and receiving of money, material gifts and indirect transfers such as payments for medical care or insurance, schooling or a down payment for a home (loans were not included). For each transfer, the respondent provided information about the donor and recipient, the value, and the motive.

Patterns of financial family transfers are characterised by their direction (who gives to whom, and who receives from whom), their amount and their motives. We first compare the direction of transfers across countries, then examine the motives according to the direction of transfers. Finally, we examine differences in the value of the transfers by taking into account both the direction and motives.

Financial Transfers Flow Mainly from Parents to Children

Figure 1 shows that about 28% of the SHARE respondents reported having given a financial or material gift worth €250 or more within the last 12 months to their family or other members of their social network (ranging from 11% in Spain to 37% in Sweden). Older Europeans were much less likely to receive a financial gift than to give one. In all countries, rates decreased significantly with increased age. On average, only 6% received money (ranging from 3% in the Netherlands to 12% in Greece). Although these rates of financial transfers at first sight appear to be rather low, it should be remembered that the threshold of €250 excludes multiple transfers of lesser sums whilst at the same time capturing more important transfers.

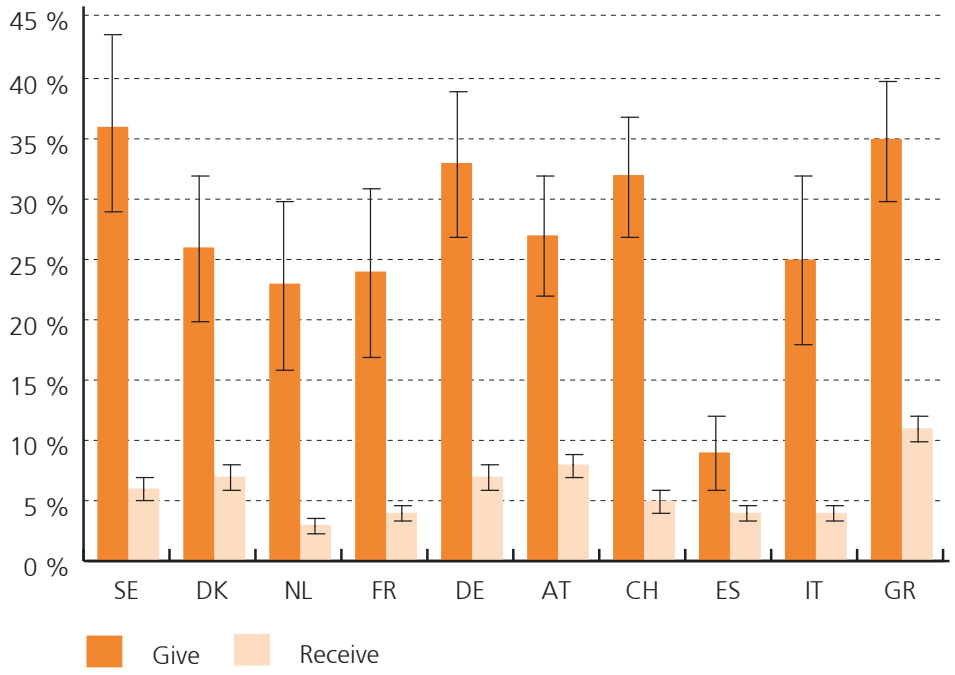

Figure 1 Percentage of respondents who have given or received €250 during the past 12 months

At first glance, it is not easy to interpret these differences. They do not follow a specific pattern, such as a grouping of different systems of welfare (social democratic, liberal or family-corporate) or a geographical north-continental-Mediterranean divide reflecting different cultures. Greek respondents were just as likely to give a gift as Swedish respondents, and more likely to give a gift than Swiss or German respondents, while rates of financial transfers were particularly low in Spain. Danish respondents were much less likely to have given financial support than their Swedish neighbours. The general trend therefore, is that older Europeans are much more likely to give financial gifts than receive them, and that financial transfers are predominantly directed to descending generations—children and grandchildren. This pattern applies to all the SHARE countries, with some differences appearing only in the likelihood of giving and receiving and the amount.

Although country differences in the rates of giving and receiving a financial or material gift do not follow any clear pattern, important North/South divides are found in the composition of the donors and recipients. Figure 2 shows the clear trend in all countries of downward flowing transfers, where children (and to a lesser extent grandchildren) are the main recipients. The age at which older Europeans are most likely to make a financial transfer is around 60, with rates decreasing steadily thereafter. But with increasing age, older Europeans are more likely to make financial transfers to their grandchildren—around 8% of the recipients of transfers made by respondents below the age of 75 are grandchildren compared to 28% when the respondent is aged above 75.

When older Europeans give important gifts, children and grandchildren are therefore the main beneficiaries. But when older Europeans receive gifts, the network of donors is more diverse, as can be seen in Figure 3. On the one hand, in the Mediterranean countries, and especially in Spain and Italy, children are much more likely to make a financial transfer to a parent than in the continental and northern countries. On the other hand, parents are important donors in these latter countries. These differences clearly reflect demographic and institutional influences at work. SHARE respondents in the northern countries are more likely to have a parent alive than in the Mediterranean countries. At

the same time, in countries with developed pensions systems and high per capita wealth, SHARE respondents are more likely to receive a gift from a parent who benefits from a high pension (mostly built up during the periods of full employment immediately after the Second World War). In southern countries, where there are more people with a low level of pensions, financial help from their children is an important family transfer.

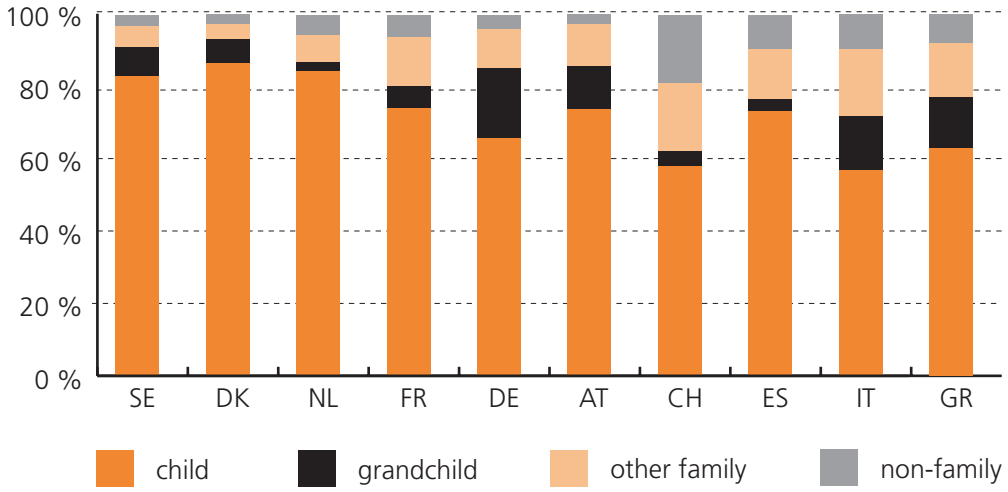

Figure 2 Network of recipients of financial transfers (to whom do older respondents give €250 or more?)

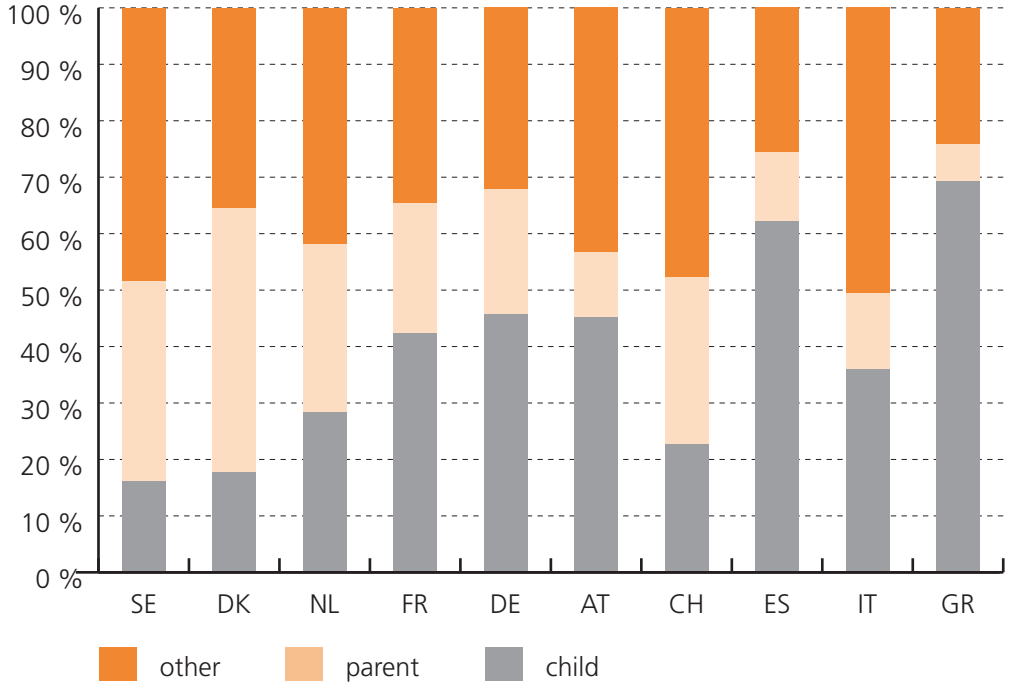

Figure 3 Network of donors of financial transfers (who gives to respondents?)

Motives and Determinants for Financial Transfers

Most donors of financial gifts tended to report general motives for having made a gift, such as meeting basic needs, a major family event or for no particular reason. However, the motives differed according to who received the gift. On the one hand, when the recipients were parents or non-family members such as friends and acquaintances, financial gifts

seem to be made for basic needs, suggesting that the income and wealth of these recipients is low. On the other hand, when older Europeans made a gift to a child or grandchild, the range of motives was much more diverse and included reasons such as 'for study', 'housing' or 'a large item or expenditure'. These reasons have less to do with poverty than promoting human capital and economic investment (in this case the life chances of descendants). However, whether older Europeans make a gift because someone is in need or to promote their life chances, it is likely that the gift is made in the context of a reciprocal and symbolic pattern of exchange among close family members who have strong affective ties. This central question of the reciprocity of family gifts will form a key part of future analyses of the SHARE data.

Since family financial transfers flow mostly from parents to children, we now focus on some of the characteristics of both the parents (respondents) and their children in order to explain these transfers. Several explanations have been suggested concerning the motives for such transfers, and this issue has important implications for the effectiveness of public transfers. The two main models are altruism and exchange. According to the altruistic explanation, the donor cares primarily about the well-being of the recipient. Thus transfers flow from the least to the most financially needy generation independent of any present or future reciprocating help. In the exchange model, financial transfers from one generation reflect the payment of services and visits provided by the other generation. Services and their financial counterpart are embedded in current or future obligations of reciprocity. Recent theoretical studies have reached different conclusions concerning these two hypotheses and at the present time, it is not clear whether family motives are driven by altruism or exchange.

The analyses are made both on aggregate data and for each country. To summarise the preliminary results, parents seem motivated to give money to their children for two reasons, although elements of both are present in each type of transfer. The first one deals with human capital considerations. Children who are helped financially by their parents appear to be following further education and therefore not to have attained financial independence. They are helped on the road to independence, no doubt by the expectations of their parents who want to see their children succeed. This is confirmed by the evidence that parents are more likely to give money to children who live far away from them than to children who live nearby. This finding is not in line with exchange explanations for the motives of transfers, which presupposes that children living close to their parents are more likely to receive money. On the one hand, geographic proximity strongly reduces the cost of providing time-related resources and services to parents (the 'exchange' service for the money received). On the other hand, the finding that higher proportions of more distant children received money from their parents could be explained by the parent's wish to further the chances of their children—for instance, parents who pay for the rent or home for an adult child who has recently completed higher education.

The second reason concerns more altruistic transfers, directed towards less well off children such as those who are unemployed. At the same time, these same parents may also be motivated in helping their children to get established in a career and adult independence. These two primary motivations to financially help children exist in all SHARE countries. However, there appears to be a greater emphasis on human capital investment in Nordic countries. There is also a larger gender difference in the Netherlands, with daughters receiving preferential treatment. The same tendency exists in other countries, but without statistical significance. This is most likely to be related to country differences

in the higher education and labour market participation rates of women, as well as parental commitment to help change the traditional role of women.

Value of Gifts Given and Received

The amount of inter-vivos gifts is strongly correlated with the identity of the recipients. Financial transfers are not only infrequently made to elderly parents, they also have a lower value. As we have seen above, children are the most likely recipients of gifts, and the mean value per child is about 50 per cent higher than for a parent. In fact, the greater the generational distance, the lower the value of the transfer, since respondents tend to give their grandchildren gifts of low value. Respondents who are grandparents would certainly think that the financial responsibility of the youngest generation (their grandchildren) should be born by the parents of these grandchildren, and therefore it is possible that gifts made by respondents to their children (where these children are themselves parents) are also indirect gifts to grandchildren. Where respondents give gifts to other family members, the values are about the same as those gifts given to non-family members.

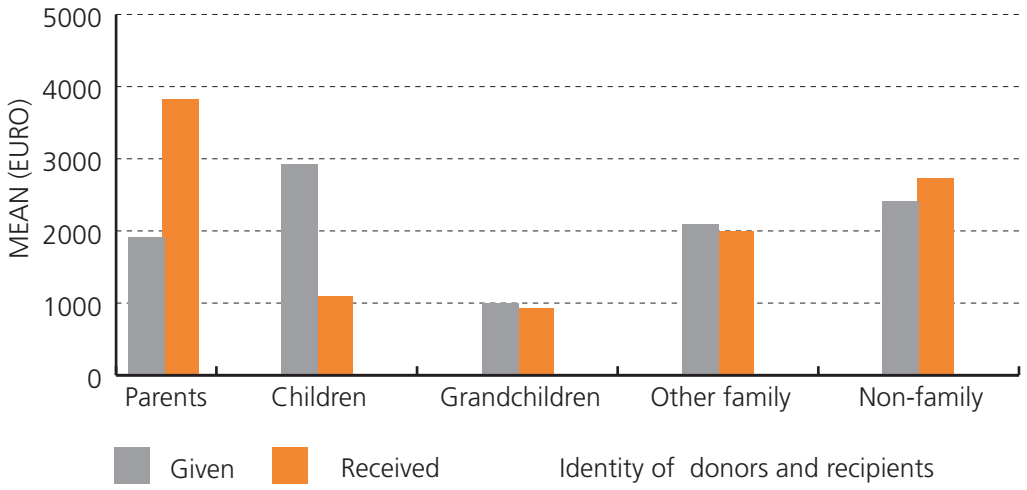

Figure 4 Network of donors and recipients of financial transfers (who gives to respondents and who receives from respondents?)

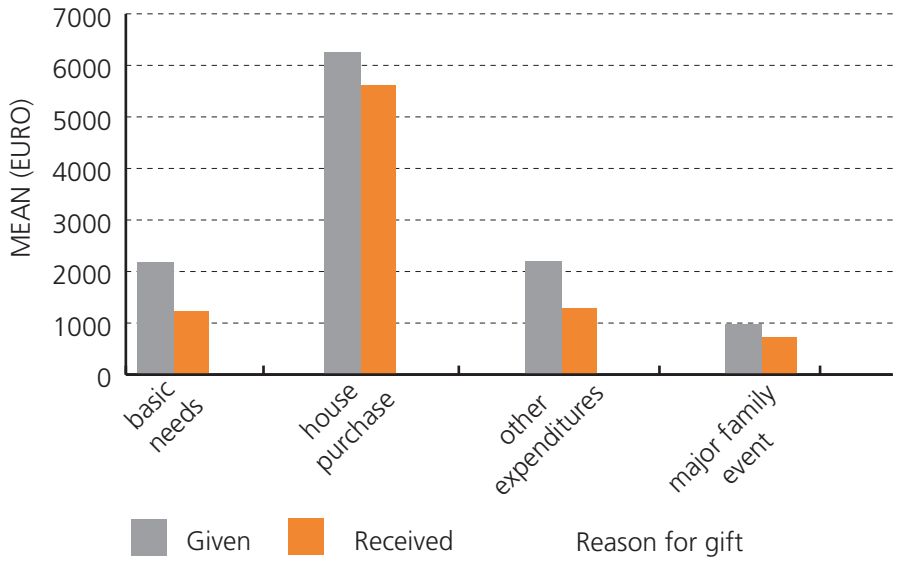

Figure 5 Motives for financial transfers (who gives to respondents and who receives from respondents?)

The value of gifts given by respondents is also correlated with the living standards of the recipients. Low transfers amount are directed towards less well-off recipients, either to meet basic needs or because they are unemployed. Gifts made for family events also have a low value. Conversely, transfers related to investment in human capital are significantly higher than those for basic needs—for example well off parents are more likely to make a gift to their children for educational purposes. A similar finding is observed for transfers related to the purchase of a dwelling. Buying a house requires much more resources for the buyers, and respondents therefore tend to make larger gifts.

Conclusion

European data on family financial transfers before SHARE are almost exclusively from single country surveys and it has not been clear to what extent they reflect particularities of the social and economic context or are aspects of institutional structures such as taxation. For the first time, the SHARE data provide simultaneous information on inter-vivos transfers from countries with very different taxation and financial market structures. This enables transfer patterns to be seen that are either specific to some countries or general to most countries. Among the major findings of this contribution are:

- Confirmation that intergenerational transfers clearly flow downwards. This is undoubtedly due to the fact that all countries have in place minimum systems of retirement pensions. Older Europeans are for the most part financially independent and so they are able to pass on some of their wealth to their children and grandchildren.

- Older Europeans are most likely to make financial transfers around the age of 60 and when they are making the transition to retirement.

- Older Europeans give mainly to their children, but, with increasing age they give more to grandchildren.

- The North/South country variation exists in the composition of the networks of recipients : younger respondents receive more from parents in the North, older respondents recipients from children in the South. This means that differences in the levels of welfare systems still influence the direction of transfers, older needy people in the weak welfare regime being still partially at the charge of the children. Moreover, older people with great financial difficulties receive a little more often and larger amounts of money, but except in this difficult situation, they receive smaller amounts on average than the younger who receive from their parents. Cash gifts from parents to their children are mainly directed towards children who are currently completing their education and to a lesser extent to those who are unemployed. This suggests that there is some intergenerational redistribution of resources within the family.

Longitudinal data will help especially to look for the consequences of the transfers in different respects (inequality, social mobility, consumption levels, etc.) They also will capture the interplay between private and public transfers. Current changes in welfare policy both create and respond to new patterns of family solidarity. By following the impact of new welfare measures and pension system reforms in specific countries, the continuation of the SHARE data would enable accurate empirical tools to be developed to address the

important question of the complementarity or substitution of family support with public and other forms of help external to the family (Attias-Donfut and Wolff 2000). The current SHARE data allow a glimpse of these complex processes, but the full story can only be told by following the course of individuals and their families over time as they interact with the rapid social change of European societies.

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4.4 Gifts, Inheritances and Bequest Expectations

Hendrik Jürges

Introduction

This contribution describes the prevalence of inheritances and bequests and their role in asset accumulation among Europe's elderly. The SHARE data is the first data set that allows to characterise and compare inheritances and bequests across Europe. Most people receive bequests from parents and other relatives when they are between 45 and 64, i.e. in the years before they leave the labour market (see Table 4A.1 in the Appendix to this chapter). For those who inherit, intergenerational transfers are potentially a major economic resource during retirement. However, this very fact raises concerns and makes bequests and inheritances an important issue for public policy. First, bequests raise concerns about wealth inequality and intergenerational wealth mobility. If bequests are distributed unequally and predominantly benefit households who are already wealthy, bequests, they tend to increase the society's economic inequality. Large gifts and bequests also raise efficiency concerns because non-labour income will affect individual labour supply decisions. Again, if the wealth receive the largest transfers, it is also likely that more productive individuals retire relatively early.

It is shown that on aggregate, private transfers play a significant role in wealth formation. About one third of all SHARE households have reported to have received gifts or inheritances worth more than €5,000 at least once (often in the form of housing), mostly from parents and parents-in-law, but also from aunts and uncles. Again, we find considerable differences in the prevalence and distribution of inheritances across SHARE countries. Future analyses of our data will link these differences to cross-national differences in inheritance and bequest laws and taxation to study the effect of different policies on the intergenerational transmission of wealth.

The contribution also describes expectations concerning future inheritances and bequests and their relation to current household wealth. Many households, particularly among the wealthy, expect to leave sizeable bequests to their heirs. Wealthy individuals have also higher expectation of (further) inheritances.

Types and Amounts of Gifts and Inheritances

SHARE respondents were asked whether they (or their spouses) ever received an inheritance worth more than €5,000, in the form of money, goods, or property. Since large gifts and bequest can often serve as substitutes (Poterba 2001), we also asked them to include large gifts (exceeding €5,000). For each such gift or bequest, we asked in which year it was received and what it was worth at that time. This information is used to calculate the present value of all large gifts and inheritances (using country-specific nominal interest rates). A sizeable percentage of respondents did not report owner-occupied housing that was inherited or received as a gift in this question. In these cases I added the amount that the respondents thought they would get if they sold their house or apartment to the present value of other reported inheritances.

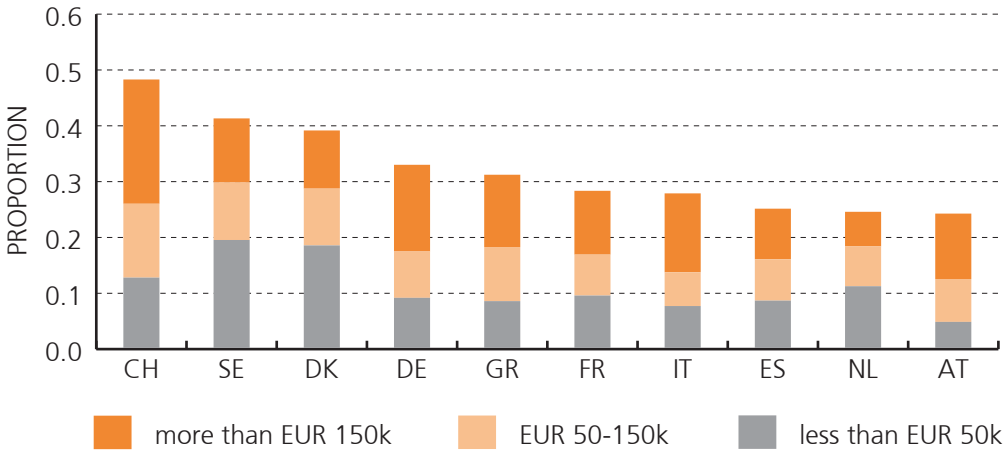

Figure 1 Distribution of received gifts and inheritances, by country

Figure 1 shows the distribution of gifts and inheritances by SHARE country (the numbers illustrated in the figures are also shown in Tables 4A.4 to 4A.7 in the Appendix). country (the numbers illustrated in the figures are also shown in Tables 4A.4 to 4A.7 in the Appendix). The overall prevalence of gifts and inheritances is 30.6%, i.e. a little less than one third of all households have ever received such a transfer. Switzerland is the country with the largest prevalence (48.1%), followed by Sweden, and Denmark (about 40%). Spain, the Netherlands, and Austria are the countries with the lowest prevalence (below 25%). The distribution of transfer amounts varies much across SHARE countries. Small inheritances (between €5,000 and €50,000) are predominant in Sweden and Denmark. About one fifth of all households have received such small inheritances, and only about 10% have received inheritances larger than €150,000. Although the prevalence of inheritances is high in both countries, the average amount is thus comparatively small. Large inheritances are predominantly found in Switzerland, Germany, and also Italy. Overall inequality in inherited amounts is largest in Greece, where the top 10% of households received 90.5% of all inheritances, and smallest in Switzerland, where the top 10% received 71.4% of all inheritances (see Table 4A.2 in the Appendix).

One can think of at least two important reasons for large cross-national differences in bequests. The first reason might be cross-national differences in gifts and inheritance taxes, which affect actual behaviour and possibly also what respondents are willing to report in a survey interview. Allowances and tax rates vary greatly across Europe. For instance, in Austria, the allowance for a direct heir is €2,200, while it is €46,000 in France and €205,000 in Germany. Effective average tax rates for a „typical" wealth portfolio worth €340,000 (including housing) passed on to a child are highest in Sweden (21.5%) and lowest in Germany (0.3%, see Scheffler & Spengel 2004).

The second reason for large cross-national differences in bequest amounts might be cross-national differences in the bequest of property. The proportion of households who live in housing that is either inherited or purchased with the help of the family is much higher in Southern and Western European countries than in the Netherlands or the Scandinavian countries (see Contribution 2.3 in this volume). Because owner-occupied housing is the largest part of total household wealth (see Contribution 6.3 in this volume), inheritance of housing also constitutes an important part of private transfers received.

We also asked the respondents who gave them a large gift or from whom households

have inherited. Expectedly, a large proportion of gifts and inheritances was received from the parents and parents-in-law, respectively (84.2%). Parents' siblings are the next largest group of donors, accounting for 8.2% of all large gifts and inheritances. Other relatives, including own siblings, grandparents and children account for about 5.8%, and non-relatives for about 1.8% of all gifts and inheritances.

The Contribution of Gifts and Inheritances to Total Wealth

How much of total household wealth is inherited and how much is saved from earned income (life-cycle wealth)? Much of the available evidence, based on the decomposition of micro-data on household wealth into inherited wealth and life-cycle wealth, comes from the U.S. (see Davies and Shorrocks 2000, for an overview). Evidence from other countries can thus prove to be particularly interesting. However, due to space constraints, we will only give a broad indication. Since our data allows to sum up past inheritances, we are able to decompose total household wealth in two parts: the sum of past life-cycle saving and the sum of past (capitalised) inheritances. However, the figures presented below must be interpreted with some care. As in other studies, inheritances and gifts are likely to be under-reported, so that the reported ratio of inherited to total wealth is probably just some lower bound.

Figure 2 shows the mean present value of all inheritances and the mean total wealth by wealth quintile (all countries pooled). The poorest 20% of all households (i.e. those in the first wealth quintile) hold an average wealth of €4,100 but have received an average inheritance of €21,800. Thus it seems as if the poorest households have used their inheritances mostly for consumption. In the other four wealth groups, average total wealth is larger than average inherited wealth, i.e. the households must hold at least some life-cycle wealth. The ratio of average inherited to average total wealth drops from 93.8% in the second quintile to 30.5% in the fifth quintile. Although the richest households are those who also receive the largest inheritances (the average is €200,000), a major part of their wealth appears to be saved from earned income.

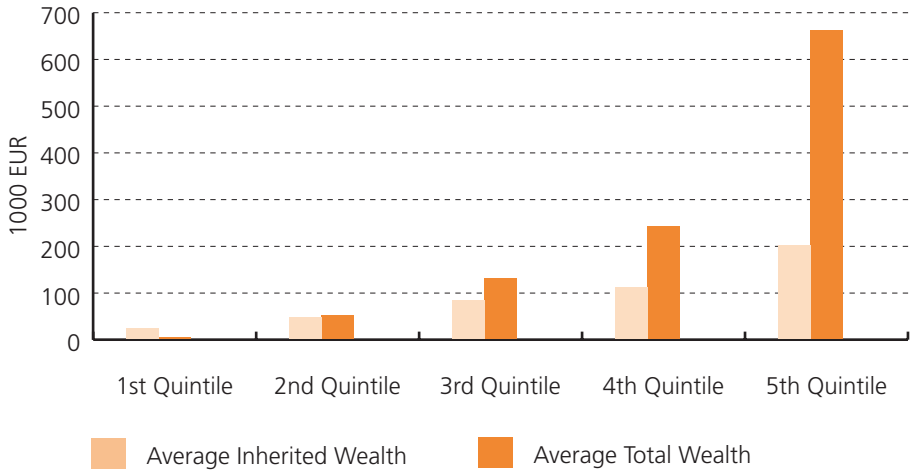

Figure 2 Average inherited and total wealth, by total wealth quintile

Inheritance and Bequest Expectations

Although a sizeable proportion of all SHARE households has already received a large gift or inheritance, particularly younger respondents whose parents are still alive will expect to receive (further) inheritances in the future. To learn about the respondents expectations of future transfers, we asked for the chances of receiving any (further) inheritances within the next 10 years. Figure 3 shows the proportion of respondents who say that there is at least a 50% chance of receiving any inheritance and an inheritance worth more than €50,000, respectively, by household wealth. Percentages are shown separately for those who never inherited and those who have inherited at least once. The sample was restricted to respondents with at least one living parent or parent-in-law. Inheritance expectations among respondents without living parents are generally much lower than those shown in Figure 3.

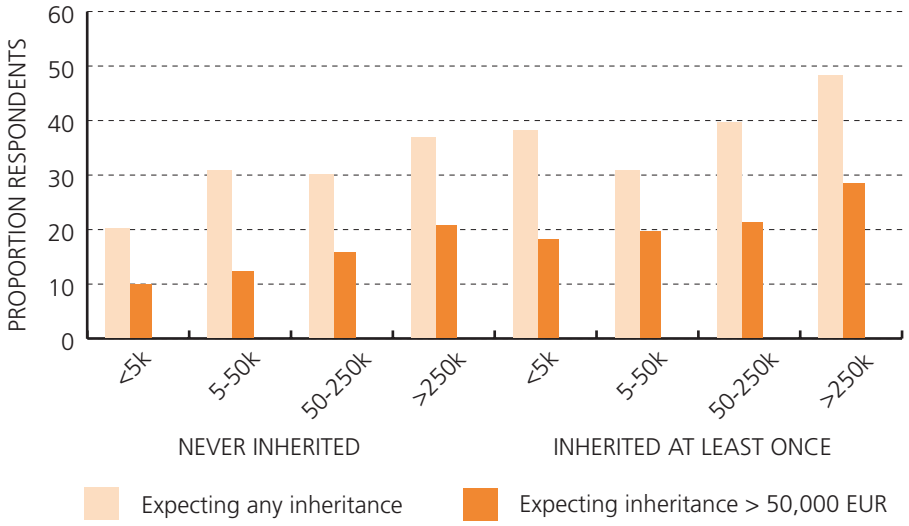

Figure 3 Inheritance expectations, by household wealth (includes only respondents with at least one living parent or parent-in-law)

Figure 3 illustrates two noteworthy points. First, there is a clear positive relationship between current household wealth and reported inheritance expectations. Individuals in wealthy households expect inheritances more often than poor households. Second, individuals in households who have already inherited also have higher expectations of future inheritances. Of those who never inherited and with current wealth of less than €5,000, 20% report a chance of 50% or larger of receiving any inheritance and only 10% report a positive probability of receiving an inheritance worth more than €50,000. Of those respondents who never inherited and with current household wealth larger than €250,000, 27% report a 50% chance or larger of any inheritance and 21% attach such chance to an inheritance larger than €50,000. It is interesting to note that households who already have inherited at least once also have higher expectations of future inheritances. In households who already have inherited, the wealth gradient in expectations continues to exist, but the percentages are 5 to 10 percentage points higher nearly everywhere. The findings in Figure 3 are in accordance with the view that inheritances predominantly benefit those who are already wealthy and they suggest that the intergenerational wealth mobility tends to be low.

Until this point we have looked at households as beneficiaries of large private transfers such as gifts and inheritances. But many households will of eventually become donors

when they leave bequests to their children and other relatives. SHARE respondents were thus asked the chances of leaving an inheritance larger than €50,000 and the chances of leaving an inheritance larger than €150,000. Figure 4 shows the proportion of respondents who say that there is a 100% chance of leaving a €50,000 and €150,000 bequest, respectively, by wealth groups (I had initially separated the sample also by age groups but differences by age were surprisingly small). As expected, the relationship between wealth and leaving bequests is strong. In the poorest subgroup, about 6% of the respondents say that the chances of leaving a bequest of more than €50,000 are 100%, whereas about 57% of respondents in the wealthiest quartile say so. The chances of leaving a €150,000 bequest are considered smaller: 2% in the poorest subgroup and 45% in the wealthiest subgroup say there is a 100% chance.

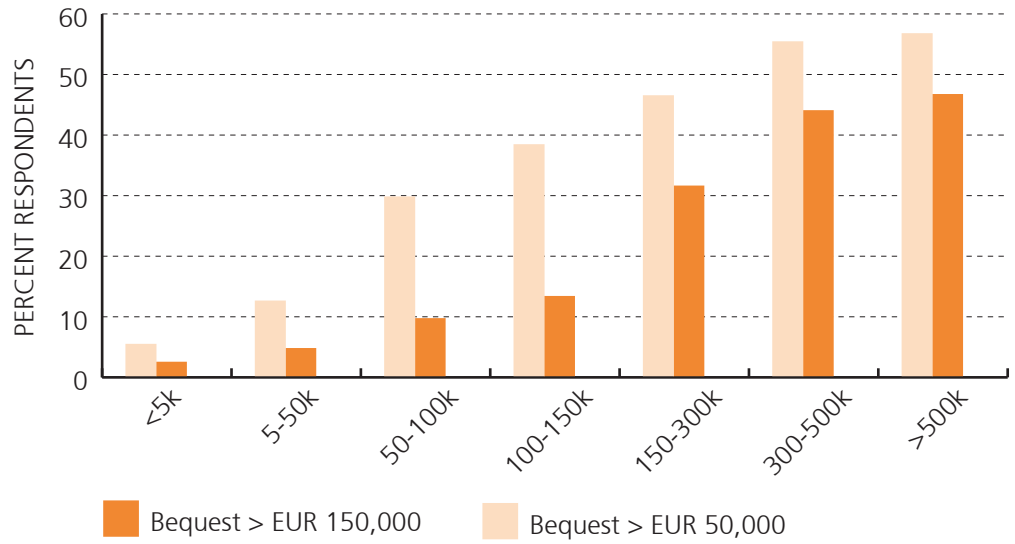

Figure 4 Bequest expectations, by wealth group

Apart from the strong relationship between wealth and bequest expectations, Figure 4 yields some further interesting insights. Note, for instance, that among those in the 50-100k wealth group, about one third is absolutely sure to leave a bequest of €50,000 or more, and among those in the 150-300k wealth group, the same proportion are absolutely sure they will leave a bequest worth more than €150,000. This suggests that—independent of the wealth level—about one third of all individuals expect to leave at least half of their current wealth as a bequest. Moreover, 11% of the respondents are 100% sure to leave as much as their current net worth or more (note those in the 5-50k group who are certain to leave at least 50k and those in the 100-150k group who are certain to leave at least 150k). This could be due either to rather strong bequest motives for saving or to the illiquidity of assets such as owner-occupied housing.

Another finding is that the percentage difference between those expecting to leave a €50,000 bequest and those expecting to leave €150,000 is largest for the middle wealth group, i.e. those whose current net wealth is between the two thresholds. This finding is reassuring as the middle wealth group should in fact be the one that is most affected by the change in threshold values.

Summary

There are two ways to acquire wealth: accumulation of savings from earned income and receiving gifts or bequests. In this contribution we have described the prevalence of intergenerational transfers in SHARE countries and their importance for household wealth formation. The main results are:

- Intergenerational transfers are a major source of household wealth. Across all countries, about 30 percent of all households have ever received a large gift or inheritance larger than €5,000.

- The distribution of inheritances is very unequal. Only one third of all households have ever received an inheritance larger than €5,000. In terms of amounts inherited, the top 5% of households have received about two thirds of all inheritances.

- Wealthier households expect to inherit more than poorer households, which suggest that intergenerational mobility of wealth tends to be low

- Many households expect to bequeath a substantial proportion of their current wealth, which implies that they find themselves either unwilling or unable to liquidate their assets.

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4.5 Quality of Employment and Well-Being

Johannes Siegrist, Olaf von dem Knesebeck, and Morten Wahrendorf

The Policy Challenge

Early retirement from regular employment provides a major challenge to social and health policy in European countries (Brugiavini 2001). As people over 60 years old will comprise up to one third of the population in several European countries in the next two decades, a shrinking number of economically active people will have to support a growing number of economically dependent elderly people. Currently, large variations in workforce participation rates are observed across European countries, e.g. in the age group 55-59. In recent years, this rate has fallen to below 20 per cent in Belgium, Italy, France and the Netherlands, to about 35 per cent in Germany and to 40 per cent in Spain, whereas this percentage is much higher in countries like Switzerland, Norway, Japan and the United States.

Therefore, a major policy challenge consists in increasing the number of regularly employed people at older age by influencing the determinants of early retirement. At least three types of determinants have been identified. First, financial incentives, often in combination with economic pressure from employers, pension schemes with extended eligibility and alternative income options need to be mentioned. National policies vary quite substantially with respect to these regulations. Secondly, poor health, chronic illness and disability are important determinants of early exit from the labour market. This holds particularly true for occupations where working conditions cannot be modified or adjusted to a reduced work ability of employees. Poor quality of work and employment is a third determinant of premature departure from working life. Today, this is not only the case for jobs with high ergonomic exposures and high physical work load. Rather, stressful working conditions, e.g. in terms of high work pressure, monotonous jobs, poor incentives and elevated job instability influence employees‘ decision to depart from jobs as early as they can (Mein et al. 2000).

Importantly, these stressful working conditions also contribute to poor health and to the development of chronic illness, i.e. to conditions that in turn influence early retirement (Ostry et al. 2003, Schnall et al. 2000). Thus, poor quality of employment exerts both direct and indirect effects on premature retirement. Given its importance, quality of work and employment seems to be a prominent target of policy interventions as its improvement may result in increased work ability and longer maintenance of regular employment.

Although poor quality of work has been monitored across Europe in a previous panel survey (Paoli and Merllié 2001) no investigation has yet compared this topic in terms of two major theoretical concepts of health-related stressful employment, the demand-control model (Karasek et al. 1998), and the effort-reward imbalance model (Siegrist et al. 2004). The former model identifies stressful work by job task profiles characterised by high demand in combination with low control (low decision latitude), whereas the latter model claims that an imbalance between high efforts spent and low rewards received in turn (money, esteem, career prospects, job security) adversely affects health. Moreover, no comparative data so far exist on associations between stressful work and the health. In both instances, the SHARE investigation is the first one to explore these topics at an European level.

In this contribution we therefore present release 0 data from SHARE to answer the following questions:

- What is the prevalence of poor quality of employment – in terms of the two theoretical models – in the ten European countries? Can we observe a specific pattern of distribution, e.g. in terms of a North-South gradient?

- To what extent does poor quality of work vary according to major socio-demographic and socio-economic factors?

- Is poor quality of work and employment associated with reduced well-being, as measured by poor self-rated health and depression?

Quality of Employment Across Europe: The North-South Gradient

To measure health-related stressful work a short battery of items derived from the job content questionnaire measuring the demand-control model (Karasek et al. 1998) and from the questionnaire measuring the effort-reward imbalance model (Siegrist et al. 2004) was included in the SHARE interview. Items were selected on the basis of factor loadings on respective original scales. With regard to the first model, we restricted the measurement to the control dimension as this dimension proofed to be of particularly high predictive power in a number of studies (Karasek et al. 1998, Ostry et al. 2003, Schnall et al. 2000). Low control at work and high effort at work were measured by two items each whereas low reward was measured by five items. In this study, low quality of work in terms of low task control was defined by scoring high on the two respective Likert-scaled items (mean score $>$ 4.5; range 2 to 8), whereas medium quality of work was defined by mean scores ranging from 4.0 to 4.5. Scores below 4.0 indicate a high degree of control at work. For within-countries analyses upper tertiles of scores were calculated for each country separately where low control at work was defined by scores in the upper tertile.

Effort-reward imbalance at work was defined by a ratio of the sum score of ‚effort' items in the nominator and of the adjusted sum score of ‚reward' items in the denominator. Values greater than 1.0 were defined as indicating an imbalance between high effort and low reward, whereas values equal to or lower than 1.0 were defined as indicating a balanced state, i.e. no stressful work experience in terms of this model. Countries with more than 50% of all respondents exhibiting effort-reward imbalance (>1.0) were considered as exposing workers to very poor quality of employment. Similarly, if the percentage ranged between 40 and 50, quality of work was considered to be poor. In countries with a percentage of imbalance ranging from 30 to 40 the quality of work was considered to be medium or fair whereas countries with a prevalence below 30 per cent were considered as exposing people to an overall high quality of work.

The data of this analysis are restricted to the subgroup of the SHARE baseline sample who was still in regular employment or self-employed at the time of the interview (n=6,727). The age range of respondents was 50 to 65.

Figure 1 *Prevalence of low quality of work (percentage effort-reward ratio > 1.0) in ten European countries*

The prevalence of levels of quality of work cross the ten European countries is given in Figures 1 and 2. Figure 1 indicates country-specific levels of quality of work in terms of the effort-reward imbalance model. Very poor quality of employment is present in Greece and in Italy. In Spain, Germany and Austria, overall quality of work is still rather poor, whereas it is fair in France, Denmark and Sweden. Two countries show high overall quality of work, Netherlands and Switzerland.

A similar, although not identical picture emerges from Figure 2 where the core dimension of the demand-control model, task control, is analysed. Lowest overall levels of task control at work are found in Greece and in Spain, a medium or fair level of control is ob-

served in Italy, France, Germany and Austria, and relatively highest prevalence of work-related control is obvious from data in Sweden, Denmark, the Netherlands and Switzerland.

Taken together these two indicators give some evidence of a North-South gradient of quality of employment in Europe with highest quality in northern countries (Denmark, Sweden, Netherlands) and in Switzerland, medium quality in western countries, especially France, Germany and Austria, and poorest quality in Greece, Italy and Spain.

Figure 2 Quality of work in ten European countries (mean score of control at work)

Answers to the second question are given in Tables 4A.17 and 4A.18 (see the Appendix to this chapter) where the prevalence of low quality of work is stratified according to gender, age and socio-economic status (level of education) for each country. With regard to effort-reward imbalance, low quality of work is significantly more prevalent among employees with low education in some, but not all countries (Sweden, Italy, Greece, Spain).

No consistent gender differences are found, and differences between the three age groups (< 55, 55 – 59, ≥ 60) are not consistent either. However, this latter finding may be mainly due to the fact that the oldest group exhibits higher quality of work compared to the two younger groups (significant differences in three countries). This latter observation can be explained by a ‚healthy worker' effect, indicating a higher probability of continued employment up to pension age among people who are employed in more privileged jobs (see Table 4A.17).

When comparing these differences in quality of work with respect to task control, a slightly different situation appears (Table 4A.18). In this case, low education is associated with low quality of employment in a much more consistent way, if compared to the former model. Here, significant differences are found in all ten countries. On the other hand, the ‚healthy worker effect' is less obvious as no significant difference in the expected direction is found. To the contrary, the prevalence of low job control is significantly higher among the oldest group in at least one country (Denmark). With regard to gender, there is a slight tendency of poorer quality of work among women, compared to men (see Table 4A.18).

Given these variations between countries it is unlikely that the overall North-South gradient in quality of work is explained to a substantial degree by the socio-demographic and socio-economic variables under study. Yet, multivariate analyses will give a quantitative estimate of their contribution.

Strong Association Between Quality of Employment and Well-Being

The third question concerns the frequency and strength of associations between quality of employment and well-being, as measured by level of self-rated health and presence/absence of depression. Self-rated health was assessed by a widely used Likert-scaled one item indicator measuring one's overall current state of health. Answers were dichotomised into good health (good or better) and poor health (less than good). The definition of depression was based on a clinically validated score of the EURO-D scale of depression. Again dichotomised information (depression present versus absent) (for details see Contribution 3.5).

As indicated in Tables 4A.19 and 4A.20 (see Appendix to this chapter), strong associations are evident between quality of employment and the two indicators of well-being. For instance, among employed and self-employed people with poor health, a higher percentage is characterised by an imbalance between high effort and low reward, compared to people with good health. This difference is statistically significant in all ten countries. A similar, but somewhat weaker trend is found for low control at work (statistically significant differences in eight countries). With respect to depression, significant differences in the expected direction are observed for both indicators of poor quality of employment in five countries. Largest differences in percentage of low quality of work between those with and without depression (>20%) are evident from Germany, Denmark, Switzerland and France (Tables 4A.19 and 4A.20).

In summary, in a majority of European countries under study significant associations do exist between reported poor quality of employment, as measured by effort-reward imbalance and low work control, and reduced well-being, as measured by poor self-rated health and depression. These results are consistent with an impressive body of empirical findings from single countries where additional statistical adjustments for confounder control were made (for review Marmot and Siegrist 2004). Despite their robustness any interpretation of the current findings must take into account the cross-sectional study design from which

they originate. Both types of measures were based on self-reports and were assessed at one single occasion, the comprehensive SHARE baseline interview. Therefore, it cannot be excluded that part of the reported association is due to ‚common method variance'.

This is one of the strong arguments in favour of conducting a follow-up study of the SHARE sample. A prospective study design would enable us to test a causal association between quality of work at baseline and reduced well-being at follow-up. Moreover, the direct and indirect effects of low quality of employment and poor health on early retirement could be estimated in a follow-up study as substantial number of employees of this age group is expected to retire during a observation period of several years. In view of the policy implications of such findings which would be available for the first time at the European level, a longitudinal analysis of SHARE is considered a high priority task.

Conclusions

In this contribution, release 0 data from the baseline SHARE investigation were used to answer three questions that are relevant for an improved understanding of the reasons of early retirement from work in European countries. First, as poor quality of employment has been found to influence premature departure from working life, it was of interest to know how large the proportion of employed and self-employed people in different countries is that is characterised by low quality of employment. We used two theory-based indicators of quality of employment, the degree of task control and the mismatch between high efforts spent and low rewards received in turn. Substantial variations were found across Europe, with clear indication of a North-South gradient where quality of work was higher in northern and lower in southern European countries. Although it is premature to explain this gradient it might well be that, overall, occupational health and safety standards are more developed and more often applied in northern European countries and that quality of work has become a topic of explicit policy concern more often there.

Secondly, we were interested in knowing to what extent poor quality of employment varies according to major socio-demographic and socio-economic factors across the ten countries under study where gender, age and level of education were explored. In almost all countries low level of education was found to be associated with poor quality of work. Similar findings resulted from analysis based on additional socio-economic indicators, income and occupational position (not reported in detail). Associations with age and gender were less consistent. Although results of multivariate analyses are not yet available it is unlikely that socio-demographic and socio-economic factors can explain the reported North-South gradient in quality of work to a substantial extent.

The third question concerned the link between quality of employment and well-being. Respective evidence is important in view of the direct and indirect effects on early retirement produced by stressful working conditions. In fact, substantial associations were found in a majority of countries for both indicators of reduced well-being, poor self-rated health and depression.

In conclusion, the essential findings are as follows:

- Quality of employment (low control at work, mismatch between high effort and low reward) varies considerably across European countries, with a clear North-South gradient (relatively high in Nordic countries, Switzerland and Netherlands; relatively low in Spain, Italy and Greece).

- Quality of employment is strongly associated with socio-economic status (educational degree) in almost all European countries: better quality of employment goes along with better education.

- Quality of employment is strongly associated with well-being in all European countries: lower quality of employment goes along with higher prevalence of poor self-rated health and depression.

Although further evidence derived from longitudinal data is warranted these first results support the conclusion that policy efforts at country level and at the European level need to be strengthened that aim at improving the quality of employment. This aim can be reached by enlarging the amount of control and autonomy at work and by matching efforts required from working people with rewards provided to them. In this latter case, measures include non-monetary gratifications as well as improved opportunities of job promotion, qualification and job security. Creating a healthy older work force in Europe remains a policy goal of high priority.

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4.6 Quality of Life and Well-Being

Olaf von dem Knesebeck, Martin Hyde, Paul Higgs, Alexandra Kupfer, and Johannes Siegrist

Why Measuring Quality of Life in Early Old Age?

One of the innovations of SHARE is the inclusion of a newly developed measure of quality of life in early old age. This innovation is important because the majority of people living in the so called third age are in good health and capable of participating in a variety of activities. It has been repeated again and again that adding life to years is as important as adding years to life. Thus, a measure is needed that identifies and quantifies those aspects of quality of life in early old age that are specific to a stage in the life course characterised by transition from work to retirement, by an increase of personal freedom and by new options of social participation.

In several studies, quality of life was shown to improve health and to promote active ageing. Yet, the degree of this quality critically depends on people's socio-economic circumstances above and beyond their health status. Poverty, deprivation and chronic social stress go along with poor quality of life, and, thus, reduce the chances of experiencing its beneficial effects (Marmot et al. 2003, Motel-Klingebiel et al. 2004). In this contribution, the following questions are addressed:

- What is the prevalence of the different levels of quality of life in early old age in European countries under study? Can we identify a specific pattern of distribution across countries, e.g. in terms of a North-South gradient?

- How strong is the association between quality of life in early old age on the one hand and socio-demographic and socio-economic conditions on the other hand? In particular, are there differences according to age, education and income? Do these associations vary across countries?

- How strong is the association between quality of life in early old age and health? Does it vary across countries?

Answers to these questions are important because respective information may draw our attention to country-specific or other (socio-economic, health-related) obstacles against successful and sustainable implementation or strategies of active ageing across Europe.

Before answering these questions we explain how quality of life in early old age has been measured. Our approach assumes that quality of life should be assessed as the degree to which human needs are satisfied. In this stage of the life course the following domains of need seem to be particularly relevant: control, autonomy, self-realisation, and pleasure. Control is understood as the ability to actively intervene in one's environment (Patrick et al. 1993). Autonomy is defined as the right of an individual to be free from the unwanted interference of others (Patrick et al. 1993). Self-realisation and pleasure aim to capture the active and reflexive processes of being human (Turner 1995). Following Doyal and Gough (1991), our approach treats these four domains as equal rather than hierarchically organised.

The operationalisation of these concepts was performed in a measurement approach termed CASP-19 (C=control, A=autonomy, S=self-realisation, P=pleasure; and 19 refers to the sum of 19 Likert-scaled items measuring these concepts on uni-dimensional scales).

The measurement approach is described in detail elsewhere (Hyde et al. 2003). In summary, the measure displays satisfying internal consistency of the scales, reasonable intercorrelations and high second order factor loadings.

In response to a request for a quality of life measure for consideration for SHARE an abridged version of the CASP-19 was designed. To do so the statistical analysis used to produce the original scale were replicated. Internal consistency analyses revealed those items with the lowest item whole correlations within each of the domains. By removing the item with the lowest value for the Control domain and the two items with the lowest values for each of the other domains we were able to reduce each of the domains to three items each without too great a loss to their internal reliability (Cronbach's alpha varying from 0.56 to 0.76). A second order factor analysis confirmed quality of life as a single latent factor. The CASP-12 correlated highly with the CASP-19 and the Life Satisfaction Index, a measure of concurrent validity (Blane et al. 1999) which was also included in the original study mentioned above.

CASP-12 has been incorporated in the self-completion questionnaire. Respondents were asked, how often they experience certain feelings and situations on a 4-point scale ranging from 'never' to 'often'. For the total score of CASP-12 values range from 12 to 48, with higher scores indicating better quality of life. These scores are subsequently classified into four levels of quality of life (QL), where 39-41 indicates very high QL, 37-39 high QL, 35-37 moderate QL and values below 35 low QL.

North-South Gradient of Quality of Life

An answer to the first question of whether a specific pattern of distribution of quality of life can be identified is given in Figure 1. As can be seen, quality of life scores are comparatively low in Greece, Italy, and Spain and comparatively high in Switzerland, the Netherlands and Denmark. Differences between countries are highly significant ($p < 0.001$) according to the Kruskal-Wallis Test. Thus, there is evidence of a North-South gradient in degree of quality of life across the European countries under study.

This general pattern is also obvious for the mean scores of the four sub-domains mentioned above. Respective figures are given in Table 4A.21 (see Appendix).

As can be seen in Table 4A.22 (see Appendix), gender differences in quality of life are small in most countries. These differences are significant ($p<0.01$) only in Italy, Spain and Greece. However, consistent age differences are obvious and significant in all countries.

In the SHARE study, we were interested in generational differences of quality of life, in particular in the question of whether these differences between the youngest and the oldest age group of participants follow a specific pattern across Europe. Figure 2 shows that, in fact, these differences are largest in southern European countries (mean difference > 3) and smaller in northern and Central European countries (mean difference < 2). In other words, age is associated differentially with quality of life across Europe, with particularly low levels in the oldest age groups in southern Europe. The North-South gradient is less pronounced in younger old age. It is tempting to interpret this finding with respect to the way of how quality of life has been conceptualised in this study. As mentioned above, a special focus is put on needs of autonomy, self-realisation and control, norms that are in accordance with modernisation and individualisation of life and that may be less frequent among older people in southern countries where traditional ways of life (family and community structures) still prevail.

Figure 1 *Quality of Life (QL) in nine European countries (CASP-12: means)*

Figure 2 *Mean differences in Quality of Life (QL) between youngest and oldest age groups in nine European countries*

Differences According to Socio-Economic and Health Status

In the second question we were not only interested in age differences, but equally so in socio-economic differences in quality of life across Europe. To this end, Table 4A.23 (see Appendix) shows the quality of life mean scores by education and equivalence household income. As can be seen, people with high education (upper secondary or tertiary according to the International Standard Classification ISCED-97) report a better quality of life in most countries compared to those with low education (primary or lower secondary). These differences are statistically significant except for Switzerland. Furthermore, we observe a strong income gradient of quality of life. Differences between the three income groups are significant in all countries.

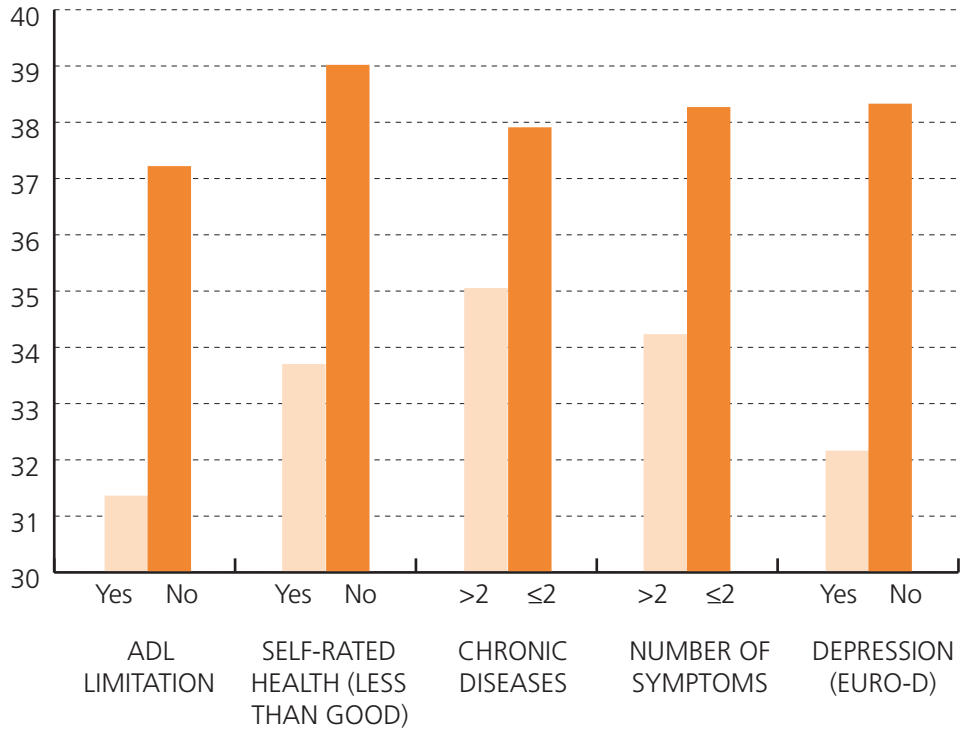

Figure 3 CASP-12 for different health indicators (all countries: means)

To explore the third question, that is the relationship between quality of life and health, the following five indicators of health and well-being were analysed: Limitations in activities of daily living (ADL), self-rated health, number of chronic diseases, number of symptoms, and depression defined according to the EURO-D scale (see Contribution 3.5). Figure 3 shows for every health indicator a significant difference in quality of life: Better health is consistently associated with better quality of life. Importantly, this holds true for all nine countries.

Conclusions

This contribution presents results of a new measure of quality of life in older age based on release 0 data from the baseline SHARE investigation. Although evidence is currently restricted to cross-sectional data several robust findings emerge that are relevant both to science and policy:

- We observe cross national variations in quality of life that are consistent with North-South gradient across Europe (relatively low levels of quality of life in GR, ES and IT; relatively high levels in CH, NE and DK)

- The differences in quality of life between youngest and oldest age groups (lower quality of life with older age) are relatively large in southern European countries.

- Quality of life is consistently associated with socio-economic status (educational degree and income).

- Quality of life is clearly related to indicators of health: better health goes along with better quality of life in all European countries under study.

It will be an important aim to follow the SHARE cohort prospectively in order to test to what extend these associations are causal. This latter evidence will be important to develop and direct measures of active ageing policies across Europe.

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APPENDIX

Tables on Social and Family Context

Table 4A.1 **Age at Receipt of Inheritance, by Country (in percent)**

	Age group							
Country	<25	25-34	35-44	45-54	55-64	65-74	75-89	N
SE	1.84	7.82	17.81	34.19	27.27	7.66	3.40	775
DK	1.94	6.34	14.44	39.84	27.70	8.38	1.38	521
DE	4.79	9.77	18.05	35.12	25.42	5.29	1.57	719
NL	2.92	6.82	22.87	35.73	23.84	5.99	1.82	618
FR	2.00	8.67	13.32	32.62	24.69	15.69	3.00	310
CH	2.10	8.88	16.05	36.06	26.61	7.77	2.53	436
AT	8.30	16.60	20.00	27.92	18.11	7.55	1.51	279
IT	3.13	6.78	24.67	33.39	23.65	7.27	1.10	373
ES	3.54	7.19	27.82	36.63	18.03	4.99	1.81	295
GR	5.78	17.04	28.12	28.42	14.71	5.73	0.20	439

Note: N is the number of inheritances

Table 4A.2 **Percentage of Inherited Amounts of the Top 10%, 5%, and 1% of All Households, by Country**

Country	Top 10%	Top 5%	Top 1%	N
SE	79.4	65.2	32.4	1,423
DK	78.8	62.2	30.9	1,134
DE	73.2	56.6	26.2	1,554
NL	83.4	67.0	28.3	1,465
FR	87.3	72.4	33.1	1,012
CH	71.4	52.0	24.2	705
AT	85.5	70.6	34.5	1,459
IT	83.2	66.3	32.2	1,369
ES	88.7	76.7	39.5	964
GR	90.5	76.3	32.3	1,475

Table 4A.3 **Distribution of Donors, by Country (in percent)**

Country	Parents	Parents' siblings	Other relatives	Non-relatives	N
SE	78.20	11.23	8.56	2.01	775
DK	82.82	7.91	7.54	1.73	521
DE	81.80	9.32	6.27	2.62	719
NL	78.84	12.40	7.06	1.70	618
FR	87.07	6.15	4.84	1.94	310
CH	84.19	7.26	6.47	2.07	436
AT	79.35	8.50	8.50	3.64	279
IT	86.00	8.41	4.90	0.69	373
ES	92.45	3.71	3.83	0.00	295
GR	87.46	6.42	5.13	1.00	439

Note: N is the number of inheritances

Table 4A.4 Distribution of Received Gifts and Inheritances, by Country

Country	€5-€50k	€50-€150k	More than €150k	Any Inheritance >€5k
CH	12.6	13.2	22.3	48.1
SE	19.3	10.3	11.5	41.1
DK	18.4	10.2	10.4	39.0
DE	9.0	8.3	15.5	32.8
GR	8.4	9.7	12.9	31.0
FR	9.4	7.3	11.4	28.1
IT	7.5	6.0	14.1	27.7
ES	8.5	7.4	9.1	24.9
NL	11.0	7.1	6.2	24.4
AT	4.7	7.7	11.7	24.1

Table 4A.5 Average Inherited and Total Wealth, by Total Wealth Quintile

Household wealth quintile	Average Inherited Wealth (in €1,000)	Average Total Wealth (in €1,000)
1st Quintile	21.8	4.1
2nd Quintile	46.6	49.7
3rd Quintile	82.2	130.4
4th Quintile	110.3	240.6
5th Quintile	200.6	660.5

Table 4A.6 Proportion of Respondents with at Least 50% Chance of Receiving an Inheritance, by Household Wealth (only respondents with living parent or parent-in-law)

Total household wealth (in €1,000)	Never inherited		Inherited at least once	
	Expecting any inheritance	Expecting inheritance > €50,000	Expecting any inheritance	Expecting inheritance > €50,000
<5	20.1	9.8	38.1	18.1
5-50	30.8	12.1	30.7	19.6
50-250	30.0	15.8	39.6	21.3
>250	36.7	20.7	48.2	28.3

Table 4A.7 Proportion of Respondents with 100% Chance of Leaving a Bequest, by Household Wealth (only respondents with living parent or parent-in-law)

Total household Wealth (in €1,000)	Proportion of respondents reporting 100% chance of leaving:	
	Bequest > €50,000	Bequest > €150,000
<5	5.4	2.4
5-50	12.5	4.7
50-100	29.7	9.6
100-150	38.3	13.3
150-300	46.4	31.5
300-500	55.3	43.9
>500	56.6	46.6

Table 4A.8 **Marital Status (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Married, living with spouse	65.0	48.8	56.3	63.5	58.1	60.8	72.6	61.2	66.7	67.8	42.5	53.4	49.8	18.0	29.8
Registered partnership	10.1	5.7	7.7	15.6	9.2	12.4	9.8	7.3	8.5	5.2	2.5	3.6	1.4	.0	.5
Married, separated f. spouse	1.2	.5	.8	1.2	.6	.9	.9	.0	.4	1.8	.3	1.0	1.4	1.1	1.2
Never married	7.0	6.8	6.9	8.8	9.0	8.9	5.2	5.2	5.2	5.4	2.7	3.9	5.7	10.3	8.6
Divorced	8.8	14.4	11.8	9.9	19.8	14.9	8.7	13.6	11.2	7.8	11.9	10.1	5.7	8.7	7.6
Widowed	7.8	23.9	16.5	1.0	3.2	2.1	2.9	12.8	8.0	12.1	40.2	28.1	35.9	61.9	52.2
Denmark															
Married, living with spouse	68.2	53.0	60.0	67.7	65.1	66.3	72.2	62.8	67.4	68.0	43.0	54.2	50.8	14.4	26.0
Registered partnership	.3	.4	.4	.4	.8	.6	.4	.0	.2	.0	.0	.0	.0	.0	.0
Married, separated f. spouse	1.7	1.3	1.5	1.0	2.0	1.5	.9	.4	.6	2.6	2.3	2.4	7.5	.0	2.4
Never married	8.4	5.7	7.0	13.3	9.3	11.2	5.2	1.2	3.2	6.6	4.7	5.6	.0	6.5	4.4
Divorced	12.6	14.0	13.3	15.5	16.9	16.2	12.3	17.2	14.8	8.5	8.8	8.6	7.7	7.1	7.3
Widowed	8.8	25.6	17.8	2.1	6.0	4.1	9.0	18.4	13.8	14.3	41.2	29.2	34.0	72.0	59.9
Germany															
Married, living with spouse	73.4	52.7	62.0	71.4	66.7	69.1	74.0	64.5	69.0	76.9	44.4	57.4	73.4	9.8	24.9
Registered partnership	.1	.3	.2	.0	.2	.1	.0	.4	.2	.4	.2	.3	.0	.6	.4
Married, separated f. spouse	1.0	1.6	1.4	1.6	3.5	2.5	1.1	1.4	1.2	.0	.7	.4	.0	.0	.0
Never married	8.7	6.1	7.3	10.9	6.1	8.6	10.1	4.7	7.3	4.3	8.1	6.6	.0	6.1	4.7
Divorced	8.8	9.8	9.3	14.4	15.4	14.9	7.3	9.5	8.5	1.5	6.2	4.3	1.3	3.5	3.0
Widowed	7.9	29.5	19.8	1.7	8.1	4.8	7.5	19.5	13.8	16.8	40.4	31.0	25.4	80.0	67.1
Netherlands															
Married, living with spouse	75.6	55.9	64.9	76.6	71.2	73.8	80.6	62.6	71.3	75.3	42.6	56.7	50.9	21.4	29.8
Registered partnership	3.6	2.6	3.0	6.2	5.2	5.7	2.5	2.0	2.2	.9	.0	.4	.0	.0	.0
Married, separated f. spouse	1.1	1.6	1.4	1.2	.9	1.0	.6	2.3	1.4	.5	2.1	1.4	2.1	1.2	1.4
Never married	6.4	6.8	6.6	8.0	6.8	7.4	5.8	5.3	5.5	3.3	7.5	5.7	5.2	9.3	8.1
Divorced	4.6	7.4	6.1	5.8	9.4	7.6	4.4	9.0	6.8	1.9	5.3	3.8	2.1	1.2	1.4
Widowed	8.8	25.6	18.0	2.3	6.6	4.5	6.1	18.8	12.7	18.1	42.5	31.9	39.7	67.0	59.2

Table 4A.8 (cont.) **Marital Status**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
France															
Married, living with spouse	77.5	56.6	66.1	80.5	68.3	73.9	76.1	64.3	70.0	78.7	50.0	62.8	63.6	18.8	34.6
Registered partnership	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Married, separated f. spouse	1.5	1.0	1.2	.8	1.7	1.3	3.0	.9	1.9	.0	.0	.0	3.6	1.0	1.9
Never married	7.5	7.4	7.4	8.0	8.6	8.3	5.6	5.6	5.6	10.3	5.7	7.8	5.5	9.9	8.3
Divorced	8.4	9.0	8.7	10.3	13.4	12.0	12.2	9.4	10.7	1.9	4.7	3.5	3.6	4.0	3.8
Widowed	5.1	26.1	16.6	.4	7.9	4.4	3.0	19.7	11.7	9.0	39.6	25.9	23.6	66.3	51.3
Switzerland															
Married, living with spouse	76.3	56.6	65.7	76.9	68.1	72.5	82.0	58.0	69.4	73.7	51.0	61.0	64.5	28.6	40.9
Registered partnership	1.5	.4	.9	2.6	.6	1.6	.8	.8	.8	1.1	.0	.5	.0	.0	.0
Married, separated f. spouse	1.9	2.7	2.3	3.5	5.1	4.3	.8	2.2	1.6	.0	1.0	.6	2.6	.0	.9
Never married	6.0	6.0	6.0	7.0	5.4	6.2	4.0	8.0	6.1	6.4	3.0	4.5	5.1	7.1	6.4
Divorced	7.7	10.1	9.0	8.4	14.2	11.3	9.2	9.7	9.5	4.1	8.5	6.6	2.4	1.7	1.9
Widowed	6.5	24.3	16.0	1.6	6.6	4.1	3.2	21.3	12.7	14.7	36.5	26.9	25.4	62.6	49.8
Austria															
Married, living with spouse	75.4	46.0	59.1	75.0	62.9	68.6	81.7	51.3	65.5	71.0	30.4	47.7	52.2	9.6	21.8
Registered partnership	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Married, separated f. spouse	2.1	2.1	2.1	2.2	2.7	2.4	1.9	3.0	2.5	2.5	.4	1.3	.0	.8	.6
Never married	7.5	9.5	8.6	10.9	11.4	11.1	5.9	8.3	7.1	4.9	8.3	6.9	8.7	11.2	10.5
Divorced	6.2	10.5	8.6	9.1	14.1	11.7	5.3	13.0	9.4	3.7	5.4	4.7	2.2	4.0	3.5
Widowed	8.8	31.9	21.6	2.9	9.0	6.1	5.3	24.5	15.5	17.9	55.4	39.5	37.0	74.4	63.6
Italy															
Married, living with spouse	80.8	54.5	66.2	79.6	78.7	79.2	86.2	60.7	71.8	80.4	36.8	55.1	64.4	18.5	32.3
Registered partnership	1.4	.5	.9	1.6	1.7	1.6	1.3	.0	.6	1.0	.0	.4	2.2	.0	.6
Married, separated f. spouse	1.9	1.4	1.6	2.6	3.2	2.9	2.7	1.3	2.0	.1	.0	.0	.0	.0	.0
Never married	5.7	10.7	8.5	8.3	6.6	7.4	5.5	5.4	5.4	3.5	12.2	8.6	.4	29.4	20.7
Divorced	2.1	2.1	2.1	3.1	1.2	2.2	1.7	3.3	2.6	1.3	1.3	1.3	.0	2.9	2.0
Widowed	8.2	30.8	20.8	4.8	8.6	6.7	2.6	29.3	17.6	13.7	49.6	34.5	33.1	49.2	44.4

Table 4A.8 (cont.) **Marital Status**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Spain															
Married, living with spouse	75.8	57.8	65.4	74.7	78.4	76.6	84.9	67.2	75.0	77.1	48.3	60.1	53.2	17.3	27.8
Registered partnership	1.3	.4	.8	3.3	.8	2.0	.0	.0	.0	.0	.5	.3	.0	.0	.0
Married, separated f. spouse	1.5	2.3	2.0	1.0	2.1	1.6	.3	4.2	2.5	2.9	1.5	2.1	3.7	.9	1.7
Never married	11.0	7.1	8.8	15.2	7.3	11.0	9.5	5.2	7.1	5.5	6.4	6.0	13.9	11.3	12.0
Divorced	2.1	1.9	2.0	2.8	4.4	3.7	.0	1.9	1.0	2.5	.0	1.0	.0	.0	.0
Widowed	8.3	30.5	21.2	2.9	7.0	5.1	5.2	21.5	14.3	12.1	43.2	30.4	29.2	70.5	58.4
Greece															
Married, living with spouse	83.2	52.0	66.2	88.3	75.3	81.6	82.7	51.5	66.1	83.9	39.4	58.5	60.8	9.5	28.0
Registered partnership	.1	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.2	.0	.0	.0
Married, separated f. spouse	.7	1.3	1.1	.9	2.1	1.5	1.0	1.5	1.2	.0	.3	.2	1.3	.9	1.1
Never married	4.6	4.7	4.7	6.5	5.5	6.0	5.6	5.7	5.6	1.6	4.2	3.1	.0	1.6	1.0
Divorced	3.6	4.3	4.0	4.3	5.9	5.1	4.4	6.2	5.4	.9	1.7	1.4	1.0	.0	.4
Widowed	7.7	37.7	24.0	.0	11.2	5.7	6.2	35.2	21.6	13.0	54.4	36.6	36.9	87.9	69.6
Total															
Married, living with spouse	76.1	54.3	64.0	75.7	71.1	73.4	78.9	62.6	70.2	77.6	43.6	57.8	62.3	15.4	29.2
Registered partnership	1.1	.6	.8	1.8	1.2	1.5	.7	.5	.6	.6	.2	.4	.5	.2	.3
Married, separated f. spouse	1.4	1.6	1.5	1.6	2.6	2.1	1.6	1.7	1.6	.6	.6	.6	1.7	.4	.8
Never married	7.7	7.5	7.6	9.9	7.1	8.5	7.5	5.2	6.3	5.3	7.9	6.8	4.2	12.4	10.0
Divorced	6.1	6.9	6.5	8.7	10.2	9.5	6.0	7.5	6.8	2.1	4.0	3.2	1.7	2.9	2.6
Widowed	7.6	29.1	19.5	2.3	7.8	5.1	5.3	22.5	14.5	13.8	43.7	31.1	29.5	68.7	57.1

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted

Table 4A.9 **Number of Living Generations (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Five generations	.2	.2	.2	.5	.0	.2	.0	.7	.4	.0	.0	.0	.0	.0	.0
Four generations	19.4	29.9	25.0	21.3	30.2	25.8	14.8	19.7	17.3	14.7	23.6	19.8	31.5	52.2	44.5
Three generations	57.4	48.8	52.8	49.3	44.3	46.8	63.5	62.2	62.8	69.0	57.5	62.5	52.7	25.8	35.9
Two generations	16.6	12.4	14.3	24.3	22.1	23.2	15.7	10.5	13.0	7.6	6.4	6.9	5.7	3.8	4.6
One generation	6.4	8.7	7.7	4.7	3.3	4.0	6.0	6.9	6.4	8.6	12.5	10.8	10.0	18.1	15.1
Denmark															
Five generations	.1	.2	.2	.0	.0	.0	.5	.4	.4	.0	.4	.2	.0	.0	.0
Four generations	18.1	25.2	21.9	20.6	26.6	23.7	14.1	13.8	14.0	11.0	19.2	15.5	39.8	52.1	48.2
Three generations	57.0	53.6	55.2	47.6	51.5	49.5	65.8	68.1	66.9	67.1	61.2	63.9	47.8	22.4	30.5
Two generations	16.6	13.3	14.8	25.2	18.2	21.6	12.2	12.3	12.2	8.2	7.0	7.6	5.0	8.4	7.3
One generation	8.3	7.7	8.0	6.7	3.7	5.2	7.5	5.3	6.4	13.6	12.2	12.8	7.4	17.1	14.0
Germany															
Five generations	.1	.5	.3	.0	.2	.1	.2	.4	.3	.0	1.2	.7	.0	.0	.0
Four generations	11.0	22.4	17.3	13.2	21.7	17.3	7.3	11.4	9.5	9.7	22.7	17.5	24.1	48.2	42.4
Three generations	51.3	48.6	49.8	39.3	46.4	42.8	54.6	58.6	56.7	68.6	50.8	57.9	57.5	27.7	34.8
Two generations	25.9	16.9	20.9	38.9	26.1	32.7	22.4	18.8	20.5	11.4	8.6	9.7	5.7	6.1	6.0
One generation	11.8	11.6	11.7	8.6	5.5	7.1	15.5	10.8	13.0	10.3	16.7	14.1	12.7	18.0	16.7
Netherlands															
Five generations	.1	.1	.1	.0	.0	.0	.0	.3	.1	.5	.0	.2	.0	.4	.3
Four generations	12.0	17.7	15.1	11.5	14.9	13.2	9.6	13.7	11.7	12.2	10.8	11.4	28.2	45.0	40.1
Three generations	55.7	56.1	55.9	44.3	49.9	47.2	64.1	66.6	65.3	74.3	69.8	71.7	45.6	33.0	36.7
Two generations	23.3	16.9	19.8	33.1	30.2	31.6	19.2	10.1	14.5	7.0	8.4	7.8	15.7	3.0	6.7
One generation	8.9	9.1	9.0	11.1	5.0	8.0	7.1	9.3	8.3	6.1	11.0	8.9	10.5	18.6	16.2
France															
Five generations	.1	.7	.5	.0	.0	.0	.5	.0	.2	.0	1.0	.6	.0	4.0	2.6
Four generations	17.7	26.1	22.3	19.1	30.7	25.3	20.0	20.0	20.0	9.0	18.7	14.4	29.1	40.0	36.1
Three generations	56.8	51.7	54.0	54.3	47.1	50.4	56.0	63.3	59.8	66.0	57.6	61.3	45.5	28.0	34.2
Two generations	15.2	12.7	13.8	22.6	18.8	20.6	14.0	10.2	12.0	7.1	9.1	8.2	5.5	8.0	7.1
One generation	10.1	8.7	9.4	4.0	3.4	3.7	9.5	6.5	7.9	18.0	13.6	15.5	20.0	20.0	20.0

Table 4A.9 (cont.) **Number of Living Generations**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Switzerland															
Five generations	.3	.1	.2	.7	.0	.3	.0	.0	.0	.0	.0	.0	.0	.9	.6
Four generations	9.5	13.0	11.4	7.8	13.6	10.7	13.5	11.3	12.3	2.7	4.9	3.9	22.7	27.9	26.1
Three generations	53.6	55.8	54.8	47.0	53.2	50.1	48.2	53.8	51.2	76.3	73.3	74.6	53.4	38.4	43.5
Two generations	26.2	21.1	23.4	36.7	26.4	31.5	22.4	22.0	22.2	12.9	13.4	13.2	11.3	16.0	14.4
One generation	10.4	10.0	10.2	7.9	6.8	7.4	15.9	12.9	14.3	8.1	8.4	8.3	12.7	16.8	15.4
Austria															
Five generations	.0	.3	.1	.0	.0	.0	.0	.2	.1	.0	.4	.2	.0	.8	.6
Four generations	15.2	18.6	17.1	20.5	22.6	21.6	10.8	11.1	11.0	15.5	15.7	15.6	10.9	36.3	28.9
Three generations	52.0	53.3	52.7	41.4	46.7	44.1	55.6	60.6	58.3	63.4	62.4	62.8	54.3	29.8	36.9
Two generations	22.1	14.9	18.1	31.7	22.3	26.8	21.3	14.9	17.9	11.2	8.3	9.5	6.5	8.1	7.6
One generation	10.7	12.9	12.0	6.5	8.4	7.5	12.3	13.1	12.8	9.9	13.2	11.8	28.3	25.0	25.9
Italy															
Five generations	.5	.5	.5	1.2	.4	.8	.0	.0	.0	.0	.0	.0	.0	3.0	2.1
Four generations	10.4	10.9	10.7	14.0	11.7	12.8	7.1	7.9	7.6	1.7	8.0	5.4	33.7	21.3	25.1
Three generations	54.2	55.6	55.0	45.5	51.7	48.6	52.1	60.8	57.0	72.4	71.2	71.7	47.2	22.6	30.0
Two generations	27.4	17.2	21.7	34.0	29.9	32.0	31.8	18.4	24.2	17.5	6.7	11.2	7.4	5.3	5.9
One generation	7.5	15.8	12.2	5.3	6.4	5.8	9.0	12.9	11.2	8.3	14.1	11.7	11.6	47.8	36.9
Spain															
Five generations	.3	.6	.5	.0	.0	.0	.0	.3	.2	.0	.6	.4	3.1	2.3	2.5
Four generations	9.0	16.3	13.2	9.0	16.6	13.0	9.6	13.0	11.5	7.9	13.2	11.1	10.4	24.6	20.3
Three generations	60.9	57.9	59.2	47.4	49.9	48.7	65.7	69.9	68.1	74.2	66.0	69.4	65.2	43.0	49.6
Two generations	17.9	15.4	16.5	32.8	29.2	30.9	13.6	10.9	12.1	7.0	7.6	7.3	.0	7.7	5.4
One generation	11.9	9.8	10.7	10.9	4.3	7.4	11.0	5.8	8.1	10.9	12.6	11.9	21.4	22.5	22.2
Greece															
Five generations	.1	.2	.2	.3	.0	.1	.0	.0	.0	.0	.5	.3	.0	.8	.5
Four generations	7.9	14.1	11.2	7.6	11.0	9.3	9.3	11.3	10.3	3.2	11.4	7.9	15.1	37.2	29.3
Three generations	54.8	59.0	57.1	49.4	52.6	51.0	45.7	57.2	51.8	73.5	73.5	73.5	68.9	51.8	58.0
Two generations	30.7	18.5	24.1	38.9	29.9	34.3	37.4	21.6	29.0	14.4	6.2	9.7	7.2	2.0	3.9
One generation	6.5	8.2	7.4	3.8	6.5	5.2	7.6	9.9	8.8	8.8	8.4	8.6	8.7	8.1	8.3

Table 4A.9 (cont.) **Number of Living Generations**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Total															
Five generations	.2	.5	.4	.3	.1	.2	.2	.2	.2	.0	.6	.4	.5	1.6	1.3
Four generations	12.2	19.2	16.1	13.9	20.0	17.0	10.3	12.4	11.4	7.6	15.8	12.4	25.1	37.0	33.5
Three generations	54.7	53.0	53.8	45.4	48.7	47.1	56.0	61.6	59.0	70.3	61.6	65.2	53.6	30.3	37.2
Two generations	22.9	16.0	19.1	33.2	26.0	29.5	22.0	15.9	18.8	11.1	8.0	9.3	5.8	6.4	6.2
One generation	10.0	11.3	10.7	7.2	5.2	6.2	11.6	9.9	10.7	11.0	14.0	12.7	15.0	24.7	21.8

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.10 **Number of Living Kin (means)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Parents	.37	.31	.34	.80	.73	.76	.19	.22	.20	.03	.03	.03	.01	.00	.01
Brothers	1.00	.87	.93	1.11	1.10	1.11	1.04	1.01	1.02	.97	.72	.83	.56	.39	.45
Sisters	1.02	.98	1.00	1.09	1.11	1.10	1.04	1.06	1.05	1.04	.96	.99	.72	.62	.66
Children	2.39	2.19	2.28	2.38	2.31	2.34	2.46	2.30	2.38	2.36	2.04	2.18	2.27	1.98	2.09
Grandchildren	2.87	3.42	3.16	1.17	1.97	1.57	3.20	3.58	3.40	4.57	4.36	4.45	4.93	5.12	5.04
Denmark															
Parents	.38	.30	.33	.73	.66	.69	.19	.15	.17	.01	.01	.01	.00	.00	.00
Brothers	1.05	.93	.99	1.22	1.10	1.16	1.06	.97	1.01	.82	.76	.79	.67	.64	.65
Sisters	1.05	1.08	1.07	1.14	1.17	1.15	1.11	1.18	1.15	.90	.93	.92	.69	.86	.81
Children	2.20	2.23	2.22	2.07	2.11	2.09	2.32	2.42	2.37	2.20	2.27	2.24	2.50	2.13	2.25
Grandchildren	2.83	3.49	3.19	1.29	1.89	1.60	3.42	4.13	3.78	4.09	4.73	4.45	5.80	5.24	5.43
Germany															
Parents	.31	.28	.29	.66	.74	.70	.13	.16	.15	.00	.03	.02	.03	.02	.02
Brothers	.86	.69	.76	1.06	.93	1.00	.87	.70	.78	.60	.62	.61	.24	.25	.25
Sisters	.86	.81	.83	.82	.84	.83	.94	.88	.91	.90	.79	.83	.48	.59	.56
Children	1.78	1.87	1.83	1.61	1.76	1.68	1.81	1.94	1.88	2.03	2.00	2.01	1.95	1.71	1.77
Grandchildren	1.99	2.51	2.28	.78	1.14	.97	2.16	2.55	2.37	3.41	3.64	3.55	3.34	3.62	3.55
Netherlands															
Parents	.30	.28	.29	.55	.60	.58	.16	.16	.16	.01	.02	.02	.02	.00	.01
Brothers	1.63	1.50	1.56	1.90	1.74	1.82	1.76	1.74	1.75	1.16	1.34	1.26	.68	.65	.66
Sisters	1.63	1.63	1.63	1.73	1.75	1.74	1.76	1.72	1.74	1.39	1.70	1.57	1.07	1.03	1.04
Children	2.32	2.38	2.35	2.05	2.06	2.05	2.36	2.57	2.47	2.85	2.60	2.71	2.52	2.58	2.56
Grandchildren	2.62	3.43	3.06	.80	1.28	1.05	2.92	3.70	3.32	5.31	5.47	5.40	4.47	6.07	5.58
France															
Parents	.36	.39	.38	.74	.84	.80	.26	.26	.26	.01	.05	.03	.00	.05	.03
Brothers	1.31	1.20	1.25	1.61	1.62	1.61	1.47	1.27	1.37	.91	.87	.89	.46	.43	.44
Sisters	1.26	1.30	1.28	1.48	1.65	1.57	1.38	1.38	1.38	1.01	1.03	1.02	.56	.63	.60
Children	2.28	2.30	2.29	2.18	2.26	2.22	2.52	2.39	2.45	2.16	2.33	2.25	2.27	2.15	2.19
Grandchildren	3.01	3.66	3.37	.95	1.75	1.38	3.54	4.08	3.82	4.99	5.36	5.20	5.93	5.43	5.61

Table 4A.10 (cont.) **Number of Living Kin (means)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Switzerland															
Parents	.36	.35	.35	.69	.75	.72	.19	.20	.20	.01	.00	.00	.05	.06	.06
Brothers	1.24	1.12	1.18	1.41	1.31	1.36	1.29	1.06	1.17	1.01	1.17	1.10	.68	.65	.66
Sisters	1.29	1.27	1.28	1.43	1.32	1.38	1.19	1.23	1.21	1.28	1.40	1.35	.95	1.02	.99
Children	2.08	2.08	2.08	2.06	2.02	2.04	1.91	2.05	1.98	2.37	2.23	2.29	2.10	2.08	2.09
Grandchildren	2.23	2.52	2.39	1.02	.79	.91	2.37	2.85	2.62	3.70	4.05	3.90	4.24	4.07	4.13
Austria															
Parents	.29	.24	.26	.67	.57	.62	.14	.17	.16	.01	.01	.01	.00	.04	.03
Brothers	.90	.74	.81	1.11	.92	1.01	.85	.84	.84	.77	.57	.65	.43	.30	.34
Sisters	.81	.85	.84	.96	1.02	.99	.80	.86	.84	.75	.79	.77	.26	.49	.43
Children	1.96	1.87	1.91	2.00	1.89	1.94	1.94	1.89	1.91	2.04	1.97	2.00	1.59	1.54	1.55
Grandchildren	2.26	2.70	2.50	1.29	1.78	1.55	2.32	2.70	2.52	3.34	3.63	3.51	3.76	3.47	3.55
Italy															
Parents	.31	.24	.27	.64	.56	.60	.17	.16	.16	.03	.04	.03	.03	.06	.05
Brothers	1.17	1.05	1.10	1.28	1.28	1.28	1.30	1.11	1.19	.98	1.08	1.04	.66	.33	.43
Sisters	1.15	1.24	1.20	1.18	1.44	1.31	1.25	1.21	1.23	1.09	1.16	1.13	.81	1.01	.95
Children	1.96	1.93	1.94	1.86	1.96	1.91	1.97	1.93	1.95	2.00	2.22	2.13	2.28	1.32	1.61
Grandchildren	1.91	2.55	2.26	.80	1.14	.97	1.73	2.18	1.98	2.92	4.08	3.58	5.23	4.61	4.87
Spain															
Parents	.30	.29	.29	.67	.71	.69	.15	.20	.18	.01	.03	.02	.04	.03	.04
Brothers	1.37	1.18	1.26	1.50	1.37	1.43	1.57	1.37	1.46	1.16	1.08	1.11	.78	.67	.70
Sisters	1.20	1.28	1.25	1.08	1.33	1.21	1.43	1.45	1.44	1.15	1.27	1.22	1.14	.92	.99
Children	2.38	2.54	2.47	1.98	2.29	2.14	2.66	2.79	2.73	2.70	2.70	2.70	2.41	2.35	2.37
Grandchildren	2.46	3.46	3.04	.42	.78	.62	2.34	3.57	3.04	4.39	4.98	4.74	5.76	6.58	6.32
Greece															
Parents	.37	.29	.33	.77	.67	.72	.23	.20	.21	.03	.03	.03	.00	.03	.02
Brothers	1.11	.99	1.04	1.09	.97	1.03	1.21	1.07	1.13	1.04	1.06	1.05	.93	.68	.77
Sisters	1.10	1.14	1.12	1.02	1.03	1.02	1.25	1.27	1.26	1.09	1.28	1.20	.83	.80	.81
Children	1.96	1.95	1.95	1.93	1.78	1.86	1.87	1.88	1.88	1.98	2.06	2.03	2.38	2.41	2.40
Grandchildren	1.63	2.59	2.15	.25	.68	.46	1.51	2.58	2.08	3.15	3.89	3.58	4.56	5.16	4.95

Table 4A.10 (cont.) **Number of Living Kin (means)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Total															
Parents	.32	.29	.31	.67	.70	.69	.17	.18	.18	.02	.03	.03	.02	.03	.03
Brothers	1.13	.98	1.05	1.31	1.25	1.28	1.19	1.04	1.11	.89	.90	.90	.55	.42	.45
Sisters	1.10	1.12	1.11	1.13	1.27	1.20	1.18	1.16	1.17	1.04	1.06	1.05	.74	.77	.76
Children	2.05	2.09	2.07	1.90	2.01	1.96	2.10	2.15	2.13	2.20	2.24	2.23	2.22	1.89	1.99
Grandchildren	2.28	2.94	2.65	.79	1.25	1.03	2.39	2.94	2.69	3.84	4.36	4.14	4.84	4.80	4.81

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.11 **Proximity to Nearest Living Child (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Same household	18.7	12.3	15.3	40.2	30.0	35.0	8.7	2.1	5.3	.5	1.6	1.1	.5	1.9	1.3
Same building	1.3	1.3	1.3	1.6	.9	1.2	.9	1.3	1.1	1.9	1.2	1.5	.0	2.7	1.6
Less than 1 km	13.2	17.0	15.2	7.9	12.6	10.3	11.8	17.4	14.6	19.3	22.2	20.9	24.9	20.4	22.2
1 - 25 km	44.0	44.8	44.4	32.0	34.9	33.5	54.2	49.8	52.0	49.6	50.9	50.3	48.9	51.1	50.2
25 – 100 km	12.0	12.4	12.2	8.4	10.4	9.4	13.0	15.5	14.3	16.5	13.6	14.9	14.5	10.2	11.9
> 100 km	10.9	12.1	11.6	9.9	11.2	10.6	11.5	13.8	12.7	12.2	10.7	11.4	11.2	13.6	12.7
Denmark															
Same household	16.8	10.5	13.4	30.7	18.5	24.4	6.2	5.4	5.8	3.0	1.5	2.2	.0	5.6	3.7
Same building	3.4	1.5	2.4	5.6	1.6	3.5	1.7	1.3	1.5	1.0	1.9	1.5	4.3	1.4	2.4
Less than 1 km	11.9	16.6	14.4	5.5	11.0	8.4	17.8	21.6	19.7	17.9	20.8	19.5	12.3	17.6	15.8
1 - 25 km	44.5	49.1	47.0	38.6	45.6	42.3	50.7	52.0	51.3	51.4	52.0	51.7	46.3	52.1	50.1
25 – 100 km	16.1	14.8	15.4	14.8	15.4	15.1	13.8	14.1	14.0	20.0	14.9	17.2	22.2	15.4	17.7
> 100 km	7.3	7.4	7.4	4.7	7.9	6.4	9.7	5.6	7.7	6.7	8.9	8.0	14.9	7.9	10.3
Germany															
Same household	22.0	17.8	19.7	43.9	34.2	38.9	12.5	10.2	11.3	4.6	11.1	8.4	5.8	10.6	9.4
Same building	12.6	15.3	14.1	9.0	9.6	9.3	13.2	15.9	14.6	15.9	17.0	16.5	20.4	24.1	23.2
Less than 1 km	12.2	13.3	12.9	6.9	7.7	7.3	14.9	11.5	13.1	18.1	18.5	18.3	8.8	22.5	19.0
1 - 25 km	32.1	36.1	34.3	20.0	29.2	24.8	39.2	43.5	41.5	40.0	38.0	38.9	35.7	30.1	31.5
25 – 100 km	10.1	7.6	8.7	8.1	8.4	8.3	10.4	9.0	9.6	11.2	7.5	9.1	16.2	2.9	6.3
> 100 km	10.9	9.9	10.3	12.0	10.8	11.4	9.8	9.9	9.9	10.1	7.9	8.8	13.1	9.8	10.6
Netherlands															
Same household	27.5	17.4	22.0	50.2	32.3	40.8	13.9	11.5	12.6	5.0	3.5	4.2	.0	4.2	2.9
Same building	1.0	.9	.9	.9	.6	.8	.9	1.1	1.0	1.5	2.0	1.8	.0	.0	.0
Less than 1 km	18.5	19.5	19.0	8.3	13.3	10.9	25.7	25.5	25.6	28.9	24.0	26.2	22.4	18.4	19.7
1 - 25 km	42.2	48.5	45.6	32.3	40.1	36.4	46.2	51.6	49.0	53.5	55.6	54.7	61.0	59.7	60.1
25 – 100 km	7.3	9.2	8.4	6.5	8.9	7.8	8.4	6.7	7.6	6.6	11.0	9.0	10.6	11.8	11.4
> 100 km	3.6	4.3	4.0	1.8	4.8	3.4	4.8	3.6	4.2	4.4	3.9	4.2	5.9	5.9	5.9

Table 4A.11 (cont.) **Proximity to Nearest Living Child**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
France															
Same household	25.4	21.3	23.1	47.4	40.7	43.8	15.5	10.8	13.1	3.2	5.9	4.7	4.5	10.1	8.1
Same building	1.4	2.4	1.9	.0	.4	.2	1.1	2.1	1.6	2.4	4.1	3.4	6.8	6.3	6.5
Less than 1 km	14.0	14.7	14.4	7.4	10.0	8.8	17.2	20.0	18.7	22.0	14.2	17.5	13.6	20.2	17.9
1 - 25 km	31.7	37.0	34.6	24.8	27.8	26.4	30.0	37.0	33.6	44.1	46.8	45.6	43.2	49.4	47.2
25 – 100 km	12.9	10.7	11.7	8.3	7.8	8.0	17.2	12.8	14.9	15.0	16.0	15.5	15.9	5.1	8.9
> 100 km	14.6	13.9	14.2	12.2	13.3	12.8	18.9	17.4	18.1	13.4	13.0	13.2	15.9	8.9	11.4
Switzerland															
Same household	31.1	22.7	26.6	53.7	39.2	46.4	15.9	16.2	16.1	8.9	4.9	6.6	5.9	14.1	11.2
Same building	5.2	8.6	7.1	2.5	4.8	3.7	5.3	6.3	5.9	10.0	16.8	13.9	8.8	10.9	10.1
Less than 1 km	11.6	13.8	12.8	10.2	8.6	9.4	12.5	19.4	16.1	14.2	19.0	16.9	12.7	8.6	10.0
1 - 25 km	36.9	37.6	37.3	23.5	33.1	28.4	50.4	47.4	48.8	48.6	36.7	41.8	41.9	36.4	38.3
25 – 100 km	10.1	9.7	9.9	7.4	8.1	7.8	9.0	6.2	7.5	13.6	13.0	13.3	17.6	15.2	16.0
> 100 km	5.0	7.5	6.4	2.6	6.1	4.4	6.8	4.5	5.6	4.7	9.6	7.5	13.1	14.9	14.3
Austria															
Same household	24.2	20.8	22.3	41.8	29.7	35.4	17.1	18.8	18.0	11.1	11.4	11.3	15.6	19.4	18.3
Same building	13.2	16.5	15.0	10.8	14.7	12.8	13.5	15.4	14.5	13.9	20.5	17.6	21.9	18.3	19.3
Less than 1 km	12.7	15.1	14.1	8.6	12.6	10.7	14.9	14.5	14.7	15.3	17.1	16.3	12.5	22.6	19.8
1 - 25 km	32.6	33.3	33.0	28.4	30.8	29.7	33.1	34.2	33.7	38.2	38.6	38.4	34.4	25.8	28.2
25 – 100 km	8.8	7.5	8.1	5.6	5.9	5.8	9.6	7.8	8.7	11.8	9.5	10.5	12.5	6.5	8.1
> 100 km	8.5	6.7	7.5	4.7	6.3	5.6	11.7	9.3	10.4	9.7	2.9	5.8	3.1	7.5	6.3
Italy															
Same household	52.2	46.7	49.3	81.1	77.1	79.1	46.7	36.2	40.9	23.1	26.8	25.2	12.0	31.4	23.2
Same building	8.5	15.0	12.0	.9	4.0	2.4	9.5	14.1	12.1	17.2	28.0	23.4	17.8	20.1	19.1
Less than 1 km	10.4	12.1	11.3	2.5	7.4	4.9	13.7	13.0	13.3	16.9	14.7	15.7	19.4	17.6	18.3
1 - 25 km	21.4	20.4	20.9	11.1	9.5	10.3	23.4	28.0	26.0	30.4	23.7	26.6	40.9	24.6	31.5
25 – 100 km	3.0	3.0	3.0	.9	.2	.6	3.1	3.3	3.2	4.6	4.9	4.8	9.2	6.3	7.5
> 100 km	4.3	2.8	3.5	3.6	1.8	2.7	3.6	5.4	4.6	7.7	1.9	4.4	.8	.0	.3

Table 4A.11 (cont.) **Proximity to Nearest Living Child**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Spain															
Same household	55.6	49.8	52.2	81.0	74.2	77.3	52.0	45.5	48.3	30.6	30.1	30.3	31.3	35.0	33.9
Same building	4.3	5.6	5.0	.7	3.2	2.0	5.8	7.2	6.6	6.1	7.0	6.6	9.3	5.9	6.9
Less than 1 km	22.0	25.2	23.8	7.7	9.9	8.9	24.2	26.4	25.4	35.8	37.7	36.9	35.5	36.4	36.1
1 - 25 km	14.2	14.0	14.1	8.5	9.7	9.2	15.6	15.2	15.4	18.5	17.1	17.7	21.5	16.8	18.2
25 – 100 km	1.4	2.4	2.0	.8	1.0	.9	1.5	3.6	2.7	2.5	3.3	3.0	.0	1.9	1.3
> 100 km	2.6	3.1	2.9	1.3	2.1	1.7	.9	2.1	1.6	6.5	4.8	5.5	2.3	4.1	3.5
Greece															
Same household	50.8	38.5	44.1	78.6	72.0	75.3	49.5	31.1	39.8	21.2	14.6	17.4	5.1	12.2	9.7
Same building	11.8	16.4	14.3	4.3	6.0	5.2	11.6	16.3	14.1	20.5	25.6	23.5	25.5	25.5	25.5
Less than 1 km	13.2	16.1	14.8	3.3	7.5	5.4	15.4	21.5	18.7	22.8	20.9	21.7	25.8	16.6	19.9
1 - 25 km	15.1	19.3	17.3	6.7	8.9	7.8	16.7	20.1	18.5	22.1	25.7	24.2	26.8	33.7	31.3
25 – 100 km	2.6	2.7	2.7	1.0	1.5	1.3	2.3	1.9	2.1	4.9	4.3	4.6	3.9	4.8	4.5
> 100 km	6.6	7.1	6.8	6.2	4.0	5.1	4.5	9.0	6.9	8.5	8.8	8.7	12.8	7.2	9.2
Total															
Same household	34.5	29.1	31.5	58.3	49.9	53.9	25.5	20.9	23.1	13.0	15.8	14.6	10.0	16.8	14.6
Same building	7.4	10.2	9.0	3.6	4.8	4.2	8.3	10.9	9.7	11.1	14.9	13.3	13.1	14.7	14.2
Less than 1 km	13.7	15.6	14.8	6.2	9.1	7.7	16.5	16.5	16.5	21.6	20.3	20.8	18.5	22.7	21.4
1 - 25 km	28.4	30.7	29.6	19.0	23.2	21.2	32.4	35.5	34.0	36.1	34.1	35.0	38.2	33.4	34.9
25 – 100 km	7.7	6.7	7.2	5.5	5.7	5.6	8.7	7.5	8.1	9.0	8.2	8.5	11.4	5.1	7.2
> 100 km	8.3	7.7	7.9	7.4	7.4	7.4	8.6	8.7	8.7	9.1	6.8	7.8	8.7	7.3	7.8

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.12 **Frequency of Contact to Most Contacted Child (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Daily	44.9	44.4	44.6	60.2	57.8	59.0	39.3	38.8	39.0	31.1	34.3	32.9	30.2	35.0	33.1
Several times a week	35.9	38.1	37.1	28.2	30.8	29.5	39.6	43.7	41.7	38.7	43.1	41.2	49.0	40.1	43.7
Once a week or every two weeks	16.5	16.5	16.5	9.8	10.0	9.9	18.6	16.5	17.5	26.5	21.8	23.9	16.1	24.9	21.3
Once a month or less often	2.0	.8	1.4	1.3	1.3	1.3	1.9	.8	1.3	1.9	.8	1.3	4.8	.0	1.9
Never	.7	.2	.4	.5	.2	.3	.6	.3	.4	1.9	.0	.8	.0	.0	.0
Denmark															
Daily	44.0	39.3	41.5	57.8	44.7	51.0	33.2	31.6	32.4	28.9	36.6	33.2	38.1	39.7	39.1
Several times a week	30.7	37.3	34.2	25.0	38.3	31.9	40.1	43.4	41.8	30.7	35.3	33.3	30.2	26.5	27.8
Once a week or every two weeks	21.1	21.3	21.2	13.5	15.3	14.5	21.2	24.0	22.6	36.2	24.1	29.5	28.4	30.5	29.7
Once a month or less often	3.0	1.9	2.4	2.2	1.7	1.9	4.8	.9	2.9	2.8	2.9	2.9	1.6	3.4	2.8
Never	1.2	.2	.7	1.5	.0	.7	.6	.0	.3	1.3	1.1	1.2	1.6	.0	.6
Germany															
Daily	50.2	50.7	50.5	60.4	54.3	57.3	47.6	47.2	47.4	38.6	47.0	43.5	42.3	57.3	53.6
Several times a week	25.2	28.8	27.2	15.8	25.7	20.9	29.4	29.6	29.5	32.3	31.2	31.6	32.2	29.7	30.4
Once a week or every two weeks	17.5	15.8	16.5	15.2	15.5	15.3	16.4	17.8	17.1	21.5	16.6	18.7	25.5	9.9	13.8
Once a month or less often	5.0	4.2	4.6	5.0	4.0	4.5	4.7	4.4	4.5	7.0	4.8	5.7	.0	3.0	2.3
Never	2.1	.6	1.2	3.6	.5	2.0	1.8	1.0	1.4	.6	.4	.5	.0	.0	.0
Netherlands															
Daily	50.9	46.8	48.7	64.7	57.8	61.1	51.1	46.7	48.9	30.4	33.7	32.2	17.3	34.4	29.1
Several times a week	32.8	36.3	34.7	25.4	31.4	28.5	33.9	34.3	34.1	40.0	44.4	42.5	57.9	42.8	47.4
Once a week or every two weeks	13.6	14.8	14.3	7.6	9.9	8.8	13.9	15.9	14.9	25.5	17.9	21.3	16.5	22.1	20.4
Once a month or less often	2.0	1.7	1.9	1.2	.8	1.0	1.2	2.0	1.6	3.0	3.9	3.5	8.3	.7	3.1
Never	.7	.4	.5	1.2	.2	.7	.0	1.1	.6	1.0	.0	.4	.0	.0	.0
France															
Daily	50.1	48.7	49.3	62.6	57.4	59.8	41.1	42.0	41.6	40.1	37.9	38.8	43.2	55.7	51.2
Several times a week	27.9	29.5	28.8	23.0	25.2	24.2	32.8	35.9	34.4	29.9	33.1	31.8	31.8	22.8	26.0
Once a week or every two weeks	16.7	17.9	17.4	10.0	12.6	11.4	19.5	17.4	18.4	24.4	27.2	26.0	20.5	17.7	18.7
Once a month or less often	4.9	3.5	4.1	4.4	4.4	4.4	5.5	3.6	4.5	5.5	1.8	3.4	4.5	3.8	4.1
Never	.3	.4	.4	.0	.4	.2	1.1	1.0	1.1	.0	.0	.0	.0	.0	.0

Table 4A.12 (cont.) **Frequency of Contact to Most Contacted Child**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Switzerland															
Daily	46.3	46.6	46.5	65.3	57.8	61.5	33.9	46.1	40.3	27.8	29.9	29.0	25.0	41.1	35.4
Several times a week	24.0	25.8	24.9	12.2	19.3	15.8	32.6	28.2	30.3	36.1	37.8	37.1	32.6	20.4	24.7
Once a week or every two weeks	22.5	23.3	22.9	17.3	18.2	17.7	26.2	23.9	25.0	26.7	28.0	27.5	32.3	30.1	30.9
Once a month or less often	6.3	3.2	4.6	4.1	3.8	4.0	7.3	.9	3.9	7.0	4.4	5.5	10.1	4.3	6.4
Never	1.0	1.1	1.0	1.1	1.0	1.1	.0	.9	.5	2.3	.0	1.0	.0	4.1	2.6
Austria															
Daily	53.1	56.5	55.0	66.4	61.2	63.6	46.6	53.3	50.2	43.8	51.9	48.4	56.3	61.3	59.9
Several times a week	24.2	23.4	23.7	18.5	22.4	20.6	27.4	23.5	25.3	27.1	25.7	26.3	21.9	23.7	23.2
Once a week or every two weeks	15.9	16.1	16.0	9.5	12.6	11.1	19.2	19.1	19.2	20.1	17.6	18.7	15.6	11.8	12.9
Once a month or less often	5.6	3.6	4.5	5.2	3.1	4.1	4.6	3.5	4.0	9.0	4.8	6.6	3.1	3.2	3.2
Never	1.2	.4	.8	.4	.7	.6	2.1	.6	1.3	.0	.0	.0	3.1	.0	.9
Italy															
Daily	85.0	86.3	85.7	91.7	91.5	91.6	83.5	83.5	83.5	78.3	84.7	81.9	76.3	81.5	79.3
Several times a week	11.0	9.6	10.2	6.1	6.3	6.2	11.8	11.8	11.8	16.9	11.3	13.7	15.0	9.5	11.8
Once a week or every two weeks	2.5	2.5	2.5	2.0	.7	1.4	.6	3.4	2.2	4.3	3.0	3.5	6.9	5.0	5.8
Once a month or less often	.9	.8	.9	.1	.0	.1	2.6	.5	1.4	.5	1.1	.8	.0	4.0	2.3
Never	.6	.7	.7	.1	1.5	.8	1.5	.7	1.1	.0	.0	.0	1.7	.0	.7
Spain															
Daily	85.2	85.3	85.3	92.1	92.4	92.3	88.2	84.8	86.3	74.8	77.8	76.6	76.4	82.9	80.9
Several times a week	9.7	10.2	10.0	4.1	3.8	3.9	10.0	10.9	10.5	13.7	15.2	14.6	21.2	14.7	16.7
Once a week or every two weeks	3.2	4.1	3.7	1.2	3.8	2.6	1.8	3.8	3.0	8.0	6.6	7.2	2.4	1.1	1.5
Once a month or less often	1.4	.2	.7	1.4	.0	.6	.0	.4	.2	3.5	.4	1.7	.0	.0	.0
Never	.5	.2	.3	1.3	.0	.6	.0	.0	.0	.0	.0	.0	.0	1.4	1.0
Greece															
Daily	86.1	82.6	84.2	91.8	91.7	91.8	86.5	82.8	84.6	79.3	73.8	76.1	75.4	74.1	74.6
Several times a week	10.9	12.6	11.9	6.1	7.1	6.6	12.2	12.8	12.5	14.8	17.2	16.2	17.5	18.7	18.3
Once a week or every two weeks	3.0	4.3	3.7	2.1	.9	1.5	1.3	3.6	2.5	6.0	9.0	7.7	7.1	6.2	6.5
Once a month or less often	.0	.3	.2	.0	.0	.0	.0	.7	.4	.0	.0	.0	.0	1.0	.6
Never	.0	.1	.1	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table 4A.12 (cont.) **Frequency of Contact to Most Contacted Child**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Total															
Daily	62.9	62.8	62.9	72.9	69.0	70.8	59.0	59.7	59.3	53.7	58.1	56.2	53.7	62.1	59.4
Several times a week	21.1	22.6	21.9	14.5	18.8	16.7	24.5	24.6	24.5	25.6	25.2	25.4	28.4	23.9	25.4
Once a week or every two weeks	11.8	11.7	11.7	8.6	9.4	9.0	11.9	12.6	12.3	16.3	14.1	15.0	15.5	11.2	12.6
Once a month or less often	3.2	2.4	2.8	2.7	2.2	2.5	3.5	2.4	2.9	4.1	2.4	3.1	1.9	2.5	2.3
Never	1.0	.5	.7	1.4	.6	1.0	1.2	.7	.9	.4	.1	.2	.4	.3	.4

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.13 **Living Natural Parents (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
Mother and Father	7.7	5.9	6.7	18.6	16.0	17.3	.9	1.2	1.1	.3	.0	.1	.0	.0	.0
Mother only	18.7	17.1	17.8	35.1	35.1	35.1	15.2	15.4	15.3	2.2	3.4	2.9	.0	.0	.0
Father only	4.0	3.1	3.5	7.6	5.8	6.7	1.7	3.7	2.7	.0	.0	.0	1.5	.0	.5
Denmark															
Mother and Father	7.5	4.9	6.1	16.0	11.4	13.7	1.0	1.5	1.3	.0	.0	.0	.0	.0	.0
Mother only	19.3	17.3	18.2	32.5	36.2	34.4	15.1	11.6	13.3	1.2	.9	1.0	.0	.0	.0
Father only	4.6	2.9	3.7	8.9	6.5	7.6	1.7	.8	1.2	.0	.0	.0	.0	.0	.0
Germany															
Mother and Father	5.1	5.3	5.2	12.1	16.9	14.4	.8	.4	.6	.0	.2	.1	1.3	.0	.3
Mother only	18.6	16.1	17.2	36.7	34.1	35.5	11.7	14.8	13.3	.0	2.8	1.7	.0	2.1	1.6
Father only	2.0	1.9	2.0	4.9	5.8	5.3	.0	.3	.1	.4	.0	.2	.0	.0	.0
Netherlands															
Mother and Father	4.8	6.0	5.4	9.6	13.4	11.6	1.1	1.8	1.5	.0	.0	.0	.0	.0	.0
Mother only	17.5	13.8	15.5	29.0	26.8	27.9	11.4	11.4	11.4	1.4	1.7	1.6	2.1	.4	.9
Father only	3.7	3.0	3.3	6.9	6.7	6.8	2.2	.8	1.5	.0	.3	.2	.0	.0	.0
France															
Mother and Father	6.8	8.4	7.7	15.4	20.4	18.1	2.6	3.3	3.0	.0	.0	.0	.0	.0	.0
Mother only	20.3	20.5	20.4	37.2	36.5	36.8	18.4	19.0	18.7	1.3	5.2	3.5	.0	5.0	3.2
Father only	3.0	2.5	2.8	6.1	7.0	6.6	2.5	.0	1.2	.0	.0	.0	.0	.0	.0
Switzerland															
Mother and Father	8.7	8.3	8.5	18.6	17.1	17.9	.0	2.2	1.2	.0	.0	.0	2.6	1.8	2.1
Mother only	16.0	16.3	16.2	24.4	32.3	28.4	16.8	13.5	15.1	.5	.0	.2	.0	2.8	1.8
Father only	3.9	3.8	3.8	7.5	8.4	8.0	2.4	2.2	2.3	.0	.0	.0	.0	.0	.0
Austria															
Mother and Father	5.5	3.8	4.6	16.1	11.2	13.5	.0	1.3	.7	.0	.0	.0	.0	.0	.0
Mother only	15.3	14.8	15.0	29.7	30.9	30.3	12.7	12.3	12.5	.6	1.3	1.0	.0	4.0	2.9
Father only	2.5	2.0	2.2	5.1	3.6	4.3	1.6	1.8	1.7	.0	.0	.0	.0	.0	.0

Table 4A.13 (cont.) **Living Natural Parents**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Italy															
Mother and Father	4.8	4.1	4.4	11.8	11.5	11.6	.0	1.7	1.0	.0	.0	.0	.0	.0	.0
Mother only	18.7	13.2	15.6	33.3	27.2	30.3	15.1	10.7	12.6	3.1	3.4	3.3	.0	5.7	4.0
Father only	3.8	2.5	3.1	7.6	5.9	6.8	1.8	2.0	1.9	.2	.2	.2	3.2	.0	1.0
Spain															
Mother and Father	5.3	5.1	5.2	13.9	14.2	14.0	.0	2.1	1.2	.3	.2	.3	.0	.4	.3
Mother only	15.7	15.1	15.3	31.4	35.7	33.7	13.2	10.2	11.5	.4	2.1	1.4	.0	2.7	1.9
Father only	4.2	3.6	3.9	7.8	6.9	7.3	1.5	5.3	3.6	.0	.0	.0	4.3	.0	1.3
Greece															
Mother and Father	7.0	5.8	6.4	17.5	14.1	15.7	1.9	2.6	2.3	.0	.0	.0	.0	.0	.0
Mother only	19.3	16.4	17.7	35.3	35.1	35.2	15.3	12.3	13.7	2.8	2.6	2.7	.0	2.5	1.6
Father only	3.7	2.2	2.9	6.7	4.2	5.4	3.7	2.4	3.0	.0	.4	.2	.0	.0	.0
Total															
Mother and Father	5.7	5.6	5.6	13.4	15.4	14.4	.9	1.6	1.2	.1	.1	.1	.4	.1	.2
Mother only	18.4	15.9	17.0	34.3	32.9	33.6	14.0	13.6	13.8	1.3	3.0	2.3	.1	3.2	2.3
Father only	3.1	2.5	2.8	6.4	6.2	6.3	1.3	1.5	1.4	.2	.1	.1	1.4	.0	.4

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.14 **Siblings (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
"Have you ever had any siblings?"															
Sweden	90.9	89.8	90.3	91.0	90.2	90.6	88.2	90.9	89.6	93.6	87.0	89.9	92.1	90.8	91.3
Denmark	90.9	91.8	91.4	91.4	92.7	92.0	90.8	88.5	89.6	87.4	91.2	89.5	94.9	97.1	96.4
Germany	81.8	81.8	81.8	79.5	79.7	79.6	80.9	80.2	80.5	90.0	83.7	86.2	77.5	87.5	85.1
Netherlands	95.3	95.0	95.2	95.6	95.8	95.7	95.0	95.2	95.1	96.2	95.1	95.6	90.6	91.9	91.5
France	88.7	90.4	89.6	91.2	94.5	93.0	89.8	92.0	90.9	85.2	87.0	86.2	81.5	81.0	81.2
Switzerland	91.9	92.1	92.0	93.3	90.8	92.0	91.2	91.4	91.3	89.4	91.7	90.7	94.9	96.4	95.9
Austria	75.5	76.8	76.2	80.4	78.1	79.2	73.3	77.1	75.3	72.8	73.2	73.1	69.6	77.4	75.1
Italy	88.9	90.6	89.8	88.6	93.4	91.0	89.9	89.6	89.7	85.7	94.0	90.5	97.4	79.7	85.0
Spain	95.1	96.2	95.7	91.7	95.7	93.9	97.6	95.7	96.5	95.4	96.3	95.9	100.0	97.5	98.2
Greece	92.3	91.7	92.0	91.4	89.5	90.4	93.6	94.1	93.9	92.1	93.2	92.8	92.6	89.0	90.3
Total	87.7	88.6	88.2	87.2	89.4	88.3	87.4	87.6	87.5	89.0	89.4	89.2	88.7	87.2	87.7
Number of living brothers															
Sweden															
None	43.9	44.6	44.3	39.3	31.5	35.4	40.2	36.2	38.2	45.1	53.5	49.9	67.1	72.4	70.4
One	29.8	35.5	32.8	32.4	43.1	37.8	30.2	40.5	35.5	31.3	30.7	31.0	16.4	18.4	17.6
Two	15.3	12.6	13.9	15.0	15.5	15.3	19.2	14.9	17.0	12.0	9.3	10.5	11.5	7.6	9.1
Three or more	11.0	7.3	9.0	13.3	9.9	11.6	10.4	8.4	9.3	11.6	6.4	8.6	5.0	1.6	2.9
Denmark															
None	38.6	42.7	40.8	33.1	31.2	32.1	35.8	44.4	40.2	47.0	52.4	50.0	59.9	57.0	57.9
One	34.3	34.2	34.3	32.0	41.1	36.7	38.3	31.1	34.6	35.4	26.9	30.6	25.3	31.2	29.3
Two	17.2	15.3	16.2	23.4	20.4	21.9	15.8	13.9	14.8	9.8	14.8	12.6	8.7	6.0	6.8
Three or more	9.9	7.7	8.7	11.5	7.3	9.4	10.1	10.6	10.4	7.9	6.0	6.8	6.1	5.9	6.0
Germany															
None	46.7	54.1	50.8	37.5	41.2	39.3	46.1	50.7	48.5	57.4	60.9	59.5	78.4	78.7	78.6
One	32.8	30.3	31.4	33.7	36.4	35.0	34.6	33.0	33.8	31.7	25.5	28.0	19.1	17.6	18.0
Two	14.5	11.1	12.6	19.8	14.9	17.4	14.5	13.8	14.1	7.3	7.1	7.2	2.5	3.0	2.9
Three or more	6.0	4.6	5.2	9.0	7.4	8.3	4.8	2.5	3.6	3.6	6.5	5.3	.0	.6	.4

Table 4A.14 (cont.) **Siblings**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Netherlands															
None	29.8	29.9	29.8	24.7	22.2	23.4	25.0	23.3	24.1	38.8	30.9	34.3	58.5	64.1	62.5
One	27.5	28.4	28.0	28.2	30.2	29.2	25.3	28.2	26.8	30.9	30.4	30.6	23.7	19.7	20.8
Two	18.4	19.5	19.0	18.2	21.3	19.8	21.1	20.3	20.6	17.6	20.8	19.5	9.4	9.8	9.7
Three or more	24.4	22.2	23.2	28.9	26.4	27.6	28.6	28.2	28.4	12.7	17.8	15.6	8.4	6.4	6.9
France															
None	36.5	39.4	38.1	27.7	23.1	25.2	30.4	35.7	33.2	47.8	52.1	50.2	72.2	72.0	72.1
One	30.3	29.5	29.9	29.0	34.1	31.7	36.6	32.9	34.6	29.0	25.8	27.2	14.8	18.0	16.9
Two	17.9	15.4	16.5	24.4	20.4	22.3	14.9	14.1	14.5	14.2	12.6	13.3	7.4	8.0	7.8
Three or more	15.3	15.6	15.5	18.9	22.4	20.8	18.1	17.4	17.7	9.0	9.5	9.3	5.6	2.0	3.2
Switzerland															
None	33.8	36.3	35.2	26.4	31.3	28.9	27.6	36.1	32.1	49.1	32.9	40.0	59.2	58.1	58.5
One	35.4	34.5	34.9	37.2	34.2	35.7	40.2	38.1	39.1	27.0	35.2	31.6	24.1	24.0	24.0
Two	17.9	17.6	17.7	21.9	18.0	20.0	18.8	18.1	18.4	13.4	19.9	17.1	9.0	12.5	11.3
Three or more	12.9	11.6	12.2	14.5	16.5	15.5	13.4	7.8	10.4	10.6	12.0	11.4	7.7	5.4	6.2
Austria															
None	48.8	53.6	51.5	38.5	46.5	42.7	51.2	47.2	49.1	56.2	61.1	59.0	69.6	78.2	75.7
One	27.1	29.0	28.2	32.0	27.3	29.5	26.7	34.7	30.9	22.2	28.0	25.6	17.4	16.1	16.5
Two	15.0	11.8	13.2	17.8	20.1	19.0	14.3	11.1	12.6	11.7	6.3	8.6	13.0	3.2	6.1
Three or more	9.0	5.6	7.1	11.6	6.0	8.7	7.8	7.0	7.4	9.9	4.6	6.9	.0	2.4	1.7
Italy															
None	40.2	41.1	40.7	38.4	29.2	33.8	31.1	36.7	34.2	47.1	42.8	44.6	67.8	75.6	73.3
One	31.3	30.6	30.9	29.0	34.9	31.9	36.4	37.2	36.9	30.7	24.2	26.9	19.2	18.1	18.4
Two	13.5	17.3	15.6	15.9	23.1	19.5	15.1	14.8	14.9	11.2	19.9	16.3	3.2	4.3	4.0
Three or more	15.0	11.0	12.7	16.7	12.8	14.8	17.4	11.3	14.0	11.1	13.1	12.3	9.8	1.9	4.3

Table 4A.14 (cont.) **Siblings**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Spain															
None	32.5	35.1	34.0	24.6	24.4	24.5	27.1	27.1	27.1	44.0	42.2	43.0	51.7	58.8	56.6
One	29.7	34.1	32.2	34.6	42.6	38.8	30.6	37.3	34.3	23.4	27.5	25.8	25.5	23.3	23.9
Two	18.8	17.1	17.8	20.2	18.7	19.4	18.4	16.1	17.2	16.9	16.7	16.8	16.1	13.3	14.1
Three or more	19.0	13.8	15.9	20.7	14.4	17.3	23.8	19.5	21.4	15.7	13.5	14.4	6.8	4.6	5.3
Greece															
None	36.3	39.6	38.1	34.7	35.3	35.0	31.2	34.4	32.9	43.3	43.6	43.5	44.3	58.0	53.1
One	35.9	36.7	36.3	36.3	42.5	39.5	39.2	40.4	39.8	31.3	28.4	29.7	33.1	27.9	29.8
Two	15.9	13.8	14.8	18.2	14.5	16.3	15.5	15.6	15.6	12.5	13.5	13.1	15.2	6.7	9.7
Three or more	12.0	9.8	10.8	10.8	7.6	9.2	14.1	9.6	11.7	12.8	14.5	13.8	7.4	7.4	7.4
Total															
None	40.1	43.7	42.1	33.4	31.3	32.3	36.6	39.9	38.3	49.2	49.6	49.4	66.7	71.5	70.0
One	31.4	31.2	31.3	31.8	36.4	34.2	34.3	34.8	34.6	29.5	26.4	27.7	20.3	19.5	19.7
Two	15.8	14.7	15.2	19.5	18.7	19.1	15.7	14.7	15.2	11.9	13.6	12.9	7.6	6.5	6.9
Three or more	12.7	10.4	11.4	15.2	13.5	14.4	13.4	10.5	11.9	9.4	10.4	10.0	5.4	2.5	3.4
Number of living Sisters															
Sweden															
None	40.3	43.4	42.0	38.3	36.8	37.5	37.1	39.6	38.4	41.6	42.6	42.1	55.2	63.2	60.2
One	34.1	31.5	32.7	35.0	35.2	35.1	36.5	31.0	33.7	33.1	32.1	32.5	24.1	23.8	23.9
Two	15.9	15.0	15.4	15.6	16.3	16.0	17.8	18.8	18.3	13.7	14.9	14.4	16.5	7.6	10.9
Three or more	9.7	10.1	9.9	11.0	11.7	11.4	8.6	10.5	9.6	11.6	10.5	11.0	4.3	5.4	5.0
Denmark															
None	40.6	40.1	40.3	36.3	35.6	35.9	42.0	37.5	39.7	44.5	43.5	43.9	58.2	52.1	54.0
One	32.3	30.1	31.1	36.5	32.6	34.5	25.2	31.5	28.5	33.2	28.7	30.7	25.1	23.1	23.7
Two	16.3	19.4	17.9	15.2	19.9	17.6	19.9	18.1	19.0	13.7	21.9	18.3	12.3	17.1	15.6
Three or more	10.8	10.4	10.6	12.0	11.9	12.0	12.9	12.9	12.9	8.6	5.9	7.1	4.5	7.7	6.7

Table 4A.14 (cont.) **Siblings**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Germany															
None	48.8	49.1	49.0	51.5	49.1	50.3	45.8	44.8	45.3	45.1	50.0	48.0	59.9	58.7	59.0
One	33.2	32.3	32.7	31.8	31.3	31.6	34.7	35.0	34.9	33.6	30.8	31.9	32.5	30.0	30.6
Two	10.5	11.9	11.2	8.6	11.7	10.1	11.6	13.6	12.7	13.1	12.5	12.7	7.6	6.9	7.0
Three or more	7.6	6.7	7.1	8.0	7.9	8.0	7.9	6.6	7.2	8.3	6.8	7.4	.0	4.5	3.4
Netherlands															
None	26.1	27.7	26.9	23.4	22.4	22.8	21.3	23.8	22.6	32.1	27.1	29.2	44.9	50.8	49.1
One	29.3	29.2	29.3	27.3	31.2	29.3	32.1	31.3	31.7	31.1	28.5	29.6	23.7	22.6	22.9
Two	20.6	19.3	19.9	23.7	21.1	22.4	20.8	19.7	20.2	15.5	21.9	19.1	15.7	9.3	11.1
Three or more	24.0	23.8	23.9	25.7	25.3	25.5	25.8	25.2	25.5	21.4	22.6	22.1	15.7	17.4	16.9
France															
None	34.1	36.4	35.4	28.8	24.8	26.7	29.7	31.5	30.6	38.7	44.2	41.7	63.0	68.0	66.2
One	32.0	28.9	30.3	31.6	30.7	31.1	32.8	32.4	32.6	35.5	28.4	31.6	22.2	16.0	18.2
Two	19.2	17.0	18.0	19.6	20.3	20.0	22.6	16.4	19.4	16.8	17.4	17.1	13.0	8.0	9.7
Three or more	14.6	17.6	16.3	20.0	24.1	22.2	14.9	19.7	17.4	9.0	10.0	9.5	1.9	8.0	5.8
Switzerland															
None	31.8	32.6	32.3	27.5	26.6	27.0	37.3	35.3	36.3	30.7	33.0	32.0	39.3	44.8	42.9
One	37.0	34.6	35.7	38.8	38.5	38.6	33.5	35.3	34.4	36.8	30.4	33.2	38.9	31.1	33.8
Two	15.4	16.3	15.9	16.3	19.0	17.7	14.7	14.7	14.7	16.6	17.7	17.2	11.6	7.0	8.6
Three or more	15.7	16.5	16.1	17.4	15.9	16.7	14.5	14.7	14.6	16.0	18.9	17.6	10.3	17.0	14.7
Austria															
None	51.3	48.7	49.9	46.9	39.8	43.2	51.6	46.2	48.7	51.9	55.2	53.8	76.1	70.2	71.9
One	28.4	31.3	30.0	27.3	36.2	32.0	29.5	34.2	32.0	30.2	25.1	27.3	21.7	17.7	18.9
Two	12.6	12.5	12.5	16.4	13.5	14.8	11.2	13.1	12.2	11.1	11.7	11.5	2.2	9.7	7.5
Three or more	7.7	7.5	7.6	9.5	10.5	10.0	7.8	6.5	7.1	6.8	7.9	7.5	.0	2.4	1.7

Table 4A.14 (cont.) **Siblings**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Italy															
None	37.9	36.0	36.9	37.1	28.1	32.6	34.0	33.5	33.7	38.1	37.2	37.6	59.1	58.0	58.3
One	30.9	32.0	31.5	31.7	34.4	33.0	30.3	36.5	33.8	32.9	31.5	32.1	18.1	17.0	17.3
Two	17.3	17.2	17.2	17.2	17.7	17.5	21.1	16.0	18.2	15.2	18.4	17.1	10.4	16.8	14.9
Three or more	13.9	14.8	14.4	13.9	19.8	16.9	14.7	14.0	14.3	13.8	12.9	13.3	12.5	8.3	9.5
Spain															
None	34.0	34.0	34.0	38.5	29.2	33.6	24.5	29.6	27.4	37.1	36.0	36.4	37.7	46.3	43.8
One	32.5	30.9	31.6	33.8	33.1	33.4	36.2	31.1	33.4	27.4	29.4	28.6	31.3	29.2	29.8
Two	19.9	19.5	19.7	15.2	22.4	19.1	23.0	18.6	20.5	21.9	19.6	20.5	25.0	15.2	18.1
Three or more	13.5	15.6	14.7	12.5	15.2	14.0	16.2	20.7	18.7	13.6	15.0	14.5	5.9	9.3	8.3
Greece															
None	36.8	34.8	35.7	37.3	36.7	37.0	32.9	29.4	31.0	35.7	31.0	33.0	57.3	53.0	54.6
One	34.9	36.4	35.7	37.8	36.6	37.2	37.2	41.3	39.4	31.0	33.6	32.5	19.7	26.6	24.1
Two	15.9	15.9	15.9	14.8	17.4	16.1	13.0	13.1	13.1	24.6	19.5	21.7	11.8	13.4	12.8
Three or more	12.4	12.9	12.7	10.0	9.3	9.7	17.0	16.1	16.5	8.7	15.9	12.8	11.2	7.0	8.5
Total															
None	39.8	39.9	39.9	39.6	34.3	36.9	36.7	36.6	36.7	40.0	41.7	41.0	55.3	57.3	56.7
One	32.3	31.5	31.8	32.3	32.7	32.5	33.4	34.4	33.9	32.6	30.2	31.2	25.8	24.2	24.7
Two	15.7	15.7	15.7	14.8	17.2	16.1	17.2	15.6	16.3	16.1	16.7	16.4	13.1	10.9	11.6
Three or more	12.2	12.9	12.6	13.3	15.7	14.5	12.7	13.4	13.0	11.3	11.4	11.3	5.7	7.6	7.0

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.15 **Number of Living Children (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
None	9.2	10.3	9.8	9.5	7.6	8.5	7.4	7.1	7.3	9.3	12.8	11.3	10.0	18.1	15.1
One	12.6	17.8	15.4	10.8	17.9	14.4	12.0	15.9	14.0	13.4	17.7	15.8	17.6	21.3	19.9
Two	39.8	36.7	38.2	39.5	35.8	37.6	41.0	37.5	39.2	38.6	41.9	40.5	40.8	30.3	34.2
Three or more	38.4	35.2	36.7	40.1	38.8	39.5	39.6	39.5	39.5	38.7	27.7	32.4	31.5	30.3	30.7
Denmark															
None	11.2	10.3	10.8	13.4	8.8	11.1	7.9	6.7	7.3	13.6	12.6	13.0	7.4	17.1	14.0
One	13.2	14.7	14.0	15.3	15.3	15.3	11.4	11.7	11.5	13.8	18.2	16.3	6.9	15.0	12.4
Two	40.2	39.7	39.9	39.3	45.7	42.5	42.7	40.0	41.3	36.0	33.4	34.6	44.2	30.6	35.0
Three or more	35.3	35.3	35.3	32.0	30.2	31.1	38.0	41.7	39.9	36.6	35.8	36.1	41.5	37.3	38.6
Germany															
None	18.1	14.6	16.2	23.1	13.9	18.6	17.3	12.1	14.6	10.3	16.8	14.2	12.7	18.0	16.7
One	22.0	25.4	23.9	21.7	24.8	23.2	21.1	23.5	22.4	25.3	23.8	24.4	18.4	32.5	29.1
Two	35.9	33.5	34.6	35.1	39.3	37.2	37.1	35.6	36.3	32.8	29.6	30.9	45.3	23.5	28.7
Three or more	24.0	26.4	25.4	20.2	21.9	21.0	24.5	28.8	26.7	31.6	29.7	30.4	23.5	26.0	25.4
Netherlands															
None	12.6	12.4	12.5	17.0	12.6	14.7	9.1	9.8	9.5	6.1	11.7	9.3	10.5	18.2	16.0
One	10.6	12.1	11.4	9.0	14.9	12.0	11.8	9.4	10.6	10.3	13.3	12.0	18.8	6.4	10.0
Two	41.8	36.6	39.0	43.5	43.8	43.7	46.2	38.3	42.2	31.9	27.3	29.3	40.8	27.5	31.3
Three or more	35.0	39.0	37.2	30.4	28.8	29.6	32.9	42.5	37.8	51.7	47.8	49.4	30.0	47.9	42.7
France															
None	12.7	11.3	11.9	8.3	7.9	8.1	10.1	9.2	9.7	19.1	14.2	16.4	21.4	20.2	20.6
One	17.6	21.3	19.6	17.4	23.4	20.6	17.7	19.4	18.6	16.6	20.3	18.6	23.2	20.2	21.3
Two	31.8	29.7	30.7	38.4	33.1	35.5	32.3	32.4	32.4	27.4	25.9	26.5	16.1	21.2	19.3
Three or more	37.9	37.8	37.8	35.9	35.5	35.7	39.9	38.9	39.4	36.9	39.6	38.4	39.3	38.4	38.7

Table 4A.15 (cont.) **Number of Living Children**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Switzerland															
None	13.8	13.5	13.6	14.1	13.1	13.6	17.4	16.1	16.7	8.1	8.4	8.3	12.7	16.8	15.4
One	13.7	17.6	15.8	9.2	12.1	10.7	13.4	15.5	14.5	17.0	24.6	21.3	26.7	25.1	25.6
Two	41.1	37.4	39.1	48.3	47.7	48.0	42.1	37.6	39.8	31.2	29.2	30.1	20.4	24.2	22.9
Three or more	31.4	31.5	31.5	28.4	27.1	27.8	27.0	30.7	28.9	43.7	37.8	40.4	40.3	34.0	36.1
Austria															
None	14.5	15.1	14.9	16.5	14.3	15.4	13.3	14.3	13.8	9.9	13.2	11.8	28.3	24.8	25.8
One	20.8	24.5	22.9	18.0	22.4	20.3	19.8	25.7	22.9	27.2	25.6	26.3	21.7	25.6	24.5
Two	36.6	34.9	35.6	36.0	39.4	37.8	40.7	34.3	37.3	31.5	31.8	31.7	28.3	31.2	30.4
Three or more	28.1	25.5	26.6	29.5	23.9	26.6	26.2	25.7	25.9	31.5	29.3	30.2	21.7	18.4	19.4
Italy															
None	10.9	17.6	14.7	12.2	11.5	11.9	10.3	13.6	12.1	9.5	14.1	12.2	11.6	47.5	36.7
One	23.4	18.9	20.9	23.6	18.3	21.0	22.8	22.3	22.5	23.7	20.4	21.7	18.2	10.0	12.4
Two	41.0	36.3	38.4	41.8	47.7	44.8	42.6	34.8	38.2	42.9	35.5	38.6	27.0	15.5	19.0
Three or more	24.7	27.1	26.0	22.3	22.5	22.4	24.3	29.4	27.2	24.0	30.0	27.5	43.2	27.0	31.9
Spain															
None	15.0	13.0	13.8	18.8	12.4	15.4	11.4	8.5	9.8	10.8	12.6	11.8	21.4	22.6	22.2
One	13.4	12.3	12.8	15.1	11.7	13.3	9.7	10.6	10.2	13.0	10.7	11.7	14.4	19.3	17.8
Two	30.1	31.5	30.9	35.3	36.0	35.7	27.7	32.4	30.3	28.6	32.5	30.9	21.6	18.5	19.4
Three or more	41.6	43.2	42.5	30.8	39.9	35.7	51.2	48.6	49.7	47.6	44.2	45.6	42.7	39.7	40.6
Greece															
None	10.0	10.5	10.3	9.7	11.2	10.5	11.3	12.5	12.0	9.3	8.4	8.8	8.7	8.1	8.3
One	14.4	17.5	16.1	11.5	19.5	15.6	15.5	17.5	16.6	18.6	17.7	18.1	10.2	12.5	11.7
Two	53.9	48.6	51.0	59.6	51.7	55.6	53.3	48.0	50.4	47.7	47.1	47.3	45.8	41.7	43.1
Three or more	21.6	23.3	22.5	19.3	17.6	18.4	19.9	22.0	21.0	24.4	26.8	25.8	35.3	37.7	36.8
Total															
None	14.1	14.0	14.0	16.0	11.7	13.8	13.0	11.4	12.1	11.5	14.2	13.0	15.2	24.7	21.9
One	18.8	20.0	19.5	18.4	19.9	19.2	18.3	19.8	19.1	19.9	19.6	19.7	18.3	21.1	20.3
Two	37.0	34.3	35.5	39.1	40.5	39.8	38.1	35.4	36.6	34.2	31.8	32.8	30.9	22.2	24.8
Three or more	30.1	31.7	31.0	26.4	28.0	27.2	30.6	33.4	32.1	34.4	34.4	34.4	35.5	32.0	33.1

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.16 **Number of Living Grandchildren (percentages)**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Sweden															
None	30.9	21.1	25.7	58.4	43.8	51.0	18.2	11.6	14.8	8.1	6.2	7.0	8.0	4.7	6.0
One	9.8	8.8	9.3	12.4	9.3	10.8	10.1	12.6	11.4	5.2	6.7	6.0	6.4	2.7	4.1
Two	13.7	15.2	14.5	9.8	15.2	12.5	16.6	16.1	16.3	15.6	13.2	14.3	16.5	17.2	16.9
Three or more	45.7	54.9	50.6	19.4	31.7	25.7	55.1	59.7	57.4	71.1	73.9	72.7	69.2	75.4	72.9
Denmark															
None	30.8	21.2	25.6	53.4	38.2	45.5	15.2	12.8	14.0	9.5	7.4	8.4	3.5	5.9	5.1
One	10.5	9.5	10.0	11.8	15.6	13.8	13.9	7.8	10.8	6.0	3.9	4.8	2.5	2.0	2.2
Two	14.5	14.9	14.7	12.5	16.3	14.5	16.4	13.1	14.7	20.1	17.3	18.6	8.3	11.2	10.2
Three or more	44.2	54.3	49.6	22.3	29.9	26.3	54.5	66.3	60.5	64.3	71.4	68.2	85.6	80.8	82.5
Germany															
None	36.4	26.9	31.1	62.6	50.9	56.6	28.9	24.4	26.5	12.2	9.3	10.6	6.5	7.0	6.9
One	15.0	13.9	14.4	15.6	17.5	16.6	16.4	13.2	14.7	8.9	12.0	10.7	21.9	11.2	13.9
Two	18.0	19.5	18.9	10.6	17.3	14.1	20.2	19.5	19.8	26.0	22.6	24.0	22.5	19.4	20.2
Three or more	30.6	39.6	35.7	11.1	14.2	12.7	34.5	42.8	39.0	52.8	56.0	54.7	49.0	62.4	59.0
Netherlands															
None	38.2	28.0	32.6	65.8	53.9	59.5	23.0	13.7	18.3	7.0	9.1	8.2	14.3	3.7	7.0
One	11.1	10.8	11.0	13.6	14.5	14.1	13.1	13.7	13.4	5.5	5.5	5.5	4.8	1.5	2.5
Two	13.4	13.9	13.7	10.4	14.9	12.8	18.2	13.2	15.6	12.4	14.1	13.4	16.7	14.0	14.8
Three or more	37.3	47.3	42.7	10.1	16.8	13.7	45.8	59.4	52.7	75.0	71.3	72.9	64.1	80.8	75.7
France															
None	30.8	23.0	26.5	58.2	43.5	50.3	16.3	12.2	14.2	7.9	9.5	8.8	6.8	6.3	6.5
One	14.3	13.0	13.6	18.5	18.0	18.2	14.6	12.8	13.6	8.7	7.7	8.1	6.8	7.6	7.3
Two	12.1	12.7	12.4	9.9	12.8	11.4	16.3	14.3	15.2	8.6	11.2	10.1	15.9	12.7	13.8
Three or more	42.8	51.3	47.5	13.3	25.8	20.0	52.8	60.7	56.9	74.8	71.6	73.0	70.5	73.4	72.4
Switzerland															
None	45.2	38.9	41.8	74.2	66.4	70.3	30.5	27.2	28.8	13.4	14.6	14.1	12.9	19.3	17.0
One	9.1	10.1	9.6	7.7	15.7	11.7	12.6	8.3	10.4	10.4	8.5	9.4	2.9	2.2	2.4
Two	14.4	13.1	13.7	6.5	6.6	6.6	19.6	18.2	18.8	18.8	17.9	18.3	29.4	15.2	20.2
Three or more	31.3	37.9	34.9	11.6	11.3	11.4	37.3	46.3	42.0	57.3	58.9	58.2	54.8	63.4	60.4

Table 4A.16 (cont.) **Number of Living Grandchildren**

	Total			50-59			60-69			70-79			80+		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Austria															
None	30.7	23.3	26.6	49.1	40.1	44.3	27.4	20.2	23.6	12.4	9.5	10.8	9.1	11.8	11.1
One	15.2	16.2	15.7	16.8	16.4	16.6	16.4	17.1	16.7	11.7	14.3	13.2	6.1	15.1	12.5
Two	18.2	17.5	17.8	14.2	16.0	15.2	19.2	18.2	18.7	22.8	19.5	20.9	18.2	15.1	15.9
Three or more	35.9	43.0	39.8	19.8	27.5	23.9	37.0	44.5	41.0	53.1	56.7	55.1	66.7	58.1	60.5
Italy															
None	44.2	31.2	37.2	65.2	58.3	61.7	43.8	27.5	34.7	19.1	8.7	13.2	10.2	10.2	10.2
One	14.7	13.7	14.2	17.7	16.2	17.0	11.6	12.9	12.3	16.0	13.6	14.6	10.0	7.8	8.7
Two	15.0	19.5	17.4	10.4	10.6	10.5	17.8	27.8	23.4	20.3	23.4	22.1	12.6	9.4	10.7
Three or more	26.0	35.6	31.2	6.7	14.8	10.8	26.8	31.8	29.6	44.6	54.4	50.2	67.2	72.6	70.3
Spain															
None	35.9	25.2	29.7	76.0	60.3	67.4	20.9	11.7	15.7	6.2	6.2	6.2	1.4	5.4	4.2
One	12.9	12.3	12.6	15.4	20.0	17.9	18.8	12.6	15.3	6.4	8.1	7.4	2.7	.5	1.2
Two	15.5	14.7	15.0	6.0	10.4	8.4	22.8	22.8	22.8	20.7	13.0	16.1	17.2	13.1	14.3
Three or more	35.7	47.8	42.8	2.6	9.3	6.3	37.6	52.9	46.3	66.7	72.7	70.3	78.6	81.0	80.3
Greece															
None	52.5	33.6	42.2	87.0	70.2	78.5	47.6	26.8	36.6	16.1	6.7	10.7	6.4	2.2	3.7
One	9.5	9.6	9.6	7.3	12.2	9.8	13.9	12.7	13.3	8.5	5.8	7.0	4.0	2.3	2.9
Two	11.9	14.0	13.0	3.6	9.2	6.4	15.7	15.4	15.6	17.5	19.9	18.9	18.6	12.1	14.4
Three or more	26.2	42.8	35.2	2.2	8.4	5.3	22.8	45.1	34.6	58.0	67.6	63.5	70.9	83.4	78.9
Total															
None	37.6	27.1	31.8	64.8	52.7	58.5	28.9	20.7	24.5	12.0	8.6	10.0	7.3	7.0	7.1
One	13.7	12.9	13.2	15.7	16.8	16.3	14.8	12.9	13.8	9.9	10.2	10.1	10.0	6.9	7.9
Two	15.3	16.8	16.1	9.6	13.4	11.6	18.8	20.1	19.5	19.4	18.4	18.8	17.4	14.9	15.8
Three or more	33.5	43.3	38.9	9.9	17.0	13.6	37.5	46.3	42.2	58.8	62.7	61.1	65.3	71.2	69.3

Note: Survey of Health, Ageing and Retirement 2004. Release 0, weighted.

Table 4A.17 Prevalence (%) of Low Quality of Work (effort-reward ratio > 1.0) in 10 European Countries According to Socio-Demographic and Socio-Economic Characteristics

	AT	CH	DE	DK	ES	GR	IT	NL	SE	FR
N	485	494	986	698	407	607	543	924	955	423
Gender										
Male	49.0	32.8	48.6	36.7	43.0	53.5	56.2	31.0	36.1	39.9
Female	39.6	24.1	39.2	43.4	44.1	52.6	47.0	26.2	41.2	39.0
Age										
< 55	48.3	25.7	48.0	40.3	38.8	50.5	62.3	29.3	44.1	41.4
55-59	42.6	28.8	47.5	47.7	53.3	52.7	39.4	31.1	37.3	40.2
≥ 60	40.6	33.1	32.3	27.4	38.8	58.9	53.8	21.2	33.1	19.3
Education										
Low	52.7	33.4	44.3	40.5	50.0	73.5	59.4	31.7	46.2	39.7
High	43.4	25.9	44.2	39.8	29.8	39.2	46.8	27.1	33.4	39.4

Table 4A.18 Prevalence (%) of Low Quality of Work (low control: upper tertile of scores[a]) in 10 European Countries According to Socio-Demographic and Socio-Economic Characteristics

	AT	CH	DE	DK	ES	GR	IT	NL	SE	FR
N	489	513	1030	718	412	644	543	956	979	443
Gender										
Male	19.5	28.1	35.8	29.6	21.9	23.6	22.7	24.0	19.8	38.3
Female	25.7	36.1	41.0	30.6	28.2	26.9	16.7	31.1	31.0	49.8
Age										
< 55	23.7	27.5	39.4	23.4	20.5	26.8	24.4	28.7	22.9	40.0
55-59	20.4	30.5	37.6	34.2	28.3	22.5	17.9	26.2	27.4	51.2
≥ 60	22.1	37.2	35.9	36.7	28.2	22.9	17.1	22.3	25.6	44.1
Education										
Low	35.2	40.7	57.9	39.2	29.5	32.3	27.2	33.9	33.7	56.5
High	19.9	24.5	36.0	28.7	14.1	18.9	15.2	22.1	19.2	38.8

Note: [a] tertiles calculated for each country separately

Table 4A.19 Prevalence (%) of Low Quality of Work (effort-reward ratio > 1.0) in 10 European Countries According to Two Indicators of Well-Being

	AT	CH	DE	DK	ES	GR	IT	NL	SE	FR
N	485	494	986	698	407	607	543	924	955	423
EURO-D										
Yes	50.2	29.2	66.8	56.0	49.1	60.8	62.5	39.7	49.4	46.4
No	43.8	29.0	41.4	36.9	41.8	52.2	49.8	26.7	37.1	36.7
SRH [a]										
Good	39.5	25.8	42.5	38.1	39.3	51.5	48.5	26.3	35.4	33.4
Bad	63.1	51.9	51.0	48.0	55.2	63.2	62.0	42.3	49.9	59.7

Note: [a] SRH: Self-rated health (Good: good or better / Bad: less than good)

Table 4A.20 Prevalence (%) of Low Quality of Work (low control: upper tertile of scores[a]) in 10 European Countries According to Two Indicators of Well-Being

	AT	CH	DE	DK	ES	GR	IT	NL	SE	FR
N	489	513	1030	718	412	644	543	956	979	443
EURO-D										
Yes	28.9	49.1	51.0	39.0	31.1	31.8	21.4	35.1	30.4	56.3
No	21.1	28.6	36.5	28.6	22.4	23.6	20.2	25.5	24.4	37.7
SRH [b]										
Good	20.6	29.0	35.6	27.4	21.5	23.7	15.6	24.0	23.2	38.4
Bad	28.0	49.8	46.6	43.1	32.9	30.1	31.0	41.8	32.3	64.7

Note: [a] tertiles calculated for each country separately. [b] SRH: Self-rated health (Good: good or better / Bad: less than good)

Table 4A.21 **Quality of Life in Nine European Countries (CASP-12: means of domains and sum score)**

Country	N	Control	Autonomy	Self-realisation	Pleasure	CASP (sum score)
SE	1478	8.54	9.29	9.65	11.14	38.70
DK	666	8.80	9.55	10.12	*11.22*	39.76
DE	1809	9.05	9.05	9.02	10.56	37.71
NL	1909	9.27	9.18	9.77	10.81	39.07
CH	669	9.44	9.41	10.33	11.20	40.47
AT	1663	9.01	8.97	9.42	10.86	38.33
IT	1133	8.44	7.77	8.71	9.35	34.26
ES	1149	8.54	8.22	8.57	9.90	35.20
GR	1827	7.79	7.73	8.41	9.50	33.43
Total	12303	8.78	8.63	9.02	10.24	36.66

Table 4A.22 **CASP-12 (mean sum score) by Demographic Characteristics**

Country	Male	Female	50-64 years	65-74 years	≥ 75 years
SE	38.99	38.45	39.39	38.86	36.77
DK	39.61	39.89	40.16	39.81	37.97
DE	37.94	37.52	38.49	37.60	35.71
NL	39.13	39.03	39.59	38.66	37.88
CH	40.50	40.44	40.56	40.89	39.71
AT	38.71	38.01	39.41	37.86	35.30
IT	34.93	33.70	35.14	33.57	32.45
ES	36.58	34.20	36.88	34.22	32.77
GR	34.63	32.41	34.92	32.76	29.64
Total	37.19	36.23	37.61	36.13	34.66

Table 4A.23 **CASP-12 (mean sum score) by Socio-Economic Status**

Country	Education		Equivalence Income		
	Primary or lower sec.	Upper sec. or tertiary	Lower tertile	Middle	Upper tertile
SE	38.10	39.37	37.51	38.80	39.89
DK	39.08	39.96	38.39	39.33	41.20
DE	35.34	38.21	35.68	37.86	39.48
NL	38.36	39.92	37.79	39.21	40.18
CH	40.07	40.89	39.83	40.59	40.93
AT	36.51	39.08	37.08	38.45	39.39
IT	33.43	36.16	33.64	34.33	34.78
ES	34.51	39.27	34.47	34.32	37.01
GR	32.15	35.76	32.37	33.02	34.99
Total	34.85	38.21	35.35	36.61	37.98

5 Work and Retirement

Ed. Agar Brugiavini

5.1 Labour Force Participation of the Elderly: Unused Capacity?

Agar Brugiavini, Enrica Croda, and Franco Mariuzzo

Introduction

Europe has witnessed an unprecedented increase in longevity and at the same time Europeans excel in early retirement. Isn't there a huge unused capacity for active work?

Economic activities and retirement decisions of the older population in Europe occupy much of the political debate around pensions reforms. The focus is on the possibility of increasing the working lives of current and future cohorts of workers, also in view of higher life expectancy, in order to provide adequate resources for retirement. The question rests on the opportunities to work longer offered by the institutional set up of the different countries (namely social security and pension arrangements) and on the ability that individuals have, given their health and social conditions, to supply labour in older ages. Economic research has explored the determinants of retirement (exits from the labour force) by stressing the role of economic incentives embedded in social security and pension systems (Gruber and Wise 1999, 2004). To what extent social security and pension rules play a role in shaping labour supply decisions? Some workers may be leaving the labour market earlier than it would be desirable, given their health conditions and their socio-demographic characteristics, possibly because "pushed" by the generosity of the pension system.

Of course measuring "unused work capacity" is not an easy task, precisely because one needs information on the labour market position of individuals as well as their health conditions, social conditions and preferences for leisure. This contribution shows that the SHARE sample permits new views on these questions because all the relevant dimensions of the individual's decision framework are jointly documented. A richer analysis of the responses of individuals to changes in one of these dimension (e.g. onset of a disease or a policy change) and a full description of the transition from work to retirement will be possible on a longitudinal sample.

Economic Activities of the Elderly: An Overview

Our analysis is mainly based on the self-reported current economic status of the respondents, which is elicited by presenting a mutually exclusive set of answers. We distinguish six possible cases: worker, retired, unemployed, disabled, homemaker and "other". This question is asked to all age-eligible individuals (including the first respondent's spouse, irrespective of age). In Figure 1 we focus on workers and retired individuals and group all others activities into "all other": it is immediately apparent that work and retirement are the two prevalent economic activities in the SHARE sample.

Tables 5A.1 and 5A.2 (see the Appendix to this chapter) provide the (weighted) average distribution of all the six categories with their standard errors, by country and also by country-gender. A first inspection of Tables 5A.1 and 5A.2 suggests a rather stable distribution of activities, with the proportion of workers ranging between 17% (Austria) and 38% (Switzerland), while retired individuals range between 34% (Spain) and 66% (Austria). However, a detailed cross-country and gender analysis unveils the heterogeneity possibly due to institutional differences and social norms (Table 5A.3). Other individual characteristics could explain the pattern in the labour force participation. Throughout this paper we focus on three relevant dimensions of variability in economic activities: age, gender and countries and then correlate with health conditions. In Austria, France, Italy and

Greece the percentage of men reporting themselves as retired is much higher than in other countries (58% and above), while in Sweden, Denmark and Switzerland we find a high percentage of workers. Furthermore, the Netherlands have a larger fraction of respondent reporting to be permanently sick or disabled than the other SHARE countries.

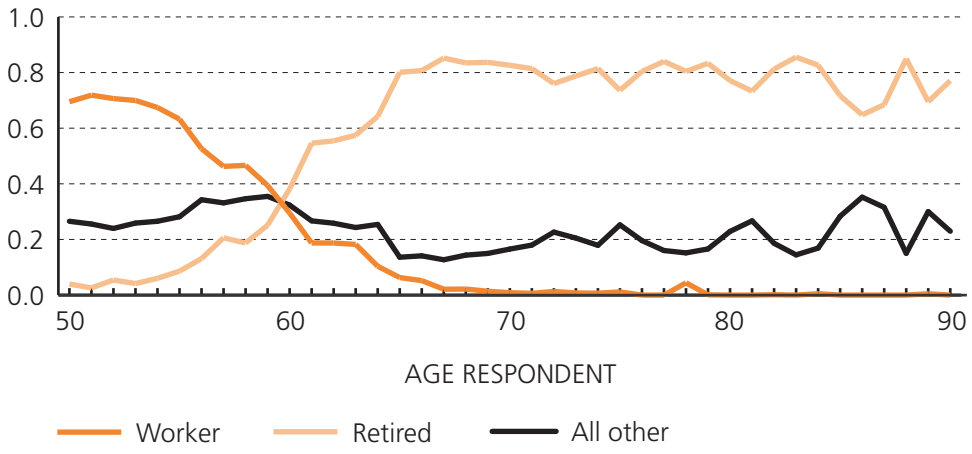

Figure 1 Self-reported economic activity by age

The prevalence of self-reported "working" is generally lower for women than for men, mostly because of the relatively large fraction of women who report their status as 'home-maker'.

Figure 2 Distribution of economically active individuals by gender and age-class

By and large a general pattern emerges, whereby men have higher rates of labour market participation or retirement (the latter most likely from a previous job). It is highly probable

that "homemaker" women never had a labour market experience during their lifetime, in this sense the "unused labour capacity" interpretation does not apply to this group of the SHARE-population. Once we will have actual transitions we will be able to study the pathways from work to retirement, however the age distribution of work (and retirement) provided in Figure 2 and Table 5A.3 already suggests possible interpretations.

Less than 1 out of 10 men over 65 report themselves as working in all countries (except Switzerland), the age-work pattern of women is less clear-cut. Austrians and Italians, both men and women, seem to exit the labour force at earlier ages than other Europeans (possibly moving into retirement). In particular 19% of Italian men between age 60 and age 64 define themselves as worker, compared to 60% of Swedish men. This evidence suggests that pension policies adopted by the different countries are an important determinant of labour force participation decisions at older ages.

Unused Labour Capacity, Full-Time Work and Part-Time Work

Figure 3 Distribution of self-reported and actual economic activity

Labour market participation rates are of extreme policy relevance in Europe and it is worth investigating labour supply behaviour in relation to actual current economic activity of the SHARE sample.

In fact, self-reported economic status could be affected by individual perceptions and also by institutional features of the pensions systems: for example in some countries individuals may be allowed to work while collecting pension benefits (possibly subject to an earnings test) and report themselves retired even if working. To investigate this further we

make use of actual current work status (Figure 3) and also distinguish between full-time and part-time workers on the basis of hours worked (Table 5A.4). We define a full-time worker reporting working hours of 30 or more per week. Although this threshold may vary between countries when looking at actual contractual agreements, we find this definition to be prevalent in the SHARE countries and strictly comparable with the ELSA study (English Longitudinal Study on Ageing). Figure 3 shows that on average there are more elderly people in paid work than self-reported, even when we restrict the condition to people with 15 hours or more of work.

Table A5.3 shows a related fact: the distribution of economically active individuals between full-time and part-time for different age groups, across countries and disaggregated by gender. The distribution of types of economic activity within the active groups varies considerably by gender and also by age.

Before age 65, the proportion of economically active respondents working part-time is much higher for women than for men. However, the frequency of part-time work increases for both genders at older ages (after 65). Across countries, at all ages women are more likely than men to be working part-time. These findings suggest that in some countries partial or gradual retirement could be an important feature of the labour market.

The intuition of "unused capacity" hinges on the incentives, embedded in social security and pension systems, to retire early. However, other determinants of early retirement should be considered, for example the health status of individuals. Figure 4 and Table 5A.5 show the distribution of actual work and retirement by restricting the attention to individuals in "good health". This latter is defined on the basis of two indicators: (i) self-reported absence of limitations in daily activities; (ii) "functioning", i.e., counting zero limitations out of fourteen daily activities (ADL and IADL).

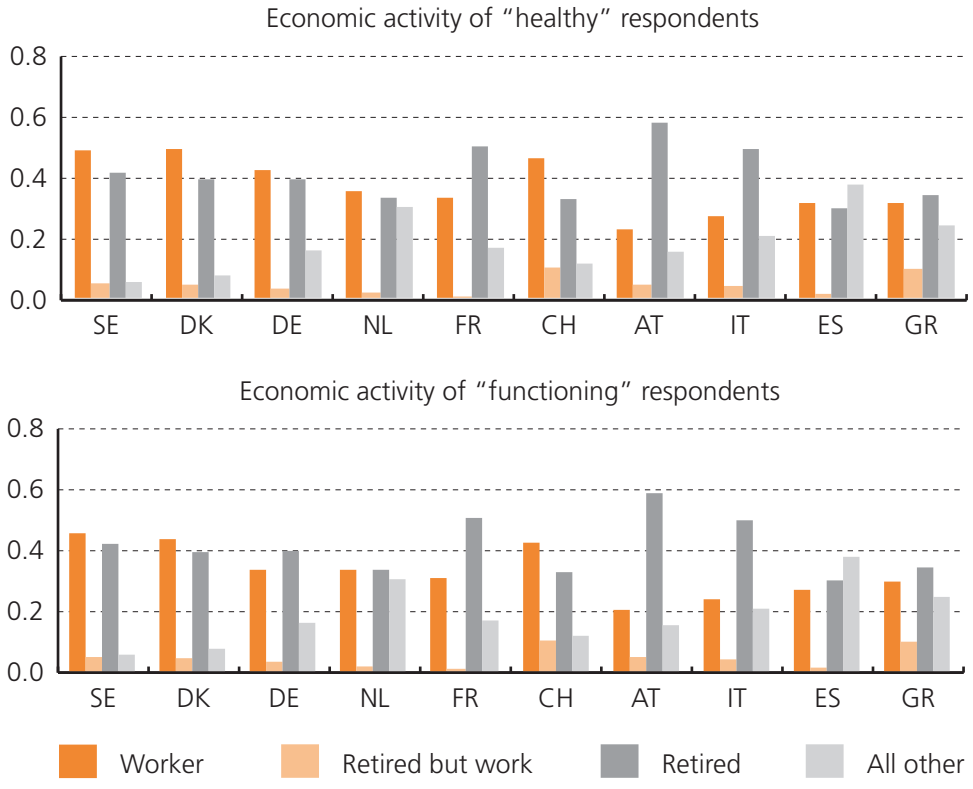

Figure 4 Economic activity and physical health

In order to make the comparison sharper we focus on three groups of individuals: those who are self-reported working and are actually currently active, those who are self-reported retired and have no hours of work (retired) and those who are self-reported retired but do some hours of work (retired but work). Results are obviously affected by the "health" composition of the population in different countries, but there is a strikingly high frequency of people with no limitations (or who are "functioning") who report themselves fully retired, in Austria, France and Italy. This is true even for people in early retirement (younger than 60). Further evidence in support of the cross-country variability in "unused labour capacity" can be found in Table 5A.6, which looks at the "main reason for retirement" for three age groups (age 55-59; 60-64 and 65+). While health-related problems are one of the reasons for retirement, there exists a substantial proportion of retirees who report eligibility for retirement, early- or pre-retirement as a cause, particularly in Germany, the Netherlands and France.

Conclusions

- Institutional differences in welfare systems clearly affect the distribution and the age pattern of participation to the labour market and of retirement. Countries where early retirement is allowed and/or is generous see a prevalence of early retirees (typically Southern countries, but also Austria and France).

- There is potentially huge unused labour capacity in countries such as Austria, Italy and France where "healthy" individuals are not in the labour force.

- Longitudinal data will allow us to further clarify the role of health and family conditions, as opposed to policy incentives, in shaping work and retirement decisions.

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5.2 Public and Private Pension Claims

Johann K. Brunner, Cornelia Riess, and Rudolf Winter-Ebmer

Introduction

When assessing the sustainability of a country's pension system, an important aspect is to know to which extent it relies on public and private institutions, respectively. Generally, public pension systems are established on a pay-as-you-go basis, that is, what the currently active contribute is immediately transferred to the pensioners. As public pension systems are therefore directly exposed to the demographic development, they require appropriate decisions by politicians in order to maintain their fiscal stability. Private pension systems, on the other hand, can only be organised according to a fully-funded method: pensioners are entitled to the returns their prior contributions earned on the capital market. While there is no immediate dependency on the age composition of the population, there are other risks related to investments in the capital market. For this reason, an appropriate mix of the two systems might be preferable.

From the point of view of social policy it is interesting to know which demographic groups do in fact have access to the various forms of old-age provision. For example, one expects that low-educated persons rely on the public, mandatory system to a larger extent than high-educated, which means that when reforming the public pension system one has to observe carefully how the former group is affected. The SHARE survey, in particular the section on Employment and Pensions provides very valuable information on these issues. Retired respondents are asked from which sources they received (pension or transfer) income last year, which gives the desired information for retired persons, while active respondents are asked about entitlement to future pensions. There are also questions concerning the amount of pension payments and the first eligibility year. Combining the answers with other characteristics of the respondents, one obtains a comprehensive view on the structure of pension income of the elderly. It should be stressed that while some of these questions could also be answered in the new EU Statistics on Income and Living Conditions (SILC), information about future pension claims is unique to SHARE, along with a more detailed decomposition of private and occupational pensions.

North-South Gradient Among Private Pension Receipts

Coverage by the public pension system is quite universal in all European countries where the SHARE survey was carried out. There is either a general basic pension, to which almost every one living in the country is entitled to (as in the Nordic countries), or there is an occupation-related pension, which is mandatory for all employed or self-employed, as in the central and southern European countries. For this reason we mainly concentrate on the so-called second and third pillars of old-age provision. The second pillar comprises retirement income from private occupational pension arrangements, while the third pillar is usually defined as purely private old-age provision. Obviously, in a broad sense the latter could consist of all long-term investments people accumulate during their active period, which are available for consumption in the period of retirement. However, in this analysis we use a narrow definition and include only private individual retirement accounts and private life insurance.

One observes in Figure 1 that non-public pension claims are generally not wide-spread in Europe, moreover there are remarkable cross-country differences: in France, Spain and Greece (but also in Italy and Austria) only a negligible share of the retirees receives an oc-

cupational pension, while more than sixty percent of the Dutch and the Swedish pensioners get one. The share is also above thirty percent in Switzerland and in Denmark while in Germany it is about one fifth of the pensioners. These findings can be compared with numbers reported in Whitehouse (2003) for the Netherlands (50%) and Germany (21% for men). Coverage by the third pillar is generally rather low in Europe: in nearly all countries less than ten percent of the retirees receive income from private accounts or life insurance, while in Sweden it is almost one fifth.

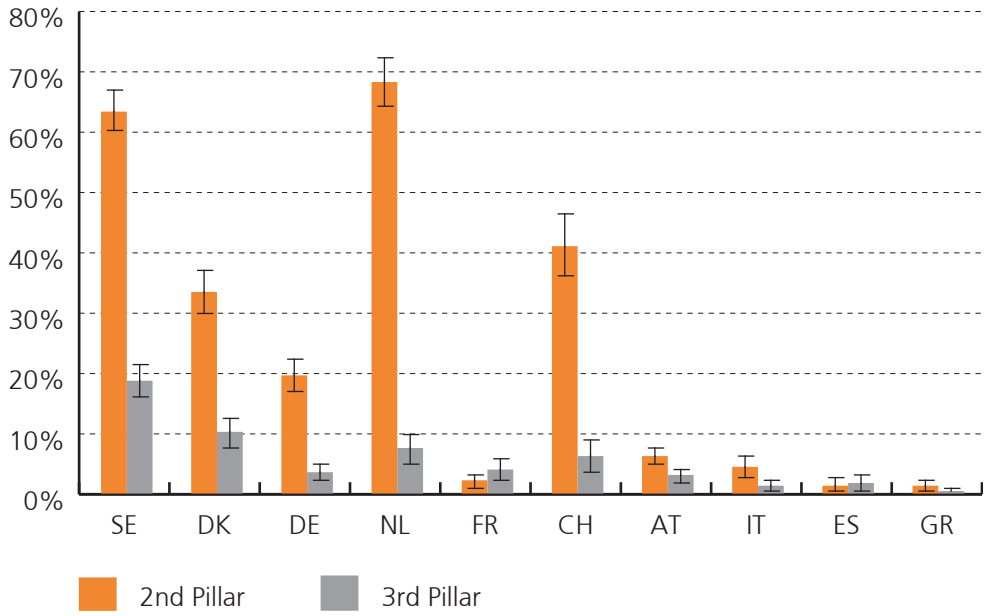

Figure 1 Coverage of 2nd and 3rd Pension Pillar among retirees who have been in workforce before retirement.

Table 5A.7 in the Appendix to this chapter shows the source of the retirement income for those pensioners who are covered by at least one public pension. Across European countries most retirees are covered by a regular old age pension, but a high proportion draws public early retirement pensions. This share clearly falls with educational level: for those with only primary education one third of males and one fourth of females have retired early, whereas these percentages are around 10% for those with tertiary education. Similarly, public disability or invalidity pension varies with education: due to more physically demanding jobs, the drawing of disability pensions is more prevalent for persons with primary education only.

Table 5A.8 in the Appendix details past participation to occupational and private pensions by education. In all cases participation is higher for males - participation rates range between 10% higher to 100% higher than those observed for females. Both for occupational pensions and private pensions, higher income individuals – which we proxy by higher education – tend to have better coverage.

A rather low coverage by the second and the third pillar becomes even more apparent when one considers the composition of the pension income of the retired, as is shown in Figure 2. The first pillar provides by far the largest part, only in the Netherlands it is as low as 56 percent; in Switzerland, Sweden and Denmark it is between 70 and 80 percent, while it is clearly over 90 percent in the other countries. The share of the third pillar is generally very low; only in the Netherlands it reaches more than five percent. As we defined the

third pillar in a narrow way – including only payments from individual retirement accounts and life insurances –, our figures are significantly lower than those in e.g. Börsch-Supan and Brugiavini (2001), who include also all other asset income (including real estate income), net transfers received and earnings in the third pillar.

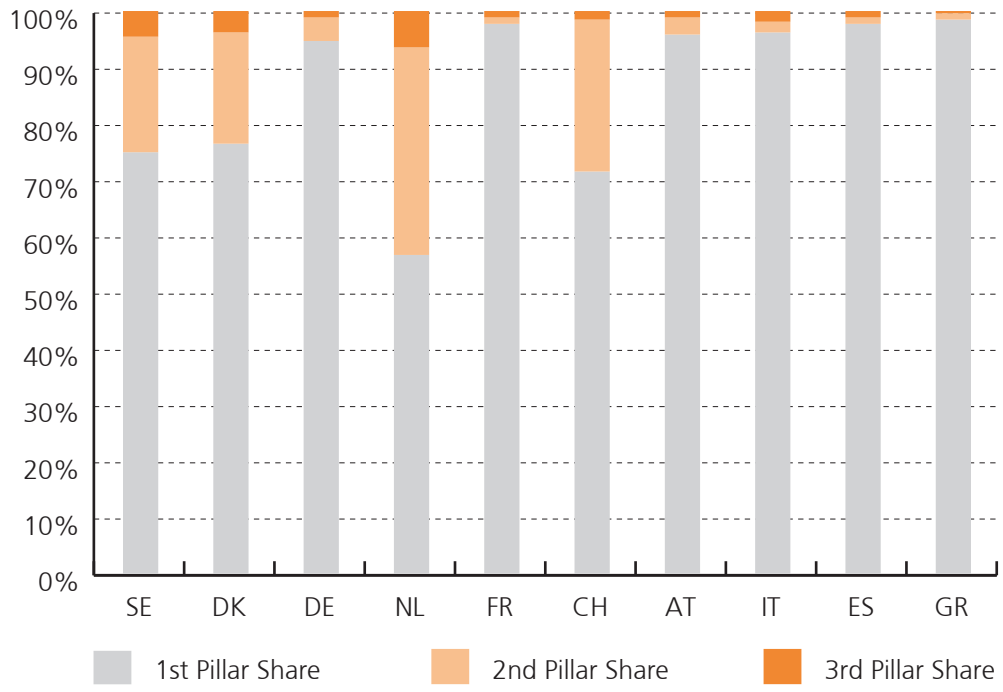

Figure 2 Composition of Pension-Income

Table 5A.10 in the Appendix shows the year when the respective type of pension was received for the first time. While target retirement age is 65 years now almost everywhere in Europe, the effective retirement age deviates considerably in some of the countries: considering only old-age pensions, the eligibility age is indeed around the target year in Denmark (66.5 for males), the Netherlands, Switzerland and Sweden, but it is even below 60 for males and females in Austria and Italy, while it is around 60 in the other countries. US figures exhibit a significantly higher effective retirement age as compared to European countries: in the USA the overall median retirement age was 64.6 for males and 63.4 for females in 1999 (OECD 2001). The difference is particularly striking for large countries such as Germany, France and Italy. Only for four countries the effective retirement age is relatively close to the target; therefore both the early retirement schemes and the regular old-age pension system seem to encourage early exits from the labour force. Except for France, private occupational old-age pensions are received even earlier than public old-age pensions in almost all countries. Early retirement may well be regarded as the main problem of the European pension systems: our findings suggest that there may be scope for reforming also occupational pensions.

Private Pension Claims Are Higher Among Non-Retirees

What kind of pensions are working individuals entitled to? In Figure 3 we concentrate on respondents in the workforce (employed, self-employed and unemployed). In all coun-

tries – except Sweden –, the entitlement to occupational pensions (2nd pillar) is considerably high as compared to income sources of the already retired persons (this question did not apply to France because there is now a mandatory supplementary scheme). Entitlement to occupational pensions differs widely across Europe; it ranges between 2.4% in Greece, 10% in Austria and more than two thirds in Denmark and the Netherlands. Entitlement among working individuals differs most from pensioners' entitlements in Denmark, Italy and Switzerland. In many countries, occupational pensions used to be "direct-pension-guarantees", where an employer promised to pay a supplementary pension once the worker reached retirement age (Kaar 2004). Recently, it has become more common to offer "portable" occupational pensions; workers also request negotiable pensions, e.g. in Austria and Germany. Sweden, Denmark and the Netherlands have a long-lasting tradition of collectively bargained occupational pensions and participation in these plans is obviously higher than elsewhere in Europe.

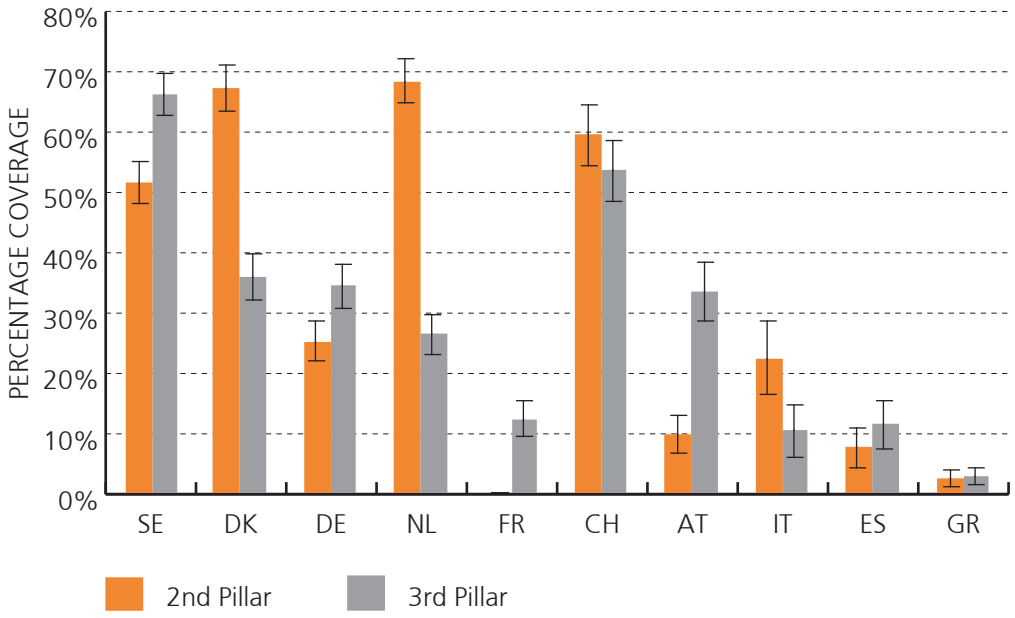

Figure 3 Entitlement to 2nd and 3rd Pension Pillar among non-retirees in workforce (employed, self-employed, unemployed)

Entitlements to private pensions are lower than those reported from the OECD (Whitehouse 2003): we find only 25% for Germany, and 68% and 51% for the Netherlands and Sweden, respectively, as opposed to 46 % for German workers and 90% for Dutch and Swedish workers estimated by the OECD. Figures from the European Commission (Kaar 2004) are very similar to ours in the case of Austria, Italy and Spain.

Given the close relation of occupational pensions to the employment status, it is interesting to see how the prevalence of these pensions varies by occupation and education (Appendix Table 5A.9). Across Europe, the entitlement to occupational pensions is somewhat higher for workers with higher education: for males the rates range between 23% for those with only primary education to some 34% for those with tertiary education. The range for females is between 13% and 25%. For both the very low and the very high educated, there is a marked gender difference in participation.

Similarly to what observed for occupational pensions, participation to private pensions

(3rd pillar) is considerably higher for the generation of working individuals across Europe as compared to those already retired. Many more workers above age 50 have individual retirement accounts and/or life insurances than the older, retired, generation. Participation ranges from more than two thirds in Sweden, 53% in Switzerland to a low of 3% in Greece and close to 10 % in France, Italy and Spain. It is a well known fact that claiming and receiving a pension may require a time-lag: with longitudinal data we will be able to further analyse participation rates by properly counting also those cases which might be currently recorded as neither collecting nor contributing. Table 5A.9 in the Appendix shows that also for private pensions there are significant socio-economic differences: less coverage for females and individuals with low-education.

Conclusion

SHARE provides very valuable data on the current economic condition of the elderly. This information is necessary to design pension reforms and evaluate their impact. We have shown that most retirees rely on public pensions in Europe. There are remarkable socio-economic differences in participation rates to private pensions: individuals from lower educational backgrounds have considerably less claims to both occupational and private pension. Hence future reforms, aimed at reducing public pensions, will have to take into account important redistributional issues. Similar considerations arise for attempts to reform the retirement age in Europe: the SHARE-sample confirms that early retirement is widespread amongst the low-education groups. On the other hand, data from SHARE show that some countries have indeed managed to supplement the public pension system by occupational and private pension schemes, tackling at the same time the early retirement problem through this route.

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5.3 Pathways to Retirement

Didier Blanchet, Agar Brugiavini, and Roberta Rainato

A common view about retirement is to describe it as a direct transition between a situation of full employment and a situation where the individual is fully inactive and where most of his resources consist of pension benefits. Over the last decades, this description has become increasingly less relevant (Kohli et al. 1991). In response to labour market rigidities, many European countries have allowed and sometimes encouraged various forms of early exit from the labour force, before access to normal retirement (soft "landing" plans). The main tools for doing so have been unemployment insurance, an extended access to sickness or disability benefits, or the development of specific pre-retirement schemes. As a consequence, a wedge has been created between employment and retirement. But there also exist some opposite cases where employment and retirement move together: retirement is gradual and workers combine labour income and pension benefits for a given period of time.

The patterns of transition to retirement have already been largely documented using various data sources, but the SHARE survey offers many interesting perspectives for the study of institutional and individual determinants of transitions through these different routes. Moving to a panel survey will increase further these possibilities, since it will allow a dynamic view of these transition processes. At this stage, this contribution will restrict itself to cross-sectional insights about the prevalence of these different patterns of transition across the 10 participating countries. It will be based on a labour-market self-reported status.

Unemployment and Disability as Forms of Pre-Retirement

Contribution 5.1 has already documented cross-country differences concerning age at exits from employment. The question here is to assess the intermediate role played, in the different countries, by non standard—but sometimes dominant—forms of transitions between employment and the full status of retiree. These routes are generally classified in three main categories:

Unemployment: people are laid-off from their last job before being able to benefit from normal pension benefits, and are therefore forced to spend some time in unemployment before being effectively retired.

Sickness or disability insurance: stricto sensu, this route should only apply to people for whom early exits from the labour force result from objective health problems. But some countries also tended to use this category as a device for managing general cases of "uneasiness" about work or even obsolescence of the worker, due for instance to the fact that the skills of an old worker are no more recognised or demanded by employers.

Pre-retirement schemes: these allow early exits from the labour force, at times they are sector-specific (for managing large scale redundancies in some declining industries), but in most cases these are nation-wide programs.

The quantitative importance of these various routes displays strong variation across countries, in particular because of institutional differences. More detailed descriptions of these institutional arrangements can be found in Blöndal and Scarpetta (1998) or the national chapters in Gruber and Wise (2004). Depending on national arrangements, access to either of these routes may be easy or strongly limited, or it could be designed to be more attractive or less attractive to the retiree. Labour demand also plays a crucial role in these patterns. It will be one strength of the SHARE data to allow new and detailed analysis

of the way institutional settings interact with individual or industry-level factors for explaining cross national variations in the development of these routes. In this contribution, the objective will be mainly descriptive, i.e. to examine the relative importance of these routes, as revealed by the self-reported activity status. How are these self-assessments collected by SHARE? Pre-retired respondents simply judge for themselves whether they are unemployed or retired. Alternatively question EP005 (which will be used throughout this contribution) explicitly offers the respondent the possibility of reporting oneself as "permanently sick or disabled".

Our analysis will therefore concentrate on three situations: "unemployed", "permanently sick or disabled" and "retired". Figures 1 and 2 give the relative frequencies of these situations, by age, for the 10 countries with available data, grouped in three regions: Northern Europe, Mid-European countries and Southern countries. Age profiles are given by single year-of-age groups, but they have been previously smoothed to remove most of the sampling variability that is observed in the raw data.

Among the three Northern countries the Dutch case provides a well-known illustration of the substitutability that can exist between the unemployment route and the disability route. The importance of disability for the Netherlands is a well-known and well-documented aspect of the management of older workers in this country: it is correctly captured by SHARE. The percentage of disabled people in the 60-64 age group peaks to reach 15%, while the Dutch unemployment rate in this group is indeed quite low, one of the lowest in the entire SHARE-sample. We also observe that the share of disabled people drops from 15% to about 2% around 65, which is the age at which the majority of Dutch people, including the disabled, move to the "retired" category.

The situation in the two other Nordic countries will need further investigation: self-reported disability appears lower than disability measured from other sources (OECD 2004) or from answers collected elsewhere in the EP module, based on benefits received, as illustrated by contribution 5.4 in this chapter. Among the Mid-European countries, Switzerland appears to be the country where age at entry into retirement is the highest, and where both disability and unemployment almost never represent more than 5% of the age groups under investigation.

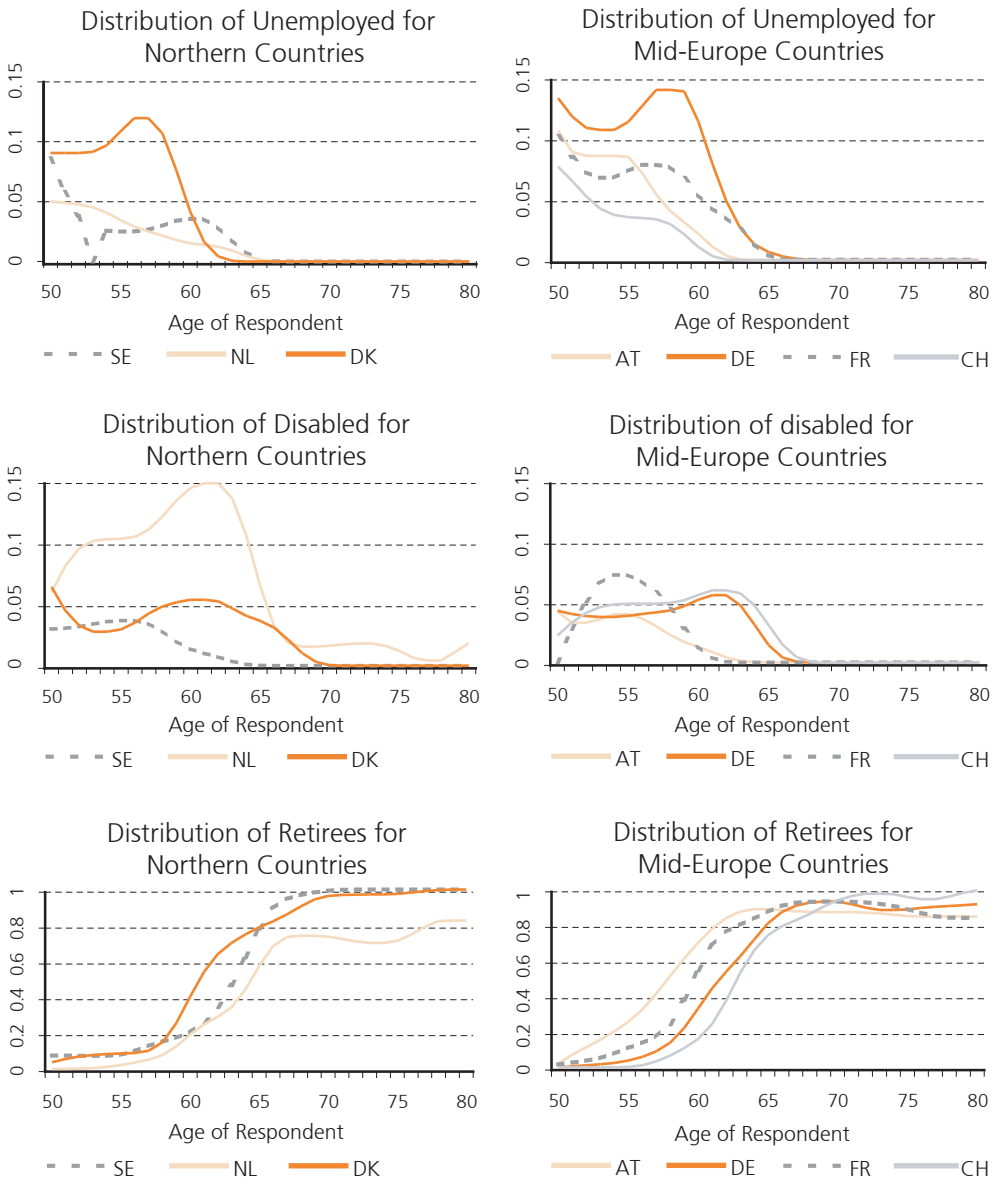

Figure 1 *Pathways to retirement for Northern and Mid-Europe Countries*

The three other Mid-European countries are less successful in this respect. They significantly differ in terms of profiles of final transitions into retirement. The ages at which about 50% of people from the SHARE sample self-report themselves as retired are around 58 in Austria, 59.5 in France, and 62 in Germany. Before these ages, the three countries exhibit relatively comparable unemployment or disability rates, with, for the three cases, a certain predominance of the unemployment route.

Figure 2 *Pathways to retirement for Southern countries*

Pathways to retirement for Mediterranean countries, displayed in Figure 2, show less regularity. Here again the ages at transition to retirement differ significantly across countries: the age at which 50% of the people report themselves as retired is 59 for Italy, 63 for Greece and 65 for Spain. Of course these ages cannot be exactly interpreted as median ages at retirement, since there exists a significant number of people who permanently report themselves as homemakers, essentially women, and for whom there is no notion of transition to retirement. This phenomenon is particularly pronounced for these three Mediterranean countries, and results from the low levels of women's labour force participation in these countries for the relevant cohorts. For instance, in Spain, the number of people reporting themselves as retired stays at 60% between ages 70 and 80. As a consequence, the "median" age at retirement should be better defined as the age at which one half of these 60% are retired, which takes us closer to 63. Nevertheless, it remains that transition into retirement occurs later in Spain than in Greece, and later in Greece than in Italy. A variety of patterns emerges for the three countries at younger ages. Disability if almost non existent for Italy and Greece before age 60. It remains so also after age 60 in Italy. This may be due to the prevalence of early retirement at a very young age: Italy displays low or very low rates for both unemployment and disability. In Greece, disability increases rather than decreasing at the age where people move into retirement: a puzzle

to be further investigated. Spain is atypical: the profile of unemployment is relatively flat before retirement age, and it drops after age 60, it is clearly the mirror image of exits into retirement.

Partial or Gradual Retirement

Partial or gradual retirement corresponds to situations where an individual simultaneously receives earnings and draws resources from pension benefits, for example because the transition out of work is gradual. The worker might well go on working in the same firm or activity as he used to do, but for a reduced amount of hours, and the prevailing pension regulation allows him to cumulate his part-time earnings with partial pension benefits. Another possibility corresponds to the case of an individual who has fully retired from his initial activity, but who takes up a new job with a different employer (or becomes self-employed) and once again adds up the resulting earnings with pension benefits (possibly means tested).

Promoting the development of such gradual retirement is one interesting policy option for countries facing the problem of an ageing population. Under the assumption that this additional labour supply does not crowd-out other groups of employees, it offers to workers flexibility without forcing them to spend additional years in full work. Besides reducing pension expenditures, further advantages may be felt by society as it is often the case that a sudden transition from work to full inactivity can alter health conditions and/or social relations of the elderly.

SHARE allows a comparison of the current prevalence of such situations in the ten countries for which data are currently available. To identify these situations, we disregard people reporting themselves as "unemployed", "permanently sick or disabled" or "homemakers". The idea is to focus on the boundary between people who report themselves as "employed or self-employed" and those self-reported "retired". We introduce the category of people who are "retired but working": respondents who report themselves as "retired" but who have done some paid work during the last month.

Table 1 Percentage of Workers and Retired by Country and Job Situation

		Retired but working		
	Worker only (%)	All	15 hours or more*	Retired only (%)
SE	33.8	4.5	2.3	61.7
DK	37.9	4.2	1.2	57.9
DE	32.0	3.4	2.0	64.6
NL	40.8	2.4	1.0	56.9
FR	29.2	0.7	0.5	70.1
CH	42.2	11.0	7.3	46.8
AT	19.8	5.8	4.7	74.4
IT	23.9	4.3	3.4	71.8
ES	36.0	2.0	1.6	62.0
GR	31.8	14.2	13.3	54.0

Note: *At least 15 hours of work in the last week in which he worked

Table 2 Percentage of Workers and Retired by Age Classes, Country and Job Situation

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
					Aged 50-54					
Worker only	91.1	91.8	97.3	99.7	96.2	99.3	84.2	85.8	91.4	84.8
Retired but work, total	2.0	0.3	1.0	0.0	0.5	0.7	3.0	3.0	0.7	5.3
Retired but work (> 15 hrs)	1.2	0.0	0.5	0.0	0.5	0.7	2.5	2.1	0.7	5.3
Retired only	6.9	7.9	1.7	0.3	3.3	0.0	12.9	11.2	7.9	9.9
					Aged 55-59					
Worker only	80.3	86.3	87.0	91.7	75.2	93.5	46.7	49.0	86.3	63.2
Retired but work, total	2.6	1.3	0.4	2.5	0.7	3.5	7.0	3.9	0.8	11.4
Retired but work (> 15 hrs)	1.0	0.4	0.0	2.2	0.7	0.9	6.6	3.3	0.8	11.4
Retired only	17.1	12.4	12.5	5.8	24.2	3.0	46.3	47.1	12.8	25.5
					Aged 60-64					
Worker only	58.5	31.3	26.5	33.5	8.8	52.0	5.8	13.6	43.2	39.6
Retired but work, total	5.1	9.1	7.2	3.8	1.8	10.9	6.9	9.2	2.1	18.2
Retired but work (> 15 hrs)	3.3	2.9	3.8	1.9	1.2	7.0	5.5	6.9	2.1	15.8
Retired only	36.5	59.6	66.3	62.8	89.5	37.1	87.3	77.2	54.7	42.2
					Aged 65-69					
Worker only	0.4	1.4	0.6	0.3	0.0	0.3	0.6	1.5	0.6	1.5
Retired but work, total	5.6	5.0	3.8	3.0	0.5	17.6	5.7	3.2	2.8	17.0
Retired but work (> 15 hrs)	2.7	1.3	2.3	0.9	0.3	12.1	4.3	2.6	2.0	16.0
Retired only	94.0	93.6	95.7	96.7	99.5	82.1	93.7	95.3	96.5	81.6

The actual amount of work varies significantly within this category, in some cases it may be only marginal. We therefore use a second and more restrictive definition of partially retired people, i.e. those who worked at least 15 hours during their last working week.

Table 1 gives global results for all people aged between 50 and 70. In most countries, the share of people that can be considered as "retired but working" fluctuates between 2% and 6%, but with high points of 14,2% and 11,0% respectively in Greece and Switzerland and a low point of 0,7% in France. Inspection of more disaggregated results (Table 2) shows that the Swiss and the Greek cases correspond to age profiles that are quite different. While partial retirement seems relatively frequent in Switzerland as a whole, this is not at all the case in the youngest age groups: in these age groups, full activity remains the rule. The situation looks different in Greece where partial retirement is already significantly developed between 50 and 54. At the other extreme, partial retirement is very rare at all ages in France, with a maximum of only 1,8% between 60 and 64. Although some specific schemes of partial pre-retirement exist or have existed in this country, they never met a large success, also because strong restrictions on the possibility of working and drawing pension benefits were in place. This illustrates the role of legal or institutional factors in shaping patterns of prevalence for partial retirement. But the choice of partial retirement may also results from individual-specific determinants: further investigation of the SHARE

data will allow us to unravel the interaction between these individual factors and the general institutional framework.

Conclusions

- The variety of transition paths to retirement across European countries is a well-known fact and SHARE will offer many possibilities for analysing both causes and consequences of transitions through these different paths at the micro level: how are these transitions related to institutions, to the characteristics of the last job, or to health before retirement; what are there consequences for health after retirement, for standards of living and for general well-being?

- This contribution focuses on self-assessed labour market status. This could differ from the "activities" distribution based on sources of income (say). Cross-checking these answers, also available in SHARE, will help also clarifying the links between these perceptions and the actual labour market position of individuals. Having at hand comparable data on transitions into retirement across Europe is a relevant achievement.

- Additional perspectives will be opened if panel data become available, since they will allow a full dynamic view of these transitions.

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5.4 Work Disability and Health

Axel Börsch-Supan

Disability insurance—the insurance against the loss of the ability to work—is a substantial part of social security expenditures in almost all European countries. Disability insurance faces a trade-off like many elements of modern social security systems: One the one hand, disability insurance is a welcome and necessary part of the social safety net as it prevents income losses for those who loose their ability to work before the normal retirement age. One the other hand, disability insurance may be misused to serve as an early retirement route even if the normal ability to work is not affected at all. Understanding the trade-off between social safety provision and its misuse is important for the design of a modern social security system which maximizes social safety provision under increasingly tight financial budget constraints (Aarts et al. 1996).

A striking finding is the great variation across European countries in the number of persons who receive disability insurance benefits. This is shown in Figure 1.

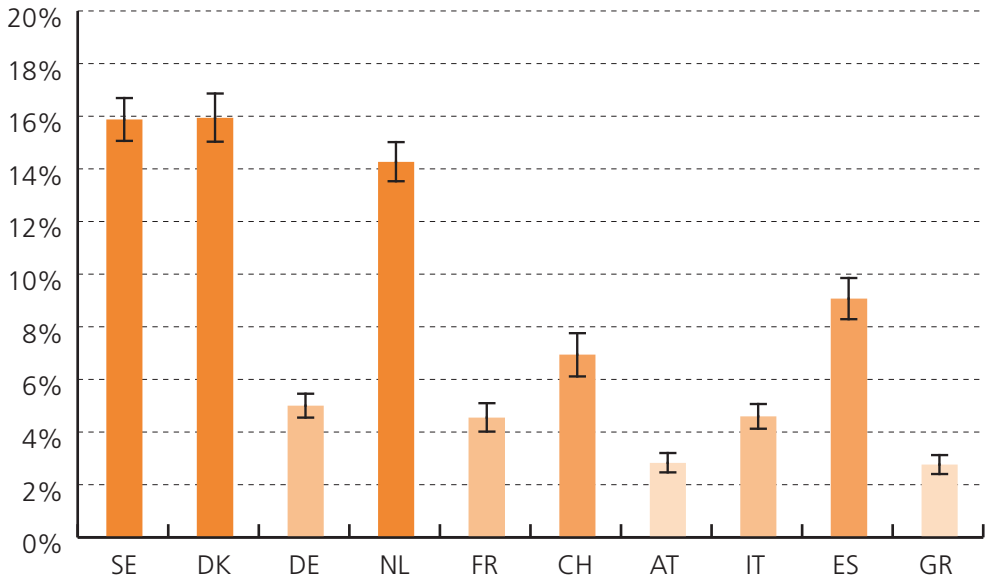

Figure 1 Disability insurance enrolment in Europe, 2004

Note: Based on 17,731 individuals aged 50 through 65 interviewed in the SHARE 2004 survey. Weighted data. Standard errors are indicated. The data refers to disability insurance take up, unlike disability definitions according to health or labour force status used elsewhere in this book. Dis-ability insurance is: Sweden (SE): "förtidspension (sjukersättning)", "yrkesskadepension", and "sjukbidrag". Denmark (DK): "offentlig sygedagpenge" and "offentlig førtidspension". Germany (DE): "Erwerbsminderungsrente" and „Beamtenpension wegen Dienstunfähigkeit". The Netherlands (NL): "WAO, Waz of invaliditeitspensioen and Algemene bijstandswet (Abw), IOAW/IOAZ, aanvullende bijstandsuitkering, Toeslagenwet (TW)". France (FR): "prestation publique d'invalidité (AAH, APA)". Switzerland (CH): "Invalidenrente aus IV", "assurance in-validité légale (AI)" and "Rendità invalidità (AI)". Austria (AT): "Staatliche Invaliditätspension". Italy (IT): "assicurazione pubblica di disabilità (anche assegno di accompagnamento)" and "pen-sione pubblica di invalidità o di inabilità". Spain (ES): "pensión pública contributiva y no con-tributiva de invalidez/incapacidad". Greece (GR): „Σύνταξη αναπηρίας".

We can distinguish four country groups. Very high enrolment rates exist in Denmark, Sweden and the Netherlands. Between 14 and 16 percent of individuals aged between 50 and 65 receive disability insurance benefits in this first group of countries. Lower, but still above average enrolment rates exist in the second country group consisting of Spain and Switzerland. Here the enrolment ranges from 7 to 9 percent. France, Germany and Italy, the third group, feature below average enrolment rates between 4 and 5 percent. Finally,

in Austria and Greece less than 3 percent of individuals aged between 50 and 65 receive disability insur-ance benefits.

Potential Causes for Disability Insurance Enrolment

How did these strikingly different enrolment rates emerge? There are three popular explanations: demographics, health and institutions. First, while all Euro-pean countries are aging, the extent of population varies considerably. We have seen this in Chapter 2. The first explanation claims that a country with an older population also has a higher prevalence of disability insurance uptake. A second potential cause for the cross-national variation is differences in health status. Can the differences in physical and mental health which we have described in Chapter 3 explain why disability insurance is taken up so much more frequently in some countries than in others? Third and finally, recent studies such as Blöndal and Scarpetta (1998) based on the Gruber and Wise (1999) methodology have shown that public old age pension systems exert large incentive effects which, according to each country's legislation, significantly increase the uptake of early retirement provisions. Do similar incentive effects arise also from disability insurance? Are differences in the European countries' legislations causing different disability insurance take-up rates?

The SHARE data permit a new look at this question because they include a de-tailed description of which kind of public transfer payments each individual re-ceives and at the same time carry an extensive and comparable inventory of physical and mental health measures across ten European countries. Hence, the SHARE data provide a unique opportunity to relate disability insurance enrolment of European individuals to their demographic characteristics as well as their health status.

Figure 2 shows the disability insurance enrolment rates by age.

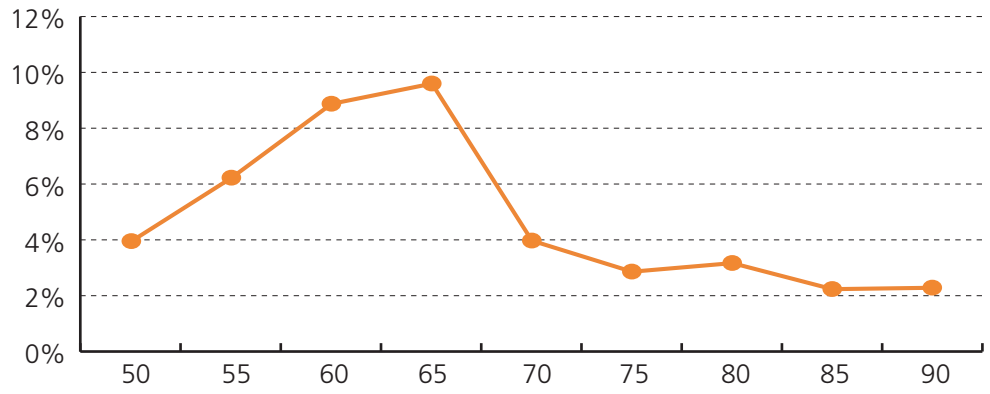

Figure 2 Disability insurance enrolment by age, SHARE countries, 2004

Note: Percentage of individuals enrolled in disability insurance by age.

Enrolment rises steeply from 4% on average across all SHARE countries at age 50 to almost 10% at age 65. In most countries, disability insurance benefits are automatically converted to old-age pension benefits at age 65. Disability insurance enrolment rates therefore decline after age 65 to percentages lower than at age 50.

We restrict our analysis to individuals in the "window" from age 50 to age 65 in which disability insurance may serve as an early retirement device. Our aim is to look which weight each of the three potential causes—demographics, health and institutions—has in

explaining disability enrolment in Europe. Our strategy is straightforward. We exploit the richness of the SHARE data to first relate individ-ual disability insurance enrolment probabilities to demographic characteristics and a broad set of health measures ranging from self-reported health to more objective measurements of the functional physical and mental health status. We then predict how enrolment rates would look like if demographics were equal across countries. If demographic differences were the main cause, enrolment rates should be very similar after taking demographic differences out. We then go through the same procedure for differences in health status. If enrolment rates are still very different after accounting for demographic and health differences, the third explanation—differences in the institutional regulations—is a likely cause.

Can Demographic Differences Explain Disability Insurance Enrolment?

Our first step is to normalize disability insurance enrolment with respect to demographic differences across countries. Italy, for instance, has an older popula-tion than the European average, while Denmark has a younger population. We take out demographic differences by first establishing the influence of age and gender on disability insurance take up. We then predict which share of our sample individuals would take up disability insurance if all countries had the same age and gender distribution as the average of the SHARE countries. The result is shown in Figure 3.

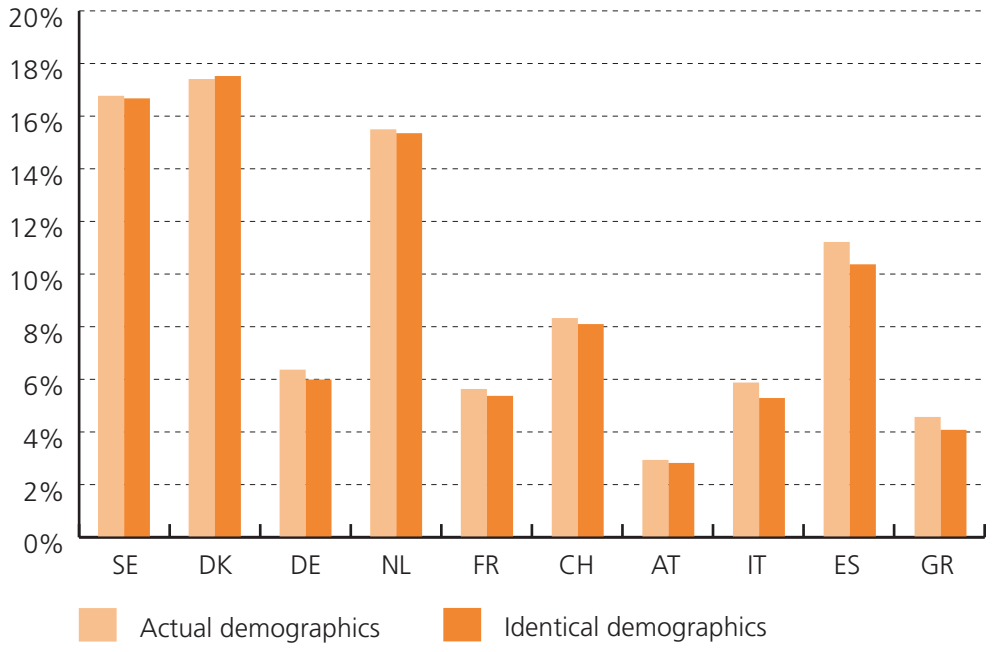

Figure 3 Actual and predicted disability insurance enrolment if age and gender were identical in all SHARE countries

Note: Based on logistic regression of disability insurance enrolment on demographic (age polyno-mial, five-year age range dummies, and gender dummy) and health variables.

Quite clearly, taking account of demographic differences does not make a substantive difference. Italy and Spain, featuring the highest average age of individuals aged between 50 and 65 years among the ten SHARE countries, would have a slightly lower disability insurance enrolment if they had the age distribution of the average SHARE country. In Denmark, which is younger than average, the opposite would happen. The effects, however, are very small. Demographic differences across Europe cannot explain why the enrolment rates in disability insurance are so different in Europe.

Can Health Differences Explain Disability Insurance Enrolment?

Our second step is therefore to account for difference in the health status of the population. The health status differs along many dimensions across countries. A first dimension is self-assessed health. Self-assessed health is relatively poor in Italy and Spain, it is best in Switzerland. As we have seen in Chapter 3, self-assessed health does not always correspond to the physical performance in daily activities such as walking or bathing. In this second dimension, Germany exhibits the most limitations and Greece the least. A third and important health dimension is physical strength, e.g. as measured by hand grip strength. Also this health measure features remarkable cross-national differences. Again, Spain and Italy show the lowest readings, while Germany and the Netherlands perform strongest on this scale. A fourth dimension is mental health. Depression, an often named reason for taking up disability insurance, varies quite substantially across the SHARE countries. Spain, Italy and France show the worst scores on the EURO-D depression scale, while Denmark, Germany and Switzerland have the lowest share of depression cases. Hence, the cross-national variation in health status looks like a good candidate to explain the variation in disability insurance enrolment.

We use the same methodology to correct for the influence of the multidimen-sional health differences as we did with demographics. We first establish the influence of health on disability insurance take up, and then predict which share of our sample individuals would take up disability insurance if the health status measured along the above four dimensions would be identical to the average of our ten SHARE countries. The results are shown in Figure 4.

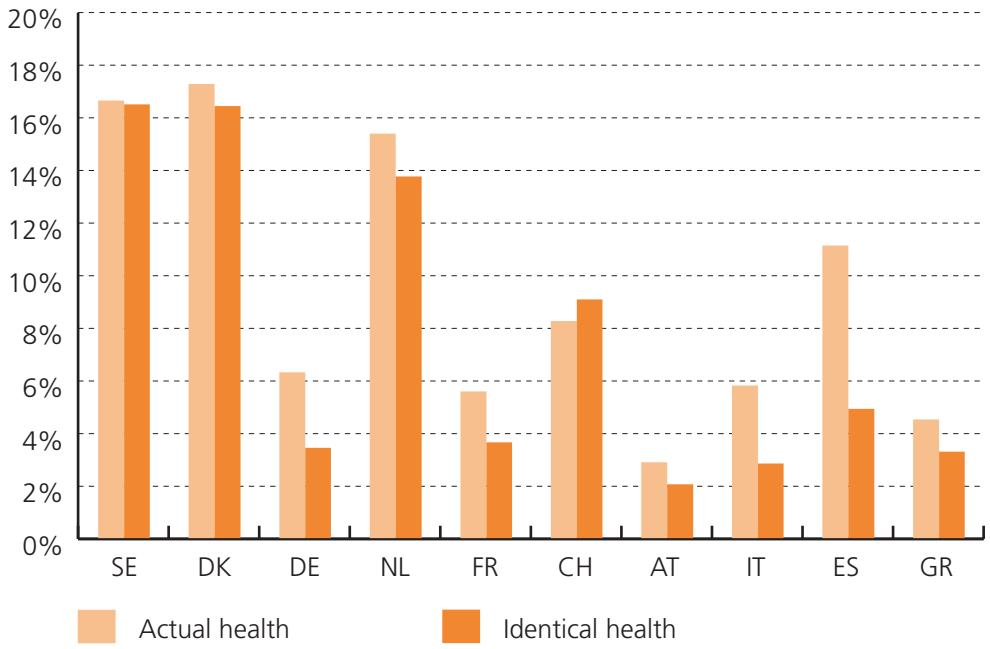

Figure 4 Predicted disability insurance enrolment if health status were identical in all SHARE countries

Note: Based on logistic regression of disability insurance enrolment on demographic and health variables (EU and US variant of self-reported health, GALI physical functioning index, EURO-D depression scale, measure of grip strength).

The differences between enrolment rates under the actual and a hypothetically identical health status are now more pronounced. If the Italians and Spaniards had the same health status as the average SHARE European person, their disability insurance enrolment would

be much lower, less than half of the actual enrolment. In Switzerland, it would be slightly higher. However, if health would be the dominant explanation for disability insurance enrolment, the predicted shares should be equal across countries, once health is identical in all countries. As Figure 4 shows, this is clearly not the case. There are still pronounced differences, even after accounting for the statistical errors as depicted in Figure 1 and after carefully including a broad spectrum of health dimensions. Especially the high enrolment rates in Sweden, Denmark and the Netherlands remain relatively stable after correcting for health differences. We conclude that differences in health across Europe cannot explain the cross-national variation in the European disability insurance enrolment.

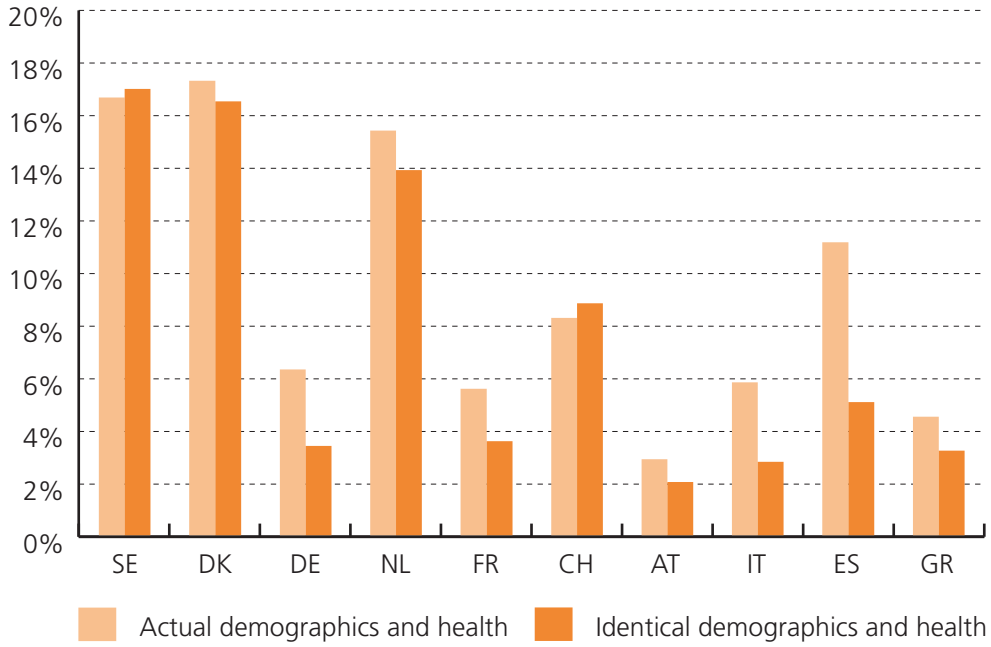

Figure 5 Predicted disability insurance enrolment if age, gender and health status were identical in all SHARE countries

Note: Based on logistic regression of disability insurance enrolment on demographic and health variables.

If It Is Not Demographics and Health, What Is It?

A logical next step is to correct for differences in demographics and health si-multaneously, using the same methodology as in Figures 3 and 4. Figure 5 shows the results.

The picture changes only slightly from the last one. Hence, counterfactually making all SHARE countries have an identical age, gender and health distribution does not make the striking variation in the uptake of disability insurance across the SHARE countries vanish. Especially the large enrolment rates in Sweden, Denmark and the Netherlands must have different reasons than an older popula-tion or a worse health status in these countries.

Which reasons could it be? By exclusion of the first two of the three popular ex-planations—demographic and health-related differences—the third popular explanation remains, namely institutional differences, specifically enrolment and eligi-bility rules that make disability insurance benefits easier to receive and more generous in some countries than in others. Such rules may create incentive effects similar to those exerted by old-age pensions which often provide a financial incentive to retire early. In many countries, health requirements for disability insurance eligibility are weak. Under such circumstances, disability

insurance may work as a labour market exit route to early retirement (Börsch-Supan 2001). Many countries have established very lenient work disability eligibility rules under the conditions of high unemployment.

A final step of our argument would therefore be a counterfactual analysis which makes disability eligibility rules identical for all individuals in the SHARE sample and then predicts the take-up outcomes in the same sprit as Figures 3 through 5 did. The SHARE data are an ideal starting point for such an institutional analysis. Eligibility rules can be expressed as variables to be constructed from individual employment history data in combination with detailed institutional knowledge, similar to the variables constructed by the Gruber and Wise (1999) project. This is not an easy task which requires time and international cooperation, such as in the SHARE team. It is very promising future research which will shed light on the working of our European social institutions.

Conclusions

- The variation in disability insurance take-up rates across European coun-tries is striking. It reaches from some 15 percent of individuals aged be-tween 50 and 65 in Denmark, Sweden and the Netherlands to less than 3 percent in Austria and Greece.

- Correcting for differences in the age, gender and health distribution across countries does not explain this striking variation. Especially the large en-rolment rates in Sweden, Denmark and the Netherlands have different rea-sons than an older population or a worse health status than in the other European countries.

- Institutional factors—incentives created by enrolment and eligibility rules—are a more likely explanation. The SHARE data are an ideal starting point for a deeper analysis of this hypothesis because they uniquely cover health status, income components and institutional variation comparably measured across Europe.

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5.5 Volunteer Work

Karsten Hank and Marcel Erlinghagen

Productive Ageing in Europe – How Does the Societal Context Matter?

Today's discussion about the growing 'burden of ageing' must not neglect the substantial productive potential of the elderly population (e.g., O'Reilly and Caro 1994). The present contribution focuses on the participation of older Europeans in volunteer work, which can be defined as "unpaid work provided to parties to whom the worker owes no contractual, familial, or friendship obligations" (Wilson and Musick 1997: 694).

Many studies show that retirement does not necessarily result in higher participation rates (e.g., Mutchler et al. 2003). However, "[w]hen it comes to hours of volunteering […] older men and women actually spend more time than do their younger counterparts, even when employment status is controlled" (Gallagher 1994: 576), suggesting that older volunteers are more highly committed than other age-groups. This is attributed to the fact that the productive nature of volunteering should be particularly beneficial for older people's life-satisfaction or health (e.g., Siegrist et al. 2004).

Volunteerism, though, should not be seen in isolation of the broader societal context in which it takes place: "as a cultural and economic phenomenon, volunteering is part of the way societies are organised, how they allocate social responsibilities, and how much engagement and participation they expect from citizens." (Anheier and Salamon 1999: 43) So far, however, cross-nationally comparable data on active participation in volunteer work are scarce.

This contribution investigates cross-national patterns of volunteering among Europe's population aged 50 and over. Moreover, the broad range of multidisciplinary information in SHARE allows us to provide (descriptive) statistics on the correlation between demographic, socio-economic, and health characteristics on the one hand, and participation in volunteer work on the other hand. Our conclusions stress the need to take a contextual perspective in future analyses of volunteering, and support policies and programs designed to encourage elderly citizens to make use of their productive potential – for the benefit of themselves and society.

Measuring Volunteer Work in SHARE

While many studies focus on membership in voluntary associations, we exploit information on whether the respondent has been actively engaged in voluntary or charity work during the month before the interview. Although membership is highly correlated with activity, the former measure might lead to an overestimation of actual engagement. Since volunteer work is often performed on a rather irregular basis and other studies' retrospective questions regarding participation cover a longer period of time (e.g. the last year), our figures are even more likely to give a very conservative estimate of the prevalence of volunteering in the SHARE countries.

We use a binary indicator of volunteering (including charity work), which is complemented by information on the frequency of engagement and the individual's motivation to do so (these variables are taken from a questionnaire module developed by the SHARE working group on 'Well-being and social productivity', lead by Johannes Siegrist). In addition, we consider a broad set of covariates in our analysis, including indicators of other social activities, demographic characteristics, education and employment status, as well as health variables. Further waves of SHARE will allow an investigation into more complex behavioural aspects of volunteer work and causal relationships.

Who Volunteers? Comparing Different Groups of Europe's 50+

Volunteering – levels, frequency, motivations (see Table 5A.12 in the Appendix to this chapter for details): With regard to levels of volunteering, the SHARE countries may be divided into three groups (Figure 1). First, the Mediterranean 'low participation' countries, where 7 percent of the Italian and only 2-3 percent of the Greek and Spanish respondents engaged in volunteer work during the preceding month. Secondly, with 9-14 percent volunteers in the population 50+, Germany, France, Switzerland, and Austria exhibit medium activity levels. The remaining 'high participation' countries are, thirdly, Sweden and Denmark (where 17 percent report to have volunteered) and the Netherlands with more than 20 percent volunteers in the older population.

Figure 1 Spatial pattern of participation in volunteer work

Among those who report to have volunteered in the last month, almost one fifth (18 percent) has done so almost daily, nearly half of the volunteers have been engaged almost every week (47 percent), and slightly more than one third has worked less often (36 percent). Although a remarkably high share of Dutch volunteers has worked in almost every week (58 percent), there appears to be no correlation between the overall level of

volunteering in a country and the frequency of engagement. The two most frequently mentioned motivations to volunteer are the desire to contribute something useful (68 percent), followed by the joy derived from volunteering (56 percent). In some countries, e.g. in Sweden and the Netherlands, this rank order is reversed. Beyond the social value of their activity, many volunteers apparently expect an additional, non-monetary personal gain.

Other social activities and volunteering (see Table 5A.13 for details): The spatial pattern of the provision of informal help or care is very similar to the one observed for volunteering. On an overall higher level – 21 percent of the respondents report to have helped in the last month – we find substantially lower activity rates in the Mediterranean countries (from 7 percent in Spain to 17 percent in Greece) than in the Nordic countries (34 percent in Denmark and 41 percent in Sweden), for example. This is interesting, as help provided to family is at least partially covered here and one might rather have expected a reverse pattern with more helping or caring in southern Europe. Moreover, 27 percent of the SHARE sample participated in activities of an organisation. Despite significant cross-national variation, there is no clear spatial pattern of participation, though. While, for example, only about 15-20 percent of Italians and Spaniards took part in some kind of activity, almost half of the Greek and Swiss respondents (45-50 percent) were involved in an organisation's activities.

With regard to the relationship between volunteering and other social activities, it is interesting to note that in all countries the share of volunteers among those who have helped or cared is between 1.5 (Sweden, Denmark, Netherlands) and more than two times (Italy, Greece) higher than in the general population. When turning to participation in organised activities, the respective factors are in most cases even somewhat larger. The association suggested here is also reflected in similarly higher shares of helpers and carers (participants, respectively) among those who report to have volunteered.

Demographic characteristics of volunteers (see Table 5A.14 for details): Gender differences in volunteering are generally small (in the order of 2 percentage points). While there is some tendency of men to be more active than women (particularly in Sweden and France), there are also exceptions like the Netherlands and Switzerland, where slightly higher shares of women engage in voluntary work. Variations in volunteering by partnership status are also small (on average by 2 percentage points), with some indication of a greater engagement among those who live with a partner versus those living alone (particularly so in Denmark and Germany, for example).

The age gradient of volunteer activity among the elderly is quite clear (Figure 2). In most countries, volunteering decreases only modestly between the two 'younger' age groups: from 12 percent among those who are 50-64 years old to 9 percent among respondents aged 65-74. While this decline in the share of volunteers till age 74 is stronger than the average in Austria and Italy (minus 6 percentage points), the Netherlands and France even exhibit an increase of 3-4 percentage points in that age group. However, when respondents age 75 or older are considered, activity rates drop by at least one third everywhere (in the Netherlands even by two thirds), to an average level of 5 percent. Still, in the Nordic countries as much as 12-13 percent of the population 75+ continue to be engaged in voluntary work.

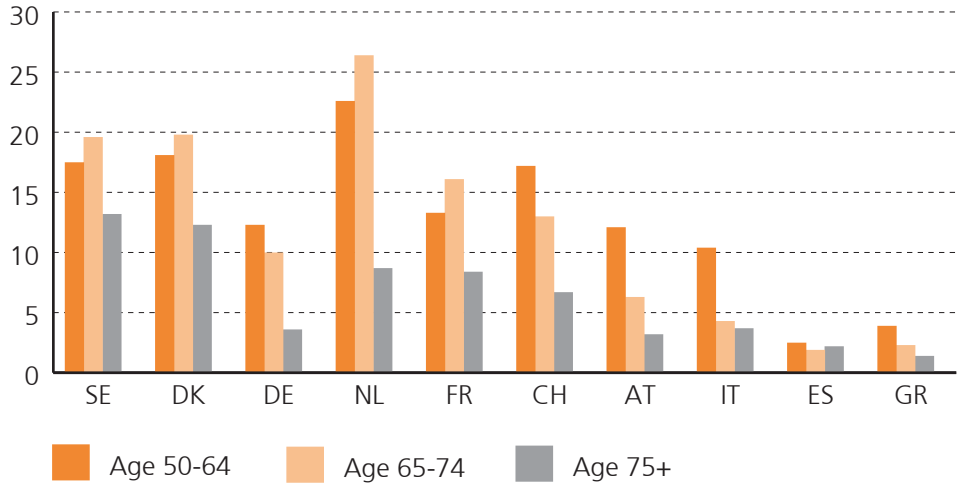

Figure 2 Participation in volunteer work by age group (in %)

Education and employment status of volunteers (see Table 5A.15 for details): The share of volunteers varies substantially between educational groups. Participation rates generally increase by almost 5 percentage points when respondents with a low degree are compared to those with a medium degree, and by another 7-8 percentage points when the highest educational group is considered. The gradient between the two latter groups is somewhat less pronounced in Sweden, Switzerland, and Austria. In the Netherlands, sizeable differences in volunteering by education can only be observed between the highly educated (29 percent) and those with a low or medium degree (about 20 percent).

In most countries, the share of volunteers differs only moderately between working, retired, and other non-working respondents (in the order of 2 percentage points). In Austria, Switzerland, and Italy, though, rates of volunteering are up to 5 percentage points (i.e. about one third) lower among retirees than among those who are engaged in market work. The reverse is true for France. In Switzerland, an exceptionally high share of 23 percent in the heterogeneous group of 'other non-working' report to have been active during the last month, which is more than double the share of volunteers among Swiss retirees.

Health and volunteering (see Table 5A.16 for details): Turning to volunteer work and health, we find much lower activity rates among those who perceive their current health status as fair or worse (about 6 percent), compared to those who report a good or better health condition (13 percent) (Figure 3). This negative association – which appears to be strongest in the Netherlands and somewhat less pronounced in Sweden – is corroborated by our Euro-D mental health indicator (cf. Section 3.5 in this volume). In almost all countries, the share of volunteers among respondents who showed symptoms of depression in the last month is 4-5 percentage points lower than among those who were not bothered by such problems. A similar, though weaker, relationship seems to exist between volunteering and chronic physical health problems.

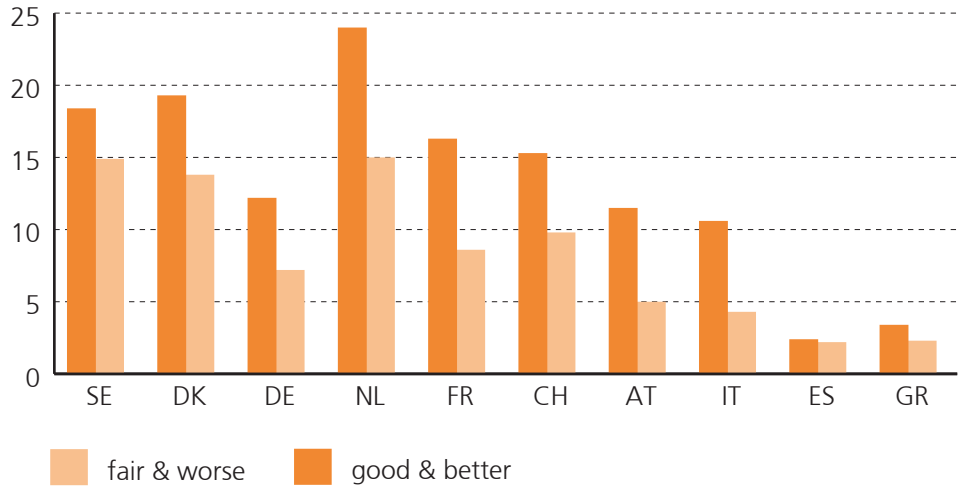

Figure 3 Participation in volunteer work by self-reported health (in %)

Lessons from SHARE: Present State and Future Prospects of Voluntary Engagement in the Older Population

Our analysis of the SHARE data reveals a cross-national pattern of volunteering with higher participation rates in Northern Europe and substantially lower ones in the Mediterranean countries. This underlines the relevance of the broader social, institutional, and cultural background for private voluntary engagement. Even when controlling for socio-demographic characteristics in a multivariate logistic regression (details not shown here), we find strong indication for contextual effects on the probability to participate in voluntary work. These are suggested to be due to various cultural, institutional, and economic factors, which clearly need more detailed investigation in future analyses. Obviously, structural context is highly relevant both with regard to the opportunities for voluntary engagement and regarding the predominant concept of volunteering in a society. Across different national contexts, however, we find a remarkable consistency in the association of individual characteristics (health, etc.) with volunteering.

A significant share of up to 20 percent of Europe's population aged 50 or older does engage in voluntary work – and its productive potential might not even be used to its full possible extent yet. This has also been recognised by policy makers, and the European Union, for example, has thus taken initiative to promote greater participation in voluntary work (cf. Commission of the European Communities 1997). Although such efforts should be welcomed, one should also not forget the limitations of the elderly population as a 'reserve army of volunteers'. We find a clear negative association between participation in volunteer work on the one hand, and age and poor health on the other hand. Longitudinal data are badly needed to investigate this relationship in-depth.

With regard to future developments and policies, it will be important to what extent people will be able to age healthy, and in how far it will be possible to create 'tailor-made' work opportunities for older (and frailer) volunteers. A first step to achieve the latter could be to set up local institutions that match volunteers to organisations which might need them. Since people usually do not begin their volunteering career in later life, efforts to attract 'new' volunteers should also usefully focus on individuals in midlife who have not yet reached retirement age. As a final point, Siegrist et al. (2004: 13) note that "[c]reating

systems and opportunities in which motivations, efforts and rewards are marked by reciprocity seems to be of vital importance [...] in increasing meaningful participation, not least in view of their powerful implications for well-being and health." It is therefore crucial to always keep in mind the beneficial aspect of volunteering for those who volunteer: older people shall not be 'exploited' for the benefit of others, but will hopefully experience a higher quality of life themselves through their active participation in society!

In sum, three main lessons can be learned from our analysis:

- Substantial regional variation in levels of volunteering exists between the countries under consideration, with higher activity rates in Northern Europe and lower ones in the Mediterranean countries.

- Across all SHARE countries, there is a remarkable consistency in the association of a broad range of individual characteristics, such as age or health, with volunteering.

- Although a significant share of Europe's population 50+ already engages in voluntary work, its yet unused productive potential needs to be activated through specifically designed policies and programs.

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5.6 How Do European Older Adults Use Their Time?

Enrica Croda and Jorge Gonzalez-Chapela

Introduction

Time is at the heart of most economic phenomena, and an accurate measurement of the temporal characteristics of the economic activities is crucial to fully understand individual and societal economic behaviour (see Gershuny, Harvey, and Merz 2004). Furthermore, time-use information can be utilised to better understand the well-being of the population and the implications of public policies. Even though specific time-use surveys are being collected in some countries, the range of accompanying information they provide is not abundant. As a consequence, their ability to answer interdisciplinary research questions is very limited. In contrast, SHARE collects a significant amount of demographic, socio-economic, health, and time-use information for the population of Europeans aged fifty and older, which can be combined to address interdisciplinary research questions in an internationally comparative framework.

Higher life expectancies and lower fertility rates have increased the necessity to know how the elderly allocate their time. This contribution attempts an accounting of time use from the SHARE data and provides a cross-sectional description of the allocation of time by older adults across the countries participating to the SHARE project. Given the various socio-economic conditions across European countries, special emphasis is devoted to the assessment of cross-country differences in time allocation. We also study how the allocation of time varies with gender, age, health status, marital status, living arrangements, and work status. SHARE provides a unique opportunity to relate the allocation of time by elderly individuals to their demographic characteristics as well as to their health status. We should point out, however, that the outcomes for older age groups do not necessarily predict what will happen to younger cohorts, since observed differences between age groups are a combination of age and cohort effects, which can not be disentangled in a single cross-section of data. The availability of longitudinal data in SHARE would provide the possibility to more accurately analyse these issues.

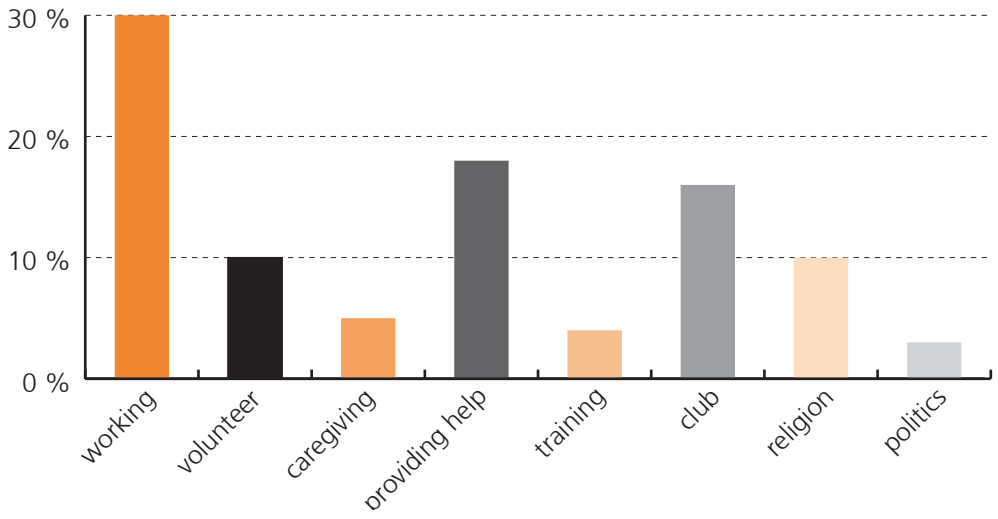

Figure 1 Participation in activities by SHARE older adults

Figure 1 offers an overview of the proportion of respondents in the whole SHARE sample who engaged in several activities in the month prior to the interview. Older adults are very active: about 30 percent of them were working in the market, while 23 percent provided help to relatives and friends, or cared for a sick or disabled adult. They are also fairly involved in social activities: doing voluntary or charity work; going to sport, social or other kind of clubs; taking part in religious, political, or community-related organisations. Some of them even attended an educational or training course. The rest of the contribution investigates the prevalence and time devoted to three activities that represent important aspects of older adults' lives: market work; the provision of help to relatives outside household, friends and neighbours; and the care for grandchildren. In contrast to the rest of the chapter, we consider as working to all respondents who have worked a positive number of hours in the market.

The Allocation of Time by European Older Adults: Prevalence

In addition to asking detailed information on market work, as already discussed in Contribution 5.1, the SHARE questionnaire explicitly asks about the help respondents may have given during the past twelve months to family members outside the household, friends, or neighbours with personal care, practical household help, and help with paperwork. It also asks separately whether during the last twelve months respondents have looked after their grandchildren (without the presence of the parents). These activities become more and more important as people age.

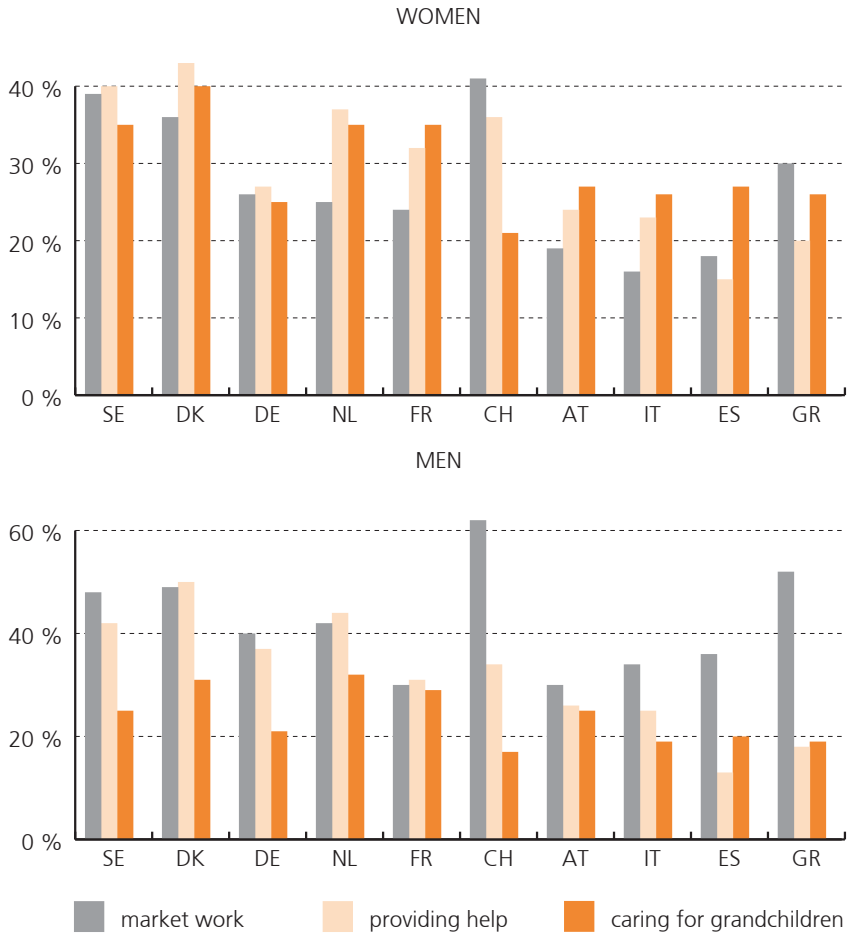

Figure 2 Prevalence of market and non-market activities by country and gender

Figure 2 (see Table 5A.17 in Appendix to this chapter for details) shows the proportion of the elderly engaged in market work, provision of help, and looking after grandchildren. Table 5A.18 in Appendix disaggregates further this information by age classes. The prevalence of these activities is sizeable in all SHARE countries, but with considerable cross-country variation. Both men and women are involved in these activities, although men are much more likely to be working, with the proportion of men working for pay ranging from 30 percent in France and Austria to more than 60 percent in Switzerland. The proportion of men providing help varies from 50 percent in Denmark to 13 percent in Spain. Perhaps surprisingly, the lowest prevalence of provision of help is found among Mediterranean countries. This is possibly due to the fact that this is help given to people outside the household and Mediterranean countries have households of larger sizes. If there is crowding out between helping friends and relatives inside and outside the household, this outcome could be expected. In most countries, more than 4 out of 10 respondents younger than 60 provide some help to other relatives or friends. Spain and Greece are the only countries reporting a prevalence below 30 percent in the youngest age cohort examined. It seems that men in the Nordic countries (Sweden, Denmark and the Netherlands) are more engaged in this than their female counterparts.

The difference between men and women in providing help does not go in a unique direction. Except for the cohort of 55 to 60 years old, women are consistently more likely to provide help, possibly because they are less likely to be active in the labour market. At older ages, the fraction of respondents giving help decreases, perhaps because they are likely to be in need of help themselves due to failing health. Many grandparents across Europe look after their grandchildren. This is an activity which engages grandfathers and grandmothers alike at all ages. The prevalence varies across countries and across ages, with peaks between 60 and 65. The countries where there is a larger prevalence of care for grandchildren are Denmark and the Netherlands, where more than 6 out of 10 women and more than 4 out of 10 men between 60 and 65 do so. Younger grandparents display noticeable gender differences in the patterns of caring for grandchildren, with grandmothers much more likely to look after grandchildren than grandfathers, since younger men are still working. Among the oldest elderly across Europe, it is more frequent for grandfathers than for grandmothers (maybe because grandmothers are busy looking after other household members in need?).

Using a simple measure of living arrangements which allows us to distinguish whether respondents live with their children or not, Table 5A.19 in Appendix shows the proportion of older persons engaged in these activities by marital status and living arrangements. Presumably, co-residing with children places more demands on people's time, and this may affect the extent to which they engage in activities outside of the household. Singles and those who are part of a couple, are more likely to be working if they have children still living with them. They are also more likely to provide help. Singles living with children are more likely to look after grandchildren, compared to those that do not live with their children. In contrast, respondents in a couple living with children are less likely to be taking care of grandchildren.

To what extent does health status affect people's ability to engage in these activities? SHARE allows us to relate individual behaviour to a very rich set of health information. Figure 3 correlates the prevalence of market work, provision of help and care for grandchildren, with two dimensions of elderly well-being: physical and mental health. We evaluate physical health by constructing an indicator of functionality based on objective

information on respondents' ability to manage their daily routine. In particular, it denotes whether they are limited in basic activities of daily living or in more complex tasks requiring a combination of physical, mental, emotional, and cognitive functions. We evaluate mental health using an indicator of whether the respondents would be likely to be diagnosed as suffering from a depressive disorder for which therapeutic intervention would be indicated. Across countries, functionally limited respondents are less likely to be engaged in all the three activities. In particular, they are less likely to be still working compared to their healthier counterparts. However, there is also a fair degree of cross country variation possibly due to social norms and institutional differences: the Swiss elderly stand out for their sizeable involvement in all three activities even when they are functionally limited. The relationship between the prevalence of market work, provision of help and care for grandchildren and depression seems to follow a similar pattern, although the limiting effect of depression seems to be less strong (not shown).

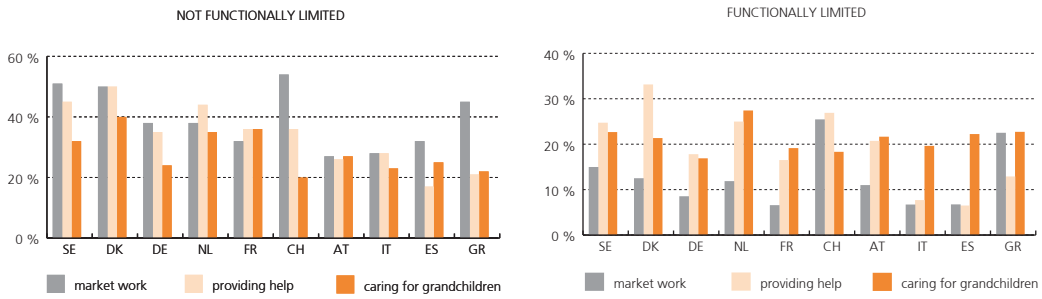

Figure 3 Prevalence of market and non-market activities by country and health status

The Allocation of Time by European Older Adults: Hours

Time devoted to market work is estimated from questions about the usual weekly hours of work in the main job, secondary job/s, and overtime. Hours of help provided and hours spent looking after grandchildren, are obtained by asking, firstly, how frequent these activities are, and, then, the number of usual hours in the selected periodicity.

Figure 4 (see Table 5A.20 for details) displays how many hours per day European older adults devote to those three activities. On average, a 50+ European devotes 1.5 hours per day to work in the market, 0.3 hours to help relatives, friends, or neighbours, and 0,5 hours to look after grandchildren. Thus, the contribution to economic activity by European older adults is by no means limited to market work, since unpaid but economically productive activities such as providing help and caring for grandchildren have certainly importance (see also Gauthier and Smeeding 2003). Residents in Switzerland, Sweden, and Denmark devote about one hour more per day to market work than residents in Italy, Spain, or Austria. Since the hours of market work of those who are working are pretty similar across European countries (see Table 5A.21), these figures show how time-use and participation are jointly determined by participation patterns. Although quantitatively much less important, we observe significant variation in the amount of help provided, from a maximum of 0.5 hours per day in Italy to a minimum of 0.2 in France. On the other hand, a clear geographical gradient is observed for the amount of time devoted to look after grandchildren: the average amount increases as we move south. What factors

are creating these time-use differences across European countries?

Regarding gender differences, we observe that, not surprisingly, men devote more time to work in the market than women (the difference, of about one hour and a half per day, is statistically significant for all countries). However, women tend to devote more time to provide help (the difference across genders is statistically significant in France and Greece) and to care for grandchildren (being the difference statistically significant in Greece).

Figure 4 Allocation of Time by SHARE Older Adults: Average daily hours

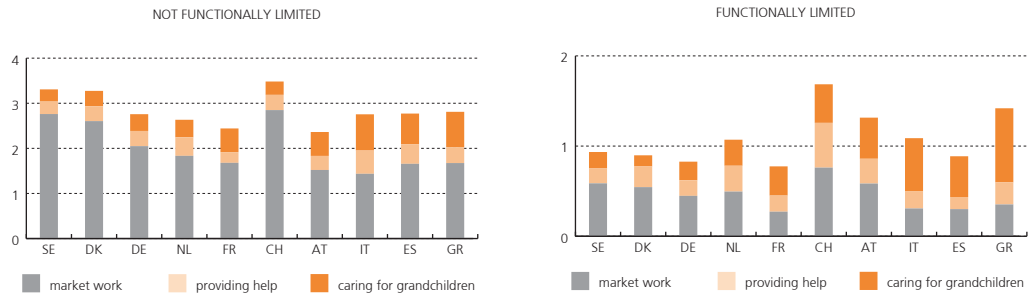

Figure 5 *Allocation of Time by SHARE Older Adults: Average daily hours by health status*

Figure 5 shows the effects of physical and mental health on the allocation of time. Individuals in a worse physical health condition tend to work considerably less in the market and devote less time to help others and to look after grandchildren (the reduction in help provided is statistically significant in Germany, Italy, and Spain; the reduction in time caring for grandchildren, in Denmark and Germany). While the evidence suggests that physical health is correlated to the allocation of time to both market and non-market activities, it also suggests that mental health is usually not related to the allocation of time to non-market activities (not shown).

We next study the allocation of time separately for individuals who are working (i.e., performing some market work) and those who are not working (mainly retirees, unemployed, disabled, and homemakers). Results are shown in Tables 5A.21 and 5A.22, respectively. The average difference in market work amongst working individuals is greater than 5 hours, except in countries like The Netherlands and Greece, in which it is slightly lower. Interestingly enough, the claim that individuals working devote the same number of hours to provide help than those non-working can not be rejected in none country, except Switzerland, where help provided by non-workers doubles the help provided by workers. Regarding the time devoted to look after grandchildren, however, we observe that non-workers tend to devote more time to this pursuit than workers (the difference, of about half an hour, is statistically significant in The Netherlands, Switzerland, Italy, Spain, and Greece). Thus, the extra-discretionary time brought about by non-working in the market seems to be only partially re-allocated to non-market activities.

In all countries, working women spend almost as much time as their male counterparts at work. However, conditional on working, women spend more time than men both providing help and caring for grandchildren, especially in southern countries. The pattern of non-market activities for non-working individuals is very similar. When the effects of age are considered, we observe a reduction in market work for those who are working: on average, a 50-54 years old European devotes 5.3 hours per day to this pursuit, while only 3.5 daily hours are devoted by a 65+ European. Regarding non-market activities, help provided is unrelated to age for those working, although it decreases with age amongst those non-working. Interestingly enough, for the latter population, looking after grandchildren decreases after age 65+ (the peak, 0.9 hours per day, is achieved in the 60-64 age interval), while tend to increase with age amongst those working. (These results are not shown for

brevity, but are available upon request) These patterns are suggesting that the effects attributed to „age“ can be as a matter of fact caused by other variables like health status (not in vain, chronological time elapses exogenously to individuals).

Tables 5A.23 and 5A.24 in Appendix address the allocation of time among these activities by marital status and living arrangements, showing that single respondents and respondents who are part of a couple are more likely to be working if they have children still living with them. Consistent with our intuition, single respondents living with children are more likely to spend the time devoted to non-market activities by taking care of their grandchildren than by providing help to others outside their household.

Conclusions

- SHARE allows us to jointly investigate the allocation of time to both market and non-market activities along different dimensions. Time spent during a typical day varies considerably across countries, even after gender, age, marital status, living arrangements and health status are conditioned out. Social norms and institutional arrangements may explain part of the variability we have documented.

- The contribution to economic activity by older adults is by no means limited to market work. The SHARE data allow us to account for about twenty percent of available daily time of the total population, and for about forty percent of available daily time of the working population.

- The amount of hours spent helping others or looking after grandchildren is not trivial. To the extent that if they were not provided by the respondents, these services should be bought in the marketplace, the economic value of these non-market activities is of a relevant magnitude.

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APPENDIX

Tables on Work and Retirement

Table 5A.1 Self-Reported Labour Market Status by Country (percentage values)

	Worker	Retired	Unemployed	Disabled	Homemaker	Other
SE	37.5	55.8	2.1	1.9	0.9	2.0
	(1.5)	(1.2)	(0.3)	(0.3)	(0.2)	(0.4)
DK	36.1	53.5	4.3	3.1	1.5	1.5
	(1.3)	(1.3)	(0.5)	(0.4)	(0.3)	(0.3)
DE	27.8	54.4	4.9	2.4	9.0	1.5
	(1.0)	(1.1)	(0.5)	(0.4)	(0.7)	(0.3)
NL	28.4	35.5	1.9	8.3	21.1	4.9
	(1.0)	(1.1)	(0.3)	(0.7)	(1.0)	(0.5)
FR	25.2	56.2	3.5	2.3	11.0	1.9
	(1.2)	(1.3)	(0.5)	(0.4)	(0.9)	(0.4)
CH	38.2	46.9	1.6	3.1	8.3	1.9
	(1.6)	(1.7)	(0.4)	(0.6)	(1.0)	(0.5)
AT	17.0	66.5	2.3	1.4	11.2	1.6
	(0.9)	(1.1)	(0.4)	(0.3)	(0.7)	(0.3)
IT	20.0	55.7	1.4	0.5	21.2	1.1
	(1.4)	(1.7)	(0.3)	(0.2)	(1.4)	(0.3)
ES	20.8	34.1	3.1	3.9	32.7	5.3
	(1.3)	(1.4)	(0.5)	(0.6)	(1.4)	(0.7)
GR	24.0	50.9	1.6	1.5	21.0	1.0
	(1.0)	(1.2)	(0.3)	(0.3)	(0.9)	(0.2)

Notes: Sample size is N=17,350 un-weighted observations. Standard errors in parentheses.

Table 5A.2 Self-Reported Labour Market Status by Gender and Country (percentage values)

WOMEN	Worker	Retired	Unemployed	Disabled	Homemaker	Other
SE	33.3	59.2	1.8	1.9	1.6	2.3
	(1.5)	(1.6)	(0.4)	(0.4)	(0.4)	(0.5)
DK	32.2	56.4	3.6	3.7	2.6	1.4
	(1.7)	(1.8)	(0.7)	(0.7)	(0.6)	(0.4)
DE	20.9	55.7	3.9	1.6	16.2	1.8
	(1.2)	(1.6)	(0.6)	(0.4)	(1.1)	(0.4)
NL	20.9	26.6	1.1	8.7	37.9	4.9
	(1.2)	(1.5)	(0.3)	(1.0)	(1.5)	(0.7)
FR	23.4	49.1	3.7	2.2	19.3	2.4
	(1.5)	(1.8)	(0.7)	(0.5)	(1.5)	(0.6)
CH	29.3	50.1	1.5	2.4	14.9	1.9
	(2.1)	(2.3)	(0.6)	(0.7)	(1.6)	(0.6)
AT	12.0	63.8	1.9	0.9	19.8	1.6
	(0.9)	(1.5)	(0.4)	(0.3)	(1.2)	(0.4)
IT	13.8	45.6	0.9	0.6	37.6	1.5
	(1.5)	(2.4)	(0.4)	(0.3)	(2.2)	(0.5)
ES	13.1	16.7	2.8	3.9	56.1	7.3
	(1.4)	(1.5)	(0.6)	(0.8)	(2.0)	(1.1)
GR	12.8	44.3	1.4	1.7	38.5	1.3
	(10.1)	(1.6)	(0.4)	(0.4)	(1.5)	(0.4)
MEN	Worker	Retired	Unemployed	Disabled	Homemaker	Other
SE	42.4	51.9	2.3	1.8	0.0	1.6
	(1.7)	(1.7)	(0.5)	(0.5)	(0.0)	(0.5)
DK	40.6	50.0	5.2	2.4	0.2	1.6
	(2.0)	(2.0)	(0.9)	(0.6)	(0.2)	(0.6)
DE	36.2	52.8	6.1	3.5	0.2	1.2
	(1.6)	(1.7)	(0.8)	(0.7)	(0.2)	(0.4)
NL	37.4	46.2	2.9	7.8	0.8	4.9
	(1.7)	(1.7)	(0.6)	(0.9)	(0.3)	(0.7)
FR	27.2	64.8	3.4	2.5	0.9	1.2
	(1.8)	(1.9)	(0.7)	(0.6)	(0.4)	(0.4)
CH	48.6	43.2	1.8	3.9	0.6	1.9
	(2.5)	(2.4)	(0.7)	(1.0)	(0.4)	(0.7)
AT	23.3	69.9	2.9	2.0	0.5	1.5
	(1.5)	(1.6)	(0.6)	(0.5)	(0.3)	(0.4)
IT	27.9	68.8	2.1	0.5	0.1	0.7
	(2.3)	(2.3)	(0.5)	(0.2)	(0.1)	(0.3)
ES	31.4	57.9	3.6	4.0	0.6	2.7
	(2.3)	(2.4)	(0.9)	(1.0)	(0.3)	(0.8)
GR	37.3	58.8	1.8	1.3	0.2	0.6
	(1.6)	(1.7)	(0.5)	(0.4)	(0.1)	(0.3)

Note: Standard errors in parentheses.

Table 5A.3 **Self-Reported Labour Market Status by Gender, Country and Age Classes (percentage values)**

		SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN						Age 50-54					
	Worker	76.1	79.9	69.4	56.7	66.4	72.6	54.8	50.4	41.9	37.0
	Retired	10.9	6.3	2.5	0.4	0.7	1.1	12.6	5.9	2.4	13.4
	All other	13.0	13.8	28.1	43.0	32.9	26.3	32.6	43.7	55.8	49.6
						Age 55-59					
	Worker	72.6	66.0	45.9	40.9	50.0	54.7	22.6	24.0	26.3	24.1
	Retired	12.8	9.6	7.6	1.7	10.7	3.6	45.7	16.2	2.6	24.0
	All other	14.7	24.4	46.5	57.4	39.3	41.7	31.7	59.9	71.1	52.0
						Age 60-64					
	Worker	55.2	17.9	14.3	12.3	14.1	29.0	3.2	8.4	13.0	15.1
	Retired	31.2	70.9	52.5	11.8	57.9	39.7	75.5	59.7	9.1	30.8
	All other	13.6	11.3	33.2	75.9	28.1	31.3	21.4	31.9	77.9	54.1
						Age 65+					
	Worker	0.9	2.9	1.1	0.3	0.0	2.1	0.8	3.0	0.9	0.2
	Retired	97.3	92.5	85.2	52.5	79.0	90.4	78.4	60.7	26.5	65.2
	All other	1.8	4.6	13.7	47.1	21.0	7.5	20.7	36.3	72.6	34.7
MEN						Age 50-54					
	Worker	88.9	77.4	80.9	81.7	82.5	85.7	71.9	78.5	70.4	87.1
	Retired	2.4	6.7	1.5	0.0	4.9	0.0	10.8	14.5	7.4	8.2
	All other	8.7	15.8	17.6	18.3	12.6	14.3	17.3	7.0	22.2	4.8
						Age 55-59					
	Worker	73.9	69.8	70.2	67.6	51.5	86.7	53.7	46.2	72.8	66.2
	Retired	13.7	9.8	8.7	6.8	21.9	5.3	31.6	50.6	12.4	28.3
	All other	12.5	20.4	21.1	25.6	26.7	8.0	14.7	3.2	14.8	5.6
						Age 60-64					
	Worker	60.7	42.2	28.8	22.1	4.1	55.0	7.1	18.8	31.2	39.8
	Retired	30.0	51.8	52.3	39.7	92.8	29.3	88.5	74.3	49.6	53.2
	All other	9.3	6.0	19.0	38.2	3.1	15.7	4.4	6.9	13.3	6.9
						Age 65+					
	Worker	2.0	2.9	2.4	1.7	0.3	4.7	0.3	3.4	0.3	3.0
	Retired	97.6	95.6	97.4	97.3	98.7	93.9	98.8	95.9	97.8	95.2
	All other	0.4	1.5	0.2	1.1	1.0	1.4	0.9	0.8	1.9	1.8
TOTAL						Age 50-54					
	Worker	82.7	78.6	75.3	68.8	74.3	79.1	63.9	63.9	55.5	60.7
	Retired	6.6	6.5	2.0	0.2	2.7	0.5	11.6	10.0	4.8	10.9
	All other	10.8	14.9	22.8	31.1	23.0	20.3	24.5	26.1	39.7	28.4
						Age 55-59					
	Worker	73.2	67.7	58.6	53.9	50.6	70.6	35.9	35.5	47.2	45.5
	Retired	13.2	9.7	8.2	4.2	15.5	4.4	39.7	33.9	7.0	26.2
	All other	13.6	22.6	33.3	41.9	33.9	25.0	24.4	30.6	45.8	28.3
						Age 60-64					
	Worker	57.9	30.0	21.2	17.0	9.5	42.2	5.1	13.0	21.1	27.3
	Retired	30.6	61.3	52.4	25.3	73.9	34.4	81.7	66.1	27.2	41.8
	All other	11.5	8.7	26.4	57.7	16.6	23.4	13.3	20.9	51.7	30.9
						Age 65+					
	Worker	1.4	2.9	1.6	0.9	0.1	3.2	0.7	3.2	0.6	1.4
	Retired	97.4	93.8	90.0	70.9	87.7	91.8	86.8	74.5	54.2	77.8
	All other	1.2	3.3	8.4	28.2	12.2	5.0	12.5	22.4	45.2	20.8

Note: Sample size is N=17,350 un-weighted observations.

Table 5A.4 **Distribution of Economically Active Individuals Between Full-Time and Part-Time, by Gender, Country and Age Groups**

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN					Age 50-54					
Full time	82.7	81.1	72.3	52.1	75.7	52.5	78.4	69.8	82.4	61.9
Part time	16.2	17.2	27.7	47.9	23.2	38.7	21.6	20.7	17.6	25.5
					Age 55-59					
Full time	79.8	84.1	58.4	43.2	65.7	49.7	73.3	50.8	76.6	57.9
Part time	20.2	15.9	39.3	56.0	34.3	50.3	24.4	38.2	23.4	32.4
					Age 60-64					
Full time	73.4	77.3	51.3	28.0	73.3	50.2	85.7	74.1	100.0	73.4
Part time	25.7	22.7	48.7	72.0	20.0	47.2	14.3	25.9	0.0	22.1
					Age 65+					
Full time	86.0	79.0	39.5	30.5		20.0	60.0	100.0	45.5	100.0
Part time	14.0	21.0	60.5	69.5		40.0	40.0	0.0	54.5	0.0
MEN					Age 50-54					
Full time	96.7	97.2	94.6	96.2	92.4	86.6	99.0	75.1	86.3	74.0
Part time	3.3	2.8	4.0	3.9	5.1	11.8	1.0	24.2	7.8	15.2
					Age 55-59					
Full time	96.8	90.1	98.5	87.1	100.0	87.8	92.9	91.5	86.2	75.0
Part time	3.2	8.8	0.8	12.9	0.0	7.3	4.3	8.0	7.3	15.6
					Age 60-64					
Full time	88.1	93.1	97.1	77.3	100.0	88.7	92.3	75.0	83.6	76.7
Part time	11.9	4.6	1.5	22.7	0.0	7.5	7.7	20.9	16.4	16.7
					Age 65+					
Full time	58.5	74.8	85.1	77.8	100.0	93.5	100.0	76.6	100.0	82.5
Part time	41.5	25.2	14.9	22.2	0.0	6.5	0.0	23.4	0.0	17.5
TOTAL					Age 50-54					
Full time	90.4	89.5	84.6	77.7	85.0	70.2	90.6	72.9	84.8	70.1
Part time	9,1	9,7	14,7	22,3	13,2	24,8	9,4	22,8	11,7	18,5
					Age 55-59					
Full time	88.1	86.8	83.4	70.0	81.0	72.9	85.6	78.0	83.2	70.8
Part time	11.9	12.7	15.3	29.6	19.0	24.1	11.7	18.0	12.3	20.0
					Age 60-64					
Full time	81.1	88.4	81.1	59.8	79.0	76.0	90.1	74.6	88.9	75.7
Part time	18.4	10.0	18.0	40.2	15.8	20.6	9.9	22.9	11.1	18.4
					Age 65+					
Full time	69.5	77.2	66.7	67.1	100.0	62.6	67.2	90.2	54.3	83.7
Part time	30.6	22.8	33.3	32.9	0.0	20.6	32.8	9.9	45.7	16.3

Note: 4,617 un-weighted observations

Table 5A.5 **Economically Active Individuals in the Sub-Sample of "Healthy" Individuals, by country**

	Worker	Retired but work	Retired	All other
SE	48.6	4.7	41.4	5.2
	(1.6)	(0.7)	(1.6)	(0.8)
DK	0.0	4.2	39.0	7.5
	(1.9)	(0.7)	(1.8)	(1.0)
DE	42.3	2.9	39.1	15.7
	(1.6)	(0.6)	(1.6)	(1.1)
NL	35.1	1.7	33.0	30.1
	(1.5)	(0.4)	(1.5)	(1.4)
FR	33.0	0.6	50.1	16.4
	(1.6)	(0.3)	(1.7)	(1.3)
CH	46.3	9.9	32.4	11.5
	(2.1)	(1.2)	(1.9)	(1.3)
AT	22.5	4.5	58.0	15.1
	(1.3)	(0.7)	(1.6)	(1.1)
IT	26.9	3.7	49.1	20.3
	(1.9)	(0.7)	(2.1)	(1.8)
ES	31.5	1.3	29.7	37.4
	(2.0)	(0.4)	(1.8)	(2.0)
GR	31.3	9.5	33.9	24.1
	(1.3)	(0.8)	(1.4)	(1.2)

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
						Age 60<				
Worker	87.4	84.9	76.9	70.9	68.9	82.5	55.0	51.3	64.2	58.0
	(1.7)	(1.9)	(1.9)	(2.1)	(2.3)	(2.3)	(2.5)	(3.2)	(3.0)	(2.0)
Retired but working	1.5	0.0	0.3	0.8	0.3	1.5	3.9	3.1	0.0	4.2
	(0.6)	(0.0)	(0.3)	(0.4)	(0.3)	(0.8)	(1.0)	(0.1)	(0.0)	(0.8)
Retired	2.2	2.2	2.5	1.5	9.4	1.3	18.8	21.5	2.3	11.0
	(0.8)	(0.8)	(0.7)	(0.5)	(1.5)	(0.7)	(2.0)	(2.7)	(0.8)	(1.3)
All others	8.9	13.0	20.3	26.8	21.5	14.7	22.3	24.0	33.5	26.4
	(1.5)	(1.8)	(1.8)	(2.0)	(2.1)	(2.2)	(2.1)	(2.4)	(3.0)	(1.8)
						Age 60>				
Worker	20.4	17.4	10.5	7.0	3.4	16.1	2.6	9.0	7.5	11.4
	(1.6)	(1.9)	(1.3)	(1.0)	(0.8)	(2.0)	(0.6)	(1.6)	(1.4)	(1.3)
Retired but working	7.1	7.9	5.2	2.5	0.8	16.9	4.8	4.1	2.3	13.5
	(1.1)	(1.4)	(1.0)	(0.6)	(0.4)	(2.1)	(0.9)	(0.9)	(0.8)	(0.1)
Retired	69.8	72.0	72.7	57.8	83.7	58.2	81.9	69.3	49.9	50.9
	(1.9)	(2.3)	(1.9)	(2.0)	(1.8)	(2.7)	(1.5)	(2.8)	(2.6)	(1.9)
All others	2.6	2.7	11.6	32.7	12.1	8.8	10.6	17.6	40.3	22.4
	(0.7)	(0.8)	(1.4)	(1.9)	(1.6)	(1.5)	(1.2)	(2.6)	(2.6)	(1.6)

Note: Sample size is N=9,844 un-weighted observations (total respondents in "good health").

Table 5A.6 **Reasons for Retirement by Gender and Country**

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN					Age 55-59					
Eligible	0.0	0.0	7.3	0.0	53.5	34.0	68.9	51.3	0.0	49.4
Early-pre	8.6	20.5	53.8	40.3	26.7	66.0	10.0	17.4	0.0	16.3
Health prob	88.3	79.5	53.5	0.0	6.7	0.0	16.7	44.0	100.0	10.7
Enjoy life	0.0	10.1	14.8	19.5	19.8	34.0	6.7	4.0	0.0	30.6
Other	3.0	0.0	0.0	60.4	0.0	0.0	0.0	0.0	0.0	0.0
					Age 60-64					
Eligible	10.9	16.5	41.8	19.2	42.5	74.8	68.5	74.4	0.0	56.3
Early-pre	12.5	29.0	32.5	42.3	22.6	12.4	12.1	6.6	29.8	11.0
Health prob	65.6	42.0	17.1	3.9	24.2	7.4	15.8	7.2	70.2	21.3
Enjoy life	18.8	26.7	11.9	26.9	18.1	8.9	9.1	15.3	0.0	14.1
Other	1.6	0.0	8.3	15.4	9.1	0.0	0.0	0.0	0.0	0.0
					Age 65+					
Eligible	53.5	46.3	59.6	33.0	46.0	67.7	64.8	65.7	56.5	71.1
Early-pre	14.6	17.4	10.1	16.7	9.6	2.4	4.3	7.1	7.1	5.2
Health prob	25.9	23.2	17.1	13.8	15.6	7.3	20.1	12.9	28.5	15.0
Enjoy life	9.1	24.0	14.7	17.9	24.2	10.8	13.0	20.2	9.5	11.4
Other	6.4	0.0	10.9	25.1	12.6	14.3	0.0	0.0	0.0	0.0
MEN					Age 55-59					
Eligible	7.3	10.4	6.1	31.1	69.4	37.6	37.2	71.3	8.4	72.5
Early-pre	14.6	19.6	51.3	68.9	39.3	25.0	20.9	13.2	22.3	9.9
Health-pro	75.3	70.0	48.7	0.0	0.0	21.6	48.8	12.4	69.3	12.4
Enjoy life	3.7	0.0	6.1	0.0	25.9	45.5	4.7	7.5	0.0	7.9
Other	6.5	0.0	12.2	6.3	13.1	20.4	0.0	0.0	0.0	0.0
					Age 60-64					
Eligible	16.4	24.4	34.8	27.9	64.5	32.7	57.8	85.6	28.1	72.7
Early pre	41.8	43.0	40.8	48.1	17.7	34.6	17.4	5.0	37.6	12.6
Health prob	38.2	37.5	28.0	10.1	14.5	9.4	29.2	13.1	32.2	7.8
Enjoy life	16.4	28.1	6.4	24.1	6.6	32.7	5.0	4.2	2.1	6.8
Other	7.3	0.0	4.9	12.7	10.0	14.1	0.0	0.0	0.0	0.0
					Age 65+					
Eligible	50.8	44.4	56.7	32.4	64.0	68.0	77.1	82.5	60.1	86.6
Early-pre	22.4	30.1	25.4	40.9	20.7	15.0	6.2	6.3	16.1	1.2
Health-prob	22.0	25.2	22.4	16.3	11.3	9.4	17.9	9.6	20.3	10.3
Enjoy life	9.1	21.3	4.5	8.3	7.0	10.9	2.6	6.6	5.1	3.2
Other	4.6	0.0	3.1	11.2	7.6	6.7	0.0	0.0	0.0	0.0

Note: 8,888 un-weighted observations

Table 5A.7 **Coverage of 1st Pillar Income Sources of Retirees by Gender and Education Group (in %)**

	PRIMARY		SECONDARY		TERTIARY	
	male	fem	male	fem	male	fem
Public Old Age Pension	59.4	64.3	80.8	85.1	84.0	80.8
Public Early Retirement	33.3	25.4	13.4	7.8	11.2	10.3
Public Disability Insurance	2.5	3.8	4.1	6.5	2.6	4.1
Public Survivor Pension	1.9	21.8	1.7	23.8	0.4	15.8
War Pension	3.0	(-)	3.2	1.1	1.8	1.2
Public Disability or Invalidity Pension	7.9	8.1	6.3	8.1	5.5	7.5

Table 5A.8 **Coverage of 2nd and 3rd Pillar Income Sources of Retirees Who Have Been in Workforce Before Retirement, by Gender and Education Group (in %)**

	PRIMARY		SECONDARY		TERTIARY	
	male	fem	male	fem	male	fem
2nd Pillar Coverage	10.3	8.4	20.7	14.2	23.7	13.2
3rd Pillar Coverage	4.5	2.2	5.1	3.3	4.1	3.8
Private Life Insurance	2.2	0.4	1.4	0.7	1.0	0.8
Private Annuity/Private Personal Pension	2.4	1.8	3.7	2.6	3.2	3.0

Table 5A.9 **Share of 2nd and 3rd Pillar Pension Claims of Non-Retirees in Workforce (employed, self-employed and unemployed) with Reference to Total Pension Claims, by Education Group and Gender (in %)**

	PRIMARY		SECONDARY		TERTIARY	
	male	fem	male	fem	male	Fem
2nd Pillar Coverage	22.6	13.4	26.6	25.3	34.4	25.1
3rd Pillar Coverage	18.5	13.9	29.3	24.4	39.4	28.8
Individual Retirement	11.8	12.1	9.3	8.5	12.5	9.4
Life Insurance	10.0	5.6	23.7	17.1	33.5	23.0

Table 5A.10 **Average Age When Receiving a Pension for the First Time, by Gender and Country**

	SE		DK		DE		NL		FR		CH		AT		IT		ES		GR	
	male	fem	male	fem	male	Fem	male	fem	male	fem	male	fem	male	fem	male	fem	male	fem	male	fem
Public Old Age Pension	64.3	63.7	66.5	66.0	61.7	60.8	64.8	64.5	60.0	60.7	64.7	62.4	58.6	57.0	58.7	57.0	60.6	63.3	60.3	61.0
Public Early Retirement	52.2	52.4	59.6	58.9	57.8	(.)	(.)	(.)	(.)	(.)	(.)	(.)	54.3	52.8	(.)	55.2	55.0	(.)	53.8	46.6
Public Disability Insurance	(.)	65.5	(.)	(.)	51.0	(.)	(.)	(.)	(-)	(-)	(.)	(.)	51.0	(.)	(.)	(.)	49.8	(.)	54.9	49.0
Public Survivor Pension	63.7	61.8	(.)	64.1	(.)	64.2	(-)	(.)	(.)	62.5	(.)	(.)	(.)	58.1	(.)	61.4	(.)	(.)	(-)	58.6
Private-Occup. Old Age P.	62.8	61.4	63.8	64.0	61.2	60.8	60.2	61.5	60.9	61.7	63.7	61.3	58.3	(.)	58.9	55.5	(.)	(-)	(.)	(.)
Private-Occup. Early Ret.	(.)	(.)	61.5	57.9	(-)	(-)	57.2	(.)	(.)	(.)	60.1	(.)	(.)	(.)	(.)	(.)	(.)	(-)	(-)	(-)
Private-Occup. Survivor P.	(-)	(-)	(.)	(.)	64.0	66.1	67.3	(.)	(.)	64.4	(.)	(.)	(-)	61.2	(.)	(.)	(-)	(-)	(-)	(.)

Table 5A.11 Distribution of Economic Activity by Age

Age of respondent	Working	Retired	Unemployed	Disabled	Homemaker
50	70.4	4.0	10.1	3.5	12.0
	(2.9)	*(1.5)*	*(2.0)*	*(1.2)*	*(1.8)*
51	73.7	2.7	5.5	5.2	12.9
	(2.4)	*(0.6)*	*(1.4)*	*(1.3)*	*(1.7)*
52	71.5	5.5	9.1	2.1	11.8
	(2.7)	*(1.6)*	*(1.8)*	*(0.6)*	*(1.7)*
53	71.8	4.3	5.9	4.4	13.6
	(2.7)	*(1.2)*	*(1.5)*	*(1.1)*	*(2.0)*
54	68.7	6.1	7.4	4.4	13.4
	(2.7)	*(1.7)*	*(1.4)*	*(1.0)*	*(1.9)*
55	64.7	8.8	6.6	3.1	16.8
	(2.9)	*(1.7)*	*(1.5)*	*(1.0)*	*(2.1)*
56	54.2	13.5	5.9	7.1	19.3
	(2.9)	*(2.3)*	*(1.4)*	*(1.4)*	*(2.1)*
57	48.8	21.7	6.0	3.1	20.4
	(3.1)	*(3.0)*	*(1.4)*	*(0.8)*	*(2.4)*
58	48.9	19.6	9.7	3.9	17.9
	(3.0)	*(2.5)*	*(1.8)*	*(1.1)*	*(2.2)*
59	40.2	25.6	10.5	4.1	19.5
	(3.0)	*(2.7)*	*(2.0)*	*(1.1)*	*(2.4)*
60	30.7	39.7	7.1	3.8	18.7
	(2.7)	*(2.9)*	*(1.5)*	*(1.2)*	*(2.2)*
61	19.3	56.1	3.5	4.4	16.7
	(2.2)	*(2.9)*	*(1.0)*	*(12.5)*	*(2.3)*
62	19.5	57.7	3.2	4.3	15.5
	(2.2)	*(3.0)*	*(0.9)*	*(1.2)*	*(2.0)*
63	18.6	58.5	1.9	4.7	16.3
	(2.5)	*(3.0)*	*(0.8)*	*(1.3)*	*(2.2)*
64	10.7	66.1	2.1	3.3	17.9
	(1.7)	*(2.7)*	*(0.8)*	*(1.0)*	*(2.1)*
65	6.3	80.2	0.4	1.2	11.9
	(1.6)	*(2.4)*	*(0.3)*	*(0.6)*	*(1.8)*
66	5.3	81.6	0.0	0.0	13.1
	(1.5)	*(2.4)*	*(0.0)*	*(0.1)*	*(2.1)*
67	2.1	85.8	0.1	0.6	11.4
	(0.9)	*(2.2)*	*(0.1)*	*(0.3)*	*(2.0)*
68	2.2	83.6	0.0	0.4	13.8
	(1.0)	*(2.3)*	*(0.0)*	*(0.2)*	*(2.2)*
69	1.4	84.1	0.0	1.2	13.4
	(1.1)	*(2.7)*	*(0.0)*	*(1.0)*	*(2.3)*
70	0.9	83.2	0.0	0.2	15.7
	(0.5)	*(3.2)*	*(0.0)*	*(0.2)*	*(3.2)*
71	0.6	82.8	0.0	0.2	16.4
	(0.4)	*(2.8)*	*(0.0)*	*(0.1)*	*(2.7)*
72	1.3	76.2	0.0	1.2	21.3
	(1.2)	*(3.7)*	*(0.0)*	*(0.7)*	*(3.5)*
73	0.8	81.6	0.0	1.3	16.3
	(0.6)	*(2.8)*	*(0.0)*	*(0.7)*	*(2.7)*
74	0.7	82.5	0.0	0.6	16.2
	(0.6)	*(3.4)*	*(0.0)*	*(0.4)*	*(3.3)*

Note: Continued on next page.

Table 5A.11 (cont.) **Distribution of Economic Activity by Age**

Age of respondent	Working	Retired	Unemployed	Disabled	Homemaker
75	1.2	75.4	0.0	0.3	23.1
	(0.7)	*(3.5)*	*(0.0)*	*(0.2)*	*(3.4)*
76	0.0	83.0	0.0	1.2	15.8
	(0.0)	*(3.5)*	*(0.0)*	*(0.6)*	*(3.4)*
77	0.0	85.0	0.0	0.5	14.5
	(0.0)	*(2.7)*	*(0.0)*	*(0.3)*	*(2.6)*
78	4.5	81.4	0.0	0.6	13.4
	(3.1)	*(3.9)*	*(0.0)*	*(0.5)*	*(2.8)*
79	0.1	84.4	0.1	1.1	14.3
	(0.1)	*(3.3)*	*(0.1)*	*(0.6)*	*(3.2)*
80	0.0	78.8	0.0	2.2	19.0
	(0.0)	*(4.0)*	*(0.0)*	*(1.3)*	*(3.8)*

Table 5A.12 **Participation in Volunteer Work by Country**

Country	Total share of volunteers (in %)	Frequency of volunteering (in % of those who volunteer at all)			Main motivations for volunteering (in % of those who volunteer at all)	
		Almost daily	Almost every week	Less often	To contribute something useful	Because I enjoy it
SE (*n = 2,010*)	17.1	15.1	41.4	43.5	62.8	70.1
DK (*n = 1,541*)	17.6	12.0	50.2	37.8	69.6	56.2
DE (*n = 2,281*)	9.9	18.0	47.3	34.7	62.0	67.1
NL (*n = 2,156*)	21.1	17.6	58.4	24.0	65.1	74.2
FR (*n = 1,432*)	13.7	20.4	46.3	33.3	71.7	56.2
CH (*n = 939*)	14.3	(.)	38.5	47.6	71.0	52.1
AT (*n = 1,911*)	9.1	(.)	41.9	53.9	59.7	58.6
IT (*n = 1,943*)	7.4	18.6	47.9	33.5	80.6	69.4
ES (*n = 1,317*)	2.3	(.)	(.)	(.)	(.)	(.)
GR (*n = 1,969*)	3.0	(.)	41.8	42.7	64.3	(.)
All countries[a] (*n = 17,499*)	*9.8*	*17.7*	*46.7*	*35.7*	*68.4*	*56.3*

Notes: [a] Weighted means across all countries. – (.) Cell size < 20 observations.

Table 5A.13 **Volunteering and Informal Help or Care and Participation in Organisations, All Countries**

Country	Informal help or care (total in %)	Participation in organisations (total in %)	Volunteering (in %) among those who …		Help or care …	Participation …
			… help or care	… participate	… among those who volunteer (in %)	
SE	40.6	34.4	24.2	30.9	57.7	62.7
DK	34.2	39.9	23.9	27.4	47.2	63.1
DE	19.4	33.1	15.3	21.2	30.2	71.1
NL	32.0	37.5	29.1	33.9	44.6	61.0
FR	28.8	23.3	22.6	30.6	50.2	55.1
CH	25.2	49.1	24.9	21.3	44.7	74.1
AT	24.8	36.3	16.3	17.3	45.2	70.6
IT	15.7	12.4	15.4	19.6	33.0	33.1
ES	7.3	20.1	(.)	(.)	(.)	(.)
GR	16.7	45.0	8.6	4.7	48.4	71.9
All countries[a]	*20.6*	*27.1*	*18.8*	*21.2*	*40.1*	*59.2*

Notes: [a] Weighted means across all countries. – (.) Cell size < 20 observations.

Table 5A.14 **Participation in Volunteer Work by Demographic Characteristics, All Countries**

Country	Men	Women	Age 50-64	Age 65-74	Age 75+	Living with a partner	Not living with a partner
SE	20.2	14.3	17.5	19.6	13.2	18.1	15.0
DK	18.8	16.0	18.1	19.8	12.3	18.7	14.7
DE	10.9	9.0	12.3	10.0	(.)	11.4	7.0
NL	19.5	21.9	22.6	26.4	8.7	22.0	18.2
FR	16.1	10.6	13.3	16.1	8.4	14.1	10.2
CH	13.3	14.7	17.2	13.0	(.)	14.6	12.9
AT	10.1	8.1	12.1	6.3	(.)	10.3	6.6
IT	8.5	6.4	10.4	4.3	(.)	6.9	8.2
ES	(.)	(.)	(.)	(.)	(.)	2.2	(.)
GR	3.0	2.9	3.9	(.)	(.)	3.1	(.)
All countries[a]	*10.8*	*8.8*	*11.7*	*9.4*	*5.0*	*10.4*	*8.1*

Notes: [a] Weighted means across all countries. – (.) Cell size < 20 observations.

Table 5A.15 **Participation in Volunteer Work by Education and Employment Status, All Countries**

Country	Low education	Medium education	High education	Working	Retired	Other non-working
SE	14.3	18.6	22.9	18.7	16.3	(.)
DK	12.1	16.2	23.7	17.4	17.2	20.4
DE	4.8	8.7	16.9	10.5	8.7	12.6
NL	18.6	20.3	29.1	19.3	20.3	23.1
FR	9.6	14.8	23.0	11.4	15.0	12.3
CH	10.5	16.4	19.7	15.4	10.6	22.5
AT	5.4	9.4	13.7	13.2	8.4	7.1
IT	5.1	12.2	(.)	12.4	7.0	4.1
ES	(.)	(.)	(.)	(.)	(.)	(.)
GR	1.8	(.)	7.8	4.6	2.9	(.)
All countries[a]	*6.3*	*10.8*	*18.3*	*11.3*	*9.5*	*8.9*

Notes: [a] Weighted means across all countries. – (.) Cell size < 20 observations.

Table 5A.16 **Participation in Volunteer Work by Health Status, All Countries**

Country	Self-reported health: good or better	Self-reported health: fair or worse	Less than two chronic diseases	Two or more chronic diseases	Not depressed in last month	Depressed in last month
SE	18.4	14.9	17.7	16.3	17.6	14.6
DK	19.3	13.8	17.1	18.2	18.1	13.9
DE	12.2	7.2	10.3	9.3	10.8	6.3
NL	24.0	15.0	22.3	18.6	21.8	17.6
FR	16.3	8.6	14.6	11.7	14.6	9.3
CH	15.3	(.)	14.9	12.4	14.9	(.)
AT	11.5	5.0	9.2	8.6	9.2	7.6
IT	10.6	4.3	9.1	5.1	8.9	4.2
ES	(.)	(.)	(.)	(.)	(.)	(.)
GR	3.4	(.)	3.1	2.8	3.2	(.)
All countries[a]	*12.5*	*6.4*	*10.9*	*8.3*	*10.9*	*6.3*

Notes: [a] Weighted mean across all countries. – (.) Cell size < 20 observations.

Table 5A.17 **Prevalence of Market/Non-Market Work by Gender and Country (%)**

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN										
Market work	38.7	36.1	26.1	24.8	24.3	41.2	19.0	16.3	17.8	29.9
	(1.6)	(1.8)	(1.3)	(1.3)	(1.5)	(2.3)	(1.2)	(1.6)	(1.6)	(1.4)
Providing help	39.9	43.2	26.9	37.5	32.0	36.2	24.1	23.0	15.1	20.4
	(1.6)	(1.8)	(1.3)	(1.5)	(1.7)	(2.2)	(1.3)	(1.8)	(1.4)	(1.3)
Caring for	34.7	39.8	24.7	34.9	35.0	21.5	26.9	25.7	27.1	25.7
Grandchildren	(1.5)	(1.8)	(1.3)	(1.5)	(1.7)	(1.9)	(1.3)	(1.9)	(1.7)	(1.4)
MEN										
Market work	48.3	48.6	40.5	41.9	29.5	61.7	29.5	34.0	35.5	51.5
	(1.7)	(2.0)	(1.6)	(1.7)	(1.8)	(2.3)	(1.6)	(2.4)	(2.3)	(1.7)
Providing help	42.1	50.0	37.4	44.2	31.2	33.6	26.3	24.8	12.9	18.2
	(1.7)	(2.0)	(1.6)	(1.7)	(1.8)	(2.3)	(1.6)	(2.1)	(1.6)	(1.3)
Caring for	24.5	31.1	20.7	32.0	28.9	17.3	24.7	18.8	20.5	18.7
Grandchildren	(1.4)	(1.8)	(1.2)	(1.5)	(1.8)	(1.8)	(1.5)	(1.7)	(1.7)	(1.4)
TOTAL										
Market work	43.1	41.9	32.5	32.5	26.6	50.7	23.7	24.0	25.3	39.8
	(1.2)	(1.3)	(1.1)	(1.1)	(1.2)	(1.7)	(1.0)	(1.4)	(1.4)	(1.1)
Providing help	40.9	46.3	31.6	40.5	31.7	35.0	25.1	23.8	14.2	19.4
	(1.2)	(1.3)	(1.0)	(1.1)	(1.3)	(1.6)	(1.0)	(1.4)	(1.0)	(0.9)
Caring for	30.0	35.8	22.9	33.6	32.2	19.5	25.9	22.7	24.3	22.5
Grandchildren	(1.1)	(1.3)	(0.9)	(1.1)	(1.3)	(1.3)	(1.0)	(1.3)	(1.2)	(1.0)

Notes: Sample size is N= 17,269 un-weighted observations. In Tables 5A.17-5A.24 we use the Version 0 release of SHARE data. All figures—except for sample sizes—are weighted. Figures refer to the whole population. However, the option of babysitting grandchildren is conditional on the person actually having grandchildren. Standard errors are in parentheses.

Table 5A.18	Prevalence by Gender, Country and Age Groups (%)									
	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN (50-54)										
Market work	83.0	84.7	76.7	64.4	68.2	78.9	63.0	52.2	52.5	54.7
Providing help	55.7	58.3	43.9	55.0	37.2	52.0	30.4	36.1	22.3	35.6
Caring for grandchildren	23.9	31.9	24.8	22.4	25.7	10.1	25.2	12.6	10.3	15.6
WOMEN (55-59)										
Market work	80.6	70.6	55.8	47.1	51.4	62.7	34.3	27.1	33.7	45.8
Providing help	55.8	57.4	45.2	50.5	45.0	37.6	33.8	34.4	26.1	29.7
Caring for grandchildren	48.4	56.8	36.8	43.9	48.6	28.2	36.4	24.7	34.8	29.1
WOMEN (60-64)										
Market work	59.8	24.4	20.0	17.3	14.9	45.1	10.5	11.4	21.7	30.9
Providing help	49.0	51.4	35.1	45.0	43.9	44.2	31.4	30.2	23.4	22.5
Caring for grandchildren	59.8	67.3	39.0	60.0	58.9	38.9	34.6	37.8	42.5	36.9
WOMEN (65+)										
Market work	4.8	4.8	4.2	1.2	0.3	16.7	5.9	5.3	1.9	16.3
Providing help	27.2	27.9	14.5	22.2	21.8	26.8	16.1	13.8	8.1	11.7
Caring for grandchildren	26.8	26.2	17.5	28.5	26.5	18.7	20.9	25.5	26.8	25.2
MEN (50-54)										
Market work	91.8	82.0	84.4	86.2	86.0	92.2	79.1	86.1	74.6	93.0
Providing help	55.3	63.6	46.4	62.6	39.9	41.8	33.1	39.7	17.0	22.7
Caring for grandchildren	12.5	14.9	9.3	9.1	14.7	5.5	16.6	6.8	6.3	5.6
MEN (55-59)										
Market work	76.6	74.6	71.7	73.9	56.2	94.7	59.6	51.7	77.0	77.5
Providing help	47.8	54.9	43.0	46.8	37.2	35.1	33.8	33.5	21.3	26.4
Caring for grandchildren	23.2	37.3	20.7	28.1	27.6	15.3	26.5	11.9	6.1	9.9
MEN (60-64)										
Market work	68.5	55.3	36.5	25.6	6.3	68.4	14.2	32.4	39.1	59.9
Providing help	47.0	48.3	44.2	46.7	40.7	43.6	30.6	25.6	15.0	19.2
Caring for grandchildren	33.7	46.3	23.2	47.2	42.7	23.2	30.6	18.0	31.4	22.9
MEN (65+)										
Market work	10.0	12.3	6.6	5.3	1.0	24.2	5.8	6.4	3.3	18.9
Providing help	32.1	40.1	27.6	31.4	22.1	23.8	18.3	14.5	7.7	12.5
Caring for grandchildren	27.3	30.9	25.9	40.5	31.7	22.6	24.1	27.2	28.4	26.4
TOTAL (50-54)										
Market work	87.5	83.3	80.6	74.9	77.0	85.5	71.5	68.5	63.1	72.9
Providing help	55.5	61.1	45.2	58.6	38.5	47.0	31.8	37.8	19.7	29.5
Caring for grandchildren	18.1	23.1	16.9	16.0	20.3	7.8	20.6	9.8	8.4	10.8
TOTAL (55-59)										
Market work	78.7	72.4	64.1	60.2	53.5	78.7	45.2	39.8	53.2	62.0
help given	51.9	56.2	44.0	48.7	41.6	36.4	33.8	33.9	24.0	28.0
Caring for grandchildren	36.3	48.1	28.4	36.3	39.6	21.7	32.1	18.1	21.9	19.3
TOTAL (60-64)										
Market work	64.2	40.0	27.8	21.3	11.0	56.8	12.2	20.7	29.5	45.2
Providing help	48.0	49.8	39.4	45.8	42.4	43.9	31.0	28.2	19.7	20.9
Caring for grandchildren	46.8	56.7	31.5	53.8	51.5	31.0	32.7	29.0	37.5	30.0
TOTAL (65+)										
Market work	7.0	8.0	5.2	2.9	0.6	19.8	5.9	5.7	2.4	17.4
Providing help	29.3	33.0	19.6	26.0	22.0	25.6	17.0	14.1	8.0	12.0
Caring for grandchildren	27.0	28.2	20.8	33.4	28.8	20.3	22.2	26.2	27.4	25.7

Notes: Sample size is N=17,269 un-weighted observations.

Table 5A.19 Prevalence of Paid/Unpaid Work by Marital Status, with or without Children, and Country (%)

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
SINGLE (not living with children)										
Market work	25.1	29.4	25.4	18.4	20.1	39.4	17.6	18.0	17.1	30.1
Providing help	34.6	41.3	23.4	31.0	28.1	37.3	20.9	19.8	8.9	15.3
Caring for grandchildren	21.2	25.6	10.7	18.7	21.3	15.9	17.0	15.1	10.1	18.2
SINGLE (living with children)										
Market work	71.1	69.6	34.8	45.9	42.4	49.4	23.3	22.7	23.3	38.7
Providing help	52.2	59.8	35.9	27.2	32.1	27.3	23.2	23.7	9.1	28.1
Caring for grandchildren	25.2	22.4	21.9	23.5	22.1	10.9	30.4	22.1	30.9	20.5
COUPLES(not living with children)										
Market work	46.6	45.0	31.5	32.3	23.2	49.5	23.6	18.4	20.8	36.1
Providing help	42.8	48.6	33.9	43.2	31.7	33.2	26.4	22.4	15.2	19.4
Caring for grandchildren	37.8	45.1	30.7	45.0	39.4	24.7	32.4	29.2	32.4	28.8
COUPLES (living with children)										
Market work	85.4	81.0	68.2	67.2	61.6	84.5	48.1	42.3	41.9	61.7
Providing help	51.1	51.6	48.3	55.5	42.9	40.4	35.8	31.1	19.7	21.7
Caring for grandchildren	13.7	19.2	21.3	15.3	27.8	7.7	22.7	18.2	21.3	14.8

Table 5A.20 Time Use in an Average Day by Gender and Country (daily hours)

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN										
Market work	1.8	1.8	1.1	0.9	1.1	1.7	0.9	0.7	0.8	0.7
	(.08)	(.09)	(.07)	(.06)	(.08)	(.12)	(.06)	(.09)	(.09)	(.06)
Providing help	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.5	0.4	0.5
	(.04)	(.04)	(.04)	(.05)	(.04)	(.06)	(.03)	(.06)	(.06)	(.06)
Caring for	0.3	0.3	0.4	0.4	0.6	0.4	0.6	0.9	0.7	1.0
grandchildren	(.03)	(.03)	(.04)	(.03)	(.06)	(.07)	(.05)	(.09)	(.08)	(.08)
MEN										
Market work	2.8	2.6	2.5	2.4	1.7	3.7	1.9	1.9	2.0	2.2
	(.11)	(.12)	(.11)	(.11)	(.11)	(.18)	(.11)	(.15)	(.15)	(.11)
Providing help	0.2	0.3	0.3	0.3	0.1	0.3	0.3	0.4	0.3	0.2
	(.02)	(.05)	(.03)	(.05)	(.02)	(.06)	(.04)	(.08)	(.06)	(.03)
Caring for	0.2	0.3	0.3	0.3	0.4	0.2	0.5	0.7	0.5	0.6
grandchildren	(.03)	(.05)	(.03)	(.03)	(.05)	(.05)	(.05)	(.09)	(.08)	(.07)
TOTAL										
Market work	2.3	2.2	1.7	1.6	1.4	2.6	1.3	1.2	1.3	1.4
	(.07)	(..08)	(.07)	(.06)	(.07)	(.11)	(.06)	(.08)	(.08)	(.06)
Providing help	0.3	0.3	0.3	0.4	0.2	0.4	0.3	0.5	0.4	0.3
	(.02)	(.03)	(.02)	(.03)	(.03)	(.05)	(.03)	(.05)	(.04)	(.03)
Caring for	0.3	0.3	0.3	0.4	0.5	0.3	0.5	0.8	0.6	0.8
grandchildren	(.02)	(.03)	(.03)	(.24)	(.04)	(.04)	(.04)	(.06)	(.06)	(.05)

Notes: Sample size is N=17,269 un-weighted observations. Standard errors in parentheses.

Table 5A.21 **Allocation of Time by Country and Gender - Working (daily hours)**

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN										
Market work	4.8	4.9	4.4	3.6	4.6	4.0	4.7	4.5	4.6	2.4
	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)
Providing help	0.4	0.3	0.3	0.5	0.3	0.3	0.4	0.6	0.6	0.6
	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)
Caring for	0.4	0.4	0.4	0.4	0.6	0.2	0.5	0.5	0.4	0.8
grandchildren	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
MEN										
Market work	5.8	5.4	6.1	5.7	5.8	6.0	6.3	5.5	5.6	4.3
	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)	(0.2)
Providing help	0.2	0.4	0.3	0.3	0.1	0.2	0.3	0.5	0.1	0.2
	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)	(0.0)	(0.1)	(0.2)	(0.0)	(0.0)
Caring for	0.2	0.3	0.2	0.1	0.2	0.1	0.4	0.4	0.2	0.4
grandchildren	(0.0)	(0.1)	(0.1)	(0.0)	(0.1)	(0.0)	(0.1)	(0.2)	(0.1)	(0.1)
TOTAL										
Market work	5.3	5.2	5.3	4.8	5.2	5.1	5.6	5.1	5.2	3.5
	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)
Providing help	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.5	0.3	0.4
	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)
Caring for	0.3	0.3	0.3	0.2	0.4	0.2	0.5	0.4	0.3	0.6
grandchildren	(0.0)	(0.1)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)

Notes: Sample size is N=5,795 un-weighted observations. Standard errors in parentheses

Table 5A.22 **Allocation of Time by Country and Gender - Non Working (daily hours)**

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
WOMEN										
Market work	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Providing help	0.2	0.3	0.3	0.4	0.3	0.5	0.1	0.4	0.4	0.4
	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)
Caring for	0.2	0.3	0.4	0.4	0.6	0.5	0.6	0.9	0.7	1.0
grandchildren	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
MEN										
Market work	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Providing help	0.2	0.3	0.2	0.4	0.1	0.5	0.3	0.4	0.3	0.1
	(0.0)	(0.1)	(0.0)	(0.1)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.0)
Caring for	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.8	0.7	0.8
grandchildren	(0.0)	(0.1)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
TOTAL										
Market work	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Providing help	0.2	0.3	0.3	0.4	0.2	0.5	0.3	0.4	0.4	0.3
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.0)
Caring for	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.9	0.7	0.9
grandchildren	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)

Notes: Sample size is N=11,474 un-weighted observations. Standard errors in parentheses

Table 5A.23 **Allocation of Time by Country, Marital Status and Living Arrangements (daily hours)**

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
SINGLE (not living with children)										
Market work	4.8	4.8	5.1	4.1	5.0	4.6	5.1	5.1	4.7	2.8
	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)	(0.3)	(0.2)	(0.5)	(0.5)	(0.3)
Providing help	0.4	0.6	0.3	0.4	0.3	0.3	0.3	0.5	0.6	0.3
	(0.1)	(0.2)	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)	(0.2)	(0.4)	(0.1)
Caring for	0.1	0.4	0.1	0.2	0.5	0.1	0.3	0.2	0.0	0.3
grandchildren	(0.0)	(0.1)	(0.0)	(0.1)	(0.2)	(0.1)	(0.1)	(0.2)	(0.0)	(0.1)
SINGLE (living with children)										
Market work	5.6	5.6	5.8	4.2	4.7	5.9	5.2	5.1	4.8	3.1
	(0.3)	(0.3)	(0.6)	(0.4)	(0.4)	(0.8)	(0.4)	(0.6)	(0.6)	(0.4)
Providing help	0.4	0.3	1.0	0.1	0.1	0.0	0.6	0.5	0.4	0.7
	(0.2)	(0.1)	(0.6)	(0.1)	(0.1)	(0.0)	(0.2)	(0.3)	(0.4)	(0.2)
Caring for	0.5	0.0	0.9	0.0	0.1	0.0	1.3	0.1	1.0	1.1
grandchildren	(0.5)	(0.0)	(0.4)	(0.0)	(0.0)	(0.0)	(0.5)	(0.1)	(0.5)	(0.4)
COUPLES (not living with children)										
Market work	5.3	5.2	5.4	4.8	5.1	5.0	5.7	5.2	5.6	3.3
	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)
Providing help	0.3	0.3	0.3	0.4	0.2	0.2	0.4	0.3	0.2	0.4
	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)
Caring for	0.4	0.3	0.4	0.3	0.4	0.2	0.6	0.4	0.2	0.8
grandchildren	(0.0)	(0.1)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
COUPLES (living with children)										
Market work	6.1	6.0	5.5	5.0	5.7	5.9	6.1	5.0	5.1	4.3
	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.3)	(0.3)	(0.3)	(0.2)
Providing help	0.2	0.2	0.3	0.3	0.1	0.2	0.2	0.7	0.2	0.3
	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)	(0.1)	(0.1)	(0.2)	(0.1)	(0.1)
Caring for	0.1	0.2	0.2	0.1	0.5	0.1	0.1	0.6	0.3	0.3
grandchildren	(0.0)	(0.1)	(0.1)	(0.0)	(0.2)	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)

Notes: Sample size is N=5,795 un-weighted observations. Standard errors in parentheses

Table 5A.24 Allocation of Time by Country, Marital Status and Living Arrangements - Non-working (daily hours)

	SE	DK	DE	NL	FR	CH	AT	IT	ES	GR
SINGLE (not living with children)										
Providing help	0.3	0.2	0.2	0.4	0.2	0.5	0.3	0.1	0.2	0.2
	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)	(0.0)	(0.1)	(0.1)
Caring for	0.1	0.1	0.2	0.1	0.3	0.3	0.3	0.3	0.2	0.5
grandchildren	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
SINGLE (living with children)										
Providing help	0.0	0.0	0.3	0.1	0.1	0.0	0.3	0.1	0.2	0.5
	(0.0)	(0.0)	(0.2)	(0.1)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.2)
Caring for	1.4	0.7	0.3	0.6	0.8	0.2	0.8	1.0	0.6	1.0
grandchildren	(1.3)	(0.5)	(0.1)	(0.3)	(0.4)	(0.2)	(0.2)	(0.3)	(0.2)	(0.3)
COUPLES (not living with children)										
Providing help	0.2	0.3	0.3	0.4	0.3	0.5	0.3	0.6	0.5	0.3
	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)
Caring for	0.3	0.4	0.5	0.6	0.6	0.6	0.6	1.2	1.1	1.2
grandchildren	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
COUPLES (living with children)										
Providing help	0.2	0.1	0.6	0.3	0.1	0.4	0.3	0.6	0.5	0.7
	(0.1)	(0.1)	(0.2)	(0.1)	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)	(0.2)
Caring for	0.1	0.6	0.4	0.5	0.6	0.8	0.7	0.7	0.6	1.3
grandchildren	(0.1)	(0.3)	(0.2)	(0.2)	(0.2)	(0.7)	(0.2)	(0.1)	(0.1)	(0.2)

Notes: Sample size is N=11,474 un-weighted observations. Standard errors in parentheses

6 Socio-Economic Status

Ed. Guglielmo Weber

6.1 Household Income

Omar Paccagnella and Guglielmo Weber

Why Is Income Important?

Income is by no means the only way to support consumption in old age, as financial assets can be run down and real assets can also be used to generate liquidity (reverse mortgages, equity lines etc.). Also, social and family support may be used to meet important requirements near the end of the life-cycle, such as nursing and long-term care.

However, social scientists and economists have always shown a keen interest in income, for instance in their studies of economic inequality and poverty, and in most health surveys containing questions on economic and social well-being, the only measure of access to economic resources is income. Indeed, income is an important (arguably, the most important) component of any measure of access to economic resources, thus deserving careful investigation on its own. For this reason, in this section we present statistics on household income as recorded in SHARE in a number of different dimensions.

This contribution describes the income available to households, and shows how careful one needs to be in defining it when comparing across countries. In almost all EU policy statements income per capita statistics are core indicators for public policy. But our analysis reveals that coarse income measures mask important differences that are due to differences in purchasing power, in household size, in taxation, in the services provided by owner-occupied housing. Only after allowance is made for all these factors, can we compare incomes across countries in a meaningful way.

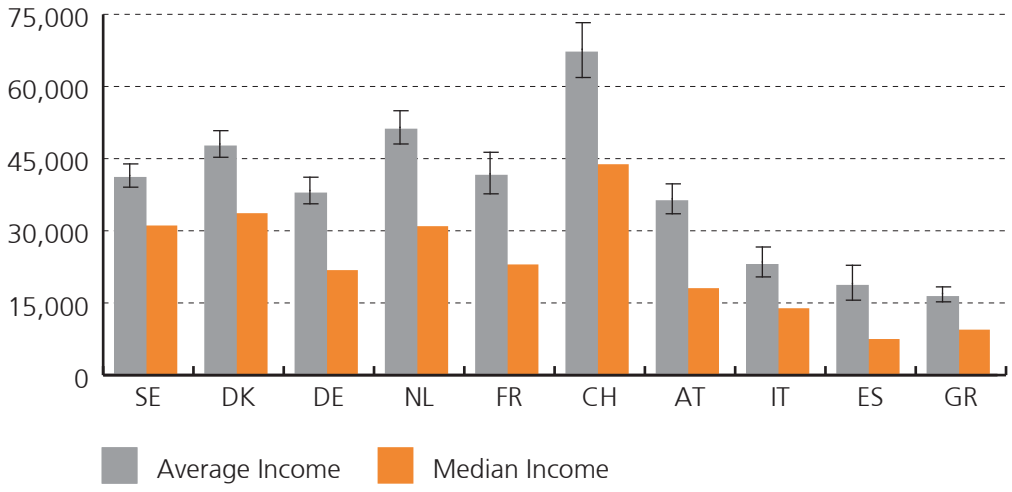

Figure 1 Average and median gross household income across SHARE countries

In Figure 1 we summarise graphically some of the income differences found across SHARE countries by reporting the average and median gross household income in its basic definition (excluding imputed rent from owner occupation – current exchange rates have been used to translate national currencies in euros, where applicable). Average income exceeds €45,000 in three countries (Denmark, the Netherlands, Switzerland), it lies between €30,000 and €45,000 in Austria, France, Germany and Sweden, it is below

€30,000 in Italy as well as in Greece and Spain. However, median income may be a better indicator of access to economic resources, as averages are heavily affected by the right tail of the distribution. In fact, Figure 1 shows that for all countries median income is much lower than average income, and that the difference is by no means constant. So Sweden replaces the Netherlands among the top three countries in terms of median income; among the lower income countries, Spain and Greece median incomes are less than half of Italy's, whereas Austria and Italy appear quite close (the complete data underlying this figure are presented in Tables 6A.1 and 6A.2).

In the rest of this section we shall provide more systematic evidence on ways in which income varies across countries, by looking at its various sources and by assessing the relevance of corrections for differences in purchasing power, in household size and in taxation. We shall also argue that some international differences appear less strong when owner-occupier housing is brought into the picture. All these adjustments can be implemented in the SHARE data in a consistent manner, and this makes this data set a particularly valuable source of information for policy analysis.

What Income Is in SHARE?

The SHARE questionnaire contains a number of questions on individual incomes, such as earnings, pensions and transfers, and a few questions on incomes that can only be recorded at the household level. The former are asked to all eligible individuals. The latter are asked to one particular respondent, and include items such as rents and housing benefits received, as well as an estimate of all individual incomes of non-eligible household members. Interest and dividend income is sometimes recorded at the individual level (when respondents keep their finances separate), but more often at the household level, and we therefore always treat it as a household level item (known as "capital income"). We should stress that household income does not include capital gains on financial or real assets.

Total household income is the sum of some incomes at the individual level and some at the household level. Lump-sum payments and financial support provided by parents, relatives or other people are excluded. The basic definition used here reflects money income before taxes on a yearly base (2003) and includes only regular payments. SHARE is the only European – wide data set that collects the gross amount for all income components in a consistent way.

The coarse income data require some adjustments before they can be used. First, imputations are needed for missing income items. Secondly, a correction must be made for differences in purchasing power across countries – to this end, we used OECD PPP exchange rates (that apply also within the Euro area) to turn nominal incomes into real incomes.

The issue of imputation is particularly relevant for income. In fact, household income is the sum of a very large number of items: for most of these, we have an exact record provided by the respondent, but for some others such amount is not available. However, when respondents refused or were not able to provide an exact answer to a question on a particular income or asset component, they were routinely asked unfolding brackets questions (was this income higher/lower than a certain threshold?). These answers place the income in a certain range, but an exact value needs to be imputed. Imputations were made using a conditional hot-deck procedure: missing income items were randomly replaced with income records from households from the same country, same income range (where available) or sex and age (where such range was not available).

Table 6A.3 presents average gross household income by country (after correcting for

differences in purchasing power) as the sum of its different components. For each item, it also reports the proportion that is imputed. So, for instance, we see that the mean of overall household income is €40,883 across all countries, with a minimum of €23,320 in Greece and a maximum of €56,856 in Switzerland. Over all SHARE countries, 19.2% of average income is the result of the imputations described above. Looking at the different columns, we see that the three largest income components are pension income (where imputations account for 15.2% of the average value), employment income (13.8% is imputed) and imputed rent. Imputed rent is defined in SHARE as a fixed proportion (4%) of the value of the home, net of mortgage interest payments; home value or mortgage interest imputations account for 25.9% of this item. Self-employment income, capital income, income from other household members and from other sources are much smaller items.

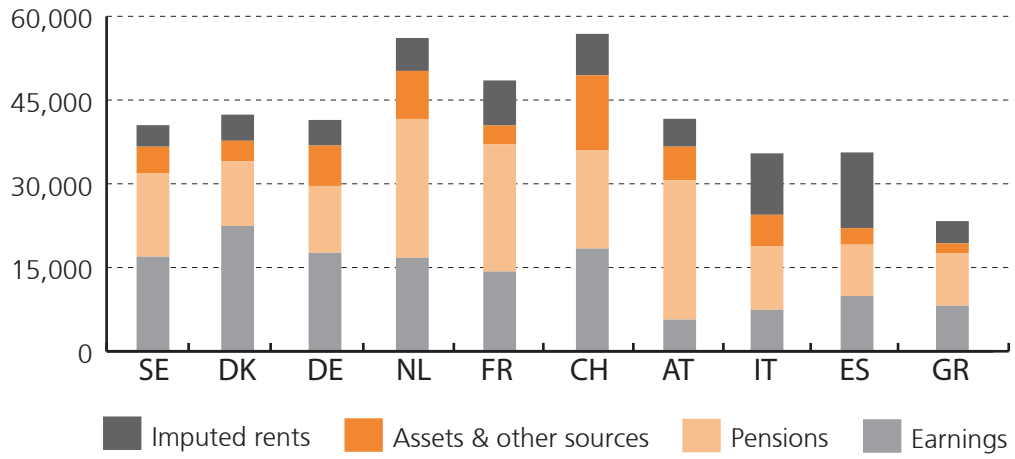

Figure 2 Income components across SHARE countries

In Figure 2 we show the importance of different income components. We look at average gross income, corrected for purchasing power differences, and inclusive of imputed rent from owner occupation. Imputed rent is a relatively small item in Nordic countries, as well as in Germany, Greece and Austria, but it is quite important in France, Italy and Spain. This is consistent with the notion that in countries where credit markets are not well developed, but house prices are high, many elderly individuals are house-rich but cash-poor. However, imputed rent is also a highly volatile measure, that is based on the market value of the main residence, and its average may be heavily influenced by the business cycle, as indeed capital income.

Two other striking features emerge when we look at Figure 2. First, earnings are the largest item in Denmark, Germany and Switzerland, whilst pensions play the biggest role in Austria and the Netherlands. Such differences may be due to differences in pension payments or in retirement ages across countries. Secondly, the residual item (that is mostly made of income from other members) is relatively small, except in Switzerland and the Netherlands.

Towards a Better Income Measure

We have already stressed that average gross household income is a relatively unsatisfactory measure of individuals' access to economic resources and shown how different median income is from average income. In this section, we document the role of corrections for differences in purchasing power and in household size. We also show how to account for owner occupation housing (through imputed rent) and for tax and social security contributions paid. These two income components are particularly important, as they vary greatly across countries, age and income groups.

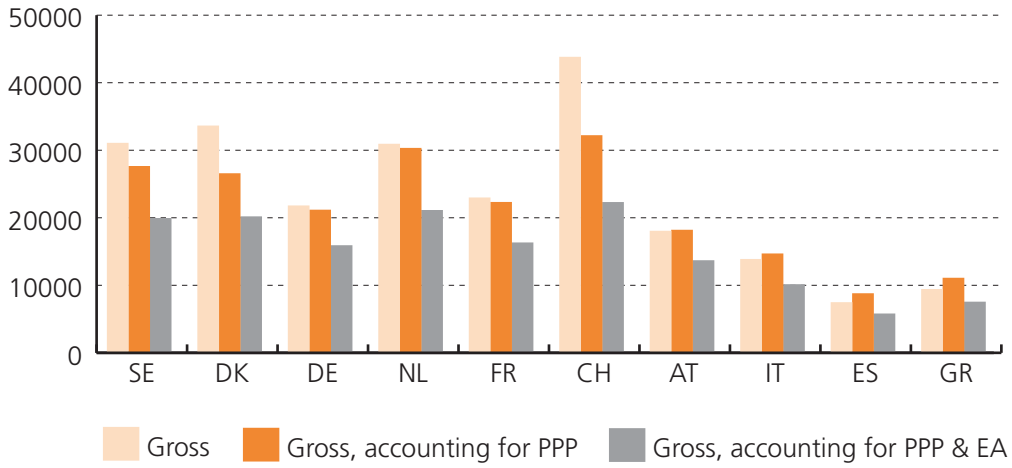

Figure 3 Different definitions of gross income

Figure 3 shows country medians of gross income in three different definitions: basic, corrected for PPP and corrected for both PPP and household size. The basic definition (left bar) does not include imputed rent – all non-Euro values are turned into euros at the current exchange rates. Allowing for differences in purchasing power (middle bar) has the effect of reducing median income in Switzerland and the Nordic countries, increasing it in Mediterranean countries (particularly Greece and Spain). Finally, differences in household size can be accounted for by dividing household income by the number of equivalent adults (EA, based on OECD scale – right bar). The resulting statistic comes close to the notion of per-capita income that is required for policy analysis, and shows that SHARE countries can be divided in three groups: Nordic countries, Switzerland and the Netherlands enjoy the highest gross income, followed by France and Germany. Austria, Italy, and particularly Greece and Spain have the lowest gross income as defined here.

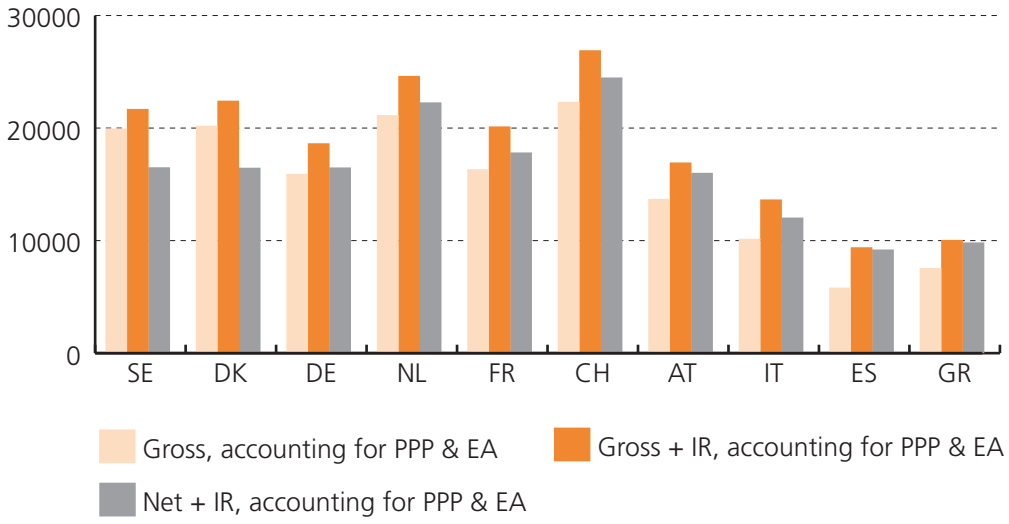

Figure 4 Different definitions of gross and net income

In Figure 4 we show median income by country in three definitions: gross income accounting for PPP and household size (EA – left bar), as already shown in Figure 3, the same plus imputed rent from owner-occupation (middle bar), and finally our estimate of median net income (that is, income after tax and social security contributions – right bar).

Comparing the first two bars for each country, we see that imputed rent (net of mortgage interest payments) does play a major role in explaining median gross income, very much in line with what we saw in Figure 2. Imputed rent is confirmed to be a substantial income component in Spain, Italy, France, Switzerland and to some extent Austria, Greece and the Netherlands. It is much less important in Nordic countries and Germany. It is worth stressing that SHARE is the only European – wide data set that allows consistent computation of imputed rent across countries, unlike the ECHP (European Community Household Panel) or its follow-up, EU – SILC (Statistics on Income and Living Conditions – for which records of imputed income are planned from 2007).

The right bar in Figure 4 shows median net income. This has been computed from household gross income, by subtracting income tax and employee's social security contributions (SSC) on the basis of OECD estimates of average income tax and SSC rates by household types (married versus single, four different levels of gross income. Linear interpolation of tax and SSC rates has been used for in-between incomes). SSC have been computed on the basis of earnings of eligible individuals, while all remaining household income (except imputed rent from owner-occupations) has been taxed at the corresponding average tax rate. Country-specific exemption levels have been taken into account. We assume imputed rent not to be subject to taxation. It is worth stressing that SHARE uses information external to the survey to provide a net income measure, unlike ECHP or EU – SILC, which estimate a net/gross income ratio on the basis of information collected on various income components (some gross and some net - see Eurostat 2002, for further details).

We see that median net income is much lower than gross income in Nordic countries, as expected. We also see important effects of taxation in all other countries, with the noticeable exceptions of Greece and Spain. In Austria and Italy the difference between gross and net income is also relatively minor.

Taking this final picture at face value, we should conclude that the SHARE data on the economically relevant notion of income tell us an interesting story: Southern European countries – particularly Greece and Spain – are indeed poorer than the others, but their median income falls short of the more affluent countries, like Germany, France and the Nordic countries, by much less than a straight comparison with average gross income would suggest. A second point worth stressing is that Swiss and Dutch 50+ households seem to have better access to economic resources than households from all other SHARE countries. However, most households in these two countries have to purchase private health insurance, and this is not reflected in our net income computations.

Conclusions

We have provided evidence on ways in which income varies across countries, by looking at its various sources and by assessing the relevance of corrections for differences in purchasing power, in household size and in taxation. We have also shown that:

- Some international differences appear less strong when owner-occupier housing and taxation are brought into the picture.
- Imputed rent should be included in income, as is the income of any other asset held by the household.
- All the necessary adjustments can be implemented on the SHARE data in a consistent manner, and this makes this data set a particularly valuable source of information for policy analysis.
- The breadth of topics covered in the SHARE questionnaire will make it possible to construct further, more comprehensive measures of access to economic resources, but in all of them income is likely to play an important role.

References

Eurostat. 2002. Imputation of Income in the ECHP. Doc. Pan 164/2002.

6.2 Poverty and Social Exclusion: A New Approach to an Old Issue

Antigone Lyberaki and Platon Tinios

Seeking Policy Added Value – An Overview

Poverty as a concept has historically played a key role in the shaping of social policy. 'Poverty' or 'social inclusion' have well-understood, if vague, connotations; the appeal and attraction of the terms are due to their significance to social engagement. We are interested in poverty because we are concerned about the poor. One of the central questions in our concerns about ageing is that the nature of poverty may change with the advent of ageing.

In bringing a new data source to bear on a well-worn subject on which a policy debate is ongoing, we should be careful to slot in the new insights in such a way that they take into account the current state of policy debate, illuminate concerns and open new avenues.

Poverty is most commonly defined in advanced countries as the situation in which an individual is unable to participate fully in what is socially accepted as the life of the community. If everything that matters could be obtained in markets, then the idea of 'participating fully' could be approximated as possessing a minimum level of income. However, crucial goods are provided in ways that bypass the market: Health, social and care services, urban transport are to some extent distributed through non-market criteria. Equally, access to social networks, the environment and other non-tangibles impinge on social welfare. Most crucially, the instances where the subjective 'feel' of poverty transcends the simple measure of income may be more frequent as age rises.

Nevertheless, there remains a sense in which financial considerations may be accorded primacy. A 'pragmatic approach' has evolved whereby financial poverty is conventionally linked to the shape of the lower end of the income distribution: thus a poverty line is drawn with reference to the income of the median individual (the person at the middle of the income distribution). Lines of 50% median and 60% median are in common use, while the latter has received most attention at the EU level, as the central 'risk of poverty line' .[1]

The 'risk of poverty' plays a crucial role in EU discussions. The two waves of National Action Plans for Inclusion serve as the cornerstones of the open method of co-ordination in the social field. Quantification through the use of indicators is the key innovation of this 'soft law' approach to social policy, designed to add a European impetus to an area under exclusive member state jurisdiction. The 2001 European Council at Laeken approved a list of indicators covering dimensions of the 'risk of poverty' (Eurostat 2004). It noted that much work still needed to be done, both to improve statistical infrastructure and to capture the multidimensional nature of poverty.

SHARE has the potential to enrich and to open new roads in this policy discussion. This short paper illustrates that, even at this early stage, analysis of SHARE data can illuminate discussions on the extent and characteristics of poverty and begin to 'flesh out' our picture of poverty and the poor.

Is Old Age Poverty More Serious than We Think?

The first step in the analysis is to see how SHARE compares with the 'stylised facts' of poverty. To do this we must note that the analysis of low income in a survey like SHARE comes at the end of the data processing phase. Accepting that some results may need to be reviewed later, we need to identify important findings.

The starting point for the analysis is the weighted data for the entire sample of the over 50s in SHARE. The income used was the version 0 estimates of 'net income' presented in the contribution on Household income. Given the centrality of the income of the median individual, infelicities in modelling taxation in the middle of the income distribution may well bias the poverty line upwards – more so in the Northern countries. Total household income, excluding imputed rent from owner occupation, was attributed in equal part to all household members. Poverty lines are computed on the basis of the median individual of the SHARE sample of over 50s.

Those familiar with the picture of social exclusion from ECHP (e.g. Eurostat 2004) may be surprised by the picture emerging in Figure 1. 'Poverty' rates are relatively high – in all but one country more than one in five people are below the poverty line. There is also a

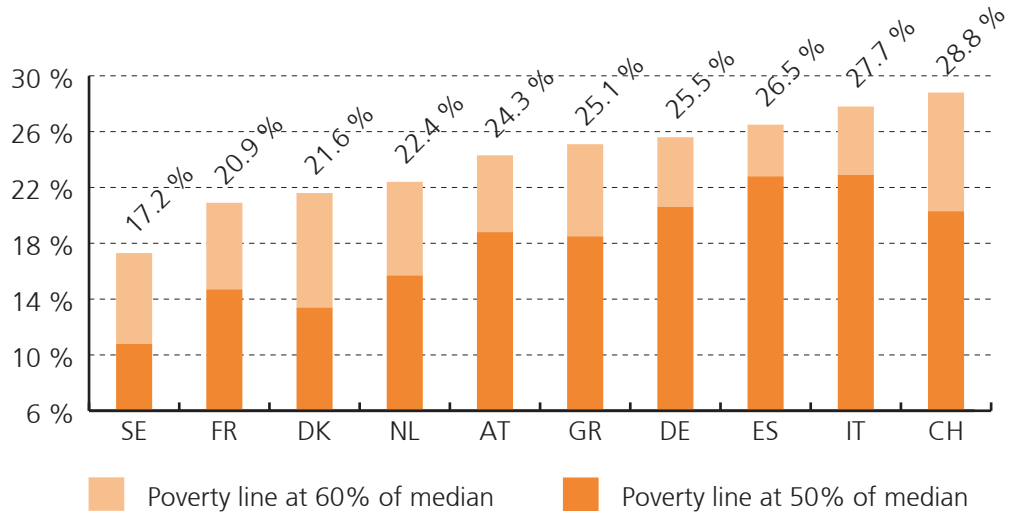

Figure 1 Poverty in the SHARE sample - % of the sample

smaller dispersion of poverty rates; the country rankings are possibly also unfamiliar. However, the concentration of people between the two alternative poverty lines in the Nordic countries is reproduced and found to apply also to Switzerland; the choice of the 50% rather than the 60% line thus leads to a change in country rankings.

To compare our findings with other information, we must allow for the fact that the SHARE sample consists of individuals over 50, rather than the entire population. The ability to participate fully in the life of society refers to the entire society: One would need to assume a total breakdown in generational communication to presume that older citizens never compare themselves with those under 50. Thus, the question arises as to how to define such a line, given that detailed information only exists for households containing individuals over 50 years of age.

We know (e.g. Joint Pension Report – CEC 2002) that the aged are subject to different poverty risks across the EU. In some countries (Greece and Denmark) old age is associated with greater poverty risk, while in others the reverse holds. A possible correction in order to approximate the population median (and hence poverty line) could be to use outside information to adjust the poverty lines upwards in countries where old age incomes are known to be lower and vice versa. In this way age-corrected poverty lines could be

computed. To identify those lines as closer to the 'true' population lines would need the additional assumption that the extraneous sources employed measure incomes both of the under 50s and the over 50s with the same degree of accuracy.

Given the European reference of the data, an obvious candidate for an extraneous source – for the EU member states - would be the ECHP. The SHARE (over 50) poverty line is corrected according to how different the median income of the over 50s is compared to the overall population in the last available ECHP wave, that of 2001 (Eurostat 2004).

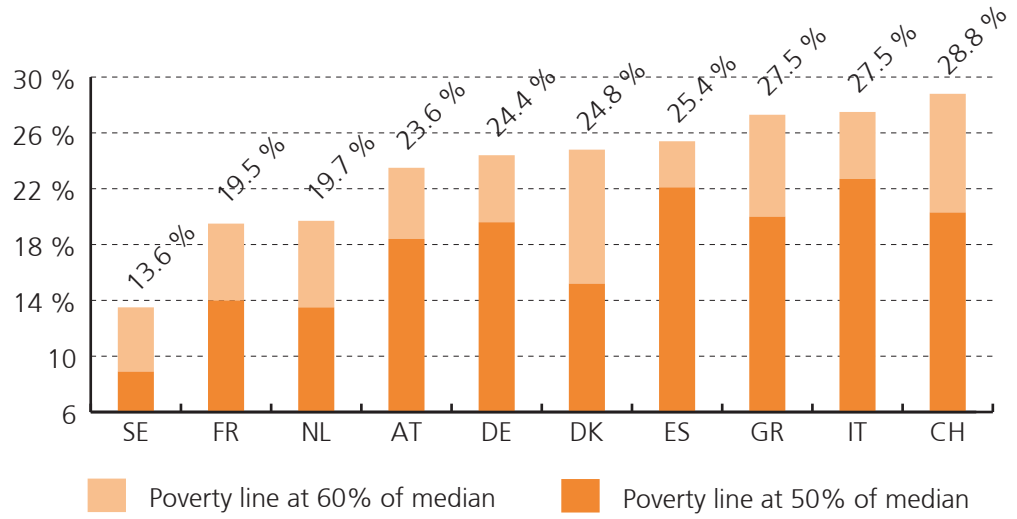

Figure 2 Poverty in the SHARE sample – 2001 ECHP age poverty line correction applied

The correction factor appears as column 2 in Table 1. It takes its maximum value in Greece (where SHARE poverty lines are increased by 5.4% and its smallest in Sweden and Holland were they are reduced by 7.7%) – the range being 11.1%. This correction, as would have been expected, introduces more variability and leads to some familiar patterns emerging. A definite North-South gradient is complemented with the presence of Denmark. Sweden is at the one extreme (followed by France) and Spain, Greece and Italy at the other.

To examine how far SHARE findings approximate those of the ECHP one should examine similar populations. This can be done for subsets of the population for whom extraneous estimates can be obtained, viz. for those over 65, as well as the group 50-64. Of these the former may be thought to have more or less severed links with the world of work, whereas the latter is still active. Table 1 compares SHARE with ECHP.

In this more restricted comparison, poverty rates of the elderly, even after correction, remain larger than in the ECHP. In Greece, France, Spain and Sweden differences are small. However, in other countries (especially of the North), SHARE appears to lead to poverty more than twice that of the ECHP, though this is often due to very low values for the ECHP rather than high estimates in SHARE. For the group of working age (50-64) differences are larger. Though more investigation of this feature is necessary, it is probable that divergences may be related to the complexity of income composition. In countries where

pensions and labour income account for larger portions of income, differences are smaller. A further factor possibly explaining differences is the net income concept employed; if median net incomes are overestimated this would lead to higher computed poverty lines. Finally, serious consideration should be given to the fact that, though strict comparability across countries of the questions posed on income was maintained in SHARE, the same did not hold for the ECHP; ECHP participants phrased the question used in radically different ways. For instance some countries estimated net income, others gross income, while the extent of imputations used also varied by country.

Table 1 Poverty Rates by Large Age Group: Comparing SHARE with the ECHP (60% median income poverty line, % of poor)

	MEMO Correction factor to poverty line (1)	Over 65 pover		50-64 pover	
		Age-corrected poverty line	ECHP Data 2001 income	Age-corrected poverty line	ECHP Data 2001 income
SE	7.7%	16.7	16	10.6	5
DK	-5.1%	39.0	24	14.5	5
DE	3.6%	23.7	12	25.0	10
NL	7.7%	18.5	4	20.6	7
CH	- (2)	(29.0)	-	(28.7)	-
FR	2.8%	19.6	19	19.6	13
AT	1.8%	19.4	24	27.2	9
IT	2.2%	26.6	17	28.4	16
ES	5.4%	20.6	22	30.8	17
GR	-5.4%	31.5	33	23.8	21

Notes: SHARE and ECHP 2001 data. 1: See text for definition – ECHP 2001 data. 2: No ECHP data available for Switzerland.

It is worth dwelling a little in the case of Denmark. As is evident from Diagrams 1 and 2, the choice of poverty line makes a large difference: there is a concentration of incomes between the 50% median and the 60% median line, probably caused by features of the Danish social protection system (e.g. the value of the age pension). The finding of large poverty rates, especially among the over 65s is corroborated by the ECHP; in the 1998 wave the 65+ poverty rate reached 31 per cent. As CEC 2002 makes clear, narrow income-based definitions of poverty ignore features of social protection systems such as the provision of benefits in kind; these may increase well-being but are not counted in the income concept used in the ECHP and other sample surveys. Given that social protection after retirement often involves the substitution of in kind benefits for cash income, such is a potentially serious shortcoming in the study of social problems associated with ageing. A full analysis using SHARE data may allow investigation of this hypothesis and the exploration of income concepts that make a fuller allowance for social protection systems.

The overall message of SHARE is that poverty may be a more serious issue than in the ECHP. In some cases the SHARE results appear fully compatible with the ECHP, in others considerable divergences arise, whose sources warrant investigation before final conclusions are drawn. Understanding the cause of difference could leave to symmetric adjustments: it may imply the need for greater refinements in SHARE, but it may also conclude that SHARE was more successful in recording incomes that are particularly relevant for the older population. SHARE may therefore be able to capture income inequality in old age to a greater extent than ECHP. Whatever the case, apart from noting this intriguing divergence, it is too early to settle on firm conclusions on the mechanisms driving it.

Turning to the question of how poverty changes between the group still of working age (50-65) and those over 65, the countries fall in three groups, regardless of whether an age correction is applied or not: In one (GR, DK and SE) the group over 65 appear to be at substantially greater poverty risk than the younger group. In the larger, second group, increased age is associated with negligible differences. Finally, in two countries (AT and ES) poverty in SHARE (though not in the ECHP) is significantly lower in the older group.

These differences are due to a complex interplay of individual retirement, work and savings decisions, household composition effects and operation of social protection systems. Equally importantly, cohort effects are conflated with age effects in such a way that we cannot express any final opinion on the two key policy questions underlying the analysis: Do social protection system protect the old adequately? And will the coming generation of old be better prepared for old age than the current generation?

Figure 3 Poverty Differences by age groups: Differences 50-64 and 65

Living in Your Own Home and Poverty

Living in your own home protects you from one of the most socially damaging effects of income insecurity – the fear of being homeless. As a result an owner occupier is in significantly better position than a renter with the same income. Income measures which ignore this are likely to portray the condition of owner occupiers as appreciably worse. In cases (common in the South of Europe) where significant numbers of the poor live in their own house, not allowing for this imputed rent is likely to significantly bias computed poverty rates (see, for instance CEC 2004). This effect is likely to be more marked in groups such as the old who are less likely both to be tenants, and to have mortgages outstanding.

A full analysis of the effect of housing on poverty should also try to model the effect of social housing and other kinds of subsidised accommodation. However, at this stage of the analysis it is as well to start with the effect of adding imputed rent to the data of the distribution of Figure 1. As a first approximation imputed rent was estimated using the short-cut of assuming it is close to 4% of house values as reported by the respondent. It also reports the absolute effects on the data (a negative figure signals a fall in poverty rates by the specified amount).

Table 2 SHARE Poverty Rates – The Effect of Imputed Rent (total sample and by large age group)

	Poverty rates (%) if imputed rent is taken into account			Difference attributed to inclusion of imputed rent (percentage points)		
	Total SHARE population	Persons 50-65	Persons 65+	Total SHARE population	Persons 50-65	Persons 65+
SE	17.2%	12.8%	22.4%	0.2	-0.3	0.8
DK	21.6%	13.7%	34.7%	0.9	0.9	0.9
DE	25.5%	24.5%	25.7%	-0.5	-1.5	0.6
NL	22.4%	22.3%	24.4%	0.8	-0.1	1.9
FR	20.9%	20.8%	21.0%	-0.1	-0.6	0.4
CH	28.8%	29.1%	26.9%	-0.7	0.5	-2.1
AT	24.3%	26.2%	21.4%	-0.3	-1.8	1.4
IT	27.7%	26.8%	24.2%	-2.1	-1.8	-2.5
ES	26.5%	29.7%	21.4%	-1.2	-2.5	0.0
GR	25.1%	19.3%	25.7%	-2.7	-3.4	-1.9

Note: See text for definition of housing income

Adding imputed rent increases incomes of the population. In the actual case, where more than 50% of the population are owner-occupiers, it also increases the population median and hence the poverty line[2]. Thus, it is possible for poverty to increase, even if all the poor are owner-occupiers, so long as the middle classes choose to live in proportionately better houses (so that poverty lines increases by more than the poor's incomes). Indeed, this seems to be happening as the proportionate increase in medians is in many countries sizeable.

The data of Table 2, indeed show just such an intricate pattern. There is a definite North-South gradient with the effect of owner occupation significantly reducing poverty rates in the South, by almost three points in Greece. The relative country rankings alter considerably. It appears that the effect is differentiated by age: Adding the effect of owner occupation reduces poverty in the 50-65 age group in *all* countries (except in DK and CH). In the

older age group, this observation is *reversed*: Only CH, GR, IT show a fall in poverty, all other countries increasing – by a maximum of 1.4 percentage points (AT). Whatever the precise interpretation, the investigation of housing effects on income is a fruitful area of investigation, precisely because it impinges on poverty differences between age groups.

Living with One's Children as Social Protection

Household composition and cohabitation with children is probably the oldest social protection mechanism for old age. Figure 4 looks at the cases where the respondent lives in the same household, or, quite importantly for social relations, in the same building as offspring. The analysis is confined to the over-65s, as cohabitation with a child in younger age group may probably mean dependency of the child on the parent and not vice versa.

Figure 4 confirms the use of cohabitation as a social protection mechanism in the South of Europe: the propensity to live with one's children is associated with poverty status. What is less usually appreciated is that this mechanism extends to living in the same building in separate households; the latter is very important in Germany and Austria. In three countries more than half of the over 65 population live in the same building, while in five it is more than 40%. The full story of poverty cannot be told if cohabitation is ignored.

Contributions 4.2 and 4.3 on time-related and financial transfers paint a picture of a web of transfers between households. The density of relations increases the probability to receive (possibly later on), rather than a simple mechanism providing aid in cases of low income. Nevertheless, in at least one case (Greece), transfers as poverty alleviation are visible: 20% of the poor aged receive financial transfers, while poverty status affects the probability of receiving appreciably. A multivariate analysis employing SHARE data may investigate such informal support networks.

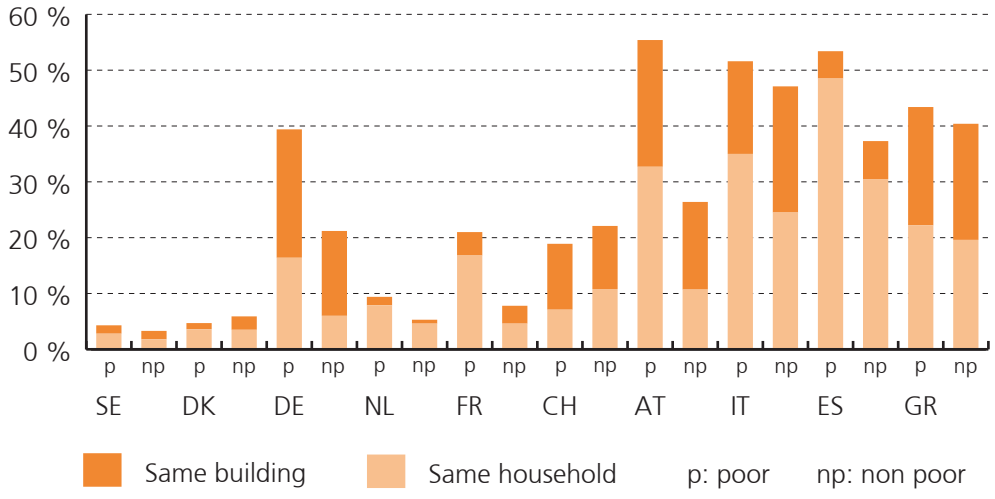

Figure 4 Household composition and poverty for people over 65: Proximity to nearest living child

Conclusions and Taking the Analysis Forward

The analysis of the previous section gave an impression of the kind of insights that SHARE can bring:

- An intriguing possibility emerges that financial poverty may be more serious, than we

thought. The investigation of non-financial dimensions thus acquires greater significance.

- Though in the majority of countries there is no significant difference in financial poverty in the 65+ group, in three cases there was apparent deterioration (and in two improvement). This may be linked to the substitution of services and goods in kind for monetary income after retirement.

- Imputed rent has a considerable influence in limiting poverty, especially in the South.

- Living close to one's children, in the same household or the same building, remains a very important mechanism of social solidarity with an important poverty alleviation role, not only in the South but also in Germany.

Realising the full potential of SHARE implies further work in three directions:

First, data calibration. Once points of contact and divergence between SHARE and the sources of the "stylised facts" are clarified, ongoing policy processes such as social inclusion and pension strategy can absorb new insights without compromising existing understanding.

Second, SHARE can be used to derive comparable indicators in many of the 'grey areas' of the open method of co-ordination process, fleshing out the multidimensionality of poverty. Access to health services, the problem of take-up of social benefits and the nature of informal social networks are all issues that have received much comment in policy discussion but are very imperfectly measured.

The third area is presupposes that SHARE follows the example of European sources such as SILC in acquiring a time dimension. Poverty persistence and dynamic mechanisms generating and perpetuating poverty, but also the relationship between health and poverty are the kind of issues that will benefit most from panel data.

The introduction, posed the central question: will poverty in the future be similar to that today? SHARE gives us a snapshot and can allow us to sketch possible alternative scenarios. Deciding between those scenarios must await the addition of a time dimension.

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1 The word 'risk' concedes that the demarcation line is 'fuzzy' – that there is a range of incomes where the risk of poverty is present even if some in this range might not consider themselves as 'poor'.

2 Allowing for imputed rents can be expected to produce greater reduction in poverty for the whole population: if the young (who are excluded in SHARE) are more likely to be renters, the median income will increase by less. This would lead to a greater poverty dampening effect among the 50+ population.

6.3 Wealth and Portfolio Composition

Dimitrios Christelis, Tullio Jappelli, and Mario Padula

Introduction

Financial wealth, real estate, and other assets are key indicator of the well-being and quality of life of the elderly. This contribution provides basic facts on wealth amounts, wealth composition, and financial asset ownership of the elderly in Europe. Because of the demographic trends, the saving behaviour of the elderly and their portfolio holdings are central to the policy debate. While income and consumption are important determinants of current well-being, assets are a key indicator of future, sustainable consumption. SHARE allows the study of the composition of wealth around and after retirement, and the distribution of wealth in real and financial assets, and the extent to which the wealth of the elderly is annuitised through pensions, social security, and health insurance.

There are a number of further reasons for considering wealth as a key indicator of well-being in old age. Most people save for retirement, and reach retirement age with considerable amount of assets. These assets provide income for the elderly in the form of rents from real estate, interests on government and other bonds, dividends from stocks. The same assets can be spent during the retirement period and converted into a flow of consumption. Conversely, if people do not save enough for retirement, they will not have enough resources to finance later consumption, a problem that has come to be known as adequacy of saving at retirement. Furthermore, wealth can provide a buffer to protect the elderly against health and other risks, which is very important at times when the length of life is increasing together with the cost of health care.

A related issue is the appropriate asset mix during retirement between low-risk saving vehicles, insurance policies, and risky financial assets. People do not rely solely on financial assets in order to provide for their old age but also on real assets, with housing being the most important among them. With respect to portfolio choice, the elderly face higher mortality and morbidity risks compared to the young, which should make the portfolio of the elderly different form that of the rest of the population. How large is this difference and how it varies across Europe depends on the public coverage of health care and the working and generosity of public pension systems. On these and related issues, SHARE provides fresh evidence in comparative fashion.

Data

Respondents in SHARE are all household members aged 50 and over, plus their spouses, regardless of age. Financial and housing respondents are those household members most responsible for financial and housing matters, respectively. This is done to save time and avoid duplications. For instance, in a couple the financial questions are preferably answered by one person only, unless finances are not jointly managed, in which case each household member is treated as a separate financial unit.

The questionnaire covers a wide range of financial and real assets, from which one can calculate wealth and its components, and is designed to make the asset definition comparable across countries. Financial assets include seven broad categories: bank and other transaction accounts, government and corporate bonds, stocks, mutual funds, individual retirement accounts, contractual savings for housing, and life insurance policies. The real assets are primary and other residences, own business and vehicles.

For each financial asset category respondents are asked whether they hold any assets in

this category. If so, they are asked to give a value for their total holdings in the category. Respondents who refuse to respond or answer "don't know" at this stage are then routed into unfolding brackets—a short series of follow-up questions of the form "Is it more or less than…euro?" For instance, survey participants in Germany who do not report their bank account balance are asked if the amount is larger or smaller than €3,600. If it is larger, they are asked if it is larger than €7,100.

The asset module in SHARE has also questions on household liabilities, such as mortgages and other debts on cars, credit cards or towards banks, building societies and other financial institutions. For both mortgages and housing, if the point value is not available, the respondents are routed into the unfolding brackets.

Net Worth and Gross Financial Assets

The detailed asset and liabilities questions contained in SHARE can be used to construct several indicators of the well being of the elderly. A first indicator refers to resources that are liquid, or can be sold in the market. Thus, we define total gross financial assets, as the sum of the seven categories of financial assets listed above. A second indicator is total real assets, defined as the sum of the four real assets categories. In case of need or financial distress, real assets can be sold and their value converted in financial assets, but this very often requires time and effort. A third indicator is total liabilities, defined as the sum of all household debts; this is an indicator of financial obligations of the household, and in some cases of financial distress. Finally, total net worth, defined as the sum of all financial and real assets, minus liabilities, is a summary indicator of all resources that are available to household members. These can be used to finance normal retirement consumption, to buffer health and other risks the elderly face, or can be left as a bequest to future generations.

This contribution focuses primarily on total net worth and financial wealth as key indicators of the well being of the elderly in Europe. To ensure cross-country comparability, the amounts are corrected for differences in the purchasing power of money across countries. Some definitions and imputations are provided in Chapter 7. In order to avoid the effect on cross-country comparison of households with influential values for wealth, we report medians rather than means of the relevant indicators.

Figure 1 plots median net worth across European countries. Countries can be divided in four groups. In a first group, the elderly have relatively high wealth: Switzerland, Spain, and Italy (above €140,000). The second group, with wealth between €120,000 and €140,000, includes France and the Netherlands. The third group, with wealth between €100,000 and €120,000 includes Austria, Denmark and Greece. Finally, in Germany and Sweden median net worth is below €100,000. It has to be noted however that the purchasing power adjustment has a significant negative effect on the net worth of Swiss, Danish and Swedish households because of the high price levels that prevail in their respective countries. Without this adjustment the median net worth in these countries would be substantially higher. The opposite holds for countries like Greece and Spain, which have lower price levels than the average of the SHARE countries.

Figure 1 *Median net worth (thousands of PPP euro)*

Note: The map displays median total wealth (real plus financial) in Europe. Total wealth is the sum of real and gross financial wealth minus liabilities. Amounts are expressed in thousands of euro and adjusted for the difference in the price levels across countries [purchasing power price (PPP) adjustment].

Figure 2 Median gross financial assets (thousands of PPP euro)

Note: The map displays median gross financial assets in Europe. Gross financial assets are the sum of bank and other transaction accounts, government and corporate bonds, stocks, mutual funds, individual retirement accounts, contractual savings for housing, and life insurance policies. Amounts are expressed in thousands of euro and adjusted for the difference in the price levels across countries [purchasing power price (PPP) adjustment].

The cross-country comparison of total net worth hides significant differences in the composition of net worth. Figure 2 documents that total financial wealth is generally higher in the North than in the South of Europe. According to this indicator, the first group of countries (financial wealth above €30,000) includes Denmark and Switzerland. Next come Sweden (between €20,000 and €30,000), and Germany and Netherlands (between €10,000 and €20,000). The group of countries with lower level of median financial wealth per household (less than €10,000) includes Austria, Italy, Greece, France and Spain. These low amounts for the Mediterranean countries and Austria reflect in part the very low ownership rate in those countries of any financial assets other than bank accounts (e.g., in Greece) and in part the relative high weight of residential and other real estate wealth (e.g., in Italy and Spain).

A comparison between the two pictures makes it clear that the cross-country distribution of gross financial assets does not parallel that of net worth. While the elderly have relatively little financial wealth in Italy and Spain, it is precisely in these countries that we see the highest levels of total net worth. The reason is that real estate, and primary residence in particular, makes for a large chunk of wealth in Italy, Spain and other countries. This raises an issue of adequacy of saving if pension income is limited and reverse mortgage markets are underdeveloped, since financial assets can be a very important vehicle for countering the financial difficulties of old age.

On the whole, whether this pattern of net worth and financial wealth reflects different attitudes toward saving between Southern and Northern Europe, different intensity of bequest motives, different features of the mortgage markets, or different characteristics and transaction costs in housing and financial markets is an interesting issue to be investigated. In particular, the balance between private and public pensions and the availability of public health care is likely to affect the desired amount of wealth of the elderly, a possibility that the multi-domain and cross-country nature of SHARE will help to explore.

The Composition of Financial Wealth

Figure 3 plots the proportion of households owning bonds, stocks, mutual funds and life-insurance policies. For bonds, stocks and mutual funds, the graph shows that ownership increases from South to North, with countries like The Netherlands, Germany and Austria lying often in the middle. The proportion of households holding bonds ranges from 0.1 percent in Spain to 24 percent in Denmark; the proportion holding stocks ranges from 3.0 of Spanish households to 38 percent of Swedish households. The ranking is similar for mutual funds, while for life insurance policies the dispersion across European countries is much lower. Except for Italy, Spain and Greece, the proportion of households with life insurance exceeds 10 percent in all countries.

Other financial assets are less widely owned across Europe. Individual retirement accounts are common only in Sweden, Denmark and France, while contractual savings for housing are extremely popular in Austria, to a lesser extent in Germany, France and the Netherlands and practically non-existent everywhere else (see Banks and Smith 2001 for comparative evidence for the UK).

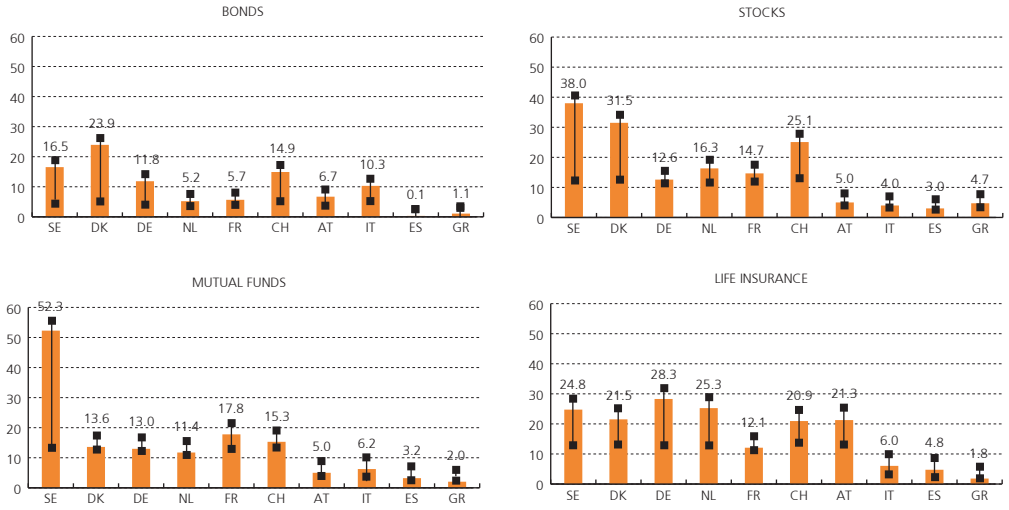

Figure 3 *Asset ownership*

Note: The graph displays the proportion of households owning bonds, stocks, mutual funds and life insurance policies. The numbers are expressed in percentage points. 95% confidence intervals are shown as black bands.

The mix between risky (stocks) and relatively safe assets (transaction accounts and bonds) signals the overall riskiness of financial portfolios. This can be measured by the ratio of total risky assets—defined as direct holding of stocks and indirect holdings through mutual funds and investment accounts—and total financial assets. Figure 4 shows that in Sweden (more than 40% of financial wealth invested in risky assets) and Switzerland (between 20 and 30%) the elderly are more exposed to financial risk. In all other countries risk exposure is more limited: between 10 and 20% of total financial assets in Denmark, Germany, Netherlands, France, Austria, Italy and Greece, and less than 10% in Spain. These countries are characterised by low direct and indirect stockholding, which is often explained as a result of transaction and information costs, an issue that SHARE data are particularly well suited to investigate.

In most countries the share of risky assets around retirement age is higher than in old age. This general pattern agrees with intuition. The elderly face increasing health risks, and should try to balance these risks holding a safer portfolio. Moreover, the investor's horizon for an old person is shorter. For an old person it is much more difficult to recover from negative stock market returns, a prominent reason why they should tilt their financial towards safer assets. This is discussed extensively in Hurd (2001), who provides evidence on the portfolio of the elderly in the US.

Figure 4 Share of gross financial assets invested in risky assets

Note: The graph displays the ratio of total risky assets to total gross financial assets. Risky assets include direct and indirect stockholding (equity held in mutual funds and individual retirement accounts). Ratios are expressed in percentages.

SHARE also provides considerable evidence that stock market participation is affected by financial sophistication and literacy of individual investors. The proportion of individuals who spend some time in managing their financial portfolio at least once a week, as an indicator of how much time and effort people spend in understanding financial markets, is relatively high in the Netherlands (9.5 percent), Sweden (9.4 percent) and Germany (8.6 percent). Conversely, the proportion is much lower in Italy (4.1 percent), France (5.3 percent) and Spain (5.8 percent). For most countries the pattern of time spent in managing portfolios matches with that of asset participation in Figure 3. For instance, in the Neth-

erlands and Sweden the elderly exhibit high rates of financial market participation and monitor their portfolios more frequently. Conversely, in Italy and Spain the relatively low degree of monitoring goes hand-in-hand with lower financial market participation. This association may happen because monitoring financial wealth improves investors' knowledge and sophistication and portfolio diversification. An equally valid explanation is that more complex portfolios require more time to be managed.

Conclusions

SHARE data indicate that total net worth varies much less than total financial wealth across Europe. In addition, we find that a high percentage of households holds virtually no financial assets. Asset ownership exhibits considerable variability across countries, as bonds, stocks and mutual funds are much more popular in Nordic than in Mediterranean countries. Exposure to financial risk is higher in Sweden and Switzerland, and comparatively low in Southern Europe.

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6.4 Consumption

Martin Browning and Edith Madsen

Introduction

An important question in relation to ageing in Europe is whether people have sufficient economic resources to maintain their material living standards as they grow older and retire from the labour market. To answer the question we need a measure of the material well-being of individuals and consumption is usually considered as being the best direct measure of this. The theory behind this is that of a traditional life-cycle model according to which individuals throughout their lives allocate income to consumption expenditures and savings in order to keep their material standard of living at a constant level. For individuals whose main source of income is from labour this means that income decreases around retirement whereas consumption remains more or less at the same level. So these individuals finance consumption in retirement by savings made during their working life such that their living standard remains unchanged. This explains why consumption as opposed to income is thought as being the adequate measure of the material well-being of individuals, in particular older individuals.

In principle it should be possible to obtain information on individual household consumption from national expenditure surveys. However, these are not easily accessible for persons outside the country and in many countries they are based on relatively small samples making it difficult to obtain useful information about the consumption expenditures of 50+ households. Therefore the consumption information in SHARE has the potential of becoming an important data source in the analysis of consumption of older households in Europe since it provides a measure of consumption that is immediately available and comparable across countries making it possible to point out differences and similarities. Furthermore, SHARE also contains various measures of both physical and mental health which are usually not available in expenditure surveys. Hence, SHARE provides a unique opportunity to investigate the relationship between health outcomes and material well-being as measured by consumption.

The information on consumption from SHARE will be even more interesting and useful when longitudinal information following the same individuals over time hopefully will be available in the future. At this point, it is only possible to provide cross-sectional evidence on consumption among older people in the countries participating in SHARE and it is important to keep in mind that the consumption pattern of older individuals today does not necessarily provide a good description of that of older individuals in the future. In order to analyse the effect of ageing and retirement for specific individuals in detail we need longitudinal information following the same individuals over time, especially before and after retirement.

Measuring Consumption

In SHARE the respondents are asked about their household's expenditure on the following three different sub-groups of consumption: Food consumed at home, food consumed outside the home, and telephoning. In addition they are asked about the total expenditure on non-durable goods and services. The respondents are asked to include groceries, utilities, transportation, clothing, entertainment, out-of-pocket medical expenses and any other expenses the household may have and to exclude housing payments (rent or mortgage), housing maintenance, and the purchase of large items such as cars, televi-

sions, jewellery and furniture. While there seem to be a general agreement that recall questions provide good measures of food consumption there is some dispute about how useful recall questions about total non-durable expenditures are. For the respondents it is simply a difficult question to answer and maybe even to understand. A preliminary analysis of the total non-durable expenditures from SHARE shows that the respondents under-report this expenditure by large amounts. This is consistent with the findings in Browning, Crossley, and Weber (2003) on Italian and Canadian data. However their analysis shows that the under-reporting is very systematic which in turn leaves hope for being able to correct for the bias. Given the problems with total non-durable expenditures, the following will only provide an analysis of food consumption based on expenditures on food at home. Tables 6A.4-6A.7 in the appendix to this chapter shows the data presented in the following.

Food Consumption

In rich countries the consumption of food corresponds to approximately 20-25% of the total consumption expenditures of households and hence food is an important component when using total consumption as a measure of living standards. In addition to that food is an essential good which all people need in certain quantities in order to survive and therefore it is of interest in itself. As mentioned above, SHARE is the first study that provides immediately comparable information about food consumption in a number of European countries.

In the following we consider food at home consumption defined as household expenditure on food and non-alcoholic beverages consumed at home. Before transforming the expenditure measure into a consumption measure we consider food at home expenditures. To make these expenditures comparable across households of different sizes we consider the food expenditure per capita. One argument in favour of using this scale is that food is almost entirely a private good that can not be shared between members of the household. On the other hand, it might be cheaper and it might only be possible to buy food in larger quantities and hence there is scope for economies of scale. Also the per capita measure is not appropriate for households with younger children since they need less in terms of food consumption. However since we consider 50+ households, the fraction of households with young children is relatively small. Altogether it is not clear which equivalence scale should be used for the older households in SHARE and therefore we use the per capita measure when comparing all types of households.

Figure 1 shows the distribution of monthly per capita expenditure on food at home across countries. The orange bars span the interquartile range and their ends represent the 25th and 75th percentile points of the distribution within each country. The horizontal lines within these bars represent the median which divide the population within each country into two halves of equal size with 50% of the population having food expenditures above this line and 50% having food expenditures below this line. Finally, the ends of the thin lines represent the upper and lower adjacent values of the distribution within each country giving a picture of the range of values.

Figure 1 shows that the distribution of per capita expenditures on food look remarkably similar for many of the countries. Denmark, Germany, Netherlands, France, Austria and Italy all have median levels around 200 euro per capita, Sweden, Spain and Greece have lower median levels whereas Switzerland has a higher median level. In addition, Figure 1 shows that within each country there is large variation in food expenditures.

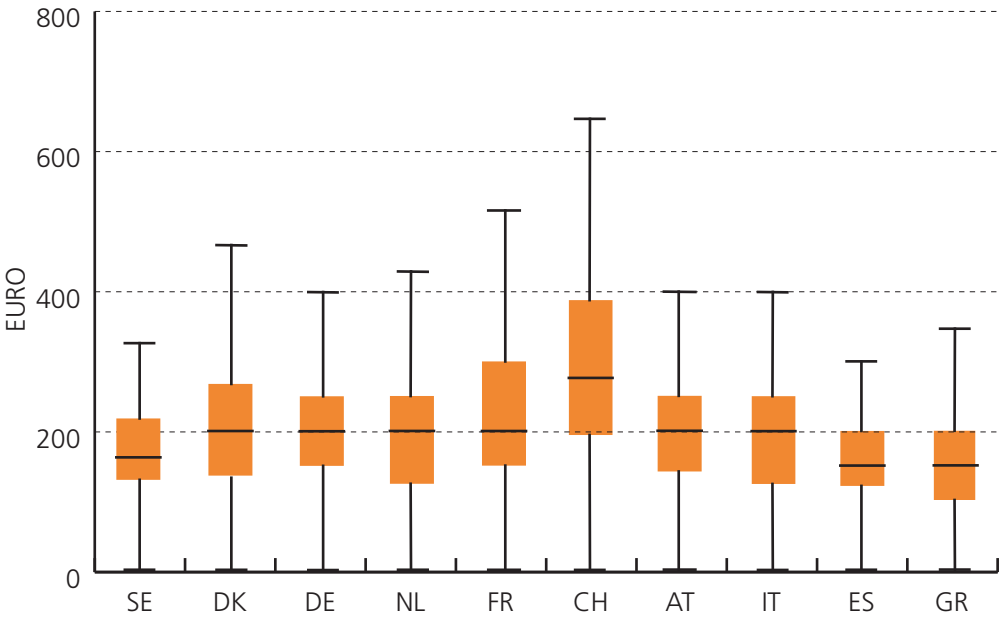

Figure 1 The distribution of the (weighted) per capita monthly expenditure on food at home across countries

In order to define food consumption and make it comparable across countries it is divided by the EUROSTAT price level index for food and non-alcoholic beverages based on a survey carried out in the spring of 2003, see EUROSTAT (2004). The price levels are calculated as the ratio between purchasing power parities (PPP) and exchange rates for each country in relation to the average in the countries in SHARE. The PPP is calculated as the nominal price within each country of a representative basket of goods covering approximately 450 products. The price level index is shown in Table 1 below. The table shows that within this group of countries Switzerland has the highest price of food, 40% higher than the average, and Spain has the lowest, 25% lower than the average. Some of the differences can be explained by differences in taxes and value added taxes (VAT) on food across countries. As an example a VAT rate on food of 25% in Denmark is the highest among these countries whereas that of 2.4% in Switzerland is the lowest. This partly explains the relative high prices in Denmark whereas it can not explain the high prices in Switzerland.

Table 1 Price Level Index for Food and Non-Alcoholic Beverages (SHARE=100)

Country	CH	DK	SE	IT	FR	AT	DE	NL	GR	ES
Food price index	140	127	112	103	102	98	96	94	82	75

Figure 2 shows the distribution of food consumption defined as the expenditure on food at home divided by the price level index.

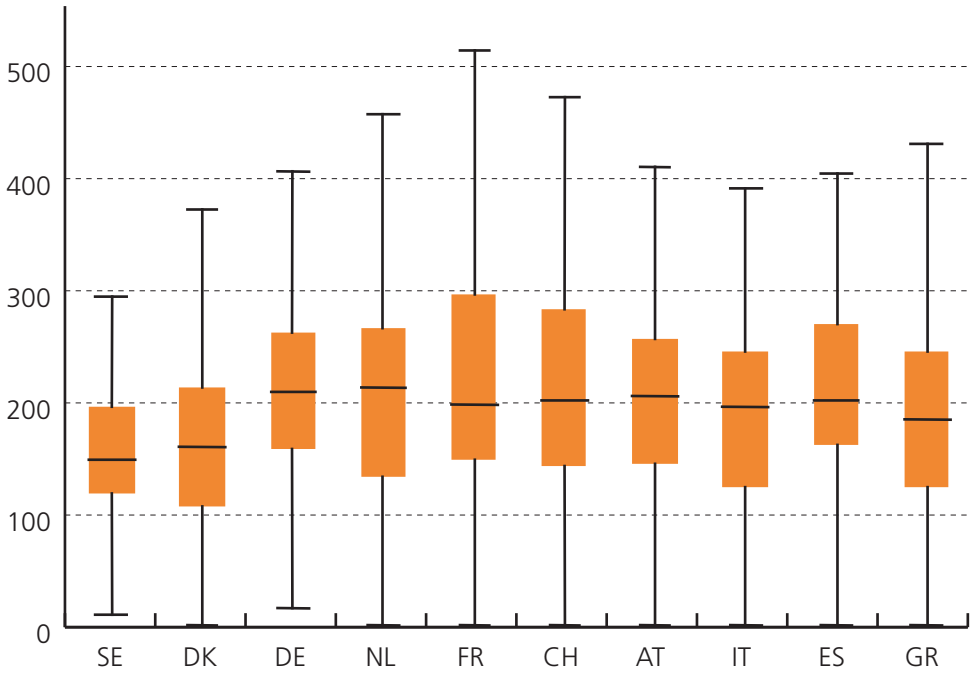

Figure 2 The distribution of (weighted) per capita monthly food at home consumption across countries

There are a number of striking features of this figure. First of all, Sweden and Denmark have lower levels of per capita food consumption compared to all other countries. The median level is 30% lower in Sweden and 24% lower in Denmark compared to the overall median level for all countries. The differences and similarities between countries illustrated in Figure 2 could be the result of different demographic composition of the households across countries and the fact that the per capita measure might blur the comparisons across countries. For instance it could be the case there are relative many single women in Sweden and Denmark compared to other countries. If single women have lower food consumption compared to other household types this could explain the findings in Figure 2. The next figure shows that this is not the case.

Figure 3 shows the food at home consumption for different household types which are single women, single men and couples all without children. The figure shows the same pattern as in Figure 2 with respect to the differences between the countries, namely that food consumption is lower in Sweden and Denmark compared to the other countries, and the finding is even more striking when looking at these specific household types. Moreover it shows that the median level of food consumption tends to be higher for single men than for single women although the difference is not that big for some countries. The level food consumption for couples is clearly higher than that of singles even though not twice as high which suggests that there is some economies of scale.

So the differences and similarities across countries seem to be genuine. When thinking about explanations for the differences there are at least two obvious candidates. One is

differences in relative food prices across countries and the other is differences in income across countries. The latter explanation is not likely to shed light on the finding as the level of net income is higher in the northern countries compared to the southern countries, see Section 6.1 on household income in this book. This finding in itself suggests that food consumption should be higher in the northern countries compared to the southern countries, which is not what we observe. We are then left with cross-country differences in the price of food relative to the price of other goods as an explanation for the findings in Figures 2 and 3. Since measures of relative food prices are not immediately available, a detailed investigation of this issue can not be carried out for the time being but is left for future research. However, an indication that cross-country differences in the price of food relative to other goods might explain some of the findings is that all countries except Denmark have a reduced VAT rate on all or some food items making it likely that the relative price of food is higher in Denmark compared to other countries and therefore people in Denmark choose to consume less food.

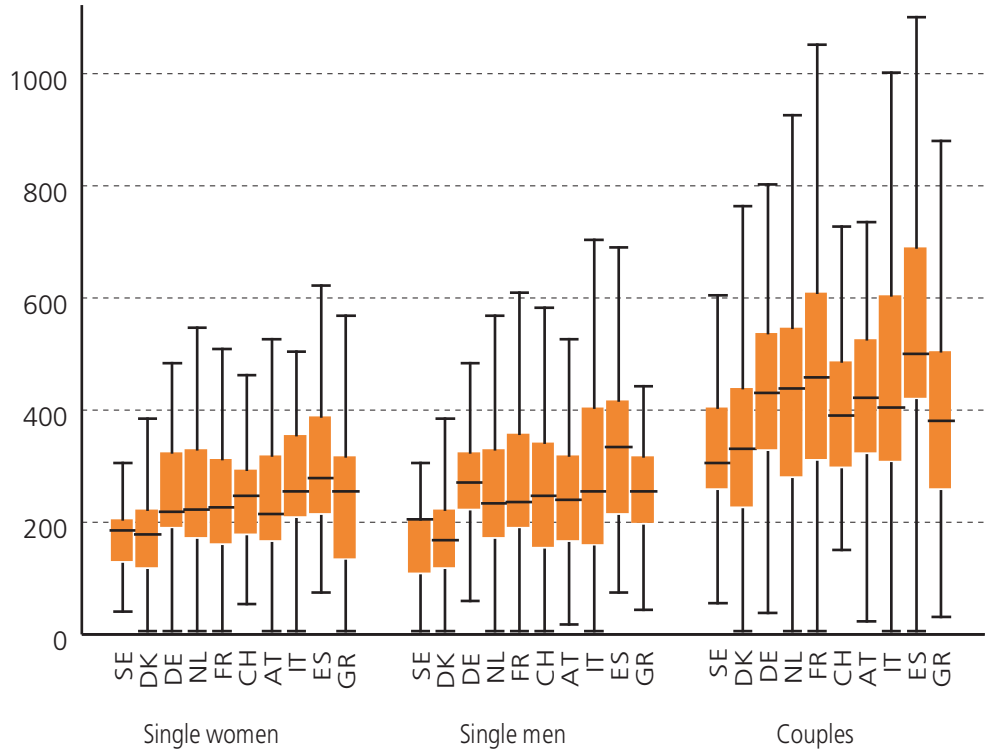

Figure 3 *Distribution of household food at home consumption across household types*

Finally, Table 6A.6 shows the distribution of food consumption across age groups within each country. In order to avoid difficulties with comparisons of households of different types we only consider households consisting of singles and couples without children. The food consumption is equivalised taking singles as a benchmark and assuming that couples need 70% more in terms of food consumption to be equally well off. In households consisting of couples age refers to the age of the man. First of all, we see that the pattern across countries described above also appears across age groups. With respect to the relation between age and food consumption within a specific country there does not seem to be a common pattern in all countries. However, in many countries the distribution of food consumption looks very constant across age groups. This rules out that the findings in

Figures 2 and 3 can be explained by cross-country differences in labour force participation since most people above 70 years of age are no longer in the labour force.

Self-Reported Economic Situation of the Households

As described in the introduction consumption is usually thought of as being the best direct measure of the material living standard of individuals. Another possibility when carrying out a survey is to simply ask people what they think about their economic situation. In SHARE the respondents were asked to give an assessment of the ease with which their household can "make ends meet" on a 4-point scale. The following question was asked: "Thinking of your household's total monthly income, would you say that your household is able to make ends meet?" The answers are arranged on the following 4-point scale: (1) great difficulty, (2) some difficulty, (3) fairly easily, and (4) easily.

Figure 4 shows the percentage of households finding it difficult (great/some difficulty) to make ends meet across countries. As before we consider three groups of households within each country; single women, single men and couples all without children.

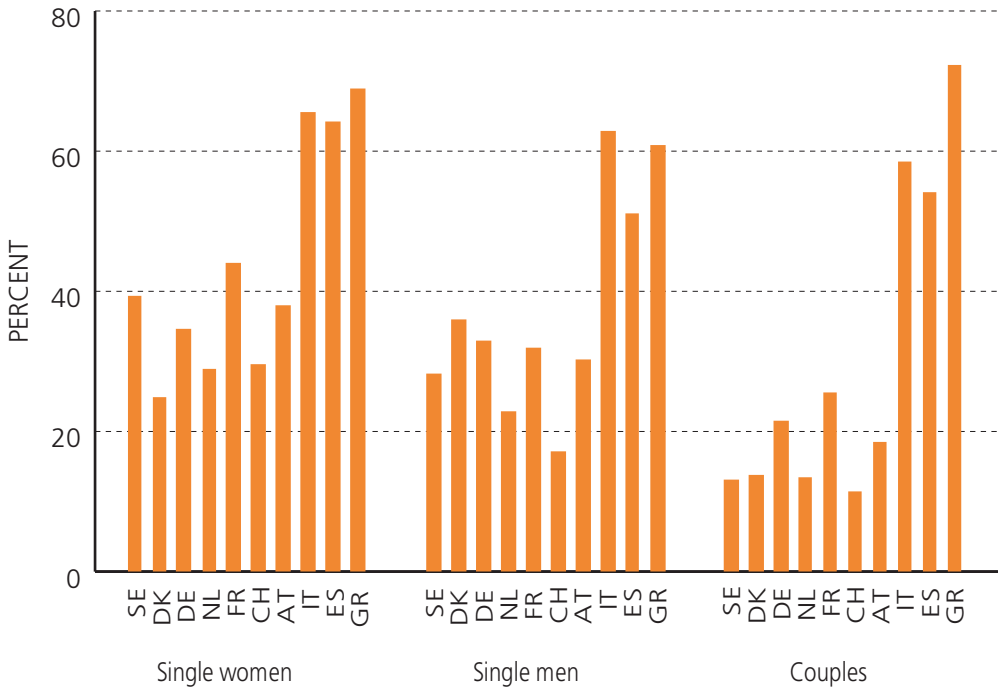

Figure 4 Percentage of households finding it difficult to make ends meet across countries and household types

The differences across groups of countries and across household types in Figure 4 are striking. More than 60% of the single women in the southern European countries (Italy, Spain and Greece) report finding it difficult to make ends meet whereas the corresponding number for couples in many of the non-southern countries (Sweden, Denmark, Netherlands, Switzerland and Austria) is less than 20%. This finding reflects two things. First, in the southern countries there is a much higher percentage of households finding it difficult to make ends meet than in the non-southern countries and this holds for both singles and couples. Second, in the non-southern countries the percentage of singles finding it difficult to make ends meet is larger than the percentage of couples whereas the numbers are more

similar in the southern countries. So the difference between the southern and non-southern countries is smaller for single women than for couples. As an example around 40% of single women and 13% of couples in Sweden report finding it difficult to make ends meet whereas the corresponding numbers for Greece are around 70% for both single women and couples.

The observed differences across countries should be interpreted with caution since it is not clear how much is genuine differences and how much is response scale variations, i.e. households that are equally well off give different answers to the question depending on in which country they live. However looking at Figure 4 it is not likely that the observed differences across countries are pure response scale variations since the pattern should then be the same for the three groups of households unless the response scale variations also vary between singles and couples. So even if comparisons across countries are not straight forward, comparisons between singles and couples within specific countries is likely to provide useful information.

Comparing the findings from Figure 4 with the distribution of food consumption across countries and across the same household types shown in Figure 3 clearly shows that one should not use food consumption in a comparison of the material living standard across countries. Across countries there is no relation at all between the percentage reporting finding it difficult to make ends meet and the level of food consumption. A possible explanation for this is that households experiencing temporary financial difficulties choose to cut back on the consumption of other goods and only to a less extent to cut back on the consumption of food. On the other hand, if a household is experiencing permanent financial difficulties then we would expect the level of food consumption to be lower, given that the level of food consumption is not already close to subsistence. Once we have longitudinal data in SHARE it will be possible to distinguish between households experiencing temporary and permanent difficulties and it will be very interesting to see how this is related to the level of food consumption.

Whereas the differences between southern and non-southern countries in Figure 4 are not related to the cross-country differences in the level of food consumption, they correspond to the cross-country differences in net income; see Figure 4 in Section 6.1 on household income in this book.

Conclusion

The SHARE data on consumption has revealed some very surprising and puzzling differences across countries that are yet to be explained. The results show that the level of food consumption is much lower in the northern countries (Sweden and Denmark) compared to all other countries. This is the opposite of what we would expect since incomes in the northern countries are higher than in the southern countries. As described above, some of the observed cross-country differences might be explained by cross-country differences in the price of food relative to the price of other goods. This and possibly other reasons for the differences will be investigated in detail in future work.

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6.5 Income, Wealth and Consumption Inequality

Eric Bonsang, Sergio Perelman, and Karel Van den Bosch

Introduction

Very often, income, consumption and wealth (I-C-W, hereafter) are considered on their own as good indicators of individual material well-being. The traditional life-cycle model introduced by Modigliani and Brumberg (1954) and Ando and Modigliani (1963) taught us that rational individuals will try to smooth consumption over their entire life, and, thus, they will save income to accumulate wealth when being young and consume their savings when being old. But several other factors affect wealth accumulation and consumption, among them uncertainty about the future, intergenerational transfers' behaviour, health status and, last but not least, social protection schemes covering income and health care needs. As a consequence, the expected correlation among the three dimensions, I-C-W, is far from being perfect, particularly among "50 and plus" individuals facing retirement or already retired.

SHARE is one of the rare surveys focusing on these three dimensions simultaneously. The purpose is to try to understand what is the real situation of families and individuals across countries and socio-economic categories. For those of them still at work we are interested to know how they are preparing for old days' consumption, and, for those already retired, how they meet their old age needs. We know that for some of them, facing liquidity constraints or bad health, consumption will be restricted, whereas others will be able to save from their current income, while a third group will be composed of net dissavers.

In this contribution, we are particularly interested in the distributive issues pertaining to these three dimensions taken together. In the first section we explain some data issues and methodological choices. The second section is devoted to the presentation of Lorenz curves and Gini coefficients by macro-regions and countries, and the third section to a comparative study of I-C-W distribution across age categories. Some conclusions and potential lines of research for the future end this contribution.

Data and Methodological Issues

Our starting point is the outcome of Sections 6.1 on income (Paccagnella and Weber), 6.3 on wealth (Christelis, Jappelli and Padula) and 6.4 on consumption (Browning and Madsen). More specifically, the data we use is the one computed by these specialised SHARE team groups on the basis of the original data. The I-C-W definitions we selected to be used in this contribution are as follows: income is defined as being the yearly net household income excluding imputed rent, consumption food consumption at home and outside home and wealth corresponds to net worth defined as the sum of financial and real wealth, net of debts. For details on these computations, the reader must refer to the corresponding contributions.

Our population comprises all the "50 and plus" individuals. To be able to present homogeneous results, we selected the households for which complete information on income, consumption and wealth was available. This can explain some minor differences with respect with other results presented in other contributions of this book. A household's consumption, income and wealth are expressed in equivalent units using the OECD equivalence scale constructed as following: 1.0 for the household head, 0.5 for each other person aged 15 years old or more, and 0.3 for children aged less than 15 years old. Each individual in the household, including the "50 and plus", is assumed to enjoy a standard

of living equal to the net household income divided by the equivalence scale. Moreover, consumption and wealth at the individual level are computed using the same procedure and equivalence scale. Note that consumption is here defined as food consumption (at home and outside home).

In order to proceed to comparisons across countries, all the values are transformed in equivalent PPP euro using purchasing power parity indices. They are also weighted to correct for sample bias and country population size. Three different European areas are distinguished: Northern (Denmark and Sweden), Central (Austria, France, Germany, Switzerland, and Netherlands) and Southern (Greece, Italy, and Spain) European countries.

Lorenz Curves and Gini Coefficients by Macro-Region and Country

The best instruments to study distributive issues are without doubt the Lorenz curve and the Gini coefficient associated with it. Lorenz curves have the cumulative percentage of the population on the horizontal axis, ordered from those with the lowest amounts (income, consumption or wealth) to those with the highest, and) the accumulated percentage of the target variable, I-C-W on the vertical axis. In Figure 1, the I-C-W distributions are presented together for each of the selected European macro-regions and for the whole "50 and plus" population. They can be read as follows: the Lorenz curve regarding consumption in Northern Europe indicates that the 40% of the population with lowest food expenditures, together have about 23% of aggregate food consumption. Similarly, the 40% of the population with lowest incomes, together have about 20% of aggregate income (these need not be the same households as those with lowest food consumption), and the 70% of the population with the smallest wealth holding together possess about 25% of aggregate wealth. Therefore, the closer the curves are to the bottom-right corner of the graph, the larger inequality. Conversely, a Lorenz curve that coincides with the diagonal indicates total equality. The Gini coefficient summarises the observed distribution in one value, going from 0% (equal distribution) to 100% (full concentration: one person has all). Geometrically, the Gini is proportional to the area between the Lorenz curve and the diagonal. Understanding of the Gini coefficients is perhaps enhanced if one knows that the Gini for the USA overall income distribution (one of the most unequal ones in the OECD area) is 0.37, while that for egalitarian Sweden is 0.25. (Results from the Luxembourg Income Study: http://www.lisproject.org/keyfigures/ineqtable.htm.)

What do these Lorenz curves tell us? In the three macro-regions, as expected consumption is more evenly distributed than income, and income less unequal distributed than wealth. Net income comes mainly from work compensation, social transfers and returns on cumulated wealth, from which direct taxes are deducted. Most people try to smooth their consumption path over the life cycle, and for this purpose they save part of their income for old days. In the long run, differences in personal income and consumption behaviour, together with life circumstances, e.g. bequests and bad health, and market conditions are factors contributing to a more unequal wealth distribution.

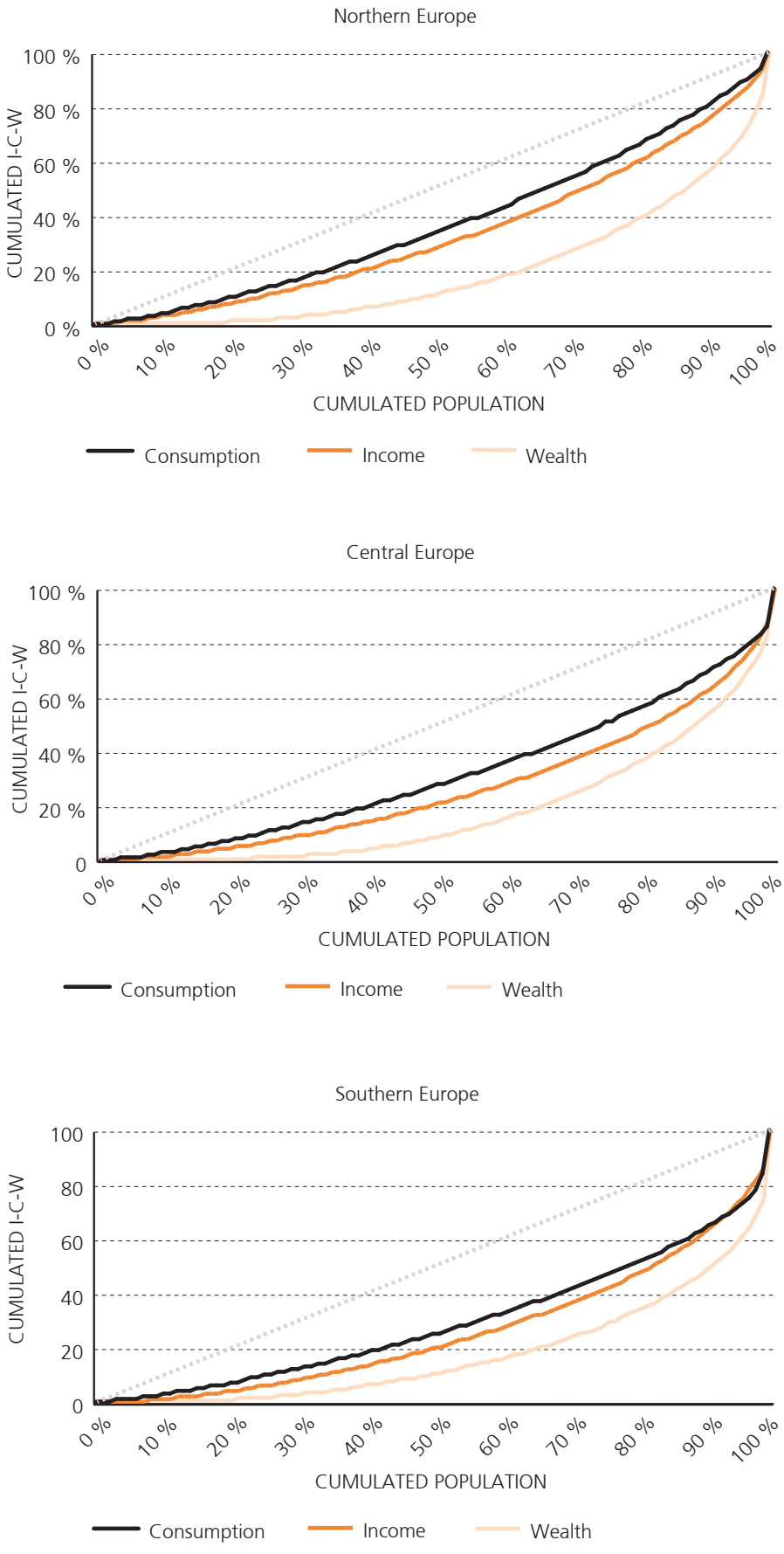

Figure 1 Lorenz curves by macro-region

Comparing the three macro-regions in Figure 1, the most remarkable facts are that in Northern countries income and consumption distributions are rather equal compared with Centre and Southern European regions and rather close to each other in Northern and Southern macro-regions compared to Central Europe. For Northern (Scandinavian) countries this results mainly from the less unequal distribution of net income and probably as a consequence of the efficient old-age coverage provided by social protection in these countries, where the "50 and plus" population has perhaps less need for precautionary saving behaviour.

But in order to have a more precise evaluation of these I-C-W distributions, the Gini coefficients will be more informative. They are reported in Table 1 together with specific country coefficients (Lorenz curves for individual countries are presented in the Appendix to this chapter).

First of all, the Gini coefficients corresponding to the situations presented in Figure 1 can be considered as a reference for further comparisons. For instance, the low unequal income and food consumption distributions observed in Northern countries correspond to Gini coefficients of 33% and 24%, respectively. These values are very close to those calculated at the national levels for Denmark and Sweden (see Table 1).

Table 1 Gini Coefficients by Macro-Region and Country

Macro-Region and Country	N	Income	Consumption	Wealth
Northern Europe	2,981	33%	24%	60%
SE	1,787	33%	22%	59%
DK	1,194	32%	28%	62%
Central Europe	6,867	46%	35%	63%
DE	1,825	42%	25%	62%
NL	1,741	49%	46%	65%
CH	743	47%	38%	63%
AT	1,589	51%	33%	58%
FR	969	47%	45%	61%
Southern Europe	4,021	47%	41%	65%
IT	1,445	41%	47%	64%
ES	897	56%	26%	68%
GR	1,679	45%	28%	52%

Among Central European countries, Germany shows a comparatively unequal wealth distribution (62%), combined with the lowest income and consumption Gini coefficients in the macro-regions, 42% and 25% respectively. Also we observe for Greece and Spain rather low Gini coefficients for consumption, but in this case the reason is the relative lower coverage offered by social protection schemes and as a consequence, lower levels of consumption expenditures (see Contribution 6.4). Moreover, Greece presents the least unequal wealth distribution (52%), while Spain has the highest inequality in income (56%), among all countries participating in the first wave of SHARE.

Inequalities Across Age Categories

In Table 2 we report Gini coefficients by age categories within each macro-region. What can we learn from these results? First of all, in Central and Southern European regions wealth inequality increases dramatically with age, while income inequality tends to decrease. Second, that in Northern European countries the low rate of income inequality reported before is also observed across all age categories. Third, the observation that differences in social protection systems cannot be the only explanation for these results; also labour market regulations that allow aged workers to retire later (see Brugiavini et al., Contribution 5.1) are at work. Certainly these regulations play indirectly a great role in favour of the social integration of older individuals, giving them the opportunity to maintain higher incomes, earnings and pensions, up to end of their lives. Finally, it is possible that part of the differences observed across age categories correspond to cohort effects, particularly for the 50-59 years old generation born after the Second World War and therefore mainly composed of baby boomers. But age and cohort distributive effects cannot be disentangled from the available data. For this purpose following waves of SHARE will be necessary.

Table 2 Gini Coefficients by Macro-Region and Age Categories

Macro-Region	Age	N	Income	Consumption	Wealth
Northern Europe	50-59	1,149	31%	23%	62%
	60-69	939	31%	24%	54%
	70-79	609	32%	23%	62%
	80+	284	33%	27%	63%
Central Europe	50-59	2,572	45%	32%	60%
	60-69	2,366	48%	36%	59%
	70-79	1,403	41%	36%	68%
	80+	526	39%	36%	72%
Southern Europe	50-59	1,368	51%	37%	61%
	60-69	1,322	43%	41%	61%
	70-79	960	47%	42%	68%
	80+	371	36%	40%	73%

Nevertheless, in order to have a better understanding of the situation faced by age categories in terms of living conditions in Europe, we present, in Table 3, income, consumption and wealth average values making the distinction between three income categories in the "50 and plus" European population (see Tables 6A.8-6A.10 for results by macro-region). These categories are Low income (5 to 25 percentiles), Middle income (40 to 60 percentiles) and High income (75 to 95 percentiles). To some extent the amounts reported in Table 3 might be considered as representative of the ageing I-C-W pathways in each of these income categories even if, as indicated before, they correspond to the different generations (cohorts) surveyed in 2004.

What clearly appears from these results is that for a large portion of European "50 and plus" individuals, those belonging to the first quartile of the income distribution, consump-

tion is seriously constrained by current income availability, particularly for the 50-59 years old category for which annual median net income and food consumption are 5,300 and 3,025 euro, respectively.

The results presented in Table 3 also show that median net wealth is higher than 50,000 euro in most cases, independently of age and income categories. No doubts, even if the consumption amounts reported here correspond to food consumption, accumulated wealth potentially allows most of European aged people to finance consumption needs on their own for rather long periods, included those in the Low income group. Nevertheless, as generally accumulated wealth corresponds to the family house they own and the annuity markets are not well developed, at the end of the day many of them are both, income and consumption constrained. This is particularly the case in the Southern macro-region, as reported in Table 6A.10.

Table 3 Median Values by Income Categories: All Countries (PPP euro)

Income Categories	Age	N	Income	Consumption	Wealth
Low Income (5-25 percentiles)	50-59	893	5,300	3,025	61,536
	60-69	835	6,431	2,823	69,044
	70-79	525	5,194	2,564	65,347
	80+	229	5,887	2,541	49,994
Middle Income (40-60 percentiles)	50-59	1,059	15,307	3,226	88,871
	60-69	901	13,672	3,108	83,722
	70-79	597	11,568	2,823	56,823
	80+	208	11,177	2,549	35,204
High Income (75-95 percentiles)	50-59	1,120	35,347	3,908	144,283
	60-69	1,028	28,854	3,811	156,509
	70-79	651	22,090	3,256	128,386
	80+	253	21,269	3,067	108,682

Conclusions

As expected, in all countries wealth inequality is higher than income inequality, and income inequality is higher than consumption inequality. But huge differences appear between the more egalitarian Northern countries, and the rest of European countries participating in SHARE. We hypothesise that the unequal development of social protection nets, on one side, and the national regulations affecting labour force participation among the "50 and plus", on the other side, can explain most of the differences observed across countries, as well as across age and income categories. But this is part of the open SHARE agenda for future work, as are the study of the potential links between income, consumption and wealth inequalities and other dimensions of inequality detected in health and dependency status, as well as in family and social support.

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6.6 Expectations

Luigi Guiso, Andrea Tiseno, and Joachim Winter

Introduction

Households' beliefs about future events play a central role in forward-looking models of decision-making. Examples of probability beliefs that may affect individual decisions related to ageing abound. They include beliefs about mortality risks, beliefs about the future value of retirement portfolios of stocks, bonds, and—most importantly for PAYG systems—social security benefits, and beliefs about receiving or leaving bequests. Obtaining reliable measures of households' beliefs with respect to future events has been at the centre of much research in survey design and analysis over the past decades (see Manski 2004, for an overview of the literature).

There is now a broad consensus that data about households' beliefs should be obtained using probability formats (rather than using discrete response alternatives and verbal descriptors such as "very likely", "likely", and "somewhat unlikely"). The idea that probabilistic elicitation of expectations might improve on the traditional qualitative approaches of attitudinal research appears to have originated with Juster (1966). After some history in market research, probabilistic expectations questions have been used successfully in economic surveys since the early 1990s (Dominitz and Manski 1997, 2004). In the United States, the Health and Retirement Study (HRS) has pioneered asking questions about subjective probability beliefs on a wide variety of topics, including general events (e.g., economic depression, stock market prices, weather); events with personal information (e.g., survival to a given age, entry into a nursing home), events with personal control (e.g., retirement, bequests). SHARE has endorsed this view: most expectations questions are about the probability individuals subjectively assign to relevant events.

Elicitation of probabilistic expectations has several a priori desirable features. Perhaps the most basic attraction is that probability provides a well-defined numerical scale for responses and this makes it easier to compare responses across individuals. A second attraction is that an empirical assessment of the internal consistency and external accuracy of respondents' expectations is possible, since in principle one can compare subjectively reported probability with objective calculations of the relevant events (e.g. survival probabilities conditional on age). A third consideration is the usefulness of elicited expectations in predicting prospective outcomes. As argued by Juster (1966), numerical responses to probability questions should have more predictive power than do categorical responses to qualitative expectations questions. With respect to several aspects of economic behaviour, including ageing and life-cycle behaviour, research by Dominitz and Manski (1997, 2004), Gan, Hurd, and McFadden (2003), and others confirms that responses to probabilistic questions indeed have predictive power. For example, responses to a question about subjective mortality risk are generally predictive for subsequent mortality experience (Hurd and McGarry 1995, 2002; Smith, Taylor, and Sloan 2001) and more predictive for savings behaviour than objective life table hazard rates (Hurd, McFadden, and Gan 1998).

SHARE 2004 elicits expectation on three major topics which have been selected for their policy relevance for this particular segment of the population. They are: the future of the pension reform, expectations about future living standards, expectations about survival probabilities and expectations about bequests and transfers. Though the set subjective probability questions asked is smaller than in recent HRS waves, they cover the main topics of concern for the elderly. In this contribution we report on the first three and leave

the discussion of expected bequest to Contribution 4.4 which focuses on intergenerational transfers.

Starting Up

In a large household survey, a block of probabilistic expectations questions typically begins with an explanation of the response format and a warm-up question. In SHARE 2004 this introduction and the warm-up question were worded as follows: "I have some questions about how likely you think various events might be. When I ask a question I'd like for you to give me a number from 0 to 100. Let's try an example together and start with the weather. What do you think the chances are that it will be sunny tomorrow? For example, '90' would mean a 90 percent chance of sunny weather. You can say any number from 0 to 100." While this question is not of particular substantive interest for the purpose of SHARE, it is useful as a "warm-up" question that gets respondents acquainted with the probability format used in the subsequent sequence of subjective expectations questions. Moreover, from a methodological perspective this question has the advantage that objective information on the probability of a sunny day can be obtained for each interview date and location from official weather forecasts, at least in principle.

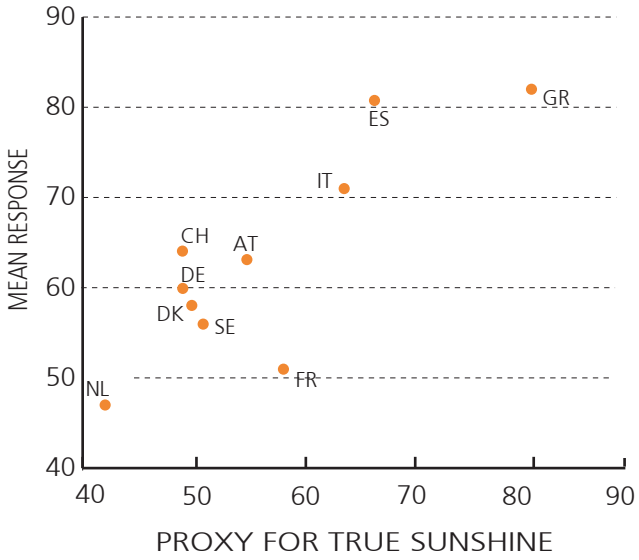

Figure 1 Chances for a sunny day tomorrow

Note: This graph shows, by country, the mean response to the question on how likely it is that "it will be sunny tomorrow" (vertical axis) and the mean hours of sunshine per day in the largest city of the country, normalised by the average length of daytime (horizontal axis).

Given the cross-country design of the SHARE study, one can look at the responses to the "sunny day" question by country to check that respondents' stated beliefs reflect the cross-country variation in actual average sunshine probabilities. As an objective measure of the sunshine probability for each month and country, we use the mean hours of sunshine per day in the largest city of that country normalised by the average length of daytime in this city. This objective measure is of course only a proxy for the actual sunshine probability at each respondent's interview location and date, due to variations in weather and length of daytime within countries and the randomness of the weather itself. Neverthe-

less, at the level of the individual respondent the correlation between the response to the "sunny day" question and our objective measure of the sunshine probability is relatively strong at 0.275 ($p<0.000$). Figure 1 shows for each country the mean response to the "sunny day" question (vertical axis) and our objective measure (horizontal axis), both averaged across months for each country. With the notable exception of France, respondents tend to be slightly too optimistic.

There is considerable variation of the reported probabilities, both across countries and over time. Moreover, the mean responses are higher in the Mediterranean countries than in the other countries. Participants in Spain, Greece, and Italy report the highest, and those in the Netherlands and in Sweden the lowest subjective probabilities for a sunny day. Overall, the figure shows the expected positive correlation of the reported probabilities and a proxy variable for the actual whether. Additional analyses show that there are no relevant differences across age groups. For all countries and months, the mean probabilities reported by respondents under 60 years of age, between 60 and 74 years, and 75 years and older are 66.6%, 66.3%, and 63.1%, respectively. This is what one would expect if probability assessment were unbiased. In contrast, the analysis of subjective expectations with respect to economically substantial issues that affect individuals differentially according to age presented in the remainder of this contribution shows some meaningful age differences.

Expectations About Future Pension Reforms

Two questions in SHARE 2004 were related to respondents' expectations about future pension reforms—an issue of obvious relevance, both for public policy and for financial planning and other life-cycle decision at the individual level. Both questions were asked only if the respondent was still working at the time of the interview. The first question asked for the chances that pension entitlements would be reduced and the second for the chances that the retirement age would be raised, both before the respondent's retirement.

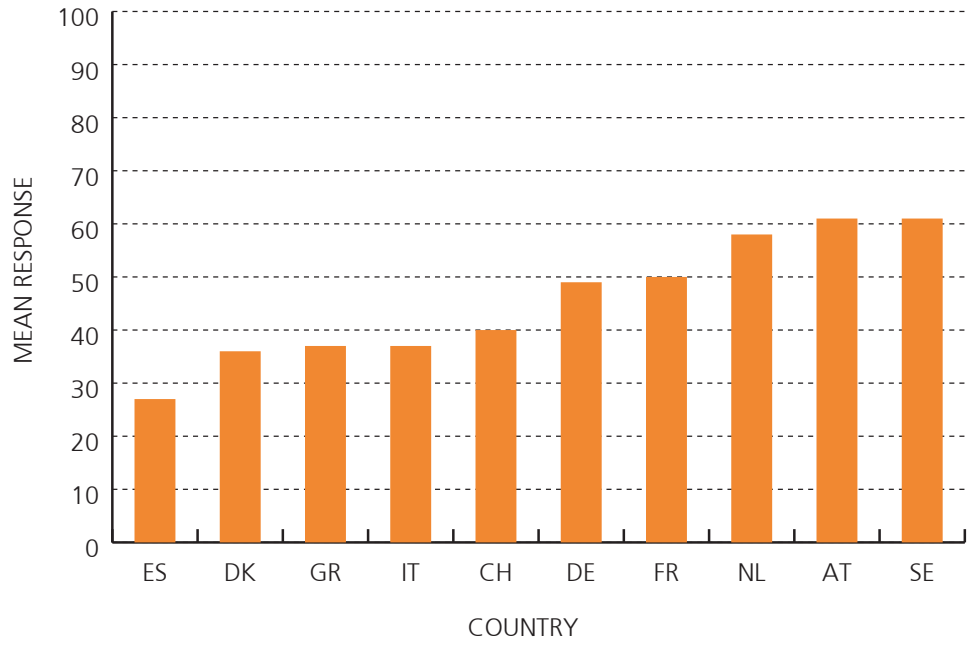

Figure 2 *Chances for a decrease in pensions, by country*

Note: This graph shows, by country, the mean response to the question on how likely it is that "before you retire the government will reduce the pension which you are entitled to".

Figure 2 shows the response distributions to the question on a decrease in pensions by country and by age. It may come as a surprise that SHARE participants in two countries that have already seen major pension reforms in the past and are, arguably, less likely to be forced to cut pensions in the future—Austria and Sweden—, report the largest subjective probabilities for future pension cuts, together with those in the Netherlands, a country that did not have major reforms recently but that has a relatively stable pension system. Respondents in Germany are in the middle, but given that pensions will be cut in Germany with near certainty, a mean response of 50 percent seems rather low. The other countries report even lower probabilities. The differences with respect to age in the response to this question are reasonable. Those respondents who are younger than 60 years (for whom there is more time left before retirement) report higher probabilities for future pension cuts. The responses to a second question on subjective probabilities for an increase in retirement age are similar. Again, the Netherlands, Austria, and Sweden report the highest probabilities, followed by Germany. The Swiss appear to be quite certain that their retirement age will not be increased in the future. The age effect is the same as in the previous question.

Subjective Survival Probabilities

For many purposes, it is useful to obtain individuals' subjective assessment of their mortality risk. In order to construct a complete probability distribution of the uncertain event "time of death", a sequence of probabilistic questions with different time horizons would be required. Due to space restrictions, SHARE 2004 contained only one such question, worded as follows: "What are the chances that you will live to be age T or more?" The target age, T, contained in this question was chosen conditional on the respondent's age such that the distance between the current age and the target age varied between 10 and 24 years, see Table 1.

Table 1 Target Ages in the Subjective Survival Probability Question

Age class of the respondent	Target age
51 to 55	75
56 to 60	75
61 to 65	75
66 to 70	80
71 to 75	85
76 to 80	90
81 to 85	95
86 to 95	100
96 to 100	105
101 to 105	110
106 and older	120

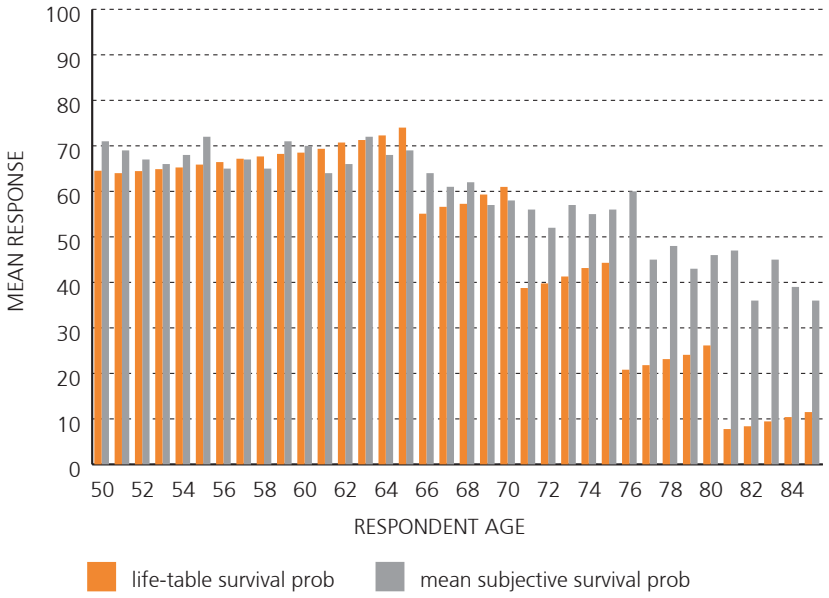

Figure 3a *Subjective survival probabilities (all countries, males)*

Note: These graphs show the mean response to the question on how likely it is that the respondent will live to the target age (see Table 1) and the corresponding population survival probability constructed from life tables; on the horizontal axis is the respondent's age.

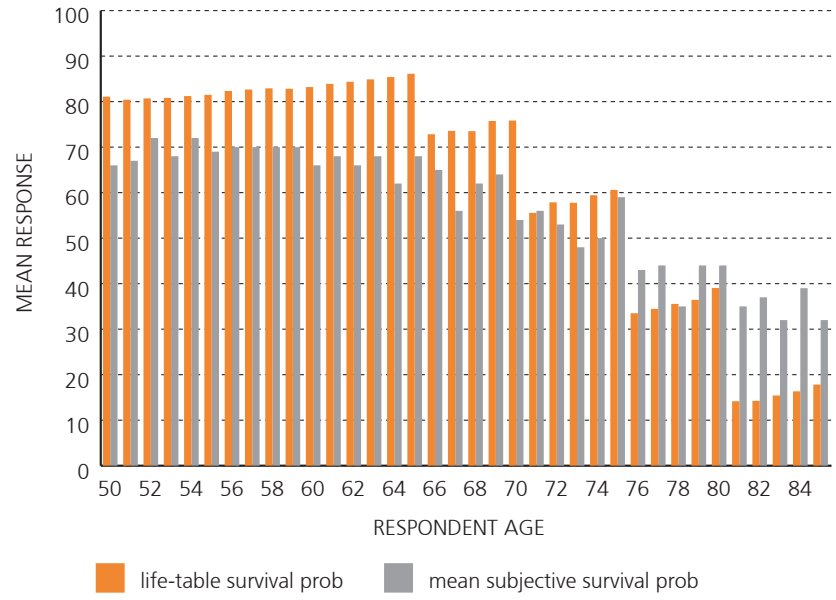

Figure 3 b *Subjective survival probabilities (all countries, females)*

Note: These graphs show the mean response to the question on how likely it is that the respondent will live to the target age (see Table 1) and the corresponding population survival probability constructed from life tables; on the horizontal axis is the respondent's age.

In Figures 3a and 3b we compare, by gender and age, the respondents' mean subjective survival probability with the corresponding population survival probabilities constructed from life tables. Using data on death rates for the period 1/1990–12/1999 from the Human Mortality Database (online at http://www.mortality.org), we constructed the population counterparts to the subjective survival expectations separately by country and gender. Ex-

ceptions are Germany, for which we used death rates for 1/1991–12/1999 (combined for East and West Germany), and Greece, for which we used death rates for 1/1980–12/1980 from the Human Life-Table Database (online at http://www.lifetable.de). We restrict the analysis to a maximum age of 85 beyond which cell counts are too small for a meaningful interpretation. The fact that the target ages specified in this question vary with age, as described above, implies that life-table survival rates are not declining monotonically but are increasing within each age class defined in Table 1.

Overall, Figures 3a and 3b suggests that up to about age 60, respondents' subjective survival probabilities and their life-table counterparts correspond very well for males while females tend to underestimate their survival rates.

The decrease of subjective survival probabilities for later age groups found in the population is also reflected in the subjective probabilities, but there is generally some overstatement relative to life tables, and in many countries the degree of overstatement is larger for males than for females. It is tempting to attribute this discrepancy to overconfidence, but there are also at least two other possible explanations. There could be differences in sample composition even after weighting—for instance, with respect to health. If the health of SHARE respondents were better than that of the population, and if respondents were aware of their relative health status and its impact on survival probabilities, our descriptive findings could be rationalised. Another potential explanation is an increase in life expectancy for older age groups over the past decade that is not yet reflected in the life tables that we used to construct population counterparts to the subjective survival probabilities. All three explanations will be investigated in future work.

Summary

The analysis of the subjective expectations and hypothetical choice questions in SHARE 2004 indicates that response behaviour is comparable to that observed in other major surveys such as the Health and Retirement Study. Put simply: Subjective expectations questions seem to work. The real test of how well they work is of course to use the responses to predict actual behaviour. This task is high on the agenda for future research that uses these data. Another important issue is to understand how variations in subjective expectations can be explained by other variables. For instance, do stated subjective survival probabilities reflect health status and health risk factors measured in other parts of the SHARE survey?

The descriptive analysis of the response distributions revealed some interesting cross-country differences. The sources of these differences are worthy of further investigation. For instance, does the perceived likelihood of a substantial pension reform (in the form of a decrease in pension entitlements or an increase in retirement age) correctly reflect the current state of the pension reform process in the SHARE countries? The fact that the field period of SHARE spanned several months could be used to test whether major events in the public debate about pension reform had an impact on reform expectations. Taking this research agenda a step further, one could even ask whether such changes have an impact on actual retirement planning (say, on the degree to which households rely on private pension provision).

The full potential of this research will come to fruit once a study like SHARE is extended to a panel that allows to observe the same individuals repeatedly over time. Similarly, one could investigate whether major health shocks, at the individual level, affect not only survival expectations, but also saving and consumption via their impact on expectations.

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APPENDIX

Tables on Socio-Economic Status

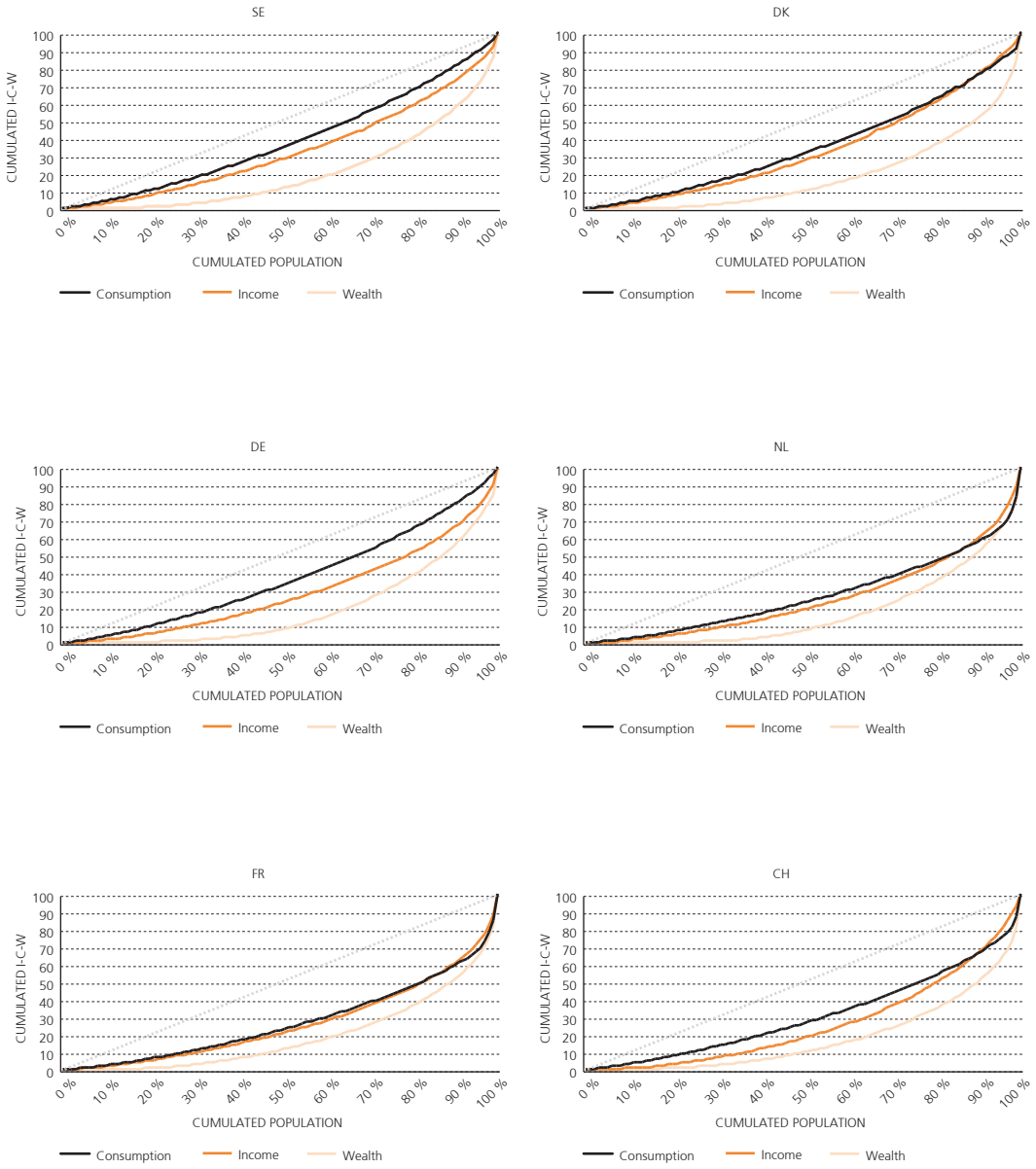

Fig. 6A.1 Lorenz curves on consumption, income and wealth, by country

Note: Continued on next page.

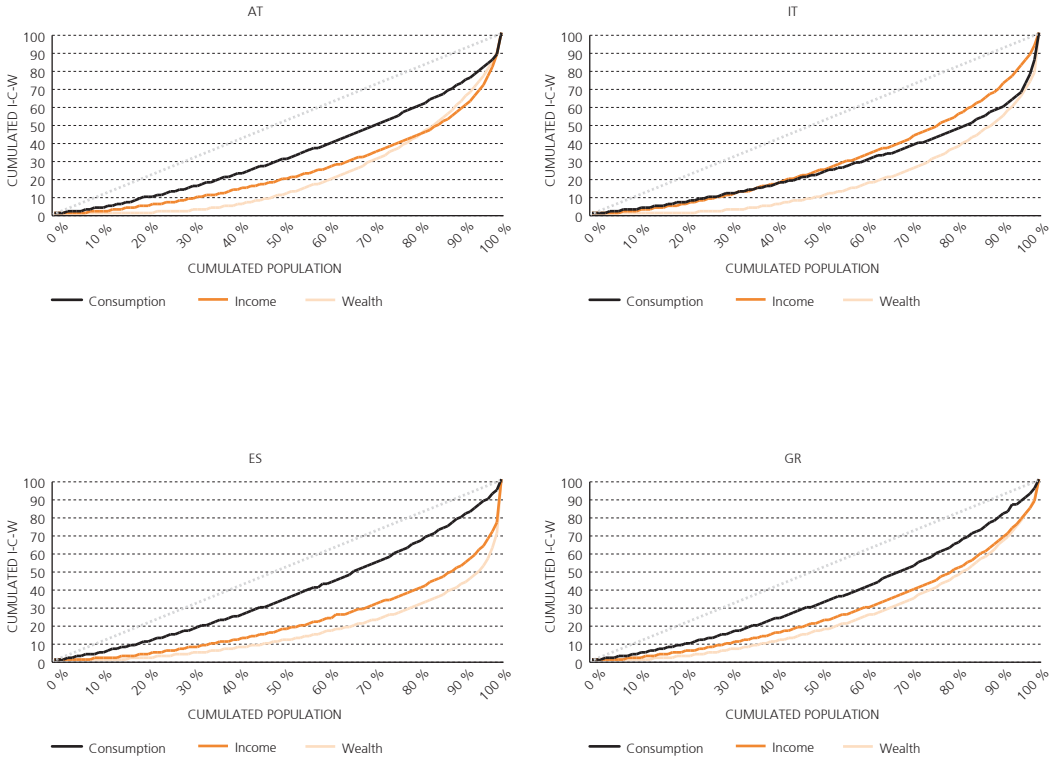

Fig. 6A.1 (cont.) Lorenz curves on consumption, income and wealth, by country

Table 6A.1 **Average Gross and Net Household Income, by Country**

Country	N	Gross Income				Net Income			
		Basic definition	Corrected for PPP	Corrected for PPP, equivalent adults	Corrected for PPP, equivalent adults + imputed rents	Basic definition	Corrected for PPP	Corrected for PPP, equivalent adults	Corrected for PPP, equivalent adults + imputed rents
SE	1418	41193	36647	25715	28497	30434	27075	19016	21798
		(1264)	(1124)	(745)	(884)	(922)	(821)	(537)	(715)
DK	1127	47728	37707	26489	29768	32560	25724	18101	23380
		(1474)	(1165)	(748)	(888)	(959)	(758)	(479)	(655)
DE	1544	37949	36857	25449	28647	30367	29494	20325	23523
		(1431)	(1390)	(939)	(1023)	(1081)	(1050)	(696)	(797)
NL	1398	51230	50218	34906	38921	44533	43653	30351	34366
		(1741)	(1706)	(1227)	(1278)	(1503)	(1474)	(1036)	(1088)
FR	1000	41642	40444	27920	33719	36440	35392	24364	30164
		(2152)	(2090)	(1441)	(1559)	(1899)	(1844)	(1256)	(1388)
CH	692	67254	49444	34892	39906	58687	43146	30429	35444
		(2939)	(2161)	(1577)	(1721)	(2531)	(1861)	(1352)	(1514)
AT	1442	36353	36653	26791	30390	31860	32122	23443	27041
		(1579)	(1592)	(1175)	(1210)	(1373)	(1384)	(1006)	(1045)
IT	1348	23096	24451	15039	22390	19343	20477	12568	19919
		(1577)	(1670)	(947)	(2193)	(1327)	(1405)	(772)	(2125)
ES	945	18753	22059	12622	20012	16838	19807	11344	18733
		(1879)	(2210)	(1373)	(1718)	(1678)	(1974)	(1193)	(1580)
GR	1470	16431	19328	12162	14785	15466	18192	11441	14064
		(732)	(860)	(513)	(531)	(693)	(816)	(480)	(498)
SHARE countries	12384	33644	33129	22176	27263	28070	27714	18497	23585
		(712)	(722)	(466)	(660)	(588)	(599)	(378)	(601)

Notes: All statistics are population weighted. Standard errors in parentheses.

Table 6A.2 **Median Gross and Net Household Income, by Country**

Country	N	Gross Income				Net Income			
		Basic Definition	Corrected for PPP	Corrected for PPP, equivalent adults	Corrected for PPP, equivalent adults + imputed rents	Basic Definition	Corrected for PPP	Corrected for PPP, equivalent adults	Corrected for PPP, equivalent adults + imputed rents
SE	1418	31099	27666	19964	21699	22825	20306	14820	16516
DK	1127	33659	26592	20209	22436	23805	18807	14315	16477
DE	1544	21825	21197	15935	18648	19171	18620	14184	16501
NL	1398	30960	30348	21151	24637	26735	26207	18841	22284
FR	1000	23004	22342	16345	20146	19790	19221	14418	17834
CH	692	43838	32228	22329	26914	39399	28965	20021	24494
AT	1442	18075	18224	13712	16942	16966	17106	13107	16024
IT	1348	13899	14714	10163	13657	12614	13354	9227	12048
ES	945	7500	8822	5823	9410	7473	8790	5787	9211
GR	1470	9450	11116	7575	10064	9200	10822	7438	9839
SHARE countries	12384	18300	18315	13135	16108	16225	16363	11571	14674

Notes: All statistics are population weighted.

Table 6A.3 **Average Weighted and PPP Corrected Gross Household Income and Income Sources, by Country**

Country	N	Income from:							
		Total income	Employ.	Self-employ.	Pensions	Capital	Other members	Other sources	Imputed rent
SE	1418	40504 (6.3%)	14904 (1.5%)	2033 (1.8%)	14987 (9.3%)	641 (24.4%)	2828 (14.7%)	1254 (6.5%)	3857 (6.1%)
DK	1127	42391 (6.7%)	19599 (2.7%)	2841 (11.1%)	11589 (10.8%)	1236 (27.2%)	1328 (1.7%)	1114 (6.2%)	4684 (4.0%)
DE	1544	41437 (21.3%)	14708 (18.1%)	2928 (30.6%)	11979 (15.3%)	626 (45.3%)	4801 (41.3%)	1815 (10.6%)	4580 (21.7%)
NL	1398	56120 (17.4%)	14503 (7.1%)	2237 (29.7%)	24874 (19.7%)	1137 (45.6%)	4666 (21.5%)	2801 (14.1%)	5902 (20.6%)
FR	1000	48511 (17.2%)	12564 (7.3%)	1721 (6.5%)	22773 (19.6%)	430 (58.4%)	2037 (19.6%)	919 (11.6%)	8067 (26.1%)
CH	692	56856 (18.8 %)	14814 (12.3%)	3576 (9.1%)	17569 (14.4%)	2136 (53.4%)	8599 (20.5%)	2750 (33.6%)	7412 (29.8%)
AT	1442	41645 (17.2%)	4630 (13.8%)	1042 (34.7%)	24975 (13.7%)	351 (48.1%)	4266 (29.4%)	1389 (13.9%)	4992 (22.0%)
IT	1348	35456 (16.5%)	4943 (13.6%)	2483 (10.5%)	11340 (5.9%)	629 (28.5%)	4771 (31.7%)	285 (9.2%)	11005 (22.9%)
ES	945	35619 (28.5%)	8315 (21.5%)	1596 (26.1%)	9187 (18.9%)	225 (73.5%)	2568 (41.6%)	168 (19.4%)	13560 (36.6%)
GR	1470	23320 (21.9 %)	6778 (17.5%)	1367 (29.4%)	9370 (20.1%)	285 (67.5%)	809 (37.1%)	719 (16.8%)	3992 (25.7%)
SHARE countries	12384	40883 (19.2%)	11034 (13.8%)	2318 (20.6%)	14203 (15.2%)	601 (44.0%)	3850 (33.4%)	1123 (12.6%)	7754 (25.9%)

Notes: All statistics are population weighted. Numbers in parentheses are percentages of imputed income.

Table 6A.4	Food at Home Expenditures (weighted) in Euro				
	25th %ile	Median	75th %ile	Mean	N
All households (per capita)					
SE	131	163	218	185	1410
DK	134	202	269	243	1131
DE	150	200	250	214	1466
NL	125	200	250	304	1485
FR	150	200	300	341	1007
CH	196	261	391	438	693
AT	150	200	250	247	1450
IT	133	200	300	333	1322
ES	120	150	210	189	940
GR	100	150	200	170	1472
Single women (per household)					
SE	131	185	218	203	272
DK	134	229	269	263	324
DE	170	200	300	233	250
NL	150	200	300	400	252
FR	150	220	305	432	265
CH	228	326	391	493	158
AT	150	200	300	266	448
IT	200	250	350	473	146
ES	150	200	250	222	99
GR	100	200	250	208	378
Single men (per household)					
SE	109	218	218	193	135
DK	134	202	269	228	166
DE	200	250	300	253	129
NL	150	225	300	366	108
FR	180	229	350	384	109
CH	196	326	456	453	80
AT	150	225	300	261	144
IT	200	300	400	341	46
ES	180	240	300	255	37
GR	150	200	250	206	131
Couples (per household)					
SE	272	327	436	358	801
DK	269	403	538	500	495
DE	300	400	400	421	807
NL	250	400	500	564	808
FR	300	450	600	622	398
CH	391	521	652	890	291
AT	300	400	500	499	536
IT	300	400	600	833	469
ES	300	360	500	419	298
GR	200	300	400	327	380

Table 6A.5	Food at Home Consumption (weighted)				
	25th %ile	Median	75th %ile	Mean	N
All households (per capita)					
SE	120	150	200	170	1410
DK	109	163	218	196	1131
DE	160	213	267	228	1466
NL	136	217	272	330	1485
FR	151	202	303	344	1007
CH	145	193	290	325	693
AT	147	209	262	259	1450
IT	133	200	300	333	1322
ES	165	206	289	259	940
GR	125	188	251	213	1472
Single women (per household)					
SE	120	170	200	187	272
DK	109	185	218	213	324
DE	181	213	320	249	250
NL	163	217	326	435	252
FR	151	222	308	436	265
CH	169	241	290	365	158
AT	157	209	314	279	448
IT	200	250	350	474	146
ES	206	275	344	305	99
GR	125	251	313	260	378
Single men (per household)					
SE	100	200	200	177	135
DK	109	163	218	184	166
DE	213	267	320	270	129
NL	163	245	326	397	108
FR	182	231	353	388	109
CH	145	241	338	336	80
AT	157	236	314	273	144
IT	200	300	400	341	46
ES	248	330	412	350	37
GR	188	251	313	258	131
Couples (per household)					
SE	251	301	401	330	801
DK	218	326	435	405	495
DE	320	427	533	448	807
NL	272	435	543	613	808
FR	303	454	606	628	398
CH	290	386	483	660	291
AT	314	419	523	522	536
IT	300	400	601	834	469
ES	412	495	687	577	298
GR	251	376	502	410	380

Table 6A.6 Food at Home Consumption for Singles and Couples Only (weighted and equivalised)

	25th %ile	Median	75th %ile	Mean	N
50-59 years					
SE	150	200	236	212	334
DK	128	192	256	218	338
DE	188	251	320	280	331
NL	192	256	326	389	387
FR	178	238	323	359	212
CH	170	284	341	336	159
AT	185	246	308	261	288
IT	177	265	400	457	11
ES	202	323	404	328	66
GR	188	251	369	285	167
60-69 years					
SE	147	177	236	189	416
DK	128	192	256	252	278
DE	188	251	314	262	474
NL	179	245	320	389	381
FR	181	252	356	400	219
CH	193	241	338	487	163
AT	185	246	314	321	436
IT	200	294	400	575	283
ES	243	291	404	371	129
GR	184	226	332	280	275
70+ years					
SE	118	160	206	175	458
DK	109	163	218	201	369
DE	172	213	314	244	381
NL	136	217	320	384	400
FR	151	238	356	414	341
CH	156	199	256	323	207
AT	157	209	314	282	404
IT	160	236	300	389	267
ES	206	275	364	310	239
GR	125	188	251	219	447

Table 6A.7 Percentage Finding It Difficult to Make Ends Meet (confidence intervals in brackets)

	All households	Single women	Single men	Couples
SE	21.0 [18.7,23.3]	39.7 [33.9,45.6]	28.7 [21.0,36.4]	13.4 [11.0,15.7]
DK	21.4 [18.8,23.9]	25.1 [20.4,29.8]	35.7 [28.4,43.0]	14.1 [11.0,17.2]
DE	25.8 [23.6,28.0]	34.1 [29.1,39.2]	36.4 [28.9,43.9]	21.4 [18.8,23.9]
NL	18.5 [16.5,20,5]	28.8 [23.8,33.8]	27.9 [20.3,35.6]	14.0 [11.8,16.2]
FR	33.5 [30.1,36.8]	44.4 [38.4,50.4]	32.7 [23.8,41.6]	26.4 [22.1,30.7]
CH	18.2 [14.9,21.4]	30.0 [22.8,37.2]	17.5 [9.00,26.0]	11.9 [8.18,15.6]
AT	28.0 [25.4,30.6]	38.2 [33.7,42.7]	30.6 [22.9,38.2]	18.8 [15.5,22.2]
IT	61.4 [58.0,64.7]	65.9 [59.1,72.8]	61.0 [49.9,72.2]	59.9 [55.8,64.0]
ES	55.2 [51.3,59.2]	62.2 [54.5,69.9]	50.0 [36.7,63.3]	53.3 [48.3,58.2]
GR	69.5 [66.5,72.5]	69.3 [64.6,74.0]	61.1 [52.6,69.5]	72.6 [68.1,77.1]

Table 6A.8 Median Values by Income Categories: Northern Countries (PPP euro)

Income categories	Age	N	Income	Consumption	Wealth
Low Income	50-59	216	10,772	2,549	46,416
(5-25 percentiles)	60-69	177	10,177	2,171	47,791
	70-79	139	8,395	2,269	50,977
	80+	55	8,126	1,744	49,844
Middle Income	50-59	226	19,627	2,760	71,253
(40-60 percentiles)	60-69	191	18,158	2,558	92,042
	70-79	115	13,348	2,294	62,503
	80+	56	11,444	2,116	46,191
High Income	50-59	249	33,407	3,399	125,472
(75-95 percentiles)	60-69	196	30,897	3,101	157,907
	70-79	121	22,026	2,549	130,496
	80+	64	18,515	2,558	123,794

Table 6A.9 Median Values by Income Categories: Central Countries (PPP euro)

Income categories	Age	N	Income	Consumption	Wealth
Low Income	50-59	489	6,794	2,980	61,536
(5-25 percentiles)	60-69	420	8,444	2,947	62,705
	70-79	242	8,013	2,661	46,556
	80+	80	8,665	2,420	8,839
Middle Income	50-59	508	18,458	3,529	101,235
(40-60 percentiles)	60-69	434	16,023	3,496	90,273
	70-79	273	14,524	3,137	62,808
	80+	111	12,906	2,875	29,210
High Income	50-59	554	42,332	4,273	164,205
(75-95 percentiles)	60-69	538	35,070	3,921	172,544
	70-79	324	26,516	3,529	138,935
	80+	143	26,269	3,163	116,744

Table 6A.10 Median Values by Income Categories: Southern Countries (PPP euro)

Income categories	Age	N	Income	Consumption	Wealth
Low Income	50-59	277	3,843	2,823	52,932
(5-25 percentiles)	60-69	286	4,580	2,823	70,400
	70-79	230	3,997	2,541	63,146
	80+	96	4,226	2,823	61,659
Middle Income	50-59	237	9,703	3,811	80,873
(40-60 percentiles)	60-69	278	9,313	3,614	92,340
	70-79	194	7,622	2,823	62,070
	80+	62	8,019	2,823	75,842
High Income	50-59	297	23,832	4,235	146,623
(75-95 percentiles)	60-69	238	20,485	4,446	130,290
	70-79	158	15,060	3,764	120,182
	80+	54	13,744	3,105	73,521

7 Methodology

Ed. Hendrik Jürges

This chapter provides short accounts of various methodological aspects of the Survey of Health, Ageing and Retirement in Europe and its co-ordination by the Mannheim Research Institute for the Economics of Aging (MEA) at the University of Mannheim, Germany. It includes an overview of both the substantive and technical development of the common survey instrument and its translation into the different languages. Further, we briefly describe the sample design and weighting strategy in the participating countries, our train-the-trainer program that aimed at implementing common practices in each country, and the field work and survey management. The chapter further presents basic information about unit and item non-response rates. Finally, we include in this chapter short methodological notes on the comparability of subjective health data, the imputation of missing information on income and wealth, and the elicitation of subjective probabilities. Further details will be available in a separate technical reports volume, which will be published later in 2005.

7.1 History of the Development Process: Pilots, Pre-Tests, and Main Study

Axel Börsch-Supan

The SHARE development process iterated in four stages between questionnaire development and data collection. In the first stage, starting in January 2002, the working groups produced an English-language draft questionnaire, departing from the HRS and ELSA instruments plus survey instruments in Germany, Italy and Sweden which addressed relevant questions. This draft questionnaire was piloted in the UK in September 2002 with help of the National Centre for Social Research (NatCen, London) which has also conducted the first wave of ELSA.

Based on the lessons from this pilot, the English-language questionnaire was thoroughly revised and, with the help of the language management utility (LMU), translated into all SHARE languages. These language elements were fed in a common CAPI programme. The second stage culminated in a first all-country pilot which applied this instrument simultaneously in all SHARE countries, using quota samples of some 75 individuals in each country (June 2003).

In the third stage, after further refinements of the instrument, the full questionnaire was pre-tested in January/February 2004 using genuine probability samples (some 100 primary respondents per country plus their spouses). This all-country pre-test also tested the country-specific logistics and the procedures to achieve probability samples.

During the fourth stage, an extensive statistical analysis of the pilot and pre-test results was conducted under the AMANDA project also financed by the European Commission. The improvements based on these analyses led to the final design of the instrument. The first prototype wave of about 1500 households per country began late April 2004 and was finished in most countries in October 2004. Supplementary data collection is still going on.

The articles in this book are based on an early and incomplete release of the SHARE data, created in November 2004 ("Release 0"). It includes 18,169 individuals in 12,512 households with completed interviews. The French data were only partial, and the November release did not contain Belgian data. While we have done a host of crosschecks, an extensive consistency and plausibility check of all data with a subsequent imputation process is work still to be done. All results in this book are therefore preliminary.

In April 2005, a more complete data set ("Release 1") will be accessible to the entire

research community. It will contain about 4,000 additional individual interviews in about 2,500 households, plus added generated and imputed variables. We hope that many researchers will take the opportunity to work with these fascinating data.

A final release with the complete data set – about 27,000 individuals – with an extensive set of generated and imputed variables ("Release 2") is planned for the first half of 2006.

7.2 Instruments: LMU, CAPI, DROP-OFF, and CMS

Marcel Das, Corrie Vis, and Bas Weerman

Although the actual fieldwork in SHARE was carried out by a different agency for each country, the programming of the individual instruments was done centrally by CentERdata, a survey research institute affiliated with Tilburg University in the Netherlands. The data were collected using a computer assisted personal interviewing (CAPI) program, supplemented by a self-completion paper and pencil questionnaire. The set-up of this CAPI program allowed each country involved to use exactly the same underlying structure of meta-data and routing. The only difference across countries was the language. This mechanism, where question texts are separated from question routing, enforces the comparability of all country specific translations with a generic questionnaire.

The CAPI program was written in Blaise: a computer-assisted interviewing system and survey processing tool for the Windows operating system, developed by Statistics Netherlands and also used by the US Health and Retirement Survey. The generic CAPI instrument was directly implemented in Blaise, and the generic texts (in English) were stored in an external database. After several rounds of revisions of the generic instrument, the different countries translated their versions of the instrument using the Internet and the so-called Language Management Utility (LMU), developed by CentERdata. Another program was written converting the translated question texts, interviewer instructions, answer categories, fill texts and other instrument texts (like error messages) from the (LMU) database into a country specific survey instrument, based on the blueprint of the generic version. Yet another program was developed to process a paper version of the separate country specific CAPI instruments, as well as the generic English version.

There were only few exceptions to the generic blueprint of the questionnaire. Country-specific parts were introduced when institutions were fundamentally different, e.g. in the health care section. Second, country specifics could be introduced by skipping irrelevant answer categories and by adding new country specific answer categories in the LMU. These exceptions never led to a different sequence of questions for a specific country.

Next to the CAPI instrument, a Case Management System (CMS) was developed to manage the co-ordination of the fieldwork. Only three countries used their own system: France, Switzerland, and The Netherlands. The CMS basically consists of a list of all households in the gross sample that should be approached by the interviewer. Contact notes and registrations, appointments with respondents, and area and case information could be entered in the system, and the system enforced common procedures for re-contacting respondents and how to handle non-response.

Some additional tools that converted the CMS into a complete Sample Management System (SMS) were developed. One tool facilitated the merging of all CMS databases that came back from the field, the preparation for sending the interview data, and the actual sending (via FTP) to the central management team. Another tool generated a progress report on the basis of the CMS databases.

All data that came back from the field were processed, converted to SPSS and STATA

data files and put on a secured web site. The so-called keystroke files, files that register all keystroke activity during the fieldwork, formed the basis for additional files containing information about times spent on different modules and the interview in total.

7.3 Translation Process

Janet Harkness

Due to the complex nature of the SHARE questionnaire, the translation process constituted a considerable challenge. Often, the costs and the effort called for in survey translation are underestimated. Thus, although each participating country in SHARE organised its own translation effort, the central co-ordinator initiated several activities to support the individual translation efforts:

- First, SHARE countries were provided with guidelines recommending how to go about hiring translators, testing translators, organising the translation, and reviewing and assessing the translation. The model advocated followed in simplified form that used in the European Social Survey (see ESS documents at http://www.europeansocialsurvey.org). The guidelines advocated organising a team to complete the translation and to review translations. The team would bring together the language and translation skills, survey questionnaire know-how and substantive expertise needed to handle the SHARE questionnaire modules. In the ESS the translation guidelines are closely linked to procedural specifications that participating countries have to meet. This was not the case in SHARE; participants were offered the guidelines as recommendations. Ultimately each country decided on its own procedures.
- Second, the project co-ordinator commissioned an expert in survey translation to advise SHARE participants on any translation queries they might have.
- Third, the project co-ordinator commissioned a professional review of a sample of the first draft of SHARE translations. SHARE countries were provided with feedback from an external set of translators, each working in their language of first expertise. The translators commented in detail on selected questions and submitted a brief general appraisal of the translation draft, pointing out areas where improvements could be made. This procedure was repeated for a later draft of the questionnaire and feedback again provided to SHARE participants. The pretest-and-pilot design of the SHARE study, coupled with the translation guidelines and appraisals, provided the SHARE project with a rare opportunity to refine and correct the source questionnaire and the translated versions.

7.4 Sample Design

Anders Klevmarken

In the participating SHARE countries the institutional conditions with respect to sampling are so different that a uniform sampling design for the entire project was infeasible. Good sampling frames for our target population of individuals 50+ and households with at least one 50+ individual did not exist or could not be used in all countries. In most countries there were registers of individuals that permitted stratification by age. In some countries these registers were administered at a regional level, Germany and The Netherlands are two examples. In these cases we needed a two or multi-stage design in which regions were sampled first and then individuals selected within regions. In the two Nordic countries Denmark and Sweden we could draw the samples from national population registers and thus use a relatively simple and efficient design. In France and Spain it be-

came possible to get access to population registers through the co-operation with the national statistical office, while in other countries no co-operation was possible. In three countries, Austria, Greece and Switzerland we had to use telephone directories as sampling frames and pre-screening in the field of eligible sample participants. As a result the sampling designs used vary from simple random selection of households to rather complicated multi-stage designs. These differences are reflected in the design weights that are all equal in Denmark, that use simple random sampling of households, but very different in, for instance, Italy. There are also national differences in efficiency. The simple Nordic designs are likely to be more efficient than some of the complex multi-stage designs used in central and southern Europe.

In the three countries that used telephone directories and in Denmark the final sampling unit was a household, while in all other countries the final unit of selection was an individual. Since all 50+ individuals of a household and any of their partners were included in the sample independently of how it was selected, the inclusion probability of a household is by design the same as that of any of the included household members. In the countries that used an individual as the finite unit of selection, the inclusion probabilities are proportional to the number of household members 50+, data that only became available in the interviews. In these countries it was thus only possible to compute design weights for responding households.

Unit non-response was compensated by adjusting the design weights. This was done in a calibration approach. In most countries the calibration was done to national population totals decomposed by age and gender, in two countries more information could be used and in two countries just national totals by gender were used.

7.5 The SHARE-SRC Train-The-Trainer Programme

Kirsten Alcser and Grant Benson

A train-the-trainer (TTT) programme was developed by the Survey Research Center (SRC) of the University of Michigan at Ann Arbor for the SHARE project, providing centralised training of local survey agency trainers in order to facilitate standard training of interviewers and standardisation of the data collection processes in the respective countries. Training tools were developed by SRC in close co-operation with MEA and CentERdata, including an Interviewer Project Manual describing all SHARE field protocols; a Facilitator Guide with power point slides and training scripts; a CD-based training on gaining respondent co-operation; and training videos to illustrate (a) the correct interpretation and recording of call attempts, and (b) physical measurements. All materials were translated from the English deliverables into the language of the country before being distributed to the local interviewers.

A TTT was conducted prior to each pilot/pretest and production data collection. After the initial TTT training, subsequent training sessions were abbreviated, covering primarily changes or additions to SHARE, as these evolved. A final product included a prototype agenda for the two-day training of SHARE interviewers in the host countries (see Table 1).

Table 1 SHARE Two-Day Training Plan

Topic	Length (Minutes)
Day 1:	
Introductions, welcome, logistics	15
SHARE project and questionnaire overview	45
Laptop overview and instrument installation check	30
Overview of Case Management System	75
Overview of the Blaise interview program	45
SHARE questionnaire walk-through (scripted mock scenario recommended): First half session	150
Day 2:	
Question and Answers from Day 1	15
SHARE questionnaire walk-through (scripted mock scenario recommended): Second half session	120
Proxy interviews	45
Importance of response rates	30
Contacting household	60
Practice using the Case Management system	60
Gaining respondent cooperation	60
Total time in training (excluding breaks):	12.5 hours

7.6 Fieldwork and Sample Management

Oliver Lipps and Guiseppe De Luca

Each individual survey agency managed their own field following their established protocols, subject to a set of requirements from the SHARE co-ordinating team, enforced by the design of the common electronic case management system (CMS). Most important among these requirements were measures to minimise the number of households who are unwilling or unable to participate in the survey. For example, advance letters explaining the importance of the study were sent to each household in the gross sample before the interviewer contacted them in person. At this stage, some countries also offered monetary or other incentives for participation. If a first attempt to gain the household's co-operation had been unsuccessful, the address was given to a new interviewer with special experience in gaining co-operation. If respondents were unable to participate due to health reasons, we asked for consent to have the interview done by a proxy respondents, e.g. an adult child.

During the field period, the SHARE co-ordinator set up a procedure to monitor the fieldwork in each participating country in real-time—in parallel to the survey agencies. Every two weeks, at pre-specified dates, the survey agencies sent their updated CAPI and CMS data to CentERdata, where the data was processed and then made available to the project co-ordinator. This data was then used by the co-ordination team to follow the progress made in each country. At each time during the entire field period it was thus possible to monitor (with a maximum lag of two weeks):

- how many households had been contacted
- how many interviews had been conducted
- which interviewers were actively working on SHARE and which were currently inactive
- what were the main reasons for non-contact
- what were the main reasons for non-interviews

Given this information, the co-ordinator was able to identify possible problems in the field and their reasons very early in the process. Strategies how to cope with such problems could be discussed with the country teams and survey agencies and implemented without unnecessary delay.

7.7 Survey Response

Guiseppe De Luca and Franco Peracchi

Survey participation may be viewed as the result of a sequential process involving eligibility, contact of the eligible units and response by the contacted units. For SHARE, the analysis of survey participation depends crucially on whether or not the sampling frame contains preliminary information on the eligibility status of the sample units. Countries that use telephone directories as sampling frames (namely Austria, Greece and Switzerland) have a higher probability of selecting ineligible sample units. However, once the effects of the different frames on eligibility rates are taken into account, one can compare response rates across all countries involved in the project.

Overall, the SHARE data release on which all results presented in the present volume are based ("Release 0") contains 18,169 individuals in 12,512 households. The unweighted country-average of household response rates is 55.4% (57.4% among the countries under EU-contract), see Table 2. France and the Netherlands have the highest response rates (69.4% and 61.6%, respectively), Switzerland the lowest (37.6%). Focusing attention on the reasons for household non-response, refusal to participate to the survey is the main reason (28.9%), although in some countries a non negligible fraction of non-response is also due to non-contact (12.4% in Spain) and other non-interview reasons (17.1% and 14.2% in Sweden and Germany respectively). An analysis of individual response rates and within-household response rates suggests that most of non-response in SHARE occurs at the household level, and that the response behaviour of individuals within a household is strongly and positively related. The unweighted country-average of within-household individual response rates is 86.3%. Preliminary response analysis by subgroup of the target population reveals only small differences in the patterns of survey participation by gender and age group.

Table 2 Household Response Rate

Country	Household Response Rate	Individual Response Rate (within household)
Sweden	42.1%	83.8%
Denmark	61.1%	93.0%
Netherlands	61.6%	87.9%
Germany	60.2%	86.5%
France	69.4%	91.7%
Switzerland	37.6%	86.9%
Austria	57.3%	87.4%
Italy	54.1%	79.7%
Spain	50.2%	73.8%
Greece	60.2%	91.8%
Total	55.4%	86.3%
Total (EU-funded)	57.4%	86.0%

7.8 Item Response

Adriaan Kalwij and Arthur van Soest

As common in household surveys, respondents sometimes answered questions with "I don't know" (DK) or "I'd rather not say" (RF, refusal). This behaviour is called item non-response. For an overwhelmingly large majority of the variables in SHARE, item non-response is a minor problem since the percentage of DKs or RFs is quite small. For example, there is hardly any item non-response in physical or mental health variables, in well-being, labour force status and job satisfaction, or in basic demographics and information on children. Somewhat larger item non-response rates are found for qualitative questions on pension entitlements, expectations, asset ownership or the nature of the assets.

The type of questions that suffers substantially from item non-response are questions on amounts of income, expenditure, or values of assets. In this respect, however, SHARE does not differ much from comparable surveys like ELSA or HRS. For example, owners of shares of stock or stock mutual funds are asked the total value of their (household's) shares of stock and stock mutual funds. In SHARE, 30.2% of the owners answer DK of RF, compared to 35.0% in HRS wave 2002.

Respondents answering DK or RF are asked a number of subsequent questions on whether the amount is larger than, smaller than, or about equal to a given amount. This so-called unfolding bracket design was already used in HRS 1992 and proved to be an effective way to collect categorical information on the initial non-respondents. For example, with bracket questions on the amounts €25,000, €50,000 and €100,000, for those who go through all the bracket questions, we know whether the amount is less than €25,000, about €25,000, between €25,000 and €50,000, about €50,000, etc. Like in HRS, a large fraction of initial non-respondents appear to be willing to answer the bracket questions. For examples, for shares of stocks and stock mutual funds, 45.4% of initial non-respondents in SHARE complete the brackets, compared to 41.2% in HRS. For 16.5% of all owners in SHARE, there is no information on the amount at all, compared to 18.6% in HRS. Thus SHARE compares favourably to HRS in this respect, something that is generally also found for other amount questions.

For studies that use income or income components, wealth or wealth components, etc., as one of the right-hand variables, missing information on one of these variables is a problem. Deleting observations with missing information is often an unattractive option for two reasons. The first reason is that a smaller sample size results in an efficiency loss. The second reason is that deleting missing data may yield biased inferences when item non-response is related to the variable of interest. For instance, the reason for item non-response may be related to the same factors that drive income or health of the respondent and deleting missing data would then lead to a selective sample.

Therefore, instead of deleting missing data, the missing values are replaced by imputed values, i.e., observed values of other respondents that are similar to the respondent considered in certain relevant aspects. Many imputation methods exist. For the data release used by all papers in this volume, we followed the procedure of Hoynes et al. (1998). Imputations were first done recursively for a small set of core variables (income from employment, self employment or public pensions, value of owner-occupied housing, amount held in shares of stock and stock mutual funds, amount held in checking and saving accounts, and food consumption. This is done to guarantee that imputations respect the correlation structure of these variables. For example, respondents with missing food consumption but with high (observed or imputed) earnings, were assigned an observed (probably relatively

high) food consumption amount of another respondent with similarly high earnings but with observed food consumption. The imputed values are flagged (i.e., an indicator variable is constructed indicating the level of imputation) and flags and imputed variables will be included in the public release of the data. More refined imputation methods will be applied to later data releases.

7.9 Computing a Comparable Health Index

Hendrik Jürges

Subjective data, such as self-assessed health can be subject to cross-country bias for several reasons. However, there is a fairly straightforward possibility to compute a single measure of health, that is comparable across countries. The main requisite are objective data on the respondents health: self reported diagnosed chronic conditions, mental illnesses, symptoms (especially pain), or functional limitations. If available, one also uses medical records, and measurements and tests like blood samples, grip strength, balance, gait speed, etc. The absence of any conditions, symptoms, or limitations, implies perfect health, i.e. an index value of 1. The presence of a condition reduces the health index by some given amount or %age, the so-called disability weight. The disability weight of each condition or symptom is assumed to be the same for each respondent.

Disability weights are often derived by expert judgements or surveys specialised to elicit health preferences, using time trade-off or standard gambles. In SHARE, we are able to compute disability weights from within our sample (Cutler and Richardson 1997) by estimating ordered probability (e.g. probit) models of self-reported health (which ranges e.g. from „excellent“ to „poor“) on a large number of variables representing chronic conditions, symptoms, ADL problems, depression, physical functioning, height, weight, and cognitive functioning. We can also include our measures of grip strength and walking speed, and basic demographic variables like age and sex. The health index is then computed as the linear prediction from this regression (the latent variable), normalised to 0 for the worst observed health state (often referred to as „near death“) and 1 for the best observed health state (referred to as „perfect health“). This procedure implies disability weights for each condition or impairment that are equal to the respective (also normalised) regression parameters. Since the variable on which we base this measurement is self-reported health itself (and thus potentially subject to cross-cultural bias), we account for country specific reporting styles by modelling the latent variable thresholds as a function of country of residence (i.e. we basically have fixed country effects at each threshold). Thus thresholds are allowed to vary across countries, while disability weights are constrained to be the same in each country.

7.10 Income Imputation

Omar Paccagnella and Guglielmo Weber

The Definition of Income: Total income is the sum of some incomes at the individual level and some at the household level. The basic definition used in the SHARE project reflects money income before taxes on a yearly base (2003) and includes only regular payments. Lump-sum payments and financial support provided by parents, relatives or other people are not included.

The available data at the individual level include: income from employment; income from self-employment or work for a family business; income from (public or private) pensions or invalidity or unemployment benefits; income from alimony or other private regu-

lar payments; income from long-term care insurance (only for Austria and Germany).

The available data at the household level include: income from household members not interviewed; income from other payments, such as housing allowances, child benefits, poverty relief, etc.; income actually received from secondary homes, holiday homes or real estate, land or forestry; capital income (interest from bank accounts, transaction accounts or saving accounts; interest from government or corporate bonds; dividend from stocks or shares; interest or dividend from mutual funds or managed investment accounts). For homeowners, the data at the household level also include imputed rent, based on the self-assessed home value minus the net residual value of the debt (payments for mortgages or loans). The interest rate used for imputed rents is fixed at 4% for all countries.

The SHARE definition of income does not include home business and „other types of debts“: in the latter case we are not able to separate the amount of the debts on cars and other vehicles from the total amount of debts.

Imputations: Whenever a respondent did not know or refused to give the exact amount in a certain question, unfolding brackets (UB) questions were asked to recover that value (see above). Different cut-offs were used across countries.

As far as UB observations are concerned, we implemented a simple hot-deck procedure to impute values for those cases in which the exact amount are missing. At this stage, only the amount variable is imputed. Also, we imputed one variable at a time and did only one round of imputations for each variable. No stratification was made, except by country (due to the differences in the cut-offs).

In the event of a „refusal“ or „don‘t know“ answer to all UB questions, we stratify by country and age classes, except for financial assets, where income is computed on the basis of the stock values (whether exact records exist or just imputed).

In the event of “invalid” („refusal“, „don‘t know“, or missing) values on frequency variables (for instance the period covered by a payment and the number of months in which the respondent has received the payment in 2003), a linear regression technique was applied to impute such frequencies. In particular, we used the linear regression only for the frequencies of received pension. The regression conditions upon the following independent variables: age, sex and dummy indicators for whether the associated amount variable belongs to the intervals defined by the 1st, 2nd, and 3rd quartile.

We produce the estimated coefficients for each frequency variable within each country. In a few cases the hot-deck procedure may fail because there are no donors that can be used for that specific interval.

7.11 Wealth Imputation

Dimitrios Christelis, Tullio Jappelli, and Mario Padula

The Definition of Wealth: SHARE contains the following information on the ownership and value of the following assets.

- Real assets, i.e. the ownership and value of the primary residence, of other real estate, of the share owned of own businesses and of owned cars.
- Gross financial assets, i.e. the ownership and value of bank accounts, government and corporate bonds, stocks, mutual funds, individual retirement accounts, contractual savings for housing and life insurance policies.
- Mortgages and financial liabilities.

The values of these variables are summed over all household members in order to generate the corresponding household-level variables. As with income, whenever a respondent did not know or refused to give the exact amount in a certain question, unfolding brackets (UB) questions were asked to recover that value, where different entry points were used across countries.

Imputations: Imputation is performed using the hotdeck imputation package in STATA, which is based on the approximate Bayesian bootstrap described in Rubin and Schenker (1986). This procedure requires the classification (by some variables, e.g. unfolding bracket values, age, etc.) of the non-missing observations in cells, from which bootstrap samples are drawn and values from these samples are used to impute the missing observations in each.

We impute asset values in two steps. (1) If an individual gives a response of „don't know" or refuses to answer the ownership question, then ownership is imputed. The imputation is done using country and age as classificatory variables for the hotdeck procedure. (2) The amount is imputed when ownership is imputed, when the individual gives a response of don't know/refusal and either does not start the unfolding brackets procedure, does not complete it, or completes it without giving a specific amount as an approximate answer, or when the original answer is deemed illegitimate for other reasons.

In the end we divided the variables into three groups according to the criteria by which the cell classification for imputation was made (all imputations were made separately for each country).

- Housing, bank accounts and cars: These variables contained numerous positive non-missing values, reflecting the wide ownership of the corresponding assets. In the case in which we did not know the bracket value we used age as an additional variable. When we knew the bracket value, we used it together with age.
- Mortgage: We needed to link the value of the mortgage to the value of the house, in order to avoid as much as possible the case where the imputed value of the mortgage was greater than the value of the house. Thus, when we did not know the bracket value of the mortgage, we used the bracket value of the house as a classificatory variable; when we knew the bracket value of the mortgage we used it for the imputation and we excluded the bracket value of the house because its inclusion would have made the cells too thin.
- Other real estate, bonds, stocks, mutual funds, individual retirement accounts, contractual savings for housing, life insurance, own business and owned share thereof and financial liabilities: These variables exhibited relatively few positive non-missing values. We used age to define the imputation cells when we did not know the bracket value, while we used the bracket value for their definition when we knew it.

7.12 Methodological Issues in the Elicitation of Subjective Probabilities

Luigi Guiso, Andrea Tiseno, and Joachim Winter

Non-response rates for the subjective expectations questions are generally low. For the "sunny day" question, the non-response rate is 3.2% and for the subjective survival question it is 7.9%. There is only minor variation of non-response rates across countries—the smallest non-response rates (below 5%) are observed in Austria, Switzerland, and Germany; the largest non-response rate to the subjective survival question of about 15% in Spain.

An issue that has received some attention in the literature on probabilistic expectations is rounding to certain "focal values" (in particular, to 0%, 50%, and 100%, and to a lesser degree to other multiples of 10%). Even more striking than rounding is the excessive use of 50% responses. Some authors argue that a 50% response reflects "epistemic" uncertainty about the event in question (e.g., Bruine de Bruin, et al. 2002). In this case, 50% responses would be similar to a "don't know" response, and they would have to be dealt with differently than other multiples of 10% generated by rounding. While a deeper analysis of this issue is beyond the scope of this paper, it is nevertheless interesting to see whether the phenomenon of rounding and excessive 50% responses is present in the SHARE data as well, and even more importantly, whether there are any striking differences in response behaviour to probabilistic expectations questions across participating countries.

For instance, an analysis of the responses to the "sunny day" question confirms findings of other surveys such as HRS: Most of the responses are at focal values, in particular multiples of 10%, with a peak at 50% that cannot easily be explained by rounding. Overall, however, only about one fifth of all responses are at 50%, which is less than what has been found in other surveys. In the SHARE data, the prevalence of 50% responses is similar in all questions—between 20% and 30% of all responses. Second, there is some variation across countries. The question with the largest degree of cross-country variation in the use of 50% responses is the "sunny day" question, and it seems likely that the observed differences are due to actual differences in weather conditions and not in response behaviour—the Mediterranean countries simply have better weather, so the entire response distribution should be shifted to the right, reducing the number of 50% responses. For the other questions, the variation is rather small.

Future research will have to test whether these differences correctly reflect differences in the underlying expectations across countries or whether there are country-specific response styles for probabilistic expectations questions. Another methodological issue related to probabilistic expectations questions is whether there is a general tendency by respondents to be optimistic (i.e., to report high probabilities for positive and low probabilities for negative events) in hypothetical choice questions. A first impression of whether this effect exists can be obtained by correlating responses to a question that likely reflects an individual's overall optimism (in the case of SHARE, we use the "sunny day" question for this purpose) with the responses to substantive probabilistic questions.

Table 3 shows the correlation of responses to the substantive expectations questions with responses to the "sunny day" question. While all correlations are statistically signifi-

Table 3 Correlation of Responses to the Substantive Expectations Questions with Responses to the "Sunny Day" Question

Question		Correlation	p-value	N
ex007	Decrease in pensions	-0.0755	0.000	6240
ex008	Increase in retirement age	-0.0563	0.000	6268
ex009	Survival to target age	0.0979	0.000	15108
ex010	Better standard of living	0.1154	0.000	15618
ex011	Worse standard of living	0.0262	0.001	15531

Notes: Reported correlation are Spearman's rank correlation coefficients. The p-value is for the null hypothesis that the row variable is independent of the response to the "sunny day" question.

cant at any conventional confidence level (due to the large sample size), the absolute size of the correlation coefficients is small, which can be taken as evidence against a general tendency to be optimistic or pessimistic.

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