# Old Age Deprivation and Social Exclusion in Europe: New Evidence on an Old Issue

# George Papadoudis Theodore Papadogonas George Sfakianakis

Central Greece University of Applied Sciences Psachna, Evia, Greece

# Abstract

Population ageing is one of the most pressing issues in the 21st century for Europe. Its role is already dominant posing serious fiscal questions to all member states. Pension and health care reforms seems to be in constant adjustments attempting to cope with a reality so much different than the past. In this context, the old age population is treated as a single manageable group of people threatened by while threatening every budget limit available. In this paper, we argue that the older individuals are characterized by multiple differences and inequalities. First among them is their socioeconomic status which appears to be far from homogeneous. The outcomes of the analysis reveal that not all individuals age following the same pattern. They do have common needs to cover but their coverage is not so common. The initial findings provide a comparative analysis for 14 European countries plus Israel during 2013. The empirical evidence is able to provide alternative interpretations to the ageing crisis trying to fill important information gaps relevant to social policy across Europe.

Keywords: Old age population, welfare state policy, social exclusion, material deprivation, SHARE data

# 1. Introduction

Population ageing is one of the most pressing social and economic challenges of the 21<sup>st</sup> century in Europe. Individual and societal ageing are strongly influenced by multiple and interconnected pension, health care and labour market reforms across the old continent. The emerging demographic mix challenge already many aspects of the current economic and social policy in every country. Security and insecurity in old age are often points of departures in politics but also very specific realities for so many Europeans. Persistent financial constraints are having serious impact on their lives. Reforms prior or after their implementation are in continuing debate no matter the background, the scope or the design. The results are also debatable more often than not and this may further the discussion but not much more than that. Meanwhile the lives of older people appear to be in a precarious state. The aged population seems to suffer the most when rates look at inequality and social exclusion issues. Pensioners by their own rights or not, managing assets or not, with a full employment life history or not, having a property or not the picture is framed and stable. This paper argues about this picture. Argue that the common trend maybe is not so common after all. The material deprivation is perhaps not a universal characteristic in old age, and surely not a unifying one.

Ageing progressively has become a buzzword in the popular and political discussion. Biological ageing as a continuing extension of life, especially when it is accompanied by a good health status is undeniably an advantage as concerns the future of human race. The discussion on ageing however in the social sciences is something different. Specifically when it comes to the economic science it is related closely with an indication of a threat. Thus the economics of ageing in particular have been gradually delimited upon the budgetary threat the ageing of population represents. Especially in Europe economic inequalities and social exclusion in the form of deprivation represent one of the most dreaded threats in later life of older people. This paper attempts to contribute new empirical evidence in that direction calling for more fact-based investigation and more efficient policy intervention. Our analyses are based on inequality & welfare state theory as well as on new, reliable, and comparable data provided by the Survey of Health, Ageing and Retirement in Europe. SHARE is a multidisciplinary, longitudinal, and cross-national study focused on health, socioeconomic status and social networks of individuals aged 50 plus.<sup>1</sup>

# 2. Sample Description

The SHARE questionnaire is designed by researchers for researchers and includes more than 1.000 items addressed to longitudinal and baseline respondents all over Europe since 2004. As of May 2016 (release 5.00) the wave 5 sample (2013) contribute to the SHARE database completed interviews collected by 66.246 individuals aged 50 or older in 45.243 households in 14 European countries plus Israel. The multidisciplinary and crossnational panel database of micro data on health, socioeconomic status and social networks cover in detail key areas of all respondent's life as they age.

<sup>&</sup>lt;sup>1</sup>This paper uses data from SHARE Wave 5 (DOI: 10.6103/SHARE.w5.500), see Börsch-Supan (2016) for methodological details. The SHARE data collection has been primarily funded by the European Commission through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812) and FP7 (SHARE-PREP: N°211909, SHARE-LEAP: N°227822, SHARE M4: N°261982). Additional funding from the German Ministry of Education and Research, the U.S. National Institute on Aging (U01\_AG09740-13S2, P01\_AG005842, P01\_AG08291, P30\_AG12815, R21\_AG025169, Y1-AG-4553-01, IAG\_BSR06-11, OGHA\_04-064) and from various national funding sources is gratefully acknowledged (see www.share-project.org).

The countries which have participated in the survey constitute a balanced representation of the geographical regions in Europe as well as the prominent typology of welfare states throughout Europe: ranging from the North & Scandinavia (Denmark and Sweden) to the South & Mediterranean (Spain, Italy and Israel) and from Eastern Europe (Czech Republic, Slovenia and Estonia) to the West and Continental Europe (Austria, France, Germany, Switzerland, Belgium, Luxembourg, and the Netherlands). Fact is that the ageing population has much in common as well as many differences. It is not homogenous to begin with and it's not takes a lot in terms of analysis to understand that similarities are not the rule here.

In our 50 plus sample the average age of the female respondents is 66 while the male respondent's age is 67 years old; the oldest old part of the sample (80 plus) is 13%. Almost 70% of them are married and living with spouse while 4% never married and 9% are divorced. Only 10% have no child while 60% have 2 or 3 children and 68% have also grandchildren. About 17% of the respondents have completed just the primary education and 5% never went to school but the mean value of the years spent in education is 11. The majority of the sample is pensioners while a third is active (employed & unemployed) in the labor market. Outside of it there are 8% homemakers and 4% permanently sick. Again the majority of the respondents live in a property as owners while 17% live as tenants and 5% as rent free. More than 25% of them perceive their health as very good or excellent and 11% as poor; 15% had hospital stays during the previous year. As for politics, 38% chose neither left nor right with just 10% at the extremes. Of course the sample varies heavily across country at most topics covered by the interviews. Table 1 present basic descriptive statistics by country and provide also the total observations (individuals & households) by country.

# 3. Data Definitions & Initial Findings

Important information gaps with respect to successful and active ageing or contrariwise still exists. The scientific knowledge in developed countries is accumulated for decades around the interactions between individual background on the one hand and the socio-economic policy environment on the other hand. The study of individual and population ageing in Europe has been focused during the years of the ongoing economic crisis on the broad research and political area of inequalities trying for better understanding and more effectiveness (Börsch-Supan, Kneip, Litwin, Myck, & Weber, 2015). The availability of new data harmonized across Europe supports this attempt allowing a closer investigation of the different socioeconomic statuses of older people. One of the major innovations of the SHARE study is the introduction of a new series of social exclusion items in the research. Our research interest is mostly framed by these variables which cover certain aspects of affordability of specific expenses.

The variables that we primarily took under account for our analyses derive from six modules of this particular questionnaire (demographics, employment & pensions, consumption, health care, mental health, activities) together with generated variables and imputations produced for the SHARE wave 5 dataset. Apart from variables useful for initial measurements as demographics (age – as of 2013 & gender – male or female), current job situation (retired, employed or self-employed, unemployed, permanently sick or disabled, homemaker, other), education attainment (by International Standard Classification of Education or ISCED levels: pre-primary education or none to second stage of tertiary education), and weights (probability & frequency weights) this exercise is centred around two major themes:

(a) A set of variables able to construct specific deprivation indices,

- Afford to regularly buy necessary groceries yes, no
- Afford to go on holiday at least once a year (a week long) yes, no
- Afford to pay an unexpected expense without borrowing money yes, no
- To help keeping living costs down: continue wearing clothing that was worn out yes, no
- To help keeping living costs down: continued wearing shoes that were worn out yes, no
- To help keeping living costs down: put up with feeling cold yes, no
- To help keeping living costs down: postponed visits to the dentist yes, no
- Need to see a doctor but could not because of cost yes, no
- Is household able to make ends meet easily, fairly easily, with some or great difficulty
- (b) a set of variables able to reproduce significant between group comparisons,
- Financial stress: how often do you think that shortage of money stops you from doing the things you want to do often, sometimes, rarely or **never**
- Depression scale: mental health index which accumulates 16 relevant incidences **not depressed** to very depressed
- Life satisfaction: on a scale from 0 to 10 where 0 means completely dissatisfied and 10 means completely **satisfied**
- Life happiness: how often, look back on life with a sense of happiness often, sometimes, rarely, never.

The items of the social exclusion module are able to extend the informational dynamic for the research community in the area of material deprivation in 14 European countries plus Israel.<sup>2</sup> The consequences of the current economic crisis on the various forms of the European welfare state as well as on the well-being of the population near or above the retirement age have been substantial in many occasions and thus the need for more and better data (Börsch-Supan & Malter, 2015). This exercise provides informative measures allowing for comparisons between countries and distinctive groups where necessary.

 $<sup>^2</sup>$  In our material deprivation and inequality analysis we didn't include three more items used in the social exclusion module which concern meat & fruits or vegetables consumption, and the necessary but not replaced eyeglasses because of dissimilarities of the sample at which these questions addressed to.

SHARE contains 26 items directly linked with various aspects of material (11 questions) and social (15 questions) deprivation (Myck, Oczkowska & Duda, 2015). In our analysis about material deprivation we utilize 8 of them plus 1 more not included in the respective dataset (see Figure 1).

#### Figure 1: SHARE map - Household able to make ends meet with difficulty

The selected items have been transformed to categorical variables where 1 represents a negative outcome while 0 represents a positive outcome; in this way the incidence of material deprivation may be noted clearly as long it is there and not lie hidden by a logical missing value. Indirect linkages can also be found across the questionnaire and we utilize 4 of them in our analysis concerning inequality outcomes. Table 2 presents significant mean values covering 8 aspects of affordability by country. For example, in 2013 almost one third (0,316) of the population could not afford to go on holiday at least once a year at least for a week. This was heavily apparent in Estonia, Spain, Italy, and Slovenia. One forth (0,250) could not pay an unexpected expense without borrowing money and this was most evident again in the same countries as well as was most apparent there too the continuation of wearing clothing and shoes that was worn out in order to keep living costs down (0,226 & 0,171 accordingly). Putting up with cold to keep living costs down (0,128) was more apparent in Italy, France, and Slovenia. Not afford to regularly buy necessary groceries (0,088), postponed visits to the dentist (0,109), or not seeing a doctor when needed due to cost (0,052) have the less problematic degree in this line of investigation but they're still serious problems for the people facing them in everyday life.

At the same time, the respondents stated that their households were able to make ends meet with some or with great difficulty (as opposed to subjective easiness to make ends meet) by a degree of more than a third (0,358). Once again the aged population of the Southern and Eastern European countries of the sample face the bigger issues while the problem is less important in Northern countries as shown in Figure 1. This particular variable emphasizes the overall question of financial difficulties in the affordability of basic goods & services. It can also represent a subjective measurement of poverty especially when the household make ends meet with great difficulty (Fonseca, Kapteyn, Lee, Zamarro, & Feeney, 2013). In many cases it would be an adequate proxy for serious economic problems faced by households and individual members of the household.<sup>3</sup> Thus it's utilization as a part of a composite index may affect directly the magnitude of the index.

#### 4. Method & Empirical Evidence

This paper's applied methodology draws by the differential ageing model which challenge the actual limits of homogeneity concerning the older population. In this context it is argued that multiple factors influence the life of the elderly simultaneously. For instance, the successful or unsuccessful accumulation over the life-course makes the path to economic security in old age more or less clear (Meyer, 2005, Walker, 2005). Similarly, we may project that inequality among future generations of elderly people will be greater than today cause of the divisions that have grown in the labor market since the last decades will carry forward into the retirement years (Myles, 1997). The differential ageing model supports that all individuals do not age following the same pattern. Mainly they age unequally because they accumulate unequally during the life-course (Walker, 2009). The extent of this paper lies in presenting key outcomes of this process. To cope with the particular challenges it is important to improve the ongoing scientific understanding and research more directly the multiple connections between certain socioeconomic factors that determine the quality of life of the ageing population. Hopefully, demography is not destiny (Altman & Shactman, 2002). The use of alarmist language that advocates horizontal super-cuts in social spending as a policy doctrine to confront the threatening demographic crisis have already largely succeed to exclude real alternatives based on quite different effects for the society which propose certain institutional and fiscal innovations (Blackburn, 2006, Jackson, 1998, Nyce & Schieber, 2005). On the other hand, the oversimplistic points of view are already being confronted by more complex contemporary realities such as the financial crisis all over Europe. Our quantitative approach is based on inequality measurement. The analysis is focused on material deprivation as a form of social exclusion. In particular we present empirical evidence on cross-country and country-group differences derived by measurements and estimations of specific deprivation indices and odds ratios. The current exercise lies heavily on inequality theorizing and measurement of quality of life in old age.

For this investigation we attempt to construct and analyze a unique but comparable deprivation index and then examine its application in other areas of research interest. Apart from the value added in the analysis by the initial findings above, these 9 variables help to compose a more complex measure for the estimation of the social exclusion based on material deprivation. This kind of exercise may take the simplest form of an accumulation scale similar to a scoring mechanism. In fact this scale can be generated by summing-up dummy variables divided by the number of their non-missing observations. Each of these items measures absolute deprivation every time no matter the significance of the effect by applying a universal criterion for each country. As a next step forward we apply specific weights correcting the simplistic properties of an index which accumulates facts of different attributes. It has to be noted that there is a variety of this kind of weighting available, both internal as external to the survey dataset and that the end product of this procedure is the rebasing results in all observations lying within the range of 0 (no deprivation) and 1 (full deprivation) (Bertoni, Cavapozzi, Celidoni & Trevisan, 2015, Lyberaki, Tinios & Georgiadis, 2011). The weights we make use of attribute relativity to the composition by enabling the observed frequency as a matter of magnitude. Our deprivation index in this respect takes the form of the sum of independent variables taken into account multiplied by their frequencies divided by the sum of each variable which has not a missing value (Lyberaki, Tinios & Papadoudis, 2005).

 $<sup>^3</sup>$  Most of the items in the social exclusion module were addressed to one respondent responsible for the finances of the household and so her answers cover too all other household members.

In this experiment we use internal weighting (variable frequencies with no missing values) to construct the main index while we use probability weights for further estimations. The resulting index, as a continual variable from zero to one, serves as a comparable across country measurement of deprivation in the household & individual sample (i.e. same score for each household member according to financial respondent of the household). After this step by step note on the applied technique above, the composite material deprivation index is a compilation of the 9 variables and returns the results below. Figure 2 represents three alternative deprivation indices for every SHARE country: (1) the material deprivation index (11 items) SHARE wave 5 (i.e. the full social exclusion module), (2) the deprivation index of this exercise composed by 8 items out of 11 available, and (3) the previous deprivation index enhanced by the inclusion of the about the ability of a household to make ends meet difficulty or not (9 items).<sup>4</sup>

All three deprivation indices present the same picture but with different measurement degrees and also similar to alternative measurements with different weighting procedures (Papadogonas, Papadoudis, & Sfakianakis, 2015). The deprivation is estimated at lower degrees in the case of the predetermined 11 social exclusion items (0,146). When we remove three components from the composition (see above for details) the index acquire higher values in all countries and in total (0,204). The index acquires even higher values when we add the item about the household's difficulty to make ends meet (0,248). Not quite surprisingly, Estonia (0,489) & Slovenia (0,406) stands at one extreme and Denmark (0,097), Sweden (0,106), & Switzerland (0,106) at the other.

The next step in this exercise is to estimate quintiles for the 9-items index and further the analysis in the direction of inequalities between the 1<sup>st</sup> (less deprived) and the 5<sup>th</sup> (most deprived) group of individuals in each country. The theme for this analysis is centered on four single items of subjective well-being. This way we may proceed with the estimation technique of odds ratio when dealing with categorical data; in this case two pairs of them for each variable under examination (Hao & Naiman, 2010). Every single odds ratio is based on the comparison of the relative frequency of a single event between two groups which means that the rest of the distribution is not taken into account anymore. The aim is to examine whether or not the probability of 0 or 1 (negative versus positive outcome) is the same in two distinct groups (1<sup>st</sup> & 5<sup>th</sup> quintiles with less or more deprivation) when being compared. For the estimations in table 3 we use logistic regressions with probability weights reporting odds ratios. As we can see the probability is always in favor of the less deprived group in every country. The lower the value of odds ration the greater the degree of inequality. It's absent would mean odds ratio of 1 but these kind of values are apparently absent too. The probabilities to never have financial stress are dramatically against the most deprived group. The same stands also for the issue of life satisfaction and in more moderate estimations the case is just the same about the zero depression scale and often felt life happiness.

In Figure 3 the geographical representation of the European sample examined in this paper into four different country groups may be seen as one more point of departure which concerns the contemporary typology of the European welfare state: Mediterranean, Continental, Eastern, and Scandinavian. South, Central, East, and North compose comparable entities through four sets of odds ratio (same as in table 3) and one set of deprivation index (same as in figure 2).<sup>5</sup> The results below allow for further examination of this typology in the inequality framework. The deprivation index takes its higher values in the South Europe (0,368) while the lowest are observed in the North (0,102). The financial stress as the observed distance between the less & most deprived quintiles is more important problem in the South, East, and Central Europe as compared to the North Europe. In the case of life satisfaction the bottom-top quintile odds ratio signifies a more serious problem in Central Europe as compared to the rest of the continent. The estimation about the absence of depression reveals almost similar in direction and size odds ratios. The comparisons about life happiness present higher odds ratios in the North & East and lower values in the Central & South; the latter means more inequality than the former. The crude welfare-state typology for Europe seems to reproduce itself through this analysis calling for more close investigation as concerns the role of state policy in real life circumstances. Even if we set apart any other reason for measuring deprivation and social exclusion while staying alert for intervention, the fact remains that inequality may over time increase a society's tolerance for inequality; if inequality matters the possibility that it can worsen matters too (United Nations, 2001).

# 5. Concluding Remarks

In this paper we examined specific aspects of inequalities among the older people in Europe, between country and wherever necessary within country. The analyses focused solely on outcomes without inquiring the level of preexisting inequality. This perhaps is the most important shortcoming of this exercise on the one hand but on the other hand it is still arguable that differences and inequalities occurring during the ageing period are strongly influenced by a series of previous integrations of individuals in certain groups with different characteristics.

Richer or poorer, with or without property, at the core or the periphery of the labor market are just a few of the pathways to a better or worse old age. The extent by which ageing inequalities are directly rooted in previous lifestages will be a very important topic to further the scientific discussion on this matter. Accepting ageing as a process without inequalities may distort the present and future reality of the elderly. Economic and social policies which do not take into account income or wealth inequalities in old age and of course the roots of low socioeconomic status cannot be expected to confront effectively the problem. Perhaps that unfortunate reality will have significant consequences for the future of the welfare state but also for the future of the older people. Inequality still matters especially for a European public policy which asks for societal consensus.

<sup>&</sup>lt;sup>4</sup> All mean value estimations of the 3 indices are significant at 1% and weighted by probability weights. The 1<sup>st</sup> index use hedonic weights in its composition while the  $2^{nd} \& 3^{rd}$  use frequency weights.

<sup>&</sup>lt;sup>5</sup> For this exercise we compose four country groups as follows: South Europe (Spain, Italy, and Israel), Central Europe (Austria, France, Germany, Switzerland, Belgium, Luxembourg, and the Netherlands), East Europe (Czech Republic, Slovenia, and Estonia), and North Europe (Denmark and Sweden). All estimations are weighted by probability weights.

At this point we could summarize a few concluding remarks based on the evidence of our empirical research:

- The particular aspects of affordability presented a detailed frame of the unequal ageing by country. Almost one third of the total population could not afford to go on holiday at least once a year for at least a week. One forth could not pay an unexpected expense without borrowing money. One fifth continue wearing clothing and shoes that was worn out in order to keep living costs down. Putting up with cold to keep living costs down was a problem for more than one out of ten.
- The same was observed about the postponement of visits to the dentist. Not afford to regularly buy necessary groceries & not seeing a doctor when needed due to cost were the less as concerns the magnitude but they may signify very serious problems bordering to hunger and poor health. The households which were able to make ends meet with difficulty were more than a third of the population.
- No matter the alternative deprivation index the same picture emerges with different degrees of inequality. The North – South gradient in this case makes a turn from North to the East and then to South once again. Despite the technical differences and the alternate use of different social exclusion items every set of material deprivation analysis represents the same pattern.
- According to odds ratio analysis utilizing the bottom and top quintiles of the deprivation index the probabilities to never have financial stress are dramatically against the most deprived groups. The same results were observed also for the stated life satisfaction. Serious too but moderate in comparison inequalities revealed examining the depression cases of the population as well as the issue of life happiness. The distance between the less deprived and the more deprived appears to be quite defined and not just in terms of material well-being.

#### 6. References

- Altman, S. & Shactman D. (2002). Overview: Issues and Options for an Aging Population. In S. Altman, S. & D. Shactman, (Eds.), Policies for an ageing society (pp. 3-33). Maryland: The Johns Hopkins University Press
- Bertoni, M., Cavapozzi, D., Celidoni M. & Trevisan E. (2015). Assessing the material deprivation of older Europeans. In A. Börsch-Supan, et al (Eds.), ageing in Europe Supporting Policies for an Inclusive Society (pp. 1-22). Berlin: De Gruyter.
- Blackburn, R. (2006). Age Shock: How Finance Is Failing Us. New York: Verso, (Chapter 7).
- Börsch-Supan, A. (2016). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 5. Release version: 5.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w5.500
- Börsch-Supan, A., Kneip, T., Litwin, H., Myck, M. & Weber, G. (2015). SHARE: a European policy device for inclusive ageing societies. In A. Börsch-Supan, et al (Eds.), ageing in Europe Supporting Policies for an Inclusive Society (pp. 1-22). Berlin: De Gruyter.
- Börsch-Supan, A. & Malter, F. (2015). SHARE Wave 5: Balancing innovation and panel consistency. In: F. Malter, & A. Börsch-Supan (Eds.), SHARE Wave 5: Innovations & Methodology (pp. 8-14). Munich: Munich Center for the Economics of Aging (MEA).
- Fonseca, R. Kapteyn, A. Lee, J. Zamarro, G. & Feeney K. (2013). Financial and subjective well-being of older Europeans. In Börsch-Supan, et al (Eds.), Active ageing and solidarity between generations in Europe: First results from SHARE after the economic crisis (pp. 137-146), Berlin: De Gruyter.
- Hao, L. & Naiman, D. (2010). Assessing Inequality. California: Sage, (Chapter 4).
- Jackson, W. A. (1998). The Political Economy of Population Ageing, Cheltenham: Edward Elgar Publishing Limited, (Chapter 6).
- Lyberaki, A., Tinios, P. & Georgiadis, T. (2011). Explaining persistent poverty: Does the past play a role?. In A. Börsch-Supan et al. (Eds.), the Individual and the Welfare State: Life Histories in Europe (pp. 19-29), Heidelberg: Springer.
- Lyberaki, A., Tinios, P. & Papadoudis, G., (2005). Family cohesion and socioeconomic status: A preliminary investigation. In SHARE, ELSA, HRS User Conference. Lund, Sweden (pp. 1-16).
- Meyer, M. (2005). Decreasing Welfare, Increasing Old Age Inequality: Whose Responsibility Is It?. In R. Hudson (Ed.), The New Politics of Old Age Policy pp. 65-89). Maryland: The Johns Hopkins University Press
- Myck M., Oczkowska, M. & Duda, D. (2015). Innovations for better understanding deprivation and social exclusion. In: F. Malter, & A. Börsch-Supan (Eds.), SHARE Wave 5: Innovations & Methodology (pp. 29-36). Munich: Munich Center for the Economics of Aging (MEA).
- Myles, J. (1997). Neither Rights Nor Contracts: The New Means Testing in US Aging Policy. In R. Hudson (Ed.), The Future of Age-Based Public Policy (pp.46-55). Baltimore: The Johns Hopkins University Press
- Nyce, S. A. & Schieber, S. J. (2005). The Economic Implications of Aging Societies: The Costs of Living Happily Ever After. New York: Cambridge University Press, (Chapter 14).
- Papadogonas, T., Papadoudis, G. & Sfakianakis, G., (2015). Social exclusion among older people in Europe: a cross-country comparison. In Proceedings of the 9th International Conference of New Horizons in Industry, Business and Education. Skiathos, Greece (pp. 320-326). ISBN: 978-960-99889-9-5
- United Nations (2001). Human Development Report 2001. New York: Oxford University Press, (Chapter 1).
- Walker, A (2005). Quality of life in old age in Europe. In A. Walker (Ed.), Growing Older: Growing Older in Europe (pp. 1-29). London: Open University Press.
- Walker, A. (2009). Why is ageing so unequal?. In P. Cann, & M. Dean (Eds.), Unequal Ageing: The untold story of exclusion in old age (pp. 141-158). Bristol: The Policy Press.

	Descriptive statistics				Observations			
	Age (%) >=65	Gender (%) Female	Employment (%) Pensioner	Education (%) >=Tertiary	Ind.	%	Hhs.	%
Austria	48,2	54,1	59,6	25,7	4.385	6,6	3.040	6,7
Germany	49,1	53,5	49,1	28,2	5.758	8,7	3.835	8,5
Sweden	52,2	52,2	51,4	32,0	4.556	6,9	3.209	7,1
Netherlands	46,7	52,3	40,8	26,6	4.168	6,3	2.922	6,5
Spain	49,6	53,9	36,0	10,9	6.710	10,1	4.212	9,3
Italy	53,6	54,6	47,8	8,1	4.756	7,2	3.022	6,7
France	48,2	54,6	56,6	22,8	4.506	6,8	3.177	7,0
Denmark	48,9	52,4	48,2	41,5	4.146	6,3	2.837	6,3
Switzerland	48,5	53,0	43,6	17,1	3.051	4,6	2.149	4,8
Belgium	47,9	53,5	46,7	32,3	5.643	8,5	4.027	8,9
Israel	45,4	53,8	31,1	32,5	2.600	3,9	1.701	3,8
Czech R.	48,4	54,7	62,6	13,1	5.646	8,5	3.842	8,5
Luxembourg	43,8	52,2	43,9	18,7	1.610	2,4	1.214	2,7
Slovenia	44,8	54,1	61,3	18,3	2.958	4,5	2.172	4,8
Estonia	49,0	60,4	50,5	21,5	5.753	8,7	3.884	8,6
Total	49,6	53,9	48,4	20,7	66.246	100	45.243	100

 Table 1: SHARE wave 5 sample description

Note: Weighted descriptive statistics and unweighted observations

# Table 2: SHARE wave 5 social exclusion component – selected variables

	Not afford to go on holiday at least once a year	Not afford to pay un- expected expense without borrowed money	To help keeping living costs down continue wearing clothing that was worn out	To help keeping living costs down continue wearing shoes that were worn out	To help keeping living costs down put up with feeling cold	To help keeping living costs down postpone visits to the dentist	Not afford to regularly buy necessary groceries	Need to see a doctor but could not because of cost
Austria	0,192	0,169	0,119	0,093	0,055	0,040	0,046	0,017
Germany	0,233	0,236	0,188	0,136	0,106	0,062	0,067	0,048
Sweden	0,137	0,128	0,055	0,042	0,055	0,045	0,050	0,013
Netherlands	0,145	0,157	0,100	0,086	0,065	0,046	0,064	0,011
Spain	0,486	0,364	0,316	0,268	0,127	0,167	0,140	0,038
Italy	0,481	0,325	0,304	0,268	0,197	0,211	0,109	0,103
France	0,272	0,196	0,253	0,136	0,161	0,093	0,072	0,044
Denmark	0,113	0,151	0,046	0,032	0,032	0,041	0,037	0,005
Switzerland	0,129	0,154	0,103	0,068	0,048	0,033	0,065	0,014
Belgium	0,189	0,188	0,097	0,073	0,068	0,040	0,057	0,028
Israel	0,382	0,351	0,158	0,132	0,102	0,158	0,172	0,120
Czech R.	0,374	0,110	0,234	0,166	0,112	0,061	0,127	0,040
Luxembourg	0,128	0,158	0,135	0,099	0,056	0,043	0,063	0,035
Slovenia	0,424	0,445	0,378	0,347	0,149	0,050	0,147	0,013
Estonia	0,696	0,492	0,478	0,410	0,086	0,346	0,351	0,169
Total	0,316	0,250	0,226	0,171	0,128	0,109	0,088	0,052

Note: All probability weighted mean values are significant at 1% (\*\*\*)



Figure 1: SHARE map - Household able to make ends meet with difficulty



Figure 2: Deprivation indices by country

Table 3: Bottom-top quintile of deprivation index (9 items) by country odds ratios for possible positive
outcome (standard errors in brackets)

	Financial stress (never)	Life satisfaction (>7/10)	Depression scale (not depressed)	Life happiness (often)			
Austria	0,131 [0,0162]	0,286 [0,0272]	0,466 [0,0529]	0,322 [0,0306]			
Germany	0,135 [0,0167]	0,197 [0,0163]	0,440 [0,0522]	0,344 [0,0271]			
Sweden	0,197 [0,0237]	0,391 [0,0401]	0,373 [0,0472]	0,683 [0,0654]			
Netherlands	0,078 [0,0125]	0,302 [0,0549]	0,331 [0,0639]	0,373 [0,0637]			
Spain	0,103 [0,0420]	0,444 [0,0617]	0,471 [0,0849]	0,551 [0,0755]			
Italy	0,113 [0,0230]	0,397 [0,0380]	0,406 [0,0593]	0,421 [0,0414]			
France	0,121 [0,0213]	0,322 [0,0318]	0,415 [0,0633]	0,556 [0,0510]			
Denmark	0,205 [0,0223]	0,391 [0,0432]	0,422 [0,0480]	0,419 [0,0430]			
Switzerland	0,222 [0,0286]	0,294 [0,0353]	0,369 [0,0579]	0,495 [0,0552]			
Belgium	0,083 [0,0105]	0,292 [0,0273]	0,334 [0,0399]	0,466 [0,0422]			
Israel	0,220 [0,0794]	0,349 [0,0666]	0,569 [0,1329]	0,419 [0,0795]			
Czech R.	0,103 [0,0206]	0,450 [0,0761]	0,527 [0,0993]	0,646 [0,1121]			
Luxembourg	0,161 [0,0283]	0,357 [0,0514]	0,621 [0,1253]	0,540 [0,0768]			
Slovenia	0,152 [0,0348]	0,373 [0,0415]	0,371 [0,0666]	0,645 [0,0713]			
Estonia	0,027 [0,0119]	0,294 [0,0339]	0,485 [0,0759]	0,608 [0,0526]			
Total	0,135 [0,0086]	0,318 [0,0126]	0,432 [0,0246]	0,454 [0,0176]			

Note: All OR are significant at 1% (\*\*\*)



Figure 3: Bottom-top quintile of deprivation index by country group OR & DI by country group, all OR & DI are significant at 1% (\*\*\*)