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## 1 SHARE: a European policy device in turbulent times

Europe faces great economic and social challenges for the coming decades. Explicit government debt in the EU now stands at almost 90 per cent. Reducing this debt will take several decades and will involve more than the current generation. But this debt does not take into account that population ageing generates a demographic imbalance, and this in turn creates an implicit debt that is even higher than the explicit debt. The implicit debt means that entitlements of the current generation to pensions, health and long-term care to be paid in the future are not covered by the taxes and contributions expected to be paid under current policies by the current and later generations. Tackling this dual debt crisis requires Europe to rethink how seriously it takes active ageing and solidarity between generations.

„Active ageing and solidarity between generations” started as a relatively harmless motto for the European Year 2012. The dual debt crisis, however, has given it a much more serious meaning. The high debt levels mean that the financial balance between generations has gotten out of equilibrium and that more economic activity has to be created to pay off the debt, not the least through a more active role of the current ageing generation which has accumulated the debt. The 2012 motto therefore entails serious controversies: Which generation will pay the bulk of the burden? Who has to work longer? Who has to pay more taxes? Who will lose wealth through inflation? Will the current austerity measures deteriorate health and longevity? Will our societies adapt without jeopardising intergenerational cohesion?

This book is built on the premise that such serious questions require solid evidence to be collected and analysed before rushing to quick answers. This holds in particular when the questions are loaded with emotions and are fraught with political prejudices. SHARE – the Survey of Health, Ageing and Retirement in Europe (SHARE) – is designed to provide such evidence. The authors in this book take a first look at the data from the fourth wave of SHARE to shed light on the many micro-level aspects of active ageing and solidarity between generations in times of the dual debt crisis that has followed the financial crisis of 2008/2009. Its main purpose is to provide sober evidence of what has changed in the activities and life circumstances of older Europeans since the crisis has begun, and how it has affected intergenerational solidarity.

The Survey of Health, Ageing and Retirement in Europe (SHARE) collects detailed information on European individuals aged 50+ and makes it available to researchers and policy-makers. The SHARE enterprise allows researchers from across Europe and elsewhere to address key questions that are relevant to the achievement of active ageing and intergenerational solidarity. For example, what are the socio-economic circumstances in which Europeans aged 50 and older live? How healthy are they and does their objective health state reflect how they feel? What is the nature of the social networks in which they are embedded, and to what degree do they engage in the exchange of intergenerational support? And, last but not least, how do varying societal conditions shape their lives as they move through the life course, particularly in the latter half of the life span?

The work in this book is based on the most recent wave of the SHARE data which was collected in 2010 and 2011. The timing of this wave of data collection allows a unique examination of the various influences that the recent economic crisis has had on the lives of people aged fifty and over in different European countries. In this fourth wave, SHARE returned to the “classical” longitudinal design of social research (see Malter & Börsch-Supan 2013 for a description of how the data was collected in Wave 4). Such longitudinal inquiry is necessary to understand the extent of the changes that occur in the life circumstances of people as they age and as they were hit by the economic and financial crises. Our “observation window”, now extending from 2004 to 2012, is augmented by the life histories that were collected in Wave 3 and which provide background information as far back in time as childhood health and economic status (see Börsch-Supan et al. 2011 and Schröder 2011 for information on SHARELIFE). Together, SHARE and SHARELIFE provide a wealth of data to better understand the activities of older Europeans and how they react to exceptional circumstances such as the crises.

SHARE Wave 4 also takes “solidarity between generations” seriously as an object that needs to be measured and analysed. SHARE Wave 4 introduced, therefore, an important innovation, the results of which are presented for the first time in this book. In its fourth wave, SHARE became the first cross-national multi-disciplinary survey to collect harmonised social network information using a name generator approach (Litwin et al. 2013). This innovation adds important new information about the social fabric in Europe which, as the authors in this book show, interacts with the health, economics and social support areas that are already well covered by the SHARE questionnaire.

SHARE is also unique in an important additional aspect. That is, the survey is not only multi-disciplinary, a major undertaking in itself, but also multi-national in scope. The fourth wave of SHARE collected data on some 65,000 individu-

als aged 50 or over (and their spouses of any age) from 16 different countries. Four additional countries joined SHARE in Wave 4 and became new members of the longitudinal infrastructure (Estonia, Hungary, Portugal and Slovenia). On a sad note, Greece did not participate in Wave 4 due to the financial difficulties in that country. It is significant to mention that SHARE is harmonised with the U.S. Health and Retirement Study (HRS), the English Longitudinal Study of Ageing (ELSA) and The Irish Longitudinal Study of Ageing (TILDA). Studies in Korea, Japan, China, India and Brazil also follow these models.

## 1.1 Finances, work, health, social networks and the crisis

This book is composed of four sections that are edited by scientists who come from different disciplines and backgrounds. However, as will be seen, these separate sections are quite inter-related and are, thus, indivisible in terms of their results and overall conclusions.

### (a) The crisis: income, wealth and consumption

The first section, edited by Guglielmo Weber, focusses on the economic situation of 50+ Europeans and investigates the effects of the crisis on income, wealth and consumption. The current financial crisis is having an impact on the lives of many, but by no means all, Europeans. We can expect the impact to be overall stronger in some countries, but to vary a lot across households. The availability of micro data allows us to compare income, wealth and consumption indicators across and within countries. The availability of longitudinal data for a majority of countries allows us to see how individual circumstances have changed over time.

Viola Angelini, Agar Brugiavini and Guglielmo Weber begin this section by investigating household consumption. In particular, they use the failure to eat out in a normal month as an indicator of a low living standard. This suggests that more people enjoy low living standards in Southern and Eastern Europe compared to Central and Northern Europe. Its changes over time reveal that people with low education, low income, poor health and single females were mostly affected by the crisis.

Barbara Cavasso and Guglielmo Weber focus on individuals past retirement age and look at the way financial wealth contributes to smoothing out adverse shocks, such as those associated with changes in individual circumstances (loss

of spouse, onset of poor health or disability) or to the crisis (loss in income, reduced access to welfare benefits). Their results confirm the overarching role of (illiquid) housing wealth in all European countries, and highlight that many households instead have relatively little (liquid) wealth. The authors construct a financial distress indicator, based on the financial wealth to income ratio, and show that financial distress is more common in Southern and Eastern European countries, and that it has increased over time. When looking at the probability of becoming financially distressed in Wave 4, they estimate a protective role for Wave 2 per-capita income and home-ownership, and also for education and being married.

In a related analysis, Giacomo Pasini and Francesca Zantomio show that the crisis has not led to an increased take-up of disability benefits, possibly because of tighter rules enforced in various European countries. The retrenching of the welfare state may explain why households resorted more to using up their financial wealth.

Viola Angelini, Danilo Cavapozzi and Elisabetta Trevisan look more specifically at the way households reduce their financial wealth when they are hit by a negative shock. They first show how financial market participation varies across countries. Stocks and mutual funds are much more commonly held in Northern and Central European countries compared to Southern and Eastern Europe. Such differences are less strong for bonds – and all but disappear when the focus is on life-insurance. The analysis then focuses on what factors drive the decision to liquidate each asset in turn: a decrease in income is seen to be the most important common explanatory factor.

Maja Adena and Michał Myck close the section by pointing out the inadequacy of measuring old-age poverty with reference to relative current incomes. Such an approach to the material conditions of seniors ignores the possibility of running down assets to meet unexpected needs as well as the quality of in-kind support provided to older people. The key message of their contribution is that if one looks at the relationship with changes in the quality of life, relative income poverty is not the relevant measure. In particular, lack of wealth and self-reported difficulties in making ends meet are much better predictors of deterioration in physical health or the onset of depression.

## **(b) Work and retirement: challenges at the end of working life**

The second section, edited by Axel Börsch-Supan, assesses the influences of different work and retirement patterns on the economic situation, cognition and well-being, accounting for the changes due to the European debt crisis.

János Divényi and Gábor Kézdi begin this chapter by a descriptive analysis of work and retirement in Hungary, one of the new countries in Wave 4 of SHARE, and a country which is hit particularly hard by the economic crisis. The Hungarian pension system provides strong incentives for early retirement, and these appear to be strengthened by the low income attainable if an individual remains in the labour force. Hungary also fares worst in terms of most health indicators in the SHARE sample. An important finding of this paper is the extent of heterogeneity in Hungary: while the employment rate among older Hungarians with high cognitive skills and good health status is very similar to the European level, employment among older Hungarians with low cognitive skills and bad health status is much lower.

Rita Borges Neves, Fátima Barbosa, Alice Delerue Matos, Victor Rodrigues and José Machado investigate the association between unemployment and depression. Indeed, the unemployed in their SHARE sample are more likely to suffer from depression. There are, however, mitigating factors in this relation. Married unemployed, e. g., are less likely to report many depressive symptoms than the unmarried, particularly if the partner is a source of emotional support. But also having other meaningful social relationships serves as a moderating factor. Financial distress seems to be a key mechanism: those unemployed who report higher financial strain are consistently more prone to depression.

Agar Brugiavini, Giacomo Pasini, Elisabetta Trevisan and Guglielmo Weber look at the effects of economic downturns at the beginning and the end of the working life. They use both a self-reported measure of financial hardship from Wave 3 (SHARELIFE) and information on regional GDP growth in the most recent years, and relate their analysis to the literature that shows that leaving school during a recession has negative long-term effects on employability and earnings (“scarring effects”). The authors find strong effects of recent financial hardship on household income and on objective health. These effects are stronger for singles (when looking at income) and women (when looking at health status).

Elena Meschi, Giacomo Pasini and Mario Padula investigate how the economic crisis has changed the pathways to retirement. They exploit the longitudinal character of SHARE and compare the transitions between 2004 and 2006 and those between 2008 and 2011. Their results indicate a higher rate of exit from the labour market before the crisis than after the crisis, suggesting that the crisis is associated to a reduced likelihood of retirement, with a smaller effect of the crisis on Eastern European countries compared to both Northern and Southern European countries.

Morten Schuth and Marlene Haupt analyse the coverage by private and occupational pensions in Europe. In Sweden, the Netherlands, Denmark and Switzerland more than 70 per cent of SHARE respondents expect to receive retirement

income from occupational schemes, which is very different from the Mediterranean countries, especially Portugal and Spain. Overall, male and more highly educated workers are more likely to be covered by occupational pensions – the very same individuals who have more financial and housing wealth. In general, the authors find a higher coverage among younger workers, indicating a growing importance of supplementary pensions in Europe in the future.

Raquel Fonseca, Arie Kapteyn, Jinkook Lee, Gema Zamarro and Kevin Feeney analyse cross-country differences in financial and subjective wellbeing and how they relate to retirement. Upon quick inspection, early retirement countries, especially Mediterranean countries like Greece, Spain and Portugal, tend to have a high incidence of poverty and lower subjective wellbeing, while the Scandinavian countries have later retirement ages and, at the same time, higher subjective wellbeing and lower levels of poverty. Is this a causal effect? The authors' main contribution is to account for potential reverse causation, using full and early pension eligibility ages as instruments. They find that retirement per se does not lead to either relative or subjective poverty, nor does it have adverse effects on subjective well-being.

### **(c) Active and healthy ageing**

The health section, overseen by Martina Brandt, discusses active and healthy ageing with a focus on the effects of individual and societal socio-economic downturns. The chapters in this section assess a great variety of health related issues, starting from self-rated health, cognitive functioning and frailty processes, to the use of health care services, institutional care and different places of death. The articles in this section assess how different health indicators vary across different age groups in Europe and how the wellbeing of older Europeans has been affected by the economic crisis.

Sonja Vestergaard, Mette Lindholm Eriksen and Karen Andersen-Ranberg start the section with descriptions of the variation of health across 16 European countries and the development of individual health across SHARE waves in twelve countries. They find that people in Central and Eastern Europe are in poorer health than their Western counterparts. Differences in institutional factors have a major impact on health disparities in Europe and must be addressed to increase healthy and active ageing all over Europe, but especially in the East. Carmen Borrat-Besson, Valérie-Anne Ryser and Boris Wernli then focus on the determinants of frailty processes, which follow a geographical North-South gradient. Amongst other measures, keeping socially and physically active proves to be an efficient prevention to delay and reduce the onset and progression of frailty among older individuals.

We know that subjective and objective health measures sometimes differ considerably – with different patterns across countries. What we do not know exactly is how these differences can be explained. Jérôme Schoenmaeckers attempts to fill in this gap and explains the divergence between subjective and objective health measures by individual characteristics such as age, gender, education and social network characteristics in order to enable efficiently targeted public policy design.

The subsequent papers by Fabrizio Mazzonna and Franco Peracchi, and Chiara Dal Bianco, Christelle Garrouste and Omar Paccagnella assess the links between cognitive function, age and early life circumstances. Education and employment status are important predictors not only of the level of cognitive scores, but of their age-related decline. Cognitive function in older age is closely linked to early life circumstances such as the number of books available in the parental household at age ten. Older people in the Mediterranean countries generally start from a lower level but exhibit lower rates of cognitive decline than other European countries, suggesting a process of convergence across countries as people age.

In their first large-scale, population-based European study of the longitudinal effect of hearing impairment Sonja Vestergaard and Karen Andersen-Ranberg show that developing a hearing impairment is significantly associated with depressive symptoms as well as poor health in general. Thus, addressing the need for screening of hearing ability and making access to hearing aids easy for older adults is likely to have a high impact on increasing active and healthy ageing.

Tabea Bucher-Koenen and Fabrizio Mazzonna then turn to the health effects of the crisis. On a regional level, rising unemployment rates have a negative effect on the health of the old-age population, and especially on those still working. Thus, during times of crisis, budgetary cuts in health expenditure as well as policies aimed at increasing labour market participation of older persons should be examined very carefully.

The last three papers in this section examine different institutional influences on health, care and the end of life. The incentives for health care use in multimorbid patients are assessed by Juliane Köberlein and Hendrik Jürges. The authors find that people with more illnesses make greater use of the health care system, and are more likely to do so in countries with higher physician density. Although the introduction of prospective inpatient payment in different European countries has led to a more efficient health care supply by reducing the average length of hospital stay – it might also re-direct multimorbid patients to long term care institutions. Anne Laferrère, Aaron Van den Heede, Karel Van den Bosch and Joanna Geerts look into predictors and alternatives for such institutional care. Health conditions that limit the possibility of living alone after the death of a spouse are the most important predictors of entry into a nursing home, espe-

cially for people with scarce economic resources. In countries with few public long term care alternatives, it is the social network, and especially the children, who support their infirm older relatives. A chapter on the individual and social determinants of places of death by Annemarie Künn-Nelen and Hendrik Jürges concludes the health section. They find that in countries that have a large number of beds in long stay institutions, people are less likely to die at home, whereas in countries with high investment in home-based care, the opposite is true. This implies that governments have the possibility of enabling the end of life to be experienced in older people's own domicile, if that is their preference.

#### **(d) Social embeddedness and intergenerational solidarity across the life course**

One of the major methodological innovations of SHARE Wave 4, the measurement of social cohesion and intergenerational solidarity in the social network module, is at the centre of the compilation of articles edited by Howard Litwin. The first chapters in this section describe the nature of the most intimate configuration within the interpersonal environment of older Europeans – the personal social networks in which they are embedded. These are followed by several chapters that link between social networks and other key areas that are addressed in the SHARE questionnaire, using either the new social network module or other aspects of the interpersonal realm.

Kimberly J Stoeckel and Howard Litwin open the section with a descriptive analysis of the structure of personal social networks. They find that such networks are relatively small among older Europeans but nevertheless satisfying. Strong relationships with children are evident among Southern Europeans, while those living in Northern and Western Europe are more likely to consider friends as confidants. Eastern Europeans have smaller social networks that are comprised, more often, by only the spouse. Anat Roll and Howard Litwin consider the role of personal social networks in the calculus of social exchange and their contribution to well-being, utilising the unique linkage between social network and exchange data that is available only in SHARE. Their analysis demonstrates that network members play different roles in the exchange of different kinds of help. Moreover, regional differences prevail in the exchange of support with social network members. In particular, financial transfers with one's network members are correlated with greater well-being.

Christian Deindl, Karsten Hank and Martina Brandt look at the associations between interpersonal solidarities and the health of older adults in Europe. They document the salutary effect of social integration by showing the close relation-

ships that exist between network characteristics and self-rated health. They also affirm the association between social cohesion at the country level and self-rated health at the individual level, suggesting that the maintenance and promotion of social relationships in later life can diminish health disparities. Lili Abuladze and Luule Sakkeus view the personal social networks of older Europeans in relation to physical functioning, seeking to clarify whether disability determines connectedness. Among their several findings, they reveal that severely limited persons aged 80 and older have fewer people with whom to communicate, less diverse networks, lesser interaction and lower satisfaction with their networks. However, education has a strong protective effect against the social isolation of severely limited older people, thus pointing to a key area of attention for policy-makers.

Viola Angelini and Anne Laferrère consider, in their analysis, the effect of the physical environment – principally housing and socio-economic status – on the nature of the interpersonal environment. They find a positive correlation between income and wealth and the size of the social network, confirming that people do not seem to compensate for low resources by having more friends. They also show that cities are not anonymous places where older people are lost or lonely, but that several aspects of urban living may favour sociability.

The remaining chapters in this section look at social networks and their associations in differing contexts. Axel Börsch-Supan and Morten Schuth argue that early retirement reduces retirees' social networks, particularly in relation to their non-family ties. They hold, furthermore, that it is these kinds of ties that keep working people mentally agile. They suggest, therefore, that cognitive decline after early retirement may be partly explained as a function of network reduction. Sharon Shiovitz-Ezra considers loneliness in relation to network structure and quality. Using a scale of loneliness that was introduced in SHARE in Wave 4, she finds, perhaps paradoxically, that feelings of loneliness are more widespread in Southern and Eastern Europe than in Northern and Western European countries. Moreover, older people with no confidant network at all feel lonelier than those who have at least one confidant.

Daniela Craveiro, Alice Delerue Matos, Sara Gabriela Silva, Roberto Martinez-Pecino and Maria Johanna Schouten look at differences in the social network types that exist among women who assist their older parents and parents-in-law in Europe. They show that the configuration of the social networks of these women is related to the extent and nature of familism in the different SHARE countries, and the respective caregiving regimes that are in place. Agar Brugiavini, Raluca Elena Buia, Giacomo Pasini and Francesca Zantomio also consider the act of helping, but they look particularly at its consequences. They ask whether the provision of help to grandchildren in earlier times results in more help received in

later life. Their analyses provide support for a positive response to this interesting question.

Jim Ogg and Sylvie Renaut examine the exchange of intergenerational support as a function of major life-course events. They find that older Europeans give more support than they receive and that such support is more often practical in nature than financial. However, ill health and poverty during the life course clearly challenge one's ability to engage in the provision of support in late life. Finally, Simone Croezen, Mauricio Avendano, Alex Burdorf and Frank J van Lenthe consider the interplay between social participation and depression among older Europeans. They consider the data from several waves of SHARE and find that participation in religious and church activities is related to a reduced risk of developing depressive symptoms. This finding implies that policies should be instituted to enable older adults to maintain their affiliation to religious communities. This, in turn, may result in reduced prevalence of depressive symptoms among the oldest cohort.

## 1.2 Special thanks go to...

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