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## **Agreement and disagreement in prevalence estimates of health between SHARE and other European population studies**

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## Abstract

**Introduction:** Prevalence estimates of health contribute to the formation of national and European health policy. However, variation in estimates might occur when using different information sources. We aimed to compare self-reports of health based on prevalence estimates of the Survey of Health, Ageing and Retirement in Europe (SHARE) to estimates from other national and European surveys.

**Methods:** Prevalence of health outcomes in SHARE measured at baseline (2004/2005) were compared to prevalence estimates from the European Health Interview Survey (EHIS) (2006-2009), national Health Interview Surveys (HIS) (1997-2003), the European Social Survey (ESS) (2004/2005), the EU Statistics on Income and Living Conditions (EU-SILC) (2005) and the disability ad hoc module added to the European Union Labour Force Survey (LFS) (2002). Across countries, agreement between surveys was described for self-perceived health, chronic health problems, global activity limitations, diabetes, hypertension, asthma, chronic lung diseases, depression and overweight by age group, gender and educational level.

**Results:** A good agreement with SHARE was found for self-reported diagnosed diseases with EHIS (e.g. mean difference in hypertension=-0.3%) and for overweight based on self-reported weight and height with EHIS (mean difference=-0.9%) and HIS (mean difference=0.6%). The agreement was lower when compare more subjective measures of health, e.g. for self-perceived health (mean difference=8.6% for EU-SILC; 5.7% for HIS; 7.6% for ESS). The agreement varied across countries, making country-specific comparisons between surveys less reliable.

**Conclusion:** The comparability of health prevalence assessed by SHARE with other health surveys show substantial differences, dependent on the health indicator of interest. More insight in the complementarity and overlap of surveys is needed which might result in a collaboration framework for a better understanding of health in Europe.

## Introduction

SHARE is a unique panel survey that places the health of older Europeans in a broader context. It complements existing national health surveys by providing opportunities to examine how health is shaped by the social, economic and family context of older Europeans in a panel design. In SHARE, health measures were constructed based on a careful consultation process of health experts and previous health surveys, with major input from the English Longitudinal Study of Ageing (ELSA) and the US Health and Retirement Study (HRS). SHARE has reached a point at which it becomes important to implement a common trans-national strategy to validate the quality of health measurements by comparing estimates based on these data to those obtained from other European health surveys. A key purpose of this paper is therefore to compare prevalence of conditions and disability in SHARE to estimates from parallel national and trans-national health surveys.

Providing comparative information on health status across European member states is one of the main concerns of the European Commission, because it is an essential prerequisite for development of harmonised policies. Existing population-based surveys, each carried out in one or more EU member states, could offer valuable information on health. However, differences between surveys in study size, sample and collection methods could lead to different estimates of health and diseases and thus to different interpretations of the population health status. These differences between surveys are not easy to overcome, as there may be some reluctance to work towards achieving complete harmonisation of methods and criteria of collection and processing of data to fulfil international comparability, thereby possibly compromising the comparability of historic data. Therefore, understanding differences between surveys in terms of concepts, design and methods, will provide valuable insights in the comparability of health status information in Europe.

Parallel to SHARE, the European Health Interview Survey (EHIS) has emerged as the basic survey of the European Health Survey System (Tolonen et al. 2008). With the creation of a common and comparable framework within the EU, the EU supports improvement of quality and comparability of health information across its member states. The EHIS provides an important source of comparable health measures to SHARE, with the advantage that both SHARE and EHIS were purposefully designed to be comparable across countries. Yet, other sources of information are available including national health interview surveys (HIS) and

international surveys focussing not mainly on health such as the EU Statistics on Income and Living Conditions (EU-SILC), the European Social Survey (ESS) and the EU Labour Force Survey (LFS). The HIS provide a comprehensive comparable source against which measures of health can be compared to, as there is great overlap in health measures between SHARE and HIS (Eurostat 2009, Koponen and Aromaa 2003). Measures of general health and disability in the EU-SILC offer an additional source of comparison (Eurostat 2010). The ESS is a biannual repeated cross-sectional survey focussing on the social sciences and covers more than thirty European countries and additionally includes information on self-perceived health and activity limitations due to a health problem (ESS 2012). Finally, the LFS 2002 ad hoc module on employment of disabled persons provides a source of external validity restricted to the measurement of disability (Eurostat 2008).

Using health information obtained by these national and trans-national health surveys, we aim to compare prevalence of common health outcomes between SHARE and the other surveys.

## Methods

### *Design characteristics*

In 2002, the European Health Survey System was set up by the European Committee and Eurostat to create a single framework for all EU health or health related surveys. An important pillar of this framework is the European Statistical System. The European Statistical System was brought up to provide reliable and comparable statistics at EU level. It is a partnership between Eurostat and the national statistical institutes, so that EU Member States collect data and compile statistics for national and EU purposes. Within the European Statistical System, the EHIS and the health module included in the EU-SILC are essential components. Another component within the European Statistical System are specific surveys, such as the LFS ad hoc disability module. Besides these European Committee induced surveys, there are surveys outside the European Statistical System such as the HIS, the ESS, and SHARE. HIS are national surveys, aiming to provide reliable health information at a national level. ESS is an academically-driven social survey aiming to investigate Europe's changing institutions and the attitudes, beliefs and behaviour patterns of the European population. SHARE and ESS data are freely available from their project websites. Concerning the other surveys, aggregate data by age group, gender and educational level are publicly available through the Eurostat website (Eurostat 2013). Aggregate data provide quick and informative overviews of health by different groups. Using the aggregate data provided by Eurostat as a base, prevalence of the health indicators were compared between SHARE and the other surveys. See appendix 1 for a more detailed description of these other surveys.

Table 1 summarises the design characteristics of SHARE and the surveys described above. A major difference between SHARE and the other surveys is that SHARE is an ageing study, focussing on people age 50 years and older. All surveys used a probability sample design and attained moderate to good response. Although most surveys used interviews to collect to information from the respondents, the mode of interviewing differed between the surveys; face-to-face or by telephone, and a further discrimination between paper and pencil, or assisted by computer. When comparing prevalence of health between surveys, these differences in design characteristics must be taken into account. Furthermore, the timing of the surveys might be a source of bias in the comparative analysis, in particular when comparing SHARE to HIS or to the LFS disability module (see Figure 1), as these surveys were already in the field before SHARE had started.

Table 1: Design characteristics of the surveys

	Sampling strategy	Response per country	N per country	Assessment mode
SHARE	Household probability sample, aged 50+	39% to 81%	1004 to 3827	CAPI + drop-off
EHIS	Household and individual sample; mostly probability, aged 15+	54% to 96%	1955 to 35,100	Questionnaires through face-to-face interviews, telephone interviews, self-administered questionnaires or a combination
HIS	Household and individual sample; mostly probability, aged 15+	50% to 93%	1500 to 60,000	Questionnaires through face-to-face interviews, telephone interviews, self-administered questionnaires or a combination
EU-SILC	Household probability sample, aged 16+	50% to 90%	3572 to 24,204	Mostly CAPI and PAPI, but also CATI and postal questionnaires
ESS	Probability sample, aged 15+	33% to 80%	≈3000	Face-to-face interview
LFS-disability	Household probability sample, aged 15+	33% to 97% (in 2004)	2200 to 38,487	Mostly PAPI, some CAPI and telephone interviews

CAPI: Computer Assisted Personal Interview; PAPI: Paper And Pencil Interview; CATI: Computer Assisted Telephone Interview

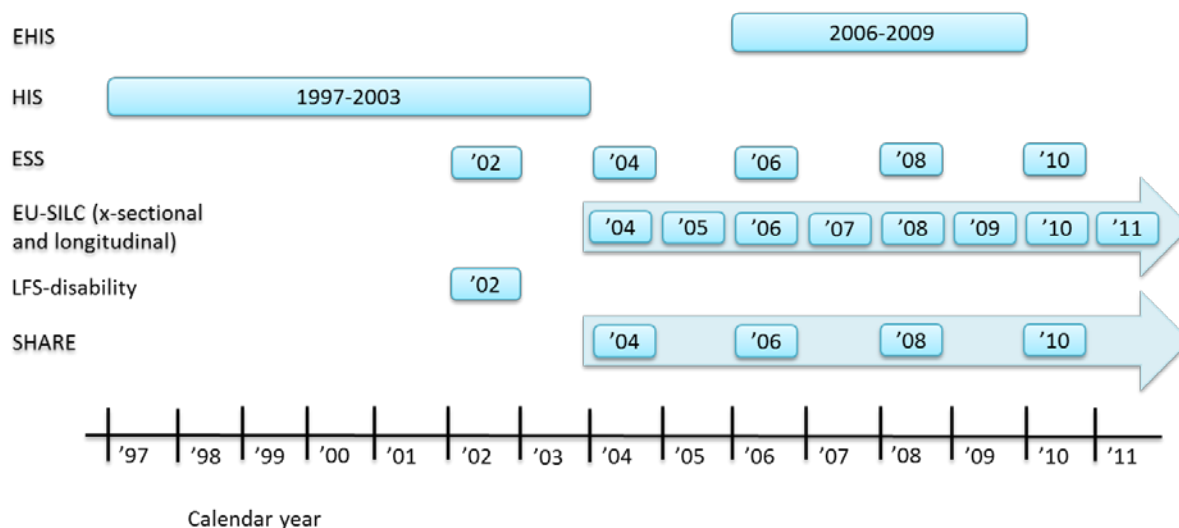


Figure 1: Time frames of the surveys. Longitudinal surveys are indicated with an arrow.

### Health measures

Comparisons of prevalence estimates were possible for several health measures: self-perceived health, chronic health problems, global activity limitation (GALI), diagnosed diseases or conditions, and body mass index (BMI). Table 2 summarises the availability of comparable health measures across the surveys. In the next paragraphs, we will discuss the assessment and its comparability with SHARE for each health measure separately.

Table 2: Availability of comparable health measures across the surveys

	SHARE	EHIS	HIS	EU-SILC	ESS	LFS-disability
Self-perceived health	yes	-	yes	yes	yes	-
Chronic health problems	yes	-	yes	yes	-	yes
Global activity limitations	yes	-	yes	yes	yes	yes
Diabetes	yes	yes	-	-	-	-
Hypertension	yes	yes	-	-	-	-
Chronic Obstructive Pulmonary Disease	yes	yes	-	-	-	-
Asthma	yes	yes	-	-	-	-
Depression	yes	yes	-	-	-	-
Overweight	yes	yes	yes	-	-	-



Self-perceived health deals with the subjective assessment that a person makes about one's own health state. It is a global measurement including several health dimensions (physical, social and emotional). Despite its very general and subjective nature, self-perceived health is an important health indicator. It is complementary to functional health, is an independent predictor of survival in older people and is associated with other health outcomes and health service use (Idler and Benyamini 1997). All selected surveys, except LFS-disability, have included a comparable measure of self-perceived health. However, statistics from the EHIS were not publicly available and could therefore not be included in our comparisons. In SHARE, HIS, EU-SILC and ESS, similar response options were used: 1) very good; 2) good; 3) fair; 4) bad; 5) very bad. In HIS, some countries used different response options, such as Germany (scale ranging from excellent to poor) and France (rating scale from 0=very bad to 10=excellent. For our current analysis, response options for self-perceived health have been dichotomised across all surveys, with the response categories "very good" and "good" into one "good" category.

Chronic illnesses or health problems are one of the main public health concerns. Measuring the prevalence of diseases is an important issue for evaluation and policy formulation on health. The presence of long-standing health problems is preferably assessed by: "Do you suffer from/have any chronic (long-standing) illness or condition (health problem)?" The assessment was comparable in SHARE, HIS, EU-SILC and in the LFS-disability module. In HIS, the wording of questions differed slightly between countries, but comparability was good for most countries. In the LFS-disability module, only disabled persons were selected, which means: those who stated that they had a longstanding health problem or disability for 6 months or more or expected to last 6 months or more. For each survey, response options were "yes" or "no".

The presence of a global activity limitation (GALI) due to a health problem was assessed by: "For at least the last 6 months, have you been limited in activities people usually do, because of a health problem?" [yes, strongly limited/ yes, limited/ not limited] Besides in SHARE, the GALI was included in HIS, EU-SILC, ESS, and LFS-disability. In HIS, comparability between countries was limited due to differences in wording of questions, reference periods (e.g. 12 months, 6 months, 4 weeks, no reference period), and differences in response categories. If possible, response categories were mapped into "yes, strongly limited", "yes, limited", and "no, not limited". Furthermore, the HIS assessment for GALI used here was not available in all HIS countries. Also in the EU-SILC survey differences exist due to the use of 2 response options instead of 3: the Danish have only two response options (yes and no), what may limit the reporting of the mild cases of limitations, and may therefore not be comparable to the other countries and surveys. The LFS disability module asked

questions concerning any long-standing health problem or disability (LSHPD) in terms of whether they restrict the kind of work that can be done, the amount of work that can be done, and the mobility to and from work. However, this LFS-disability information was not available in the Eurostat database, and therefore not included here in the comparisons. For our current analysis, we have re-categorised the response options for all surveys into two categories: limitations and no limitations.

Diagnosed diseases or conditions: Although many cohorts generally include questions about history of different diseases, wording of these questions and definitions of diseases vary greatly between cohorts. For instance, assessments vary by 1) which (groups of) diseases are included; 2) the number of diseases; 3) whether or not the disease is diagnosed by a doctor; 4) the reference period of having a disease. In SHARE, show-cards were used in combinations with the following question: “Has a doctor ever told you that you had any of the conditions on this card? Please tell me the number or numbers of the conditions”. Besides in SHARE, information on specific chronic diseases is available in LFS-disability and EHIS. In HIS however, the prevalence of specific conditions was not harmonised. In EHIS, the following diseases (+ICD10 codes) were assessed: diabetes (E10-E14), depressive disorders (F32-F33), hypertensive disorders (I10-I15), chronic bronchitis, emphysema, other chronic obstructive pulmonary disease (J41-J44) and asthma (J45). These are also available in SHARE and the prevalence of these diseases could be compared by sex, age group and educational level. In SHARE the assessment of depressive disorders this was not part of the health conditions show-card, but included through a separate question: “Has there been a time or times in your life when you suffered from symptoms of depression which lasted at least two weeks?” In the LFS-disability module, most health problems were clustered together, making comparisons with SHARE difficult. Furthermore, the LFS-disability information on specific chronic health problems was not available through Eurostat and could therefore not be included into our comparisons with SHARE.

Body mass index (BMI) is a measure of a person's weight relative to his or her height that correlates fairly well with body fat content in adults. BMI is accepted by experts as the most useful measure of obesity for adults when only weight and height data are available. BMI is calculated by dividing body weight (in kg) by body height (in m) squared. For BMI the following subdivision is recommended: underweight (less than 18.5); normal weight (between 18.5 and less than 25); overweight (between 25 and less than 30); and obese (equal or greater than 30) (WHO 2000). Ideally, BMI should be based on measured weight and height. However, only self-reported weight and height were available in SHARE, EHIS and HIS. The assessment of BMI between the surveys was quite comparable and all studies followed the aforementioned classification in underweight, normal weight, overweight and obese. In SHARE, exact questions were: “Approximately how much do you weigh?” (in kilos) and

“How tall are you?” (in cm). In EHIS and HIS, the recommended questions were: “How tall are you without shoes?” and “How much do you weigh without clothes and shoes?” In both EHIS and HIS, the actual questions may have differed slightly between the countries, but comparability was generally good. For our current analysis, we grouped the overweight and obese category together, and presented the prevalence of overweight including obesity here ( $BMI \geq 25$ ).

### *Statistical analysis*

Aggregate data were used to carry out a first set of comparisons between SHARE wave 1 (2004/05) and the other surveys by country. Eurostat provides aggregate data from EHIS, EU-SILC, LFS-disability and HIS (Eurostat 2013). All aggregate information was available by sex, age group and educational level. EU-SILC, HIS and EHIS information were presented by 10-year age groups. Overlapping with the SHARE participants, the following age groups were used: 55-64; 65-74; 75-84; 85 years and older. Regarding LFS, 5-year age groups were used: 50-54; 55-59; 60-64 years. ESS and SHARE data on individual level were available after registration on the concerning project websites (ESS 2004, ESS 2012, SHARE 2011a, SHARE 2011b). From the ESS round 2 (2004/05), people aged 55+ years were selected from countries overlapping with SHARE. Weights were applied in ESS and SHARE to represent the national population based distributions of age and gender. Concerning educational level, all surveys followed the 1997 International Standard Classification of Education ISCED-97 (UIS 2012). For HIS, educational levels were categorised into the following groups: 1) pre-primary and primary (ISCED 0-1); 2) lower secondary or second stage of basic education (ISCED 2); 3) upper secondary (ISCED 3); 4) post-secondary and tertiary (ISCED (4-6)). For the other surveys, educational level was presented by three grouped ISCED categories (ISCED 0-2, ISCED 3-4, ISCED 5-6). According to Eurostat, there was some incomplete information concerning EHIS. Proportions of COPD were not computed in Germany. In Austria, Estonia and Germany, the chronic depression prevalence was not computed, as no data was available. In France, variables measuring whether the condition was diagnosed by a general practitioner and whether it occurred during the past 12 months were not included in the questionnaire. Consequently, the concerning prevalence estimates were presented on Eurostat without taking on board this information.

Descriptive statistics were used to present overviews of prevalence of health by country and 10-year age group for each survey. Table 3 presents an overview of countries that were used in the analysis for comparing prevalence estimates. Within countries and age groups, results were further stratified by gender and educational level to achieve a most valid comparison between surveys. For gender and educational level, tables with results in the stratum of the youngest age group (55-64 years) were presented, as this stratum included most observations, and therefore might be most reliable.

For LFS, we needed to average the two estimates for the age groups 55-59 years and 60-64 years first.

Across countries, agreement between surveys was described using Bland and Altman plots for each health outcome in the youngest age group. The Bland and Altman technique enables to quantify the agreement between surveys by country for each health indicator. The Bland and Altman method calculates the mean difference between two methods of measurement, and 95% limits of agreement as the mean difference  $\pm$  1.96 SD (Bland and Altman 1986). The presentation of the 95% limits of agreement is for visual judgement of how well two methods of measurement agree. The smaller the range between these two limits the better the agreement is.

Table 3: Countries included in the analysis

	SHARE	EHIS	HIS	EU-SILC	ESS	LFS- disability
Austria	x	x	x	x	x	x
Belgium	x	x	x	x	x	x
Denmark	x		x	x	x	x
France	x	x	x	x	x	x
Germany	x	x	x	x	x	x
Greece	x	x	x	x	x	x
Italy	x		x	x	x	x
Netherlands	x		x	x	x	x
Spain	x	x	x	x	x	x
Sweden	x		x	x	x	x
Switzerland	x	x	x	x	x	

## Results

The prevalence of reported health by 10-year age groups, gender and educational level are presented in appendix 2. The results for the LFS-disability module were presented by 5-year age groups instead of 10-year intervals, with an upper-age limit of 64 years. For gender and educational level, tables with results in the stratum of the youngest age group (55-64 years) were presented, as this stratum included most observations. Results by gender and educational level for the other age groups (65-74 years, 75-84 years, 85+ years) are available from the corresponding author on request.

### *Self-perceived health*

Cross-sectional comparisons with SHARE data were carried out using HIS, EU-SILC and ESS. Bland and Altman plots were created using the data from respondents aged 55-64 years to get more insight in the agreement between surveys reporting on self-perceived health. Figure 2 presents the agreement between SHARE and EU-SILC. The mean difference (Y-axis) reflects the estimated systematic difference between both surveys (SHARE minus EU-SILC). The three solid horizontal lines represent the mean systematic difference with the limits of agreement. For the comparison of SHARE with EU-SILC, the mean difference was greater than zero, meaning that for most countries SHARE found higher prevalence estimates than EU-SILC. The 95% limits of agreement (mean difference  $\pm$  1.96 standard deviation) show whether there were possible outliers; it can be seen that only for Sweden the agreement between SHARE and EU-SILC was different from other countries, as Sweden was outside the limits of agreement. The mean difference is plotted against the pooled prevalence across both surveys (X-axis), showing that the systematic difference is not dependent on the magnitude of the prevalence, thus excluding the existence of so called proportional bias. Across the observed range of pooled prevalences between 49.9% and 77.6%, in SHARE the prevalence was on average 8.7% higher than in EU-SILC. When comparing SHARE with HIS the systematic difference is 5.7% (Figure 3). The comparison of SHARE with ESS shows a systematic difference of 7.6% (Figure 4). For France, the disagreement between SHARE and ESS was substantial, as France was placed outside the limits of agreement.

As mentioned earlier in the methods section, the HIS in France and Germany deviated from the standard response options. When looking at the results, SHARE's estimates from France are consistently higher across all surveys, and thus, might not be solely attributable to the difference in response scales that were used. However, for HIS Germany the results could have been influenced by the use of different response options. SHARE's estimates for Germany are higher as compared to ESS

and EU-SILC, but lower than the HIS estimate. This could indicate that individuals appear to report a better health when confronted with the response options used in HIS Germany.

Based on the Bland and Altman plots, SHARE systematically presented higher prevalence estimates than the three other health surveys and this systematic difference is present in most countries. This systematic difference is substantial, especially for older age groups with a modest proportion of subjects in good health. Across all surveys, SHARE seemed to be in disagreement most with Southern European countries, in particular Italy, France and Spain, whereas better agreement was found for Northern European countries such as Sweden and Denmark. Between the surveys, SHARE compared best with HIS, less with ESS, and poorest with EU-SILC.

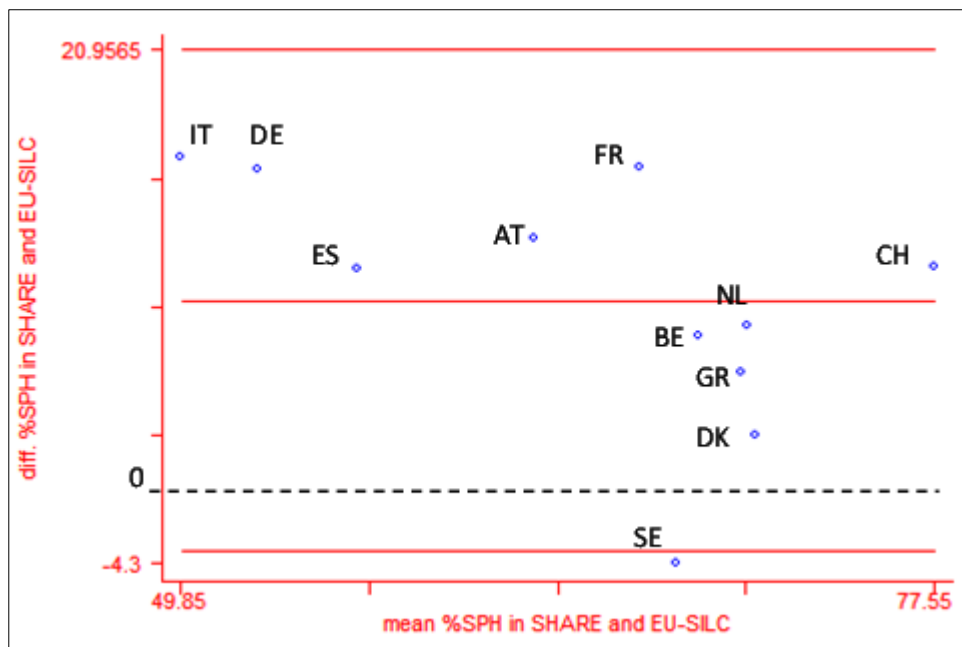


Figure 2: Bland-Altman comparison of self-perceived health in SHARE and EU-SILC

Limits of agreement: -3.63, 20.96; Mean difference: 8.66 (CI 4.53-12.79); Range: 49.85-77.55

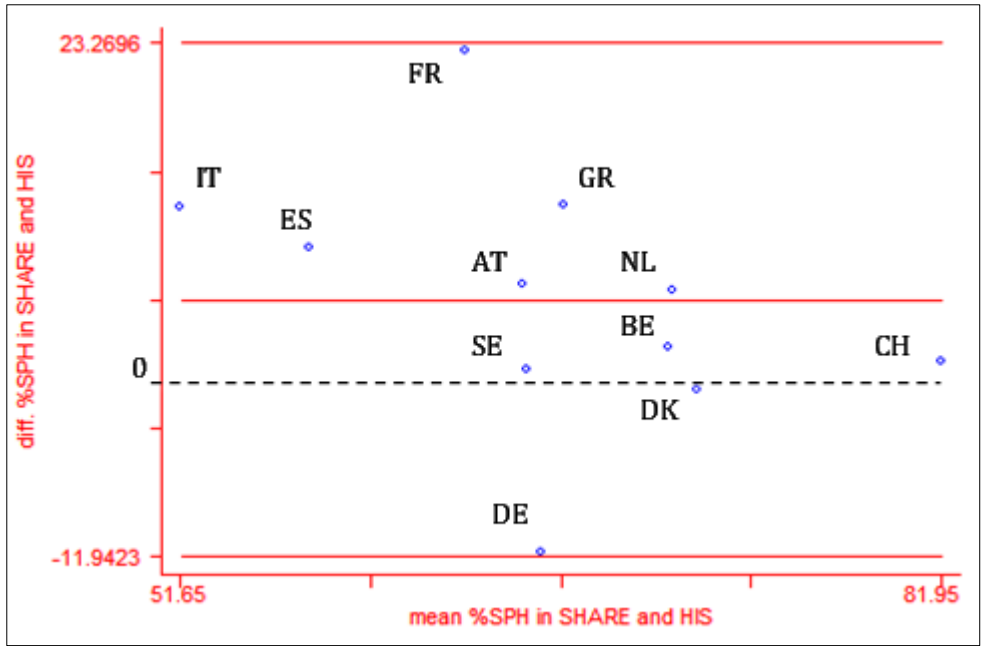


Figure 3: Bland-Altman comparison of self-perceived health in SHARE and HIS  
 Limits of agreement: -11.94, 3.27; Mean difference: 5.66 (CI -0.25, 11.58); Range: 51.65-81.95

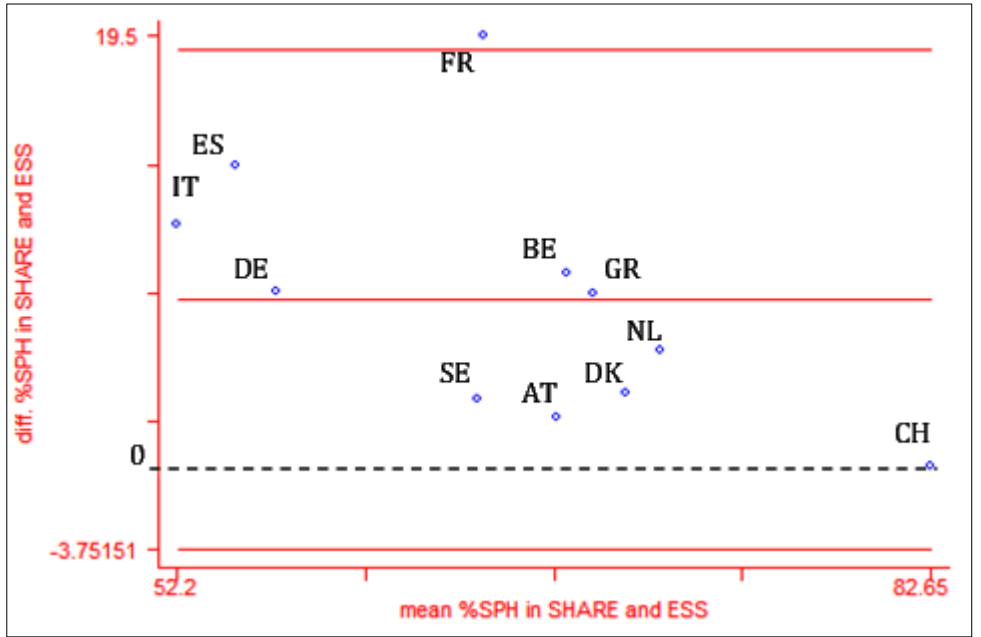


Figure 4: Bland-Altman comparison of self-perceived health in SHARE and ESS  
 Limits of agreement: -3.75, 18.86; Mean difference: 7.56 (CI 3.76-11.35); Range: 52.20-82.65

*Chronic health problems*

The prevalence of chronic health problems, or long-term illnesses were assessed in SHARE, HIS, EU-SILC and in the LFS-disability module. This information was not available for all countries in the HIS. In SHARE the prevalence of having chronic health problems was systematically higher than in EU-SILC

and LFS (Figures 5 and 7). The mean difference was 7.5% for EU-SILC and 17.2% for LFS across the observed range of pooled prevalence estimates between 27.6% and 52.4%. When comparing SHARE with HIS, there seemed to be a good agreement, as the systematic difference was only small (0.96%, Figure 6). However, this difference varied considerably across countries. Concerning all surveys, there was no clear indication for proportional bias, and according to the limits of agreement, there were no outliers.

Overall, a good agreement was found between SHARE and HIS. Despite the presumed comparability in the assessment of chronic health problems, lesser agreement was found for EU-SILC and substantial systematic differences were found between SHARE and LFS. SHARE’s estimates seemed to be in good agreement with all surveys for Greece and the Netherlands. Spain was one of the countries for which lower agreement was found across all surveys.

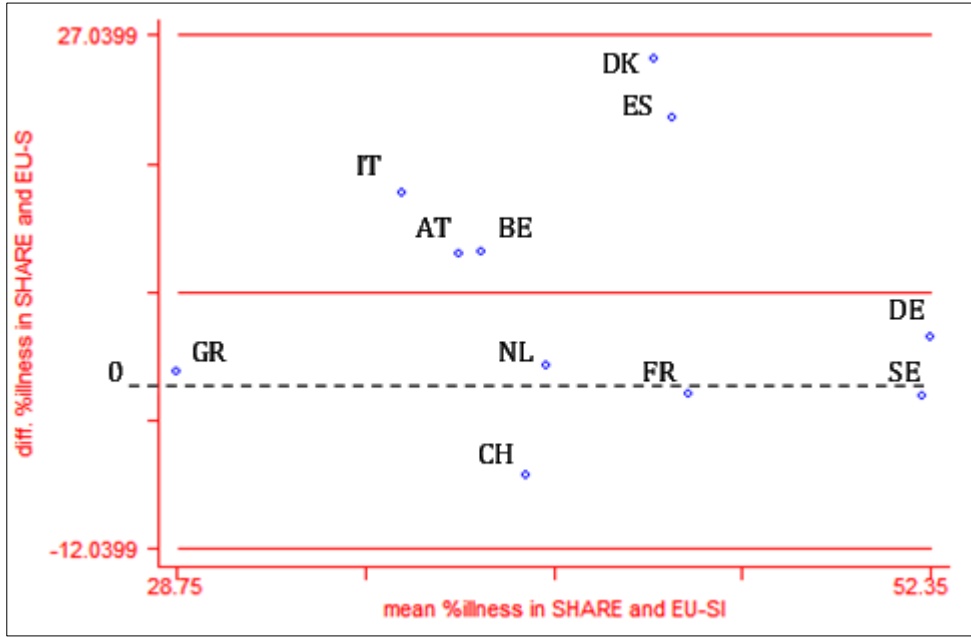


Figure 5: Bland-Altman comparison of chronic health problems in SHARE and EU-SILC  
 Limits of agreement: -12.04, 27.04; Mean difference: 7.50 (CI 0.94-14.06); Range: 28.75-52.35



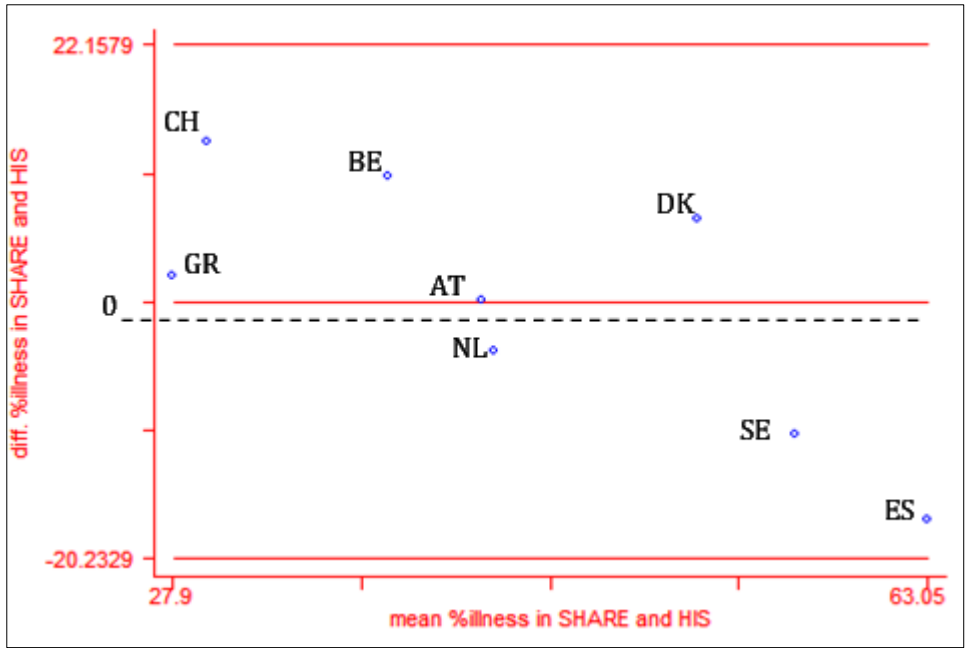


Figure 6: Bland-Altman comparison of chronic health problems in SHARE and HIS  
 Limits of agreement: -20.23, 22.16; Mean difference: 0.96 (CI -7.90, 9.82); Range: 27.90-63.05

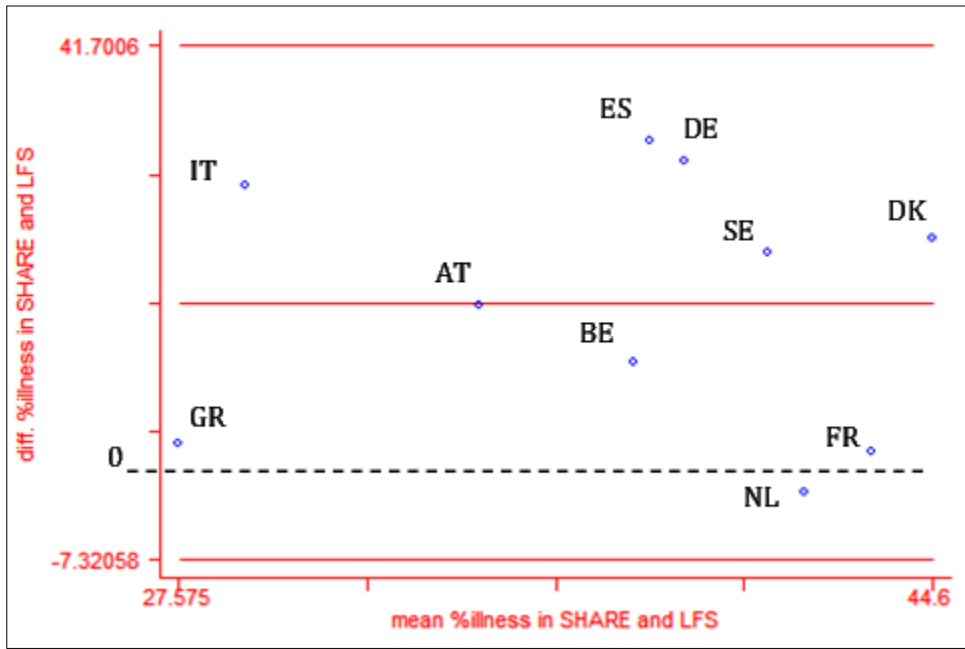


Figure 7: Bland-Altman comparison of chronic health problems in SHARE and LFS  
 Limits of agreement: -7.32, 41.70; Mean difference: 17.19 (CI 8.42-25.96); Range: 27.58-44.60

*Global Activity Limitation (GALI)*

The information on limitations in activities due to health problems (GALI question) refer to the auto-evaluation of respondents to what extend they are limited in activities they usually do. For the comparisons with SHARE, we used information from EU-SILC, HIS and ESS (Figures 8, 9 and 10). The

agreement was best between SHARE and EU-SILC; the prevalence estimates reported by SHARE were systematically 5.7% higher. Denmark was identified as an outlier, being outside the limits of agreement (difference is 23.7%). This was expected, as the Danish EU-SILC respondents were offered different response options regarding the GALI indicator. When rerunning the Bland and Altman procedure without Denmark, the agreement between SHARE and EU-SILC improved, showing a reduced systematic difference (3.9%). The difference between SHARE and HIS was large (mean difference is 16.7%). However, there were only four countries included in this comparison. The comparison of SHARE with ESS shows a systematic difference of 9.0% and some indication for proportional bias with larger systematic differences for lower prevalence estimates.

Based on the Bland and Altman plots SHARE compared best with EU-SILC and less with ESS. However, systematic differences were relevant over a range of pooled prevalences between 19% and 48%. For both EU-SILC and ESS, good agreement was found for France and Greece.

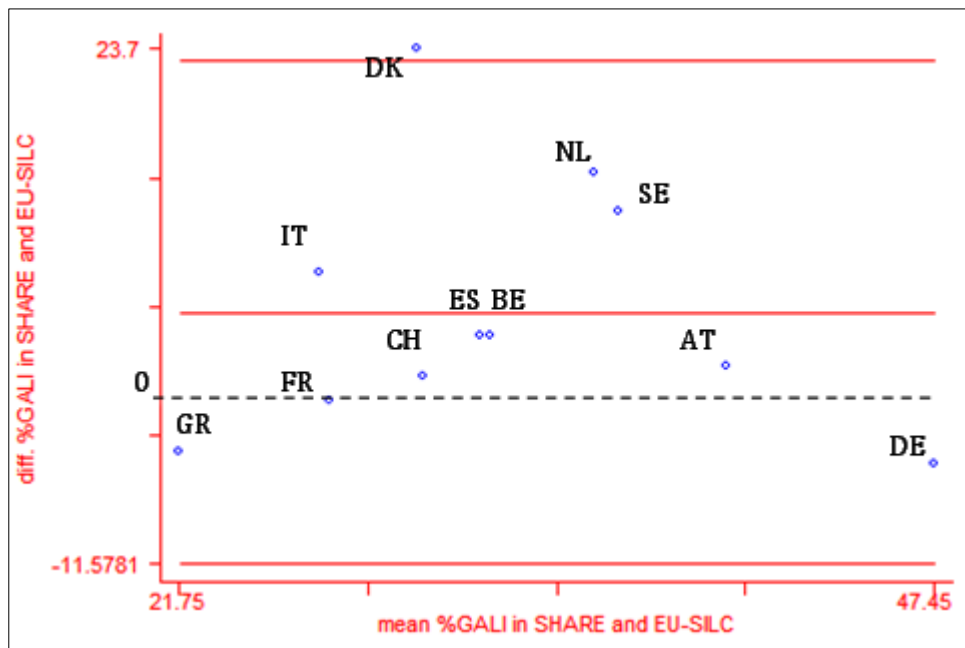


Figure 8: Bland-Altman comparison of experienced limitations in SHARE and EU-SILC

Limits of agreement: -11.58, 22.96; Mean difference: 5.69 (CI -0.11, 11.49); Range: 21.75-47.45

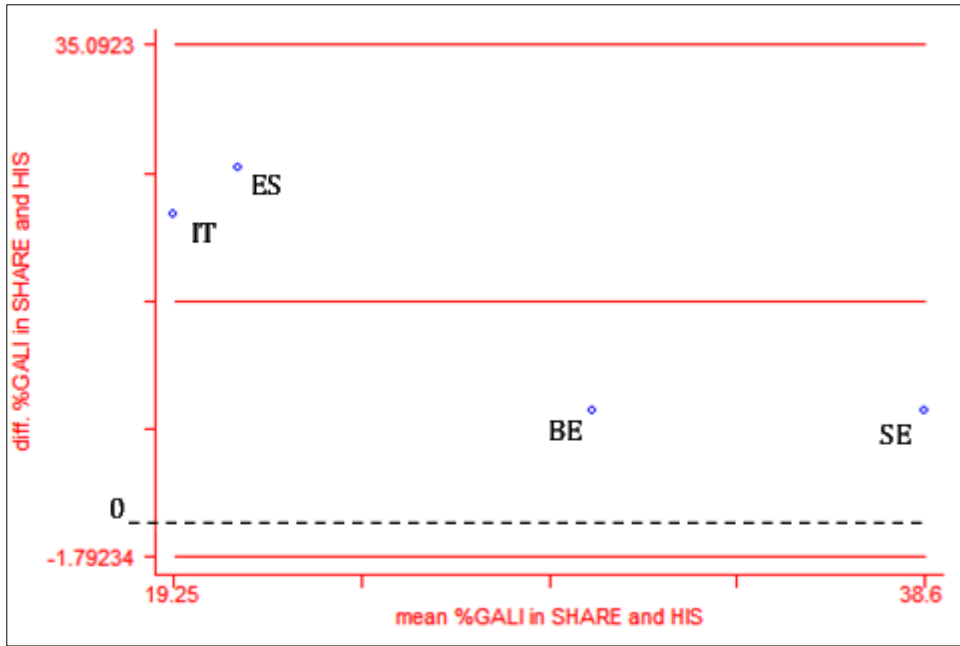


Figure 9: Bland-Altman comparison of experienced limitations in SHARE and HIS  
 Limits of agreement: -1.79, 35.09; Mean difference: 16.65 (CI 1.98-31.32); Range: 19.25-38.60

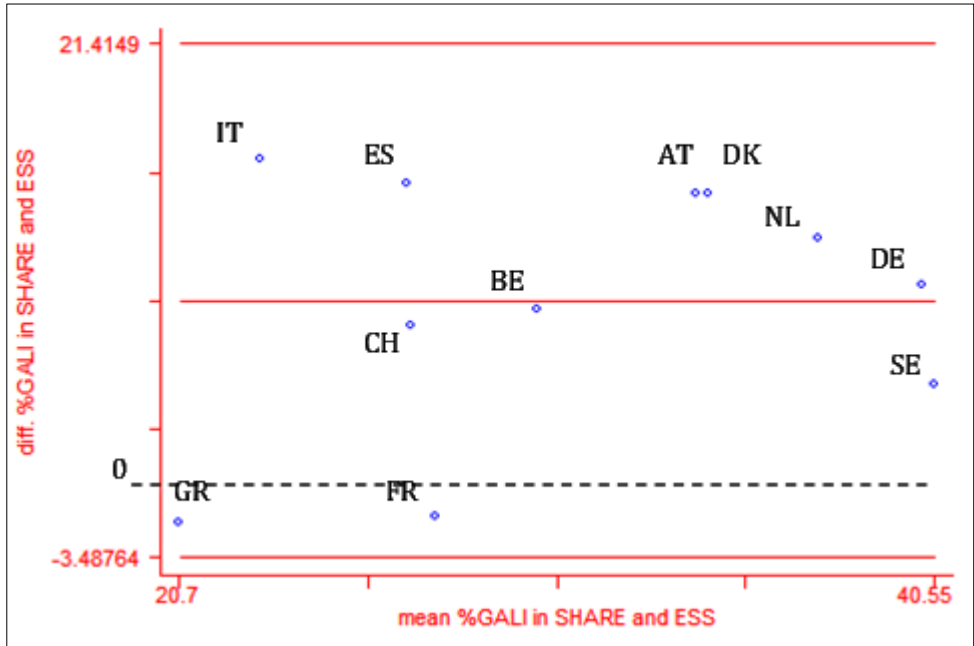


Figure 10: Bland-Altman comparison of experienced limitations in SHARE and ESS  
 Limits of agreement: -3.49, 21.42; Mean difference: 8.96 (CI 4.78-13.15); Range: 20.70-40.55

*Diabetes*

Cross-sectional comparisons with SHARE data were carried out using EHIS. According to the Bland and Altman plot (Figure 11), there was no clear systematic difference between prevalence estimates by SHARE and EHIS. In particular in Belgium and France, the estimates were close to being identical.

Overall, the mean difference was close to zero (-0.8%) across the observed range of pooled prevalences between 7.4% and 11.7%. We did not find any clues for proportional bias, maybe partly because of the small number of countries included in the comparison. Despite of the overall agreement between SHARE and EHIS, comparisons might not be valid as 1) the prevalence of diabetes is low, and might therefore be affected substantially by the systematic bias; and 2) the systematic difference varied across the countries.

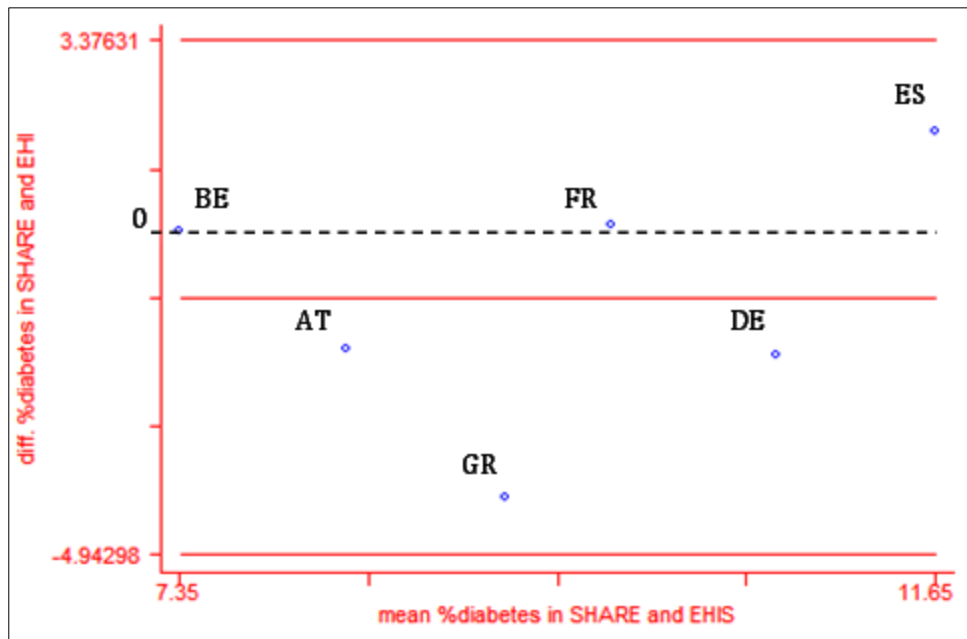


Figure 11: Bland-Altman comparison of diabetes in SHARE and EHIS

Limits of agreement: -4.94, 3.38; Mean difference: -0.78 (CI -2.97, 1.40); Range: 7.35-11.65

### *Hypertension*

Comparing hypertensive diseases between SHARE and EHIS yielded similar patterns of results as for comparing diabetes (Tables 16, 17 and 18). Again, no clear pattern of differences was observed between the two surveys. According to the Bland and Altman plot using the data from SHARE and EHIS respondents aged 55-64 years reporting on hypertension, the mean difference was close to zero (-0.3%) across the observed range of pooled prevalences between 23.8% and 39.1% (Figure 12). We found that systematic differences were larger for lower pooled prevalences, indicating systematic bias. However, we should take into account the low number of countries we could include in this analysis (n=6).

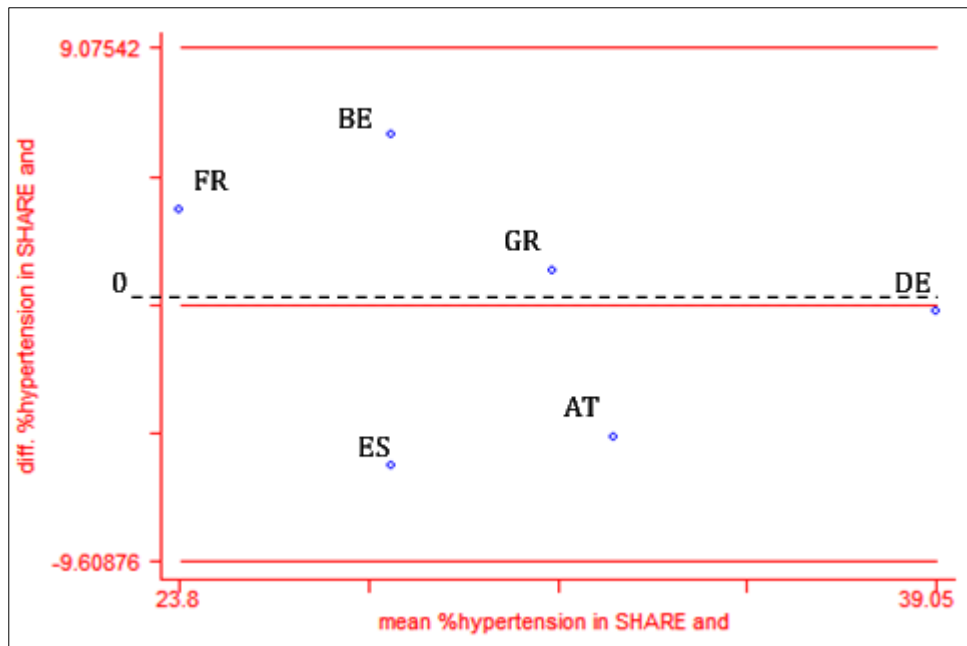


Figure 12: Bland-Altman comparison of hypertension in SHARE and EHIS

Limits of agreement: -9.61, 9.08; Mean difference: -0.27 (CI -5.17, 4.64); Range: 23.80-39.05

### *Asthma and COPD*

Cross-sectional comparisons with SHARE wave 1 data were carried out using EHIS. Overall, SHARE's estimates of asthma prevalence were lower as compared to EHIS; this was most profound in Germany and Austria. Figure 13 shows that, according to the Bland and Altman technique, SHARE's reported prevalence estimates of asthma were systematically lower than those reported by EHIS (mean difference is -1.18%). This systematic difference is substantial, as the range of pooled prevalences varied only from 2.8% to 5.1%. However, if Germany and Austria were to be excluded, the agreement will be improved. There was some indication for positive proportional bias with larger systematic differences for higher pooled prevalences.

In line with the results for asthma, SHARE's estimates of COPD prevalence were lower as compared to EHIS (mean difference is -0.96%, Figure 14). When looking at country-specific differences between surveys, a large difference for Austria's prevalences of COPD was found, whereas for the other countries the agreement between SHARE and EHIS seemed better. Germany was not included here. We did not find an indication for proportional bias with COPD.

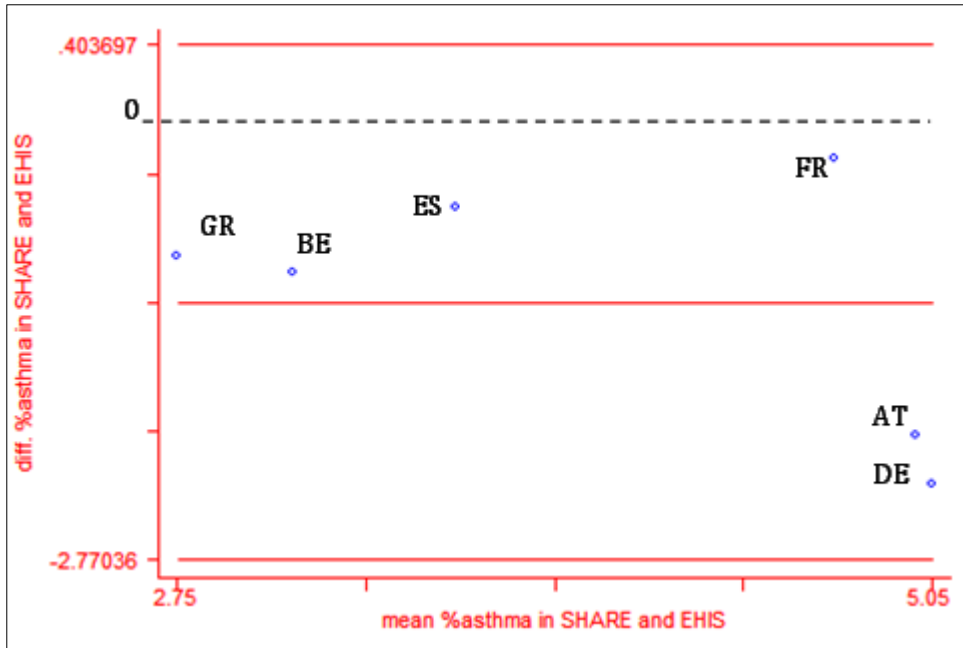


Figure 13: Bland-Altman comparison of asthma in SHARE and EHIS

Limits of agreement: -2.77, 0.40; Mean difference: -1.18 (CI -2.02, -0.35); Range: 2.75-5.05

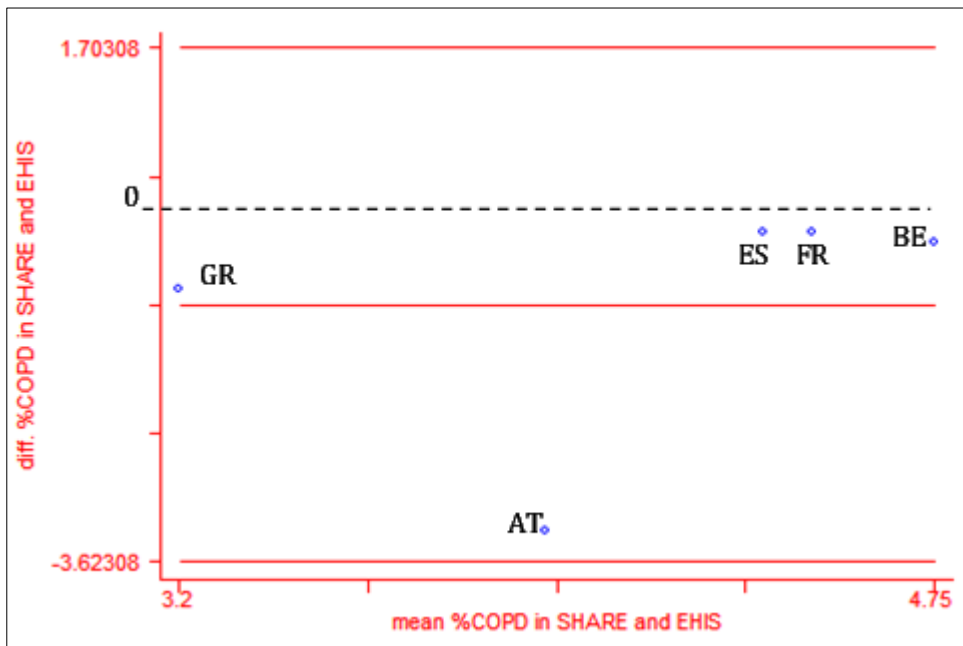


Figure 14: Bland-Altman comparison of COPD in SHARE and EHIS

Limits of agreement: -3.62, 1.70; Mean difference: -0.96 (CI -2.61, 0.69); Range: 3.20-4.75

### *Chronic depression*

In SHARE, prevalence of diagnosed depression was not assessed, instead we used the information available from the question: “Has there been a time or times in your life when you suffered from symptoms of depression which lasted at least two weeks?” As mentioned earlier, for EHIS chronic

depression prevalence was not computed, as no data was available for Austria, Estonia and Germany. Therefore, only four countries could be compared for depression prevalence.

Clearly, SHARE reported much higher prevalence as compared to EHIS (Figure 15). The mean difference reflecting the estimated systematic difference between both surveys was 24.7% across an observed range of pooled prevalences between 9.8% and 22.0%. With a systematic difference being even larger than the pooled prevalence, it is evident that SHARE and EHIS are not comparable concerning depression. This lack of agreement between the two surveys is probably due to the different assessments of depression. In EHIS, depression prevalence was based on diagnosed depression, whereas in SHARE the occurrence ever of a depressive period lasting at least two weeks was assessed. The assessment in SHARE resulted in higher prevalence of depression than the assessment of diagnosed depression by EHIS.

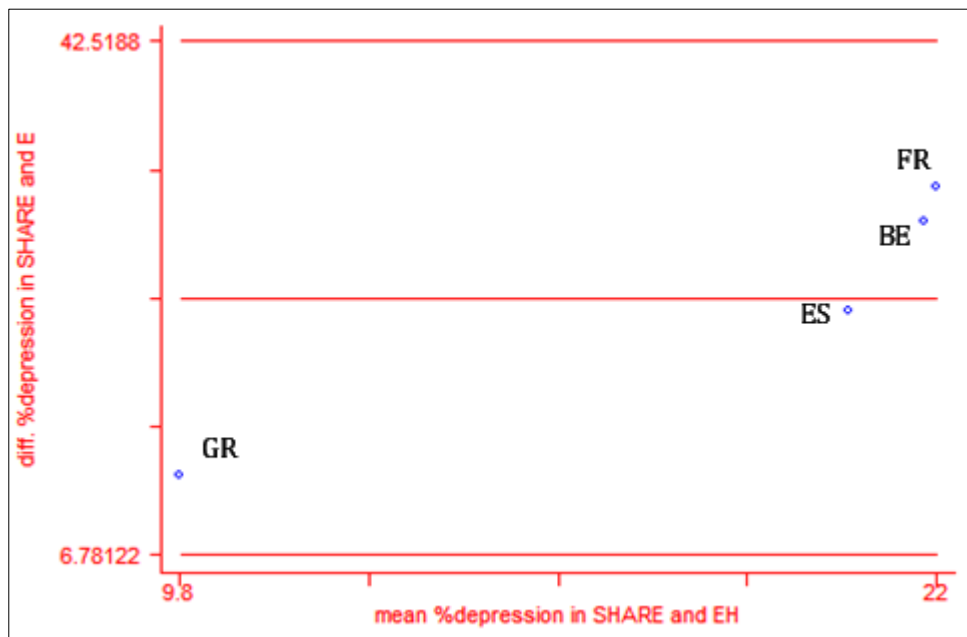


Figure 15: Bland-Altman comparison of depression in SHARE and EHIS

Limits of agreement: 6.78-42.52; Mean difference: 24.65 (CI 10.43-38.87); Range: 9.80-22.00

### Overweight

For both comparisons (SHARE with EHIS and SHARE with HIS), the systematic difference between the surveys was minor: -0.9 for SHARE minus EHIS, and 0.6 for SHARE minus HIS over a range of pooled prevalences between 49% and 73% (Figures 16 and 17). This indicates good overall agreement between the surveys. However, systematic differences varied across countries. The difference between SHARE and EHIS was quite close to the mean difference, indicating good agreement with

EHIS. For HIS, the variation between countries was larger, probably due to the large difference observed in Germany. Both comparisons showed an indication for proportional bias, with larger systematic differences for higher prevalences of overweight.

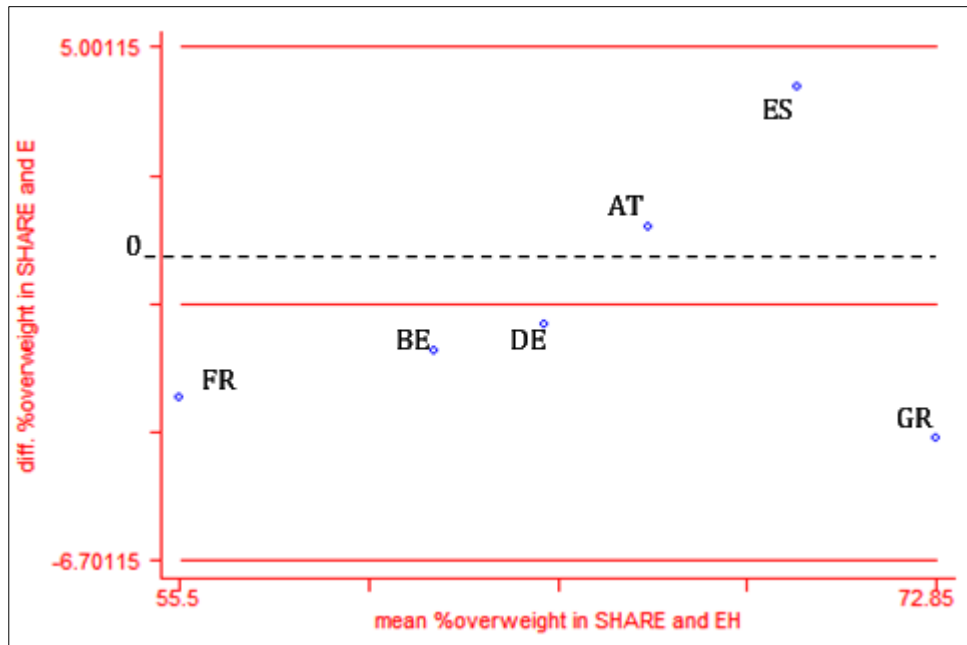


Figure 16: Bland-Altman comparison of overweight in SHARE and EHIS

Limits of agreement: -6.70, 5.00; Mean difference: -0.85 (CI -3.92, 2.22), Range: 55.50-72.85

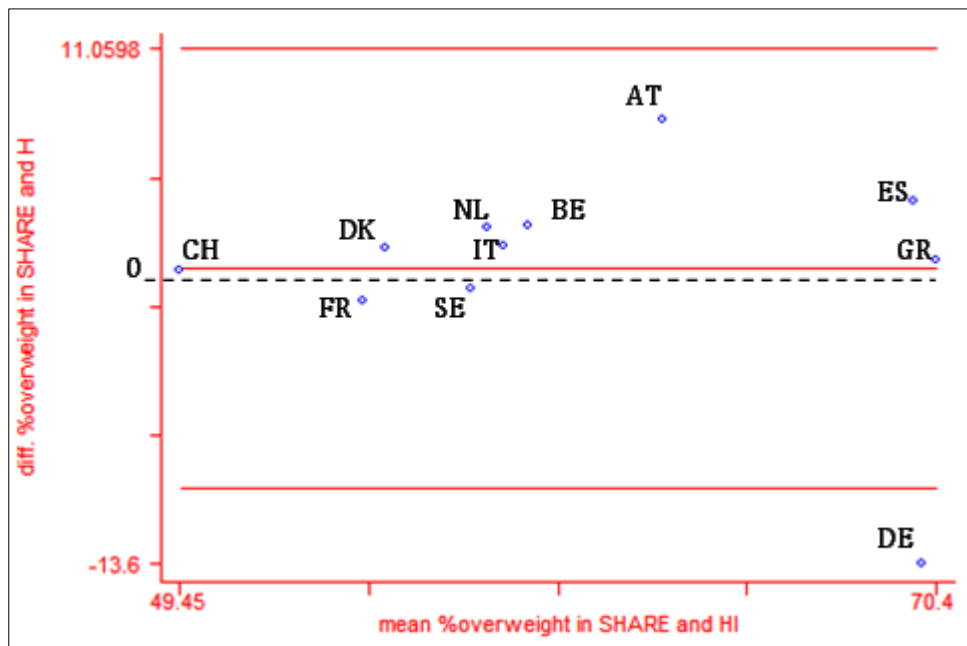


Figure 17: Bland-Altman comparison of overweight in SHARE and HIS

Limits of agreement: -9.93, 11.06; Mean difference: 0.56 (CI -2.96, 4.09), Range: 49.45-70.40



## Discussion and Conclusion

The current paper provides an overview of the comparability of the SHARE health measures with aggregate data from other European health surveys with respect to definition in the data collection instruments and occurrence in the study population. It is a first step towards describing the agreement and disagreement between health surveys in Europe. By comparing prevalence estimates of SHARE with other surveys, we have found that the agreement between SHARE and other surveys varied by country and was depending on the health outcome of interest.

We have summarised the main results in Table 4. SHARE's population reported a better health based on self-perceived health, diabetes, hypertension, asthma, COPD and BMI as compared to the other surveys with available information. At the same time, SHARE's population seemed unhealthier when looking at chronic health problems, global activity limitations, or depression. For health outcomes that are perhaps less subjective to assess, such as self-reported prevalence of a diagnosed disease or BMI calculated from self-reported weight and height, we found higher agreement between SHARE and other surveys. Only small systematic differences, reflected by the mean difference, were found for these health outcomes for EHIS and HIS, indicating a good agreement with SHARE. However, by studying the Bland and Altman plots, we noticed that the differences varied across countries, making country-specific comparisons between SHARE and EHIS or HIS not reliable. For the more subjective health measures such as self-perceived health, having a long-standing illness or health problem, and global activity limitation, SHARE and other health surveys cannot be compared externally for occurrence across age groups, gender, educational levels, and countries. These comparisons seem only valid within each health survey.

Table 4: Agreement in health prevalence estimates between SHARE and other surveys

	Mean difference	Range of pooled prevalences	Number of countries	Proportional bias <sup>1</sup>	Outliers
Self-perceived health					
EU-SILC	8.6%	49.9%-77.6%	11	-	Sweden
HIS	5.7%	51.7%-82.0%	11	-	-
ESS	7.6%	52.2%-82.7%	11	Negative	France
Chronic health problems					
EU-SILC	7.5%	28.8%-52.4%	11	-	-
HIS	1.0%	27.9%-63.1%	8	-	-

LFS	17.2%	27.6%-44.6%	10	-	-
Global activity limitation					
EU-SILC	5.7%	21.8%-47.5%	11	-	Denmark
HIS	16.7%	19.3%-38.6%	4	-	-
ESS	9.0%	20.7%-40.6%	11	Negative	-
Diabetes					
EHIS	-0.8%	7.4%-11.7%	6	-	-
Hypertension					
EHIS	-0.3%	23.8%-39.1%	6	-	-
Asthma					
EHIS	-1.2%	2.8%-5.1%	6	Positive	-
COPD					
EHIS	-1.0%	3.2%-4.8%	5	-	-
Chronic depression					
EHIS	24.7%	9.8%-22.0%	4	-	-
Overweight					
EHIS	-0.9%	55.5%-72.9%	6	Positive	-
HIS	0.6%	49.5%-70.4%	11	Positive	-

<sup>1</sup>Positive proportional bias: proportional bias increases with increasing prevalence; Negative proportional bias: proportional bias decreases with increasing prevalence

Looking into the determinants causing the systematic differences in prevalence estimates between SHARE and other surveys, we have described the sampling strategy, response and assessment mode for each survey. In general, differences between these surveys in the methodological issues were not substantial. For example, responses were reasonably good to good in most of the surveys (of course with some exceptions where response proportions were below 40%). A low response could indicate a selective population taking part in the survey, and if health plays an important role in this selection process surveys or countries with lower response may have higher prevalence estimates of good health. However, we could not demonstrate that particular survey characteristics contributed to the observed differences in the health prevalences between studies. We could also not find clues that timing of surveys might have biased the comparative analysis.

Based on the information available, it seems that at least for some of the comparisons, substantial differences in health measurements between surveys are a main contributor for finding a lack of agreement between the surveys. This was shown in our results when comparing depression

prevalence between SHARE and EHIS. We found a very poor agreement between these surveys, most likely due to the different measures to assess depression that were used. Thus, concerning the agreement for depression prevalence, influences due to differences in measurements seem therefore larger than possible bias induced by different design characteristics between surveys. Furthermore, different response options could have influenced our results. This was demonstrated by the self-perceived health assessment for HIS Germany and the GALI indicator in EU-SILC for Denmark. For self-perceived health, our results indicated that individuals appeared to report a better health when confronted with the response options used in HIS Germany. This is in line with the results found by Jürges et al. (2008), who assessed the comparability between different measures of self-rated health. The GALI indicator in EU-SILC that was used in Denmark had different response options as compared to the other countries, which most probably resulted in Denmark being identified as an outlier in its comparison with SHARE. Despite the aforementioned influences caused by differences in measurements, most measurements were quite comparable between the surveys, and this could therefore not be completely attributable for the disagreements we found between SHARE and other surveys.

The comparisons between surveys that were made in this paper were based on aggregate data in older adults aged 55-64 years. We deliberately chose to use this age group, as for this age group the numbers of respondents were highest and probably gave most reliable estimates. Prevalence of ill-health is increasing with age and we should be very careful to extrapolate our findings to the general older population. Individual-level information might help to investigate the influence of age and other socio-demographic characteristics on the comparability of health estimates between European surveys.

Unfortunately, we did not have information about the true health estimates. We therefore do not know which survey provides the most valid estimates. For most health indicators that were used in this paper, no gold standard is available. Responses were an individual's perception of a certain health problem. For self-reported conditions in SHARE that require hospitalisation, it would be interesting to link individual SHARE records to hospital registries to validate the self-reported measures. Additionally, for health measures not directly requiring hospitalisation, investigating their predictive ability for diseases or cause-specific mortality gives an indication of the validity. Currently, possibilities for individual linkages at the national level are available for some SHARE countries, and will be explored further.

To conclude, this paper provides some valuable insights in the comparability of health information across European surveys. Further steps need to be taken to improve understanding of observed incongruence between European surveys and to evaluate whether incongruence in occurrence will also affect agreement among trends over time in prevalence and incidence of health measures across important structural determinants, such as education, gender, and income. For instance, we could study the increase or decrease in health inequalities over time in SHARE, and compare these to changes in health inequalities over time in other European surveys. Furthermore, using repeated cross-sectional information from EU-SILC and ESS, we could describe time trends for 1) self-perceived health, 2) having a long-standing illness or disease and 3) global activity limitations.

Based on current research, EHIS and HIS might provide the best information for comparing health prevalence estimates with SHARE. These studies focus on health, whereas EU-SILC, LFS and ESS have other priority topics. Besides, EHIS is the only other interview survey next to SHARE focussing on health across Europe using standardised methodologies, and might therefore be regarded as the most important source of information to compare health estimates from SHARE with. Unfortunately, not all information regarding health status estimates was available on the Eurostat website. Individual-level information on all comparable health indicators of EHIS, would help us drawing more valid conclusions about its overlap and difference with SHARE, since it is still unanswered why we find differences in health estimates based on SHARE and estimates based on EHIS or other surveys. Complete overlap with SHARE will not encompass with either survey, as SHARE is the only survey focussing on older adults, which makes SHARE a unique addition to the other surveys. SHARE's complementarity to EHIS and recommended cooperation with EHIS might help creating a framework to produce a comprehensive view on health in Europe.

## References

ESS Round 2: European Social Survey (2012). "ESS-2 2004 Documentation Report. Edition 3.4." Bergen, European Social Survey Data Archive, Norwegian Social Science Data Services.

ESS Round 2: European Social Survey Round 2 Data (2004). "Data file edition 3.3." Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data.

Bland, J. M. and D. G. Altman (1986). "Statistical methods for assessing agreement between two methods of clinical measurement." *Lancet* 1: 307-310.

ESS (2012). "European Social Survey." Retrieved March, 2013, from <http://www.europeansocialsurvey.org>.

Eurostat (2007). "Comparative EU statistics on income and living conditions: Issues and challenges." Eurostat Methodologies and working papers.

Eurostat (2008, 26 March 2013). "Employment of disabled persons (LFS adhoc module 2002)." Retrieved March, 2013, from [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/hlth\\_empdis\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/hlth_empdis_esms.htm).

Eurostat (2009, 14 January 2009). "Health status: indicators from the national Health Interview Surveys (HIS - collection round 2002)." Retrieved March, 2013, from [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/hlth\\_status\\_his\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/hlth_status_his_esms.htm).

Eurostat (2010, 10 February 2013). "Health status: indicators from the SILC survey (from 2004 onwards)." Retrieved March, 2013, from [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/hlth\\_status\\_silc\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/hlth_status_silc_esms.htm).

Eurostat (2012, 19 April 2012). "EHIS data collection. Survey overview." from [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/Annexes/hlth\\_ehis\\_esms\\_an3.pdf](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/Annexes/hlth_ehis_esms_an3.pdf).

Eurostat (2013, 26 May 2013). "European health interview survey (EHIS) - collection round 2008." Retrieved May, 2013, from [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/hlth\\_ehis\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/hlth_ehis_esms.htm).

Eurostat (2013). "Eurostat database." Retrieved April 2013, from [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database).

Jürges, H., M. Avendano, J.P. Mackenbach (2008). "Are different measures of self-rated health comparable? An assessment in five European countries". *European Journal of Epidemiology* 23: 773-781.

Idler, E. L. and Y. Benyamini (1997). "Self-Rated Health and Mortality: A Review of Twenty-Seven Community Studies." *Journal of Health and Social Behavior* 38(1): 21-37.

Koponen, P. and A. Aromaa (2003): "Survey design and methodology in national health interview and health examination surveys. Review of literature, European survey experiences and recommendations." National Public Health Institute (KTL), Department of health and functional capacity, Finland.

SHARE (2011a). "Release Guide 2.5.0. Waves 1 & 2". Mannheim Research Institute for the Economics of Aging.

SHARE (2011b). SHARE Wave 1 Release 2.5.0. from <http://www.share-project.org>.

Tolonen, H., P. Koponen, A. Aromaa, S. Conti, S. Graff-Iversen, L. Grøtvedt, M. Kanieff, J. Mindell, S. Natunen, P. Primatesta, M. Verschuren, L. Viet and K. Kuulasmaa (2008). "Review of Health Examination Surveys in Europe." Helsinki, National Public Health Institute.

UNESCO Institute for Statistics (UIS) (2006). "ISCED 1997: International Standard Classification of Education." from <http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>.

WHO (2000). "Obesity: Preventing and managing the global epidemic." WHO Technical Report Series. Geneva, WHO.

## **Appendix 1: Description of EHIS, HIS, EU-SILC, ESS and LFS**

### *EHIS*

The EHIS was designed to address basic information needs on health in EU member states based on self-reported data (Tolonen, Koponen et al. 2008, Eurostat 2013). The EHIS is implemented and managed by Eurostat and the survey is to be conducted every five years. The EHIS is a general household survey and data are collected via national surveys. EHIS modules (Health determinants, Health care, Health status, Background variables) may be either grouped in one separate national survey or be integrated into existing national surveys (i.e. HIS, LFS, other household survey). In such a way Member States have had the maximum flexibility for implementation. The EHIS health status module concentrates on the main elements of health status needed at EU level and does not intend to cover all detailed aspects which can better be carried out via specific surveys or survey modules at national level. The first wave of the EHIS was implemented in the period 2006-2009. EHIS wave 2 is scheduled to start in 2014. The structure of the survey is a standardized questionnaire translated into all EU languages. However, the survey allows a certain level of flexibility to the countries in the implementation and the specific survey system that they would use in order to collect the required information. Unlike SHARE, therefore, the EHIS is not a centralized survey carried out across countries, but instead, national surveys in most cases 'host' the EHIS by implementing the common questionnaire agreed upon. This results in variations concerning specific design characteristics (Eurostat 2012).

### *HIS*

Most European countries regularly conduct a national HIS (Eurostat 2009). Some of these HIS correspond to the EHIS in a particular country, while some HIS are separate from EHIS. The data come from non-harmonised national surveys. The countries were asked to post-harmonise the data according to proposed guidelines developed by Eurostat. Thus, HIS were not purposefully designed to be comparable across countries, and as a result the level of cross-country comparability is not optimal. Most HIS took place in the years just before SHARE started (2004), covering the period 1997-2003. As the data are collected via national surveys, the study design characteristics varied between countries; different assessment modes were used to collect the health information (Koponen and Aromaa 2003).

### *EU-SILC*

EU-SILC (Eurostat 2010) is the reference source for comparative statistics on income distribution and social inclusion in the European Union. EU-SILC was launched in 2003 in six Member States and was expanded to cover all of the EU Member States plus some additional countries. Several countries (Czech Republic, Germany, Netherlands, Poland, Slovenia) were only included from 2005 onwards; therefore, EU-SILC round 2005 was used for comparisons with SHARE. In some countries, EU-SILC served as platform for the EHIS, hosting as a vehicle survey for one or more EHIS modules. EU-SILC is based on the idea of a common “framework” and no longer a common “survey”. Because of allowing some flexibility related to the survey and sampling design, the specific mode of collecting information varies from country to country (Eurostat 2007). National surveys also differ through the period during which the fieldwork was carried out.

### *ESS*

The ESS (ESS 2012) is an academically-driven social survey designed to describe and explain the interaction between Europe's changing societies and the attitudes, beliefs and behaviour patterns of its diverse populations. The ESS is a biannual cross-sectional survey and covers more than thirty countries. The first round was fielded in 2002/2003, the fifth in 2010/2011. The ESS aims to design and implement workable and equivalent sampling strategies in all participating countries. Individual-level ESS data are available through the ESS project website.

### *LFS*

The LFS (Eurostat 2008) is conducted in the 27 Member States of the European Union, 3 candidate countries and 3 countries of the European Free Trade Association. The survey provides results on labour participation as well as on persons outside the labour force, four times per year. The data collection covers the years from 1983 onwards. The Labour Force Surveys are conducted by the national statistical institutes across Europe and are centrally processed by Eurostat. National statistics institutes are responsible for selecting the sample, preparing the questionnaires, conducting the direct interviews among households, and forwarding the results to Eurostat in accordance with a common coding scheme. The LFS covers all industries and occupations. In 2002, the LFS contained an ad hoc module concerning the employment of disabled people. The module consisted of 11 variables dealing with the existence, type, cause and duration of longstanding health problems or disability, work limitations (regarding the kind of work or the amount of work, and mobility problems), and assistance needed or provided to work.



## Appendix 2: Prevalence of reported health by age group, gender and educational level

For all tables, the following footnotes are applicable: <sup>1</sup> not available, or strata size is <20, or item non-response is >50%; <sup>2</sup> strata size is between 20 and 49, or item non-response is between 20% and 49%; <sup>3</sup> EU-SILC: Switzerland was included from 2008 onwards; <sup>4</sup> EU-SILC: in Denmark different response categories were used; <sup>5</sup> Results by gender and educational level for the other age groups (65-74 years, 75-84 years, 85+ years) are available from the corresponding author on request.

Table A2.1: Prevalence (%) of good + very good self-perceived health by age groups according to the different surveys

	EU-SILC 2005	HIS '97-'03	ESS '04/'05	SHARE '04/'05
<b>Austria</b>				
55-64 yrs	57.0	61.9	66.4	68.7
65-74 yrs	45.5	52.0	59.5	56.3
75-84 yrs	29.2	43.2	39.0	39.2
85+ yrs	21.2	38.0	<sup>1</sup>	32.2
<b>Belgium</b>				
55-64 yrs	65.4	69.9	63.5	72.3
65-74 yrs	56.3	58.1	64.8	69.0
75-84 yrs	42.3	46.6	49.5	56.3
85+ yrs	27.8	43.8	<sup>1</sup>	46.1
<b>Denmark</b>				
55-64 yrs	70.0	72.4	68.6	72.0
65-74 yrs	63.2	65.4	63.5	66.7
75-84 yrs	49.1	53.7	53.6	54.0
85+ yrs	<sup>1</sup>	55.5	<sup>1</sup>	47.8
<b>France</b>				
55-64 yrs	59.1	51.6	54.8	74.3
65-74 yrs	41.7	43.2	41.0	56.6
75-84 yrs	26.6	36.8	30.2	43.7
85+ yrs	17.2	31.6	<sup>1</sup>	37.5
<b>Germany</b>				
55-64 yrs	45.1	71.8	52.2	60.2

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65-74 yrs	33.9	67.1	38.3	48.9
75-84 yrs	22.5	64.2	20.6	27.1
85+ yrs	<sup>1</sup>	<sup>1</sup>	37.5 <sup>2</sup>	31.7
Greece				
55-64 yrs	67.9	60.8	65.1	73.0
65-74 yrs	48.5	39.5	51.7	51.0
75-84 yrs	29.4	21.4	31.8	37.4
85+ yrs	18.6	17.1	29.6 <sup>2</sup>	23.9
Italy				
55-64 yrs	42.0	45.6	46.7	57.7
65-74 yrs	24.0	27.6	40.7	38.6
75-84 yrs	13.1	17.2	26.3	29.8
85+ yrs	10.5	12.7	<sup>1</sup>	23.9
Netherlands				
55-64 yrs	67.0	68.0	69.1	74.4
65-74 yrs	57.9	62.1	59.5	63.6
75-84 yrs	44.1	50.7	38.2	51.0
85+ yrs	43.1	50.9	54.5 <sup>2</sup>	40.3
Spain				
55-64 yrs	51.2	52.1	47.7	61.4
65-74 yrs	38.2	41.5	34.2	46.3
75-84 yrs	23.2	33.9	39.0	31.7
85+ yrs	20.7	31.8	17.4 <sup>2</sup>	30.8
Sweden				
55-64 yrs	70.2	65.0	62.8	65.9
65-74 yrs	65.6	65.4	64.1	63.4
75-84 yrs	45.4	49.2	51.2	48.0
85+ yrs	40.5	38.6	52.4 <sup>2</sup>	37.3
Switzerland <sup>3</sup>				
55-64 yrs	72.4	81.2	82.6	82.7
65-74 yrs	67.6	77.8	72.6	76.6
75-84 yrs	60.6	69.9	65.9	69.3
85+ yrs	53.6 <sup>2</sup>	59.2	43.5 <sup>2</sup>	78.6

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Table A2.2: Prevalence (%) of good + very good self-perceived health by gender in respondents aged 55-64 years<sup>5</sup>

	EU-SILC 2005	HIS '97-'03	ESS '04/'05	SHARE '04/'05
Austria				
Men	53.7	62.0	71.9	68.3
Women	60.3	61.8	61.0	69.0
Belgium				
Men	66.2	69.4	63.5	73.7
Women	64.5	70.4	63.6	71.0
Denmark				
Men	69.9	73.2	68.3	75.0
Women	70.2	71.7	68.9	69.3
France				
Men	60.7	54.9	59.4	75.0
Women	57.5	48.5	48.9	73.7
Germany				
Men	44.1	73.0	50.9	59.4
Women	46.1	70.7	53.4	61.1
Greece				
Men	71.3	67.3	72.8	79.2
Women	64.8	55.1	58.1	66.8
Italy				
Men	45.6	50.5	58.7	64.3
Women	38.6	40.8	32.5	51.5
Netherlands				
Men	67.6	69.0	73.0	75.1
Women	66.5	66.9	66.1	73.7
Spain				
Men	54.4	56.5	51.5	67.3
Women	48.2	47.9	43.3	56.0
Sweden				
Men	71.5	67.2	69.5	70.4
Women	68.9	62.6	56.8	61.3

Switzerland <sup>3</sup>				
Men	75.3	82.0	85.0	83.6
Women	69.4	80.3	80.6	81.8

Table A2.3: Prevalence (%) of good + very good self-perceived health by educational level in respondents aged 55-64 years<sup>5</sup>

	EU-SILC 2005	HIS '97-'03		ESS '04/'05	SHARE '04/'05
Austria					
ISCED 0-2	41.6	53.4	<sup>1</sup>	62.1	52.9
ISCED 3-4	59.8	65.7		66.7	71.4
ISCED 5-6	73.6	72.9		75.0 <sup>2</sup>	79.3
Belgium					
ISCED 0-2	56.2	64.9	64.0	54.4	64.7
ISCED 3-4	67.7	74.6		62.9	75.3
ISCED 5-6	76.5	79.0		80.0	80.6
Denmark					
ISCED 0-2	62.6	<sup>1</sup>	64.0	52.7	54.0
ISCED 3-4	71.7	68.2		60.6	71.6
ISCED 5-6	54.0	82.9		81.6	82.2
France					
ISCED 0-2	52.4	40.5	54.4	46.6	65.8
ISCED 3-4	62.9	53.7		62.6	77.0
ISCED 5-6	71.9	62.8		55.9	88.5
Germany					
ISCED 0-2	37.5	62.5 <sup>2</sup>	70.9	34.3 <sup>2</sup>	38.8
ISCED 3-4	44.7	73.2		49.2	60.1
ISCED 5-6	54.0	82.3		62.2	69.6
Greece					
ISCED 0-2	63.0	56.5	71.0	58.3	64.5
ISCED 3-4	74.4	67.9		90.0 <sup>2</sup>	79.7
ISCED 5-6	83.3	80.6		77.3 <sup>2</sup>	88.8
Italy					

ISCED 0-2	36.5	39.0	48.7	37.7	54.6
ISCED 3-4	50.7	53.9		58.3	64.1
ISCED 5-6	62.0	61.1		65.5 <sup>2</sup>	69.2
Netherlands					
ISCED 0-2	60.3	61.5	75.6	65.9	68.8
ISCED 3-4	67.4	71.1		75.0	76.3
ISCED 5-6	77.9	73.6		71.2	85.9
Spain					
ISCED 0-2	46.4	45.2	59.9	42.9	57.7
ISCED 3-4	58.3	63.7		<sup>1</sup>	75.9
ISCED 5-6	68.5	76.4		<sup>1</sup>	74.7
Sweden					
ISCED 0-2	65.3	52.8	64.9	59.7	56.7
ISCED 3-4	68.7	63.9		65.8	69.1
ISCED 5-6	77.5	73.6		65.5	78.9
Switzerland <sup>3</sup>					
ISCED 0-2	59.4	68.5 <sup>2</sup>	71.4	78.2	80.1
ISCED 3-4	73.7	82.8		84.0	82.2
ISCED 5-6	81.8	87.6		83.5	96.4 <sup>2</sup>

Table A2.4: Prevalence (%) of having a long-standing illness or health problem health by age groups

	EU-SILC 2005	HIS '97-'03	LFS 2002		SHARE '04/'05
			55-59 yrs	60-64 yrs	
Austria					
55-64 yrs	32.4	41.7	26.5	25.3	42.8
65-74 yrs	40.4	48.3			46.2
75-84 yrs	44.9	54.4			53.4
85+ yrs	54.1	55.3			47.5
Belgium					
55-64 yrs	33.0	32.3	32.1	32.1	43.6
65-74 yrs	38.1	37.7			46.2
75-84 yrs	51.7	46.8			57.7

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85+ yrs	51.0	65.7			57.3
Denmark					
55-64 yrs	31.1	48.4	31.0	34.8	56.3
65-74 yrs	36.0	56.8			60.4
75-84 yrs	38.9	63.1			67.0
85+ yrs	<sup>1</sup>	61.5			65.6
France					
55-64 yrs	44.9		41.1	42.3	44.7
65-74 yrs	59.4				58.7
75-84 yrs	66.9				71.1
85+ yrs	74.5				68.8
Germany					
55-64 yrs	50.3		22.9	24.3	54.4
65-74 yrs	61.1				64.8
75-84 yrs	67.3				78.3
85+ yrs	70.5				81.0
Greece					
55-64 yrs	28.0	26.3	21.2	30.1	29.5
65-74 yrs	42.7	40.7			46.4
75-84 yrs	57.4	51.4			58.3
85+ yrs	65.7	62.2			59.3
Italy					
55-64 yrs	28.3		13.2	16.5	43.3
65-74 yrs	40.1				52.6
75-84 yrs	52.3				62.1
85+ yrs	63.9				59.2
Netherlands					
55-64 yrs	39.3	44.4	41.6	42.6	41.3
65-74 yrs	45.1	51.7			45.6
75-84 yrs	54.9	57.2			53.3
85+ yrs	61.7	55.9			49.2
Spain					
55-64 yrs	33.9	71.5	18.8	24.9	54.6
65-74 yrs	46.4	84.3			66.7

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75-84 yrs	55.3	89.0			74.0
85+ yrs	53.1	92.2			71.7
Sweden					
55-64 yrs	52.3	61.8	29.9	29.8	51.9
65-74 yrs	61.0	73.2			57.3
75-84 yrs	78.7	85.4			62.5
85+ yrs	84.2	90.9			71.0
Switzerland <sup>3</sup>					
55-64 yrs	42.9	22.4			36.5
65-74 yrs	47.5	23.5			38.7
75-84 yrs	48.4	30.4			48.7
85+ yrs	49.8	34.4			56.6

Table A2.5: Prevalence (%) of having a long-standing illness or health problem health by gender in respondents aged 55-64 years<sup>5</sup>

	EU-SILC 2005	HIS '97-'03	LFS		SHARE '04/'05
			55-59 yrs	60-64 yrs	
Austria					
Men	33.5	41.2	28.4	26.5	45.3
Women	31.3	42.2	24.7	24.1	40.6
Belgium					
Men	32.0	34.7	32.7	34.1	43.4
Women	33.9	29.8	31.6	30.2	43.9
Denmark					
Men	28.2	48.5	30.2	33.2	53.5
Women	34.2	48.2	31.7	36.6	58.7
France					
Men	45.6		42.3	40.7	44.0
Women	44.2		40.0	43.8	45.2
Germany					
Men	50.5		24.8	27.7	54.0
Women	50.1		20.9	21.0	54.8

Greece					
Men	27.1	24.0	20.3	29.0	25.4
Women	28.8	28.5	22.1	31.2	33.6
Italy					
Men	28.0		13.7	17.0	38.5
Women	28.6		12.8	16.1	47.9
Netherlands					
Men	38.8	42.7	40.7	45.1	39.1
Women	39.6	46.1	42.5	40.3	43.5
Spain					
Men	31.5	65.9	20.4	27.1	50.6
Women	36.3	76.9	17.2	22.9	58.2
Sweden					
Men	49.3	56.8	28.6	29.1	49.2
Women	55.4	67.0	31.2	30.6	54.7
Switzerland <sup>3</sup>					
Men	39.0	21.9			34.6
Women	46.9	22.9			38.4

Table A2.6: Prevalence (%) of having a long-standing illness or health problem health by educational level in respondents aged 55-64 years<sup>5</sup>

	EU-SILC 2005	HIS '97-'03	LFS		SHARE '04/'05	
			2002			
			55-59 yrs	60-64 yrs		
Austria						
ISCED 0-2	38.3	43.2	<sup>1</sup>	28.3	26.1	51.4
ISCED 3-4	32.5	41.4		26.8	25.1	41.3
ISCED 5-6	22.4	38.7		21.9	23.6	36.8
Belgium						
ISCED 0-2	38.5	28.9	34.7	37.1	36.7	48.2
ISCED 3-4	31.0	32.2		27.7	28.0	42.9
ISCED 5-6	26.8	32.9		24.4	19.0	37.4
Denmark						



ISCED 0-2	31.3	<sup>1</sup>	52.7	39.5	47.2	62.8
ISCED 3-4	30.2	51.5		30.2	28.6	60.3
ISCED 5-6	32.7	41.7		25.8	29.0	46.8
France						
ISCED 0-2	47.9			45.9	46.9	52.4
ISCED 3-4	44.3			40.3	39.1	42.6
ISCED 5-6	36.6			27.8	28.8	31.5
Germany						
ISCED 0-2	52.9			26.0	25.6	69.7
ISCED 3-4	50.9			24.4	25.8	53.4
ISCED 5-6	45.8			19.4	23.4	50.6
Greece						
ISCED 0-2	31.8	29.7	17.4	24.3	32.3	31.7
ISCED 3-4	23.2	18.9		15.0	26.2	27.8
ISCED 5-6	16.0	15.7		13.5	19.5	24.1
Italy						
ISCED 0-2	30.0			15.2	17.9	44.9
ISCED 3-4	24.4			8.9	12.4	38.0
ISCED 5-6	25.3			6.2	6.8	44.9
Netherlands						
ISCED 0-2	42.3	47.8	41.4	49.6	50.0	46.3
ISCED 3-4	41.0	41.7		37.6	40.6	35.5
ISCED 5-6	31.9	40.8		29.7	28.7	34.5
Spain						
ISCED 0-2	36.8	76.7	65.4	21.0	26.7	56.5
ISCED 3-4	31.2	58.9		12.5	16.8	54.3
ISCED 5-6	22.4	56.4		8.1	12.7	38.7
Sweden						
ISCED 0-2	54.0	69.1	54.8	32.7	30.8	56.1
ISCED 3-4	55.1	62.5		32.5	31.0	52.3
ISCED 5-6	45.6	58.8		22.0	25.3	43.2
Switzerland <sup>3</sup>						
ISCED 0-2	47.4	24.9 <sup>2</sup>	28.2			41.8
ISCED 3-4	42.3	21.6				33.6

ISCED 5-6	40.4	18.3		23.42
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Table A2.7: Prevalence (%) of experiencing global activity limitations by age groups

	EU-SILC 2005	HIS '97-'03	ESS '04/'05	SHARE '04/'05
<b>Austria</b>				
55-64 yrs	39.4		27.2	41.4
65-74 yrs	52.9		42.0	52.0
75-84 yrs	70.2		62.3	65.9
85+ yrs	80.7		<sup>1</sup>	70.5
<b>Belgium</b>				
55-64 yrs	30.3	25.7	25.8	34.4
65-74 yrs	35.7	36.3	38.1	38.1
75-84 yrs	53.7	52.5	39.6	57.4
85+ yrs	68.2	72.9	<sup>1</sup>	65.3
<b>Denmark<sup>4</sup></b>				
55-64 yrs	18.0		27.5	41.7
65-74 yrs	20.2		29.5	46.7
75-84 yrs	24.3		31.0	63.0
85+ yrs	<sup>1</sup>		<sup>1</sup>	80.0
<b>France</b>				
55-64 yrs	27.0		28.2	26.7
65-74 yrs	40.3		36.6	44.7
75-84 yrs	60.7		51.7	57.9
85+ yrs	79.7		<sup>1</sup>	74.8
<b>Germany</b>				
55-64 yrs	49.8		35.4	45.1
65-74 yrs	59.0		67.5	58.6
75-84 yrs	71.5		68.2	78.9
85+ yrs	83.2		84.0 <sup>2</sup>	76.0
<b>Greece</b>				
55-64 yrs	23.7		21.6	19.8
65-74 yrs	36.3		33.8	37.7

75-84 yrs	51.2		55.5	59.5
85+ yrs	64.1		66.7 <sup>2</sup>	70.3
Italy				
55-64 yrs	22.3	7.8	14.9	30.7
65-74 yrs	35.4	13.8	24.7	47.9
75-84 yrs	53.8	28.1	41.8	61.7
85+ yrs	72.2	50.6	<sup>1</sup>	72.2
Netherlands				
55-64 yrs	28.2		31.5	43.5
65-74 yrs	32.2		34.3	46.0
75-84 yrs	48.3		51.7	57.3
85+ yrs	55.5		56.5 <sup>2</sup>	57.1
Spain				
55-64 yrs	29.9	7.8	19.3	34.0
65-74 yrs	40.4	16.1	34.7	44.0
75-84 yrs	54.9	31.3	39.0	62.9
85+ yrs	66.3	67.6	65.2 <sup>2</sup>	72.6
Sweden				
55-64 yrs	30.4	34.2	38.1	43.0
65-74 yrs	32.9	39.6	37.8	43.0
75-84 yrs	52.8	52.6	43.1	58.1
85+ yrs	63.4	68.0	57.1 <sup>2</sup>	79.1
Switzerland <sup>3</sup>				
55-64 yrs	29.4		22.9	30.7
65-74 yrs	35.3		24.7	34.7
75-84 yrs	40.0		46.3	45.9
85+ yrs	49.3		60.9 <sup>2</sup>	59.9

Table A2.8: Prevalence (%) of experiencing global activity limitations by gender in respondents aged 55-64 years<sup>5</sup>

	EU-SILC	HIS	ESS	SHARE
	2005	'97-'03	'04/'05	'04/'05
Austria				

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Men	42.2		27.2	42.2
Women	36.7		28.1	40.8
Belgium				
Men	28.1	26.4	26.1	33.8
Women	32.4	25.0	25.4	35.0
Denmark <sup>4</sup>				
Men	15.0		27.3	35.8
Women	21.1		27.6	47.0
France				
Men	26.3		28.8	24.4
Women	27.6		37.9	28.7
Germany				
Men	49.7		33.6	41.9
Women	49.8		37.7	48.2
Greece				
Men	22.9		17.1	16.4
Women	24.5		25.6	23.1
Italy				
Men	19.8	7.1	12.4	26.9
Women	24.6	8.5	17.8	34.3
Netherlands				
Men	26.7		23.5	37.6
Women	29.6		37.2	49.3
Spain				
Men	25.5	6.8	13.7	33.4
Women	34.2	8.7	25.6	34.6
Sweden				
Men	28.8	29.7	34.4	39.3
Women	32.0	38.9	41.4	46.8
Switzerland <sup>3</sup>				
Men	24.2		22.2	25.7
Women	34.4		23.0	35.4

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Table A2.9: Prevalence (%) of experiencing global activity limitations by educational level in respondents aged 55-64 years<sup>5</sup>

	EU-SILC	HIS		ESS	SHARE
	2005	'97-'03		'04/'05	'04/'05
Austria					
ISCED 0-2	52.9			25.4	54.5
ISCED 3-4	37.4			28.7	39.7
ISCED 5-6	24.4			<sup>1</sup>	31.4
Belgium					
ISCED 0-2	35.5	26.2	27.2	27.2	39.1
ISCED 3-4	30.4	24.5		31.4	32.7
ISCED 5-6	22.3	23.4		16.7	28.2
Denmark <sup>4</sup>					
ISCED 0-2	18.7			35.2	52.9
ISCED 3-4	18.0			31.9	43.0
ISCED 5-6	16.5			20.8	33.6
France					
ISCED 0-2	30.8			34.2	34.8
ISCED 3-4	25.8			21.7	21.5
ISCED 5-6	17.2			28.8	18.3
Germany					
ISCED 0-2	56.9			51.4 <sup>2</sup>	64.1
ISCED 3-4	49.4			38.4	45.9
ISCED 5-6	43.2			25.5	36.1
Greece					
ISCED 0-2	27.0			25.4	25.5
ISCED 3-4	19.9			9.8 <sup>2</sup>	12.9
ISCED 5-6	12.6			11.6 <sup>2</sup>	11.8
Italy					
ISCED 0-2	25.7	8.9	6.8	18.8	33.0
ISCED 3-4	15.2	6.7		8.2	25.1
ISCED 5-6	13.1	6.2		10.3 <sup>2</sup>	24.5
Netherlands					
ISCED 0-2	31.1			34.1	47.4

ISCED 3-4	30.3			31.6	37.0
ISCED 5-6	21.0			24.3	39.4
Spain					
ISCED 0-2	33.2	9.0	7.0	21.6	36.6
ISCED 3-4	24.7	6.1		<sup>1</sup>	27.9
ISCED 5-6	18.3	2.8		<sup>1</sup>	19.9
Sweden					
ISCED 0-2	36.7	45.6	34.7	40.3	48.2
ISCED 3-4	31.4	34.9		34.2	41.3
ISCED 5-6	22.6	26.6		37.9	35.0
Switzerland <sup>3</sup>					
ISCED 0-2	38.2			26.9	40.4
ISCED 3-4	28.5			17.1	24.4
ISCED 5-6	22.9			31.3	15.4 <sup>2</sup>

Table A2.10: Prevalence (%) of diabetes by age groups

	EHIS	SHARE
	'06-'09	'04/'05
Austria		
55-64 yrs	9.1	7.5
65-74 yrs	13.8	10.2
75-84 yrs	21.7	8.2
85+ yrs	18.1	8.7
Belgium		
55-64 yrs	7.2	7.5
65-74 yrs	9.5	9.5
75-84 yrs	11.6	10.8
85+ yrs	11.8	17.2
France		
55-64 yrs	9.6	10.0
65-74 yrs	13.1	10.8
75-84 yrs	13.8	11.6
85+ yrs	10.8	2.0

Germany		
55-64 yrs	11.6	9.9
65-74 yrs	16.3	15.0
75-84 yrs	20.0	20.2
85+ yrs	<sup>1</sup>	14.8
Greece		
55-64 yrs	11.2	7.2
65-74 yrs	20.0	10.6
75-84 yrs	21.6	13.3
85+ yrs	17.5	12.4
Spain		
55-64 yrs	10.7	12.0
65-74 yrs	16.3	17.0
75-84 yrs	19.9	23.1
85+ yrs	16.4	12.6

Table A2.11: Prevalence (%) of diabetes by gender in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
Men	10.6	9.4
Women	7.7	5.8
Belgium		
Men	7.6	8.0
Women	6.9	7.0
France		
Men	11.0	14.0
Women	8.3	6.4
Germany		
Men	13.0	10.6
Women	10.3	9.1
Greece		
Men	10.3	8.7

Women	11.9	5.7
Spain		
Men	12.3	11.4
Women	9.1	12.6

Table A2.12: Prevalence of (%) diabetes by educational level in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
ISCED 0-2	11.3	8.8
ISCED 3-4	9.0	7.2
ISCED 5-6	7.0	6.6
Belgium		
ISCED 0-2	8.8	10.3
ISCED 3-4	7.3	5.0
ISCED 5-6	5.2	6.2
France		
ISCED 0-2	12.2	12.8
ISCED 3-4	7.9	9.3
ISCED 5-6	6.8	5.3
Germany		
ISCED 0-2	<sup>1</sup>	15.9
ISCED 3-4	12.1	8.7
ISCED 5-6	7.9	9.6
Greece		
ISCED 0-2	14.7	9.5
ISCED 3-4	10.0	3.8
ISCED 5-6	2.1	5.4
Spain		
ISCED 0-2	12.4	11.5
ISCED 3-4	9.9	18.4
ISCED 5-6	4.8	8.6



Table A2.13: Prevalence (%) of hypertensive diseases by age groups

	EHIS '06-'09	SHARE '04/'05
Austria		
55-64 yrs	35.1	30.0
65-74 yrs	42.9	38.3
75-84 yrs	48.8	38.2
85+ yrs	47.7	26.3
Belgium		
55-64 yrs	25.1	31.0
65-74 yrs	37.5	34.4
75-84 yrs	34.4	39.6
85+ yrs	32.5	35.3
France		
55-64 yrs	22.2	25.4
65-74 yrs	31.5	35.1
75-84 yrs	32.3	41.7
85+ yrs	28.1	41.7
Germany		
55-64 yrs	39.3	38.8
65-74 yrs	50.0	47.5
75-84 yrs	52.2	52.5
85+ yrs	54.9	57.6
Greece		
55-64 yrs	30.8	31.8
65-74 yrs	46.0	49.9
75-84 yrs	55.5	52.1
85+ yrs	64.4	42.9
Spain		
55-64 yrs	31.1	25.0
65-74 yrs	43.8	41.1
75-84 yrs	51.9	44.6
85+ yrs	49.3	36.6

Table A2.14: Prevalence (%) of hypertensive diseases by gender in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
Men	34.9	27.6
Women	35.3	32.2
Belgium		
Men	21.9	30.4
Women	28.2	31.6
France		
Men	21.3	23.3
Women	23.2	27.3
Germany		
Men	40.4	33.1
Women	38.1	37.4
Greece		
Men	26.8	28.6
Women	34.6	35.0
Spain		
Men	31.9	22.5
Women	30.4	27.3

Table A2.15: Prevalence (%) of hypertensive diseases by educational level in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
ISCED 0-2	39.0	34.8
ISCED 3-4	34.6	28.7
ISCED 5-6	32.0	28.3
Belgium		
ISCED 0-2	27.8	34.2
ISCED 3-4	24.6	29.0

ISCED 5-6	22.2	27.8
France		
ISCED 0-2	23.4	29.5
ISCED 3-4	23.9	22.0
ISCED 5-6	16.2	22.5
Germany		
ISCED 0-2	44.3	44.7
ISCED 3-4	40.2	35.4
ISCED 5-6	33.8	31.2
Greece		
ISCED 0-2	36.3	32.8
ISCED 3-4	24.7	29.6
ISCED 5-6	22.4	31.9
Spain		
ISCED 0-2	33.8	27.1
ISCED 3-4	26.2	19.5
ISCED 5-6	26.1	14.7

Table A2.16: Prevalence (%) of asthma by age groups

	EHIS '06-'09	SHARE '04/'05
Austria		
55-64 yrs	6.0	4.0
65-74 yrs	6.9	5.7
75-84 yrs	8.1	7.1
85+ yrs	7.8	2.0
Belgium		
55-64 yrs	3.9	3.3
65-74 yrs	5.6	3.4
75-84 yrs	6.1	3.5
85+ yrs	3.8	3.8
France		
55-64 yrs	4.9	4.6

65-74 yrs	5.6	3.9
75-84 yrs	6.2	6.9
85+ yrs	5.3	2.0
Germany		
55-64 yrs	6.2	3.9
65-74 yrs	6.3	3.7
75-84 yrs	6.4	3.1
85+ yrs	<sup>1</sup>	6.3
Greece		
55-64 yrs	3.2	2.3
65-74 yrs	5.3	3.8
75-84 yrs	7.2	6.3
85+ yrs	9.9	6.4
Spain		
55-64 yrs	3.6	2.6
65-74 yrs	5.6	3.5
75-84 yrs	6.6	6.1
85+ yrs	7.2	6.6

Table A2.17: Prevalence (%) of asthma by gender in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
Men	5.6	5.1
Women	6.4	3.2
Belgium		
Men	2.9	2.4
Women	4.9	4.3
France		
Men	4.0	4.8
Women	5.8	4.3
Germany		
Men	3.3	2.2

Women	8.9	5.6
Greece		
Men	2.4	1.3
Women	3.9	3.2
Spain		
Men	2.2	2.0
Women	4.8	3.2

Table A2.18: Prevalence (%) of asthma by educational level in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
ISCED 0-2	8.5	4.3
ISCED 3-4	5.2	4.5
ISCED 5-6	5.0	2.5
Belgium		
ISCED 0-2	5.8	3.8
ISCED 3-4	3.0	3.4
ISCED 5-6	2.3	2.7
France		
ISCED 0-2	6.6	6.2
ISCED 3-4	3.7	3.8
ISCED 5-6	3.4	2.6
Germany		
ISCED 0-2	<sup>1</sup>	10.2
ISCED 3-4	5.9	2.2
ISCED 5-6	4.2	3.9
Greece		
ISCED 0-2	4.1	1.4
ISCED 3-4	2.1	3.9
ISCED 5-6	2.1	2.7
Spain		
ISCED 0-2	3.8	2.4

ISCED 3-4	3.2	3.2
ISCED 5-6	3.0	3.7

Table A2.19: Prevalence (%) of COPD by age groups

	EHIS '06-'09	SHARE '04/'05
Austria		
55-64 yrs	5.6	2.3
65-74 yrs	6.1	3.4
75-84 yrs	8.9	5.6
85+ yrs	11.3	<sup>1</sup>
Belgium		
55-64 yrs	4.9	4.6
65-74 yrs	8.0	6.4
75-84 yrs	9.5	7.3
85+ yrs	8.4	7.2
France		
55-64 yrs	4.6	4.4
65-74 yrs	7.7	6.7
75-84 yrs	10.9	8.2
85+ yrs	14.1	8.4
Greece		
55-64 yrs	3.6	2.8
65-74 yrs	5.8	4.5
75-84 yrs	8.5	6.5
85+ yrs	10.2	6.1

Table A2.20: Prevalence (%) of COPD by gender in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
Men	5.5	3.3

Women	5.6	1.4
France		
Men	5.3	5.6
Women	4.0	3.3
Greece		
Men	3.2	2.0
Women	3.9	3.5
Spain		
Men	4.8	6.4
Women	4.3	2.4

Table A2.21: Prevalence (%) of COPD by educational level in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
ISCED 0-2	6.5	6.0
ISCED 3-4	5.8	1.1
ISCED 5-6	4.2	1.2
Belgium		
ISCED 0-2	9.5	5.9
ISCED 3-4	1.9	3.8
ISCED 5-6	1.3	3.4
France		
ISCED 0-2	5.3	5.0
ISCED 3-4	4.6	4.8
ISCED 5-6	3.0	2.6
Greece		
ISCED 0-2	4.4	3.2
ISCED 3-4	3.6	3.5
ISCED 5-6	1.0	0.6
Spain		
ISCED 0-2	5.3	4.2
ISCED 3-4	3.8	6.9

ISCED 5-6	2.4	1.7
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Table A2.22: Prevalence (%) of depressive disorders by age groups

	EHIS '06-'09	SHARE '04/'05
Austria		
55-64 yrs	<sup>1</sup>	18.7
65-74 yrs	<sup>1</sup>	16.8
75-84 yrs	<sup>1</sup>	16.3
85+ yrs	<sup>1</sup>	12.6
Belgium		
55-64 yrs	6.8	36.8
65-74 yrs	6.0	29.7
75-84 yrs	6.8	28.3
85+ yrs	6.5	24.6
France		
55-64 yrs	5.8	38.2
65-74 yrs	4.4	33.0
75-84 yrs	5.1	25.6
85+ yrs	3.8	18.1
Germany		
55-64 yrs	<sup>1</sup>	26.3
65-74 yrs	<sup>1</sup>	23.0
75-84 yrs	<sup>1</sup>	21.6
85+ yrs	<sup>1</sup>	26.2
Greece		
55-64 yrs	3.6	16.0
65-74 yrs	3.7	16.0
75-84 yrs	6.4	15.5
85+ yrs	3.9	23.2
Spain		
55-64 yrs	8.7	32.5
65-74 yrs	9.9	35.1



75-84 yrs	10.8	29.4
85+ yrs	11.6	19.6

Table A2.23: Prevalence (%) of depressive disorders by gender in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
Men	<sup>1</sup>	13.9
Women	<sup>1</sup>	22.8
Belgium		
Men	4.2	27.6
Women	9.5	45.7
France		
Men	3.8	27.3
Women	7.8	47.5
Germany		
Men	<sup>1</sup>	18.7
Women	<sup>1</sup>	33.6
Greece		
Men	1.2	7.2
Women	5.8	24.8
Spain		
Men	5.3	16.7
Women	11.8	46.9

Table A2.24: Prevalence (%) of depressive disorders by educational level in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	SHARE '04/'05
Austria		
ISCED 0-2	<sup>1</sup>	25.6
ISCED 3-4	<sup>1</sup>	17.8

ISCED 5-6	<sup>1</sup>	13.5
Belgium		
ISCED 0-2	8.9	37.9
ISCED 3-4	6.0	39.6
ISCED 5-6	4.4	31.7
France		
ISCED 0-2	6.2	36.5
ISCED 3-4	5.3	38.5
ISCED 5-6	6.1	41.9
Germany		
ISCED 0-2	<sup>1</sup>	33.0
ISCED 3-4	<sup>1</sup>	26.9
ISCED 5-6	<sup>1</sup>	22.5
Greece		
ISCED 0-2	4.5	18.0
ISCED 3-4	3.1	16.5
ISCED 5-6	1.4	7.9
Spain		
ISCED 0-2	10.6	32.3
ISCED 3-4	4.7	28.5
ISCED 5-6	5.7	38.0

Table A2.25: Prevalence (%) of overweight by age groups

	EHIS '06-'09	HIS '97-'03	SHARE '04/'05
Austria			
55-64 yrs	65.8	59.0	66.7
65-74 yrs	68.0	57.8	60.4
75-84 yrs	61.2	47.5	55.0
85+ yrs	41.5	31.4	44.7
Belgium			
55-64 yrs	62.3	57.6	57.8
65-74 yrs	60.3	61.9	64.0

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75-84 yrs	56.7	52.2	57.7
85+ yrs	40.4	27.1	45.4
Denmark			
55-64 yrs		54.4	55.9
65-74 yrs		53.0	51.8
75-84 yrs		46.6	48.0
85+ yrs		32.8	26.9
France			
55-64 yrs	57.0	55.0	54.0
65-74 yrs	57.8	58.1	55.9
75-84 yrs	54.1	48.8	47.5
85+ yrs	38.5	29.7	48.5
Germany			
55-64 yrs	64.5	76.8	63.2
65-74 yrs	65.1	78.2	65.1
75-84 yrs	63.3	74.2	57.4
85+ yrs	<sup>1</sup>	<sup>1</sup>	32.0
Greece			
55-64 yrs	74.8	69.9	70.9
65-74 yrs	77.4	72.4	66.9
75-84 yrs	65.8	61.8	67.6
85+ yrs	59.0	43.7	52.6
Italy			
55-64 yrs		57.6	64.1
65-74 yrs		58.2	61.7
75-84 yrs		51.0	56.5
85+ yrs		38.3	28.0
Netherlands			
55-64 yrs		56.7	59.2
65-74 yrs		57.3	59.1
75-84 yrs		52.4	51.7
85+ yrs		37.8	46.3
Spain			
55-64 yrs	67.6	67.9	71.7

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65-74 yrs	72.5	71.2	72.2
75-84 yrs	68.2	64.2	65.7
85+ yrs	56.2 <sup>2</sup>	59.3	57.3
Sweden			
55-64 yrs		57.7	57.3
65-74 yrs		57.8	57.6
75-84 yrs		46.0	49.3
85+ yrs		35.2	37.5
Switzerland			
55-64 yrs		49.2	49.7
65-74 yrs		52.7	52.5
75-84 yrs		47.3	57.9
85+ yrs		28.9	41.0

Table A2.26: Prevalence (%) of overweight by gender in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	HIS '97-'03	SHARE '04/'05
Austria			
Men	70.1	74.3	73.2
Women	61.7	44.6	61.1
Belgium			
Men	70.0	64.1	65.2
Women	54.4	51.0	50.6
Denmark			
Men		65.0	64.5
Women		43.2	48.2
France			
Men	64.3	64.5	61.9
Women	49.8	46.2	46.9
Germany			
Men	73.2	82.1	67.4
Women	55.7	71.7	59.2
Greece			

Men	80.0	71.0	72.1
Women	70.0	68.9	69.7
Italy			
Men		66.4	72.6
Women		49.1	56.2
Netherlands			
Men		62.3	64.0
Women		51.0	54.4
Spain			
Men	75.9	71.0	77.1
Women	59.3	65.0	66.6
Sweden			
Men		64.9	63.1
Women		50.4	51.2
Switzerland			
Men		58.0	63.4
Women		40.7	36.1

Table A2.27: Prevalence (%) of overweight by educational level in respondents aged 55-64 years<sup>5</sup>

	EHIS '06-'09	HIS '97-'03		SHARE '04/'05
Austria				
ISCED 0-2	71.5	59.3	<sup>1</sup>	66.9
ISCED 3-4	64.6	58.1		64.8
ISCED 5-6	61.9	61.1		71.2
Belgium				
ISCED 0-2	67.5	61.0	63.0	64.2
ISCED 3-4	59.9	52.4		56.3
ISCED 5-6	56.8	52.3		50.3
Denmark				
ISCED 0-2		<sup>1</sup>	59.5	60.9
ISCED 3-4		57.5		59.7
ISCED 5-6		47.9		47.9

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France				
ISCED 0-2	60.9	63.9	52.2	61.4
ISCED 3-4	60.1	51.3		53.4
ISCED 5-6	41.6	48.3		39.5
Germany				
ISCED 0-2	67.3	67.1 <sup>2</sup>	79.5	71.2
ISCED 3-4	65.6	65.5		65.3
ISCED 5-6	60.0	62.1		56.0
Greece				
ISCED 0-2	75.6	71.8	69.5	75.2
ISCED 3-4	77.7	66.1		66.7
ISCED 5-6	68.5	60.2		63.7
Italy				
ISCED 0-2		60.7	58.3	66.2
ISCED 3-4		52.3		59.6
ISCED 5-6		46.3		55.6
Netherlands				
ISCED 0-2		60.6	54.5	62.8
ISCED 3-4		56.8		62.5
ISCED 5-6		49.8		50.4
Spain				
ISCED 0-2	72.3	73.7	61.5	75.2
ISCED 3-4	58.9	59.7		72.9
ISCED 5-6	59.6	47.1		42.7
Sweden				
ISCED 0-2		65.9	53.5	64.3
ISCED 3-4		60.4		55.8
ISCED 5-6		50.8		46.7
Switzerland				
ISCED 0-2		69.5 <sup>2</sup>	59.8	53.1
ISCED 3-4		46.7		48.2
ISCED 5-6		44.5		39.9 <sup>2</sup>

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