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Long-term Care, Ageing and Gender in the Greek crisis

Antigone Lyberaki, Platon Tinios

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

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Long-term Care, Ageing and Gender in the Greek crisis

Antigone Lyberaki* and Platon Tinios†

ABSTRACT

This paper examines Long Term Care (LTC) in Greece over the crisis. It does so through examining micro data from the 2007 and 2015 waves of the Survey of Health, Ageing and Retirement and Europe (SHARE. The crisis was exceptionally deep and involved retrenchments in public welfare, superimposed on a familial LTC system. Hence, the 'austerity narrative', expects cutbacks to have led to deteriorating outcomes and to rising informal provision. The empirical investigation casts doubt on these expectations: First, LTC needs did not rise, despite a deterioration in health. Second, 'care gaps' – people declaring need who receive no care – shrank, despite austerity. Third, it was (paid) professional care, rather than informal care which rose, despite the familial LTC system. Fourth, care in the last year of life is a further drain on family finances. The paper concludes with thoughts on whether expecting the family to keep delivering is a sustainable LTC medium term policy in the face of ageing.

Keywords:

Greece; Long term care; Care needs; Austerity; Gender; financial crisis

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1. Introduction

This paper examines what happened in Greece over the crisis, focusing on long term care (**LTC**). It does so through a comparison of micro data spanning the crisis - responses by individuals in the same sample survey given in 2007 and 2015. Hard evidence on how specific individuals weathered the crisis can take the place of *a priori* theorising and casual empiricism which characterised much commentary on the Greek crisis.

This paper sheds **empirical** light on the crisis and LTC by taking a first look at a unique data source released in late 2017, covering individuals aged 50+. Our aim is to give an overview and provide a narrative, examining descriptive statistics, privileging breadth over depth.

We compare two waves of the same *survey* (SHARE – Survey of Health, Ageing and Retirement in Europe), conducted in 2007 and 2015. SHARE is large geographically and intertemporally comparable interdisciplinary survey[3]; Greece was part of it from the start (2004) up to 2009, but was unable to participate between 2011 and 2013. It re-joined the sixth wave with an enlarged sample in 2015, allowing us detailed examination of what happened during the crisis years. This involves comparing two cross-sections – one just previous to the manifestation of the crisis, and the other between the second and third bailouts, 2015, when most of the crisis effects were in full evidence. We also make some use of the longitudinal dimension of SHARE – i.e. individuals who had answered both in 2007 and 2015. We supplement release 6.0.0 of the data with two components of SHARE not used before: exit interviews referring to the last year of life of individuals who died between waves, completed by relatives; we also examine a special paper-based drop off questionnaire completed by the Greek sample only.

Examination of the crisis is of wider importance. The economic crisis in Greece was exceptionally long and deep, and changed many entrenched relationships in fiscal and social policy. Long term care for the aged was one of the specific areas most affected: it lies on the boundary between formal and informal care, between state and private, between social services and market provision. What happened during the crisis in LTC

[3] Details on data are provided in Appendix 1

can shed light in four domains: the mechanics of the crisis, ageing, long term care and gender. More specifically:

First, fiscal rebalancing and its impact on individuals. In LTC, before the crisis, the State was expanding its own role, a process interrupted by austerity. Needs for LTC, on the other hand, were unaffected. Families had to assume greater responsibility just as their own means were reduced.

The second, is how ageing links to LTC. Greece is the second fastest ageing country in Europe, implying a growing demand for LTC, compounded possibly by crisis-related health deteriorations. Would the supply of LTC respond? Given the importance of informal care, the question amounts to the willingness of new cohorts of women, were used to economic independence, to supply more care. Would this mean gaps in provision? If not, how were they filled?

The third field relates to LTC policy. LTC all over Europe is provided by a combination of public and private, professional and informal provision. Policy experimentation revolves shifts these boundaries, changing fiscal commitments whilst trying to maintain quality of care. In Greece the public/private mix was altered in a one-sided fashion. Did the family and civil society rise to the challenge, and if so, how?

The fourth issue is gender. The crisis was not gender neutral: Women were the primary recipients of the crisis to-do-list; the needs of aged relatives were added to pressures on income and employment. It was up to families to provide an answer; it was up to their female members to put it into practice.

The paper first sets the scene, providing background on the crisis: what happened to incomes, to health care, the institutions of LTC. The examination of LTC starts from the needs of care: did they grow and if so, for whom? How needs were met, the supply side, is the object of the next section: was it professional or family care that rose to meet the needs? The period of concentrated need, end of life care, is considered next, followed by aspects of gender. The conclusions offer an explanation of five apparent paradoxes uncovered by the analysis.

2. Setting the scene: Ageing, Gender and Austerity in the Greek context

The Greek crisis was uniquely long and deep (Meghir et al. 2017; Lyberaki and Tinios, 2017). GDP fell continuously from 2008 to 2016; the drop of GDP per head by a quarter is one of many indicators of individual hardship. The elderly were thought to have been hit especially hard, victims of cuts in pensions and health care, both results of austerity economics (Lyberaki, 2018). Women were also deemed heavily affected by the crisis (Karamessini, 2014). These impressions were carried over in international understanding (Papadimitriou and Zartaloudis, 2015) and individual experiences (Chalari, 2015).

Two rival narratives attempt to make sense of developments. The anti-austerity narrative builds on fiscal developments to underline cuts in entitlements and dramatic falls in welfare (Karamesini and Rubery, 2014; Papadopoulos and Roumpakis, 2012). Commentary stressed hardship and dramatized reality, especially in health (Kentikelenis et al. 2014) and social protection (Adam and Papatheodorou, 2016). On the other side are views stressing implementation and reform ownership (IMF, 2017; Meghir et al. 2017). Pensions after 2010 were cut at least 12 times, while there were at least three major pension reform bills (Panageas and Tinios, 2017; Tinios, 2018). Health policy had to contend with an explosion of expenditure in the few years preceding the crisis, as well as a considerable reform backlog (Kanavos and Souliotis, 2017).

What happened to incomes? The crisis's most prominent impact was on incomes, (Lyberaki 2018; Tinios, 2018). This is reflected in the SHARE sample -Table 1: The median income of persons aged 50+ declined sharply for all age groups, by 10% on average. The impact, though, was far from even: those of working age (50-64) saw the most dramatic decline (by 13%), followed by the older groups (decline by 7%). These impacts are mirrored by private disposable income per capita (down by 23%), while the age difference is also met in EU-SILC data. As discussed in Lyberaki (2018) and Tinios (2018), those employed lost on average more than retirees. Homemakers, mainly women, entered the crisis with lower incomes and saw them decline by 12%[4]. Macroeconomic

[4] In contrast, average incomes were rising for the SHARE sample as a whole, in absolute and in relative terms. The largest increase was in the Nordic countries (30%) and the Eastern countries (37%) (Lyberaki, 2018).

data and EU SILC data covering the population of all ages show that falls were even greater for the population at large.

Table 1: Change in median/mean income and in relative income position by age group, cross sectional analysis SHARE w2 (2006/7) and w6 (2015)

SHARE wave 2 and wave 6		***Median Income (EUR)***		**Change**	***Indexed (50+ median=100)***	
		wave 2	**wave 6**	**(%)**	**wave 2**	**wave 6**
Greece: Total	50-64	7044	6130	-13.0	95	92
	65-80	7668	7205	-6.0	104	108
	80+	6600	6118	-7.3	89	92
	50+	**7397**	**6647**	**-10.1**	**100**	**100**
Greece: Pensioners	50-64	9520	9000	-5.5	129	135
	65-80	7800	8000	2.6	105	120
	80+	6720	6400	-4.8	91	96
	50+	**7836**	**7627**	**-2.7**	106	115
Greece: Employed	50-64	6602	6303	-4.5	89	95
	65-80	9000	6056	-32.7	122	91
	50+	**7000**	**6250**	**-10.7**	95	94
Memorandum items						
		2007	**2016**	**Change**		
EU SILC median income 18+		10307	7676	-25.5		
EU SILC median income 65+		8767	7816	-10.8		
GDP per capita (EUR) nominal		21100	16200	-23.2		
Private disposable income per capita		18990	14539	-23.4		

Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017. Figures for EU SILC median income; GDP per capita and private disposable income per capita have been obtained from Eurostat.

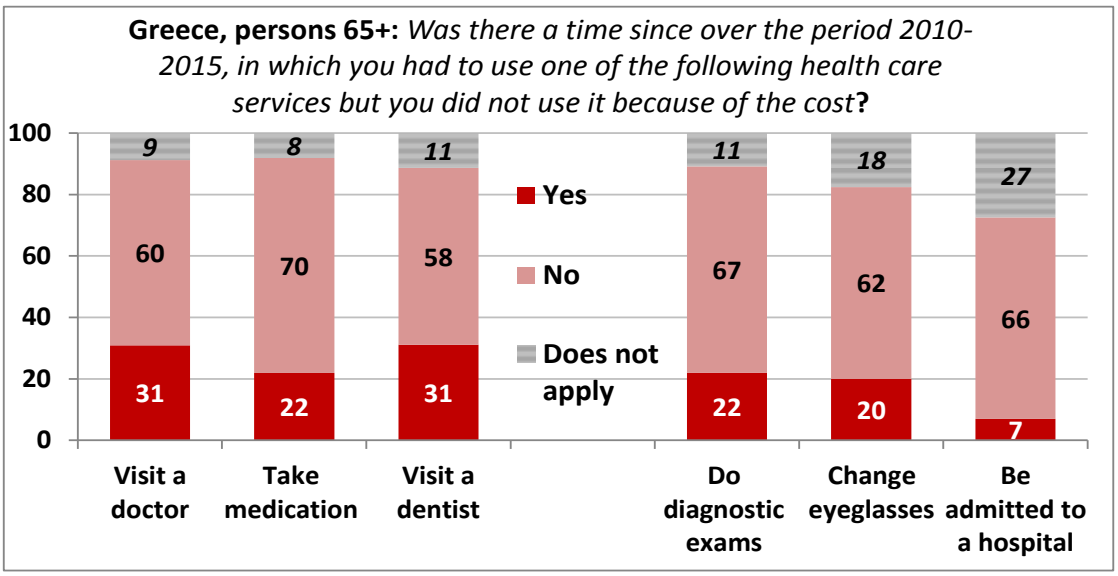
Note: Median equivalent income is set equal to 100 for the 50+ population in each wave. Values greater than 100 indicate income status above the median of the 50+ population.

Health-care was a major concern in the retrenchments and structural reform effort from 2010. Considerable retrenchment of expenditure in the initial period was able to claw-back some of the rise in expenditure in 2000-2010. Structural change affected health insurance, which was consolidated into a single insurance- single buyer system while primary care shifted towards a family-doctor referral system. Souliotis et al. (2016) explain there is a growing unwillingness of citizens to pay informally, just as demands for these payments are growing. According to Kyriopoulos et al. (2014), 25% of chronic patients face geographical barriers while two out of three are facing financial barriers in access (most of them being unemployed, low-income and low-educated).

A recent study (GBD-G 2018) provides a careful analysis of available morbidity and mortality indicators: mortality trends (and to a lesser extent morbidity) sharply deteriorated in Greece during the crisis. This was mainly due to acceleration of ageing, and to unhealthy behaviour (smoking, BMI, diet). Even so, the fall of per capita health expenditure, combined with 'rooted inefficiencies' of health care was linked to health outcomes. Their overall conclusion is agnostic as to causation but is unequivocal as to 'a disproportionate decrement in the health of Greeks, which parallels the course of the economic crisis' (p. 404).

Problems to access health care are reflected in the SHARE 2015 drop-off, one in three persons aged 65+ did not visit a doctor or a dentist because of cost (Figure 1), while more than one out of five elderly has forgone health services such as prevention, necessary diagnostic test or changing eyeglasses.

Figure 1: Forgone health care due to cost over the period 2010-2015, Greece persons aged 65+ in 2015



Source: SHARE wave 6 (2015) Drop-off module.

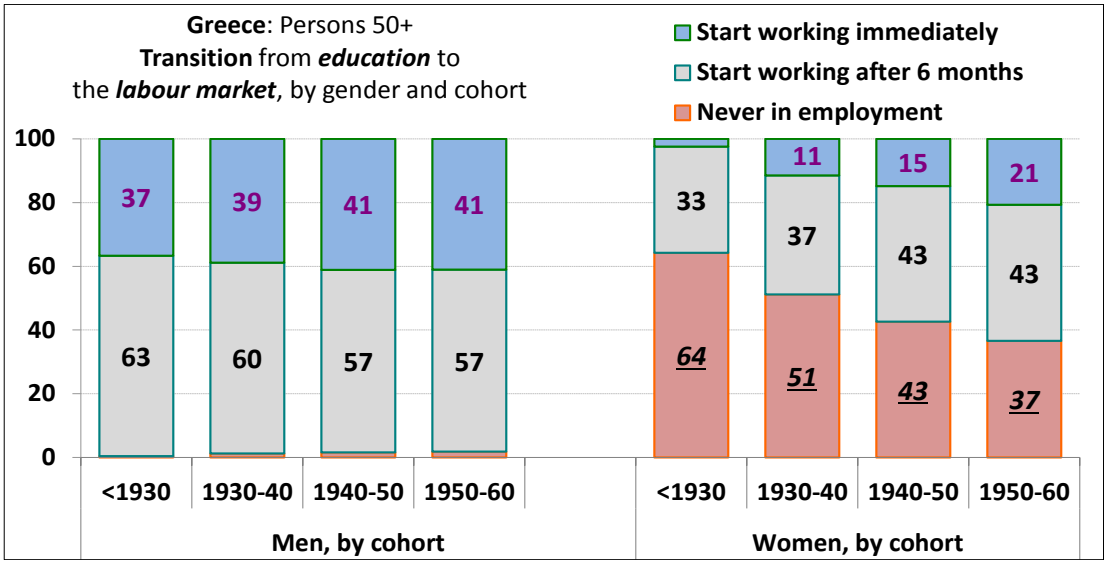
Greece is **ageing** fast. The Ageing Report 2018 expects the 65+ population to increase by 12.5 percentage points by 2070, when it will account for 33.9% of the total, from 21.4% today (EPC 2018). The 80+ group will account for 16.6% of total, up from 6.6% today, both figures at the top end of the EU.

Despite this, ageing does not feature in narratives of the Greek crisis. This is surprising. Commentary deals almost exclusively with pensions. Other ageing-related issues pass unremarked: Attention is focused on the projected fall in the total population (driven by low birth rates and fall in migration) but is hardly aware of other issues that longevity poses, such as the need to work longer. In consequence, there is little support for active ageing, while employment policy discourages older people working.

Turning to the gender dimension, women are thought especially affected by austerity (Karamessini, 2014). One of the observed features of the crisis was a wave of early retirements chiefly by women, encouraged by legislation effectively lowering retirement ages for them in the period before 2015 (Panageas and Tinios, 2017). Did these women retire early in order to take on care responsibilities, in the manner suggested, for example, by Loretto and Vickerstaff (2015) or by Ni Léime and Street (2017)?

An important gender consideration to take on board are the large differences between cohorts in Greece. Women born in the 1950s started retiring during the crisis. Their involvement in the labour market was very different to previous cohorts. Lyberaki (2017) notes that 64% women born before 1930 had never worked, whereas for those born in the 1950s this was only 37% (see Figure 2). This is also probably reflected in the prevalence of the 'added worker effect', among women: Women who were previously out of the work force (yet had worked in the past) *entered* the labour market in large numbers. (Lyberaki and Tinios, 2014). The opposite held for men, who left the labour market discouraged of job search.

Figure 2: Transition from education to the labour market Greece, persons aged 50+

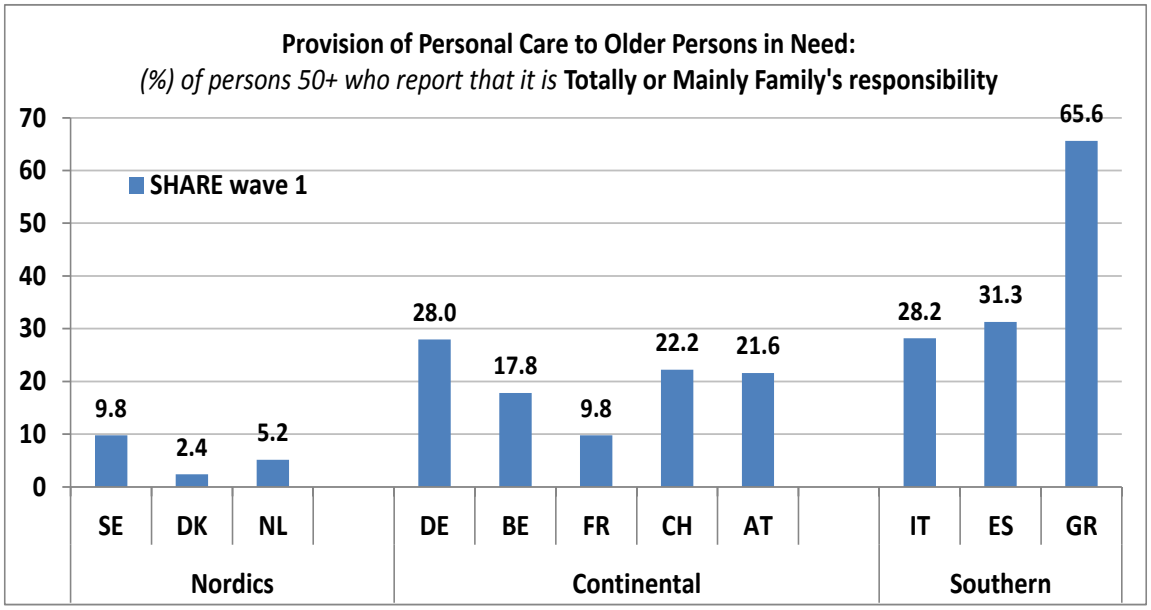


Source: Lyberaki, 2017, from SHARELIFE data.

Turning to **long term care (LTC),** this is seen in Greece as a job for the family. Figure 3, from SHARE 2004[5] charts people's opinions of who *should* have responsibility for care of the aged – State or family. We see a North-South gradient, with Greece being an outlier – even in the South.

[5] Lyberaki, 2009; Lyberaki and Tinios, 2010; Lyberaki et al. 2013.

Figure 3: Perceptions on family's role in care provision, SHARE wave 1



Source: SHARE wave 1 (2004/2005).

The 'informal welfare state' (Lyberaki and Tinios, 2014) relied on women. Despite formally stated intentions, the process of 'recalibration and reform' (Ferrera, 2010) strengthening formal social protection had hardly advanced. As a result, the crisis found Greece without a functioning social safety net, implying that much of the emergency social protection had to be provided by the family.

Box 1: Has Austerity obliterated LTC? A story in Greek statistics

Information on public LTC is patchy and inconsistent. One of the sources most cited are the projections of the EU Ageing Working Group (AWG), which in its reports (AWG 2018, 2015) mentions current public expenditure before projecting forward to 2060 and beyond. For the case of Greece, the AWG published wildly different estimates, indicating a dramatic decline from 1.4% of GDP in 2009 to 0.1% in 2018 -with no apparent justification. In the 2015 AWG, beneficiaries were reported as 288 thousand receiving LTC *cash* benefits; who appeared to have lost it. Greece thus is held to be the only bailout country for which austerity has led to absolute falls in the public LTC supplied.

However, the reason for this is nothing to do with austerity, but plenty to do with 'Greek statistics'. The 2015 figure was larger, as it included a cash benefit directed specifically to paraplegics; for reasons unknown, this was not included in the 2018 figures. More importantly, neither report includes estimates for the Help at Home programme, run by municipalities with structural funds finance, nor of residential care, financed by municipalities, the church and NGOs. When looking aτ ESSPROS data, LTC spending seems to have increased from €105.1 million to €126.7 million in 2015, but as noted by the Social Protection Working Group, LTC data and health care data cannot be easily separated.

Pending a fuller investigation (see appendix) it is not possible to say that retrenchment has hit LTC. However, we may still conclude that LTC in Greece exists in a kind of public finance 'black hole' – being almost invisible to policy makers.

This observation is particularly worrisome given the size of the ageing challenge. Going back to the 2018 AWG report, the scenario that asks the hypothetical convergence question of Greece with the rest of the EU, results in public expenditure 28 *times* greater its baseline value (5.6% of GDP rather than 0.2%). We may conclude from this, that the ageing challenge for LTC remains.

It is indubitable that the *formal* provision of personal long-term care is small and uneven (Tinios, 2016). Public involvement was traditionally provided in medicalized form by the hospital sector and in outdated residential care institutions, frequently charitable institutions set up decades before (see Appendix 2). These were supplemented after 2000 by the Help-at-Home Programme, which delivered personal and practical at people's homes. Long-term care for the elderly in Greece, can be summarized in a Table 2, relating the type/setting of care provision (care homes, home-based care, day care centres) to 'who provides care' (public sector, non-profit organizations, private sector, informal care provision).

Table 2: Long-Term Care for the elderly: the state of the art in Greece

Greece: Long-term care provision		**who provides care**			
		Public sector	**Non-profit organizations**	**Private sector**	**Informal care**
Type of care provision	**Home-based care**	Care is provided through the '***Help at home***' Programme	Non-significant	Private companies	Care provided by family, friends or third parties
	Care homes	Limited number of care homes owned by public sector	Owned and managed by the Orthodox Church or other non-profit organisations	Private companies	N/A
	Day care centres	Day care centres at municipality level	N/A	Non-significant.	N/A
	Other	Allowance	N/A	n/a	N/A

Needs for care were met through two mechanisms: (a) by the unregulated private carer market, which grew enormously in the 1990s owing to the availability of supply provided by immigrant women and (b) by informal unpaid provision on the part of women to members of their family. The two sectors are linked; the rise in female labour participation since 1995 was associated with the rise in immigration from the Balkans and Eastern Europe (Lyberaki, 2011). The paid-for market is being squeezed since the crisis by falls in supply as many of the first wave immigrants return home, as a result of the crisis; this market could also be affected by rises in the tax obligations of self-employed workers.

3. The need for care: The Demand side

How does Greece compare with other countries? We approach this issue by looking at the need (demand) for care in the conventional way – by examining reported limitations in Activities of Daily Living (ADL) (e.g. Clark, 2004) by age groups (Table 3). The following text box makes clear that the definition of need for care used in different countries varies. Our choice of self-declared ADLs follows practice in the US and elsewhere; in the absence of other definitions it is useful to benchmark across countries. One should bear in mind that bureaucratic use could apply different criteria and could differ from self-assessment. Reporting an inability to perform a particular task may be affected by bureaucratic notions of severity, if need has been ascertained by a formal process. This being said, given that the respondent is simply asked whether he/she can perform some activities unaided, reporting ADL may have a lower subjective variation than, say, reporting on health status.

Box 2: Limitations in Activities of Daily Life

Six activities are included in the SHARE questionnaire, following identical formulations in the US HRS and UK ELSA **i)** Dressing, including putting on shoes/socks; **ii)** Walking across a room; **iii)** Bathing or showering; **iv)** Eating, such as cutting up your food; **v)** Getting in and out of bed; **vi)** Using the toilet, including getting up or down.

Instrumental activities of daily life (IADL): Seven activities are included: i) Using a map to figure out how to get around in a strange place; ii) Preparing a hot meal; iii) Shopping for groceries; iv) Making telephone calls; v) Taking medications; vi) Doing work around the house or garden; vii) Managing money, such as paying bills and keeping track of expenses.

The eleven countries (in addition to Greece) that participated both in SHARE wave 2 (2007) and SHARE wave 6 (2015) *are categorized for convenience in four clusters:* ***Nordics*** *(DK and SE),* ***Continental*** *(DE, BE, FR, CH and AT),* ***Southern*** *(IT and ES) and* ***Eastern*** *(PL and CZ)*. Though the membership of the clusters is familiar, they do not entail accepting any of the established schemes of categorisation.

A recurring theme in virtually all SHARE work is the North-South gradient, where there is a tight clustering in country groupings. However, the North-South gradient seems

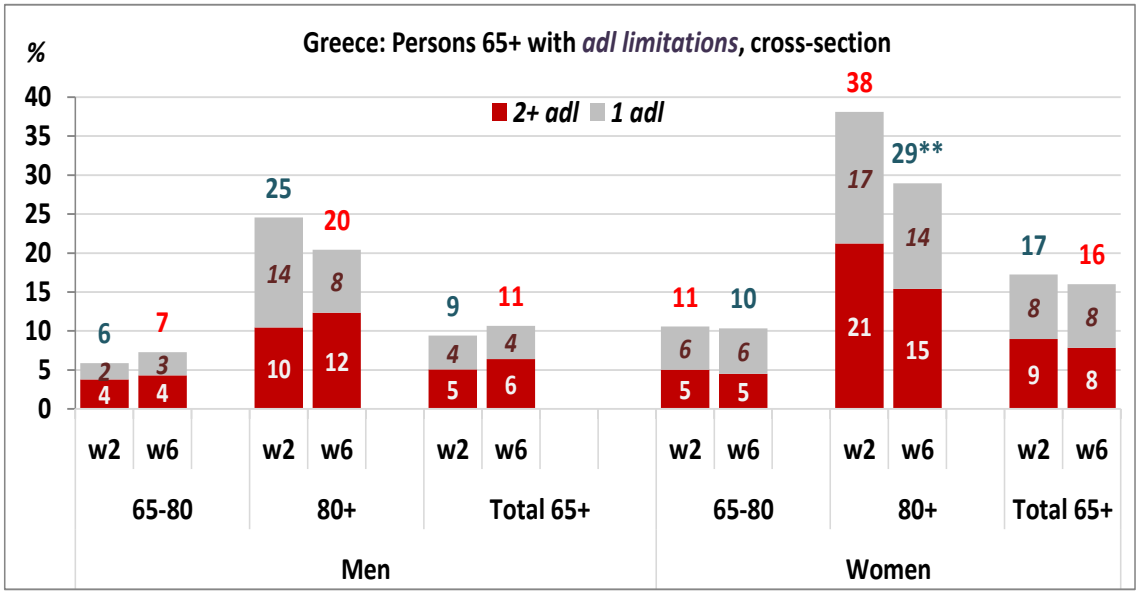
absent in the needs for care. That, at least for Greece is absent; it has much lower percentages of persons in need of care than the European average, both for men and women. Indeed, Greece in ADL limitations is closer to the Nordic (i.e. Sweden and Denmark) than the Southern countries for both age groups. Other Southern European countries for people over 80 (37.8%) are in 2015 by 12 percentage points more likely than Greece (25.5%) to report at least one ADL limitation. In contrast, Instrumental ADLs show less differentiation, or differences between waves.

Table 3: Persons 65+ with at least 1 ADL limitation, by age group, cross sectional analysis, wave 2 and wave 6

SHARE W2-W6	***(%) of persons with at least one ADL***				**Change w2-w6 in p.p.**	
Persons 65+	*Wave 2 (2007)*		*Wave 6 (2015)*			
Country	**65-80**	**80+**	**65-80**	**80+**	**65-80**	**80+**
Nordics	8.8	28.5	8.6	22.4	-0.2	-6.1
Continental	11.5	35.8	12.6	35.8	1.1	0.0
Southern	12.5	37.4	11.0	37.8	-1.5	0.4
Greece	**8.4**	**32.8**	**8.9**	**25.5**	**0.5**	**-7.3**
Eastern	25.3	47.7	16.1	39.5	-9.2	-8.2
Total	**13.2**	**36.9**	**12.2**	**36.0**	**-1.0**	**-0.9**
SHARE W2-W6	***(%) of persons with at least one iadl***				**Change w2-w6 in p.p.**	
Persons 65+	*Wave 2 (2007)*		*Wave 6 (2015)*			
Country	**65-80**	**80+**	**65-80**	**80+**	**65-80**	**80+**
Nordics	14.2	43.6	13.3	40.1	-0.9	-3.5
Continental	16.6	49.9	16.3	50.4	-0.3	0.5
Southern	22.2	53.2	17.2	53.6	-5.0	0.4
Greece	**25.4**	**60.7**	**24.8**	**58.1**	**-0.6**	**-2.6**
Eastern	34.7	64.1	26.0	59.1	-8.7	-5.0
Total	**20.6**	**52.2**	**17.9**	**52.2**	**-2.7**	**-0.1**

How have the needs for care changed over the crisis? Needs are largely determined by physiology. *In theory, g*iven ageing, as well as cuts in health care (the austerity narrative), one would have expected a *rise* in the demand (needs) for care. However, no such tendency is seen. We may even say that the opposite holds: needs for persons of age 80+ as measured by ADLs *drop* in Greece over the crisis, especially among women, where the drop is statistically significant (Figure 4). For other age groups there is definitely no increase -needs remain unchanged. More specifically, a cross-section analysis between wave 2 (2007, before the economic crisis) and wave 6 (2015, after economic crisis), showed that 20% of men age 80+ reported ADL limitations in 2015 -a decrease of 5 percentage points compared to 2007- while the percentage for women of age 80+ was 29% in 2015, down from 38 % in 2007.

Figure 4: Changes in ADL limitations, 2007-2015, persons 65+, Greece



Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

Note: A t-test has been employed to test the difference in adl prevalence between wave 2 and wave 6 ***, ** and * mean that the estimated figures for wave 6 are significantly different compared to those of wave 2 at 0.01, 0.05, and 0.1 level respectively.

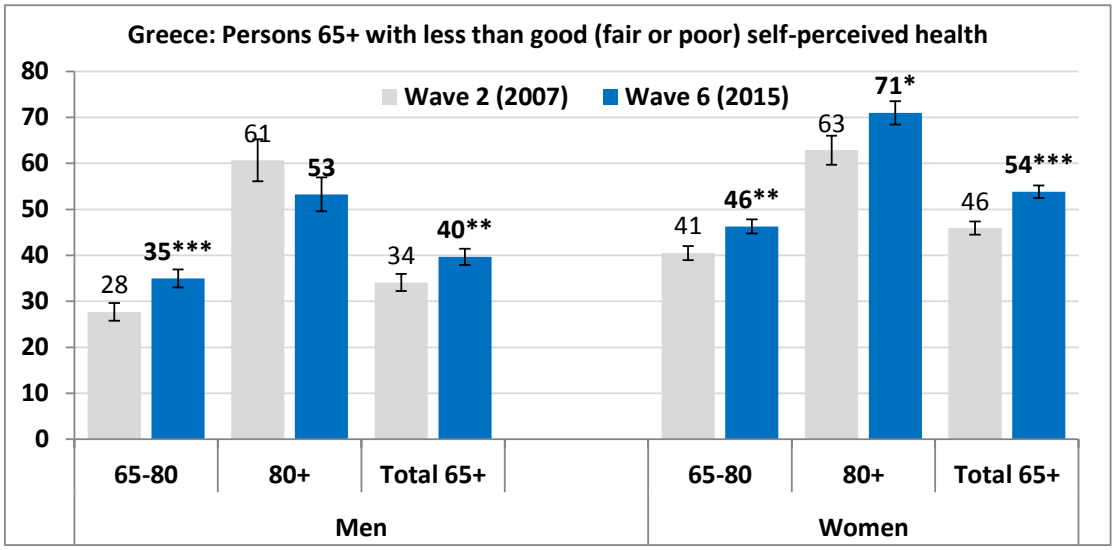
ADLs should be, at least roughly, related to health status. That, however, is worsening: Almost all groups (except men of age 80+), report overall *self-perceived health* to be worse in 2015 than 2007 (Figure 5). Self-perceived health for men of age 65-80 'less than good' rose to 35.0% in 2015 (from 27.7%) and equivalently for women (46.3% from 40.5%). For the 80+, self-perceived health went separate ways for the two genders: bad

health dropped for men and *rose* for women. GBD-G 2018, examining administrative outcome data concur with this fall.

This leads us to a first 'paradox': although health is worse, it does not lead to higher ADL limitations, but lower. Less healthy people are, nevertheless, no less active.

The paradox cannot be seen independent of gender*:* women report ADL limitations in higher percentages than men, while their health is worse, even controlling for age. However, women appear to be more stoic– they report ADL limitations in lower percentages compared to 2007, while the gap between them and men is smaller in 2015 than in 2007. This stoicism – more marked after 80 – implies that, as crisis-related needs of other family members are mounting, older women stress their own LTC needs less. Older cohorts of women may have been conditioned through their lives to defer to male relatives; so, they do not showcase their own needs, in order 'not to be difficult'.

Figure 5: Changes in self-perceived bad health, 2007-2015, persons 65+, Greece



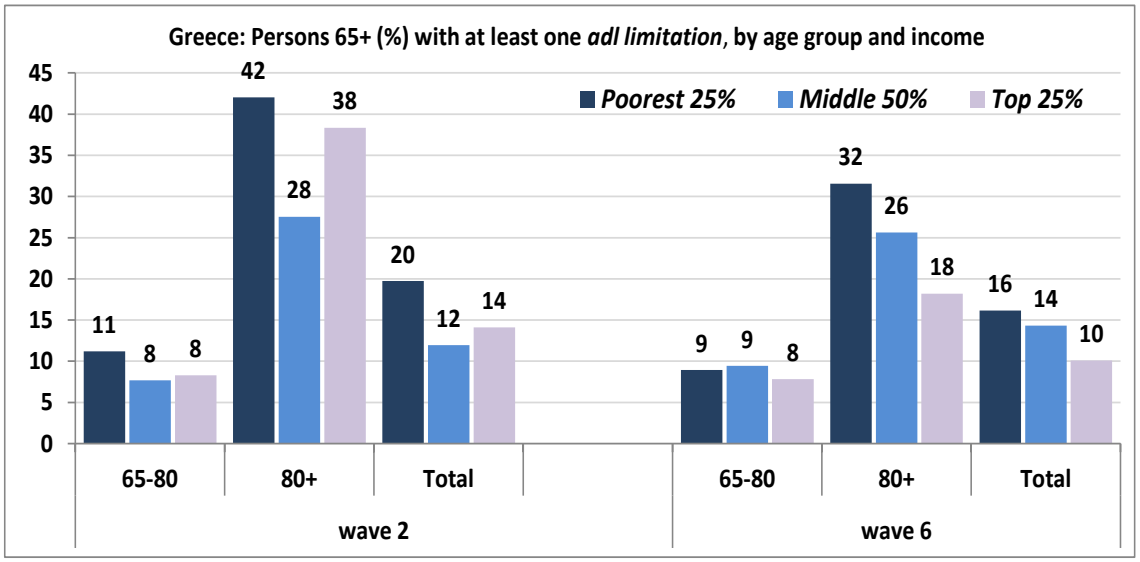
Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

Note: A t-test has been employed to test the difference in the less than good health prevalence between wave 2 and wave 6. ***, ** and * mean that the estimated figures for wave 6 are significantly different compared to those of wave 2 at 0.01, 0.05, and 0.1 level respectively.

How is the need for care linked to income? Looking at the in-need-of-care risk by income quartiles, Figure 6 suggests that while *before* the crisis there was no clear association between income and ADL limitations (controlling for age), in wave 6 the relationship changed: A clear *negative* relationship emerges for the very old (80+),

though not for the younger group; the poorest quarter are twice as likely to be in need of care as the richest one. It is also interesting to note that the *level* of need is much reduced for the two ends of the distribution.

Figure 6: Persons 65 with at least 1 adl limitation, by age and income status, cross section wave 2 & wave 6, Greece



Note: Income quartiles are defined based on the distribution of the equivalent income for 50+.

Adding dynamics*: Did the* changes *in income lead to a change in the need for care?* To address this question, we turn to the ***panel sample*** (i.e. persons who participate in both wave 2 and wave 6).

Table 4 presents income rises and falls between 2007 and 2015 in Greece by gender. The *average* fall masks considerable heterogeneity, and is the product of sharp and diverging movements, both up and down. Some 40% of people aged 65-80 in 2007 (wave 2) say their income fell by more than a third in 2015 (wave 6); this is counterbalanced by a quarter who note *rises higher* than 15%. The differentiation applies sharply to gender: Sharp income decreases are more pronounced among elderly women than for men; the reverse holds for income *rises* (21.3% of women vis-à-vis 27.7% of men). This differentiation is most likely due to the treatment of widows' pensions after 2010.

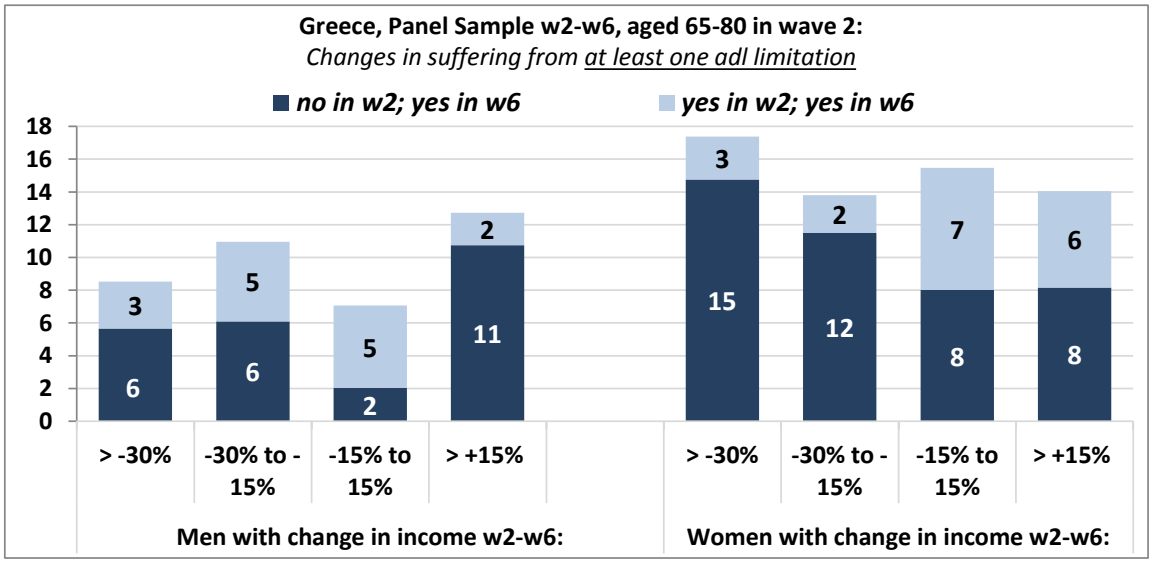
Changes in income appear linked with care needs for elderly women, but *not* for men (Figure 7). The proportion of women aged 65-80 in wave 2 (2007) with some ADL

limitations for the first time in wave 6 reaches 15% for those whose income fell by more than 30%, and declines with income falls. For men, in contrast, no such relationship is evident. (it should be noted that average ages are similar across the income categories). For the older group, this relationship is not as obvious – probably due to the prevalence of widows amongst those with large income falls.

Table 4: Categories based on change in income between wave 2 and wave 6 of persons aged 65+ by gender, panel sample Greece

Panel sample Greece	Change (%) in income between wave 2 and wave 6, Panel sample of persons 65 plus in wave 6						
	> -30%	-30% to -15%	-15% to -5%	-5% to +5%	5% to 15%	> +15%	Total
Men	37.8	12.5	9.4	5.9	3.0	31.4	100.0
Women	39.2	11.7	10.8	7.2	3.8	27.3	100.0
Total	**38.6**	**12.1**	**10.2**	**6.6**	**3.5**	**29.1**	**100.0**

Figure 7: Panel sample w2-w6, Greece: Changes in the *in-need-of-care status* across waves, by changes in *income status* between w2 & w6, persons aged 65-80 in w2



4. The supply side: informal care provision

Box 3: Definitions – Professional and Informal Care

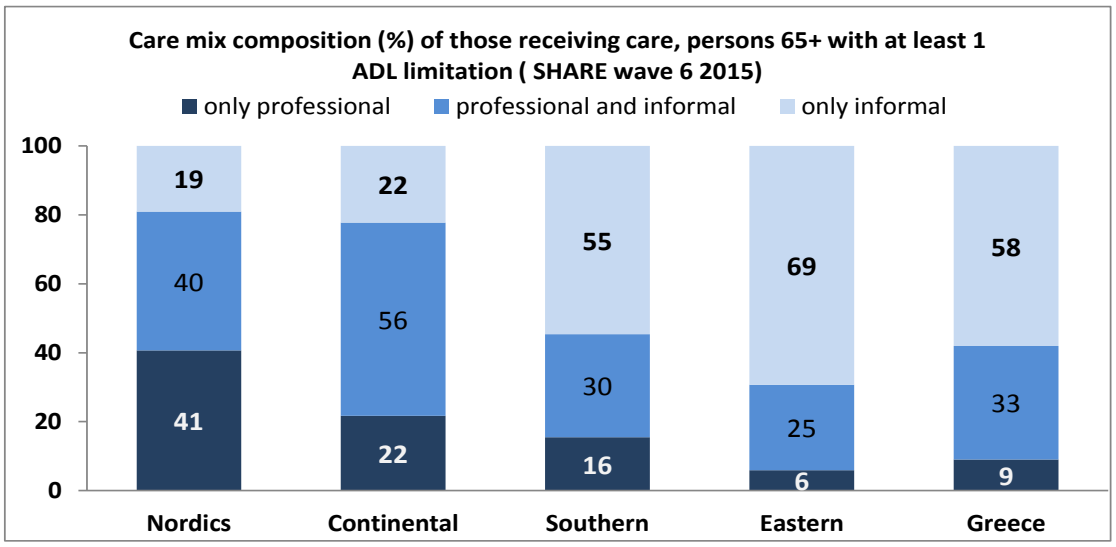
Professional care: Includes any professional or paid services received in own home such as: i. Help with personal care, (e.g. getting in and out of bed, dressing, bathing); ii. Help with domestic tasks (e.g. cleaning, ironing, cooking); iii. Meals-on-wheels (i.e. ready-made meals provided by a municipality or a private provider); and iv. Help with other activities (e.g. filling a drug dispenser.

Informal care/help: This indicator equals to one if a person either receives informal care/help from outside the household on a daily or weekly frequency *or/and* receives personal care regularly from someone in the household. Consequently, the indicator equals zero if a person receives neither help/care from a person outside the household, nor from a person within the household.

How are needs met?

Looking at the European landscape as a whole, *formal* provision dominates in the north and the family in the south. Formal in the SHARE questionnaire comprises professional care – whether paid for by the State, or out of pocket by the family. The role of family and friends in care to the elderly in Southern and Eastern countries is far more important, than in Continental and Nordic countries (Figure 8). In Southern countries, 54.6% receive informal care only; the respective share is 19.1% in the Nordic and in Continental countries 22.2%. On the other hand, receiving *both* at the same time is characteristic in Continental countries (56.0%). Informal care, thus, plays a role everywhere, even where social protection dominates over other delivery modes. Greece follows the South in the overall importance of the family. However, regarding the low value of exclusively formal care, it is closer to Eastern countries; this might reflect that quality is lower, or that exclusively formal care is insufficient to meet needs.

Figure 8: Care mix (%), of persons 65+ with at least one adl limitation who receive any type of care, SHARE wave 6



Source: SHARE Wave 6 (2015), Release: 6.0.0, March 31st 2017.

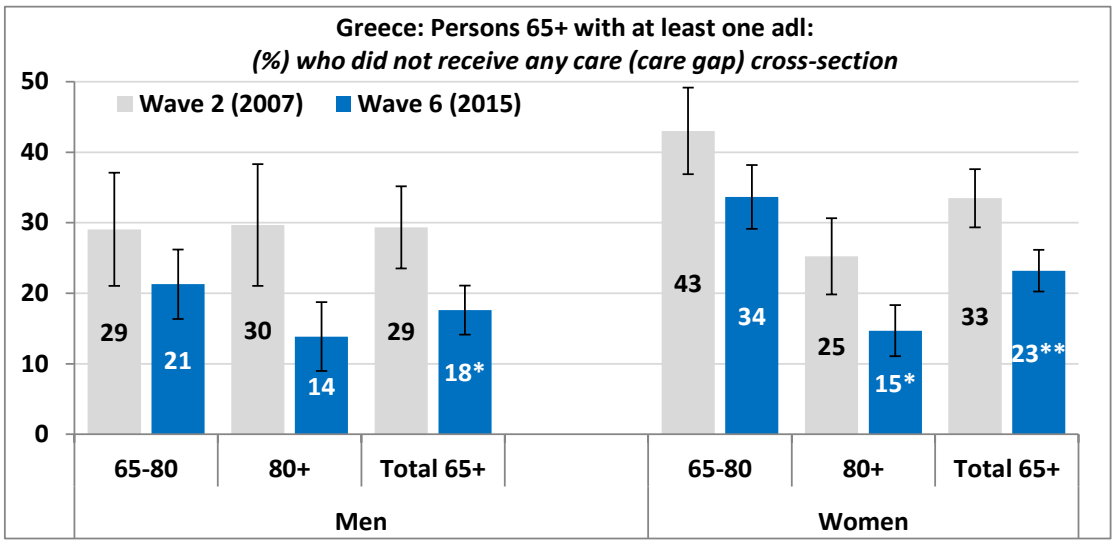
Did the crisis leave more needs unmet in Greece? A perusal of newspaper headlines on 'the humanitarian crisis' predisposes for a widening care deficit. If we factor in the ageing narrative, this expectation would only be reinforced.

But, contrary to expectations, care gaps – the percentage who expressed need for care (ADLs), but received none – ***shrank*** (Figure 9). This is less marked for women than for men- but applies for both genders and age categories. Taking the 65+ sample, measured gaps fell from 29 to 18 % for men and from 33 to 23 % for women. Comparing this with the picture on needs, the fall in care gaps is larger than any fall in the care needs, though it affects the same groups[6].

How was the gap filled? Contrary to expectations it is *not* informal provision that rose, but *formal* (professional) care. Whereas in 2007 16% of those in need received formal care (Figure 10), that rose to 33% (7% exclusively formal and 26% in combination). The percentage of *exclusively* informal fell, even though total informal rose (61% to 72%).

[6] Standard errors are large due to sample size. Though care gaps for ADL>2 moved in the same way, differences were not statistically significant. However, the one-tailed test that gaps rose was rejected.

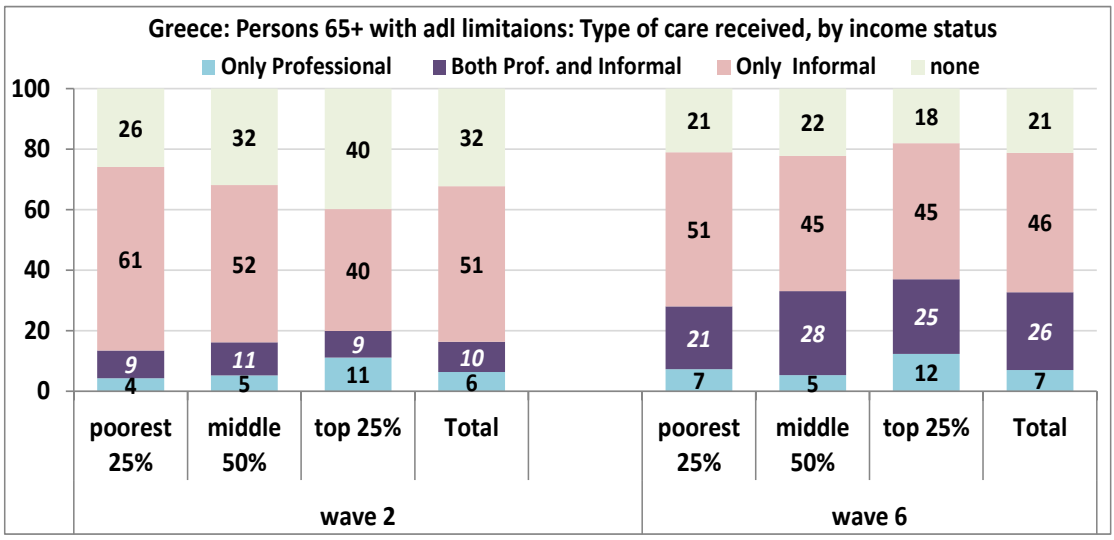
Figure 9: Changes in the care gap (no care received) of persons 65+ with at least one ADL, by gender and age, SHARE wave 2-wave 6, cross section



Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.
Note: A t-test for the difference between wave 2 and wave 6. ***, ** and * showed w6 is significantly different compared to those of wave 2 at 0.01, 0.05, and 0.1 level respectively.

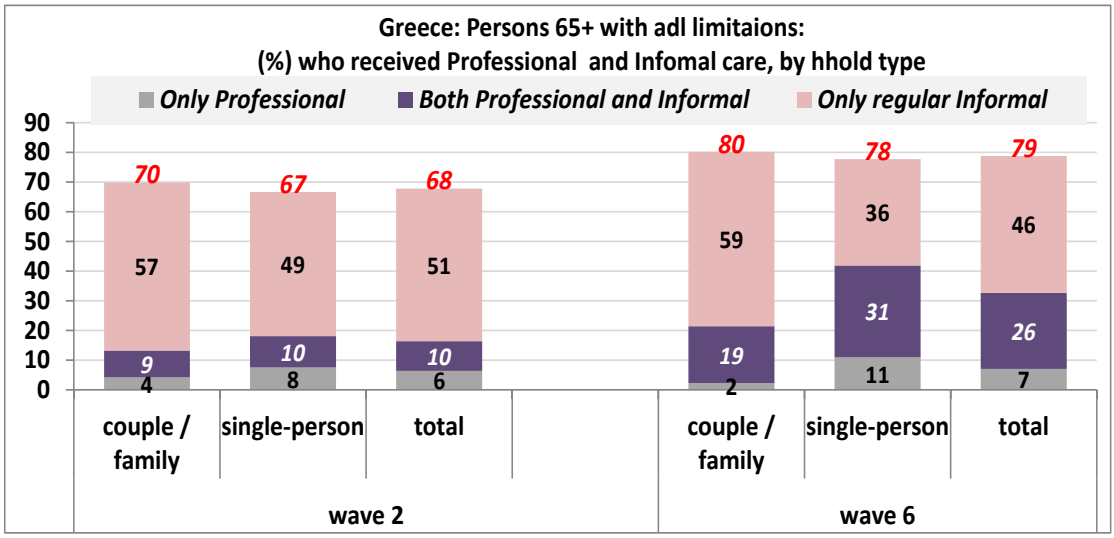
When we disaggregate data by income status (Figure 10) three observations stand out: First, care gaps were more common among the richest in 2007, comparing the top with the bottom quarter of the income distribution. The difference was made up by greater incidence of informal care for the poorest. Second, care gaps shrank between wave 2 and wave 6 for all income groups. The relationship by income disappears in wave 6– all groups are equally likely to have unmet needs. Third, the response to needs is for all income classes due to an increase in *formal*, rather than informal care. Having said this, even the rich are able to mobilise greater informal support.

Figure 10: Persons 65+ with at least one ADL: (%) who have received any care/help and care mix of care received, by income status, Greece, cross sectional w2 & w6



Lower care gaps in 2015 affect all types of households. Those living alone are not more prone to care gap, though they do have to rely on formal care to a greater extent. (Figure 11).

Figure 11: Persons 65+ with at least one adl: (%) who have received any care/help and care mix of care received, by type of household, Greece, cross sectional w2 & w6

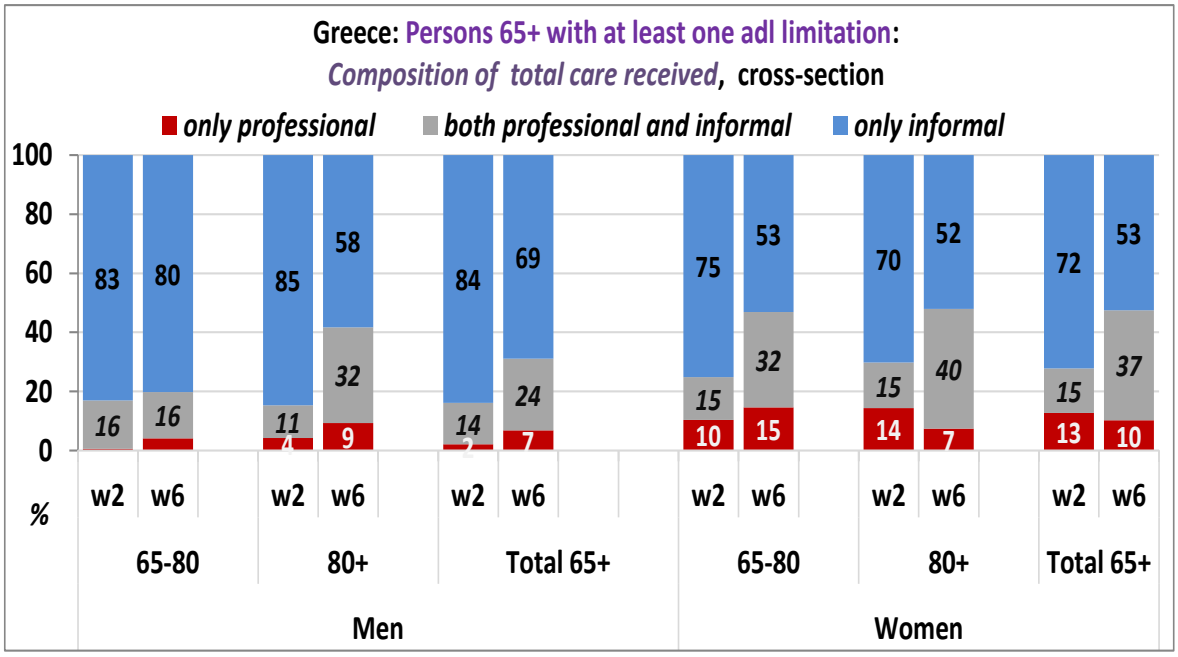


Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

Did the care mix change over the crisis? The austerity narrative predisposes that formal care should have fallen; family incomes were squeezed, and state provision was under threat. Again, the opposite holds: Figure 12 shows that changes in the care mix between

2007 and 2015 are due to greater *formal* (meaning professional) care and *not* informal care. The shift was more notable for people over 80 and for women of all ages. This, admittedly, happened against a background where informal help still dominates.

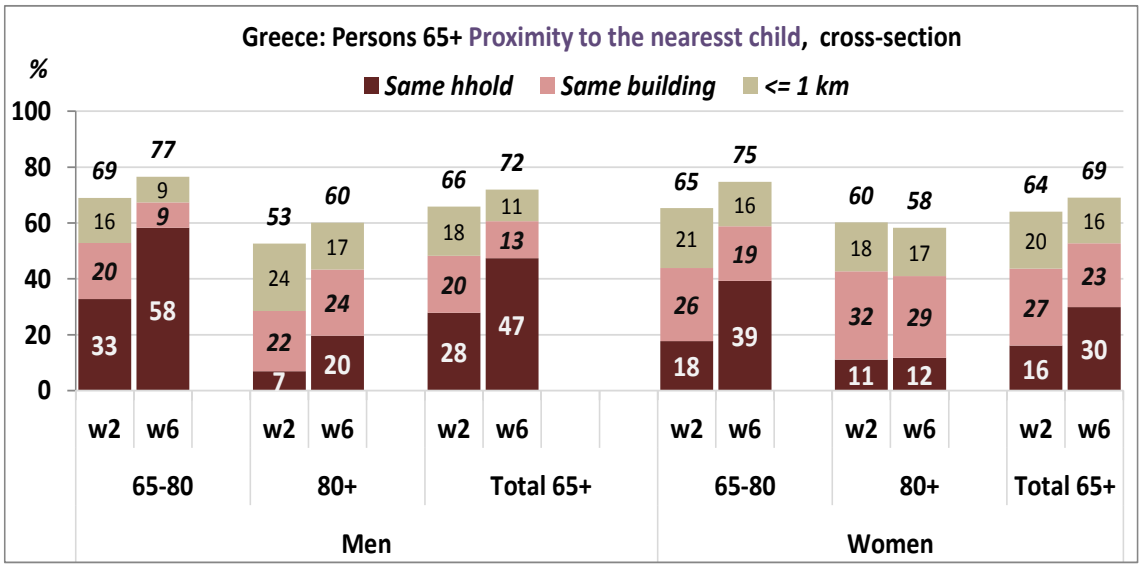
Figure 12: Composition of total care received by type of care, persons with 1+ ADL limitation, by gender and age, Greece, wave 2- wave 6, cross section



Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

This is paradoxical for two reasons: *first*, austerity limited (or at least did not increase) the provision of care by public bodies. *Second*, family consolidation meant that there was a movement of generations to pool resources by moving in together (often from a flat in the same building). Figure 13 illustrates this response to the crisis- elderly households accommodating grown children. Both factors should shift the care mix towards informal care – which they clearly did not. The paradox thickens.

Figure 13: Proximity to the nearest child, persons 65+, cross section



Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

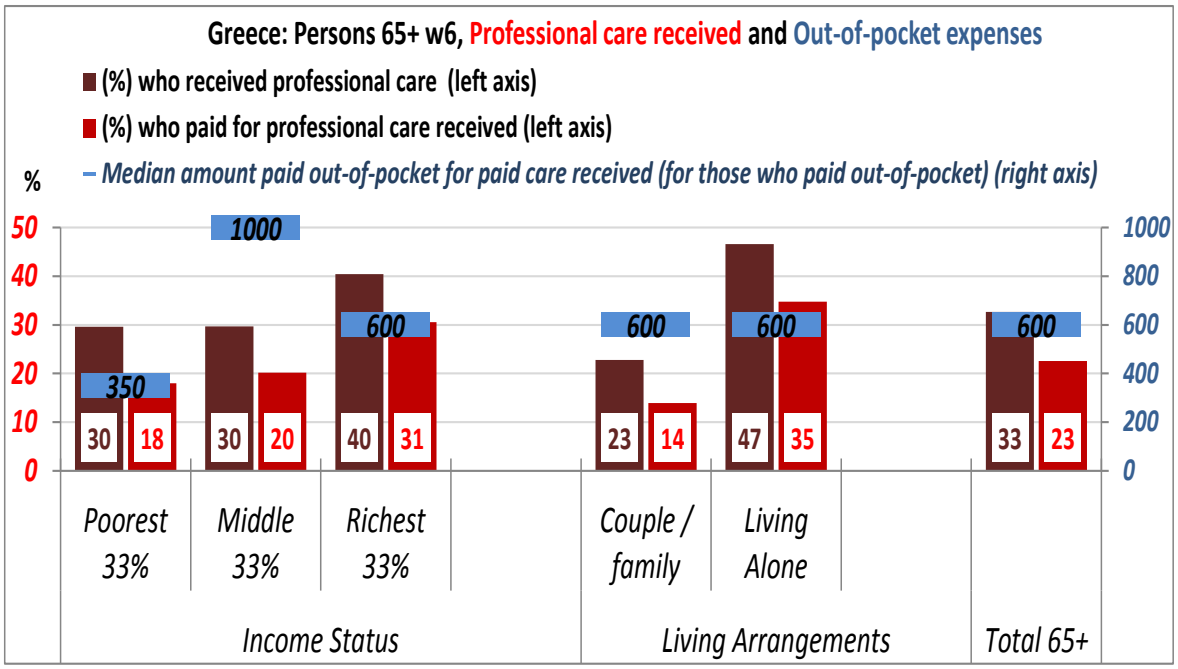
How did households secure more formal long-term care? The apparent paradox is explained once we take on board that formal care includes professional bought-in care, paid out of pocket by families (Figure 14). What is happening is that Greek families are paying to access care services. Eliciting respondents' cooperation for financial information is notoriously hard in Greece, implying that sample sizes of positive replies are small and values underestimated.[7] Even so, the amounts involved are non-negligible and are paid across the income distribution.

Median amounts of out-of-pocket expenditure are approximately €600/year, an amount not small for Greeks amid austerity. As a point of reference, in December 2016, administrative data (Helios) show mean the monthly pension was EUR 820 (the median around EUR 700) -with large differences across gender- and with the modal value at the private sector minimum pension (EUR 420) ('Helios data'). For the majority, therefore LTC expenses amounted to a monthly pension or more.

One possible economic explanation proposed by Lyberaki et al. (2017) is that pensions fell by *less* than wages of carers, implying a relative price fall for private LTC. Hence pensioners find it easier to devote funds (even from a shrinking overall family budget) to provide care for family members.

[7] Those aged 65+ who paid out of pocket are 54 persons (observations), 22 living as a couple and 32 living alone.

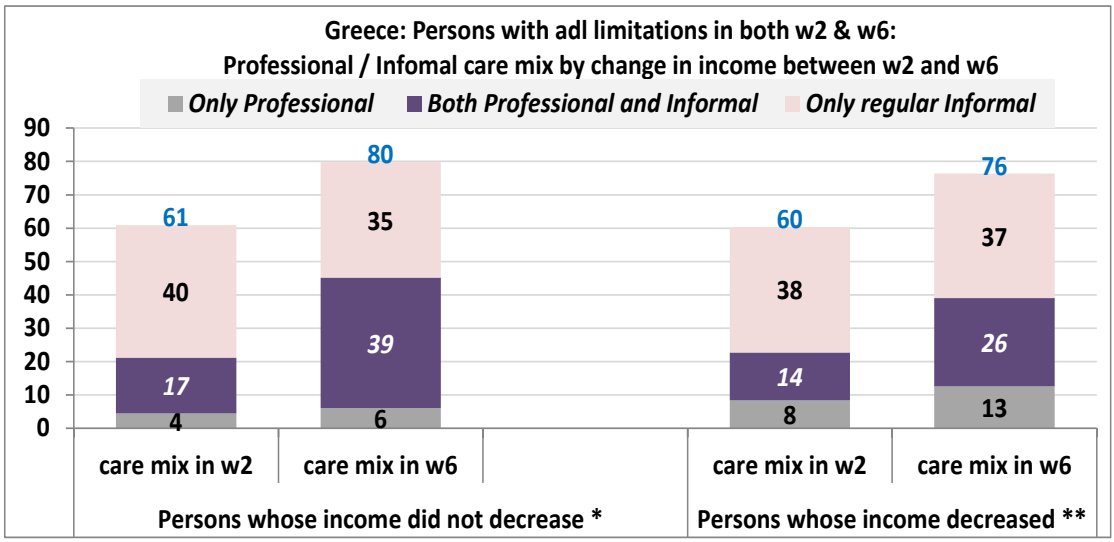
Figure 14: Paid out-of pocket for professional care received, persons 65+, Greece, w6



Source: SHARE Wave 6 (2015), Release: 6.0.0, March 31st 2017.

Adding dynamics: Trying to examine how the changes in the care gap between 2007 and 2015 are associated with the changes in income over the same period, Figure 15 looks at persons in-need-of-care in *both* wave 2 and wave 6 (panel sample). We look at how these needs are met across waves, depending on the changes in income status. Given that these people needed LTC in both waves, they are most likely to have been exposed to austerity and other supply shocks.

Figure 15: Panel sample of persons with at least one adl in both waves: (%) who have received any care/help and care mix of care received, by change in income, Greece, panel sample w2 & w6



Source: Panel sample, SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

Note: * N= 31. **N= 37.

Persons whose income did *not* fall between 2007 and 2015 saw a big decrease in the care gap (from 39% in 2007 to 20% in 2015), largely driven by the increasing inflows from both professional and informal care (from 17% in 2007 to 39% in 2015). For this group, inflows of exclusively informal care fell from 40% in 2007 to 35% in 2015. Care gaps *also* fell, though by less, for those whose income decreased between 2007 and 2015; care gaps in 2015 are 24%, down from 40% in 2007.

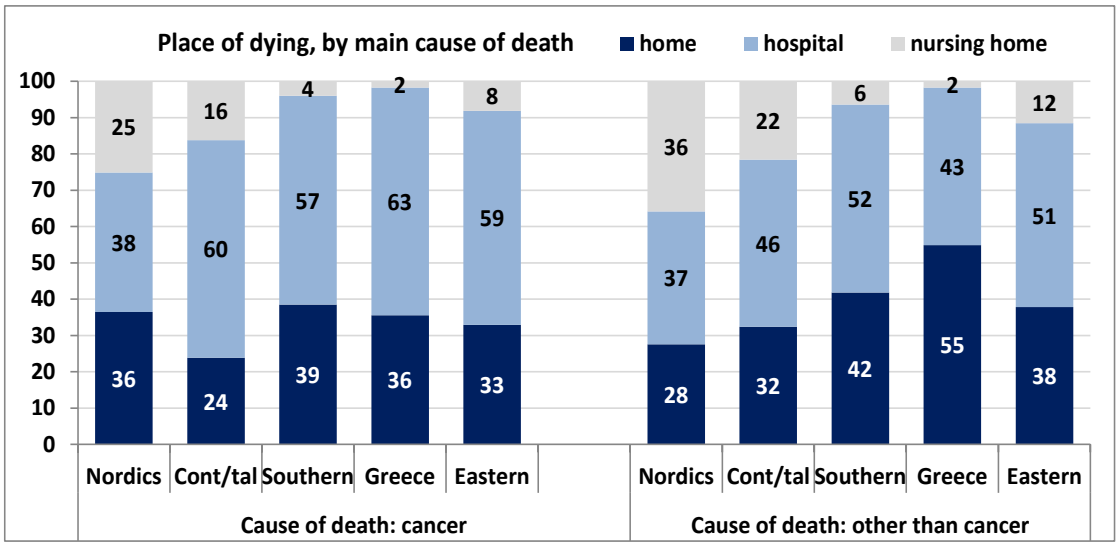
5. A first look at exit interviews: Care in the last year of life

What happens when needs reach their peak, in the last year of a person's life? Do the same mechanisms react, but to a greater extent? Are there other mechanisms activated? Or, do greater needs translate into higher care gaps?

These critical questions for individual well-being can be approached for the first time by an analysis of SHARE exit interviews – given by relatives of w2 panel members who died between 2007 and 2015. This in Greece comprised 350 individuals, around ten percent of the w2 sample.

Dying at home or in institutions: Even when controlling for the cause of death (e.g. disease) a remarkable North-South gradient appears in the share who lived in a nursing home or hospice over their last year. Figure 16 shows that, excluding cancer, more than one out of three persons in the North spent their last year in a nursing home; this falls to 22% in the Continental countries, and almost disappears in the South and in Greece (2%). More than one out of two (55%) died at home in Greece twice the share of the Nordics (28%).

Figure 16: Place of decease, by cause of death SHARE wave 5 and wave 6

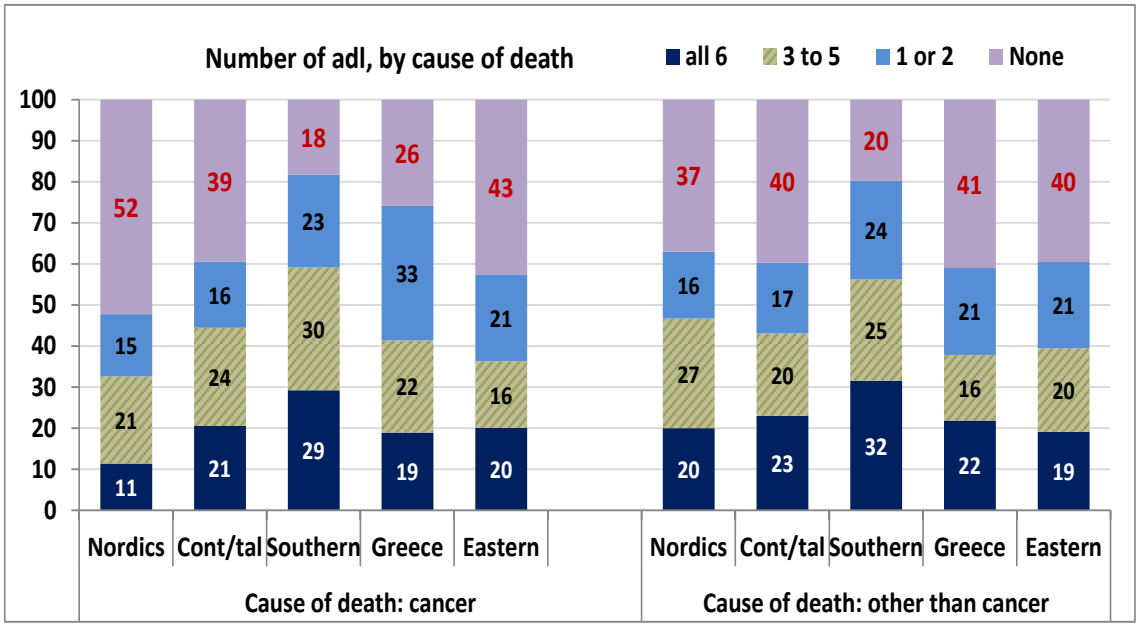


Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

Notes: (i) '**Home**' includes: at his/her home, at another person's home, at some other place. '**Nursing home**' includes dying in a nursing home, in a residential home or in a hospice.

How did needs develop in the last year? Figure 17 shows people who encountered difficulties with ADLs in the last year. Even controlling for the cause of death, that exceeds 60%, well above the corresponding figure of persons of the same age (as analysed in the previous section). The rise in needs is thus amply confirmed. Needs both affect a greater percentage of the group and are more severe. There is remarkable dispersion in the extent of need across Europe- possibly unexpected for something physiologically determined. Greece once more is at variance with other Southern countries, showing a pattern of ADLs similar to the Nordic and Continental countries.

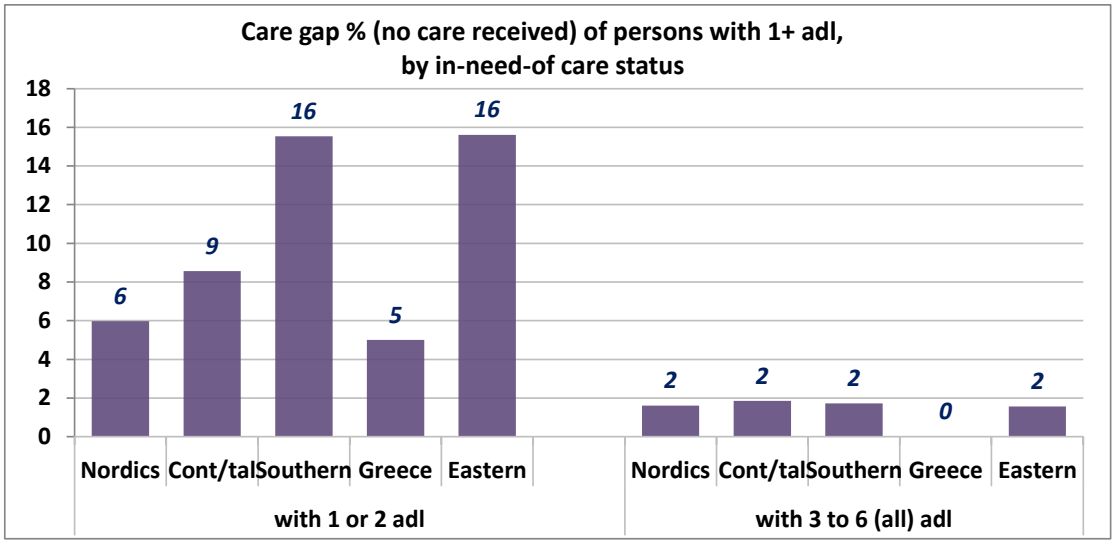
Figure 17: Number of ADL during the last year of life, by gender and cause of death



Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

Did the increasing needs result in higher care gaps? Figure 18 suggests that when needs rise, mechanisms are activated to address them: those with >3 ADLs and who did not receive any care is negligible everywhere. Conversely, even in their last year, less intense ADLs, are associated with higher care gaps; 16% in the Southern countries did not receive care, though Greece displays the *lowest* care gaps for every category of ADLs.

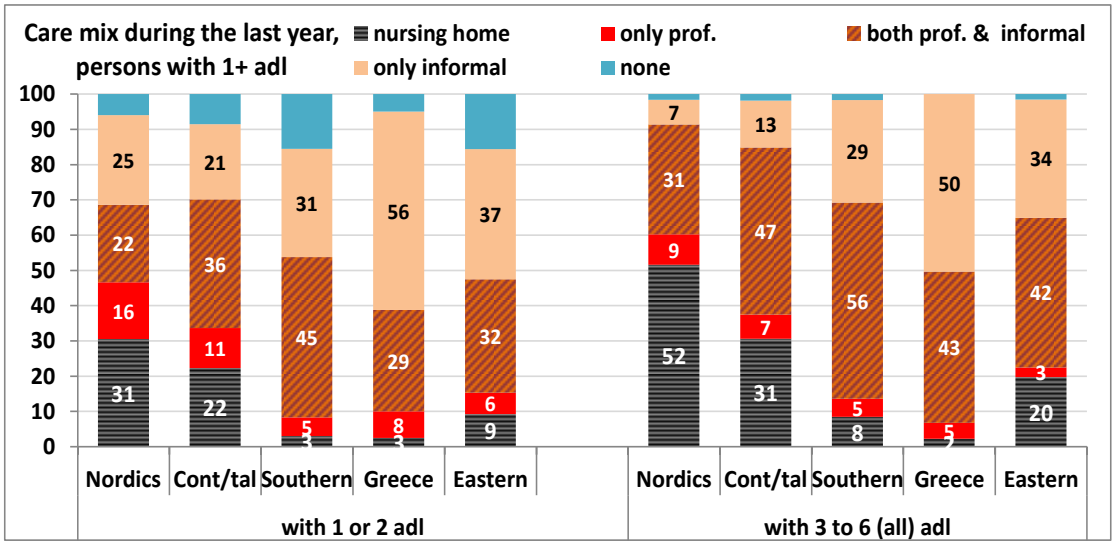
Figure 18: Care gap during the last year of life, by adl status SHARE wave 5 & wave 6



Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

Mechanisms which are activated to deal with the peak of needs: Mechanisms that meet needs in the last year fall into four mutually exclusive categories: i) living in a nursing home; ii) receiving only professional help/care (not in a nursing home); iii) receiving both professional and informal care (not in a nursing home); and iv) receiving only informal care. Figure 19 suggests that in all countries the complementarity of types of care increases. In the absence of specialised structures, Southern countries and Greece do not increase involvement of nursing homes care or purely professional care. Both formal and professional care respond to greater need: in Greece, half of those with 3+ ADLs, received only informal care.

Figure 19: Care mix during the last year of life, by the number of adl SHARE w5 & w6



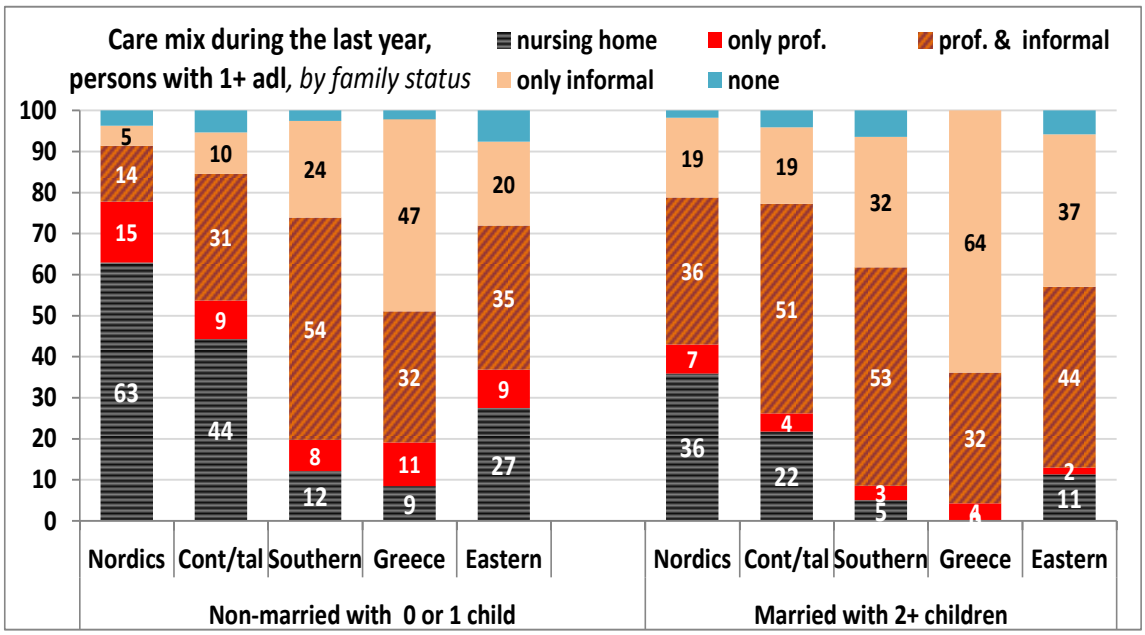
Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

Note: N 1 or 2 adl: Nordics (#118), Continental (#211), Southern (#264), Greece (#80), Eastern (#314).

N 3 to 6 adl: Nordics (#314), Continental (#542), Southern (#640), Greece (#133), Eastern (#587).

Differences in family arrangements do not affect care gaps but, as before, alter the care mix. Figure 20 shows this applying everywhere- albeit to a different extent. In Greece solely informal care concerns 47% of persons who were not married at death and have no or only one child, while the figure for those who were married and had 2 or more children was 64%. The absence of a family network is compensated by increasing exclusively professional care (even in the South) and by residential care.

Figure 20: Care mix during the last year of life, by family status at the moment of death, SHARE w5 & w6



Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

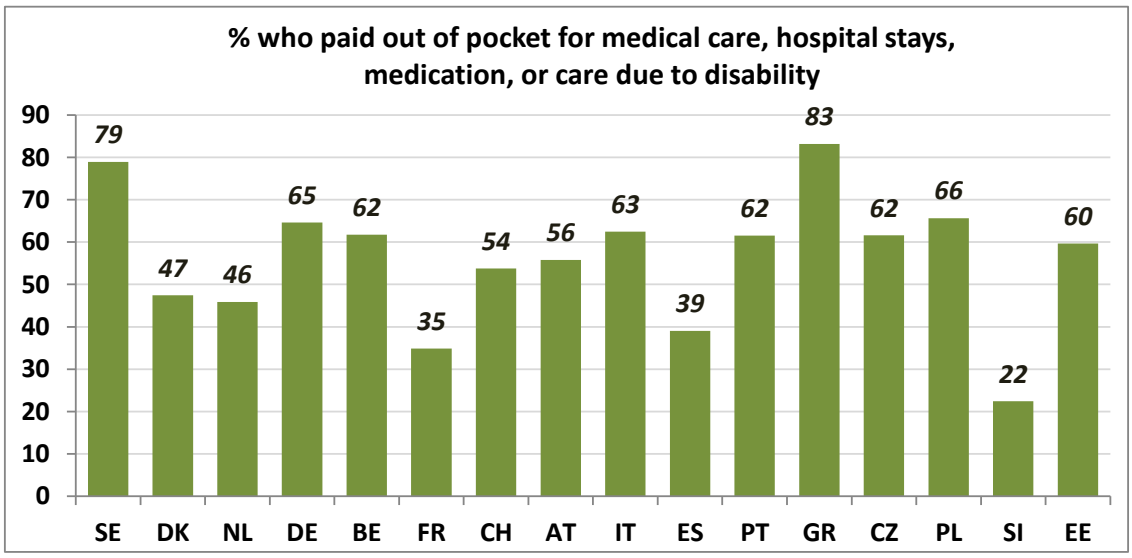
Note: N, non-married < 1 child: Nordics (#81), Continental (#149), Southern (#157), Greece (#47), Eastern (#171).

N married with 2+ children: Nordics (#170), Continental (#294), Southern (#374), Greece (#47), Eastern (#361).

Out of pocket expenses for the last year of life. Greece has the highest proportion (83%) of persons who paid –out-of-pocket for health care during their last year (Figure 21); Out of pocket costs for LTC are not noted, probably as the proxy replying would not have that information[8]. The median cost over the last year (in EUR) for those who paid is estimated EUR 550 in Greece. The figure is comparable to out of pocket costs for the entire Greek sample, despite the greater potential for underreporting. Still, the average hides considerable dispersion, evidenced by the distance between the median and the 75th percentile of the distribution as well as the entire distribution; a substantial minority were subject to catastrophic expenses. Figure 22 reports the out of pocket expenses for the median, 25th and 75th percentile, normalised by the country mean income. In addition to the familiar North-South gradient, the South and East are characterised by greater dispersion.

[8] We must remember that the respondent is a relative (proxy) who may not be in a position to know.

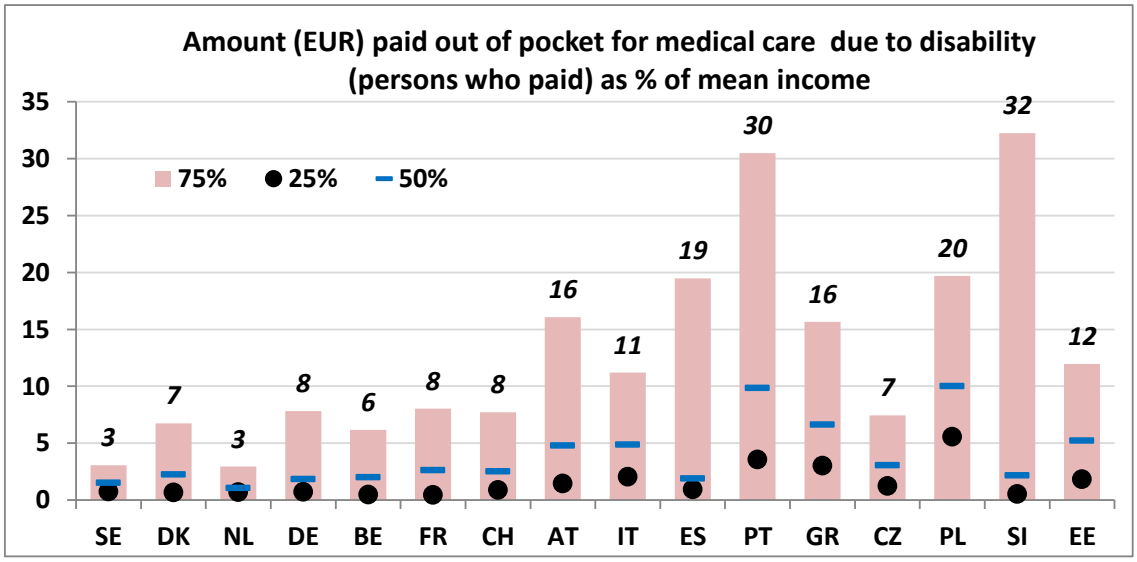
Figure 21: % of persons who paid out-of-pocket for health care during the last year of life, SHARE w5 & w6



Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

Note: Include only costs not paid or reimbursed by the health insurance or the employer for types of medicare such as: care from a general practitioner/ care from specialist physicians/ hospital stays/ care in a nursing home/ hospice stays/ medication/ aids and appliances/ help with personal care due to disability/ help with domestic tasks due to disability.

Figure 22: Amount paid out-of-pocket for health care during the last year of life as % of SHARE mean income, SHARE w5 & w6



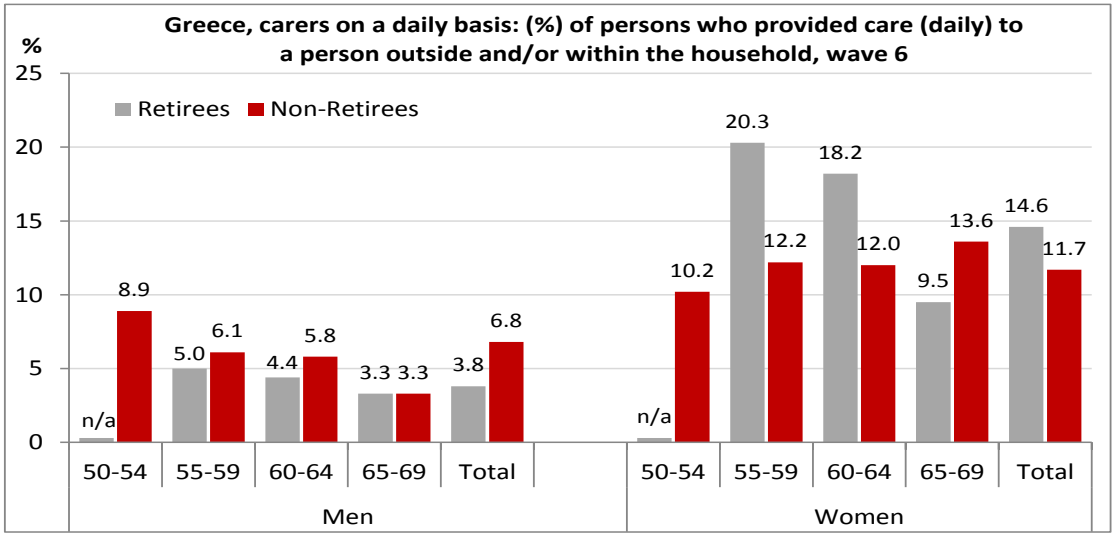
Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews., normalized by mean income for SHARE sample 50+.

Note: Include only costs not paid or reimbursed by the health insurance or the employer for types of medicare.

6. The gender dimension: Women, work and care

We know that during the crisis women worked more, they were looking for work more and were also retiring earlier (section 2). So, who provides the care needed to close the care gaps? Figure 23 compares the extent to which retirees and non-retirees provide daily care by 5 -year age group from the ages of 50 to 69. Women retirees provide *more* care; men *less*. This effect is reversed after the 'normal' retirement age of 65. This could be interpreted in two ways; either women are led to early retirement to provide care or, early retirement makes them more *available* to provide care. It is interesting to note that this sharp difference between retirees and non-retirees, was *not* a feature of the situation in 2007. The same goes for gender gaps; gender gaps in care provision widened strikingly in wave 6 among retirees, but shrank among non-retirees.

Figure 23: Carers on a daily basis: (%) of persons who provided care (daily) to a person outside and/or within the household, Greece SHARE wave 6



The gender difference could be linked to time use patterns. The first ever time use survey in Greece was conducted in 2013. That revealed that the contribution of help with domestic tasks on the part of men, when their spouses are working, was the smallest in Europe (Lyberaki and Tinios, 2016; Lyberaki, 2017).

7. Conclusions

What happened in long term care during the crisis can be summarized as a tangle of *five* paradoxes:

- Care *needs* remained stable or even fell, despite ageing and worsening self-perceived health, especially among older women.
- Care *gaps* shrank, despite limited and retrenched public provision.
- Gaps were filled by an increase in *professional* and *not* in informal family-provided unpaid care.
- This took place *despite* observed family consolidation – pulling in incomes and care resources together. So, families used their strained financial resources to buy and pay for more care.
- The incidence of out-of-pocket payments for care grew across the income spectrum despite falling incomes.

Given what we know about the informal welfare state, as well as the pre-crisis characteristics of LTC provision, the 'normal' reaction one would have expected is the family stepping in to meet demand. This would have been a heavily gendered process. It would be women that would have to devote more time resources and emotional energy to care for their relatives and friends.

Instead, what we see, is that gaps are filled by greater reliance on the market. Women, rather than staying at home to look after relatives, are doing the opposite: Even women who were homemakers before the crisis, are entering the labour market, looking for work to make up for income shortfalls affecting their household–the 'added worker effect'. Indeed, one would expect that at least some of the increased supply of 'professional' bought in services is supplied by some women previously providing unpaid work within the family. Rather than women staying at home to look after elderly relatives, they prefer to try to find work themselves and employ other women for the extra care work generated.

Economic factors during the crisis reinforced this process. It brought about a major redistribution of income. First, medium to low pensions fell by less than earnings from

work (by around 14%). Second, more of the adjustment was shifted to private sector wages, further affected by greater flexibility. So, while average earnings fell by around 30%, fees for LTC services would have fallen by more than the price level. So, pensioners' relative income position improved, as relative prices of care services declined, enabled by flexible working. If the ease of evading tax is factored in, the expectation of falling care prices is reinforced.

However, relative prices only tell half the story. They could only work due to the radical transformation of women's attitudes towards work. This was helped by the arrival of female immigrants in the 1990s, who enabled the operation of an affordable market for personal services. This had allowed the expansion of female labour force participation in the period to 2007. Despite the supply of migrant carers being depleted by outmigration, women rejected reversion to traditional roles. Given inadequacy (and retrenchment) of public provision, families sought *market* solutions to their care problems.

A key message is that, despite difficulties, families *are coping* – with social indicators such as the care gap *improving* (or at least deteriorating by less than financial indicators). It should be stressed that this is unlikely to be costless; there is ample evidence that balancing conflicting needs and duties is taking a toll in peoples' psychology and in other dimensions.

What of public policy? It is clear, that public attention is absorbed by what happens to pensions. The vacillations in the coverage of LTC costs in the AWG reports can be interpreted as due to complacency that families are coping. Will they continue to cope, all the way to 2070, without any help from the State? Yet, this is what Greece has accepted, by projecting that demographic deterioration will rocket their estimated public expenditure of 0.01% of GDP, all the way to 0.02% of GDP.

Our analysis showed that the private care sector, that is, Greek families, met immediate needs since 2007. However, it requires a leap of faith to say that this can remain a sustainable option for the long term. This implies that a discussion of whether LTC is ready for the ageing challenge is long overdue.

Even in the medium term, out of pocket expenses are a drain on resources, which are under threat from many directions. Pensions are due to fall again in 2019. Another major problem is the supply of carers; foreign migrant carers are falling in numbers. The gap could be filled by tapping into the labour supply of pensioners who retire early. However, obstacles exist: the 2016 pensions law restricts many such sources (restrictions placed on the part-time employment of pensioners; disincentives for self-employed individuals or for caring as second job).

The refugee crisis could be an opportunity to fill the supply gap, especially as former waves of 1990s migrant themselves depart. However, for this potential to be realised, considerable changes of attitudes need to take place. These are both policy towards their integration, but also on the part of refugees themselves regarding their personal goals.

These dilemmas may also have implications for the *quality* of care. That, in an unregulated market with little or no quality control is likely to vary and to be subject to downward pressures as incomes are bid down further. In such a situation the presence of a robust high-quality public sector will act as a quality benchmark for the private sector.

APPENDIX 1

The Data:

The paper uses SHARE data. It compares the last pre-crisis Wave (2 -2007) with the latest Wave available (6 -2015). The latter year followed the end of the second bailout in December 2014 and spanned the period of confrontational negotiations leading to the third (August 2015). SHARE is well suited to track the fortunes of people aged 50+ over the crisis (Börsch-Supan et al. 2013). It contains interdisciplinary, internationally and intertemporally comparable panel data, adapted to the difficulties of sampling an older population.

Greece had participated in the first three SHARE waves (2004, 2007, 2009) -pre crisis. It re-joined the survey in w6 (2015). It was possible to revisit the 3,500 respondents who had participated in the first waves; a refresher sample was added for those who became 50 since 2007, and enlarging sample size for older ages, reaching an overall sample size of 5,000 in 2015. The sample size for Greece of those aged 65+ which will be used in the analysis is shown in Table A1.

Table A1: SHARE sample size for Greece, per age categories per wave

	age 50-64	**age 65-80**	**age 80+**	**sub-sample 65+**	**Total sample (age 50+)**
Wave 6	2,262	2,091	582	2,673	**4,935**
Wave 2	1,888	1,222	301	1,523	**3,411**
Panel sample (wave 2-wave 6)[1]	688	1,088	335	1,423	**2,111**
Total sample size all countries, Wave 6	**28,391**	**31,142**	**8,686**	**39,828**	**68,219**

We also, for the first time in Greece, investigate 'exit interviews', proxy interviews probing the conditions surrounding the demise of panel members – the last year of life of those who died between waves. Table A2 presents the sample size based on wave 5 and wave 6, by group of country; a sample size of 350 is sufficient for most descriptive analyses. Figure A1 shows the median age of the exit interviews sample used in the

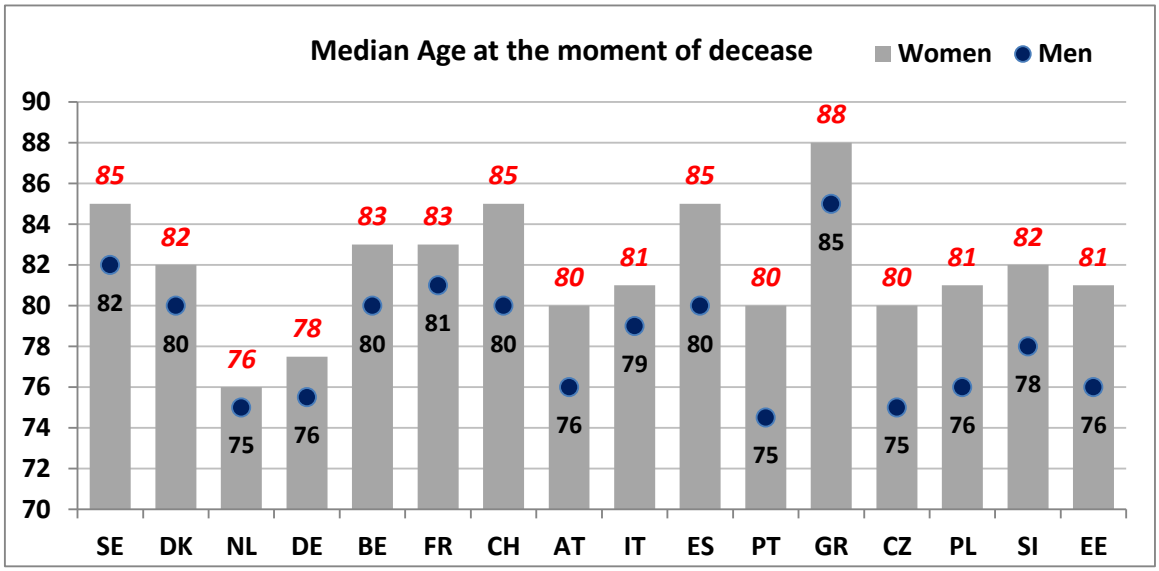
analysis, by gender. We must bear in mind that the age distribution (where the age of death in Greece appears at the top end) is a reflection of the length of time spent in the survey. This is higher in Greece as (a) deaths are counted since 2009 and *not* 2013 and (b) the retention rate of the survey is higher in Greece.

Table A2: Sample size by gender, deceased persons (SHARE w5 & w6 exit interviews)

country	Men	Women	Total
Nordics (SE, DK, NL)	400	364	764
Continental (DE, BE, FR, CH, AT)	658	613	1,271
Southern (IT, ES, PT)	639	564	1,203
Greece	150	200	350
Eastern (CZ, PL, SI, EE)	870	747	1617
Total	**2,717**	**2,488**	**5,205**

Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

Figure A1: Median age at the moment of decease, SHARE wave 5 and SHARE wave 6



Source: SHARE wave 5 (2013) and SHARE wave 6 (2015) exit interviews.

APPENDIX 2

The supply of Long-Term Care: The Institutional background in Greece

Home-based care: Home-based care is the preferred type of care in Greece. In 1997 the program 'Help at Home' was launched at municipality level. Until 2003, beneficiaries were older people with difficulties in daily activities. In 2003 it was expanded to persons regardless of age, with a disability rate of >67% (sufficient for a disability pensions). Beneficiaries are persons older than 78 with difficulties in daily activities as judged by social workers plus the officially disabled (>67%). Three additional criteria apply: (i) they live alone or with another old person in need of care, (ii) have personal annual income less than €7.700 and family income less than €15.400, (iii) not receiving public allowance for disability and (iv) not living in a Care Home (Ministerial Decision, FEK B 1240/11-04-2012).

Public opinion considers 'Help at Home' a successful public program. It serves approximately 72,000 beneficiaries per year; it employs 3,200 persons and has an annual budget of approximately EUR 60M, which amounts for a public spending of €70 per beneficiary per month. Funding of the program proved a challenge and has still to become part of the regular government budget. Until 2011, it was financed by structural funds, while since then it is paid for a combination of the Generational Solidarity Fund (AKAGE), the Ministry of Employment, the Social Security Organization (EFKA) and the Ministry of Interior (Law 4483/2017; EETAA, Administrative data, 2017).

Home-based_care is also delivered by private companies or non-profit organizations, which provide care services, paid out of pocket by recipients or their families. Administrative data for informal care are not available, but surveys suggest it may be widespread (Tinios et al. 2017).

Residential care: The foundation and operation of care homes for the elderly is regulated by specific rules (FEK B 1136/6-7-2007). Care homes, regardless of ownership, operate at municipality level under the supervision of the Ministry of Employment. Ministry data, show for 2016 241 care homes, of which 10 were publicly owned (State or municipalities), 129 were non-profit organizations (mostly Church) and 112 private companies. The number of people living in homes was 10,658 of whom almost 50% in

private-owned care homes. Care homes employ 4,322 employees; 44% work in the private sector and 56% in non-profit or state-owned organizations (Ministry of Employment, 2017). Care homes funding comes from donations, subsidies from the Ministry of Employment, Prefectures and frequently a levy on the beneficiary's pension. For-profit organizations are financed by out-of-pocket payments based on market prices. The above mentioned combination of finance lacks transparency; rumours are rife that elderly people are forced to 'donate' part of their assets, under to non-profit organizations operating care homes.

As to **the quality of care**, the lack of coherent public policies -that would assess and evaluate care provision in Care Homes - leads to low level of care provision quality. No quality survey has ever been undertaken.

Day care centres for the elderly (KIFI) operate at municipality level financed by the state. They provide care services during the day to elderly who are not fully autonomous, face financial difficulties, and their families cannot take care of them during the day due to employment obligations. Ministry data show 74 day centres operated in 2016, taking care of 1,600 of persons in need of care (Ministerial Decision, FEK B 1397/22-10-2001; Ministry of Employment 2017). Cash Allowances: For serious health problems, which result to a disability rate over 50%, and after an evaluation from public health authorities, cash allowances are given to beneficiaries.

APPENDIX 3

Ascertaining need of care

The definition of in-need-of care is not straightforward. Different countries follow different approaches in characterizing a person as vulnerable, being in-need-of care (Brugiavini et al. 2017), while even the European Commission's DGECFIN finds it difficult to conclude on a definitive definition.

In the 2009 Ageing Report, the projected number of dependent persons was based on the percentage of persons that had reported 1 or more ADL limitations (based on SHARE data). After 2012, the projected number of dependent persons is based on persons reporting severe limitations in 'usual activities' because of health problems for at least 6 months, based on EU SILC data, while 'usual activities' are not specified. DG ECFIN notes there are many people with some form of disability who can lead completely independent lives without the need for care services. Further, dependency as reported in EU-SILC also depends on a person's perception of his or her ability to perform activities associated with daily living.

Thus, on the one hand survey data can underestimate some forms of disability and on the other hand, disability data can be too inclusive and capture relatively minor difficulties in functioning that do not require LTC.

Regarding eligibility criteria per country to receive public long term care, in some countries the sole criterion is limitations in performing ADL or iADL activities, without examining how severe those limitations are (e.g. Czech Republic); in other there is rating of care needed based on the level of seriousness of those limitations (Spain, Belgium) and on others, 2 ADL limitations is considered the threshold for receiving public care while the level of seriousness of the limitations may also be a criterion (e.g. Germany). The algorithm for defining the type and the frequency of public care provision differs among countries -and in some cases even among prefectures of the same country-, taking into account additional parameters such as age or severe illness (Brugiavini et al. 2017).

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