

The Effects of Welfare State Intervention on the Living Condition of Europeans Aged 50 and Over First Results of SHARELIFE on Life Histories

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SHARELIFE, the third wave of the Survey of Health, Ageing, and Retirement in Europe (SHARE), interviewed senior citizens aged 50 and over on their life histories from childhood to the present day. The aim of the survey was to fill an information gap common to surveys on health and economic and social conditions: the lack of retrospective data. By collecting standardized retrospective data on individuals' life histories, SHARELIFE permits, for example, a better understanding of the effects of welfare state intervention on individuals' past and present lives.

The first results from SHARELIFE presented here have been summarised from a selection of articles taken from the multi-authored book *The Individual and the Welfare State*, edited by A. Börsch-Supan, M. Brandt, K. Hank and M. Schröder. If the positive short-term effects of social protection systems are confirmed, unexpected and sometimes pernicious long-term effects, both in terms of public expenditures and individual benefits, are equally observed.

The European continent is currently the most affected by the population ageing process. According to Eurostat, the percentage of individuals aged over 65 is expected to increase from 16% in 2010 to 29% in 2060. This phenomenon constitutes a major challenge for all European countries, notably in terms of its impact on social protection systems (pensions, health...). At the beginning of the years 2000, the European Commission, aware of the lack of data on this theme, called for the establishment of a European longitudinal ageing survey to provide insights into the economic and social consequences of population ageing.

This demand for data on population ageing was answered by SHARE (Sources and Methods inserts). Conducted among individuals aged 50 and over, this survey covers three of the most important dimensions of ageing: health, the economy and social networks. Its longitudinal nature (respondents are interviewed every two years), permits ageing to be treated as a continuous process rather than a state of being making it easier to identify potential medium and long-term political levers. Using a standardized, cross-national approach, SHARE is conducted in fifteen European countries permitting comparative analyses on the way different public policies have an impact on the well-being of older citizens before and after retirement.

SHARE, launched in 2004, has already resulted in three data sets. The first two waves permitted the creation of the panel and the third, of specific interest here, provided the opportunity to document the life histories of individuals interrogated in 2008. Following a presentation of SHARELIFE, we will provide a summary of the first results that illustrate the potential of this third survey wave. The summary was carried out using a selection of articles published in the multi-authored book *The Individual and the Welfare State*, edited by A. Börsch-Supan, M. Brandt, K. Hank and M. Schröder.

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The specificity of SHARELIFE: a questionnaire on the life histories of survey participants¹

One of the shortcomings common to surveys on health or the socio-economic aspects of health is the lack of retrospective data, namely due to the difficulties in knowing an individual's past history prior to the survey. Information concerning an individual's material living conditions in childhood can, however, provide essential insights in that they can effectively be at the root of difficulties experienced in old or very old age. Child health status, for example, is often correlated to health status in adulthood and in consequence can affect individuals' career paths and subsequently their material living conditions on retirement. SHARELIFE fills this infor-

mation gap by grouping together standardized data on individual life histories and permits a better understanding of how social policies impact individuals' lives.

Questionnaire modules were hierarchically organized so as to stimulate respondents' memories and facilitate the emergence of buried memories. The interview begins with questions concerning respondents' kinship networks (children and life partners) followed by questions on the different lodgings occupied. After a section on material living conditions during childhood, questions focus on individuals' professional and financial histories. Finally, individuals are questioned on health events during childhood and adulthood (with a focus on health care and notably prevention) and the interview terminates with questions concerning their lives in general.

Collecting data on events dating back over fifty years is extremely difficult. The risk of error in dating events or the manner in which events occurred is high. To

CONTEXT

SHARE (Survey of Health, Ageing and Retirement in Europe) is a research infrastructure made up of several European universities and research teams. It is coordinated by the Mannheim Research Institute for the Economics of Aging based in Germany.

On the web site, <http://www.share-project.org/>, SHARE provides users with a vast number of tools: data from the three first survey waves that can be downloaded free of charge, different methodological documents, the questionnaires (in the 21 languages) and a large number of publications covering themes such as health, retirement and ageing.

In France, INSEE and IRDES jointly conducted the survey until 2011 thanks to financing from numerous partners presented on the French survey web site: www.irdes.fr/Share. On this web site, a dictionary of variables and data issued from wave 2 are equally available together with a bibliography of French research exploiting SHARE data.

reduce this memory bias as much as possible, SHARELIFE developed an innovative methodology using an electronic tool integrating a multi-dimensional calendar.

¹ For further information on SHARELIFE, please refer to the detailed methodology available on the web site: http://www.share-project.org/t3/share/fileadmin/pdf_sharelife/Publications/FRB-Methodology_feb2011_color-1.pdf

SOURCES AND METHOD

SHARE is the Survey of Health, Ageing and Retirement in Europe. Since 2004, SHARE questions individuals aged 50 and over on their physical and mental health status, material living conditions, social and family network relationships, retirement, dependency etc. After the first two waves of SHARE, the third wave, SHARELIFE, questioned the same individuals on their life histories from childhood to the present day. These retrospective data are now freely accessible on (www.share-project.org) and a book gathering together the first research results has just been published (see p. 4 of this document).

The SHARE sample

SHARE interviews a sample of individuals^a aged 50 and over together with their eventual life partner (whatever their age).

During the course of the first survey wave, over 31,000 individuals were interviewed in a total of 12 countries. The second wave permitted interviewing the same sample again and was accompanied by an updated sample to maintain its representativeness. Three new countries were added to the second survey wave: the Czech Republic, Poland and Ireland. During the course of the third wave, all respondents in the 13 countries interviewed during the first two waves were re-interviewed. In waves 2 and 3, for deceased respondents' previously interviewed, an end of life interview was conducted among the individuals' next of kin so as to obtain information on the circumstances of the deceased respondent's last year of life.

In France, field data collection was carried out by INSEE. 3,000 one-to-one interviews were thus conducted during the first two survey waves and almost 2,500 in the third wave.

^a In certain countries samples are composed of individuals whereas in others, such as France, they are composed of households whose one of the members is 50 years old and over (Boersch-Supan et al. (2005). The Survey of Health, Aging, and Retirement in Europe – Methodology, MEA – University of Mannheim (Germany), www.share-project.org)

SHARE sample

| | Total number | | | Number on the panel | | |
|-----------------|---------------------|---------------------|----------------------|---------------------|--------------------|--|
| | Wave 1 (2004-05) | Wave 2 (2006-07) | Wave 3* (2008-09) | Waves 1 et 2 | Waves 1, 2 et 3 | End of life interviews Waves 2 et 3 |
| Germany | 3,008 | 2,568 | 1,852 | 1,544 | 1,116 | 113 |
| Austria | 1,893 | 1,341 | 847 | 1,238 | 663 | 74 |
| Belgium | 3,827 | 3,169 | 2,832 | 2,808 | 2,277 | 138 |
| Denmark | 1,707 | 2,616 | 2,141 | 1,249 | 963 | 141 |
| Spain | 2,396 | 2,228 | 2,048 | 1,375 | 1,065 | 217 |
| France | 3,193 | 2,968 | 2,483 | 1,999 | 1,468 | 165 |
| Greece | 2,898 | 3,243 | 2,951 | 2,280 | 1,792 | 197 |
| Ireland | - | 1,134 | - | - | - | - |
| Israel | 2,598 | - | - | - | - | - |
| Italy | 2,559 | 2,983 | 2,492 | 1,766 | 1,471 | 147 |
| The Netherlands | 2,979 | 2,661 | 2,210 | 1,777 | 1,304 | 128 |
| Poland | - | 2,467 | 1,918 | - | - | 94 |
| Czech Republic | - | 2,830 | 1,873 | - | - | 65 |
| Sweden | 3,053 | 2,745 | 1,893 | 2,010 | 1,367 | 154 |
| Switzerland | 1,004 | 1,462 | 1,296 | 696 | 566 | 39 |
| Total | 31,115 | 34,415 | 26,836 | 18,742 | 14,052 | 1,672 |

* Individuals interviewed in wave 3 and also in waves 1 or 2.

Source: SHARE 2004-2009.

This allows respondents to recall events in several ways: in descending order (from the most important to the least important), chronologically within a given theme (different lodgings occupied) or between themes (for example an illness at the birth of a child). As the questionnaire progresses, this calendar permits events or periods covered by the different themes to be visualized simultaneously and put into perspective in relation to public events (election of a president, major sporting event, etc.). This extremely flexible tool can shift from one theme to another at any time and permits both interviewers and respondents to validate the exhaustiveness or accuracy of self-reported information.

Questionnaires, information technology tools and methodologies were identical for each country permitting the harmonization of data collection. In addition, the statistical treatment of data, calculations and adjustments and the diffusion of data were centralized.

The first results of SHARELIFE

The book entitled *The Individual and the Welfare State* (Börsch-Supan *et al.*, 2011) uses a multi-disciplinary approach to present a series of articles written by researchers systematically using SHARELIFE data. If the short-term effects of social policies implemented in welfare states have been widely researched, little information was available permitting the study of the long-term effects of participating countries' social policies on the living conditions of their inhabitants from a life-cycle perspective (from childhood to the present day). The diversity of social protection systems in Europe and their evolution permits a comparative analysis of their impacts on individuals' lives.

In general, the exploratory research presented here, confirms the previously identified positive short-term effects of social protection systems, but show that they equally have long-term effects that can be aggravated through time. SHARELIFE data equally permits the study of the long-term and occasionally pernicious effects of certain welfare state interventions both in

terms of public expenditures and individual benefits.

The following examples illustrate these overall observations in greater detail.

The positive effects of different social policies on health

The teachings provided by the first results of SHARELIFE clearly reveal the positive interplay of social policies: a public health policy will produce positive effects on education level, socio-economic status and material living conditions in old age. Inversely, policies aimed at improving working conditions and unemployment insurance will have positive effects on individuals' health.

Moschetti *et al.* (Chapter 23) thus demonstrate that child health status has a significant impact on health expenditures from the age of 50 onwards. This observation is particularly clear in the central and Mediterranean countries of Europe; that is to say in countries that did not have a universal health care system at the time when SHARE respondents were children.

Childhood living conditions, however, also have an impact in areas other than health. SHARELIFE confirms the idea that child health status determines education level (healthy children are better qualified) and socio-economic status (higher). Recent reforms in European social protection systems focus on increasing the role of individual savings in financing retirement. The development of individual savings management (or 'portfolio choice') equally renders older citizens more and more responsible for their financial security following retirement. The amounts involved vary from one household to the next, but all those who have to manage their savings are not equal in their abilities to succeed. Economic literature (in particular that using SHARE data) has already shown that differences in individuals' cognitive abilities have an impact on their ability to manage financial products (shares, bonds, etc.): arithmetical calculations or the need to evaluate the risks entailed effectively require good cognitive abilities. Yet, as for all health conditions in adulthood, it is possible that individuals' cognitive abilities are partly determined

by conditions experienced during childhood. This is demonstrated by Christelis *et al.* (Chapter 5) using retrospective life histories data: individuals whose cognitive abilities are inferior to others during childhood have less chance of adequately managing their savings. In short, health inequalities during childhood maintain socio-economic inequalities in adulthood that can have serious consequences for the elderly population of Europe, particularly in view of current reform trends that tend towards lowering pension rates.

SHARELIFE data equally confirm the long-term impact of working conditions on health. Siegrist *et al.* (Chapter 15) show that individuals having experienced difficult working conditions over a relatively long period of time are more likely to self-report poor health from retirement onwards. This effect remains unchanged when employment status and country of habitation are taken into account. On the other hand, those who continue working after 60 years old are often those who have experienced good working conditions and more particularly, a high level of responsibility. We equally observe that continuing professional education (or life-long learning) seems to be correlated to job quality (autonomy and recognition) and remaining in work after the age of 60. This effect is, however, less pronounced after country and employment status are taken into account, factors that have a 'mediating' effect.

Schröder (Chapter 17) shows that individuals' having been subject to redundancy or job loss through company restructuring during their working lives appear to have a poorer health status from the age of 50 than other economically active individuals. We observe effects on self-perceived health, mental health (risk of depression) and physical health (more particularly the existence of chronic diseases). Men and women are affected in the same proportions by changes in employment but the adverse health effects appear higher among women. It however appears that the unemployment insurance system has (at least partially) compensated for the negative effects of the vagaries of the labour market on the health of individuals, and more particularly women.

FURTHER INFORMATION

- Börsch-Supan, M. Brandt, K. Hank et M. Schröder, Eds. (2011). *The Individual and the Welfare State*. Berlin Heidelberg, Springer-Verlag, 285 p. :
- Avendano M. et Mackenbach J.P. (2011). "Life-Course Health and Labour Market Exit in 13 European Countries: Results from SHARELIFE". Pp. 203-213.
- Brugiavini A., Pasini G., Trevisan E. (2011). « Maternity and Labour Market Outcome: Short and Long Term Effects », pp. 151-159.
- Christelis D., Dobrescu L., Motta A. (2011). « The Impact of Childhood Health and Cognition on Portfolio Choice » in A. Börsch-Supan, M. Brandt, K. Hank et M. Schröder (Eds): *The Individual and the Welfare State*. Berlin Heidelberg, Springer-Verlag, pp. 59-66.
- Moschetti K., Lamiraud K., O'donnel O., Holly A. (2011). "Does Poor Childhood Health Explain Increased Health Care Utilisation and Payments in Middle and Old Age?", pp. 255-267.
- Siegrist J. et Wahrendorf M. (2011). "Quality of Work, Health and Early Retirement: European Comparisons", pp. 169-177.
- Schröder M. (2011). "Scar or Blemish? Investigating the Long-Term Impact of Involuntary Job Loss on Health", pp. 191-201.
- The Survey of Health, Aging, and Retirement in Europe – Methodology, MEA - Université de Mannheim (Allemagne), www.share-project.org.

But also unexpected long-term effects

There is no doubt that policies implemented within the framework of the different types of welfare state have protected Europeans in the face of economic, social and health risks in the short-term. Some of these policies, however, have had counter-productive long-term effects both in economic and health terms.

Several articles identifying under-employment in older workers, variable according to country, examine the differences in health or health prevention expenditures and the different unemployment or invalidity benefit schemes.

The article written by Avendo and Mackenbach (Chapter 18) tests three hypotheses (for the male population only). The first, validated by analysis, reveals that a long period of illness is positively correlated with early withdrawal from the labour market for health reasons. On average in Europe, having suffered from an illness lasting at least a year during the course of one's working life doubles the risk of early withdrawal from the labour mar-

ket. We however observe major disparities between countries: in Germany the risk is multiplied by three whereas in France it is only multiplied by 1.6. The second hypothesis, that attempts to measure the role played by unemployment and invalidity benefits as indicators of early retirement is partially validated: in the eleven countries retained, the risk of early retirement is positively correlated ($R^2=0.60$) to the rate of unemployment benefits (in percentage of GDP). For these authors, the results suggest that if health status plays an important role in their lives, individuals with a past history of 'long-term illness' can use the existence of unemployment benefits as a means of anticipating early withdrawal from the labour market. This is all the more worrying in that, according to the authors, the countries with the highest health expenditures (in percentage of GDP) do not register as one could expect (third hypothesis) less risk of early retirement for health reasons even if the prevalence of long-term illness in these countries is lower.

Another example (Brugiavini *et al.*, Chapter 13) underlines some of the unex-

pected and pernicious effects of maternity insurance coverage: if the existence of maternity benefits tends to improve the economic and social conditions of mothers during their working lives, in the long-term, the generosity of these schemes (in terms of leave and/or benefits) has a negative effect on future pension levels; the higher the number of children and consecutive periods of maternity leave (temporary or definite), the lower the pension rate.

In more general terms, the generosity of certain invalidity pension schemes is examined (Börsch-Supan and Roth, Chapter 19). The authors show that the current differences between European countries in terms of invalidity benefits persist when health and life history variables are taken into account and that they essentially depend on 'institutional' characteristics specific to each system, such as minimum benefit level or the severity of eligibility criteria. Using simulation, the authors show that the average levels of generosity observed in EU-15 applied to Sweden, Denmark and the Netherlands would significantly reduce the number of individuals benefitting from invalidity pensions paid by social insurance in these three countries.

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These first results of SHARELIFE suggest two conclusions: on the one hand the social protection systems emanating from the welfare state have provided significant benefits and deserve to be maintained for the benefit of future generations. On the other hand, the demographic impact of population ageing, increasing concern regarding the economic sustainability of social protection systems, should lead to modifications in welfare state interventions so as to ensure their efficacy throughout an individual's life cycle. ♦