

SHARE:
**Building a Panel Survey on Health, Aging and
Retirement in Europe**

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ABSTRACT

Ageing is one of the greatest social and economic challenges of the 21st century in Europe. SHARE, a EU-sponsored project that will build up a Survey of Health, Aging and Retirement in Europe, will be a fundamental resource for science and public policy to help mastering this unprecedented challenge. The main aim of SHARE is to create a pan-European interdisciplinary panel data set covering persons aged 50 and over. The project brings together many disciplines, including epidemiology, sociology, statistics, psychology, demography, and economics. Scientists from some 15 countries work on feasibility studies, experiments, and instrument development, culminating in a survey of about 22.000 individuals. The multidisciplinary nature of the data will provide new insights in the complex interactions between economic, health, psychological and social factors determining the quality of life of the elderly.

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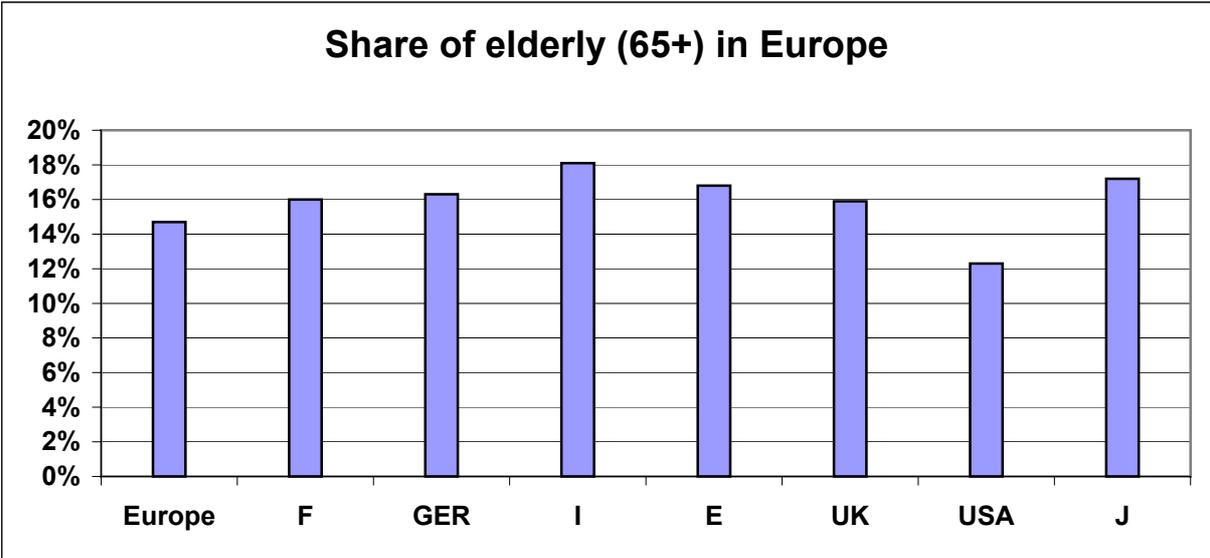
1. Introduction

The purpose of the paper is to present SHARE and its accompanying projects. We detail objectives, milestones, deliverables and current status. A special focus is the description of the cross-national and interdisciplinary focus of the project which introduces considerable complexity in light of the many different options and restrictions in the participating countries.

Background

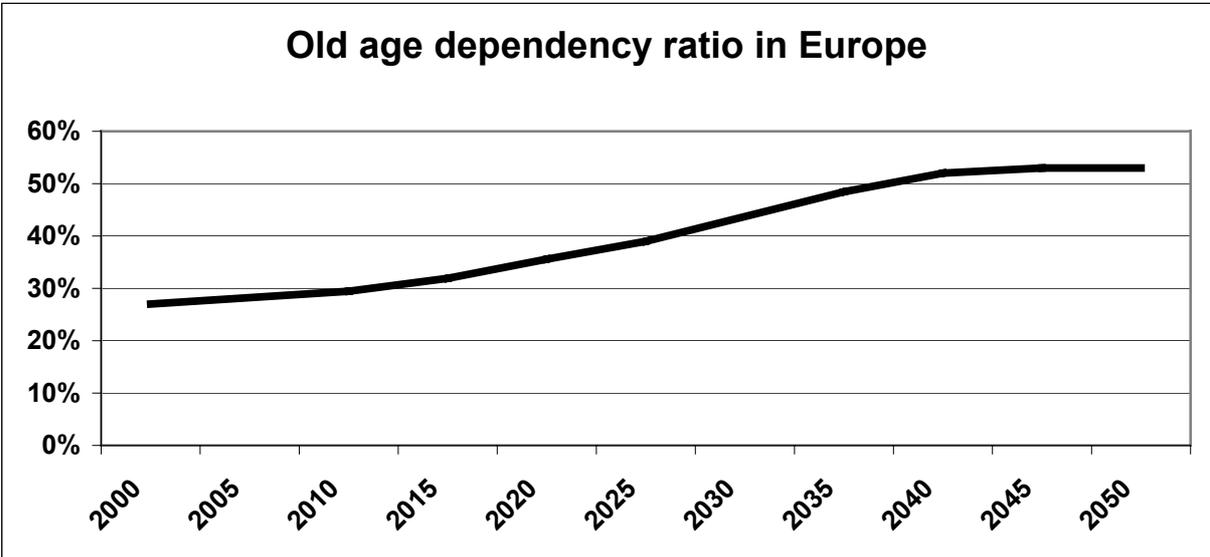
Ageing is one of the greatest social and economic challenges of the 21st century in Europe. Of the world regions, Europe has the highest proportion of population aged 65 or over, with Italy having the highest proportion of people aged 65 or over (18% in 2000), see figure 1. Outside Europe, only Japan has a similar age structure (about 17% of the population is 65 or over). In Europe, the ratio of persons aged over 65 as a percentage of the working age population 20-64 (the dependency ratio), is expected to increase from about 27% in 2000 to 39% in 2025, and to 53% in 2050 (European Commission, 2000), see figure 2. This increase of the dependency ratio in itself places a heavy financial burden on society through pay-as-you-go financed pension, health and long-term care systems.

Figure 1: Share of Elderly in Total Population in Europe, 2000



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2002 Revision and World Urbanization Prospects: The 2001 Revision*

Figure 2: Old-Age Dependency Ratio, 2000-2050



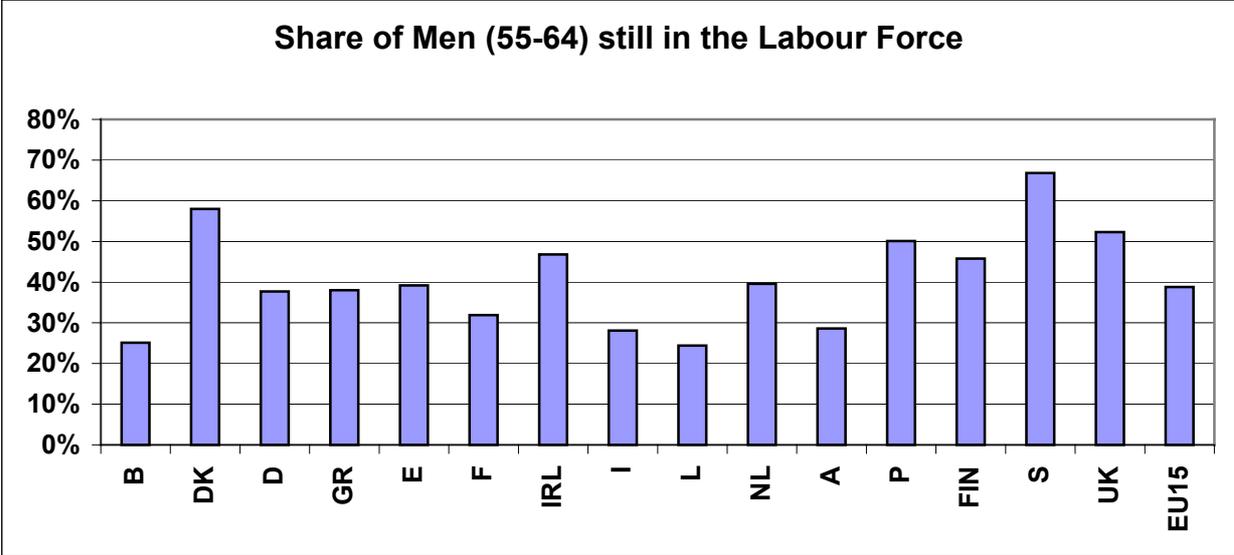
Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2002 Revision and World Urbanization Prospects: The 2001 Revision*

There are other pressures on the social security and welfare system as well. Older workers are more likely to be in disability programmes (Aarts et al, 1996) and generally the health care

cost of the elderly is substantially higher per capita than of the non-elderly. A special aspect of ageing lies in the increasing number of the oldest old, a population segment with a high prevalence of long-term care needs (Suzman et al, 1992). The ageing of society will cause the number of people on disability or consuming health care to go up.

In addition, Europeans retire much earlier than inhabitants of other developed countries: for instance, in Belgium only a quarter of all males are still in the labour force at age 55-64, compared to three quarters in Japan (U.S. National Academy of Sciences, 2001), see figure 3. This typically European combination of an ageing population and retirement at ever earlier ages with relatively generous benefits puts very severe strains on our capacity to care for the elderly in the future.

Figure 3: Share of Men Aged 55-64 Still in the Labour Force, 2001



Source: Eurostat, LFS

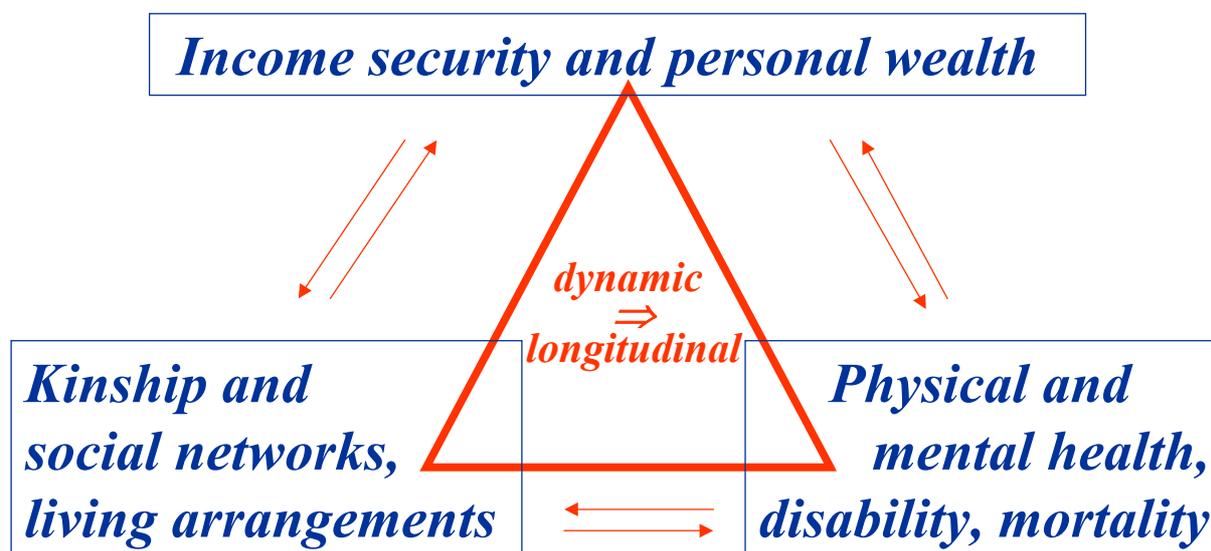
Thus, everything else equal, ageing places a much higher burden on the sustainability of income maintenance systems in Europe than elsewhere in the world, and European public policy – pension policy, health care policy, labour market policy – is challenged in particular. Public policy plays an important role in explaining the differences in health care utilisation or disability insurance across countries, and public policy appears to be a major factor in explaining the low retirement ages in Europe (Gruber and Wise, 1999).

Prepared policy making

To deal with the challenges for public policy posed by the ageing of European societies, one needs to understand the complex interactions among economic, health, psychological and social factors that determine the quality of life of the elderly, and in particular the mechanisms

through which policy measures such as pension reform, health care reorganisation and labour market restructuring affect elderly citizens, see figure 4.

Figure 4: Interactions among economic, health, psychological and social factors



Such understanding requires multidisciplinary data and research on ageing. In this respect, however, Europe is ill-equipped. While some member states have collected data in specific disciplines at various points in time, there is no Europe-wide longitudinal and multifaceted knowledge base for this crucial challenge of our new century.

Analysing cross-nationally comparable data provides a particularly large added value to the European Community because analysing data on a pan-European level is worth much more than the sum of its national parts. The two main reasons for this are:

First, matters of economic and social policy are increasingly Community matters, due to the increasing personal and capital mobility, precipitating common policies and regulations such as the pension directive. The gradually increasing importance of the method of open co-ordination requires indicators based on reliable and comparable data such as collected in SHARE, to assess and guide Community policy.

Second, the enormous diversity in institutional histories, policies, and cultural norms that history has created, represents a unique living laboratory in which the various determinants of the current economic, health and socio-psychological conditions can much easier be understood than in the much more homogeneous environment of a single country. A large added value provided by the SHARE project bundle both to science and to society is to

exploit this living European laboratory for the analysis of the elderly's quality of life. The insights gained from analysing and comparing the diversity of experiences will help both a supranational body like the EU and its member countries to more effectively prepare for the continuing changes in age demographics in the future.

Objectives

The main objective of SHARE is to provide a fundamental knowledge base for science and public policy in order to understand and to master the challenges posed by population ageing. Specifically, SHARE aims to create, evaluate and analyse a large-scale pan-European and interdisciplinary household survey of respondents aged 50 and over. Data to be collected include variables about health, psychology, economics, social support, family support, and intergenerational transfers of money and time.

SHARE has many accompanying projects, and we use the acronym SHARE for both the entire project bundle and the core project within this bundle. This name-giving core project will collect several preparatory surveys in a selected number of European countries culminating in a prototype survey in Spring 2004 that demonstrates the feasibility and usefulness of such a large-scale cross-national and interdisciplinary survey. This core project is sponsored by the European Commission as part of the 5th framework program. AMANDA, a second EU-sponsored project under the 5th framework program, will analyse these data, develop prototype indicators for the well-being of the elderly, and perform behavioural analyses. Austria, Belgium and Switzerland are formally part of SHARE but have their own funding as part of several national projects. Finally, a set of accompanying projects are funded by the U.S. National Institute on Aging and provide technical assistance, through the University of Michigan at Ann Arbor, the RAND Corporation at Santa Monica, and the National Bureau of Economic Research at Cambridge, Massachusetts.

Project participants are currently eleven countries ranging from Scandinavia (Sweden, Denmark), Western and Central Europe (France, Belgium, The Netherlands, Germany, Switzerland, Austria) to the Mediterranean (Spain, Italy, Greece). SHARE will be based on best practice technologies in these participating countries. The survey will follow a common set-up across all countries with the goal of collecting data that are strictly comparable to allow cross-country research. Therefore, one of the most difficult tasks consist in taking into account differences in language, culture and institutions. Other difficult tasks are of a more technical nature such as developing country-specific feasible sample designs and making use of suitable sampling frames that are already available.

The remainder of this paper is organised as follows. Section 2 motivates the main innovation of this project, its multidimensional design which combines interdisciplinarity, cross-national comparability, and longitudinality. Section 3 presents the organisational structure of this large project. Section 4 details content and questionnaire design. Section 5 presents the development process and the project schedule. Section 6 describes fieldwork procedures. Section 7 reports on the current state of the project and summarises results achieved so far.

2. Innovation

The main innovation of the SHARE project lies in its multidimensional design which combines interdisciplinarity, cross-national comparability, and longitudinality. This design is a necessary consequence from the SHARE objectives. In order to study the quality of the life of the elderly and how it is affected by the population ageing process, by the various social and economic policies in Europe, one needs multidisciplinary, longitudinal and internationally comparable data:

Multidisciplinary data

- One needs *multidisciplinary data*, for the simple reason that many societal aspects of ageing have a multidisciplinary character (e.g. retirement and health, or financial and health factors determining inflow in disability insurance programmes). To deal with the challenges for public policy posed by the ageing of European societies, one needs to understand the complex interactions among economic, health, psychological and social factors that determine the quality of life of the elderly, and in particular the mechanisms through which policy measures such as pension reform, health care reorganisation and labour market restructuring affect elderly citizens. We know, for instance, that wealthier persons on average are healthier and live longer than persons who are poorer. But we do not understand well through which channels this link is working and how policy can affect these channels.

Longitudinal data

- One needs *longitudinal data*, because many events associated with ageing are dynamic in nature. For instance, current pensions or social security benefits will usually depend on one's earnings history; current health is partly determined by past behaviour and past health events; accumulated wealth is the result of past savings and investment decisions

which in turn depend on expectations about the future. Without longitudinal data one cannot distinguish between age and cohort effects. That is, if we observe differences in for example health, income or wealth between individuals of different age, but we cannot ascertain if the difference is simply due to age or due to the fact that the younger person is on a different trajectory than the older person, because of the different life experiences associated with different generations.

Internationally comparative data

- One needs *internationally comparative data* to exploit the rich variety in policies, institutions and other factors across European countries. The impact of public policy can only be understood if we observe one policy in contrast to other policies. Many of the policies that one might want to consider to address future public policy challenges resulting from an ageing population, have already been implemented in some form in at least one of the European countries. Exploiting the variation in institutions across European countries creates a unique *laboratory* in which to study the effects of institutions on societal processes (Gruber and Wise, 1999). For this to work, data must be comparable across countries (e.g. the measurement of disability).

The unique and innovative feature of SHARE lies in the *combination* of these three features. Never before has a team from such diverse disciplines collected data on ageing on a European scale. We have interdisciplinary data sets in some countries, notably the English Longitudinal Survey on Ageing (ELSA)¹ and the Health and Retirement Study (HRS)² in the United States, the German Ageing Study and the Italian Longitudinal Survey on Ageing. We also have cross-national data sets on single issues, notably the European Community Household Panel (ECHP), the European Social Survey (ESS), and the various health surveys collected by the WHO. Some of these data sets are longitudinal (ELSA, HRS and ECHP). The combination of interdisciplinarity and longitudinality has made ELSA and HRS role-models for SHARE.

The cross of longitudinality, genuine interdisciplinarity, and a truly cross-national design, however, has not been attempted before. SHARE is from the beginning designed to meet all country specific institutional and linguistic requirements in a single common design.

¹ <http://www.natcen.ac.uk/elsa/>

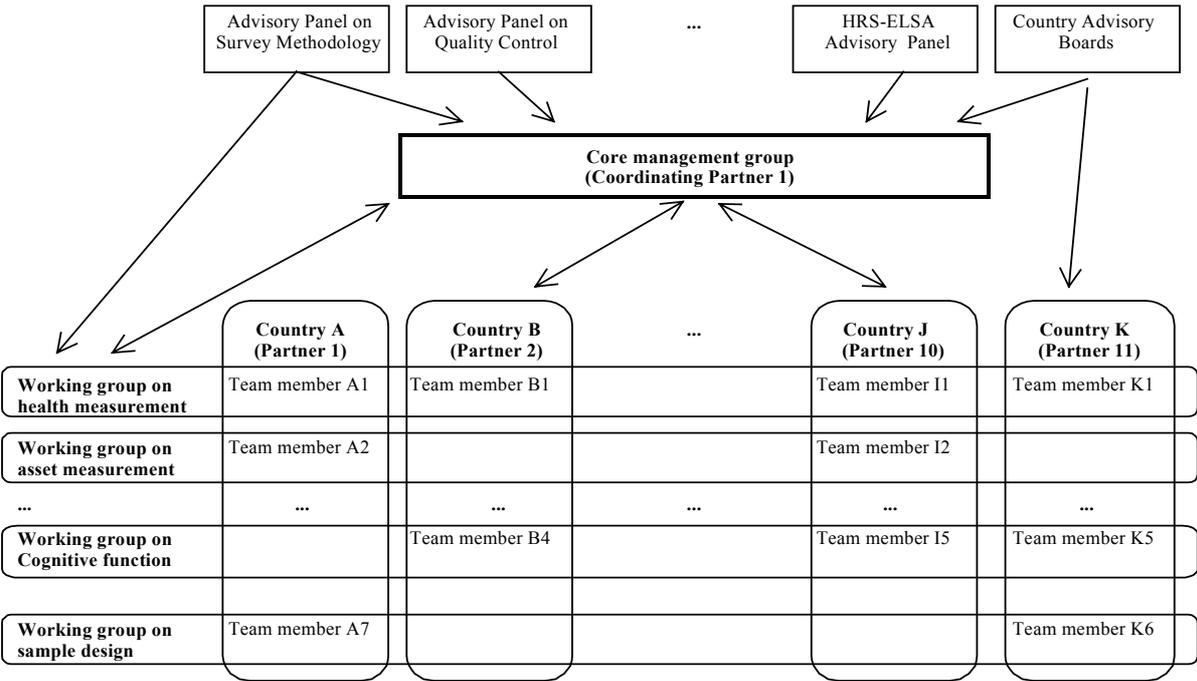
² <http://hrsonline.isr.umich.edu/>

3. Participating partners and organisational structure

Project participants are currently eleven countries ranging from Scandinavia (Sweden, Denmark), Western and Central Europe (France, Belgium, The Netherlands, Germany, Switzerland, Austria) to the Mediterranean (Spain, Italy, Greece). In each country, we have assembled teams of first-rate researchers in demography, economics, epidemiology, psychology, sociology, statistics, and survey design. Currently, about 130 researchers are directly involved in the SHARE project.

These researchers are organised in multidisciplinary country teams and cross-national working groups (“matrix organisation”), assisted by a number of expert support and advisory teams. Each researcher belongs to both a country team and a working group. The organisational structure is summarised in figure 5:

Figure 5: Matrix structure of SHARE working groups and country teams.



Multidisciplinary country team A consists of researchers A1, A2, ..., and A7. The country teams negotiate with the survey agencies to conduct the national survey; manage the translations; participate in the training process to motivate the interviewers.

The cross-national working group on health measurement consists of researchers A1, B1, ..., I1 and K1. The working groups design specific questionnaire modules, conduct response analyses during the testing phase and modify the questionnaires accordingly.

Potential disagreements between country teams and working groups or among country teams and working groups will be settled by the core management group.

Core management group and Co-ordination team

A **core management group** supervises the entire project. It is led by the **co-ordinator**, Axel Börsch-Supan, economist at Mannheim University. The overall direction of the project will be carried out by the co-ordinator in collaboration with the core management group, all internationally-respected senior experts in their fields (Agar Brugiavini, economist at the University of Venice, Arie Kapteyn, economist at Tilburg University and RAND, Stefania Maggi, epidemiologist at the University of Padua, Sir Michael Marmot, public health expert and sociologist at University College London, James Nazroo, sociologist at University College London, and Jean-Marie Robine, epidemiologist at INSERM, Montpellier). The co-ordinator is aided by a **co-ordination team** which is based in Mannheim, Germany. It ensures overall quality and cross-national comparability; co-ordinates the development of the questionnaire modules; and co-ordinates and participates in all crucial negotiations.

Country teams

The **country team** leaders' institutions are the partners of the consortium. The country teams are responsible to conduct the project in all of its phases in their respective countries. The task-oriented working groups, which consist of those members in each country team who are interested in specific subjects plus external experts, co-ordinate survey design and outcome analyses across countries. The country teams are led by the following country team leaders (CTL):

- **Axel Börsch-Supan:** Coordinator, leads German country team.
- **Martin Browning:** Leads Danish country team.
- **Thierry Magnac:** Leads French country team.
- **Platon Tinios:** Leads Greek country team.
- **Guglielmo Weber:** Leads Italian country team.
- **Arthur van Soest:** Leads Dutch country team.
- **Manuel Arellano:** Leads Spanish country team.
- **Anders Klevmarken:** Leads Swedish country team.
- **Alberto Holly:** Leads Swiss country team.
- **Pierre Pestieau:** Leads Belgian country team.
- **Rudolf Winter-Ebmer:** Leads Austrian country team.

Working groups

All substantive work is conducted in cross-national **working groups**. The **working group leaders** (WGL) are specialists in their fields. The composition and leadership of each working group is determined by the co-ordinator. All working group leaders report to the co-ordinator who may delegate part of the responsibility to the partner in charge of the respective field. Eleven working groups will produce the questionnaire design and write up subject-specific parts of the final report on a design of SHARE (**working group leader** in parentheses):

- D1: Physical health (**Johan Mackenbach**),
- D2: Mental health and psychological status (**Martin Prince**),
- D3: Well-being (**Johannes Siegrist**),
- D4: Oldest Old (**Kaare Christensen**),
- D5: Saving and assets (**Tullio Jappelli**),
- D6: Consumption (**Martin Browning**),
- D7: Labour force participation, income and pension claims (**Agar Brugiavini**),
- D8: Expectations and subjective probabilities (**Luigi Guiso**),
- D9: Family and social networks (**Martin Kohli**),
- D10: Intergenerational transfers (**Claudine Attias-Donfut**)
- D11: Health systems and health service utilisation (**Brigitte Santos-Eggimann**).

In addition, three working groups address methodological issues and write up the methodological parts of the final report on a design of SHARE:

- M1: Cross-national survey design (**Anders Klevmarken**),
- M2: Data base management and data validation (**Arthur van Soest**),
- M3: Preliminary response analysis (**Manuel Arellano**).

Advisory panels

In order to draw from the best experience available, several **advisory panels** have been set up. In addition to those on the national level, there are formal advisory panels on the supranational level on overarching issues such as survey methodology, quality control, and data management and dissemination. Furthermore, one advisory group consists of leading researchers of the US HRS and the UK ELSA.

Support teams

The co-ordination team is aided by four expert support teams. Their tasks and responsibilities are:

- CentERdata³ (Tilburg, NL) is responsible for the technical implementation of the CAPI questionnaire including the translation tool, and works out the data and sample management system, collects the data centrally and runs preliminary checks.
- The Social Research Centre⁴ (SRC, Ann Arbor, USA) designs a centralised “train-the-trainers” program, monitors fielding protocols and provides trouble-shooting consultation.
- The Centre for Survey Research and Methodology⁵ (ZUMA, Mannheim, Germany): designs the framework for the model contracts and negotiation procedures and produces guidelines for the translation process and design-problem handling procedures.
- The National Centre for Social Research⁶ (NatCen, London, UK) has conducted the first pilot of SHARE in the September of 2002, and has advised in the improvement of the questionnaire as result of this pilot. NatCen now serves as the main link between ELSA and SHARE.

4. Questionnaire Content and Questionnaire Design

Data to be collected will include *health variables* (e.g. self-reported health, physical functioning, cognitive functioning, health behaviour, use of health care facilities), *psychological variables* (e.g. psychological health, well-being, life satisfaction, control beliefs), *economic variables* (e.g. current work activity, job characteristics, job flexibility, opportunities to work past retirement age, employment history, pension rights, sources and composition of current income, wealth and consumption, housing, education), *social support variables* (e.g. assistance within families, transfers of income and assets, social networks, volunteer activities, time use).

³ <http://cdata4.uvt.nl/eng/index>

⁴ <http://www.isr.umich.edu/src/>

⁵ <http://www.gesis.org/en/zuma/index.htm>

⁶ <http://www.natcen.ac.uk/>

All data will be collected by face-to-face, computer-aided personal interviews (CAPI). The survey instrument is written in English as a generic version. In each country or region, the English text can be replaced with text in its own language. The structure of the survey instrument is not affected by the language; all survey instruments are identical.

Questionnaire modules

The survey instrument is structured in modules. The current set of modules is listed in figure 6, together with the persons in the households who are answering each module.

Figure 6: Modules of SHARE questionnaire

Module	Name	All Respondents	Financial Respondent	Housing Respondent	Family Respondent
CV	Coverscreen				
DN	Demographics	x			
PH	Physical Health	x			
BR	Behavioural Risk	x			
CF	Cognitive Function	x			
MH	Mental Health	x			
HC	Health Care	x			
EP	Employment and Pensions	x			
GS	Grip Strength	x			
WS	Walking Speed	x			
CH	Children				x
SP	Social Support	x			x
FT	Financial Transfers		x		
HO	Housing			x	
HH	Household Income			x	
CO	Consumption			x	
AS	Assets		x		
EX	Expectations	x			
IW	Interviewer Observations				

Respondents

Respondents are all household members aged 50 and over, plus their spouses, independent of age. Example: Anna, age 52; her husband Bert, age 49; her daughter Cecilia, age 17; and her mother Dorothy, age 70. We will interview Anna, Bert and Dorothy.

Some parts of the questionnaire need only be answered by one respondent in a household or couple, respectively. Questions on housing and housing finances should be answered by the household member who is most knowledgeable in housing matters ("housing respondent"). Questions about finances need be answered by one person in a couple only, again preferably by the partner who is most knowledgeable ("financial respondent"). If a couple keep their finances completely separate, they will be treated as separate financial units and each of them will answer their own questions on finances.

Description of modules

In the following, each module of the questionnaire is described, in the order in which they appear in the questionnaire. The current version of the questionnaire is available on www.SHARE-project.org.

Coverscreen: The interview starts with a “coverscreen” that provides an introduction to the study and contains the statement of confidentiality. The coverscreen collects basic demographic information about everyone who currently lives in the household (name, gender, birth year and month, relationship to informant, and whether married or living with someone as married). It establishes whether household members are eligible for a SHARE interview and who is going to be the housing, financial, and family respondent. This section only needs to be completed by one person in each household, the “informant”.

Demographics: This module collects details about each respondent’s marital status, country of birth, education, and occupation. It also collects selected details about parents such as last occupation, health status, and frequency of contact.

Physical Health: This module covers many different aspects of people’s health; self-reported general health, longstanding illness or disability, eyesight and hearing, specific diagnoses and symptoms, pain, and difficulties with a range of activities of daily living.

Behavioural Risks: This module collects information on health behaviours such as smoking, alcohol use, and physical activities.

Cognitive function: This module contains subjective and objective measures of four aspects of the respondent’s cognitive functioning: literacy, numeracy, memory, and verbal fluency.

Mental Health: This module asks how the respondent views his or her life and collects information about emotional problems.

Health Care: This module asks about recent doctor visits and hospital stays. It also contains questions about the respondent's level of health insurance.

Employment and Pensions: This module collects information about respondents' current work activities, their income from work and other sources, and any current or past pensions that they may be entitled to. For respondents who have retired and are receiving a pension, we ask about the number and kind of pensions and how much they receive.

Grip Strength: This type of physical measurement involves recording the respondent's maximum handgrip strength with the aid of a dynamometer.

Walking Speed: This type of physical measurement involves asking the respondent to walk a certain distance and measuring the time it takes for the respondent to complete this activity. Only persons of age 65+ are asked to perform this test

Children: This module collects information about the respondents' children.

Social Support: This module collects information about any help the respondents might receive from family and other people not living in the household and how household members help others. Questions on most kinds of help received by members of a couple are asked of the family respondent.

Financial Transfers: This module asks the "financial respondent" about any regular financial transfers and payments the respondent(s) may have given or received from non-household members. It also asks about inheritances.

Housing: This module collects information about the respondents' current housing situation, including the size and quality of the accommodation. Owners are asked about the value of their property and, depending on the individuals' tenure, questions are asked about mortgages and rent payments. The section on housing is asked of one person per household, regardless of how many people are eligible for the interview.

Household Income: This module collects summary measures of the household income from various sources.

Consumption: This module asks about various types of household expenditures, e.g. on food, fuel, electricity, and telephone. It is answered by the "housing" respondent.

Assets: This module asks about the amount of financial and non-financial assets held in various forms and income from these assets. This section will be completed by one person in each financial unit (the "financial respondent"). A financial unit is defined as either a single person or a couple, so in most couples only one of them will complete the sections on assets on behalf of both of them.

Expectations: This module explores people's expectations, the level of certainty they feel about the future, and how they value risk and make financial decisions within their household.

Interviewer Observations: This module concerns the interviewing experience and should be answered by the interviewer as soon as possible after the interview. These questions are important in understanding the circumstances surrounding the interview and can sometimes help researchers clarify any confusing or conflicting information. Included are e.g. information of background interview characteristics, third person present, time and day, atmosphere, area, housing, household characteristics, etc.

5. The Development Process

Core of the SHARE development process is the iteration between *questionnaire development* and *data collection*. Point of departure will be the US HRS (Health and Retirement Survey), the UK ELSA (English Longitudinal Survey of Ageing) and similar other survey instruments (e.g., in Germany, Italy and Sweden) which have addressed relevant questions.

The development process will take place in four stages:

Stage 1: Initial questionnaire design in English language

In the first stage, the working groups, departing from the US HRS and the UK ELSA survey instruments and exploiting other survey instruments which have addressed relevant questions, produced an English-language draft questionnaire. The entire group met in plenary sessions during this process to test ideas and ensured that the proposed questions are likely to be viable in all participating countries.

The first stage culminated in an English-language pilot which took place in the UK in September 2002. The main purpose of this pilot was to test the feasibility of the survey instrument and the CAPI program. It was based on a quota sample: 40 households had at least one respondent aged 50-70, 40 households had at least one respondent aged 71-85, and 10 households had at least one respondent aged 86+. 30 households contained at least one

respondent who is working; and single/couple or composite households were equally frequent. The pilot was conducted by NatCen (London) which already conducted the ELSA pilots and the first wave of the main survey. The aim of this pilot was to test the English language questionnaire which was revised on the basis of the results of the pilot.

Stage 2: Development of multi-language instrument

After some revision of the questionnaire, the next stage consisted of an array of cognitive interviews in selected countries based on the English-language questionnaire in order to test the international feasibility of the generic instrument. Next, and after some minor revisions of the questionnaire, a translation tool⁷ was developed by CentERdata to enforce the comparability of all national translations with the “generic” (English language) questionnaire. During translation of the questionnaire into national languages, it was important to keep track of necessary further adaptations to each country’s institutions and circumstances. Afterwards, the translation tool and the translated questionnaires were tested in two different countries, the result going back to the English, generic version in order to satisfy the country specifics.

After a further elaboration of the translation tool and the questionnaire, the second stage culminated in a first pilot simultaneously in almost all SHARE countries, using quota samples (n = 50 households, some 75 persons). These interviews aim at testing to ensure that the questions are understood and answered as intended in each country, along with testing of the duration of the different modules, and the functioning of the sample management system.

Stage 3: Development of multi-language sampling frame

In the next stage, after further refinements of the instrument, the full questionnaire using random samples (n = 100 primary respondents per country plus their spouses) will be fielded. Aim is to allow predictions to be made of the reliability and validity of the full questionnaire, including more “problematic” respondents than are to be expected using a quota sample. In addition, this pre-test should also test the country-specific procedures to achieve a probability sample.

An extensive statistical analysis of the pilot results is being performed to maximise the reliability and validity of the questions. Using data from the testing interviews, the pilot results and past data, these will suggest improvements to questions, and assist in the design of the final source questionnaire, that are most suitable for each country.

⁷ “Language management utility”.

Stage 4: Running the prototype “main test survey”

The last stage will consist of a medium-scale test survey of this prototype questionnaire (n = 1000-1500 primary respondents per country plus their spouses). This stage is essential in demonstrating the feasibility and the usefulness of SHARE, in that it permits substantive data analysis addressing the main questions of interest. This survey delivers a prototype for the planned multi-year panel, and should serve as a demonstration object to the European Commission.

Project schedule

Table 7 lists the major tasks, meetings and milestones of the SHARE project. It shows the complexity of the project and depicts how the different working groups depend on each other.

Table 7: SHARE project schedule

Responsible	Date	Task
All	1. Jan. 2002	SHARE project begins; formation of WGs and CTs
WGs	Due 15. March	Draft paper versions of module contents due
All	March 2002	SHARE conference in Madrid, draft of questionnaire discussed, questionnaire and module length fixed
WGs	Due 30. June	Version 1 questionnaire modules due
CentERdata	Due 20. July	Version 1 CAPI instrument due
MEA, NatCen	August 2002	Testing, Corrections: Generate version 2 survey instrument
MEA/NatCen	Sept. 2002	UK-PILOT: First test of whole questionnaire (version 2), quota Sample (50 HH) in the UK
WGs	Due 7. Nov	1 st draft of updated modules
WGs	Due 30. Nov	2 nd draft after feedback with SRC and NatCen
MEA	1-15. Dec	(Minor) editing in cooperation with WGs: version 3
SRC, ZUMA	15. Dec-15. Jan	Cognitive interviews in Danish, French, German, Italian
All	1. Jan. 2003	AMANDA project begins
CentERdata	Due 15. Jan	Programming of survey instrument version 3, some testing
All	15.-30. Jan	Testing (CTLs: does it fit your country requirements?)
MEA	31. Jan	Collect and merge feedback from testing: version 4

CentERdata	Due 31. Jan	Translation tool (1 st version)
CentERdata	1.-15. Feb	Programming of survey instrument version 4, some testing
NatCen	16.-28. Feb	Mock interviews (“UK Mock Pilot 1.3”)
GE, IT	1.-28. Feb	Translation of version 4 into German and Italian
GE, IT	1.-10. March	Mock interviews (“GE-IT Mock Pilot 1.7”)
All	14/15. March	SHARE conference in Edesheim (experiences with translation, procedures for translation and survey agency selection)
MEA/CentERdata	16.-31. March	Finalise English survey instrument: version 5
CentERdata	Due 31. March	Translation tool (2 nd version)
All countries	1.-30. April	Translation of version 5 into all member languages
CentERdata	Due 30. April	Sample Management System/Interface
MEA/CentERdata	1.-15. May	Edit multilingual survey instrument (freeze for training)
All	15.-31. May	Testing of multilingual instrument, minor revisions
CTLs/CentERdata	Due 31. May	Coordination of sample management systems in all countries
All CTLs, all survey agencies	30/31. May	SHARE conference in Venice (preparation of pilot 2, train-the-trainer program I)
CTLs	10-30. June	ALL-COUNTRY PILOT (quota sample, some 50 HHs in each country)
CTLs, WGLs	1.July-31.Aug	Analyse pilot data (as part of AMANDA)
All	midSept 2003	SHARE/AMANDA conference in Mannheim (analysis of pilot 2, sampling coordination, train-the-trainer program II)
All	Due 30. Oct	Revisions, testing
CTLs	1. Nov-15. Dec	PRE-TEST (random sample, some 100 HHs per country)
CTLs, WGLs	15. Dec-15. Feb	Analyse pilot data (as part of AMANDA) and success of sampling procedures (as part of SHARE)
All	MidFeb 2004	SHARE/AMANDA conference in Crete (analysis of pilot 3 data, analysis of sampling issues, proxy handling, train-the-trainer program III)
All	Due 31. Mar	Revisions (sampling procedures; minimal for instrument)
CTLs	1. Apr - 30. June	MAIN TEST SURVEY (random sample, some 1800 HHs in each country, final size depending on funds)
CTLs	1. July-30. Sept	Overflow time for completing interviews if necessary
All	1. July-30. Sept	Preliminary response analysis (as part of SHARE)
All	from July 2004	Start with substantive analysis (as part of AMANDA)
All	30. Sept. 2004	SHARE ends, AMANDA continues

6. Fieldwork Procedures

It is crucial in SHARE to ensure consistency of methods and fieldwork procedures across countries in order to obtain a genuinely cross-national survey of high quality. This section summarises the main elements by which SHARE tries to enforce cross-national comparability and high quality standards.⁸

Objectives

The first objective of tight fieldwork procedures is to achieve high data quality, such as high response and low non-contact rates. For this reason, the selection of reputable survey agencies capable of carrying out data collection for this complex study is necessary. In order to provide common standards, our second and equally important objective, a member of the SHARE co-ordination team and a member of the working group on cross-national survey design must be involved in all the crucial negotiations, and detailed written standards have to be adhered to.

The CTL are encouraged to select a survey agency that will be able to conduct all three data collection stages: pilot, pre-test and main test survey, on a high standard basis. All countries must use a common standard contract, along with the country specific specifications.

Basic interview characteristics

The base population are all residents in a country aged 50 and over. The target respondents are thus all age eligible (50+) residents plus their (possibly younger) partners⁹. The sample is based on residents, not citizens. Persons who live in an institution are not explicitly excluded¹⁰.

The SHARE survey is a CAPI based face-to-face interview, which contains closed questions as well as physical and mental health tests, and a self completion paper questionnaire. The CAPI is centrally programmed in BLAISE. The program is augmented by a unique sample management and data transmission system also provided by SHARE. During the interview, showcards will be used alongside CAPI. The CAPI program will prompt the interviewer when to hand out the self-completion questionnaire to the respondent. The interview length depends

⁸ See Lipps (2002) for details.

⁹ Spouses are included to learn more about the social network and household financial aspects.

¹⁰ Although not being part of the common design, countries where such an experiment is feasible, are welcome to try this. As with the application of proxy interviews, the design will be defined for the first random survey.

on the household size, and is supposed to range from around 80 min in a one-person household to around 150 min in the rare cases in which a household contains four respondents eligible for the interview. On average, the interview is expected to take around 100 min.

The self completion questionnaire contains additional questions in the areas of mental and physical health, health care, and social networks. Where physical and cognitive limitations make it too difficult for a selected respondent to complete the interview himself or herself, it is planned to conduct proxy interviews in the pre-test and main test survey, if feasible.

Keeping track of contacts and non-response

Contact data which are collected at all interactions with respondents, informants, and gatekeepers are to be sent to CentERdata. A detailed reporting of the contacts, response, and nonresponse outcomes should be carried out, calculated and keyed according to a pre-specified standard format, which will include at least the mutually exclusive categories listed below. In addition, reports should be regularly submitted on costs and verification efforts, as should regular frequency lists of key variables. The CTL have to review the timing, breakout and frequency of the reports, which must be agreed with the SHARE co-ordinator.

- Number of total issued and contacted addresses (or other sample units) and mode, time and date of contact and - if applicable - date of appointments for the interview
- Mode, time, and date of all contact attempts. After at least four personal visits with no contacts, including at least one call in the evening and at least one at the weekend, details of the attempts must be delivered to the survey agency, including observable area, stratum, dwelling and housing conditions, information about moving or deceased, where possible. The agency then has to take appropriate measures.
- Number, time, and date of household and target respondent refusal (if applicable) classified into standard categories (including where possible details of gender, age-bands)
- Number of respondents who are too ill or otherwise incapable (e.g. language problems) or not available, split into temporarily and permanently, if possible.
- Number, time, and date of achieved interviews, started and still to be completed, and started but not to be completed interviews.
- Number, time, and date of collected drop off questionnaires.

The preceding categories are part of the sample management system provided by SHARE.

The following non-response items should easily be computable:

- Household – non-response
- Person – non-response (unit-non-response, by a set of pre-specified reasons, see below)
- Break-off during the interview by specific persons
- Item – non-response by person

Probability samples

The sample for the pre-test and the main survey should be a full probability sample, whose sampling frame will differ according to availability in different countries. It is the responsibility of the CTL to construct together with the survey agency a sample design that is at the same time suitable for this country and compatible with all other SHARE sampling designs. Hence, the country-specific sampling procedures and the sampling process has to be approved by the SHARE co-ordinator who will consult with SHARE working group on cross-national survey design. The addresses used in the main test survey must be (co-)property of SHARE, such that re-interviewing in a future wave is feasible. For the main survey a high quality of the recently updated frame is necessary.

Quota sampling is not permissible for the pre-test and the main test survey. No oversampling by age or other socio-demographic characteristics is planned. The sampling frame (if existing and generally accepted) or sampling units at different stages, including the degree of clustering and the data base used for the selection of communities as well as stratification factors applied to the sampling frame, must be described in detail and should allow for the following:

- The process of the household selection from a multi-household (or multi-individual) address has to be spelled out in detail by the agency and agreed in advance, before signing the contract.
- The selection probabilities of every sample household and every sample member must be estimated and recorded after the survey.
- The remaining systematic non-coverage problems (telephone sample coverage, language minorities, other impairments, e.g. a high rate of illiteracy) must be recorded.

Survey agencies and interviewers

Sufficient experience of the survey agency should be taken into consideration by the CTL in the survey agency selection process. The following dimensions should be detailed:

- Similar kinds of studies (topics and themes with references)
 - Representativeness, e.g. how have they dealt with reluctant respondents?
 - Achieved response rate (number of call attempts, quality control procedures)
 - Size of survey
 - Year of survey
- Clients of other survey work (academic/ authority/ market researcher/ other) with references
- Target population (50+), proxy interviews

- Sampling frame (random, using registers/random route)
- Mode of interview (CAPI BLAISE, using showcards, self completion/drop-off)
- Availability of suitable laptops
- Length of interview (80+ min)
- Panel studies
- Centralisation of design (SHARE: highly centralised)

For pilot, pre-test, and especially the main test survey, the survey agency must make sure that an appropriate number of interviewers is available in a sufficient regional spread. Extensive general face-to-face interview experiences are necessary. Furthermore, interviewers are expected to receive a general interview training from the survey agencies prior to attending study specific training. This includes all skills related to approaching a household, addressing respondent concerns, probing, recording responses, completing time sheets, etc. Survey firms should discuss how newly hired interviewers are trained to work at their firm.

Information on payment of interviewers must be given by the agencies. A fixed salary, i.e. not paid by interviews performed, is preferred. Guidelines or requirements on conducting the interview and how interviewers should cope with special situations will be given by SHARE.

Interviewer training

SHARE gives a lot of attention to interviewer training. This includes both technical aspects and motivation. The interviewers will be trained personally by the survey agency and the CTL, who in turn will be trained using the “train-the-trainer” materials provided by SRC. Participation of the CTL is crucial for the motivation of the interviewers and the quality of the content. Training is the key to a successful survey. Training details have to be specified in the contract with the survey agency.

Fieldwork monitoring

The fieldwork progress must be closely monitored, including producing a weekly report on response rates, broken down by categories similar to those listed above. The survey agency must accept quality control back-checks (e.g. contacting interviewed households by the agency to ensure that interview actually took place, acceptance of visits by CTL/co-ordinator, acceptance of code of ethics). The survey agency must accept to immediately and directly send the raw data to CentERdata (i.e. without editing) by electronic means. In case of interviews with errors, these may be sent back to the field for correction.

Debriefing sessions

After each survey, survey agencies must hold a “debriefing” meeting with their interviewers, the CTL and, possibly, members of the SHARE co-ordination team, i.e., interviewers, CTL and SHARE co-ordinator have a formal meeting in which the interviewers report on their experiences during the fieldwork. This holds at least for the pilot and the pre-test, after the main test study, a written debrief may suffice. Experience after the UK-pilot showed, that such meetings helped to learn a lot about the feasibility of complex surveys and questions.

7. Current State of Project

This section describes the state of the project as of 30 June 2003.

Formation of organisational structure

At the beginning of the project in January 2002, 14 *working groups* have been formed which are responsible for the development of modules of the common questionnaire and for the sample design in the various countries, and 9 *country teams* for the selection and control of survey agencies. The total number of researchers involved in either a working group or a country team is about 120. In addition, we have formed the core management group, which is the main guiding body of the project. In addition to the co-ordinator, it has six well-known and experienced members (Agar Brughiavini, Arie Kapteyn, Stefania Maggi, Sir Michael Marmot, James Nazroo, and Jean-Marie Robine). Finally, we have assembled various ad hoc advisory committees, notably the HRS advisory group (led by Michael Hurd and Robert Willis, the current principal investigators of the US Health and Retirement Survey), the ELSA advisory group (led by Richard Blundell and James Banks, the current principal investigators of the English Longitudinal Study on Ageing), and the Survey Instrument Review Board (Norbert Schwarz, University of Michigan; Jonathan Skinner, Dartmouth College; Beth Soldo, University of Pennsylvania; Clemens Tesch-Römer, DZA, Berlin; John Rust, University of Maryland). Finally, we have invited outside observers on all conferences as discussants, among them Nobel laureates Dan McFadden and Danny Kahnemann.

Initial instrument development

Core of the workplan in the first year was the iteration between questionnaire development and preliminary data collection. The substantive work of the questionnaire development has been performed by the cross-national working groups consisting of specialists in their fields. Eleven working groups have designed interview modules. Their point of departure was the

US HRS, the UK ELSA and other survey instruments (existing instruments in Germany, Italy and Sweden). By June 2002, they had assembled first drafts of the interview modules which were converted in Mannheim and Tilburg to the *1st version of the English-language draft questionnaire*. We have tested various aspects of this draft questionnaire over the summer of 2002. Most notably, we have tested various ways in which to ascertain notoriously hard economic questions (assets and wealth). We have tried out cognitive aspects and framing effects.

The UK-Pilot

The results have produced the *2nd version of the English-language draft questionnaire*. This version has been programmed by CentERdata in Tilburg to a fully functional CAPI (Computer-Aided Personal Interview) survey instrument in the Blaise language. In September 2002, we have piloted this instrument on some 120 British households representative of our sample (age range 50-96). This pilot was a great success, since item non-response rates were low and the willingness to participate high. We attribute this success to great care in interviewer training and motivation, and the timeliness and relevance of the questions asked to economic and social policy. As a major innovation, we introduced the grip strength measure of physical health in a general-purpose social survey with great acceptance by the respondents. In the UK pilot, only 6 percent of all respondents (aged 50-96) and 12 percent of those above 80 were unable to take the test. This success has convinced both HRS and ELSA to follow our approach in health measurement.

At the end of the year 2002, we have produced the *3rd version of the English-language draft questionnaire*, learning from the UK pilot experience. This instrument has been published and can be accessed via Internet on the SHARE website. It can be used as paper version (in two display variants) and as an executable file that can be run on any Windows-based PC to simulate a real interview situation.

The all-country pilot

During the Spring of 2002, versions 4 and 5 of the questionnaire were developed with the help of additional focus-group interviews in the UK, US, Germany and Italy. These updated and improved survey instruments were translated in all SHARE languages during April 2002.

These translated instruments (version 5) are the basis for first the all-country pilot. This pilot is currently in the field, simultaneously in almost all SHARE countries. We expect to get valuable feedback about the cross country feasibility of the questionnaire and the performance of the CAPI BLASE.

Additional support

We have mustered additional support from the National Centre of Social Research (London) who ran the UK pilot; from the Survey Research Center at the University of Michigan in Ann Arbor who started designing a “train-the-trainer” program, sponsored by the US National Institute on Aging, and helped process design; from ZUMA in Mannheim, who started designing survey agency selection procedures; and, most crucially, from CentERdata in Tilburg, a small and new survey firm who developed and programmed the Blaise survey instrument. The development of the multi-language CAPI instrument was a major achievement; elements of the design are being considered by ELSA and HRS for a retooling of their instruments. Another technical innovation is the *translation tool* that enforces identical routing and framing of all questions in all countries and languages.

Meetings and conferences

The team leaders have met in plenary sessions three times during this process to co-ordinate contents (March: Madrid, September: Copenhagen, and December: Frankfurt). In addition, many working group meetings have taken place, organised de-centrally by the working group leaders, and country teams, organised by the country team leaders. Currently, the working group leaders ensure that the proposed questions are likely to be viable in all participating countries.

In addition, three cross-national working groups have worked on technical aspects such as sample design, data management and response analysis of the pilot data.

Dissemination

We have disseminated our progress in a multitude of presentations and seminars. Moreover, we have posted results, drafts of questionnaires, timelines and deadlines, milestones and deliverables on the Internet site www.share-project.org to facilitate information sharing and feedback. We also have facilitated an open structure which has allowed many external researchers to participate. This has led to a submission to the German Israeli Foundation (GIF) for an Israeli SHARE, to a submission to the Austrian National Fund for an Austrian SHARE, and a note of interest in the participation of Malta.

References

- Aarts, L.J.M., R.V. Burkhauser, Ph.R. de Jong (eds.) (1996), *Curing the Dutch Disease, An International Perspective on Disability Policy Reform*, Aldershot: Avebury.
- European Commission (2000), *The Contribution of Public Finances to Growth and Employment: Improving Quality and Sustainability*, Communication from the European Commission to the Council and the European Parliament.
- Gruber, J., and D.A. Wise (1999), *Social Security and Retirement around the World*, Chicago University Press.
- Lipps, O. (2002) Guidelines for survey agency selection. Unpublished manuscript, Mannheim.
- National Academy of Sciences (USA) (2001), *A Research Agenda and New Data for An Aging World*, http://www7.nationalacademies.org/cpop/New_data_aging_world.html
- SRC (2003), Interviewer Project Manual for the Survey of Health, Ageing, and Retirement in Europe, unpublished Interviewer manual prepared by the staff of the Survey Research Center at for the SHARE June Pilot, University of Michigan's Institute for Social Research
- Suzman, R.M., D.P. Willis, and K.G. Manton (eds.) (1992), *The Oldest Old*, Oxford: Oxford University Press.

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