WORKING PAPER

Harmonization of Cross-National Studies of Aging to the Health and Retirement Study

Expectations

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HARMONIZATION OF CROSS-NATIONAL STUDIES OF AGING TO THE HEALTH AND RETIREMENT STUDY

USER GUIDE

Expectations

Version A

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ABSTRACT

This paper summarizes and compares measures of subjective economic and health expectations in the Health and Retirement Study (HRS) and its sister surveys from other countries: the English Longitudinal Study of Aging (ELSA), the Survey of Health, Aging, and Retirement in Europe (SHARE), the Korean Longitudinal Study of Aging (KLoSA), the Japanese Study on Aging and Retirement (JSTAR), and the Longitudinal Aging Study in India (LASI).   The authors analyze and discuss the extent to which these measures are comparable, the methodological differences in the way information was collected for these measures, and the implications for secondary data analysis. This paper is one in a series of similar papers, each comparing different domains (e.g., chronic medical conditions, cognition, employment and retirement, transfers, income, and wealth) across these surveys with an aim to encourage rigorous, cross-national and international comparison research on aging populations.

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INTRODUCTION

The Health and Retirement Study (HRS) has achieved remarkable scientific success, as demonstrated by an impressive number of users, and research studies and publications, utilizing the HRS. Its success has generated substantial interest in collecting similar data as population aging have experienced and is progressing in every region of the world.

The result has been a number of surveys designed to be comparable with the HRS: the English Longitudinal Study of Ageing (ELSA), the Survey of Health, Ageing, and Retirement in Europe (SHARE), the Korean Longitudinal Study of Aging (KLoSA), the Japanese Study on Aging and Retirement (JSTAR), the Chinese Health and Retirement Longitudinal Study (CHARLS), and the Longitudinal Aging Study in India (LASI). The overview of this family of surveys, including their research designs, samples, and key domains can be found in Lee (2010)[1].

As these surveys were designed with harmonization as a goal, they provide remarkable opportunities for cross-country studies. The value of comparative analyses, especially the opportunities they offer for learning lessons resulting from policies adopted elsewhere, is widely recognized. Yet there is only a limited number of empirical studies exploiting such opportunities. This is partly due to the difficulty associated with learning multiple surveys and the policies and institutions of each country.

Identifying comparable questions across surveys is the first step toward cross-country analyses. The RAND Meta Data Repository[2] provides users a digital library of questions for all these surveys: metadata.rand.org. Its search engines enable users to examine cross-country concordance at for each survey question. Using them, researchers can identify all questions related to particular key words or within a domain or a sub-domain. The RAND Meta Data Repository also provides macro-level statistics compiled from multiple sources[3].

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[1] Lee, J. "Data Sets for Pension and Health: Data Collection and Sharing for Policy Design," *International Social Security Review*, 2010, 63, (3-4), 197 – 222.

[2] http://metadata.rand.org

[3] Sources include: the Organization for Economic Cooperation and Development (OECD), the World Health Organization (WHO), the World Bank, the International Monetary Fund (IMF), the U.S. Census, Eurostat, national statistical offices of China, Indonesia, Japan, and Korea, International Labor Organization (ILO), and other publicly available information (i.e., Index Mundi, Doing Business).

Nevertheless, comparing these questions and evaluating comparability across surveys is still a labor-intensive process. Understanding all the idiosyncratic details in each survey takes still more effort. To facilitate such a process, we have prepared a series of domain-specific user guides.

These user guides are designed to provide researchers with documentation about the concepts, measures and questions of particular domains in the all HRS-family surveys. For each domain, we reviewed all relevant questions across all surveys. These guides expand upon the information found in codebooks, questionnaires and data descriptions. They also provide our evaluation of the comparability across surveys and recommendations for harmonized measures that can be exploited for cross-country analyses.   We hope these guides, by helping researchers save time and better understanding what can be studied in HRS-family surveys, accelerate scientific advances.

EXECUTIVE SUMMARY AND OVERVIEW

This guide reviews various questions about probabilistic expectations that survey respondents are asked about in HRS and its sister surveys around the world, focusing on the year 2006 whenever available and for JSTAR, CHARLS and LASI, using the first survey wave in 2007 and the 2008 and 2010 pilot studies respectively. Across the various countries, respondents are asked to express in numerical probabilities expectations about their own individual well-being and life events such as survival, their own current and future health, future employment and retirement, leaving or receiving inheritance and future financial need. They are also asked about their expectations regarding future macro-level trends or events, such as developments in the economy, stock- and real-estate markets, pension reforms or the continued availability of old-age benefits and specific political events. Those subjective expectations are likely to play an important role for intertemporal decisions.

This guide provides a comparative overview of the events respondents are asked to provide expectations about, discusses methodological issues and details related to the questions and provides recommendation for cross-country analysis.

There are key differences across the surveys both in terms of subject coverage as well as methodology.

- In certain surveys, only a subset of respondents received some questions (HRS: only respondents who do not have difficulty with probabilities answer standard module, LASI: only one third of respondents).
- In certain surveys, respondents are given preliminary training questions (HRS, ELSA, SHARE and LASI), but not in other surveys.
- Methods of elicitation and visual aids vary across surveys (HRS/ELSA/SHARE /JSTAR elicit a continuous measure from 0-100. KLoSA asks for responses on a 10-point Likert scale, while LASI employs a similar concept using 10 stones that are physically counted. ELSA, SHARE and KLoSA also present visual aids of their scales. In JSTAR, respondents are shown a chart of average life-expectancies for Japanese men and women, but no visual aid of the probability scales to aid in giving responses.
- The only subject areas represented in four or more of the sister surveys are survival, inheritance and retirement.

- For the same questions about survival, inheritance and retirement, respondents are asked about different target ages, amounts and time frames across the surveys, which make cross-national comparison more difficult.
- CHARLS does not include probabilistic expectations questions.

We suggest below some harmonized measures best exploited for cross-country analysis. Due to difference in survey design, few variables may be directly compared. The measures that are available should be adapted with caution and suitable adjustment.

- Survival probabilities may be directly compared in HRS, ELSA, SHARE, JSTAR and KLoSA for a range of respondent and target ages described in the text , either by comparing the raw answers, or alternatively the individual-specific ratio between the elicited expectation and the corresponding probability obtained from the life table for the country.
- Subjective survival curves for respondents aged 64 or less may be fitted and compared for HRS, ELSA, JSTAR and LASI (although the number of data-points available for curve-fitting varies across surveys).
- The probability of receiving any inheritance may be directly compared in HRS, ELSA and SHARE.
- Reporting a positive versus a zero-probability of leaving any inheritance may be directly compared between HRS, ELSA and SHARE (but the probability of leaving any inheritance does not lend itself to direct comparison).
- The probability of leaving a certain amount of inheritance is difficult to compare directly because respondents are asked about different amounts in different countries. Comparison may be made if the researcher is willing to make additional assumptions, including converting threshold amounts to a common denominator and specifying functional forms for the probability distribution.
- The probability of working full-time after reaching the official retirement age may be compared across HRS, KLoSA and ELSA (conditional on a simple transformation using two separate questions in ELSA) but for age groups that vary by survey.
- The probability of working full-time in 6-10 years may be compared across HRS, SHARE and KLoSA respondents in their early- to mid-50s.

1. INVENTORY OF MEASURES

Most decisions are made under uncertainty, and individuals are likely to form beliefs (expectations) about the probabilities of events that are relevant for their decisions. While asking respondents about verbal expectations (e.g. is this event "very likely" or "very unlikely"?) is commonly done in surveys, those yield only ordinal measures of beliefs. Moreover, responses may not be interpersonally comparable. These concerns led to the elicitation of *probabilistic* expectations, where respondents are asked a question that can be interpreted as a probability. We refer the interested reader to Manski (2004) who reviews the history of eliciting expectations in survey in several disciplines and describes the emergence of the literature on expectations in developed countries, and to Delavande, Giné, and McKenzie (2011) for evidence from developing countries.

In this section, we first provide a comparative overview of the various probabilistic expectations measures that survey respondents are asked about in HRS and its sister surveys around the world (details about specific question features follow in the next section). We focus on the year 2006 whenever available. For JSTAR, we use the first wave which was collected in 2007, and for CHARLS and LASI, the pilot studies conducted in 2008 and 2010 respectively. HRS has asked expectations questions since 1992 and the content has somewhat changed over time. The 2006 wave is therefore not fully representative of the expectations questions that are available in the HRS.

We summarize in Table 1 the concepts that are measured in each survey. In Section 3, we discuss the possibility of cross-country analysis of the expectations questions and provide an overview of the measures that can be compared in Table 9.

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Table 1. Summary of What Concepts Are Measured in Each Survey

	HRS	ELSA	SHARE	KLoSA	JSTAR	CHARLS*	LASI
Inheritance	X	X	X	X			
Financial help	X						
Survival	X	X	X	X	X		X
Work							
Retirement	X	X	X	X			X
Job loss/finding a job/working in the future	X			X			X
Working at current job				X			
Economy and financial situation							
Depression and cost of living	X						
Financial situation / financial need	X	X		X			
Standard of living		X					
Stock market returns	X						
Future health							
Future work-limiting health problems		X					X
Be independent and mentally ok	X						
Medical expenditures	X						
Go to a nursing home	X						
Current health conditions							X
Pension reforms							
Pension reform	X		X	X			
Real Estate							
Housing price		X					
Real estate market stabilization				X			
Migration							X
Go back to Mexico	X						
Move							X
Political events				X			

Note: X indicates included in some form in the survey. Both LASI and CHARLS are pilot studies.
 * CHARLS contains no relevant questions.

1.1 Inheritance and Financial Help

1.1.1 HRS

Respondents are asked about the probability that they (and their spouse/partner if married/partnered) will *leave* an inheritance above certain amounts, excluding inheritance between spouses. They are also asked about the probability that they (or their spouse/partner if married/partnered) will *receive* inheritance over the next 10 years. Respondents are asked the probability that they (and their spouse/partner if married/partnered) will *give* financial help to grown children, relatives or friends over the next 10 years. This help should include college tuition payment but not shared housing or food. They are also asked the probability that they (and their spouse/partner if married/partnered) will *receive* financial help from children, relatives or friends over the next 10 years.

1.1.2 ELSA

In ELSA, respondents are also asked about the probability that they will *leave* an inheritance above certain amount, including property and other valuables. Respondents are asked about the probability that they will *receive* inheritance, including property and other valuables, within the next 10 years

1.1.3 SHARE

Respondents are asked about the probability that they (and their spouse/partner if married/partnered) will *leave* an inheritance above certain amounts, including property and other valuables. They are also asked about the probability that they (or their spouse/partner if married/partnered) will *receive* inheritance within the next 10 years.

1.1.4 KLoSA

Respondents are asked about the probability that they (and their spouse/partner if married/partnered) will *leave* an inheritance above a certain amount. Respondents who have at least one of their parents still alive are asked about the probability that they will receive an inheritance above a certain amount.

1.2 Survival

1.2.1 HRS

Respondents are asked the probability that they will live to be a certain age or more. The target age depends on the respondent's current age.

Because respondents who answer 50% are sometimes thought to express epistemic uncertainty rather than merely a 50% probability (Bruine de Bruin et al., 2000), a sub-sample of respondents who answered 50% to the survival questions were asked some randomized follow-up questions assessing whether the respondent truly meant a 50% chance of whether s/he was just unsure.

1.2.2 ELSA, SHARE and KLoSA

Respondents are asked the probability that they will live to be a certain age or more. The target age depends on the respondent's current age and varies across surveys (see Section 2).

1.2.3 JSTAR

Respondents are asked the likelihood that they will live to be a certain age in 5-year intervals from 75 to 120 years. The starting age depends on the respondent's current age.

1.2.4 LASI Pilot Study

Respondents are randomly asked about survival or mortality expectations. They are first asked to consider 10 people like themselves (same age, gender, etc…) and predict how many will be alive/die within a one-year, 5-year and 10-year period. They are then asked the probability that they *themselves* will be alive/die within a one-year, 5-year and 10-year period.

1.3 Work

1.3.1 HRS

Retirement: Respondents are asked the probability that they will be working full-time after they reach the age 62 and the age 65. Respondents who are 61 or less are asked about the two

ages. Respondents who are 64 or less are asked about 65 only. Older respondents are skipped out.

Job loss and finding a job: Respondents who are working and are not self-employed are asked the probability that they will lose their job during the next year. They are then asked to provide the probability that they could find an equally good job in the same line of work within the next few months if they were to loose their job this month. Those who reported that they were currently looking for a job are asked the probability that they will find a job like the one they are looking for within the next few months.

Work in the future: Respondents who are not currently employed are asked the probability that they will be working for pay at some time in the future.

1.3.2 ELSA

Female respondents under 60 and male respondents under 65 are asked the probability that they will be working for pay after they reach a target age that depends on the respondent's current age and gender. Respondents are also asked the probability that if they were doing paid work after they reached the target age, the work would be for 35 hours a week or more (full time).

1.3.3 SHARE

Respondents who are 60 years old or less are asked the probability that they will be working full-time after they reach the age of 63.

1.3.4 KLoSA

Respondents aged 55 and under are asked about their future work status.

Retirement: Respondents who are currently working are asked about the probability that they will be working full time after they reach a certain age. The target age depends upon the respondents' current age.

Current job: Respondents who are currently working are also asked about the probability that they will be working at their current job for the next 5 years.

Employment: Respondents who are not currently working are asked about the probability that they will be working for pay at some time in the future.

1.3.5 LASI Pilot Study

Retirement: Respondents who are currently working are asked the probability that they will still be working in a similar job in 5 and 10 years.

Job loss: Respondents who are currently working are asked the probability that they will lose their job during the next year.

1.4 Economy and Financial Situation

1.4.1 HRS

Depression and cost of living: Respondents are asked the probability that the U.S. economy will experience a major depression sometime during the next 10 years or so. They are also asked the probability that their income will keep up with the cost of living for the next 5 years, and that the cost of living will increase by 5 percent or more per year on average over the next 10 years.

Stock Market Returns: Respondents are also asked to think about how well the economy will do in the future, and for this to provide their expectations about stock market returns. They are asked to consider mutual fund shares invested in blue chip stocks like those in the Dow Jones Industrial Average and to provide the probability that the price of those shares will: (i) be worth more by next year than they are today, (ii) will increase faster than the cost of living over the next 10 years, (iii) will increase by 8 percent or more per year on average over the next 10 years.

1.4.2 ELSA

Financial need: Respondents are asked the probability that they will not have enough financial resources to meet their needs at some point in the future.

Standard of living: Respondents are asked the probability that, in 5 years from now, their standard of living (i.e., the ability to buy goods and services) will be better than today, and that it will be worse than today.

1.4.3 KLoSA

Financial situation: Respondents are asked about the probability that their financial situation will be worse in the future at a certain target age. The target age depends on the respondent's current age and is the same as the target age for the survival questions.

Respondents are asked about the probability that their children's generation will live in a better economic/social situation than their generation does. Respondents are also asked about the probability that the Korean economy will experience a major depression sometime during the next 10 years.

1.5 Future Health

1.5.1 HRS

Respondents are asked about several dimensions of their future health, their ability to be independent, to go to a nursing home and experience large medical expenditures.

Those who currently do not have any problems with activity of daily livings are asked the probability that their health will allow them to live independently at a certain target age, and to be mentally ok at a certain target age (i.e., free of serious problems in thinking, reasoning or remembering things) assuming they are alive at that age. The target age used in the question depends on the respondent's age.

Earlier in the survey, respondents rated their health on a scale of excellent, very good, good, fair or poor. They are then asked about their expectations for their health in 4 years. They are also asked the probability that medical expenses will use up all their (and that of their spouse/partner if married/partnered) savings in the next 5 years.

Finally respondents are also asked the probability that they will ever go to a nursing home if they are less than 65 years old, or that they will go to a nursing home in the next 5 years for older respondents.

1.5.2 ELSA

Respondents under 65 who are currently working are asked the probability that their health will limit their ability to work before they reach age 65.

1.5.3 LASI Pilot Study

Respondents are asked the probability that they will have a work-limiting health problem within 6 months, one year and 5 years. Married respondents are asked the same questions for their spouse.

1.6 Current Health

1.6.1 LASI Pilot Study

Respondents are asked the probability that they currently have hypertension, heart disease, anemia and diabetes.

1.7 Pension Reforms

1.7.1 HRS

Respondents are asked the probability that Congress will change Social Security (in general) sometimes in the next 10 years so that it becomes less generous than now. Those who provide a positive probability to this question are asked a follow-up question depending on whether they currently receive any benefits. Those who currently do not receive Social Security benefits are asked the probability that over the next 10 years there will be changes in Social Security so that their *own* future benefits would be reduced compared to what they would get under the current system. Those who currently receive benefits are asked the probability that the benefits they currently receive will be cut some time over the next 10 years.

1.7.2 SHARE

Respondents who are employed or self-employed or report being entitled to Public old age pension are asked the probability of two pension reforms taking place before they retire: (i) the government will reduce the pension which they are entitled to, and (ii) the government will raise their retirement age.

1.7.3 KLoSA

Respondents are asked about the probability that the government will provide old age support when they get older (the government currently provides a public pension scheme, although not all individuals are qualified to receive it).

1.8 Real Estate

1.8.1 ELSA

Respondents are asked the probability that the value of their home will increase or decrease by more than 5% or 10% over the next year.

1.8.2 KLoSA

Respondents are asked about the probability that the Korean real estate market will be stabilized within the next 10 years.

1.9 Migration

1.9.1 HRS

Expectations about migration are asked only to respondents who were born in Mexico. Those are asked the chance that they will go back to live in Mexico in the next 5 years, and the probability that they would go back if they have a serious health problem in the next 5 years.

1.9.2 LASI Pilot Study

Respondents are asked the probability that they will move during the next 2 years.

1.10 Political Events

1.10.1 KLoSA

South and North Korean reunification: Respondents are asked about the probability that South and North Korea will be re-united in the next 10 years.

2. METHODOLOGICAL ISSUES

We now discuss some methodological issues related to the elicitation of expectations in each of the surveys. In particular, we describe how the concept of probability was introduced and explained to the respondents and provide any training questions that were used. We also provide greater details on the skip patterns that were used for some of those questions.

2.1 United States – Health and Retirement Study (HRS)

2.1.1 Introduction and Training Question

The HRS introduces the concept of probability with the following text:

Next we would like to ask your opinion about how likely you think various events might be. When I ask a question I'd like for you to give me a number from 0 to 100, where "0" means that you think there is absolutely no chance, and "100" means that you think the event is absolutely sure to happen. For example, no one can ever be sure about tomorrow's weather, but if you think that rain is very unlikely tomorrow, you might say that there is a 10 percent chance of rain. If you think there is a very good chance that it will rain tomorrow, you might say that there is an 80 percent chance of rain.

Respondents are then asked a training question about the weather: *Let's try an example together and start with the weather. What do you think are the chances that it will rain or snow tomorrow?* All the expectations questions are phrased based on a similar formats, though the exact the question wording varies from question to question ("What are the chances that…" or "What is the percent chance that…" or "What do you think is the percent chance that…"). For all questions, respondents can answer "Don't know" or "Refuse." The HRS is conducted over the phone or face-to-face and there was no visual aid provided for either of the interview modes.

2.1.2 Respondents Unable to Answer Probabilities Questions

All non-proxy respondents are eligible for the expectations module. However, respondents who seem to have excessive difficulty to deal with probabilities are skipped out of the expectations module. Those respondents are the ones who answered "Refuse" or "Don't know" to three questions asked at the beginning of the module: (i) the chance that income will keep up with the cost of living for the next 5 years, (ii) the chance that they will leave an inheritance

totaling $10,000 or more, and (iii) the chance that they will receive an inheritance in the next 10 years.

2.1.3 Thresholds for Inheritance Questions and Financial Help

Give inheritance:

Respondents are asked the probability that they will give inheritance above certain amounts.

Everyone is asked about the probability of leaving an inheritance totaling $10,000 or more.

- If the probability is zero, respondents are asked about the chance of leaving any inheritance.

- If the probability is strictly positive, respondents are asked about leaving more than $100,000. If this probability is also strictly positive, they are further asked about more than $500,000.

Receive inheritance:

All respondents are asked about the chance that they will receive an inheritance in the next 10 years. They are not asked about other thresholds but are asked how much they expect the inheritance to be.

Give financial help:

Again, respondents are asked about the chance of providing financial help above certain amount.

Everyone is asked about the probability of giving $5,000 or more.

- If the probability is 30% or less, respondents are asked about giving $1,000 or more.

- If the probability is greater than 30%, respondents are asked about giving $10,000 or more. If this probability is , they are further asked about $20,000 or more.

Receive financial help: Respondents are asked about the chance of receiving financial help above certain amount.

Everyone is asked about the probability of receiving $5,000 or more.

- If the probability is 30% or less, respondents are asked about receiving $2,500 or more. If this probability is less than 100%, they are further asked about $1,000 or more.

- If the probability is greater than 30%, respondents are asked about receiving $10,000 or more.

2.1.4 Target Ages for Survival Questions

Table 2 presents the target ages that are used in HRS for the survival expectations questions. Note that respondents who are less than 65 are asked two survival questions: to ages 75 and 85.

Table 2. Target ages for the survival expectation question in HRS

Age group of the respondent	Target age
less than 65	75 & 85
65-69	80
70-74	85
75-79	90
80-84	95
85-89	100

2.1.5 Target Age for Living Independently and Being Mentally OK

The target ages are the same as the one of Table 2.

2.1.6 Randomization of Wording for Health Status in 4 Years

Respondents were randomly allocated into two different wordings regarding their health status in 4 years with a probability ½ of being in each group. We present in Table 3 the fills that were used depending on the self-reported health status and the randomized group. Note that there was further randomization made within the second group.

Table 3. Fill for Health in 4 Years in HRS

Self-reported current health status	Fills for group 1	Fill for group 2
excellent	still be excellent	Randomly assigned with probability ¼ between very good/good/fair/poor; good/fair/poor, fair/poor or poor
very good	still be very good or better	Randomly assigned with probability 1/3 between good/fair/poor, fair/poor or poor
good	still be good or better	Randomly assigned with probability 1/2 between fair or poor, poor
fair	still be fair or better	poor
poor	have improved significantly	have improved significantly

2.1.7 2006 Experimental Module on Subjective Probabilities

The HRS typically conducts some "experimental modules" at the end of its core interview to a subset of respondents. In 2006, about 1,500 respondents were selected to participate in an experimental module on subjective probabilities (Module 7). This experimental module asks the respondents: "Think about a group of 100 men (or women for female respondents) the same age as you but otherwise picked at random so some will be taller, some shorter, some healthier, some sicker, some richer, some poorer, and so forth." Respondents are then asked to report how many they think currently work full-time, will go a nursing home in the future, and similar events than in the expectations module from the core interview. We refer the interested reader to the online questionnaire available at:

http://hrsonline.isr.umich.edu/modules/meta/2006/core/qnaire/online/Module7_SubjectiveProbabilities.pdf

2.2 United Kingdom – English Longitudinal Study of Ageing (ELSA)

2.2.1 Introduction and Training Questions

ELSA introduces the concept of probability with the following text:

Now I have some questions about how likely you think various events might be. When I ask a question I'd like you to give me a number from 0 to 100, where 0 means that you think there is absolutely no chance an event will happen, and 100 means that you think the event is absolutely certain to happen.

Like the HRS, ELSA respondents are given a training example to start with about the weather. Respondents are asked *"What do you think the chances are it will be rainy tomorrow? (Where 100 means a 100 percent chance of rainy weather and you can say any number from 0 to 100. For example, if you think there is a good chance that it will be rainy tomorrow, you might say there is an 80 percent chance of rain.)"*. At the same time, respondents are also shown a visual aid in the form of the card below:

CARD H1

```
0    10    20    30    40    50    60    70    80    90    100
Absolutely                                        Absolutely
No Chance                                          Certain
```
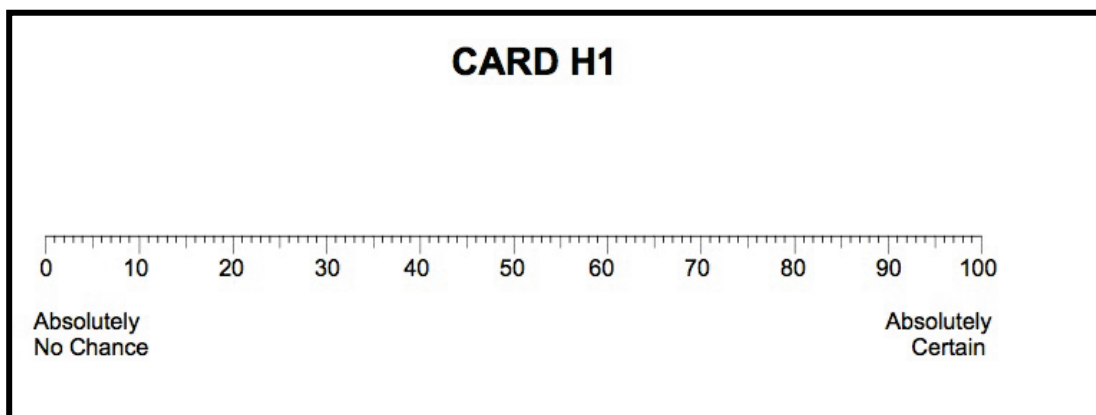
2.2.2 Thresholds for Inheritance Questions

Inheritance questions in ELSA are asked using the following branching algorithm.

Give inheritance:

All respondents are first asked the probability that they will leave an inheritance (including property and other valuables) totaling 50,000 pounds or more.

- If the probability is zero or respondents do not know, they are asked the probability that they will leave any inheritance.
- If the probability is greater than zero or respondents do not know, they are asked the probability that they will leave an inheritance totaling 150,000 pounds or more

Receive inheritance:

All respondents are first asked the probability that they will receive any inheritance (including

property and other valuables) during the next 10 years.

- Respondents who give the probability of receiving any inheritance as greater than zero or that they do not know are asked the probability that they will receive an inheritance totaling 10,000 pounds or more during the next 10 years.

- Respondents who then further respond that the probability receiving an inheritance totaling 10,000 pounds or more is greater than zero or that they do not know, are asked the probability that they will receive an inheritance totaling 100,000 pounds or more during the next 10 years.

2.2.3 Target Ages for Retirement Questions

Table 4 presents the target ages that are used in ELSA for the retirement questions.

Respondents are asked the probability that they will be working for pay after they reach the

target age and the probability that if they were doing paid work after they reached the target

age, the work would be for 35 hours a week or more (full time).

Table 4. Target Ages for Retirement Questions in ELSA

Age group of female respondent	Age group of male respondent	Target age
< 54	-	55
55-59	<59	60
-	60-64	65

2.2.4 Target Ages for Survival Questions

Table 5 presents the target ages that are used in ELSA for the survival expectations

questions. Respondents are asked the percent chance they will live to be that age or more.

Table 5. Target Ages for the Survival Expectation Question in ELSA

Age group of the respondent	Target age
51-65	75 & 85
66-69	80 & 85
70-74	85
75-79	90
80-84	95
85-99	100
100-104	105
105-109	110
110-119	120

If respondents are aged below 70 and they give a chance of living beyond the target age that is nonzero, they are also asked the chances that they will live to be 85 or more.

2.2.5 Randomization of Wording for Housing Price Change in the Next Year

For the question "What are the chances that the value of your house will [fill] by more than over the next year?", respondents were randomly assigned into four different fills. A quarter of respondents were asked 'increase by 5%', a quarter of respondents were asked 'increase by 10%', another quarter 'decrease by 5%' and the final quarter 'decrease by 10%'.

2.3 Europe – Survey of Health, Ageing, and Retirement in Europe (SHARE)

2.3.1 Introduction and Training Question

SHARE introduces the concept of probability with the following text:

Finally, I have some questions about how likely you think various events might be. When I ask a question I'd like for you to give me a number from 0 to 100.Let's try an example together and start with the weather. Looking at card 50, what do you think the chances are that it will be sunny tomorrow? For example, '90' would mean a 90 per cent chance of sunny weather. You can say any number from 0 to 100.

Card 50 that is shown to the respondent is presented below:

CARD 50
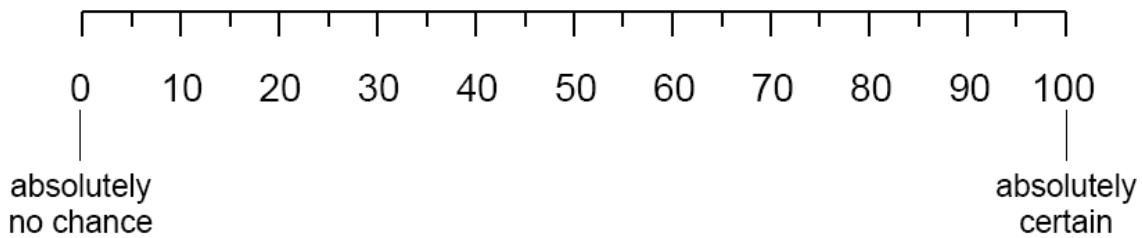
2.3.2 Thresholds for Inheritance Questions

Give inheritance: Respondents are asked the probability that they will give inheritance above certain amounts.

Everyone is asked about the probability of leaving an inheritance totaling 50,000 [local currency] or more.

- If the probability is zero, respondents are asked about the chance of leaving any inheritance

- If the probability is strictly positive, respondents are asked about leaving more than 150,000 [local currency].

Receive inheritance: All respondents are asked about the chance that they will receive any inheritance in the next 10 years. Those who report a positive probability are asked the chance that they will receive an inheritance worth more than 50,000 [local currency].

2.3.3 Target Ages for Survival Questions

Table 6 presents the target ages that are used in SHARE for the survival expectations questions.

Table 6. Target Ages for the Survival Expectation Question in SHARE

Age group of the respondent	Target age
51-65	75
66-70	80
71-75	85
76-80	90
81-85	95
86-95	100
96-100	105
101-105	110
106 and older	120

2.4 Korea – Korean Longitudinal Study of Aging (KLoSA)

2.4.1 Introduction and Training Questions

At the start of the expectations module for KLoSA respondents are given a brief explanation and introduced to the visual Likert scale reproduced below:

G001. Next we would like to ask your opinion about how likely you think various events might be. When I ask a question I'd like for you to give me a number from 0 to 100, where "0" means that you think there is absolutely no chance, and "100" means that you think the event is absolutely sure to happen. If it's hard to answer in numbers, take a look at the picture I show you and answer in accordance to that. Including property and other valuables that you might own, what are the chances that you will leave an inheritance totaling 10,000 MW (10,000 Korean won) or more? Please mark the level of chances you agree to the above statement using the scale below. 0 means absolutely no chance and 100 means absolutely certain.
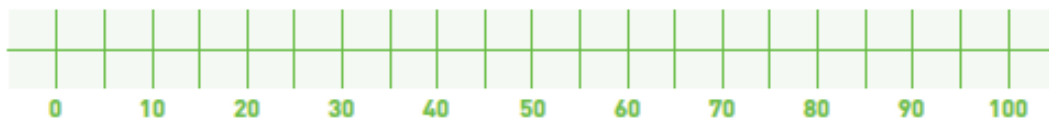
No other training is given but following this, for each question in the expectations module, respondents are again asked to give the level of chances of agreeing with the interviewer's

statement using the scale, and reminded that 0 means absolutely no chance and 100 means absolutely certain.

2.4.2 Bracketing of Responses [0,10,20…,100]

Although respondents were asked to use the visual scale, which may be interpreted continuously, in practice responses were collected on a Likert Scale with intervals of 10 points. Respondents were not allowed to indicate refusal or that they did not know the answer.

2.4.3 Thresholds for Inheritance Questions

Give inheritance: All respondents are asked the probability that they will leave an inheritance above totaling 100,000,000 Korean Won (10,000 MW) or more.

Receive inheritance: Respondents with at least one parent alive are asked about they will receive an inheritance above totaling 100,000,000 Korean Won (10,000 MW) or more.

2.4.4 Target Ages for Survival Questions

Table 7 presents the target ages that are used in KLoSA for the survival expectations questions. Respondents are asked the percent chance they will live to be that age or more.

Table 7. Target Ages for the Survival Expectation Question in KLoSA

Age group of the respondent	Target age
less than 64	75
65-69	80
70-74	85
75-79	90
80-84	95
85-94	100
95-99	105
100+	110

2.4.5 Target Ages for Retirement Questions

Table 8 presents the target ages that are used in KLoSA for the retirement expectations questions. Respondents are asked the percent chance they will be working full time after they reach this age.

Table 8. Target Ages for Retirement Questions in KLoSA

Age group of respondent	Target age
45-49	55
50-55	60

2.5 Japan – Japanese Study on Aging and Retirement (JSTAR)

2.5.1 Introduction (including visual aid card with life table)

In JSTAR, respondents are introduced to the concept of survival probabilities by being shown a table of average life expectancies for Japanese men and women with the following language:

"This chart shows the average life expectancies from now for Japanese men and women at age 70. For example, of 100 men, 85 will live to age 75, while 93 women will."

We have reproduced the chart below:

	Male	female
Live to age 75	85.16%	93.21%
Live to age 80	65.18%	81.61%
Live to age 85	40.98%	63.12%
Live to age 90	19.05%	38.86%
Live to age 95	5.64%	16.23%
Live to age 100	0.94%	4.12%
Live to age 105	0.07%	0.57%
Live to age 110	0.00%	0.04%

Respondents are then asked the likelihood that they will live to an age of X where X increases from 75 to 120 in 5 year intervals. If the respondent is 75 or over, the interviewer automatically enters 100% for the likelihood he or she will live to 75.

Note that the interviewer is asked to confirm that the likelihood of reaching an age declines as the age decreases. No further training on the concept of probability was introduced.

Showing a life table is unique to JSTAR and could potentially introduce anchoring bias for respondents towards the number provided in the life table.

2.6 India – Longitudinal Aging Study in India (LASI)

2.6.1 Eligible Sample

A third of the LASI respondents are eligible for the expectations module.

2.6.2 Visual Format, Introduction and Training Questions

The elicitation format in LASI differs from the other surveys in that respondents were provided 10 beans to allocate on a plate to express the likelihood of an event happening. Similar visual aids are often used in developing countries (see Delavande et al., 2011 and Delavande and Kohler, 2009). The interviewer introduced the concept with the following introduction:

I will ask you several questions about the chance or likelihood that certain events are going to happen. There are 10 beans in the cup. I would like you to choose some beans out of these 10 beans and put them in the plate to help me understand what you think the likelihood or chance is of a specific event happening. If you do not put any beans in the plate, it means you are sure that the event will NOT happen. If you add beans, this means that you think the likelihood that the event happens will increase. For example, if you put one or two beans, it means you think the event is not likely to happen but it is still possible. If you pick 5 beans, it means that it is just as likely it happens as it does not happen (fifty-fifty). If you pick 6 beans, it means the event is slightly more likely to happen than not to happen. If you put 10 beans in the plate, it means you are sure the event will happen. One bean represents one chance out of 10. There is not a right or wrong answer; I just want to know what you think.

Let me give you an example. Imagine that you are playing Ludo. Say I was to ask you the chance that you will win the game. Suppose that you think that you would win for sure because you always win, you put all 10 beans in the plate.

Suppose that you think you will never win, you put no beans in the plate.

Suppose you think that you are quite likely to win but you are not sure, since you often win at Ludo, but not always. In fact, suppose you believe that if you were to play for a long time you would win about 7 times for every 10 games and you would lose about 3 times. So you put 7 beans in the plate and leave 3 beans in the cup.

Let me give you another example. Say I was to ask you to think about the chance that you will have a cold in the next year. If you put 4 beans on the plate, it means that out of 10 people who are exactly like you, 4 would have a cold in the next year <Interviewer should put the 4 beans in the plate. Interviewer points to the 6 beans in the cup>. It also means that 6 out of those 10 people would not have a cold in the next year.

After the introduction, the respondent was asked a series of training question to familiarize her with the concept and to evaluate whether her answers respect basic properties of probability by asking about complement events, nested events, and a unity probability event. The training questions started with the ludo example given in the introduction:

EE001 – EE002. Pick the number of beans that reflects how likely you think it is that…
EE001. You will win the game   _____
EE002. You will lose the game   _____

If the sum of the respondent's answers was different from 10, the interviewer explained the inconsistency as follows: "*You put [fill=EE001] beans in the plate for the likelihood that you will win the game, which means that if we play for a long time, you would win [fill=EE001] out of 10 games. Look, you left [fills=10- EE001] beans in the cup. Since you can only win or lose, this means that you would lose [fills=10- EE001] out of 10 games if we play for a long time. Let me ask you again.*" and re-asked the same questions.

The next training questions ask about nested events:

EE003 – EE004. Pick the number of beans that reflects how likely you think it is that…
EE003. you will go to the market at least once <u>within the next 2 days</u>
EE004. you will go to the market at least once <u>within the next 2 weeks</u>

Again, the interviewer provided additional explanations if the respondent provided inconsistent answers (i.e. when the answer to EE004 was strictly smaller than the answer to EE003) as follows: *"Remember, as time goes by, you may find more time to go to the market. Therefore, there is a higher chance that you go to the market within 2 weeks than within 2 days. So you should put more beans for the likelihood of going to the market within 2 weeks than within 2 days. Let me ask you again"* and re-asked the same questions.

Finally, the last training question asked the likelihood that the sun will rise tomorrow.

2.6.3 Randomization for Survival Questions

Due to framing effects, asking about survival may lead different types of answers than asking about mortality. Half of the LASI respondents were asked about the likelihood that they will die within one, 5 or 10 years while the other half was asked about the likelihood that they will be alive in one, 5 or 10 years.

3. USING MEASURES IN CROSS-COUNTRY ANALYSIS

We now discuss the possibility of cross-country analysis of the expectations related to survival, inheritance and retirement.   Table 9 provides an overview of the measures that can be compared. We present the exact wording of those questions in Section 4.

Table 9.   Summary of Measures for Cross-Country Analysis

	HRS	ELSA	SHARE	KLoSA	JSTAR	CHARLS	LASI
Survival							
Direct comparison[*]	X	X	X	X	X		
Comparison with transformation (fitted survival curve for respondents less than 64)	X	X			X		X
Receiving any inheritance							
Direct comparison	X	X	X				
Leaving any inheritance							
Direct comparison							
Comparison of zero versus positive probability	X	X	X				
Leaving a certain amount of inheritance							
Direct comparison							
Comparison with transformation (fitted curve)	X	X	X				
Working full-time at official retirement age							
Direct comparison[**]	X	X		X			
Probability of working full-time in 6-10 years							
Direct comparison[***]	X		X	X			(X)

[*] For respondents aged 51 to 89 except those aged 65, 70, 75, 80 and 85.
[**] For HRS and male ELSA respondents and aged 60-64, female ELSA respondents aged 55 to 59 and KloSA respondents aged 50 to 54.
[***] For HRS respondents aged 52-56, SHARE respondents aged 53-57 and KLoSA respondents aged 50-54. LASI respondents are asked about working at a similar job rather than working full-time.

3.1.1 Direct Comparison of Answers

All surveys eliciting expectations ask about survival. Section 4.1 presents the exact wording of the survival expectation of each survey. While the wordings are very similar across surveys, there are some differences regarding (i) the target age that is asked about and (ii) the information that is presented to the respondent.

Looking at Tables 2, 4, 5, 6 and 7, one can notice minor differences in the target age computation as a function of age across the surveys. For example, a 65 year old is asked survival expectations to age 80 in HRS and KLoSA, and survival expectations to age 75 in SHARE and ELSA. Finally, LASI did not ask about survival to a target age, but rather, survival within a time frame (one-year, 5-year, and 10-year).

Table 10 presents the age groups and the associated target age that are identical in HRS, ELSA, SHARE, JSTAR and KLoSA and that therefore allows direct comparison across surveys. When doing comparison and depending on the purpose, one can either compare the raw answers, or alternatively the individual-specific ratio between the elicited expectation and the corresponding probability obtained from the life table for the country. For example, the RAND HRS provides the implied probability from the Vital Statistics life tables that someone of the respondent's age and gender will live to be the target age s/he is asked about, and the ratio between the respondent's answer and this probability (StClair et al., 2010).

While not directly comparable, one could still use the age group presented in Table 10 to look at the 10-year survival elicited from LASI.

Table 10. Age Group and Associated Target Ages for the Survival Expectation that are Identical in HRS, ELSA, SHARE, JSTAR and KLoSA

Age group of the respondent	Target age
51-64	75
66-69	80
71-74	85
76-79	90
81-84	95
86-89	100

When analyzing the JSTAR data and comparing them to the other surveys, one needs to keep in mind that a life table was presented to the respondents, which is a unique feature of that survey and is likely to influence respondents' answers.

3.1.2 Fitting a Survival Curve

The HRS asked respondents who are 64 or less their survival to ages 75 and 85 and ELSA also asked respondents who are less than 70 about two target ages. JSTAR elicits up to 10 points and LASI 3 points in the respondents' survival curve. This opens up the possibility to fit individual-specific survival curves based on respondents' answers. Gan, Hurd and McFadden (2005) and Perozek (2008) present two different methods that use the subjective expectations data from the HRS to generate individual-specific subjective survival curves. One can fit and compare survival curves for respondents 64 or less in HRS, ELSA, JSTAR and LASI.

3.2 Inheritance

Questions about giving and receiving inheritance appear in HRS, ELSA, SHARE and KLOSA. However, the different surveys adopt different thresholds in local currency units for the level of inheritance as well as the time frame for receiving an inheritance. In HRS, ELSA and SHARE the time frame for receiving an inheritance is specified as during the next 10 years, while KloSA does not specify a time horizon. Note also that KLOSA asks questions about receiving inheritance only for respondents with at least one living parent.

3.2.1 Direct Comparison of Answers

In the HRS, ELSA, SHARE all respondents are asked if they expect to *receive any* inheritance within the next 10 years. These questions may be compared directly. Note however that HRS is the only survey asking coupled respondents to not include inheritance between partners (see Section 4.2).

Some but not all HRS, ELSA and SHARE respondents are directly asked about the probability of *leaving any* inheritance. It is however still possible to conduct a cross-country comparison of a binary measure of intent to leave any inheritance, by comparing respondents who report a

zero probability of leaving any inheritance versus those who report a *positive probability* of leaving any inheritance. In all surveys, respondents who report a zero probability of leaving an inheritance above the first threshold are asked the probability of leaving any inheritance. Those who say zero to the latter questions are respondents who have a zero probability of leaving any inheritance. Those who report a positive probability of leaving an inheritance above the first threshold or of leaving any inheritance are respondents with a positive probability of leaving any inheritance.

3.2.2 Comparing Across Thresholds

Directly comparing the probability of leaving a certain amount of inheritance is not possible with the questions as is due to differing threshold amounts. These amounts can be converted to a common denominator, e.g. 2006 US$ Purchasing Power Parity (PPP). Table 11 below gives the converted thresholds asked to all respondents across the surveys. Note that for HRS, ELSA and SHARE, all respondents within a survey are effectively asked about two identical thresholds amount. Those who report zero probability when asked about the chance of leaving the lower amount are not asked about the chance of leaving a larger amount, but this probability is implicitly zero.

Table 11.   Thresholds for Inheritance Questions in Local Currency and 2006 USD PPP

	2006 PPPs - National currency per US dollar	Thresholds asked to all in local currency	Thresholds in 2006 USD PPP adjusted
Austria	0.86	50,000	43,000
		150,000	129,000
Belgium	0.88	50,000	44,000
		150,000	132,000
Czech Republic	14.04	50,000	702,000
		150,000	2,106,000
Denmark	8.33	50,000	416,500
		150,000	1,249,500
France	0.9	50,000	45,000
		150,000	135,000
Germany	0.84	50,000	42,000
		150,000	126,000
Greece	0.7	50,000	35,000
		150,000	105,000
Ireland	0.98	50,000	49,000
		150,000	147,000
Italy	0.83	50,000	41,500
		150,000	124,500
Korea	774.29	100,000,000	129,150
Netherlands	0.87	50,000	43,500
		150,000	130,500
Poland	1.84	50,000	92,000
		150,000	276,000
Spain	0.74	50,000	37,000
		150,000	111,000
Sweden	9.09	50,000	454,500
		150,000	1,363,500
Switzerland	1.66	50,000	83,000
		150,000	249,000
United Kingdom	0.63	50,000	31,500
		150,000	94,500
United States	1	10,000	10,000
		100,000	100,000

Source: RAND Survey Mega Data Repository

Depending on the assumption one is willing to make, one could compare raw answers for similar thresholds (e.g., thresholds contained in a given interval).

For HRS, SHARE and ELSA, the surveys elicit the probability of leaving inheritance at two thresholds, potentially allowing the researcher to fit a curve from which the probability of leaving inheritance of various amounts may be extrapolated. It is not entirely clear which functional form assumption is best suited for this purpose. One possibility is to use a beta distribution which is very flexible. One needs however to keep in mind that respondents were asked about only two points in their subjective distribution, and that those points may not be relevant to all respondents (e.g., the two questions are uninformative for a HRS respondent whose subjective distribution of future bequest is uniform between 0 and USD 8,000 and will provide only limited information about a distribution that is uniform between 0 and USD 11,000). As a result, there may be a lot of measurement error in the obtained distributions.

3.3 Retirement

All surveys but JSTAR asked some expectations questions related to whether the respondent will be working at a certain target age or in the future. The challenges for doing cross-country comparison is that (i) not all surveys refer to the same type of "work," (ii) not all surveys ask about the same target age. LASI is particular in the sense that it asks about working in a *similar job* in 5 and 10 years, while the other surveys ask about working full-time at a certain age (see Section 4.3).

3.3.1 Transforming ELSA's Expectations for Comparability

HRS, SHARE and KLoSA all ask about the probability of working *full-time* at a certain age. This probability is not directly asked in ELSA but can be recovered using Bayes' rule from the expectations that are elicited. ELSA respondents are first asked the probability of working for pay at age X (denote this event $working_X$), and the probability of working full-time at age X (denote this event $workingFT_X$) conditional on working for pay. Using Bayes' rule, we have:

$$P(workingFT_X) = P(workingFT_X | working_X)P(working_X)$$

Therefore, by multiplying the two work-related probabilities in ELSA, EXPW and EXPWF (see Section 4.3), one can obtain the subjective probability of working full-time at age X.

When doing cross-country comparisons, one needs to keep in mind that systematic differences between ELSA and the other surveys may be due to the fact that this probability was not directly elicited, but rather derived from two separate questions.

3.3.2 Comparison Across Various Target Ages

We suggest two ways to do some cross-countries comparison of the probabilities of working full-time in HRS, ELSA, SHARE and KLoSA.

- *Probability of working full-time at the official retirement age*: Some of these target ages were designed to represent the legal retirement age in those countries. Some respondents were therefore effectively asked about the event "working full-time at the official retirement age." Table 12 presents the survey target ages and the official retirement age defined by OECD (2009) for the period 2002-2007.[4] It shows that for HRS, KLoSA and ELSA, one of the target ages is the official retirement age. Note however that in ELSA and KloSA, the target age depends on the respondent's age. All HRS respondents 64 or less are asked about working at age 65, ELSA female respondents aged 55-59 and ELSA male respondents aged 60-64 are asked about the legal retirement age while KloSA respondents aged 50 to 54 are asked about the legal retirement age. For comparing the probability of working full-time at the official retirement age, one could therefore focus on HRS respondents aged 60-64, ELSA males aged 60 to 64 and ELSA female aged 55 to 59, and KLoSA respondents aged 50 to 54. Note however while HRS and ELSA respondents are asked about an age that is one to 5 years in the future, KLoSA respondents are asked about an age that is 6 to 10 years in the future.

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[4] OECD (2009) points out that the official age of retirement is complex to pin down, especially when retirement is based on fixed years of pension contribution.

Table 12. Official Retirement Age and Survey Target Age for Retirement Expectations

	Men		Women	
	Official Retirement Age	Target age	Official Retirement Age	Target age
Austria	65	63	60	63
Belgium	65	63	62	63
Czech Republic	62	63	59	63
Denmark	65	63	65	63
France	60	63	60	63
Germany	65	63	65	63
Greece	58	63	58	63
Ireland	66	63	66	63
Italy	65	63	60	63
Korea	60	55 or 60	60	55 or 60
Netherlands	65	63	65	63
Poland	65	63	60	63
Portugal	65	63	65	63
Spain	65	63	65	63
Sweden	65	63	65	63
Switzerland	65	63	64	63
United Kingdom	65	60 or 65	60	55 or 60
United States	65.8	62 and 65	65.8	62 and 65

Source: OECD (2009)

- *Probability of working full-time in 6-10 years:* By looking at HRS respondents aged 52-56, SHARE respondents aged 53-57 and KLoSA respondents aged 50-54, one can compare respondents in their early to mid-50s about the probability of working full-time in 6 to 10 years. One could possibly add LASI respondents to this comparison since they were asked about working in 10 years. The caveat is that LASI asked about working at a similar job rather than working full-time, although one option to somewhat improve comparability is to restrict the sample for analysis to individuals in all surveys who report currently working full-time.

4. QUESTION CONCORDANCE

We present the exact wording and question number for survival, inheritance and retirement, which are the domains where cross-country analysis can be done, for all the surveys.

4.1 Survival

HRS:

(KP028, KP029)What is the percent chance that you will live to be X or more?

ELSA:

(EXLO80, EXLO90) What are the chances that you will live to be X or more?

SHARE:

(EX009_) What are the chances that you will live to be age X or more?

KLoSA:

(G007, G008) What is the percent chance that you will live to be X or more?

JSTAR:

(G-029) Please tell me the likelihood you will live to the following ages.

LASI:

(EE016-18): Pick the number of beans that reflects how likely you think it is that you will die within a one-year/5-year/10-year period beginning today?

(EE022-24): Pick the number of beans that reflects how likely you think it is that you will you will be alive in one year/5 years/10 years?

4.2 Inheritance

Give Inheritance

HRS:

(KP005) Think about an inheritance you (and your husband/wife/partner]) might leave (but not including any inheritance you might leave to each other). Including property and other valuables that you might own, what are the chances that you (and your [husband/wife/partner]) will leave an inheritance totaling $10,000 or more?

(KP059) And what are the chances that you [and your] [you/husband/wife/partner] will leave an inheritance totalling $500,000 or more? Include properties and other valuable items as well as money here.

(KP007) And what are the chances that you [and your] [you/husband/wife/partner] will leave any inheritance? Include properties and other valuable items as well as money here

ELSA:

(EXCIN) Including property and other valuables that you might own, what are the chances that you will leave an inheritance totalling £50,000 or more?[5]

(EXCPIN) What are the chances that you will leave an inheritance totalling £150,000 or more?

(EXCAIN) What are the chances that you will leave any inheritance?

SHARE:

(EX004_) Not only thinking about the next 10 years, including property and other valuables, what are the chances that you [or] [your] [husband/wife/partner/] will leave an inheritance totaling 50,000 [{local currency}] or more? _____ (0…100)

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[5] The wording of the question says "you" without explicitly mentioning the partner but the question title refers to the chances for interviewee and partner leaving an inheritance.

(EX005_) What are the chances that you [or] [your] | husband/wife/partner/partner] will leave any inheritance?

(EX006_) What are the chances that you [or] [your] | | [husband/wife/partner] will leave an inheritance totaling 150,000 [{local currency}] or more?

KLoSA:

(G001) Including property and other valuables that you might own, what are the chances that you will leave an inheritance totaling 10,000 MW (10,000 Korean won) or more? Please mark the level of chances you agree to the above statement using the scale below. 0 means absolutely no chance and 100 means absolutely certain.

Receive Inheritance

HRS:

(KP008) (Not counting anything you might give or leave to each other,) [what/What] are the chances that you (or your [husband/wife/partner]) will receive an inheritance during the next 10 years?

ELSA:

(EXAINH) Including property and valuables, what are the chances that you will receive any inheritance during the next 10 years?

(EXCINH) What are the chances that you will receive an inheritance totalling £10,000 or more during the next 10 years?

(EXINHE) What are the chances that you will receive an inheritance totalling £100,000 or more during the next 10 years?

SHARE:

(EX002_) Please look at card 50. Thinking about the next ten years, what are the chances that you will receive any inheritance, including property and other valuables?

(EX003_) Please look at card 50.Within the next ten years, what are the chances that you will receive an inheritance worth more than 50,000 [{local currency}]?

KLoSA:

(G002) How about the chances that you will receive an inheritance totaling 10,000 MW (10,000 Korean Won) or more? Please mark the level of chances you agree to the above statement using the scale below. 0 means absolutely no chance and 100 means absolutely certain.

4.3 Retirement

HRS:

(KP017) [Thinking about work in general and not just your present job, what/What] do you think the chances are that you will be working full-time after you reach age 62?

(KP018) And what about the chances that you will be working full-time after you reach age 65?

ELSA:

(EXPW) Thinking about paid work in general, what are the chances that you will be working after you reach age 55/60/65?

(EXPWF) If you were doing any paid work after you reached age 55/60/65, what are the chances that this would be for 35 hours a week or more, that is, full-time?

SHARE:

(EX025_) (Please look at card 50.) Thinking about your work generally and not just your present job, what are the chances that you will be working full-time after you reach age 63?

KLoSA:

(G003) What do you think the chances are that you will be working full-time after you reach age 55? Please mark the chances that you agree to the above statement using the scale below. 0 means absolutely no chance and 100 means absolutely certain.

(G004) What do you think the chances are that you will be working full-time after you reach age 60? Please mark the level of chances that you agree to the above statement using the scale below. 0 means absolutely no chance and 100 means absolutely certain.

LASI:

(EE006). [if currently working] Pick the number of beans that reflects how likely you think it is that you will still be working in a similar job in 5 years.

(EE007). [if currently working] Pick the number of beans that reflects how likely you think it is that you will still be working in a similar job in 10 years.

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