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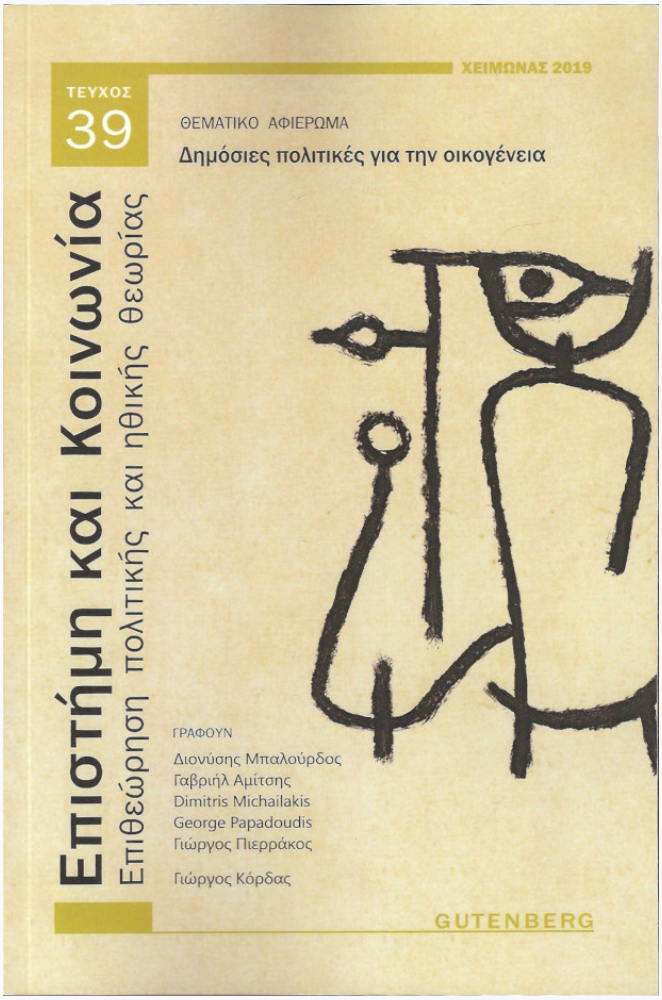

Ageing population in Europe: The individual, the family and the welfare state

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AGEING POPULATION IN EUROPE
THE INDIVIDUAL, THE FAMILY AND THE WELFARE STATE

Population ageing in Europe is undeniably a success story. At the same time the new demographic mix is already challenging the old social policy framework together with a series of underlying socioeconomic factors such as inequalities and stratifications. The welfare state across Europe struggles among the current and projected total cost of ageing and the current and projected needs of an emerging ageing population. Pension, health care and long-term care systems tend to treat the needs and abilities of the older individuals as if there is no variation among them. But all individuals do not age following the same pattern. Divergent pathways over the life course present different outcomes in later life. Without innovative and targeted policy-making for the near and distant future the ageing population is in danger to be trapped between ineffective social support and inadequate family support (if any).

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A long introduction

Population ageing is undeniably a success story. Despite being a buzzword for many problems the fact that people are living longer signifies in itself an enormous progress on global scale. Biological ageing as an unprecedented extension of life, especially when it is accompanied by a healthier life, is an unquestionable advantage regarding the future of humanity. However, the discussion on ageing as concerns the social sciences and politics is something different: the ageing population will be of course one of the dominant issues of the 21th century but more often than not in the aspect of a threat which challenges directly and indirectly various societal norms and institutional arrangements. The new demographic mix is already challenging the old social policy framework. At the same time a series of underlying socioeconomic factors such as inequalities, discriminations and stratifications keep pushing the traditional welfare state beyond its limits. The responses are currently delayed regarding the former and still a long time coming regarding the latter. Focusing on Europe the responses vary significantly as well as their results country by country. Despite the achievements of the European welfare state in general there are clear distinctions and differences in its effectiveness when cross country and within country examination comes forward.

Contemporary Europe is changing once again while the post war era seems a long past. The baby boomers have grandchildren called the generation X. The millenniums (the next in line age-cohort) is not even the most recent one. Birth rates are falling while longevity is rising. New challenges for the individual, the family and the state are expected to radically change the shape of the future in the old continent. The political agenda and the social policy in all Europe are being transformed under this new old-age reality. According to Eurostat's available data and its demographic projections there are very strong indicators about that fact. The European population (EU-28) is

projected to become older with the median age rising from 42.4 years in 2015 to 46.6 years in 2080. The share of the 65+ years old part of the total population in the EU-28 is also projected to increase from 19.2% (or 98 million persons) in 2016 to 29.1% (or 151 million persons) by 2080. During the same period, the oldest old (80+ years old) of the European population is projected to increase from 5.4% in 2016 to 12.7% by 2080 (Eurostat 2017). These projections indicate a radical change which is undergoing for quite some time. By the beginning of 21st century (2001) to 2016 the number of people aged 65 or older in the EU-28 rose by 26.6%, while at the same time the overall population of the EU-28 increased by just 4.5%. The old-age dependency ratio (people aged 65+ relative to people aged 15-64) was almost 25% in 2010 (and almost 30% in 2016) and it is projected to rise further and eventually reach 51.2% in 2070 (European Commission 2018a). This substantial increase (more than double) over just six decades is capable to drastically alter the European society and economy; whereas in 2010 there were four persons of working age (15-64) for every person aged 65+ in 2070 the ratio is expected to be less than 2 to 1. No matter the projection horizon the estimations are more than clear: the EU as a whole as well as every member state will face an unprecedented reality.

The picture above in its rate & ratio diversity feeds the political and scientific discussion at full blast. Together with another set of indicators centered this time around the projected cost of population ageing it builds a strong case about an ongoing and escalating crisis. Not surprisingly the public pension schemes as well as the health care and long-term care systems are the main focal points of this argument. In 2016 the EU-27 gross public pension expenditure was at 11.9% of their Gross Domestic Product. This average brings together very different situations on pension spending: while in Ireland the share of GDP was at 5.0% (the lower limit of the distribution), Greece (representing the upper limit) spent for public pensions 17.3% of GDP. After many substantial reforms undertaken in every mem-

ber state the level of expenditure is projected to rise (by 0.8%) until 2040 and then decline (by 1.3%) until the end of the most recent projection in 2070 (European Commission, 2018b). Taking under consideration that in 2016 the GDP of the European Union amounted to almost €15 trillion (at current prices) every single percentage point accounted for €150 billion. But the total cost of ageing is not just pensions. While it is the main component (almost half of it) the health care and the long-term care costs as well as other social age-related expenditures have to be taken into account. For the European Union the total cost of ageing was 25% of GDP in 2016 and is projected to rise by 2% to 4% until 2070 (European Commission, 2018b). Thus far, it is clear that the ageing-related costs in the EU now and more importantly in the near future represent a challenge for each member state.

It is well documented that the ageing population accumulates multiple pressures on public finances. Almost every European country has undertaken major reforms concerning public pension, health care, and long-term care systems during the last 3 decades. In the case of public pensions, the effort was/is concentrated on the aspect of the viability/sustainability and all available projections verify that after a time period of 2 to 3 decades the state expenditures will in fact decline. Nonetheless, the debate is still on: the financial or budgetary reforms may ease the pressure on current and future welfare state across Europe but what about the ongoing and expected pressures on aged individuals and their families? Their socioeconomic status, their health care needs, and their chances to receive long-term support (if necessary) do not appear secured or even reasonably fulfilled now or in the long run. Different welfare states under the umbrella of the non-unified model called European welfare state have different responses and priorities while facing the challenges posed by population ageing. The extent of the differences across country but also within country more often than not make the necessary adjustments on reforms' parameters almost unattainable. Retirement ages, periods of con-

tributions, and levels of benefits seem to move alongside the ageing population as a demography story. But this is not all. Addressing the needs and fulfilling the rights of today's and future old-age European population —regardless the exact age of any future working definition— remains at the core of the argument supported in this paper. This paper attempts to contribute some key findings in that direction calling for more thorough data-driven investigation and welfare state policy redesign. Welfare state(s) of course have to be sustainable but as long as this strive for viability goes together with an adequate support for the people – the principal reason designed for. The European welfare state continues to draw legitimacy from an unparallel success post-war herstory against inequalities, poverty, and discrimination. Its achievements on equal access, opportunities, rights to health care, work, education (to name a few) are based on active intervention (as opposed to an overall withdrawal). Unfortunately for now, the social ageing process appears to undermine this successful past. Unresolved problems and new threats are challenging this efficient construction. Letting up cannot be a legitimate response. Moving the burden of ageing to families and individuals is not just a transfer of responsibility but also a loss of accountability for the state(s). And without it the ageing crisis may be its final crisis.

Ageing population: the big and (not so) distant picture

As Table 1 shows, by 2016 EU-28 total expenditures on social protection reached almost 4 trillion Euro (slightly more than 28% of European Union's GDP). The two main funding components of social protection remain the social security contributions (55%) and the contributions by the general government through taxes (40%). During the last 9 years' available data, social spending at EU level increased by more than 500 billion Euro. The EU average on social protection expenditures in 2016

Table 1. *Total expenditures on social protection in EU-28, 2008-2016 (% of GDP & Euro at constant 2010 prices)*

	% GDP			Billion Euro			Euro per inhabitant
	2008	2016	Dif.	2008	2016	Dif.	2016
EU-28	25.9	28.1	2.2	3,399	3,911	513	7,658
Belgium	27.7	29.6	1.9	101	115	14	10,158
Bulgaria	14.7	17.5	2.8	6	8	2	1,105
Czechia	17.9	18.9	1	29	33	4	3,145
Denmark	28.9	31.1	2.2	73	83	11	14,554
Germany	27.2	29.4	2.2	711	862	151	10,467
Estonia	14.7	16.6	1.9	2	3	1	2,325
Ireland	20.2	15.8	-4.4	35	40	5	8,478
Greece	22.8	26.2	3.4	58	49	-9	4,538
Spain	21.4	24.3	2.9	242	257	15	5,527
France	30.8	34.3	3.5	615	738	123	11,065
Croatia	18.8	21.3	2.5	9	10	0	2,345
Italy	26.7	29.5	2.8	441	469	29	7,742
Cyprus	17.6	19.1	1.5	3	4	0	4,148
Latvia	12.1	15.1	3	3	3	1	1,709
Lithuania	15.9	15.4	-0.5	5	5	0	1,897
Luxembourg	20.9	21.9	1	8	11	2	18,355
Hungary	22.3	19.1	-3.2	24	22	-2	2,216
Malta	18.2	16.4	-1.8	1	2	0	3,417
Netherlands	26.1	29.5	3.4	172	197	26	11,577

Austria	27.6	29.9	2.3	83	94	11	10,790
Poland	19.3	20.3	1	66	88	22	2,320
Portugal	23.4	25.1	1.7	42	45	3	4,317
Romania	13.7	14.6	0.9	19	23	4	1,149
Slovenia	21.0	23.3	2.3	8	9	1	4,380
Slovakia	15.7	18.3	2.6	11	14	3	2,526
Finland	25.1	31.9	6.8	51	62	11	11,230
Sweden	27.9	29.6	1.7	102	124	22	12,509
United Kingdom	25.7	26.2	0.5	488	543	56	8,278

S o u r c e: Eurostat, 2019

was 7,658 Euro per inhabitant. According to the data above social Europe seems stronger than ever before. At the same time the present and future socioeconomic reality of many Europeans appear somehow to be under constant threat. From youth unemployment to poor pensioners and from the working poor to homemakers without social insurance the threat may well be substantive. Persistent financial constraints and consecutive economic crises bring forth a number of reforms which strive mainly for cost reductions. In fact, in a precarious situation like this there is a real danger for those who actually have the greater need for support. Furthermore, the substantial disparities on social protection across Europe confuse certain boundaries of the current situation as well as its projections for the near future. For example, Greece and the United Kingdom appear to have an identical GDP proportion for social expenditures in 2016 but this is perhaps the only similarity here: the per capita expenditure is almost double for UK while the total cost for social protection is more than ten times over. Even comparing the differences between countries can be misleading. In the same exam-

ple, an 0.5 increase between 2008 and 2016 for UK means 56 billion euro whilst for Greece an increase of 3.4 during the same time means a decrease of 9 billion. Budget cuts or generous spending can be both right or wrong depending on their actual impact on people's lives. Any kind of reform does not affect all the people in the same way.

An alternative way to approach the welfare state in each European country, other than its cost, is through its effectiveness. Figure 1 illustrates the proportion of people in poverty or under social exclusion by member state and the extent of income inequality respectively. For 2017 the EU percentage of people at risk of poverty or social exclusion was 22.4% and the inequality index estimated at 30.7 (where 0 represents perfect equa-

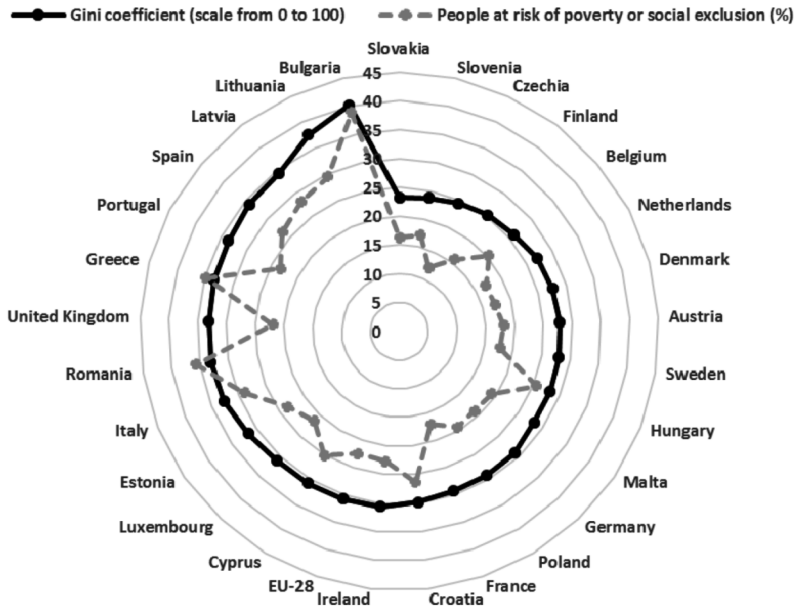

Figure 1. *Income inequality & poverty or social exclusion in EU-28, 2017*

Source: Eurostat, 2019.

lity and 100 represents absolute inequality). In both cases the Baltics, the Balkans and the Mediterranean countries are very close or above the EU average followed by the Western Europe countries. Scandinavia and large parts of Eastern and Central Europe can be found on the side of comparatively less poverty and inequality. Poverty and social exclusion as a multidimensional process continues to be a common problem across EU (Balourdos, 2014). Poverty index and Gini coefficient are informative measures which allow for direct comparisons between countries and their applicability is strongly supported in the field of economics, health and education. These measurements provide this exercise with a point of departure attempting to point out that the ageing population as a large part of the whole population in every country is something far from an unvarying sum. Differences in income and living conditions are substantial between countries as well as within countries and this fact has crucial impact on the later life of every individual.

Projections like these presented in Figures 2 & 3 strike at the core of the ageing crisis in Europe. Figure 2 illustrates the decrease of the working population (15-64 age group) and the increase of the elderly population (65+ age group) until 2070. More specific, the former is a projected to decrease from 65.3% in 2016 to 55.9 in 2070 and the latter to increase from 19.5% in 2016 to 29.2% in 2070. Among other factors this is expected to signify a proportional increase for the old-age dependency ratio (population aged 65+ as a % of the population aged 15-64) from 30 to 52 during the same period. Even worse for the European finances, the economic old-age dependency ratio (inactive population aged 65+ as a % of the employed population 15-64) is projected to increase from 44 to 70 by 2050 and remain as high for the next 20 years.

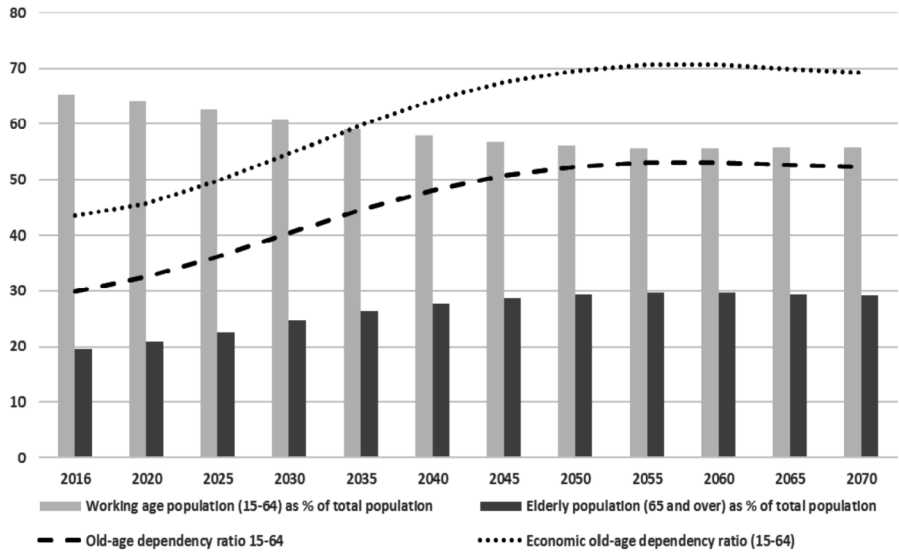

Figure 2. *Working age & elderly population as % of total population and Old-age dependency ratios in EU-27, 2016-2070*

S o u r c e: European Commission, 2018a.

Figure 3 shows ten projection scenarios regarding the total cost of ageing as GDP percentage (the baseline defined at 25.4% of GDP in 2016). The reference scenario projecting a cost increase by 2% until 2045 followed by a gradual decrease until 2070 at 26.6%. Almost in every available scenario at EU level the projected increase will be escalated during 2045-2050. With the higher employment rate of older workers scenario, the maximum increase of the total cost of ageing will be limited to 1.2% of GDP while with the AWG risk (extra costs for health care & long-term care) scenario the increase may be as high as 3.3% reaching 29% by 2070. In every other scenario the total cost is projected to increase but fluctuating: lower increase by linking retirement age to increases in life expectancy, higher migration, higher employment rate, or higher increase by lower migration, lower employment rate, lower fertility, higher life expectancy. It is evi-

dent that the primary concern of the projections above at EU level remain the budgetary impact mostly due to demographics despite the considerable uncertainties around the future needs of the ageing population.

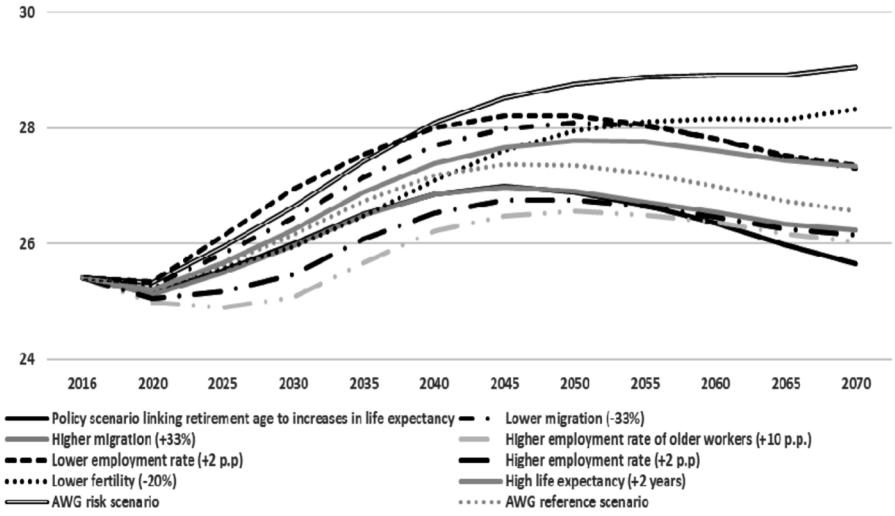

Figure 3. *Total cost of ageing as % of GDP – 10 scenarios in EU-27, 2016-2070*

S o u r c e: European Commission, 2018a.

As shown in Figure 4, life expectancies at 65 vary widely from one EU country to another. For example, a 65 years old male in Latvia or Bulgaria is expected to live 14.1 more years on average while a male of the same age in France can expect to live another 19.6 years. Females live longer than males in every EU country by 3.3 years on average; the discrepancy appears to be significantly higher in the Baltics and lower in Scandinavia. As concerns the healthy life years at 65 the gender discrepancy is much lower (0 in Slovenia or Hungary and 1.5 years in France). But country by country the differences in healthy life years after the age of 65 vary substantially: from 4.1 (Slovakia) to 15.8

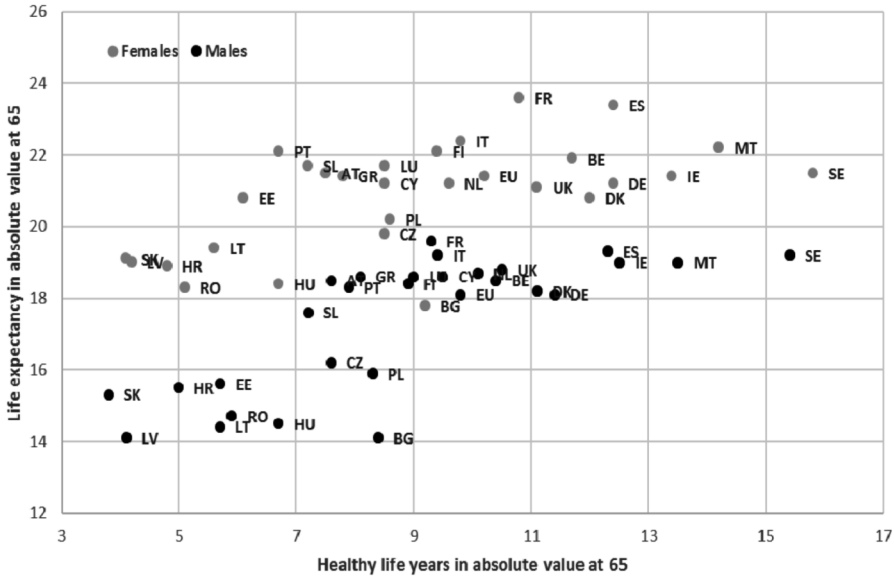

Figure 4. *Healthy life years & life expectancy in absolute value at 65 in EU-28 by gender, 2017*

Source: Eurostat, 2019.

(Sweden) for females and from 3.8 to 15.4 years (same countries) for males. At a glance, Figure 4 shows that reaching the age of 65 in Latvia or Slovakia (either female or male) is something quite different from what is expected on average in the same situation in Sweden or Malta. In all, the big picture for the whole Europe may be strikingly misleading. At EU level the average of 10 more healthy life years or 20 more years in total for any person at 65 is just that; an average which gathers very different life histories, outcomes and expectations.

Moving from macro to micro: informative measurements & policy gaps

All individuals defined as the aged do not getting older following one single homogenous pattern. It is quite possible to categorize the aged population in as many ways there are available in their life herstories. The availability of new, reliable and comparable data may support an attempt to explore closer than before the differences and common features across Europe. This paper argues about the necessity of more detailed pictures and investigations when it comes to issues as crucial for the society as this of population ageing. Especially regarding the current, ongoing and future needs of so many individuals and their families (if any). In order to contribute in this direction our analyses use new empirical evidence which may reinforce the scientific attempt for more fact-based examinations and more effective public policy.

This movement from macro to micro is facilitated by micro data derived from the Survey of Health, Ageing and Retirement in Europe.[1] SHARE is a multidisciplinary and cross-national panel database on health, socio-economic status and social and family networks of individuals aged 50 or older. For comparison reasons this paper uses the most recent data by the 7th wave of the survey for 25 European countries in 2017. The countries which have participated in this wave cover effectively all geographical regions in the continent as well as the prominent typology of welfare states throughout Europe, ranging from the North & Scandinavia (Denmark, Sweden & Finland) to the South & the Mediterranean (Spain, Italy, Greece, Portugal, Malta & Cyprus) and from Eastern Europe & the Baltics (Poland, Czechia, Hungary, Slovenia, Slovakia, Lithuania, Latvia & Estonia) to Balkans (Bulgaria, Romania & Croatia) and Central Europe

1. This paper uses data from SHARE Wave 7 (DOI: 10.6103/SHARE.w7.700), see Börsch-Supan et al. 2013 for methodological details.

(Austria, France, Luxembourg, Germany & Belgium). The sample used for the analyses below contains information by 72,000 individuals aged 50 plus and/or 49,000 households all weighted by probability computations.[2]

In this representative sample the average age of the female respondents is 67.9 while the male respondents' average age is 66.2 years old. Females represent 54% of the sample and males represent the remaining 46%. Almost half of the sample (47%) is younger than 65 years old while the oldest old part of it (aged 80 or more) is almost 16%. Around 62% of the respondents is married and living with a spouse while another 8% never married and another 9% is divorced; almost 19% is widowed. More than 25% lives alone (single-person household), almost 50% lives in a 2-persons household and 10% lives in 4+ persons household. About 16% of the respondents have completed just the primary education and 4% never went to school but on average for the whole sample the years spent in education are 12. More than 50% of the sample is retired from own work while a third is active (29% employed & 3% unemployed) in the labor market. Furthermore, there are 9% homemakers and 4% permanently sick or disabled. Half of the sample answered that, on balance, they look back in their lives 'often' with a sense of happiness although for more than a third the answer was 'sometimes' and for 13% the answer was 'rarely' or 'never'. It is to be expected of course that the sample varies broadly across Europe at most topics covered by the personal interviews.

A key fact derives rather easily from above: the ageing population has much in common as well as many differences. The sample description may emphasize similarities and dissimilarities but at this point that is perhaps only about larger or smaller groups of the sample under investigation. On the other hand, the strict eligibility rules and the random selection of the sample allows for validated representations of the whole population.

2. All indicators in this exercise are computed with individual or household probability weights.

While the former may point out several initial findings the latter strengthens the scientific procedure by which important data could be useful for policy-oriented analysis. For example, the old age population is not another synonym for the pensioners, especially those retired from own work. A smaller but significant part of the older individuals has never done any paid job or haven't participated into any contributory pension scheme. Another example is about the household sizes or types. Living in a single-person household does not necessarily mean living alone. A family member may be across the street or on the same floor. By definition a household is not equal to a family but serves primarily as sample unit for the analysis. At the same time, compared to other household types the person who lives in a single household may differ from other households regarding for instance the potential of receiving or giving help (inside or outside the family) when necessary. This may be very important considering cases of poor health conditions which last long.

Table 2 represents three health status indicators by specific income quintiles (lowest & highest).[3] All three indicators are based on negative outcomes. As concerns the self-perceived health (five scales: excellent, very good, good, fair poor) the cut-off point for the specific self-perception is set to less than 'good' pointing out the remaining choices of 'fair' or 'poor' health. In total, 42% of the population find themselves having fair or poor health. The disparities are substantial: from 70% in Estonia to 26% in Slovakia. This range is quite different regarding the population into the first- & fifth-income quintile. At the lowest quintile (poorer) the estimation of facing a fair or poor health range from 83% in Estonia to 34% in Greece. At the highest quintile the estimation of facing a fair or poor health range high in the Baltics (around 40%) and low in Sweden and Denmark (around 10%). There is no country with a difference between

3. The income quintiles are weighted on individual level and estimated on household level through total household net income for which equivalent scales (OECD version) were applied.

Table 2. *Health status indicators for 50+ population by income quintiles in SHARE-W7 countries (EU-25), 2017*

	Fair or poor self-perceived health			2+ chronic diseases			3+ mobility, arm function & fine motor limitations		
	Total	1st Q	5th Q	Total	1st Q	5th Q	Total	1st Q	5th Q
Austria	34.9	52.6	20.8	46.9	52.5	35.2	24.7	40.5	14.4
Germany	44.6	66.0	24.8	55.4	65.1	40.4	25.2	40.4	12.5
Sweden	28.1	50.6	8.1	39.2	55.0	20.9	15.2	33.0	3.8
Spain	42.9	50.4	26.0	55.0	54.2	44.0	27.9	34.5	14.9
Italy	42.5	54.9	31.2	42.2	50.8	30.7	24.3	33.0	15.4
France	36.3	52.8	24.4	47.9	55.0	41.0	24.6	38.1	14.8
Denmark	27.3	43.3	14.9	43.9	60.5	31.7	17.2	30.7	7.8
Greece	30.0	34.0	21.7	48.9	51.8	40.1	32.0	33.7	24.0
Belgium	31.7	41.6	19.7	54.6	58.7	48.2	25.8	36.9	13.4
Czechia	27.6	38.8	18.1	56.3	66.5	43.8	26.8	40.9	12.8
Poland	49.9	63.9	37.7	58.3	62.2	49.8	36.0	48.2	22.4
Luxembourg	38.3	57.1	26.0	52.2	54.8	39.0	25.2	37.2	16.1
Hungary	55.5	68.1	44.1	53.4	63.3	42.6	32.3	42.2	19.4
Portugal	51.3	73.2	41.8	46.3	46.6	43.5	14.8	23.0	12.5
Slovenia	38.5	53.6	23.6	44.4	50.1	38.0	26.1	45.9	13.0
Estonia	69.7	83.4	47.0	47.8	55.4	31.3	31.6	46.6	11.0
Croatia	46.0	56.4	35.0	55.1	61.3	44.2	41.6	50.9	30.7
Lithuania	60.6	70.5	39.2	54.8	59.1	40.2	35.7	46.8	11.9
Bulgaria	38.1	56.1	17.3	42.3	58.3	20.3	30.0	48.8	10.6

Cyprus	31.2	41.7	19.6	51.0	57.2	38.0	21.9	35.2	11.3
Finland	39.5	54.8	22.5	58.4	59.3	52.6	16.1	25.8	9.3
Latvia	65.7	74.6	42.1	48.9	51.9	30.5	30.2	37.9	10.6
Malta	41.8	56.5	26.1	48.8	53.7	41.5	23.1	31.3	15.5
Romania	50.4	56.6	34.4	42.2	39.1	36.7	36.6	35.0	28.5
Slovakia	26.1	45.0	11.5	30.1	46.4	16.5	23.4	35.5	11.1
Total	41.9	56.6	27.3	50.2	56.7	39.2	26.7	37.9	15.4

S o u r c e: SHARE wave 7 dataset, 2019.

the two extreme quintiles lower than 12 points (Greece) while there are two in which the difference exceeds a threshold of 40 points (Sweden & Germany).[4] This subjective measurement reveals significant disparities and inequalities between countries and also within countries. Regarding the chronic diseases, the focus of this analysis is on the respondents who acknowledged suffering by at least two conditions (presented to them with a specific showcard).[5] The analysis of this particular indicator

4. It has to be noted that all probability weighted mean values and the differences between quintiles country by country are statistically significant with p<0,001.

5. Conditions that a doctor had inform the respondent about it and that is either currently being treated for or bothered by this condition: 1. A heart attack including myocardial infarction or coronary thrombosis or any other heart problem including congestive heart failure, 2. High blood pressure or hypertension, 3. High blood cholesterol, 4. A stroke or cerebral vascular disease, 5. Diabetes or high blood sugar, 6. Chronic lung disease such as chronic bronchitis or emphysema, 10. Cancer or malignant tumor, including leukemia or lymphoma, but excluding minor skin cancers, 11. Stomach or duodenal ulcer, peptic ulcer, 12. Parkinson disease, 13. Cataracts, 14. Hip fracture, 15. Other fractures, 16. Alzheimer's disease, dementia, organic brain syndrome, senility or any other serious memory impairment, 18. Other affective or emotional disorders, including anxiety, nervous or psychiatric problems, 19. Rheumatoid Arthritis, 20. Osteoarthritis, or other rheumatism,

appears to support effectively the previous results. Half of the population is either being treated for or bothered by a number of health conditions. The variation between countries is once again large (from 30% to almost 60%). This stands also for each separate income quintile group but with very different ranges: 39 to 67% for the lowest and 17 to 53% for the highest. The differences between them also vary extensively, almost 2% in Romania while 38% in Bulgaria when the mean value for all countries is almost 18%. The last indicator in this series is about particular difficulties in everyday life.[6] The cut-off point for this analysis is set to three difficulties concerning the individual's mobility, arm function & fine motor skills. Once more the weighted mean values per country vary broadly: from 14% in Portugal to 42% in Croatia. On average one quarter of the whole population seems to suffer by three or more such difficulties. The range inside each income quintile group is almost equal (27 points) but their limits are significantly different: 23-50 points for the first quintile and 4-31 for the fifth. All three indicators and their specifications highlight similar empirical evidence. Health and income inequalities are serious problems for the ageing European population; for now, and for the not so distant future. Ageing appears to have a significant effect and the same stands for the socioeconomic status represented in this exercise by the income variable.

One of the main characteristics and strengths of the European welfare state lies in its long tradition of fighting against

21. Chronic kidney disease, 22. Other conditions. It is informative to mention that 14,818 individuals acknowledged 0 conditions while 65 acknowledged more than 10 conditions.

6. Difficulties doing each of the following everyday activities and are expected to last no less than three months: 1. Walking 100 meters, 2. Sitting for about two hours, 3. Getting up from a chair after sitting for long periods, 4. Climbing several flights of stairs without resting, 5. Climbing one flight of stairs without resting, 6. Stooping, kneeling, or crouching, 7. Reaching or extending your arms above shoulder level, 8. Pulling or pushing large objects like a living room chair, 9. Lifting or carrying weights over 5 kilos, like a heavy bag of groceries, 10. Picking up a small coin from a table.

poverty. Progressively this fight took many forms across Europe prioritizing alternatively active or passive interventions. Traditionally the main fields for these interventions remain the labour market and the education system recognizing their crucial role as production and reproduction structures. For the welfare state, and especially for one striving for equality, this is a continuing struggle. For an older individual, especially one after his or her retirement, the results of these interventions (successful or not) appear rather stable. Successful or unsuccessful life paths may have different outcomes. Figure 5 shows at a glance a series of cross-country differences about the ability of households to make ends meet. This household population has at least one household member aged 50 or more. This representation focuses on households which make ends meet with some or great difficulty (as opposed to fairly easily and easily). This variable emphasizes the affordability of basic goods & services and can also represent a subjective measurement of poverty or material deprivation especially when the household make ends meet with great difficulty (Fonseca, Kapteyn, Lee, Zamarro & Feeney, 2013). On average, 40% of the households fall down in this group. Greece and Bulgaria exceed even the most pessimist projection on this matter while 16 out of 25 countries exceed the weighted mean value. None of the Scandinavian countries nor a country from the traditional Central Europe belongs to this particular grouping. Material deprivation and/or poverty may be a more serious problem than anticipated. Not all households are families (the former stands as an economic unit) but the bad shape of their economic situation seems to put significant pressure on their ability to provide support to their members in need. The case of long-term care is an example for this situation where limited access to public LTC signify family's spending using its limited own resources (Lyberaki, Tinios, Papadoudis & Georgiadis, 2019). And this in turn may have its own implications in the individual's and/or family's future.

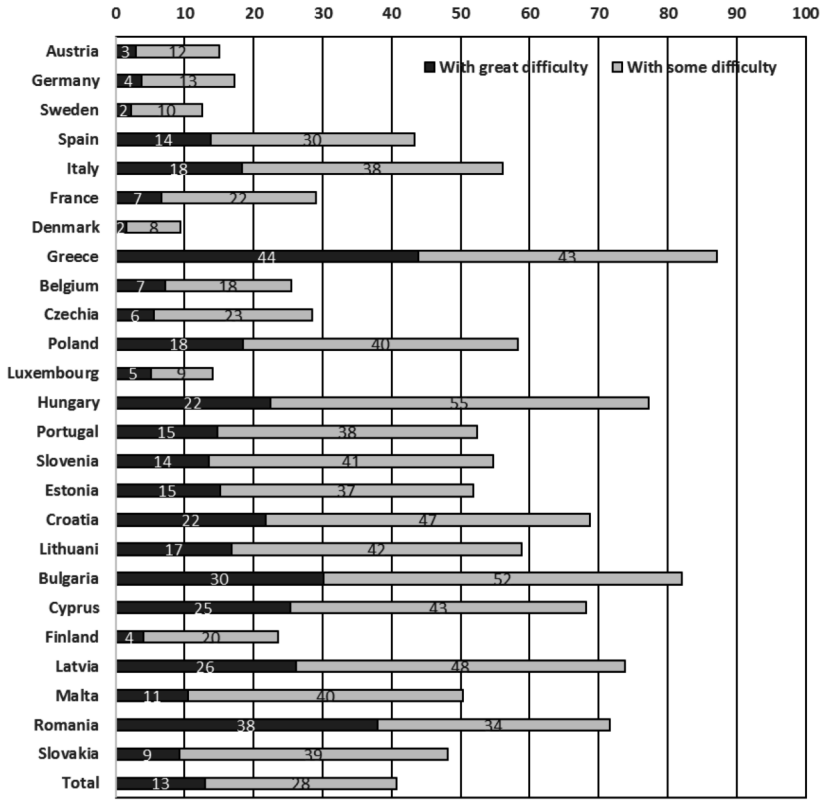

Figure 5. *Households make ends meet with great or some difficulty for 50+ population households in SHARE-W7 countries (EU-25), 2017*

Source: SHARE wave 7 dataset, 2019.

Table 3 presents three measures about limitations with activities cross-country and compares the estimations between the first (lowest) and the fifth (highest) income quintile. The first set of this measurement series refers to the Global Activity Limitation Index (GALI), the second refers to the Activities of Daily Living (ADL) index and the third to the Instrumental Activities of Daily Living (IADL) index. The GALI is a global single-item instrument that measures activity limitations for no less

than six months referring to general health problems and activities. The ADL index records the number of limitations with six self-care activities of daily living for no less than three months. The IADL index records the number of limitations with nine instrumental activities of everyday life for no less than three months. The basic research questions these indices try to grasp is the independence of the respondent as well as his or her need for support. The estimations for GALI take into account only the negative outcomes (severely limited or limited as opposed to not limited). For ADL & IADL indices the estimations are based on outcomes with 1+ difficulties because of a physical, mental, emotional or memory problem.[7]

The GALI scores very high throughout Europe, almost 50% on average, with the exceptions of Greece and Cyprus (about a quarter of the particular sample). This index ranges from 31% to 74% concerning the most poor fifth and from 13% to 46% for the least poor fifth of the sample. The mean difference by country and income quintile vary among 11 points in Greece and 45 points in Bulgaria revealing once again significant disparities and inequalities. Around 12% of the population is experiencing ADL limitations; ranging from 6% in Cyprus to 19% in Romania. Belgium scores very high when it comes to lower income quintile and Slovakia scores very low regarding the highest one. The difference between these quintiles takes its highest value also in Bulgaria and its lowest value in Romania. IADL limitations have been experienced by 18% of the sample (from 10% in Portugal to 26% in Hungary). The ranges between the two

7. ADL limitations: 1. Dressing, including putting on shoes and socks, 2. Walking across a room, 3. Bathing or showering, 4. Eating, such as cutting up your food, 5. Getting in or out of bed, 6. Using the toilet, including getting up or down. IADL limitations: 1. Using a map to figure out how to get around in a strange place, 2. Preparing a hot meal, 3. Shopping for groceries, 4. Making telephone calls, 5. Taking medications, 6. Doing work around the house or garden, 7. Managing money, such as paying bills and keeping track of expenses, 8. Leaving the house independently and accessing transportation services, 9. Doing personal laundry.

income quintiles in question do not overlap at all: 18%-47% for the lowest & 3%-15% for the highest. A fact which may further influence the inequalities discussion on this issue.

Table 3. *Limitations with activities for 50+ population in SHARE-W7 countries (EU-25), 2017*

Limitations with…	activities			activities of daily living			instrumental activities of daily living		
	Total	1st Q	5th Q	Total	1st Q	5th Q	Total	1st Q	5th Q
Austria	51.3	64.3	38.5	10.3	17.0	6.8	19.1	33.5	9.8
Germany	57.8	71.0	45.2	12.9	21.5	5.4	16.5	28.6	8.2
Sweden	43.3	63.0	26.5	8.3	18.4	2.7	11.8	28.6	2.6
Spain	40.1	50.2	28.5	13.0	20.7	4.0	21.0	31.2	7.5
Italy	37.4	50.0	27.7	10.8	17.3	6.3	16.7	23.5	9.4
France	44.6	56.5	34.7	11.6	19.2	7.5	16.8	28.1	12.1
Denmark	41.5	53.8	31.9	8.9	17.5	3.5	15.0	27.6	8.0
Greece	25.7	31.0	20.4	6.7	9.4	3.7	20.4	29.2	13.7
Belgium	50.1	61.1	38.5	15.1	24.3	6.4	22.9	34.2	10.7
Czechia	53.5	64.1	46.0	12.2	21.0	7.4	19.8	34.7	10.6
Poland	56.9	69.8	41.3	14.0	21.1	8.2	18.6	28.4	7.9
Luxembourg	49.4	57.4	40.4	8.6	17.4	5.1	16.2	25.4	8.0
Hungary	50.6	70.3	27.3	9.3	17.5	2.5	25.8	46.7	11.1
Portugal	59.5	64.1	44.7	8.2	16.8	1.5	10.1	20.2	3.3
Slovenia	49.6	64.3	37.1	9.7	20.5	4.7	14.8	31.3	6.2
Estonia	59.3	73.6	38.0	13.9	22.8	5.6	23.0	36.6	8.3
Croatia	54.6	64.9	42.1	12.8	17.4	10.5	21.2	30.6	15.0

Lithuania	50.6	60.9	29.9	15.1	20.8	4.2	20.7	29.7	5.2
Bulgaria	44.0	65.6	20.6	14.1	23.1	4.1	22.5	41.4	5.5
Cyprus	27.9	41.7	13.4	6.1	10.1	4.8	16.9	28.4	10.8
Finland	49.3	52.6	39.2	9.2	15.0	5.5	12.5	18.3	7.2
Latvia	50.8	61.1	29.0	11.4	17.3	2.7	20.1	29.1	6.9
Malta	31.6	41.3	23.4	6.8	8.8	2.6	16.2	24.5	8.6
Romania	52.7	53.6	39.1	19.2	16.5	12.4	22.2	22.6	12.3
Slovakia	36.5	58.2	18.3	6.7	14.7	1.5	16.8	26.6	6.4
Total	47.8	59.6	35.5	12.1	19.3	6.0	17.9	28.5	9.1

S o u r c e: SHARE wave 7 dataset, 2019.

Figure 6 illustrates findings based on the EURO-D depression scale & caseness for three large age-groups in 11 European countries.[8] In this subsample of the total population it is evident that the oldest old part may suffer the most regarding depression problems. The scale scores as well as the scores of caseness are particular high in the Mediterranean and Poland. For six countries (Sweden, Spain, Italy, France, Greece and Poland) the pattern is rather clear: increasing depression scores by older age group. For Germany and Denmark, the U shape discloses a different pattern although for Austria, Czechia and Belgium depression problems seems to be attached mainly to the oldest old population. The number of older individuals facing this mental health condition is unprecedented and this is expected

8. The sample size for this exercise differs because it refers only to regular panel respondents from 11 SHARE European countries. Variables forming the EURO-D scale: depression, pessimism, suicidality, guilt, sleep, interest, irritability, appetite, fatigue, concentration, enjoyment, tearfulness. The scale can have a max score of 12 'very depressed' & a min score of 0 'not depressed'. A scale score of 4 plus is categorized as 'caseness' or case of depression.

to rise even more and serious challenges for their families and their social networks (if there is any for support) as well for the welfare state policies (in place already or absent at this time).

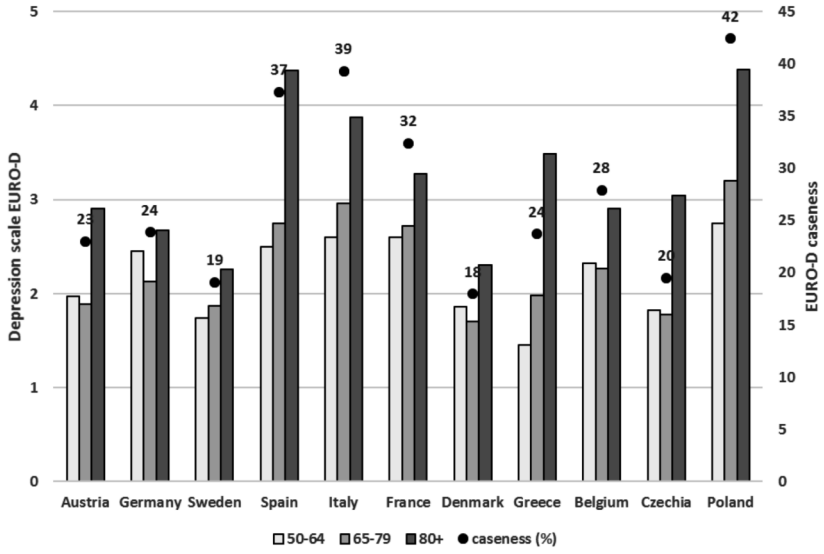

Figure 6. *Depression scale EURO-D & EURO-D caseness by age-group for 50+ population in SHARE-W7 countries (EU-11), 2017*

S o u r c e: SHARE wave 7 dataset, 2019.

Figures 7 & 8 display the magnitude of two addressed needs by three large age groups: to consult a doctor and hospital overnights. According to this data during a 12-month period, a European has been seen or talked to a doctor 6 times on average and 15% of this population has been in a hospital overnight. So far it is to be expected that these figures vary dramatically by country and age group. In reference to consultations with doctors the number increases by age group: 5 for the younger group (50-64), 6.6 for the group 65-79 years old, and 8.3 for the oldest old. The same stands for the proportion of these three groups

in reference to hospital overnights, 11%, 16%, 23% respectively. The individuals aged 80 or older in Italy have almost triple consultations than their counterparts in Romania. Regarding the age group 65-79 years old and the proportions of hospital overnight the range is almost 5: from 5% of this population in Greece to 25% in Austria. Despite the large variations or perhaps because of them there is no concrete pattern across Europe. Even if the need for medical consultation or admission to a hospital can be the same for these individuals there are so many differences in the health care systems around Europe as concerns their coverage and responses; and not only that.

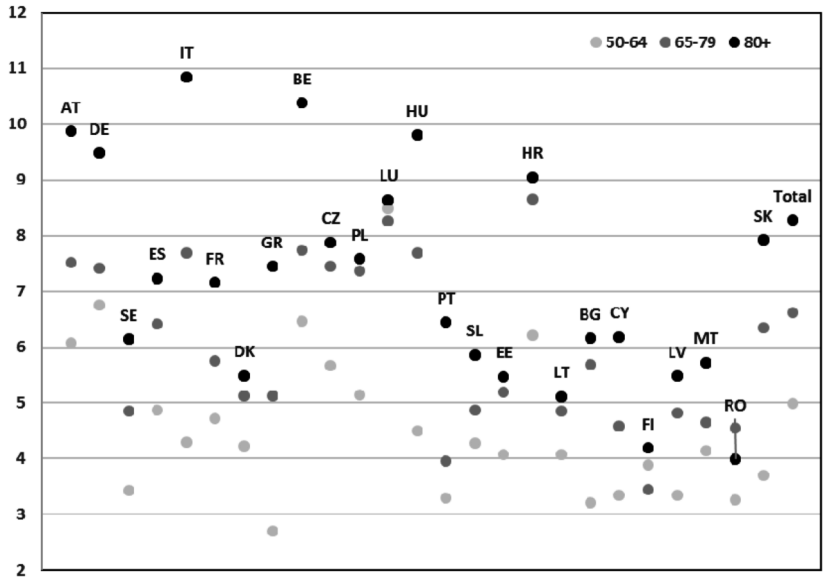

Figure 7. *Consultations with doctors for 50+ population by age-group in SHARE-W7 countries (EU-25), 2017*

Source: SHARE wave 7 dataset, 2019.

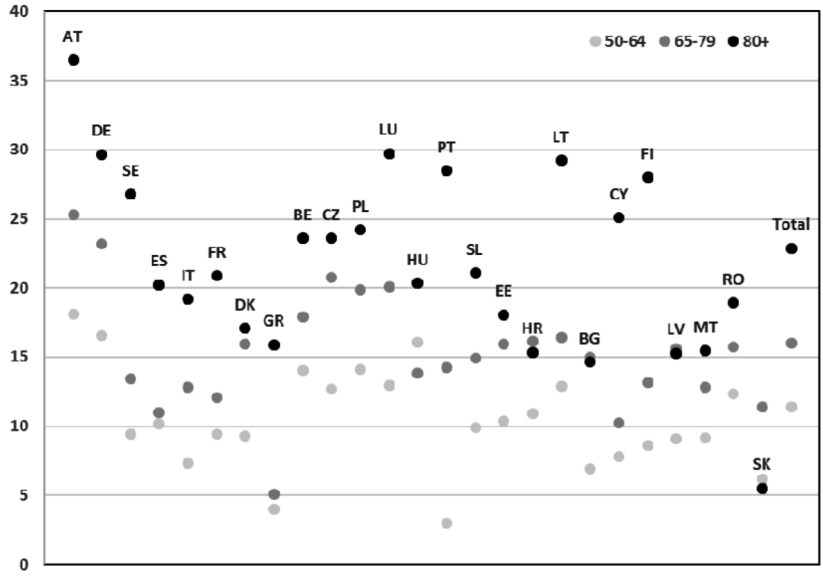

Figure 8: *Hospital overnights for 50+ population by age-group (%) in SHARE-W7 countries (EU-25), 2017*

S o u r c e: SHARE wave 7 dataset, 2019.

The analysis reveals serious socioeconomic differences when it comes to doctor visits and hospital stays. Individuals categorized into the most income-poor households of the sample have a mean value of 6.8 consultations with doctors while those from the least income-poor households have 5.2. The findings have the same direction regarding hospital overnights: 17.8% and 11.4% respectively. Is this some kind of reversed inequality and where the unmet needs or even unnecessary treatment of the population fit in? In a very limited space and apart from other possible and more comprehensive explanations, the importance of good health stands out. Table 4 present self-perceived health statuses (from poor to excellent) in reference to the educational attainment (from none to tertiary) of the indi-

viduals.[9] The relative ratios below reflect significant health disparities because of different socioeconomic factors. With very few exceptions the individuals with none or primary education along with the individuals with secondary education have less probabilities acknowledging a good health status than those with tertiary education (reference group). It is only to be expected that such socioeconomic inequalities will continue to accumulate pressure to the welfare state institutions together with the evolution of the ageing population.

Table 4. *Relative self-perceived health status and educational attainment for 50+ population in SHARE-W7 countries (EU-25), 2017*

Reference group: tertiary education	None or primary education			Secondary education		
	RR	95% CI		RR	95% CI	
Austria	0.60***	0.515	0.694	0.74***	0.657	0.828
Germany	0.44***	0.322	0.595	0.72***	0.663	0.788
Sweden	0.68***	0.601	0.781	0.76***	0.682	0.848
Spain	0.65***	0.528	0.795	0.84	0.690	1.035
Italy	0.66***	0.555	0.794	0.71***	0.597	0.855
France	0.60***	0.530	0.683	0.76***	0.682	0.849
Denmark	0.64***	0.559	0.727	0.79***	0.737	0.850
Greece	0.72***	0.622	0.837	0.88	0.759	1.018
Belgium	0.57***	0.509	0.639	0.78***	0.714	0.852

9. The multinomial logistic regression's reference group of individuals with tertiary education derives by the ISCED codes 5 & 6). For none or primary education the grouping use ISCED codes 0 & 1 and for the secondary education the ISCED codes 2-4. Statistical significance at p<0,001, p<0,01 & p<0,05.

Czechia	0.48***	0.385	0.595	0.79**	0.659	0.946
Poland	0.61***	0.517	0.713	0.73***	0.654	0.820
Luxembourg	0.45***	0.350	0.567	0.66***	0.534	0.822
Hungary	0.20***	0.079	0.525	0.60***	0.488	0.739
Portugal	0.72	0.420	1.221	1.13	0.644	1.999
Slovenia	0.43***	0.350	0.526	0.62***	0.545	0.699
Estonia	0.42***	0.318	0.563	0.66***	0.600	0.720
Croatia	0.64***	0.543	0.743	0.76***	0.677	0.852
Lithuania	0.51***	0.370	0.697	0.69***	0.605	0.781
Bulgaria	0.57***	0.466	0.699	0.76***	0.675	0.851
Cyprus	0.57***	0.460	0.699	0.78*	0.638	0.958
Finland	0.56***	0.440	0.699	0.63***	0.537	0.742
Latvia	0.40***	0.273	0.580	0.71***	0.605	0.830
Malta	0.78*	0.619	0.986	0.74**	0.593	0.928
Romania	0.51***	0.402	0.636	0.66***	0.550	0.782
Slovakia	0.72	0.384	1.345	0.70***	0.582	0.851
Total	0.66***	0.627	0.698	0.74***	0.711	0.768

S o u r c e: SHARE wave 7 dataset, 2019.

Concluding remarks

Ageing does not happen in a social vacuum. In fact, the transformation of the European society, in general as well as in every country across the old continent, follows a series of changes and adjustments. For example, the new demographic profile cannot be separated from what is taking place in labour market and

education. The declining fertility rates are among other things interconnected with significant changes in family structures and trends around Europe. At the same time migration offers new opportunities as well as new challenges. Taking good care of fewer children and even more senior citizens requires important adaptations as concerns the social support institutions (from pre-school to nursing homes and from housing to home care). The need for effective health care systems and supportive social networks is of utmost importance in the new social setting. A positive outcome for all these links is not secured, by far, even in one of the richest regions in the whole world. Europe's social protection system while one of the strongest worldwide varies significantly across its borders. Balancing (or unbalancing) between social expenditures and social investments the overall costs are substantial and also necessary.

Living longer and living healthier are not synonyms so far but two interconnected dimensions. For Europe and its welfare states in every country the goal seems straightforward: while the former expanding the latter must expand at greater speed. The European welfare state will be unavoidably in dispute once again because of the distance in question. Population ageing may threaten the public finances but the ageing process as it is first and foremost threatens the people themselves. The ageing population is not defined solely by biological factors. Perhaps not even that because of this broad definition (people close to retirement or after the retirement age, oldest old) and also because the definition will remain adjustable in the near future. In any case the old age population is not characterized by its homogeneity. Very different life paths of so many individuals cannot be merged conveniently into one large age-defined group. Welfare state responses have to be proactive and diverse in order to be efficient. At every cut off point of each working definition of the aged, one can find many cross pathways: employment, education, income, family etc. For the ageing population these pathways were significant in the past and continue to be significant for its present and future situation.

Differences and inequalities in old age have been recognized in Europe and worldwide in a systematic way. For more than a half of a century the research on age and ageing has tended to concentrate on individual adjustment to old age and in turn, on narrow functionalist explanations of depressed social status (Walker 1981). Subsequently, in the political arena and academia the elderly has been treated as a single uniform group facing all issues in common. During the same period the problems of the elderly were expected to be confronted in the same manner. Poverty and poor health status, for example, imposed as the principal problem faced unvaried by each individual member of the ageing population. The very strong connections between health and income or between the health status and the working conditions, as they have been established by various empirical studies during the last decades (Wise 2004, Jurges 2008, Avendano et al, 2009), suggests that ageing may be seen also as an evolutionary stage in which a set of differences and inequalities rooted in previous periods will be imposed to the present time of the aged individuals having a number of physical and social effects. In the case of pensions these differences are explicit by simple comparisons of individuals with or without interruptions in their working life, specialized or unskilled workers, state employees or employees in the private sector. As concerns the retired population these ingrained inequalities over the working life are prone to be diffused to positive or negative outcomes (Lyberaki, Tinios, Papadoudis, & Georgiadis, 2017). It is very unlikely that inequality among future generations of older people will not be greater than today cause of the divisions that have grown in the labor market since the last decades will continue to carry forward into the retirement years (Myles, 1997). The inequalities are significantly more important when gender is included in the analysis as well as the marital status. Countering functionalist and neo-classical theories of ageing this analytical approach attempts to recognize the individual problems of the aged as issues of general public interest who calls for further research and political action in a broader environ-

ment. (Estes, Biggs & Phillipson 2003). That environment corresponds rather to alternate forms of social stratification than simple age distributions; based for example on structures of employment, status and property (Kerbo, 2006, Crompton 2004). In this context it is argued that multiple factors influence the life of the elderly simultaneously and age is just one of them. Marital status & family, gender, nationality, social class, status, the relevant position in the economic & property structure, the relation with the labor market are all specific factors that should be taken into account when the aims of scientific research lies in the needs and the corresponding policies of the aged individuals.

This paper supports with clarity that all individuals do not age following the same standard. In many ways they age differently because they and their household or families (if any) accumulate unequally during their lives. The acquired socioeconomic status continue to play an important role during the later years of any individual. Poverty and social exclusion of the older people in contrast to active and healthy ageing remain different realities of different people dependent on divergent pathways over the life course through the given social structures. Moreover, these outcomes may significantly affect the ways the future needs of the older individuals will be addressed. There is a great distance separating a lone and poor elder from one wealthy with a big and supportive family network. The data driven analysis provide alternative interpretations to the ageing crisis trying to disconnect it by its one-sided contingent solely on budgetary restraints and dependency ratios. Demography is not history and a story of chaos seems inadequate to describe productive answers for policy-making. The challenges for the welfare state in the old continent are escalating and this is not the time for pause.

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