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12 Financial and subjective well-being of older Europeans

- Among individuals 50+, poverty is highest in Eastern Europe and Greece, Spain and Portugal
- In these countries, subjective well-being among 50+ also tends to be lower
- Retiring has no effect on financial well-being and a mild, positive effect on subjective well-being

12.1 Cross-country variations in well-being

Economic indicators, such as income and poverty rates, suggest significant cross-country variations in the financial well-being of Europeans, and such variations are more pronounced among older adults. Cross-country variations in subjective well-being also exist, and a country's rank in subjective well-being may not match with its rank in financial well-being, even though financial well-being is an important determinant of the former.

In this chapter, we examine cross-country differences in financial and subjective well-being and the role of retirement in explaining the variations we observe. We investigate financial and subjective well-being, using multiple measures – including relative and perceived poverty, depressive symptoms, quality of life, and life satisfaction. By using a diverse set of indicators, we develop a fuller understanding of the various dimensions of well-being. We then examine the effects of retirement on financial and subjective well-being.

12.2 Poverty, a measure of financial well-being

Both absolute and relative poverty measures are widely used, but in the European context, a relative poverty line is most common (OECD 2008). A widely accepted approach has been to use 60 per cent of the national median equivalised disposable income as the definition of a national poverty line (Zaidi 2010).

To identify individuals at risk of poverty, we aggregated all household members' income after tax and then divided the total net household income

by the number of household members converted into equivalised adults, following the Eurostat's equivalence scale. Household heads get a weight equal to one; other household members over 14 get a weight equal to 0.5 and household members under 14 get a weight equal to 0.3. We then identified those at risk by comparing equivalised income with country-and-year-specific poverty thresholds. We report the income of countries in nominal Euros of 2010, after adjusting for purchasing power parity.

We also made use of a subjective poverty measure where available. Subjective poverty measures are based on surveys in which individuals are asked about basic needs or minimum income levels (see Kapteyn et al. 1988; Pradhan & Ravallion 2000). Adena and Myck (chapter 6) note earlier in this volume that subjective poverty correlates more strongly with health and well-being than traditional income-based approaches. The SHARE respondents were asked: "Thinking of your household's total monthly income, would you say that your household is able to make ends meet?". Response options are: with great difficulty, with some difficulty, fairly easily, or easily. We classify an individual as being subjectively poor if the respondent answers the household has great difficulty in making ends meet.

Figure 12.1 shows the population-level relative poverty rates in 2010 taken from Eurostat together with our estimate of the relative poverty rates and subjective poverty rates for individuals 50 years and older from the SHARE Wave 4 data. All descriptive results from the SHARE data are weighted. Reflecting different standards of living, significant cross-country variations exist in poverty thresholds, ranging from € 3,595 in Hungary to € 20,950 in Switzerland. Cross-country variations also exist in relative poverty rates for the population, ranging from nine per cent in the Czech Republic to almost 21 per cent in Spain. We found even greater cross-country variations in relative poverty rates for individuals 50 years and older, ranging from 17 per cent in Estonia to 34 per cent in Portugal. Particularly, relative poverty rates among older adults are twice higher than those among the population in Czech Republic, Portugal, and Slovenia.

Subjective poverty rates and threshold are presented in Figure 12.2, showing a strong negative correlation between poverty thresholds and subjective poverty rates (the correlation is −0.8). In other words, in countries with high relative poverty lines (that is with high median incomes) subjective poverty rates are lower. For example, over 30 per cent of 50+ individuals in Hungary reported being in poverty, while only two per cent of individuals at the same age in Switzerland and Denmark reported to feel poor. We do note, however, a modest positive correlation between the percentage in relative poverty and in subjective poverty across countries for individuals 50 or older (the correlation is 0.18).

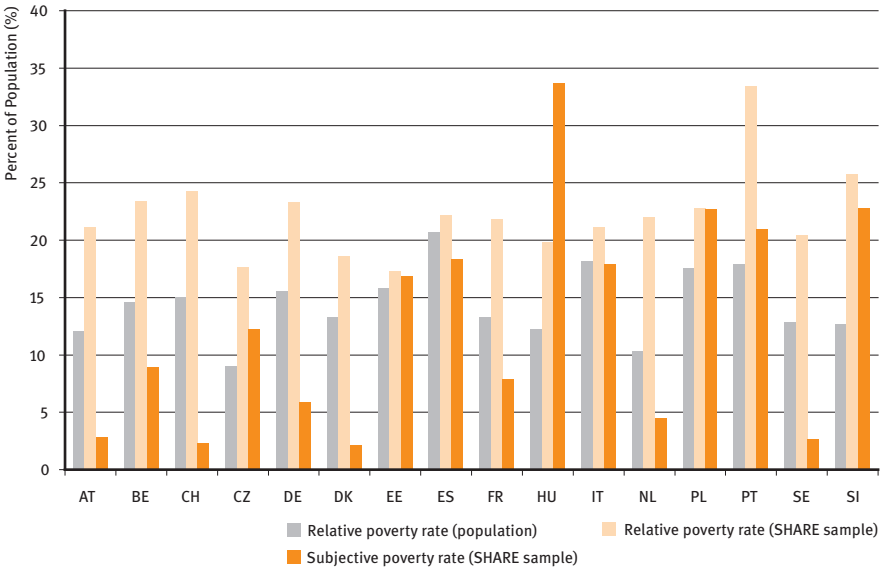

Figure 12.1: Relative and subjective poverty rates in SHARE countries
Notes: Thresholds reflect 60 per cent of the median income in the 50+ population in 2010 Euros. N=55,447 for SHARE sample subjective poverty and N=54,712 for SHARE sample relative poverty.
Source: Relative poverty rate for population is drawn from Eurostat data (online data code: ilc_peps01, ilc_li01 and ilc_li02). Relative poverty rate for age 50+ and subjective poverty rate in SHARE sample is from SHARE Wave 4 release 1.

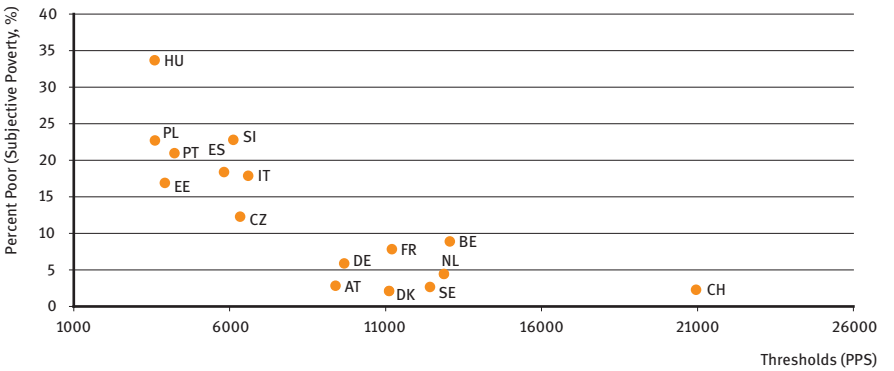

Figure 12.2: Subjective poverty and poverty thresholds
Notes: Thresholds reflect 60 per cent of the median income in the 50+ population in 2010 Euros. N=55,447 for SHARE sample subjective poverty.
Source: SHARE Wave 4 release 1

12.3 Subjective well-being

SHARE includes three measures of subjective-well-being: the EURO-D depression measure, a single item life satisfaction measure, and the CASP-12 scale of quality of life for middle and older ages. The EURO-D (Prince et al. 1999) includes twelve "yes-or-no" questions about depression, pessimism, suicidality, guilt, sleep, interest, irritability, appetite, fatigue, concentration, enjoyment, and tearfulness during the last month to capture emotional health and well-being. The EURO-D is scored by summing individual items. Total scores range from 0 to 12 with a higher score indicating more depressive symptoms.

For life satisfaction, a single item question was asked at the core interview. The question asks: "On a scale from 0 to 10 where 0 means completely dissatisfied and 10 means completely satisfied, how satisfied are you with your life?".

To measure quality of life, SHARE included an abridged version (twelve items) of the CASP-19 (Control, Autonomy, Self-realisation, Pleasure) (Hyde et al. 2003). Respondents were asked how often they experience certain feelings and situations on a 4-point scale, ranging from 'never' to 'often.' The twelve items first ask if (1) age, (2) family responsibilities, or (3) shortage of money prevent the respondent from doing things s/he enjoys; if s/he feels (4) what happens to him or her is out of his or her control; (5) s/he feels left out of things, (6) that s/he can do things that s/he wants to do, (7) s/he feels life has meaning, (8) happy, (9) full of energy, (10) that life is full of opportunities, (11) that the future looks good for them; and (12) that s/he looks forward to each day. The total score of CASP-12 ranges from 12 to 48, with higher scores indicating a better quality of life.

Figure 12.3 shows a consistent pattern across the three measures. For example, older adults in Denmark have the lowest depressive symptom scores and the highest life satisfaction and quality of life scores. In contrast, older adults in Hungary and Estonia report the highest mean depressive symptom scores and the lowest level of life satisfaction, and their quality of life score is also at the bottom. In general, older adults in Eastern European countries report lower levels of subjective well-being than older adults in Western and Scandinavian countries. Older adults in Southern European countries are in the middle of the spectrum, except that older adults in Portugal report the lowest level of quality of life. To further illustrate the consistency in reports, we note that the correlation in mean scores of Euro-D and life satisfaction across countries equals −0.44; similarly the correlation between Euro-D and CASP-12 equals −0.53 and the correlation between CASP-12 and life satisfaction equals 0.59.

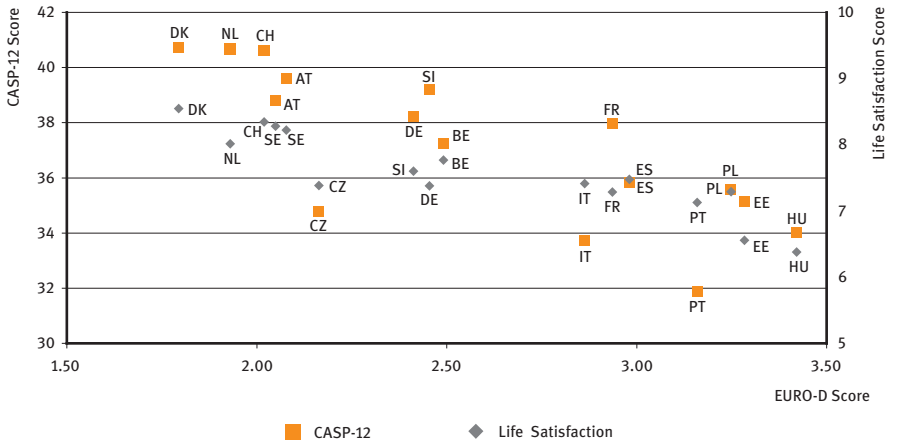

Figure 12.3: Subjective well-being by country
Notes: N=54,903 for EURO-D; N=55,209 for life satisfaction; N=53,269 for CASP-12
Source: SHARE Wave 4 release 1

As one would expect, life satisfaction and subjective poverty rates are negatively related as shown in Figure 12.4. The correlation is –0.85.

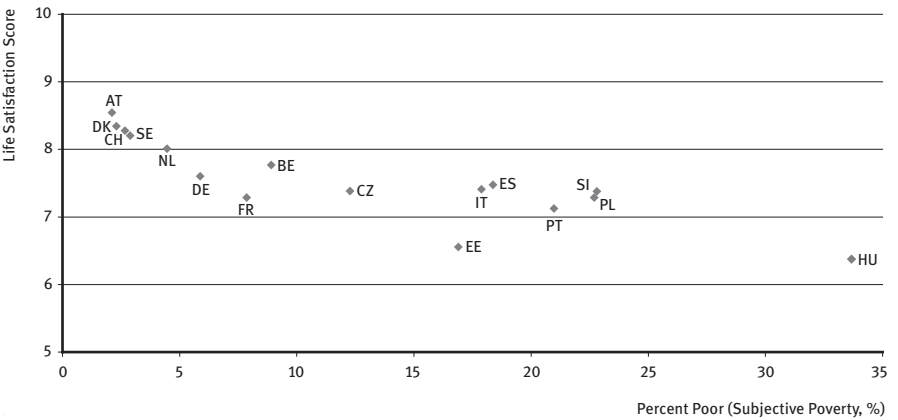

Figure 12.4: Life satisfaction and per cent poor in the SHARE sample
Notes: N=55,447 for SHARE sample subjective poverty and N = 55,209 for life satisfaction
Source: SHARE Wave 4 release 1

12.4 Retirement effects on financial and subjective well-being

Most developed countries devote a substantial portion of their resources to the protection of well-being after retirement by providing old-age pensions, but policy variations exist, including differences in official retirement ages, generosity of pension benefits, and other retirement incentives (OECD 2011). Full pension eligibility ages are typically 65 among our analysis countries, but exceptions include age 60 in Austria (women only) and France. Austria, Germany, and Italy are also phasing in increases in their retirement ages. By comparing countries with different pension entitlement ages as well as exploiting within-country variation in pension eligibility, we will evaluate the retirement effects on well-being, using all available waves of SHARE.

First, we investigate the effects of retirement on financial well-being. Our dependent variables include relative poverty and subjective poverty, and we fit unweighted random effects models, controlling for country, year, and cohort effects. In estimating the effects of retirement, we separate out unemployment, while the reference category is "currently working". To address endogeneity of retirement, we instrument with two dummy variables indicating whether the respondent is eligible for full or early retirement public pensions using country and gender specific pension-eligibility ages. In this, we follow a similar strategy as Rohwedder and Willis (2010), Angelini et al. (2009), and Coe and Zamarro (2011). It is important to keep in mind the interpretation of the instrumental variables procedure. The procedure compares the wellbeing of individuals before they are eligible for retirement pensions and after they are eligible for each country, after controlling for continuous age, birth cohort, and country effects. That is we are estimating the dis-continuous jump in wellbeing when individuals become eligible for retirement pensions for each country and then aggregate that effect.

The explanatory variables included in estimation are: age, age squared, marital status (a dummy variable, indicating married or living with a partner), gender, interaction of gender and marital status, education (a set of dummy variables with less than high school as a reference category), health (having at least one difficulty with activities of daily living, and a binary indicator for having any of the following major chronic diseases: cancer, stroke, heart diseases, or lung disease).

Table 12.1 presents both random effects (RE) estimates and RE estimates with retirement instrumented by pension eligibility. The first two models examine relative poverty. In the RE specification of the first model, we find that retirement is positively associated with relative poverty, while controlling for other covariates. In the instrumental variables specification, we find however that retirement

has no effect on relative poverty, while unemployment, disability, and education have significant effects.

The models for subjective poverty yield similar findings. Retirement is positively associated with one's subjective assessment of poor economic standing, but once we instrument retirement with pension eligibility ages, we find that retirement is not significantly associated with subjective poverty. Health problems such as disability and major disease continue to be associated with subjective poverty, although the models here do not attempt to identify the direction of that relationship. Women are more likely to be poor and higher educational attainment protects against subjective poverty in later life.

Table 12.1: Effects of retirement on financial well-being

	Relative Poverty	Relative Poverty (IV)	Subjective Poverty	Subjective Poverty (IV)
Age	−0.018***	−0.006	−0.001	0.001
	(0.003)	(0.005)	(0.002)	(0.003)
age sq ($x10^{-2}$)	0.012***	0.005	−0.001	−0.002
	(0.002)	(0.003)	(0.002)	(0.002)
Female	0.073***	0.075***	0.029***	0.030***
	(0.007)	(0.006)	(0.005)	(0.005)
Married	−0.036***	−0.038***	−0.032***	−0.033***
	(0.006)	(0.006)	(0.005)	(0.005)
married x female	−0.091***	−0.086***	−0.042***	−0.041***
	(0.007)	(0.008)	(0.006)	(0.006)
College	−0.187***	−0.195***	−0.096***	−0.097***
	(0.005)	(0.006)	(0.004)	(0.004)
high school	−0.112***	−0.113***	−0.070***	−0.070***
	(0.004)	(0.004)	(0.003)	(0.003)
Retired	0.076***	0.002	0.033***	0.021
	(0.005)	(0.022)	(0.003)	(0.016)
Unemployed	0.191***	0.160***	0.173***	0.171***
	(0.009)	(0.013)	(0.007)	(0.010)
Disability	0.014**	0.018***	0.043***	0.044***
	(0.006)	(0.006)	(0.005)	(0.005)
Disease	0.002	0.006	0.028***	0.029***
	(0.004)	(0.004)	(0.003)	(0.003)
N	72,018	72,018	72,887	72,887

Significance: * p<0.10, ** p<0.05, *** p<0.01

Notes: Models control for country, wave, and birth cohort effects. Standard errors in parentheses.

Source: SHARE Wave 1 release 2.5.0, Wave 2 release 2.5.0, Wave 4 release 1

We next investigate the effects of retirement on subjective well-being, while controlling various covariates, such as health and demographics. Our dependent variables include: Euro-D, life satisfaction, and CASP-12, and we fit unweighted random effect models, controlling for country, year, and cohort effects. By taking an instrumental variable approach, we avoid potential reverse causation of poor subjective well-being leading to retirement.

Table 12.2 presents a random effects model together with an instrumental variables model for all three subjective well-being measures. Under the RE model, retirement is found to be negatively associated with subjective well-being. The instrumental variables specification shows that retirement does not have adverse effects on subjective well-being: for the EURO-D and CASP measures, retirement increases quality of life and decreases depressive symptoms, whereas there is no significant change in life satisfaction with retirement.

Table 12.2: Effect of retirement on subjective well-being

	EUROD	EUROD (IV)	CASP12	CASP12 (IV)	Satis-faction	Satis-faction (IV)
Age	−0.200***	−0.125***	0.518***	0.155**	−0.001	−0.039
	(0.016)	(0.024)	(0.046)	(0.068)	(0.017)	(0.024)
Age sq (x10^{-2})	0.143***	0.097***	−0.404***	−0.183***	0.007	0.030*
	(0.012)	(0.016)	(0.033)	(0.045)	(0.012)	(0.016)
Female	0.677***	0.693***	−0.541***	−0.622***	−0.037	−0.047
	(0.037)	(0.037)	(0.105)	(0.107)	(0.033)	(0.033)
Married	−0.394***	−0.402***	0.745***	0.786***	0.534***	0.537***
	(0.033)	(0.033)	(0.096)	(0.097)	(0.031)	(0.031)
married x female	0.081*	0.114***	0.206*	0.041	−0.019	−0.034
	(0.042)	(0.043)	(0.121)	(0.124)	(0.038)	(0.039)
College	−0.408***	−0.460***	2.055***	2.309***	0.373***	0.397***
	(0.030)	(0.032)	(0.085)	(0.092)	(0.027)	(0.029)
high school	−0.317***	−0.327***	1.282***	1.328***	0.255***	0.259***
	(0.023)	(0.023)	(0.067)	(0.068)	(0.021)	(0.021)
Retired	0.258***	−0.212*	−0.590***	1.744***	−0.206***	0.035
	(0.024)	(0.117)	(0.068)	(0.328)	(0.024)	(0.108)
Unemployed	0.582***	0.370***	−2.232***	−1.163***	−0.766***	−0.661***
	(0.046)	(0.070)	(0.132)	(0.199)	(0.048)	(0.067)
Disability	1.366***	1.389***	−3.720***	−3.840***	−0.730***	−0.740***
	(0.033)	(0.034)	(0.098)	(0.100)	(0.031)	(0.031)
Health condition	0.737***	0.762***	−1.754***	−1.863***	−0.428***	−0.441***
	(0.021)	(0.022)	(0.061)	(0.063)	(0.020)	(0.021)
N	73,367	73,367	61,760	61,760	48,375	48,375

Significance: * p<0.10, ** p<0.05, *** p<0.01

Notes: Models control for country, wave, and birth cohort effects. Standard errors in parentheses.

Source: SHARE Wave 1 release 2.5.0, Wave 2 release 2.5.0, Wave 4 release 1

12.5 Conclusions

The previous sections described the cross country differences in measures of financial and subjective well-being. Eastern and Central-Eastern European countries and Mediterranean countries like Greece, Spain, and Portugal tend to have high incidence of poverty and lower subjective well-being. On the other hand, Scandinavian countries tend to have higher subjective well-being and lower levels of poverty (both subjective and relative).

We then examined the effect of retirement on both financial and subjective well-being, using an instrumental variable approach. Once we accounted for potential endogeneity of retirement, using full and early pension eligibility ages as instruments, we found that retirement does not lead to increases in either relative or subjective poverty. We also found that retirement does not have adverse effects on subjective well-being. Instead, it has a positive effect on depression symptomology and quality of life and no effect on life satisfaction. These results carry particular weight as populations across Europe continue to age.

Although we formulate conclusions in terms of the effect of retirement on financial and subjective well-being, the important policy question is the effect of later retirement ages on well-being. Our results suggest that under the current institutional arrangements in the SHARE countries, the effects on financial well-being will be minimal. This depends crucially how policies inducing longer working lives are structured. Regarding subjective well-being measures (including depression measures), the analysis suggests that potentially longer working lives may reduce well-being and increase the prevalence of depressive symptoms. It would seem therefore that policies that induce longer work lives need to be accompanied by forms of work place accommodation that minimise the potential adverse effects on subjective well-being.

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