First Results from the Survey of Health, Ageing and Retirement in Europe (2004-2007)

Starting the Longitudinal Dimension

November 2008

Edited by

Axel Börsch-Supan (Coordinator)
Agar Brugiavini
Hendrik Jürges
Arie Kapteyn
Johan Mackenbach
Johannes Siegrist
Guglielmo Weber

Authors:

Kirsten H. Alcser
Karen Andersen-Ranberg
Viola Angelini
Claudine Attias-Donfut
Mauricio Avendano
Grant D. Benson
Radim Bohacek
Axel Börsch-Supan
Maarten Brouwer
Agar Brugiavini
Alex Burdorf
Lisa Callegaro
Danilo Cavapozzi
Dimitris Christelis
Kaare Christensen
Sarah Cornaz
Laura Crespo
Enrica Croda
Marcel Das
Giuseppe De Luca
Michael Dewey
Marcel Erlinghagen
Meenakshi Fernandes
Steven Gorlé
Heidi M. Guyer
Karsten Hank
Alberto Holly
Tullio Jappelli
Hendrik Jürges
Arie Kapteyn
Olaf von dem Knesebeck
Martin Kohli
Renske Kok
Harald Künemund
Anton Kunst
Anne Laferrère
Karine Lamiraud
Howard Litwin
Antigone Lyberaki
Johan Mackenbach
Maurice Martens
Erik Meijer
Pedro Mira
Farizah Mohd Hairi
Karine Moschetti
Michał Myck
Jim Ogg
Omar Paccagnella
Mario Padula
Giacomo Pasini
Franco Peracchi
Jean-Marie Robine
Claudio Rossetti
Brigitte Santos-Eggimann
Eliyahu V. Sapir
Barbara Schaan
Mathis Schröder
Mario Schnalzenberger
Nicole Schneeweis
Johannes Siegrist
Tilja van den Berg
Karel Van den Bosch
Arthur van Soest
Jacques Spagnoli
Mikael Thinggaard
Platon Tinios
Claudia Vogel
Morten Wahrendorf
Guglielmo Weber
Christina Benita Wilke
Joachim Winter
Rudolf Winter-Ebmer
François-Charles Wolff
Tarik Yalcin
Gema Zamarro
Martina Zweimüller

Mannheim Research Institute for the Economics of Aging (MEA)
L13, 17
68131 Mannheim

Published by
Mannheim Research Institute for the Economics of Aging (MEA)
L13, 17
68131 Mannheim
Tel.: +49-621-181 1862
Fax: +49-621-181-1863

Internet:
http://www.mea.uni-mannheim.de
http://www.share-project.org

The SHARE data collection has been primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life) and through the 6th framework program (projects SHARE-I3, RII-CT- 2006-062193, and COMPARE, CIT5-CT-2005-028857). Additional funding came from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, OGHA04-064). Data collection for Wave 1 was nationally funded in Austria (through the Austrian Science Foundation, FWF), Belgium (through the Belgian Science Policy Office), France (through CNAM, CNAV, COR, Drees, Dares, Caisse des Dépôts et Consignations, et le Commissariat Général du Plan) and Switzerland (through OFES, DUMSC, HEC, UNIL). The SHARE data collection in Israel was funded by the U.S. National Institute on Aging (R21 AG025169), by the German-Israeli Foundation for Scientific Research and Development (G.I.F.), and by the National Insurance Institute of Israel.

Printed by
Druckerei Schwörer
Mönchwörthstraße 222
D-68199 Mannheim

© Mannheim Research Institute for the Economics of Aging, 2008

ISBN 978-3-00-024969-3

Contents

1 Introduction 10
Editor: Axel Börsch-Supan

1.1 The Fascination of the Ageing Process 11
1.2 Why Do We Need More Interdisciplinary Data to Understand Ageing? 11
1.3 Why Do We Need More International Data to Understand Ageing? 12
1.4 Why Do We Need More Longitudinal Data to Understand Ageing? 13
1.5 SHARE as an Infrastructure 14
1.6 Our Main Results 15
1.7 Where Do We Go From Here? 19
1.8 Acknowledgements 20

2 Comparison Between SHARE, ELSA, and HRS 23
Editor: Arie Kapteyn

2.1 Overview of Available Aging Data Sets 24
Erik Meijer, Gema Zamarro, Meenakshi Fernandes

2.2 Health Comparisons 30
Meenakshi Fernandes, Gema Zamarro, Erik Meijer

2.3 Mental Health and Cognitive Ability 40
Gema Zamarro, Erik Meijer, Meenakshi Fernandes

2.4 Labor Force Participation and Retirement 48
Gema Zamarro, Erik Meijer, Meenakshi Fernandes

2.5 Income and Replacement Rates 56
Erik Meijer, Gema Zamarro, Meenakshi Fernandes

3 The SHARE Respondents 65
Editor Axel Börsch-Supan

3.1 What Has Happened to the Oldest Old SHARE Participants After Two Years? 66
Karen Andersen-Ranberg, Jean-Marie Robine, Mikael Thinggaard, Kaare Christensen

3.2 Health, Bequests, and Social Support in the Last Year of Life: First Results from the SHARE End-of-Life Interviews 74
Hendrik Jürges

3.3 Czech Republic and Poland – the 50+ on Labour Markets in Transition 84
Radim Bohacek, Michal Myck

3.4 Israel: Diversity Among Population Groups 93
Howard Litwin, Eliyahu V. Sapir

3.5 Home, Houses and Residential Mobility 99
Viola Angelini, Anne Laferrère

3.6 Staying or Moving? Housing and Residential Mobility ... 108
Martin Kohli, Harald Künemund, Claudia Vogel

4 Health and Health Care ... 117
Editor: Johan Mackenbach

4.1 Changes in Physical Health Among Older Europeans ... 118
Mauricio Avendano, Johan Mackenbach

4.2 The Association Between Socioeconomic Status and Changes in Health in Europe ... 125
Renske Kok, Mauricio Avendano, Johan Mackenbach

4.3 Changes in Health-Behaviour Related Determinants ... 131
Farizah Mohd Hairi, Mauricio Avendano, Johan Mackenbach

4.4 The Effects of Ill Health on Displacement from the Labour Market and Potential Impact of Prevention ... 137
Alex Burdorf, Tilja van den Berg, Mauricio Avendano, Anton Kunst, Johan Mackenbach

4.5 Do New Countries Joining SHARE Experience a Different Level of Health Services Utilization? ... 143
Jacques Spagnoli, Sarah Cornaz, Brigitte Santos-Eggimann

4.6 Life Events and Change in Economic Resources as Predictors of Change in Health Services Utilization ... 149
Sarah Cornaz, Jacques Spagnoli, Brigitte Santos-Eggimann

4.7 Changes in Health Out-of-Pocket Payments and Health Care Utilization in the Early Post-Retirement Period ... 156
Alberto Holly, Karine Lamiraud, Karine Moschetti, Tarik Yalcin

5 Social and Family Context ... 165
Editor Johannes Siegrist

5.1 Shrinking Families? Marital Status, Childlessness, and Intergenerational Relationships ... 166
Martin Kohli, Harald Künemund, Claudia Vogel

5.2 Evolution of Social Support ... 174
Claudine Attias-Donfut, Jim Ogg, Francois-Charles Wolff

5.3 Changes in Financial Transfers: Do Family Events Matter? ... 182
Claudine Attias-Donfut, Jim Ogg, Francois-Charles Wolff

5.4 Social Productivity and Quality of Life – First Prospective Findings ... 190
Morten Wahrendorf, Olaf von dem Knesebeck, Johannes Siegrist

5.5 Informal Care and Labour Force Participation: The Economics of Family Networks ... 197
Lisa Callegaro, Giacomo Pasini

6 Work and Retirement ... 205
Editor: Agar Brugiavini

6.1 Exits from the Labour Force ... 206
Agar Brugiavini, Giacomo Pasini, Franco Peracchi

6.2 Job Quality and Retirement Decisions ... 215
Mario Schnalzenberger, Nicole Schneeweis, Rudolf Winter-Ebmer, Martina Zweimüller

6.3 Public, Occupational and Individual Pension Coverage ... 222
Lisa Callegaro, Christina Benita Wilke

6.4 Changes in Health Status and Work Disability ... 230
Axel Börsch-Supan

6.5 Dynamics of Volunteering ... 239
Karsten Hank, Marcel Erlinghagen

6.6 Retirement and Mental Health ... 247
Agar Brugiavini, Enrica Croda, Michael Dewey

6.7 Quality of Work and Well-being: The European Dimension ... 255
Johannes Siegrist, Morten Wahrendorf

6.8 Caring for Parents and Employment of European Middle-Aged Women ... 263
Laura Crespo, Pedro Mira

7 Socio-Economic Status ... 271
Editor: Guglielmo Weber

7.1 Income and Income Changes ... 272
Danilo Cavapozzi, Omar Paccagnella, Guglielmo Weber

7.2 Poverty and Persistent Poverty: Adding Dynamics to Familiar Findings ... 278
Antigone Lyberaki, Platon Tinios

7.3 Real and Financial Assets in SHARE Wave 2 ... 285
Dimitris Christelis, Tullio Jappelli, Mario Padula

7.4 Consumption ... 291
Viola Angelini, Agar Brugiavini, Guglielmo Weber

7.5 Inequality, Life-Course Transitions, and Income Positions ... 297
Steven Gorlé, Karel Van den Bosch

7.6 Expectations and Attitudes ... 306
Joachim Winter

8 Development ... 313
Editor: Hendrik Jürges

8.1 The Development Process: Going Longitudinal and Including New Countries ... 314
Axel Börsch-Supan, Hendrik Jürges

8.2 Survey Instruments in SHARE Wave 2 ... 316
Maarten Brouwer, Marcel Das, Maurice Martens

8.3 Training for SHARE Wave 2 ... 322
Kirsten H. Alcser, Grant D. Benson, Heidi M. Guyer

8.4 Attrition ... 327
Mathis Schröder

8.5 Sampling Design and Weighting Strategies in the Second Wave of SHARE 333
Giuseppe De Luca, Claudio Rossetti

8.6 Fieldwork and Survey Management in SHARE 339
Barbara Schaan

8.7 Item Non-Response 345
Dimitris Christelis

8.8 Enhancing International Comparability Using Anchoring Vignettes 353
Arthur van Soest

List of Contributors 358

6.1 Exits From the Labour Force

Agar Brugiavini, Giacomo Pasini, Franco Peracchi

This section describes the labour market activity of the elderly in the SHARE sample using both the cross-sectional and the longitudinal dimension of the survey. Although increasing the working lives of current and future cohorts is a priority in the European agenda, it is not entirely clear yet how retirement decisions are affected by the institutional setup in the different countries, in particular by social security and pension arrangements. In fact, while the available evidence suggests a direct relation between "unused labour capacity" and the incentives to retire early embedded in the social security and pension system (Gruber and Wise, 1999, 2004), other determinants of early retirement should also be considered, such as the health status of an individual. Because of its design, SHARE is especially suited to shed light on these issues.

Labour Force Participation in the 2006 Sample

Our analysis is based on the self-reported current economic status of the SHARE respondents. The survey distinguishes between six labour force states: working, unemployed, disabled, retired, homemaker and "other". The question about labour market status is asked to all age-eligible individuals (including the first respondent's spouse, irrespective of age).

Figure 1 presents the fraction of respondents aged 50+ who report themselves in the labour force (working or unemployed), retired or disabled, or in other conditions (homemaker and "other" in the original classification). A first striking result of Figure 1 is that in Austria, Italy and Poland, the fraction of retired men is much higher than in the other countries (above 60%). Overall, the percentage of people in the labour force is high in Sweden, Denmark, Switzerland and Czech Republic. As for gender differences, a general pattern is that the fraction of people who report to be in the labour force (employed or unemployed) is always higher for men than for women. This is partly true also for self-reported retired, although there are several exceptions. In Sweden, Denmark, Germany and Israel, for example, the differences by gender in the fraction of retirees are barely statistically significant, while in Poland and the Czech Republic the fraction of retired women is higher than that of retired men. The "other" category is especially important for women in Mediterranean countries (Italy, Spain, Greece) and in the Netherlands. In these countries, the "other" category contains a substantial fraction of women who report themselves as "homemaker" and have had limited or no labour market experience during their lifetime. These differences in labour market status across countries are likely to arise from differences in institutions and social norms.

Figure 2 presents the employment rate of people aged 50-64, by country and gender. We focus on individuals in this age group because, unlike older respondents in SHARE, they are likely to face important labour force participation decisions. The aim is to measure the fraction of people employed, but various definitions of employment are possible. Figure 2 considers three alternative definitions: the first definition (orange bar) is based on people who report themselves as employed or self-employed, the other two definitions are both based on (self-reported) usual hours of work per week. In particular, the second case (pink bar) corresponds to working fifteen hours or more per week while the third case (grey bar) corresponds to working a positive number of hours. Cross-country differences are little affected by the precise definition adopted: employment rates in this age group are lower for women than for men in all countries. Sweden and Switzerland stand out for the particularly

high employment rate of both men and women. Employment rates are instead very low in Poland. Although cross-country differences may be partly driven by cohort and composition effects, the fact that we control for age by restricting attention to people aged 50-64 suggests that institutional features are important. As already mentioned, this age group largely consists of individuals whose labour force participation decisions are most likely affected by the generosity and eligibility rules of the social security and pension system.

Besides financial incentives and institutional rules, other determinants of early retirement should also be considered. Especially important is the health status of an individual. Figure 3 focuses on people aged 50-64 who are in the labour force, disabled or retired, and presents the distribution of current activity, by country. The top-left panel of the figure considers all individuals irrespective of their health, whereas the other three panels consider only "healthy people". The top-right panel defines as healthy an individual who is "functioning", i.e. does not have any limitation out of six activities of daily living, the bottom-left panel defines as healthy an individual with no symptoms, while the bottom-right panel defines as healthy an individual who reports no chronic diseases.

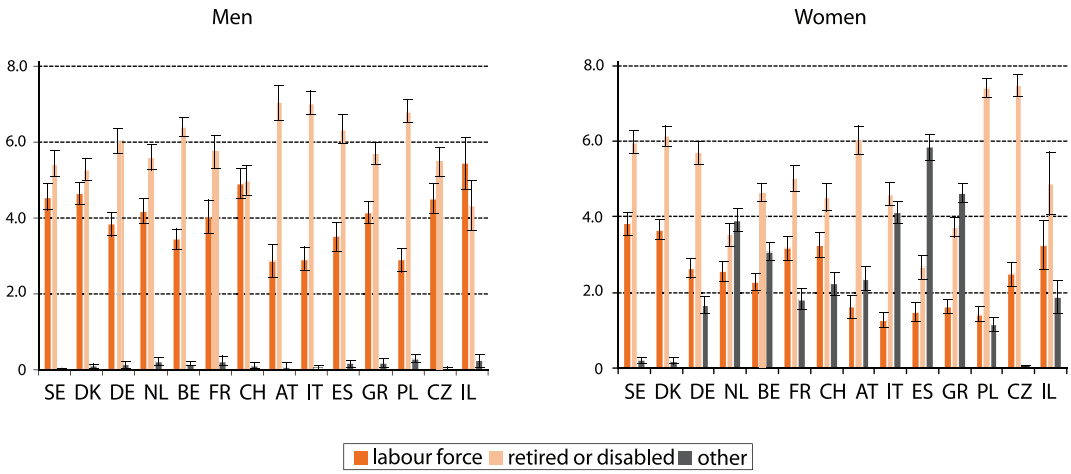

Figure 1 *Labour Market Status by FGender*

Note: Sample Size: Men = 15,227; Women = 18,266. Brackets on top of each bar represent 95% confidence intervals

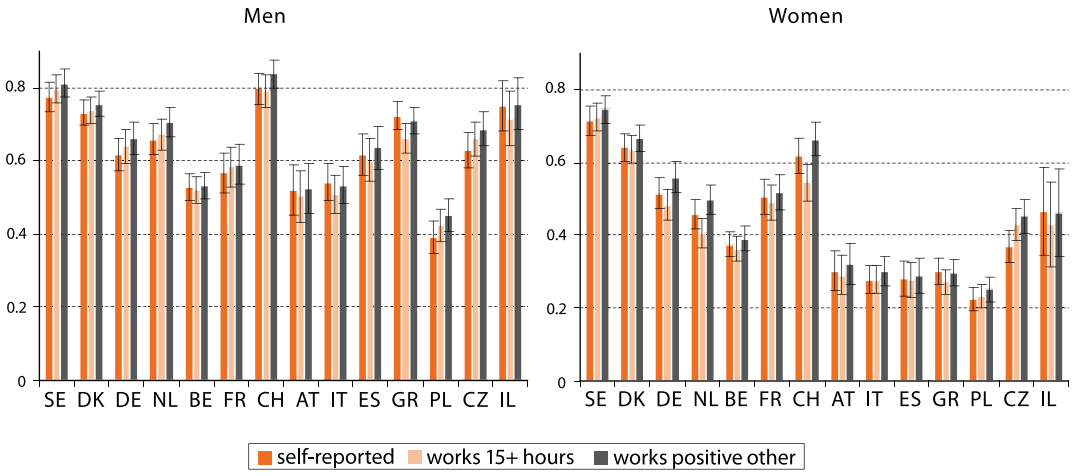

Figure 2 *Employment Rates by Gender*

Note: Sample size: Men = 7635; Women = 9465. Brackets on top of each bar represent 95% confidence intervals

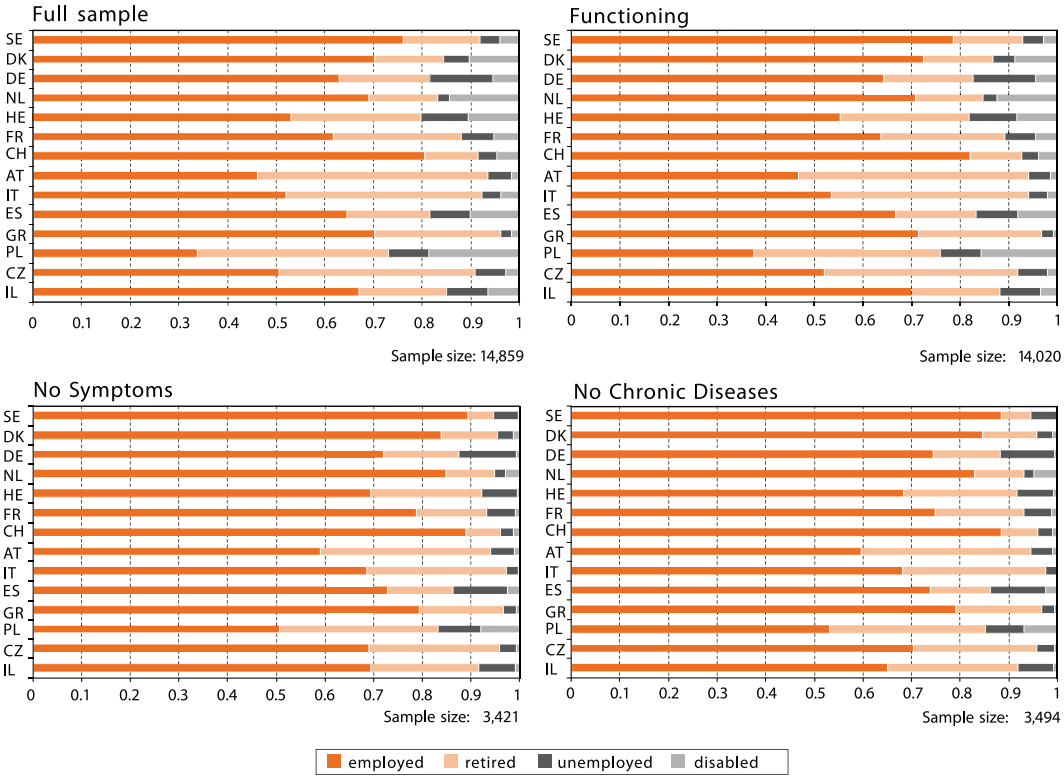

Figure 3 *Distribution of Labour Market Status by Health Status*

Note: Sample Size: Men = 15,227; Women = 18,266

Comparing the various panels of Figure 3, it appears that people in good health tend to work more. However, there are significant differences both depending on the health definition and, given the same health definition, across countries. In particular, the fraction of people in good health who report themselves as fully retired is strikingly high in Austria and Poland. A comparison can be drawn between the different sub-samples and the full sample: there is little difference in employment rates between the full sample (top-left panel) and the sample in "good health" when good health is defined as absence of limitations (top-right panel) . On the other hand, employment rates are approximately 5-10% higher when health is defined as absence of symptoms (bottom-left panel) or chronic diseases (bottom-right panel), suggesting that important differences emerge in the health measure to be used when studying labour market decisions. Interestingly, there is a non-negligible fraction of individuals who report themselves as disabled in Poland, Spain, the Netherlands and Denmark, but have no limitations in daily living activities (top-right panel). One explanation is that in these countries disability is used as a pathway to retirement. Of course, the relationship between labour market status and health may be more complex than it appears from our descriptive evidence, as retirement decisions depend in a complex way on pain perception and the number and type of limitations on activities of daily living.

Longitudinal Analysis: Labour Market Transitions

The dynamic features of the data can be studied by using both the 2004 and the 2006 SHARE samples. However, care is needed when interpreting the results because of the attrition problem: if the longitudinal sample is self-selected with respect to some dimension of interest, results may be biased. As an example, if only the healthy individuals remain in the sample, then the panel is no longer representative of the underlying population. A detailed discussion of the panel dimension of SHARE and of the potential attrition problems in the data can be found in the methodological chapters in Section 7 of the book. Because the panel SHARE sample provides information on the economic status of individuals two years apart, we can study the patterns of labour market transition over a two-year period. In what follows, we analyse three of these transitions, namely the transition out of the labour force, the transition out of employment, and the transition into retirement. Labour market participation, and its relation to incentives and health status, is intrinsically a dynamic problem. For example, because retirement decisions depend on health status, a worsening of health may be relevant. This is the issue tackled by the multivariate analysis at the end of this section. As already mentioned, retirement decisions also depend on the incentives that individuals face during their career, including eligibility conditions and benefits calculation rules. Table 1 contains the transition matrices for men and women aged 55-64, which is the age band where transitions are most likely. The labour force states considered are those of Figure 1, namely in the labour force, retired or disabled, and other. The rows and the columns of the table correspond to the labour market conditions in 2004 and 2006, respectively, and the entries to the fraction of people moving from one state in 2004 to the same or another state in 2006.

	LABOUR MARKET STATUS 2006							
	MEN				**WOMEN**			
LABOUR MARKET STATUS 2004	In labour force	Retired or disabled	Other	Total	In labour force	Retired or disabled	Other	Total
In labour force	1,157	465	38	1,660	902	316	108	1,326
	69.7	28.0	2.3	100	68.0	23.8	8.14	100
Retired or disabled	29	1,244	17	1,290	25	1,002	90	1,117
	2.2	96.4	1.3	100	2.2	89.7	8.1	100
Other	6	10	7	23	52	175	867	1,094
	26.1	43.5	30.4	100	4.7	16.0	79.2	100
Total	1,192	1,719	62	2,973	979	1,493	1,065	3,537
	40.1	57.8	2.1	100	27.7	42.2	30.1	100

Table 1 Transition Matrix, Self Reported Labour Market Status in 2004 and 2006

The fraction of people moving out of the labour force into disability or retirement is substantial: over a 2-year period 28% of the men and 23.8% of the women do so. A notable feature, highlighted by the column labelled "In labour force", is that retirement is not a completely absorbing state: over a 2-year period, 2.2% both of men and women move back from retirement or disability into the labour force.

Figure 4 provides additional information on the transitions out of employment. Each bar represents the fraction of men and women employed in 2004 who are in any other state in

2006. There seems to be a stark heterogeneity in exit rates from employment, which range from 14% for Greek men to 61% for Austrian women. Moreover, there is no common pattern of gender differences across countries. Nevertheless, the small sample size in each country limits the statistical significance of these cross country differences.

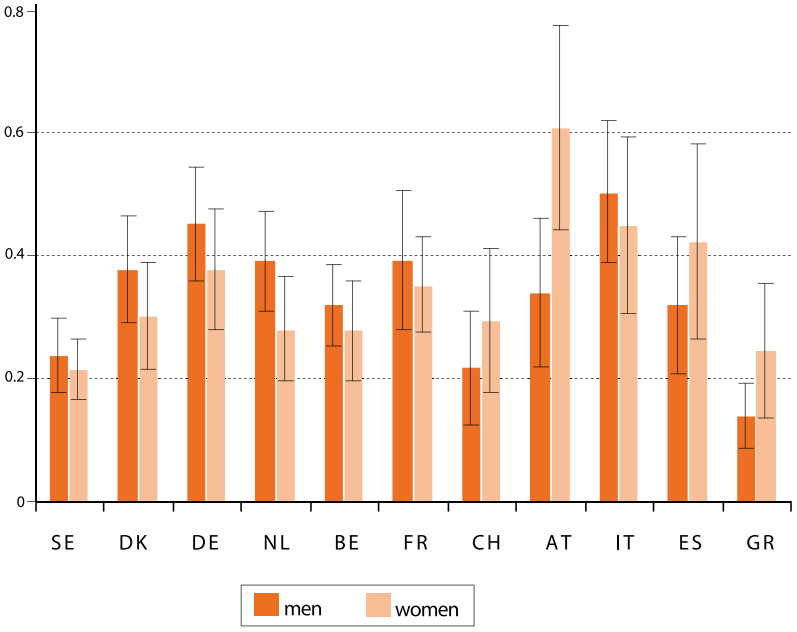

Figure 4 *Transition out of Employment by Country and Gender*

Sample Size: Men = 15,227; Women = 18,266. Brackets on top of each bar represent 95% confidence intervals

Figure 5 illustrates the patterns of exit from employment, by country and gender. While men generally report moving into retirement, a substantial fraction of women reports moving into "homemaking", especially in Switzerland, Belgium, the Netherlands, and the Mediterranean countries.

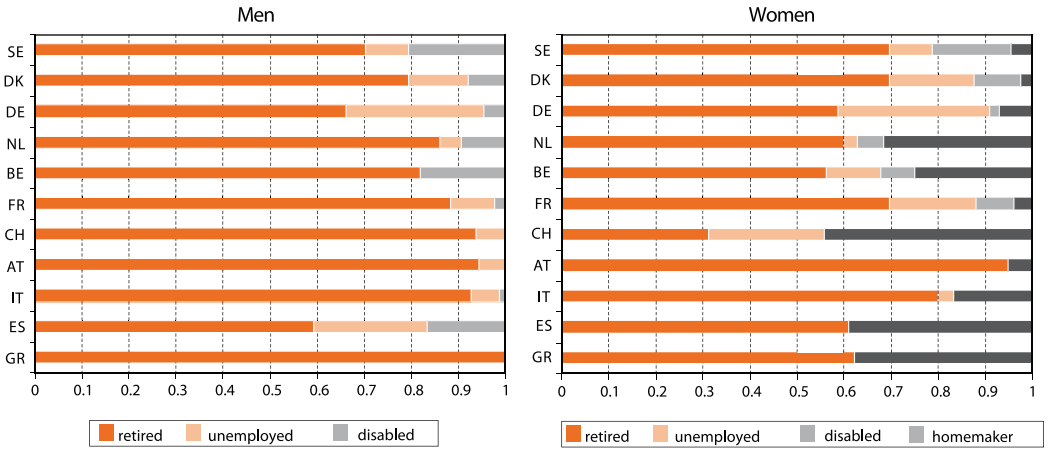

Figure 5 *Transition Out of Employment to Different Labour Market States by Country and Gender*

Further, as it also emerges from the first column of Table 1, individuals do not always move directly from employment into retirement. For example, a non-negligible fraction of Belgian and Swedish men move from employment into disability before ending up into retirement. While this may be driven by the incentives provided by the welfare state, the large fraction of transitions through unemployment in Germany and Spain (especially for men) cannot simply be considered as the result of individual choice. In the case of women, the homemaker category turns out to be important, although transiting through disability is still a choice, especially in Sweden.

In studying transitions out of employment, health also matters: Table 2 restricts attention to individuals working and in good health in 2004, and shows their labour market transitions, distinguishing by health status in 2006. Table 2 shows that health conditions are relevant in the dynamics of labour market choices: while 78.1% of people in good health in both 2004 and 2006 remain employed, this percentage falls to 72.0% if health deteriorates between 2004 and 2006.

LABOUR MARKET STATUS 2004	**LABOUR MARKET STATUS 2006**						
	Retired from work	Employed or self employed	Unemployed	Permanently sick or disabled	Home-maker	Other	Total
Employed or self-employed (good health in 2004 and 2006)	68	321	6	0	9	7	411
Percentage	16.5	78.1	1.5	0	2.2	1.7	100
Employed or self-employed (good health in 2004 and bad health in 2006)	102	373	12	6	15	10	518
Percentage	19.7	72.0	2.3	1.2	2.9	1.9	100
Total (good health in 2004)	170	694	18	6	24	17	929
Percentage	18.3	74.7	1.9	0.6	2.6	1.8	100

Table 2 Transition Matrix: Employment and Health

To exemplify the role of health and the richness of the SHARE sample, we present a multivariate analysis of the determinants of the transition probabilities out of work. Figure 6 looks at the probability of leaving the labour force and reports the marginal effects obtained by a "probit regression". Explanatory variables are: the health status in 2004 (measured by the number of chronic diseases), the difference between the number of chronic diseases in 2004 and 2006, "poor quality of work" in 2004, and a set of controls (age, gender, a self employment dummy, years of education, a full set of country dummies, and a dummy for the year of interview to account for different time effects). The interaction between the number of chronic diseases and the difference in the number of chronic diseases is also added. The marginal effects of health and of "poor quality of work" have the expected sign and are statistically significant. As for health, one additional chronic disease increases the probability of leaving the labour force by 3.5 percentage points. Further, the

dynamic effect of health is positive (i.e. a worsening of health implies a higher probability of leaving employment) and statistically significant: this result is in line with the intuition given in the previous section. The negative coefficient on the interaction is also as expected: the worse the initial health status, the less relevant is the effect of the change in health between 2004 and 2006.

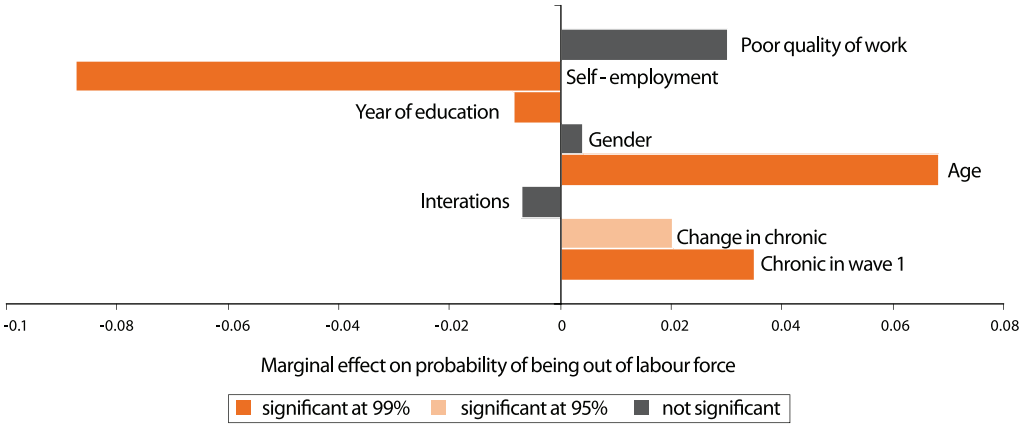

Figure 6 Multivariate analysis of probability of leaving employment

Note: Sample size 2,532

Interpreting Transitions

The panel structure of SHARE helps us overcome, at least partially, the identification problems arising with cross-sectional data. The aim of this section is to isolate the age-profile of incentives a given cohort of individuals faces over its life cycle. In order to do so, we first use a simple "probit" model to estimate the cross-sectional probability of being out of the labour force conditional on age (from now on, CS probability). We then compare the age-profile of these CS probabilities with a set of generated steady-state probabilities of being out of the labour force (from now on, SS probability).

CS probabilities are the result of, amongst other things, cohort and age effects: they depend on the different pension and social welfare rules that each cohort faced during the lifetime. For example, the observed CS probability for the cohort who is currently 55 years old depends on the incentives to retire that its members faced at younger ages. The same is true for those who are currently 65 years old. The two cohorts faced different incentives due to the changes in the institutional and legislative setup. In particular, it is likely that those who are currently 65 years old found it easier to retire early and, therefore, it is likely that they had higher transition probabilities into retirement than those who are currently 55 years old.

SS probabilities are generated "as if" labour market transition probabilities were fixed at their 2006 values for an entire cohort. They are computed exactly as a demographer would compute life expectancy. In fact, instead of using the patterns of mortality experienced by a given cohort, life expectancy is based on the cross-sectional age-profile of mortality rates, thereby mixing age and cohort effects. Because of this, life expectancy does not represent a forecast of residual life length for people of a given cohort and would forecast a person's residual life length only if mortality rates would remain fixed at their current level.

Thus, starting from the probability of being in the labour force for those aged 55 years in 2004, we recursively generate the age-profile of the SS probabilities for this cohort using the transition probabilities observed in 2006. As discussed by Deltas and Kim (2007), these

age-profiles are "reference probabilities", not forecasts of future state probabilities. A comparison of the SS and the CS probabilities helps the researcher to draw inferences about the kind of social welfare a country is moving towards. For example, if the SS probability for a 60 year old male in a given country stays below the corresponding CS probability, then this would imply that the probability of being out of the labour force at age 60 is going to decline, provided that transition probabilities remain close to their current values. This can be interpreted as a tendency of the current pension system to favour labour force participation at older ages, compared to the regimes faced by previous cohorts. Vice versa, if the SS profile lies above the CS curve, social welfare in 2006 looks more "generous" than in the past, since it discourages labour force participation.

A cross country comparison of these differences gives us some insight into the effectiveness of different pension reforms. Figure 7 reports CS and SS probabilities of being out of the labour force for males in three SHARE countries, namely Denmark, Germany and Italy (since we are trying to isolate institutional differences, cross-country aggregation would be meaningless). Despite the social security reforms of the past decade, the current social welfare seems still generous towards males: if transition probabilities do not change in the future, the probability of being out of the labour force for either a Danish, a German or an Italian male is going to increase.

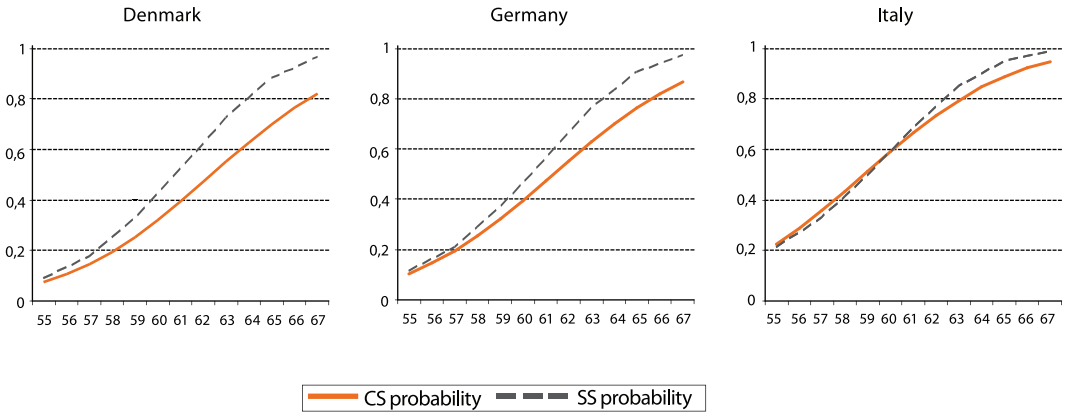

Figure 7 CS and SS Probabilities of Being Out of the Labour Force, Men

Note: CS probability = Cross-sectional probability of being out of the labour force, conditional on age

SS probability = generated steady-state possibilities of being out of the labour force

Conclusions

In this chapter we described the cross-sectional and longitudinal relation between labour force participation and health. Although those who are employed tend to be healthier on average, there are countries where a large fraction of retirees are in very good health. Moreover, the comparison of the cross-sectional and the steady-state probabilities of being out of labour force suggests that current institutional setups provide little incentives to labour force participation at older ages. This empirical evidence has important policy implications:

- The SHARE 2006 sample confirms the presence of a large "unused labour capacity": across countries a significant fraction of individuals aged between 50 and 64 is out of the labour force despite their good health status. This may be a motive to revise the incentives to retire early embedded in social security and pension systems.

- Current institutional setups allow for several pathways to retirement and, at the same time, do not incentive to work at older ages. Thus, social security and pension reforms may take some time to exert the desired effects.

References

Deltas, G., and G. Kim. 2007. *Using steady-state lifetime employment profiles to analyze labor market shifts, with an application to Korea*. Mimeo.

Gruber, J., and D.A. Wise. 1999. *Social Security and Retirement Around the World*. Chicago.

Gruber, J., and D.A. Wise. 2004. *Social Security Programs and Retirement Around the World: Micro-Estimation*. Chicago.

Siegrist, J., D. Starke, T. Chandola, I. Godin, M. Marmot, I. Niedhammer, and R. Peter. 2004. The measurement of effort–reward imbalance at work: European comparisons. *Social Science & Medicine* 58:1483–99.