

# 5<sup>th</sup> SHARE User Conference

BOOK OF ABSTRACTS

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Esch-sur-Alzette, Grand-Duchy of Luxembourg



**SHARE**  
Survey of Health, Ageing  
and Retirement in Europe

## Gender, culture and cognition in later life

*Eric Bonsang*

This paper analyzes the relationship between culture, and more particularly gender-role attitudes, on gender differences in cognitive functioning in later life (50+ yrs.) across countries. Previous studies found that traditional gender-role attitudes is associated with substantial reductions in human capital investment and labor supply of women. This lack of opportunity for women to engage in (potentially) cognitively stimulating activities (education, work...) over the life course is likely to translate in poorer cognitive performance of women at older age. We use data from 27 countries covering a broad range of gender-role attitudes and developmental status, from the Survey of Health, Ageing and Retirement in Europe (SHARE), the Health and Retirement Study (HRS), the English Longitudinal Study on Ageing (ELSA), and the World Health Organization Study on Global AGEing and adult health (SAGE) that include comparable cognitive test scores across countries. Measures of gender-role attitudes are obtained from the World Values Surveys (WVS) and merged with the other surveys at the country and cohort level. As expected we find that late-life gender differences in cognitive functioning systematically vary across countries. Furthermore, we find strong associations between gender differences in cognition and gender-role attitudes across countries. Women perform relatively better in countries characterized by more equal gender-role attitudes. This association is robust to the inclusion of measures of economic development. By exploiting cross-country variations in the cohort-related changes in gender-role attitudes, we find that this association is robust to the inclusion of country and cohort fixed effects. Further analyses suggested that this association is unlikely to be driven by reverse causality.

## Adjusting housing to ageing, do individual characteristics matter?

*Mélanie Lepori*

Due to the tendency of elderly to stay home and to keep living in their family house as long as possible, the idea of maladjustment of their housing to ageing is growing. Highlighting the necessity of old people houses improvement mostly seems to emanate from political will, especially in Scandinavian and western European countries. However, even in countries encouraging adaptation of housing, unawareness of devices, complexity of administrative routines and a certain predilection for personal strategies can be observed. As political tools do not seem to enable a greater adjustment of elderly housing to ageing, the question of the influence of individual characteristics should be asked. Here, we aim to measure if certain individual characteristics have a bigger influence while taking the decision to fit housing to ageing and to determinate which characteristics are involved in this process. In addition to the variables generally studied (age, gender, general health), socio-economical features and housing conditions are also taken into account. Data from both waves 4 and 5 are mobilized to study the behaviors of respondents aged 55 and older during wave 4 in ten European countries (Sweden, Denmark, Netherlands, Germany, Switzerland, Belgium, France, Spain, Italy and Czech Republic).

## Disability and self-sufficiency among the elderly. The case of the Czech Republic

Poster  
Session I

Michala Lustigova, Dagmar Dzuurova

*Background:* One of the basic components of evaluating the health potential at old age is “functional” health. During the last decade the life span at age 65 years among the Czech population has been prolonged, as well as life span in health or without any limitation. On the other hand the life expectancy at age 85 years is increasing, while the healthy life expectancy is decreasing. In that case the increase in functionally serious morbidity and disability can be observed.

*Methods:* On the base of SHARE dataset (wave 5) the prevalence of disability among the Czech population was assessed with deeper focus on 80–89 years old population. Self-sufficiency of the elderly was measured on the basis of a battery of questions addressing the managing of daily life’s activities, self-sufficiency (instrumental activities of daily living) and by the occurrence of problems and limitations of mobility and fine motor.

*Results:* Functional health among the Czech male population was comparable to the European average, while among the Czech elderly females one of the worst health condition and the highest prevalence of disability in Europe was found.

*Conclusion:* Among the Czech population the healthy life expectancy at age 85 is decreasing, thus increase in functionally serious morbidity and disability can be observed. Healthy life expectancy at that age is higher among males than among females; hence health potential of Czech females considers being worse than of Czech males. Prevalence of disability is one of the highest of Czech females in Europe.

## Inequality in old age cognitive abilities across the world

Poster  
Session I

Javier Olivera, Anja K. Leist, Louis Chauvel

What is commonly found in studies that look at later-life cognitive abilities is a strong effect of educational attainment on retarding the deterioration of such abilities. In this sense, education is a protective measure for cognition reserve. In a more aggregate perspective, we propose a measure of later-life cognition inequality per birth cohort in 34 countries with diverse degree of economic development and comparable cognition tests. We decompose this measure by subgroups of sex and age and relate it with corresponding past inequalities in education and income in each country. A proxy of survival rate of the cohort is also included in linear regressions in order to disentangle the effects of age and education composition on cognition inequality. Our results show a sizeable positive effect of past educational inequalities on present inequality of old age cognition. Furthermore, the survival rate is positively associated with today’s cognitive inequality.

Poster  
Session I

## Mixed cares, explanatory factors in Europe in the XXIst century

*María Ángeles Minguela Recover, José A. Camacho Ballesta*

Within a general context of low fertility rates below the replacement rate, the rise of life expectancy and of migratory processes characterize the European population structure, more aged. The scene is one marked by the rise in dependence situations which generate greater needs in personal cares and support in daily life. Moreover, social changes like the increase of women inclusion in job's market, the decrease in home's size and the dynamics followed in them. All of this generates a decrease in the personal cares informal network and a smaller presence of families in home personal cares support. Our work's objective is the exploratory analysis of the factors involved in the reception of personal cares and, particularly, in measuring the influence of those factors in mixed cares for dependent people over 65 in SHAREw.5 countries. For that purpose, we have used econometric models- multi-variations analysis technique and binary logistic regression model -. The main conclusion is that the degree of severity of the situation and the dependent's social net are endogenous characteristics of the care. And apart from these factors, we have to add the academic level, the dependent's place of residence, and the economic situation, for that reason, the mixed cares are presented as a social network complement and alternative to avoid dependent old people isolation.

Poster  
Session I

## The effect of health on productive ageing: A comparison of China and Europe

*Sebastian Visser*

China has one of the fastest ageing populations in the world. It is important to keep the ageing population engaged in society, productive ageing, as research has shown that productive ageing is beneficial for ones' health and therefore lowers healthcare expenditure. This paper uses data from CHARLS waves 1 and 2 and SHARE waves 4 and 5 to research what factors are of influence of productive ageing in China and Europe by the use of multiple models. The factors this paper takes into account are standard demographic controls and health variables. Both whether someone is productive as well as the rate of productivity are used to measure productive ageing. The results of China and Europe are compared to find cross-country differences. This paper finds that a better self-assessed health and higher education are important factors in China and Europe. Investing in healthcare and education therefore pays itself (partly) back. Differences between China and Europe include the effects of age and marital status. In general productive ageing is more common in every European country than in China. In that sense, China can learn from Europe to increase the rate of productive ageing. Within Europe, productive ageing is most common in Sweden and least common in Italy.

## Intergenerational Transfers in Turbulent Times

Poster  
Session I

*Christian Deindl, Martina Brandt*

The family is an important safety net, especially in times of ageing and economic crises. We know that most transfers flow between parents and their adult children and functional solidarity is a crucial dimension of intergenerational relations. Until now, however, little attention has been given to exchange patterns between economically deprived family members within different policy contexts. We thus assess how intergenerational transfers are linked to social inequality across Europe on the micro and the macro level; i.e. do the deprived give less and receive more money and practical help, and does social inequality play a role? Based on SHARE, we focus the effects of deprivation on exchange between older parents and their adult children in Europe. We distinguish between different kinds and flows of assistance and consider the possible impacts of state contexts on the links between solidarity and deprivation. Multilevel models indicate that materially deprived respondents indeed give less but need more help from their adult children and thus lose their normal role as providers. Moreover, contexts matter: In countries with more poverty fewer transfers of time and money are given and received. Poor families in countries with high social inequality are thus especially vulnerable.

## Income-related health inequalities: some microeconomic evidences using the SHARE survey

Parallel  
Session A

*Amelie Adeline, Eric Delattre*

Income-related health inequalities have gained much attention. Recent studies have identified an association between income, income inequalities and health where it is said that income inequalities are detrimental to individual health. Two hypotheses have been drawn concerning the link between health, income and income inequalities. The Absolute Income Hypothesis states that income has a positive and concave effect on health and the Income Inequality Hypothesis states that income inequalities are a threat to the health of individuals within a society. We set up ordered probit regressions in order to examine the determinants of the health status. We use data from the fifth wave of the Survey of Health, Ageing and Retirement in Europe (SHARE) which is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks, to test the above hypotheses. Our results concerning the Absolute Income Hypothesis and the strong version of Income Inequality Hypothesis (inequalities affect all members in a society equivalently) are consistent with what it is said in the literature. However, we find no consistent association of the weak version of Income Inequality Hypothesis which states that income inequalities may hurt the health of only the least well off in a society.

## Inequity in unmet medical need among elderly in Europe

*Bora Kim*

This study evaluates unfair inequality in health care utilization among the elderly population in 14 European countries. We quantify ethically unacceptable inequality, namely inequality of opportunity (IOP), revealed in a priori constraints that hinder old people from utilizing services. We use the fifth wave of Survey of Health, Ageing and Retirement in Europe (SHARE) from 2013. Our dependent variables are self-evaluated indicators regarding easiness of physical access to primary service, and unmet need due to cost or waiting time. Our independent variables are sub-divided into circumstance and effort according to its relation with individual responsibility. Circumstances are defined by demographic characteristics, childhood SES, and education, and effort by private insurance use and urban residence. By applying multivariate probit model with respect to three binary outcomes, we attempt to control for unobserved heterogeneity. We provide comprehensive results based on ex-ante/post approach of measuring IOP. For a policy recommendation, we compute counterfactual IOPs assuming that educational attainment is equalized for all individuals. Regarding physical accessibility, we find that excessive IOPs in Slovenia and Estonia can be substantially improved by educational intervention. Personal inputs play an important role in Italy and Germany, on the other hand. As for unmet medical need due to cost, the highest IOP in Italy also seems to be mainly driven by educational disparity. Other illegitimate factors matters more in Germany, Czech Republic and Estonia. Last, our results suggest that IOP presented in unmet need due to waiting time is problematic only in Estonia and Italy. Their relative ranking of IOP does not change even after removing educational gap. In most evaluations, Nordic states, Netherlands, and Switzerland show leading examples.

## Immigrant-Native Differences in Health and Well-being among European Integration Policy Regimes

*Gregor Sand, Stefan Gruber*

Demographic aging and international migration have transformed the European population structure significantly. These days, large debates on immigration control and integration policies have been on the political agenda all over Europe. However, there is only a small understanding on how these policies affect the health and well-being of migrants, especially in later life.

This study analyses health disparities among elderly migrants and natives across several European countries. The outcome differences are brought into relationship with different immigrant integration policy models using the Migration Integration Policy Index (MIPEX). Two indicators of health are used: Grip strength as an objective measure of physical health and the CASP index measuring quality of life and subjective well-being.

Our results indicate that there are statistically significant differences between natives and migrants: Migrants show lower levels of both grip strength and well-being than the native population. The group differences remain statistically significant even when controlling for socio-demographic characteristics, chronic conditions and migration variables. Additionally, we find that the level of disparities between the two groups concerning health and well-being varies between countries. Current integration policies correlate with these country differences: The lower the MIPEX score the larger the immigrant-native gap. The disparities deteriorate with increasing age.



## Comparing apples and oranges? An analysis of the role of objective health and institutions in explaining country differences in benefit receipt, using 2013 SHARE data on people over 50

Parallel  
Session A

*Daniela Skuđer, Annemie Nys*

This study investigates to what extent the substantial cross-country differences in disability benefit receipt can be explained by health and institutional frameworks. Our research purpose is twofold. Firstly, to get an indication of whether social security systems may function as an alternative pathway into early retirement, we examine to what extent disability benefit schemes in various countries are utilized by individuals with health problems. Disability benefit schemes are particularly interesting in this case, because health is an intuitive explanatory factor for disability benefit receipt, and moreover, because outflow from these schemes is virtually non-existent in the 50+ age group. If health inequalities and other micro-level factors cannot explain the cross-country variation in disability benefit receipt, we should look for explanations at the institutional level by examining the effect of the design of the benefit system. Our second research aim is therefore to shed light on the question how informative cross-country comparisons based on labor market indicators are when their welfare systems are so heterogeneous.

We use data from the most recent SHARE wave on people from 14 European countries who are at least 50 years of age, but have not yet reached the statutory retirement age. Our analyses include a Oaxaca-Blinder decomposition to assess which proportion of the cross-country difference in disability benefit receipt can be ascribed to individual health factors and which proportion remains unexplained. In a following step we conduct a (multilevel) multinomial logistic regression analysis in which we condition benefit receipt on institutional characteristics.

## Spending time together? Effects on the retirement decision from partner's labour market status

Parallel  
Session A

*Anders Boman*

In this paper we study retirement decisions and more specifically, the influence of a partner's labour market status on this decision. We use information from four waves of the Survey of Health Ageing and Retirement in Europe (SHARE), from wave 1 collected in 2005/05 up to and including wave 5 collected in 2013. These surveys provide information on a wide range of variables, including economic, social, as well as health variables not only of the respondent but also of the partner of the respondent, if any. Most importantly, we are able to analyse the transition into retirement rather than the state of being retired and also to distinguish between different degrees of labour market attachment of the partner. Initially, we find that having a partner who is retired or a homemaker increases the likelihood of retirement, whereas an unemployed partner or a partner who is not working due to permanent sickness or disability has no statistically significant effect. However, dividing the sample into men and women, we find that the effects differ substantially between these two groups. The probability of retirement among men is not influenced by their partner's labour market status, and among women we only find a statistically significant effect of having a partner who is retired. Our findings are robust to variations in the definition of retirement and subsamples.

## Healthier lifestyles after retirement in Europe? Evidence from SHARE

*Martina Celidoni, Vincenzo Rebba*

This paper investigates changes in health behaviours upon retirement, using data drawn from the Survey of Health Aging and Retirement in Europe (SHARE). By exploiting changes in eligibility rules for early and normal retirement, we identify the causal effect of retiring from work on smoking, alcohol drinking, engagement in physical activity and visits to the general practitioner or specialist. We provide evidence about heterogeneous effects related to gender, education, net wealth, early-life conditions and job characteristics. Results show that changes in health behaviours occur upon retirement and may be a key mechanism through which the latter affects health. We find heterogeneous effects related especially to gender, education and job characteristics.

## Gender and transition to retirement in Switzerland

*Olga Ganjour, Jacques-Antoine Gauthier, Jean-Marie Le Goff*

Our study is centred on the disparities between men and women professional trajectories and the retirement exit in Switzerland. We used the data from the third wave SHARELIFE. We retrace the professional trajectories of individuals who belong to the generation born before 1949 for 26 years with annual state sequences from age 45 to 70 years. We used the R package TraMineR for analyzing the sequence data (Gabadinho, Ritschard, Müller & Studer, 2011). By distinguishing the states of employment, insurances and professional inactivity we showed the diversity of professional trajectories of individuals before the retirement exit. Although most individuals decrease their professional activity at the official retirement age (is fixed in Switzerland 65 year for men and 64 years for women) some categories of individuals declare to stay at home since 45 years and continue this status until 70 years. Surprisingly, the assurances are not widely dispersed as the way to retirement. In order to analyse the influence of social characteristics on the individual's trajectories we used the multifactor ANOVA discrepancy analysis of sequences (Studer et al, 2011). We found that sex has the most significant influence on the individual trajectories. The male trajectories are centred on the full time employment with and without contribution to occupational pension plan, while the female trajectories are associated with part time employment and professional inactivity. We also confirmed that other social characteristics such as marital status, professional status and birth cohort have more influence on the women professional trajectories than on the men.



## **Increases in well-being after transition to retirement for unemployed. Catching up with formerly employed persons**

Parallel  
Session A

*Valentina Ponomarenko, Anja K. Leist, Louis Chauvel*

This paper examines the extent to which well-being levels change in the transition to retirement depending on transitioning from being employed, unemployed, or economically inactive. Whereas transitioning from employment to unemployment has been found to cause an increase in depressive symptoms or decline in life satisfaction with more time spent in unemployment, it is not clear to which extent transitioning from unemployment to retirement affects well-being levels compared to retiring after being employed or economically inactive. We use two waves of the Survey of Health, Ageing and Retirement in Europe monitoring respondents transitioning to retirement and use life satisfaction as well-being measure. The effect of the transition is captured with a difference-in-difference like approach to test if the change in well-being after retirement is different for persons who were formerly unemployed or inactive, respectively, compared to formerly employed retirees. Results indicate that retiring from unemployment is associated with an increase in life satisfaction, but presents mainly a catching-up effect compared to employed persons transitioning to retirement. Retirement from labour market inactivity, especially sick leave, does not lead to significant changes in well-being. Findings are robust to selection into unemployment and country differences. As well-being of unemployed persons recovers after transitioning to retirement, especially the currently unemployed population should be supported to prevent detrimental consequences of economically unfavourable conditions and lower well-being.

## **Forever and ever? Emotional Closeness in Elderly European Couples**

Parallel  
Session A

*Ronny König*

Despite longer life expectancy and thus an increasing extent of common time of living together, previous research has paid more attention on emotional closeness between couples in young adulthood than in old age. However, regarding the phenomenon of ageing societies, the paper focuses on elderly European partnerships and addresses the following questions: (1) How close are European couples in old age?, (2) Are there gender- and/or country-specific differences regarding emotional bonds within partnerships? and (3) Which circumstances concerning the individual, the partnership, the family and the context can explain a situation of closeness or distance? The analysis are based on the social network module as part of the 4th wave of the Survey of Health, Ageing and Retirement in Europe (2010/11) including 37,000 respondents from 16 countries. The results indicate that in general, almost 80 percent named the respective partner as an important member to discuss important things that happen to them, bad or good. Besides, there are partially huge gender and country differences. While in all observed European countries, men report more often of such an emotional relationship to his partner/wife than women, the country-specific pattern is less clear or simple. Hereby, men and women especially in Austria and Hungary show the closest and particular French couples the lowest emotional closeness. Furthermore, multilevel logistic regressions provide relevant insights to understand such a situation, in general and especially for men and women.

## Are childless seniors lonely? Examination of micro and macro aspects

*Nela Patschová*

Thanks to demographic changes such as decreasing fertility and population ageing is childlessness usually perceived as something necessarily negative for society and, as the childless are often viewed as those who are lonely and without a self-fulfillment, the childlessness is viewed also as something negative for an individual. But - is that true?

In my paper I focus on just a small piece of this problem. In previous research on the effect of childlessness on loneliness gave us quite inconsistent results. Almost nobody have considered the different social context the childless and parents live in.

I take in consideration macro variables such as accessibility of health care, quality of social system or normative attitudes towards family life. So the research question was: Does childlessness influence loneliness of older people in the same way in all countries or is it somehow systematically changing across the countries?

The secondary analysis is based on multiple imputed data from the 5th wave of SHARE project. I try to combine these data with data from associated studies HRS, ELSA and JSTAR.

The macro data are gathered from various datasets and for the analysis I use the multilevel regression models. According to the results, it seems that the childless are really lonelier than parents and that macro context has an influence on loneliness of older people but only in the interaction with childlessness.

## Social Network Structure and the Transition into Widowhood

*Ella Schwartz*

The death of a partner in later life is generally experienced as a very stressful life event. This study examined whether adjustment to widowhood is influenced by the structure of the social ties that exist prior to spousal loss. Specifically, it explored whether the bereaved will experience a lesser decline in well-being if before the loss they had more confidants, higher contact frequency with confidants, and if the spouse was not included in the close social milieu.

The study was based on data from waves 4 (2011) and 5 (2013) of the SHARE survey. It compared adults aged 50+ that were married in wave 4 and widowed in wave 5, with those who were married in both waves. The change scores in depression, quality of life and life satisfaction were regressed on the structural social network factors. Results showed that better adaptation to widowhood was achieved if prior to the loss the bereaved had more confidants and the spouse was not seen as a confidant. However, the bereaved experienced a decrease in life satisfaction if they had frequent contact with the people closest to them before the loss. Those who were not widowed experienced a decline in well-being only if their spouse was not seen as a confidant. The results indicate the importance of confidants that are a part of the social environment prior to conjugal loss, as a vital resource for coping with widowhood.

## Do regional contexts shape the burden of informal caregivers aged 50+ across Europe?

Parallel  
Session A

Melanie Wagner

Informal caregiving is an indispensable task in an ageing society. All across Europe, family members provide informal help to sick or old relatives in need of long-term care. Such caregiving can, however, be “a chronic stressor that places caregivers at risk for physical and emotional problems” (Pinquart & Sörensen 2006: 33) . To lower the burden for informal caregivers different support policies have been established. However, the availability of formal support is not equally distributed among European regions. In our paper, we aim to find out if the availability of paid home-care services, day-care centers or residential care facilities reduces the burden of informal caregivers in a region. The burden of caregivers is measured by three different outcomes: their loneliness, quality of life, and self-rated health.

We apply a three stage multilevel design using SHARE data (wave 5 release 1) and OECD macro data from seven countries. We find that across Europe, caregivers aged 50+ feel lonelier, state a lower quality of life and worse self-rated health even when controlling for important other influences such as socio-economic factors. The difference between caregivers and non-caregivers, however, varies between countries and regions. We find evidence that the regional context shapes the burden of informal caregivers via different formal care arrangements.

## Work, Retirement and Muscle Strength Loss in Old Age

Plenary  
Session I

Marco Bertoni, Stefania Maggi, Guglielmo Weber

Reduced muscle strength is an accurate predictor of functional limitations, disability, and mortality. Hence, understanding which socio-economic factors contribute to preserve muscle strength in old age is central to designing social policies to reduce these health risks. Using data on handgrip strength collected by SHARE for the European 50+ population and the exogenous variation in pension eligibility age across countries over time, we estimate that the retirement transition has a short-term positive causal effect on muscle strength. However, this protective effect is not persistent, as retirement speeds up the age-related trend in muscle strength loss by more than 50 percent, especially for males and blue collar workers. The “holy grail” of early retirement may not be such a good deal for retirees’ longevity and physical functioning late in life.

## A dynamic micro-simulation model of health in Europe

*Vincenzo Atella, Federico Belotti, Andrea Piano Mortari, Sara Zuzzi*

We have built a dynamic micro-simulation model (EU-FEM) of health demand in Europe, with the goal of reproducing individual behaviours in terms of healthcare choices. The model is based on the public version of the Future Elderly Model (FEM). Given its dynamic structure, the model allows individual health statuses to evolve and change over time according to the different personal characteristics. We use data from SHARE (wave 1, 2, 3 and 4) in order to derive and compare in a homogeneous way results for the 13 European countries included in the model (Austria, Germany, Sweden, Netherlands, Spain, France, Denmark, Greece, Switzerland, Belgium, Czechia, Italy and Poland). The data in SHARE are integrated using other sources in order to model the trends for the new cohorts and the direct medical expenditures associated with the modelled chronic conditions.

EU-FEM is able to predict quite well the evolution of the population aged 50 or more, predict the evolution of both disability free and quality adjusted life years and, since our model also include cost data for the major chronic conditions, we are also able to perform cost-benefit analyses for specific scenarios.

## Is Income Equality also Better for Your Cognitive Health? A Multilevel Analysis on Trajectories of Cognitive Function at Older Ages

*Anja K. Leist, Louis Chauvel*

This paper contributes to research on contextual associations with older-age cognitive function by investigating to which extent country-level income inequality is associated with older-age cognitive function and decline. Data came from the Survey of Health, Ageing and Retirement in Europe (SHARE), providing information on cognitive function (fluency, immediate and delayed recall) of respondents aged 50-80 years coming from a total of 16 European countries that participated in at least two waves of SHARE. A total of 44,303 observations were available at first and second measurement, 13,509 observations at third measurement, and 9,736 observations at fourth measurement. Three-level hierarchical models (measurements nested within individuals nested within countries) were run, showing that income inequality was negatively associated with cognitive level but not with decline. The findings suggest that income inequality is not associated with cognitive trajectories. Mechanisms of maintaining cognitive function at older ages may not be susceptible to country-level income inequalities.

## Socioeconomic inequalities in older adults' dentition – what is the role of dental service use?

Plenary  
Session II

*Jing Shen, Hendrik Jürges, Christian Stock, Stefan Listl*

**Background:** Oral disease, despite largely preventable, is still the most common chronic disease worldwide and has a significant negative impact on quality of life. The present study is the first to comprehensively examine socioeconomic inequalities in oral health (measured by the number of teeth) in the over 50-year-old populations from 15 European countries and to separate out the extent to which such inequalities are attributable to dental service use.

**Methods:** Using novel data from SHARE wave 5, which included internationally harmonized and unique information on the number of teeth at the individual level, we calculated Gini indices, Concentration indices (CIs) by income and education, and the decomposition of CIs.

**Results:** Among all countries, Sweden consistently remained the best performing country. No single country performed the worst for all three inequality measures. Decomposition analysis showed that apart from age (which is expected in the case of dentition), income and education contribute substantially to the socioeconomic inequalities. Even after controlling for income, considerable proportions of inequalities were attributable to dental service use, in the Netherlands, Austria, Belgium, the Czech Republic, Luxembourg, Denmark and Switzerland.

**Conclusions:** In light of the stark differences in oral health inequalities among the examined countries and how dental service use contributed differently to the measured inequalities, the study highlighted the importance of comprehensively investigating distributional issues in oral health. Against the background of the ageing population, the results may be informative to policy makers for developing country-specific health policies on dental service use to reduce oral health inequalities among the older population.

## The effect on mental health of retiring during the economic crisis

Parallel  
Session B

*Michele Belloni, Elena Meschi, Giacomo Pasini*

This paper investigates the causal impact of retirement on late life mental health, a growing concern for public health as major depressive disorders are the second leading cause of disability. We shed light on the role of economic conditions in shaping the effect of retirement on mental health by exploiting the time and regional variation in the severity of the economic crisis across ten European countries over the 2004-2013 period. We use data from four waves of the Survey of Health, Ageing and Retirement in Europe (SHARE) and address the potential endogeneity of retirement decision to mental health by applying a fixed effect instrumental variable approach. Results indicate that retirement improves mental health of men, but not of women. This effect is stronger for those men working in regions that are severely hit by the economic crisis and in blue-collar jobs. These findings may be explained by the worsening of working conditions and the rise in job insecurity stemming from the economic downturn: In these circumstances, the exit from the labor force is perceived as a relief.

## Working conditions, retirement and health Longitudinal evidence from HRS, ELSA and SHARE

*Felizia Hanemann, Morten Schuth*

Recent literature on the effects of retirement provides evidence for accelerated cognitive decline with the time spent in retirement. However, still little is known about how overall health is evolving after individuals stop working. We extend the existing literature by providing additional cross-country evidence on the interaction between physical health and retirement. We construct a harmonized dataset using all available waves of HRS, ELSA and SHARE which enables us to conduct comparative cross-country panel analyzes. Based on the harmonized data, we use subjective and objective measures to build different health indices assessing the physical health status during the transition from work to retirement. Furthermore we include harmonized measures of working conditions to evaluate the role of the quality of work within the framework of health effects of retirement. By applying instrumental variables fixed effects regressions, we are able to control for individual heterogeneity and endogeneity of the retirement decision by using the statutory retirement ages for the respective countries as instrumental variables. Our findings suggest that retirement overall has positive effects on physical health. This effect is even stronger when retiring from a job with poor working conditions.

## Route of exit from work and change in wellbeing in the European context

*Sol Richardson, Amanda Sacker, Gopalakrishnan Netuveli*

*Objective:* Although a substantial body of literature exists on the effects of retirement and unemployment on health and wellbeing, the influence of the circumstances through which exit from work occurs has received little attention.

*Methods:* Using data collected from respondents aged  $\geq 50$  years in 15 countries as part of waves 1, 2, 4 and 5 of SHARE who had left work since the previous wave, we constructed multilevel linear regression models to investigate the determinants of change in CASP-12 wellbeing scores between baseline (pre-exit) and follow-up (post-exit). Respondents were categorised by age at exit from work relative to the state retirement age and route of exit from work, defined as the type of income or benefits received since the previous wave—including old age pension, early retirement pension, unemployment benefit, sickness benefit, disability pension, social assistance or no pension or benefits.

*Results:* Our adjusted model indicated that a significantly more adverse change in wellbeing was experienced by respondents who exited work through receipt of unemployment benefit, sickness benefit, disability pension or social assistance when compared with those in receipt of old age pensions. Furthermore, exit from work more than one year before or after the state retirement age was associated with a significant decline in wellbeing.

*Conclusion:* Route and timing of exit from work in early old age has a significant independent impact on change in wellbeing post-exit. One explanation for our results may be that each route is associated with a different degree of “voluntariness” of exit.



## Do longer working careers contribute to our well-being?

Parallel  
Session B*Lieze Sohler*

This study estimates the effect of a change in the employment status (from employed to retired) on life satisfaction, controlling for individual fixed effects, health, financial situation and social support. We particularly take into account the notion of freedom of choice in the employment status. Research has highlighted a significant loss of well-being of having the sentiment to be involuntary retired. A significant share of the retirees in these studies would rather work than be retired. However, none of these studies have investigated the opposite feeling of being involuntary employed. The binary question “Thinking about your present job, would you like to retire as early as you can from this job?” in SHARE captures the willingness to retire rather than to work. Approximately four out of ten senior employees in our sample have answered the question affirmative and are considered to be involuntary employed.

The findings of our fixed effect estimations indicate no significant effect of the employment status on life satisfaction but we do find a significant difference in life satisfaction between involuntary employees and retirees. Retirees have a higher life satisfaction than employees who are not satisfied with their employment status. Additionally, we find a significant loss of well-being of being involuntary employed. These findings do give an interesting comment on the debate of longer working careers. Freedom of choice in the employment status is a determining factor for the individual well-being of seniors.

## Need for long-term care, informal care from children, type of welfare state, past transfers and prospective bequest: is there a link?

Parallel  
Session B*Anne Laferrère, Karel Van den Bosch*

The risk of needing long-term care (LTC) is significant both at the individual or family level, and at the macroeconomic level because of the financial burden care it puts on societies. People get care by a combination of informal and formal care, which can be partially or totally covered by public or private insurance. Depending on the level of need and on LTC provision systems, the care arrangements can leave some unmet needs and provide more or less incentives for the children to help.

The ultimate goal of the paper is to relate LTC arrangements to family models of intergenerational transfers and to country welfare systems. We use information on the extended family and its history provided by waves of the SHARE survey on health and retirement in Europe.

We define gradual levels of needs of LTC based on the number of limitations and instrumental limitations in activities of daily living in wave 5. Then combining information on provider and frequency of help we compare level of needs and care received, to derive whether the needs seem adequately met or not. On average 16% of the 65+ parents needed LTC help; 17 to 25% had unmet needs. In a former paper we pointed to deprivation being linked to unmet needs. Here with the same type of Heckman selection model to take care of the selection process into LTC need we look if and how more past and current intergenerational relations may help parents' need to be met.

## Older adults living with cognitive and mobility-related limitations: social deprivation and forms of care received

*Roméo Fontaine, Maribel Pino, Marine Jean-Baptiste, Aurore Philibert, Nicolas Briant and Marie-Eve Joël*

Cognitive impairment and mobility-related limitations are two major risk factors for disability among older adults. In order to develop effective support programs for older adults with disability and reduce the risk of social exclusion in this population, a fundamental step is to better understand their living conditions.

Using data from SHARE Wave 5, we propose in this paper to focus on the specific role of cognitive disorders on the quality of life of individuals aged 65 and over. We measure cognitive disorders through a global composite score of cognitive functioning constructed from four cognitive tests (verbal fluency, immediate free-recall, delayed-free recall and serial 7's).

As a preliminary analysis, we assess the explanatory power of cognitive limitations on the ability to perform activities of daily-living after controlling for mobility-related limitation.

Second, we assess the association between cognitive limitations and two alternative outcomes related to quality of life: social deprivation and mental health. The originality of the empirical approach we adopt is twofold. First, for individuals living in couple, we jointly estimate the effect of cognitive limitations on our quality of life outcomes for both partners by assuming that cognitive limitations not only affect individual quality of life, but also indirectly partner's quality of life. Second, we investigate to what extent the impact of cognitive limitations on both partners' quality of life depend on informal and formal care received from outside the household.

## Country Context Matters: Informal Care and Health in Europe

*Judith Kaschowitz, Martina Brandt*

Due to an expected increase of people in need of care, a sound knowledge about health effects of the provision of informal care becomes important. Using data from SHARE (wave 1, 2, 3 and 5) and ELSA (wave 1 – 5) we examine the connection between informal care and self-perceived as well as mental health in a country comparative perspective. Theoretically, there might be positive as well as negative health effects due to the provision of care. We suppose that health effects differ by national context since care is differently organized in Europe – some countries rely more on formal, others more on informal care. Utilizing the longitudinal structure of the data, pooled ordinary least squares (OLS) and fixed-effects models (FEM) are estimated. Our preliminary results show that there are differences in the assessment of health depending on whether individuals take care for someone outside or inside the household. Caregivers of the former group report better, those of the latter worse health than non-caregivers. We show that – apart from a deterioration of mental health in some countries – this correlation is largely due to selection into caregiving, that is, people in better health take up care outside while people in worse health take up care inside the household.

## Determinants of unmet needs for long-term care of older people in the European Countries

Parallel  
Session B

*Valentina Hlebec, Andrej Srakar, Boris Majcen*

Organization of care for older people is one of important issues in European countries. Based on cross-national studies (Motel-Klingebl et al. 2005, Litwin and Attias-Donfut 2009, Gannon and Davin 2010, Suanet et al. 2012), there are large differences across European countries considering proportions of people that receive various types of care and proportions of people with unmet needs for long-term care, as well as in the welfare context of care. In the article, we use the data from the Wave 5 of SHARE survey to estimate the share of older people who receive any individual type of care (no care, only informal care, only formal care, a combination) as well as the share of people who need care, but fail to receive it. We also use econometric methods, mainly the multinomial logistic models to evaluate the predisposing, enabling and need factors (following Andersen's behavioural model, see e.g. Andersen 1995) that influence the probability of unmet needs for long-term care among the older people. The results show that the multinomial model which takes note of the heterogeneity of types of unmet needs significantly outperforms the previously used Heckman model (see e.g. Gannon and Davin 2010; Srakar et al. 2015). We also provide an examination of determinants of unmet needs in the context of different welfare regimes with a particular focus on Eastern Europe, where only a handful of such studies has been made so far. We conclude by research and policy reflections on the importance of our findings.

## Chronic Pain in the European Elderly Population

Parallel  
Session B

*Enrica Croda*

In this paper, I exploit newly available information collected in the fifth wave of SHARE to study the prevalence of pain in the European elderly population and investigate the extent to which chronic pain is associated with education.

I document the existence of dramatic differences in the prevalence of pain by educational attainments: Across Europe, individuals with basic or no education are much more likely to be troubled by pain than those that have completed secondary education, and these two categories are more likely to report pain than those who have higher educational attainments. Not only those who have lower educational attainments are more likely to suffer from pain, but they also report higher level of pain.

What can explain this strong association between pain and education and the observed disparities? An obvious explanation is that people with lower education are more likely to have worked in manual jobs, or to suffer from poor health. In the multivariate analysis, I control for such differences using controls for occupation and industry, as well as for other dimensions of socioeconomic status, and for several dimensions of health status, that may be associated with pain at older ages.

The preliminary results show that, even after controlling for health status, occupation and country dummies, the probability of being troubled by pain and the intensity of pain are lower the higher the educational attainment. These findings emphasize the need for public policy intervention promoting pain prevention and management strategies addressing the most vulnerable groups of the population.

## Quality of work and depressive symptoms among older workers across Europe. A longitudinal analysis

*Emma Garavaglia, Mario Lucchini, Daniele Zaccaria,*

Work status is crucial for one's identity, providing economic and social resources that improve individual wellbeing. However, whether the status of worker is beneficial to individuals' wellbeing depends on various factors, among which contextual factors describing the level of the quality of work. Stress, control, social recognition at work may decisively influence the effects of the work role on physical and mental wellbeing. The nature of a person's work and the setting and context in which it is performed have a substantial impact on their mental health. It has been observed that workers in particular occupations, in low-skill jobs, with higher job-stress may more frequently develop depressive symptoms. Contextual factors describing the quality of work matter even more for wellbeing outcomes among individuals in the last part of their career. Few studies have adopted a specific focus on the older workers' group to investigate the association between mental health and quality of work. Moreover, depression symptoms among the young-old group are often under-estimated and under-treated, also due to difficulty in diagnosis. This paper investigates whether depressive symptoms among older employees are associated with indicators of low quality of work. For our analysis, we use a subsample of employed male and female workers from SHARE waves 1, 2, 4 and 5. Applying a two-step cluster analysis three different cluster with different levels of quality of work have been identified. Then, running both fixed effect and random effect models, we investigated the influence of quality of work on depressive symptoms: both of models underlie a significant association between low quality of work and risk of depression among older workers.

## Past Life Events and Expectations about the Future

*Robin L. Lumsdaine, Lisanne van Prooyen Schuurman, Eline van de Ven*

Most older adults do not expect to age successfully, defined as a state in which high cognitive and physical functioning is maintained, according to Sarkisian, Hays and Mangione (2002). From an economic perspective, however, the ability to maintain one's standard of living may also be an important aspect of successful aging. In SHARE waves 1 and 2 respondents were specifically asked about the likelihood that their standard of living would improve or worsen. The relationship between these expectations and physical, mental, and cognitive functioning varies across different age groups as documented by Shrira, Palgi, Ben-Ezra, Spalter, Kavé and Shmotkin (2011), using wave 1 of SHARE. We extend the research of Shrira, et al. (2011) by adding variables constructed from the retrospective information contained in SHARE wave 3 ("SHARELIFE"). Our main focus is the influence that past life-course events have on expectations about the future. For example, positive events such as a period of happiness may result in prolonged optimism and lead to optimistic expectations while negative events such as financial hardship or ill health may result in prolonged pessimism that could lead to skepticism about the future. Our interest in this topic is motivated by the "possible selves" literature, first proposed by Markus and Nurius (1986). We explore the link between respondents' views of their future selves, as measured by their expectations, and their past experience, as measured by the episodes that are documented in SHARELIFE.

## How does Attitude in Life affect the Willingness to take Financial Risk

Parallel  
Session B

Jesse Owie

This paper investigates the effect a positive attitude in life has on the willingness to take financial risks. Data from a representative sample of people aged 50+ in 15 countries and over 65,000 individuals is drawn from the Survey of Health, Ageing and Retirement in Europe (SHARE). The large set of variables in SHARE make it possible to control for possible confounding factors that may affect positive attitude or risk willingness. Subjective data regarding individuals' self assessed financial risk willingness and asset allocation is used to determine how willing an individual is to take financial risk. An adjusted Life Orientation Test (LOT) is used to measure positive attitude. Ordered logistic regressions are used to analyze the effect of attitude on financial risk willingness. This paper found that a positive attitude in life significantly increases the willingness to take financial risk.

## Does the interviewers' reading behavior influence survey outcomes? Evidence from a cross-national setting

Poster  
Session II

Johanna Bristle, Michael Bergmann

Interviewers play a fundamental role in collecting high-quality data in face-to-face surveys. Here, standardized interviewing is still the gold standard in quantitative data collection, while deviations from this interviewing technique are supposed to have negative implications for survey outcomes. This paper contributes to the literature on deviant interviewer behavior by analyzing item-level paradata from a cross-national survey. More precisely, we study to what extent interviewers vary in their reading behavior with regard to intra-individual changes across the survey's field period and if this has implications for the survey outcomes.

The paper uses SHARE wave 5 data from all participating countries. Our empirical strategy is based on a fixed-effects approach to precisely investigate the change in reading behavior. Our results show systematic changes in interviewers' reading times. First, interviewers' reading durations significantly decrease over the course of fieldwork, even when controlling for period effects, relevant respondent characteristics as well as the overall sample composition. Second, a cross-national comparison reveals that this decrease is uniform in nearly all countries. Third, the decrease influences survey outcomes to a varying extent depending on the informational content of the item read by the interviewer.

Poster  
Session II

## Lifetime Income Inequality: quantile treatment effect of retirement on the distribution of lifetime income

*Małgorzata Karolina Kozłowska*

Recent reforms in pension systems enacted in most European countries plan to extend working lives, shortening years spent in retirement and consequently reducing the period of withdrawing retirement benefits. As can be motivated from both theoretical and empirical standpoint, these changes are likely to reshape individual income profiles and affect inequality in lifetime income. This study attempts to estimate the causal effect of staying longer in the labor force on the distribution of lifetime income and to assess its consequences for the overall inequality in lifetime resources. Results in a cross-national setting are estimated through Local Quantile Treatment Effect estimator by Abadie, Angrist and Imbens (2002), and are confronted with the Instrumental Variables Quantile Regression by Chernozukov and Hansen (2005). These results clearly suggest heterogenous effects across the distribution, negative at the bottom tail, increasing in magnitude across the quantiles. Such a picture points towards a conclusion that postponing retirement to older ages exacerbates the overall income inequality. Stochastic Dominance test renders support to this conclusion. However, relevant country specific estimates embedded in Regression Discontinuity design, relying on Frandsen, Frölich and Melly (2012) approach, are less readable and suggest heterogeneity in country specific effects.

Poster  
Session II

## The effect of the financial crisis on the elderly in Spain and Italy compared to elderly in the Netherlands and Germany

*Lisanne van Prooyen Schuurman*

The effects of the financial crisis are still tangible. The collapse of the Lehman Brothers in September 2008, one of the global leading banks, is thought to have played a major role in the unfolding of the recent crisis. The downfall of the bank almost brought down the world's financial system. (Schuknecht et al. 2010) The European economy did not remain unharmed. Since many mortgage backed securities were sold within Europe, the turbulence in the US housing sector quickly spread to European banks. Spain and Italy, which had developed so-called property bubbles, were among the worst affected. The demand for housing fell and banks subsequently collapsed. Since 2010, some European countries like The Netherlands and Germany are more or less heading towards recovery. However for other countries stabilizing merely appears to be a major challenge.

A commonly asked question among both policy makers and the general public is how the recent financial crisis has affected the public health. Measures introduced by governments to fight the financial crisis, for instance cutbacks in social welfare and healthcare spending, together with the increase in unemployment rates and the rising job insecurity may be severely affecting the public health. This study therefore focuses on the effect of the recent financial crisis on the self-perceived health of elderly in Spain and Italy as compared to those in the Netherlands and Germany, using SHARE data from wave 1, 2, 4 and 5.



## Transitions in Giving and Receiving Financial Support among Middle and Old-Age Populations

Poster  
Session II

*Aviad Tur-Sinai, Noah Lewin-Epstein, Noam Damri*

The question of intergenerational support, in general, and financial assistance in particular are the subject of a sizable body of literature. This literature, however, typically provides a static picture generally showing “downstream” support from older to younger generations. In our study we aim to expand the understanding of intergenerational assistance by examining its stability and changes in both parental and children’s assistance. Our study is meant to produce a comprehensive map of the giving and receipt of financial support among the older population. Based on data from Wave II and Wave IV of SHARE-Europe, it tracks the granting of financial support by persons aged 50+ among those interviewed in both Waves as well as the receipt of financial support by those aged 50+ in this population.

Based on the information as to whether households gave and/or received financial support we examine stability and change in financial support patterns. Transitions between situations of giving financial support were specified for the entire research population.

In these analyses, we examine the role of economic wellbeing, health, health changes, various aspects of need, personal characteristics and changes in it, along with reciprocity as factors that affect the likelihood of transition between states of giving and receiving financial assistance. The analyses are further elaborated by examining the question of giving financial support from parents to their children, and afterwards by exploring the question of receiving financial support from children to parents.

## The role of question order and framing in responses to self-assessed health questions: A comparison of China and Europe

Poster  
Session II

*Robin L. Lumsdaine, Sebastiaan Visser*

This paper considers the role of question order and framing in evaluating the subjective health assessment responses using the Survey of Health, Ageing and Retirement in Europe (SHARE) and China Health and Retirement Longitudinal Study (CHARLS) datasets. A unique feature of these datasets was that respondents were twice asked during the survey to evaluate their health on a five-point scale, using two different sets of descriptors to define the five points, with the ordering of which set was first given determined randomly. Earlier studies by Jürges, Avendano, and Mackenbach (2008) and Lumsdaine and Exterkate (2013) considered the extent of concordance between the two sets of responses using only the SHARE dataset; we replicate their analysis with the CHARLS data and compare the results. The structure of the skip pattern in the CHARLS data differs slightly from that of SHARE, in that rather than all respondents being administered a different question in the second instance, some received the same question as the first. This enables an additional comparison to previous literature, namely to the work of Crossley and Kennedy (2002) who found that a large proportion (28%) of respondents change responses even when asked the same question. We find that in CHARLS, 31% of respondents similarly changed responses. In comparing the three populations (those that were asked one question first, those that were asked the other question first, and those that were asked the same question twice) we document important differences in both the response distributions and in resulting inference.

## Caring for elderly parents: is it altruism, exchange or family norm?

*Sergio Perelman, Pierre Pestieau, Jérôme Schoenmaeckers*

The objective of this research is to study the underlying motivations in intergenerational transfers. We are particularly interested in care from the children to dependent parents and in potential financial downward transfers from parents. The issue is whether informal care is motivated by either pure altruism or exchange, or by family norms. The difference between the two is important. Altruistic caring or caring that is based on an implicit exchange contract are voluntary whereas informal caring induced by family norm is constrained and as such does not necessarily bring utility to the caregiver and may even have negative psychological or physical implications. It is based on theoretical models that we identify for each of those situations which are the expected signs of the relationship between care, financial transfers, parent's wealth and children's level of education. By using econometric techniques and based on the data collected as part of the second wave of SHARE, we consider the sign of these relations. The results of econometric estimates enable us to provide first initial response to the question of the motives of intergenerational links. They confirm the existence of differences between the different European regions into the motivations and behaviors of individual children and parents dealing with the problem of dependency. Family norm seems to dominate in ascending relationships, particularly in Northern countries. Exchange definitely plays a role for explaining downward transfers in the SHARE countries.

## Providing informal care by the older people and the effect of poor health: causality problems

*Andrej Srakar, Mateja Nagode*

Informal care is a widespread and important segment of long-term care, which is carried out independently or in parallel with formal care, i.e. as a complement or replacement. That informal carers represent the backbone of long-term care is witnessed by numerous international studies (see e.g. Litwin 2012 and numerous other studies) and it is crucial to know to what extent informal care is currently being implemented, who are the ones that provide informal care under which conditions and for whom. In our article we focus on the relationship between health status of the respondent and decision and intensity of provided informal help to others. Interestingly, the correlation of (good) health and informal caregiving is negative, particularly for help provided outside household. We explain this relationship by examining the endogenous (reverse causal) relationship between the variables, using different measures of health and instrumental variables from Wave 5 and Wave 3 of SHARE Survey, and determine the causal effects of health on informal care, provided within and/or outside household, using methodology of e.g. Imbens and Angrist 1994, Hoxby 2000, Murray 2006. We also model the effect of various different covariates (e.g. welfare regime, social and material deprivation, cognitive abilities) on informal caregiving. In conclusion we provide an examination of research and policy relevance of the study.

## Financing long-term care through housing in Europe

Plenary  
Session IV*Carole Bonnet, Sandrine Juin, Anne Laferrère*

In the current context of population aging and increasing financial pressures on public systems, we explore to what extent home ownership constitutes an insurance against the risk of long-term care expenses, by simulating the lump-sum payments that could be extracted from reverse mortgages.

First, using the 5th wave of SHARE, we simulate, for individuals living alone and aged 65 and over, the proportion who are able to pay for 1, 3 and 5 years of long-term care depending on their income, financial assets and on the value of their home in 9 European countries (Sweden, Denmark, Netherlands, Germany, Belgium, France, Austria, Italy, Spain). In a second step, we take into account potential differences in the risk of being dependent according to gender and the socioeconomic status. We run multinomial logit models on the 4th and 5th waves to estimate the effect of age, sex, income and education on the probabilities of transition between 3 states: i) no disability, ii) disability (at least 2 restrictions in activities of daily living) and iii) death. We then use these estimations to simulate disability trajectories of individuals until they die and to study to what extent they would be able to finance their periods of long term care needs through reverse mortgages.

Preliminary results suggest that reverse mortgages, as expected, increase the proportion of individuals able to pay for their long-term care expenses. However, since low-income individuals face a higher risk of disability and have less housing wealth, such products may not be adequate for those with the higher needs.

## What are the benefits of volunteering for volunteers?

Plenary  
Session IV*René Bekkers, Arjen de Wit, Dave Verkaik, Danique Karamat Ali*

To what extent does volunteering have beneficial effects for volunteers? While a large body of literature has examined benefits of volunteering, many studies have failed to address the direction of causality adequately. In this project we analyzed associations between volunteering and four possible outcome variables: subjective health, subjective well-being, career outcomes and social relations. We used data from six panel surveys from the period 1984 - 2014, covering 15 countries and including 845,733 survey responses from 154,970 different respondents. By running fixed-effects and first-difference regression models the paper disentangles selection and causation effects, offering valuable insights on volunteering as a way to enhance welfare in society.

We find robustly positive associations between changes in volunteering and changes in subjective health, subjective well-being and social relations. The impact on career outcomes is less clear. Findings from the SHARE point to a substitution effect between volunteering and paid work, but this result is not consistent with other panel surveys.

Most of the outcome variables are quite stable over time and the magnitude of the impact of volunteering is small. On average, the increase in subjective health and subjective well-being benefit due to changes in volunteering is about 1%.

In sum, voluntary engagement does enhance people's welfare, but we should not expect miracles from participation in voluntary activities.

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