



## **COUNTRY FRAMING REPORT**

### **Greece**

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## Introduction

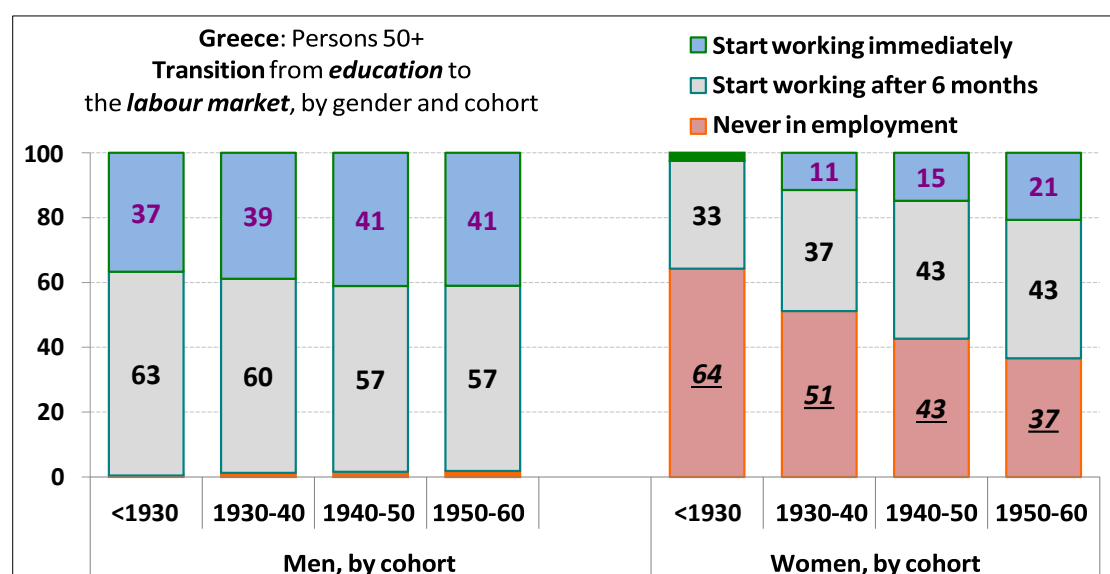
Greece is the second fastest ageing country in Europe. Ageing accelerates considerably after 2007, owing to the entry into retirement of the baby boom generation. The Greek baby boom (owing to the civil war and post-war emigration) started later (around 1955), lasted longer (to 1970) and was accompanied by rapid urbanisation. However, this timeline means that the ageing acceleration coincided and the onset of the Greek crisis, 2007 being the last year with positive GDP growth. Thus ageing developments are complicated and confounded with the impact of the crisis and of austerity.

Austerity, in the sense of fiscal adjustment, in Greece has two features that distinguish it from other countries: *First*, it was uniquely *deep*. GDP per capita fell cumulatively by a quarter, and the primary balance showed the most sudden and largest change of any country in peacetime. *Second*, adjustment was uniquely *long*; externally supervised programmes started in 2010 and are due to continue well into 2018 –eight years and possibly beyond. Adjustment of this scale and duration means the implicit *ceteris paribus* assumption of social sciences strains credibility: fiscal changes are only one among many other structural, social and even psychological changes that accompany large and traumatic adjustments. Bearing this in mind, austerity-linked policies have had direct and indirect effects. Direct effects are chiefly to do with pensions policy, indirect with health and long-term care and the informal economy. Finally, austerity affects not only the demand side of ageing (i.e. needs of an ageing population); it impacts also on the supply side of social service provision: the health and care infrastructure, but also factors such as immigration. Labour for the care economy is provided largely by female immigrants of the wave, which arrived to Greece before the crisis, and are now in many cases leaving Greece as a direct consequence of the crisis.

This Greek background implies that three general considerations are of particular application:

First, current and future cohorts of ageing women are considerably different from their mothers and grandmothers. In particular women entering retirement have had a greater involvement with the labour market and have worked chiefly in services (rather than the primary sector and manufacturing). Figure 1 (from SHARELIFE) is telling: women born in the 1960s are far more likely to have worked.

**Figure 1:** Transition from education to the labour market Greece, persons aged 50+



Source: Lyberaki et al. 2017

The *second* consideration is the need for interdisciplinary analysis: Changes of such a long duration and depth generate more than changes at the margin – of the kind that economic analysis is best suited for. Analysing the Greek ageing experience requires additional input using sociological, psychological, epidemiological approaches.

Third, much of the evidence concerns associations between variables and leaves open the question of causation. For example seeing that early retirees may have worse health than those retiring later could mean *either* that people with pre-existing health issue decide they cannot work any more *or* that early retirement may affect health or *both*. Disentangling causality requires longitudinal data – such as SHARE in Europe, ELSA in England or the HRS in the US.

### Existing knowledge and key themes

#### Ageing in the years of the crisis: The new environment and policy adjustments

Ageing does not play an explicit role in the narratives of the Greek crisis. This, in itself, is surprising. In the nineties, it had played a prominent part in arguments in favour of structural pension reform. A recent book by a prominent ex-minister of labour Giannitsis (2016) claims boldly that, had there not been borrowing to sustain pension expenditure after 2001, the debt crisis would not have happened.

Thus, though ageing undoubtedly operated as a background factor, it played little part in the *mechanics* of the crisis. Pension deficits predated ageing and were, in a way a structural feature of the pension system. The crisis itself nevertheless, operated in a way that could have been expected to exacerbate any underlying ageing problem. The generalised fiscal imbalances led to an environment not conducive to coping with long term problems: On the supply side revenue imbalances were magnified by unemployment, while on the demand side explicit reliance on early retirement as a labour market escape valve stoked long term problems. Thus at the time when the public sector was trying to balance its finances, these were being strained further, while the need to finance pensions grew faster than pension cuts could keep up with. The dramatic rise in the percentage of pensions in GDP (to over 18 per cent), despite annual reform bills and a dozen pension cuts, meant that there was very little finance or policy room available for any public-sector based initiative to tackle aspects of ageing (Tinios 2017). At the same time, there had been no preparations for any structures beyond the public sector to step in the breach. As a result, any ageing-related problems other than pensions were likely to languish unremarked and unaddressed.

#### Statistics on older labour force participation

**Crisis stylized fact 1:** The ‘**added worker effect**’ of increasing labour supply as a consequence of a rise in unemployment dominates, apparently as part of efforts by women to compensate for the non-existence of a functioning social safety net. *Why?* As a response to the decreasing household income and/or men’s unemployment. *For whom?* Women who were not in the labour market before the crisis decide in the midst of the crisis to react counter-cyclically and to start looking for a job in order to make up for losses in household income.

The added worker effect affected all age groups of women (Table 1); it was most noted in the younger age groups which were beyond the reach of early retirement: for the age group 50-54 participation rose by almost 10 percentage points; while in the group 60-64 the rise was more

modest (and from a lower base).

**Table 2:** Labour market participation rate by gender and age group, persons aged 50-64, Greece: the intended “*added-worker effect*” response of women

<b>Greece</b>	<b>(%) activity rate</b>			<b>change in p.p.</b>	
<b>Men</b>	<b>2008</b>	<b>2012</b>	<b>2016</b>	<b>2008-2012</b>	<b>2012-2016</b>
50 to 54	88.6	88.7	88.8	0.1	0.1
55 to 59	76.5	72.9	73.9	-3.6	1.0
60 to 64	45.5	37.5	39.8	-8.0	2.3
<b>50 to 64</b>	<b>71.1</b>	<b>67.6</b>	<b>68.9</b>	<b>-3.5</b>	<b>1.3</b>
<b>Women</b>	<b>2008</b>	<b>2012</b>	<b>2016</b>	<b>2008-2012</b>	<b>2012-2016</b>
50 to 54	54.5	56.4	64.4	1.9	8.0
55 to 59	37.8	40.8	44.0	3.0	3.2
60 to 64	19.9	19.0	22.7	-0.9	3.7
<b>50 to 64</b>	<b>38.1</b>	<b>39.6</b>	<b>44.7</b>	<b>1.5</b>	<b>5.1</b>

Source: Eurostat, LFS series.

**Crisis stylized fact 2:** *The ‘added worker effect’ of women has not translated to higher employment outcomes for women*; women tried to find work but were not successful.

Lower activity rates for men 50-64 were accompanied with lower employment rates, while for women this has not been the case: women’s 50-64 employment remained rather stable throughout the crisis (Table 2). *Why?* Due to the scarcity of job opportunities, but also bottlenecks and male-breadwinner bias in the Greek labour market. Greece had always the smallest segment of part-time in the EU, and this lies at the heart of the «jobless growth» experience in the pre-crisis years. Interestingly, the lack of part-time jobs was always considered a point of pride among trade-unionists and politicians alike.

**Table 2:** Unemployment and employment rate by gender and age group, persons aged 50-64, Greece: *offsetting the women’s «added-worker effect” in activity rates*

<b>Greece</b>	<b>Men</b>			<b>Women</b>		
<b>Unemployment (%)</b>	<b>2008</b>	<b>2012</b>	<b>2016</b>	<b>2008</b>	<b>2012</b>	<b>2016</b>
50 to 54	2.9	16.7	16.8	6.8	19.8	22.7
55 to 59	2.8	14.5	19.4	5.3	14.4	20.1
60 to 64	3.0	11.9	19.1	:	10.4	16.6
<b>50 to 64</b>	<b>2.9</b>	<b>15.1</b>	<b>18.1</b>	<b>5.4</b>	<b>16.6</b>	<b>20.9</b>
<b>Employment</b>						
50 to 54	86.0	73.9	73.9	50.8	45.2	49.8
55 to 59	74.3	62.3	59.6	35.8	34.9	35.2
60 to 64	44.1	33.0	32.2	19.6	17.0	19.0
<b>50 to 64</b>	<b>69.0</b>	<b>57.4</b>	<b>56.4</b>	<b>36.1</b>	<b>33.0</b>	<b>35.4</b>

Source: Eurostat, LFS series.

### Research on retirement decisions

**Crisis stylized fact 3:** *Early retirement became endemic during the crisis* -in part due to a conscious policy decision- and primarily affected women.

Administrative data (sadly not available by gender) showed that the stock of private sector pensioners rose considerably (Table 3). The fall in disability pensions was occasioned by stricter procedures implemented as part of retrenchment in 2011.

**Table 3:** Number of pensions (in 000s), Insurance Fund of Employees (IKA-ETAM)

<b>Greece</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Old-age</b>	<b>704.4</b>	<b>723.1</b>	<b>739.7</b>	<b>774.6</b>	<b>800.2</b>	<b>800.4</b>	<b>806.5</b>	<b>811.2</b>	<b>810.0</b>
<i>change</i>		2.7	2.3	4.7	3.3	0.0	0.8	0.6	-0.1
<b>Disability</b>	<b>135.3</b>	<b>135.7</b>	<b>133.5</b>	<b>130.9</b>	<b>111.6</b>	<b>118.6</b>	<b>118.6</b>	<b>120.4</b>	<b>113.5</b>
<i>change</i>		0.3	-1.6	-1.9	-14.8	6.3	0.0	1.5	-5.8

Note: Social Insurance Funds merged with IKA-ETAM are included

Source: Administrative data obtained from the Unified Insurance Fund of Employees (IKA-ETAM)

The trend in early retirement is evident in the 31% rise in the number of women inactive due to retirement (Table 4). This was concentrated in the first two years of the bailout, but has continued at a lower rate afterwards. As a result the share of the female population 50-64 in retirement has increased by a third (Table 5 by 5 pp).

**Table 4:** Number (in 000s) of inactive persons 45-64 due to retirement, by gender

<b>Greece</b> <b>Persons 45-64</b>	<b># of inactive (in 000s) due to retirement</b>			<b>Change (%)</b>	
	<b>2008</b>	<b>2012</b>	<b>2016</b>	<b>2008-12</b>	<b>2012-16</b>
<b>Men</b>	239.5	275.0	267.1	14.8	-2.9
<b>Women</b>	168.0	219.7	237.6	30.8	8.1

Source: Hellenic Statistical Authority (EL.STAT), Labour force survey yearly time series since 1981/2016.

**Table 5:** Inactive due to retirement as (%) of total population, by gender

<b>Inactive due to retirement as (%) of total population</b>					<b>Change p.p.</b>	
<b>Greece</b>	<b>Age</b>	<b>2008</b>	<b>2012</b>	<b>2016</b>	<b>2008-12</b>	<b>2012-16</b>
<b>Men</b>	50-59	12.4	13.4	12.6	1.0	-0.8
	<b>50- 64</b>	<b>23.9</b>	<b>26.7</b>	<b>25.1</b>	<b>2.8</b>	<b>-1.6</b>
<b>Women</b>	50-59	10.2	14.6	14.5	4.4	-0.1
	<b>50- 64</b>	<b>15.6</b>	<b>19.8</b>	<b>20.9</b>	<b>4.2</b>	<b>1.1</b>

Source: Eurostat, LFS series.

Early retirement in Greece is not due to exceptional cases, but to the existence of extremely fragmentary provisions, meaning that a large number of women in particular occupations, sectors, or personal circumstances could access retirement earlier than the rule. Indeed in Greece as regards retirement ages pre 2010, the ‘rule’ was followed by 15% of men and 85% could follow some exception (Panageas and Tinios 2017); the equivalent figures for women were 30% for the rule and 70% for the exception. As a consequence a far higher proportion of women are retired and early retired than in other OECD countries (Table 6) – without needing to cite another cause such as illness or caring responsibilities. It is interesting that even in the height of the crisis the number of people dismissed is far lower than in other countries, possibly implying that retirement is a form of unemployment (which happens when pensions are more generous than unemployment benefits).

**Table 6:** Labour market exit paths among men and women, aged 55 to 64, 2014

Persons 55-64 2014	Labour market exit paths among men and women, aged 55-64							Total
	Job ended	Dismis- sed	Early ret/nt	Retire- ment	Care tasks	Illness/ disabilitly	Other	
Men								
OECD20	8.0	18.8	21.5	23.9	1.3	17.3	9.2	100
Greece	5.7	10.6	3.5	66.6	0.4	3.5	9.7	100
Women								
OECD20	9.9	14.4	18.9	28.0	3.5	15.6	9.7	100
Greece	6.4	9.4	8.3	63.3	1.0	2.9	8.8	100

Source: OECD 2015, Pensions at a glance 2015, based on LFS 2014.

### Statistics on duration of working life

**Crisis stylized fact 4: The recession (job scarcity) together with the unintended consequences of policy decisions offset part of the gains in women's employment outcomes.** Progress in the duration of working life –as a result of women's greater engagement in employment over the past 20 years- has been limited by early retirement options of women in employment (as a response to policy decisions) (Table 7 & 8).

**Table 7:** Duration of working life by gender, Greece vis-à-vis EU28

Duration of working life (in years)	Greece		Change	EU-28		Change
	2010	2015	2010-15	2010	2015	2010-15
Men	36.9	35.6	-1.3	37.3	37.9	0.6
Women	27.4	28.9	1.5	31.6	32.8	1.2
<b>Gender Gap</b>	<b>-9.5</b>	<b>-6.7</b>	<b>2.8</b>	<b>-5.7</b>	<b>-5.1</b>	<b>0.6</b>

Source: Eurostat, LFS series.

**Table 8:** Working careers categories of persons aged 65+ in SHARE wave 6, 2015

SHARE Wave 6	Men %					Women %				
	years in work between 21 and 60 as (%) of 40-year working life					years in work between 21 and 60 as (%) of 40-year working life				
Persons 65+	Never Work	<20 years	21-30	>30	Total	Never Work	<20 years	21-30	>30	<20 years
<b>GR</b>	2	1	15	82	100	43	16	18	23	100
<b>SHARE Average</b>	0	2	14	84	100	14	23	23	40	100

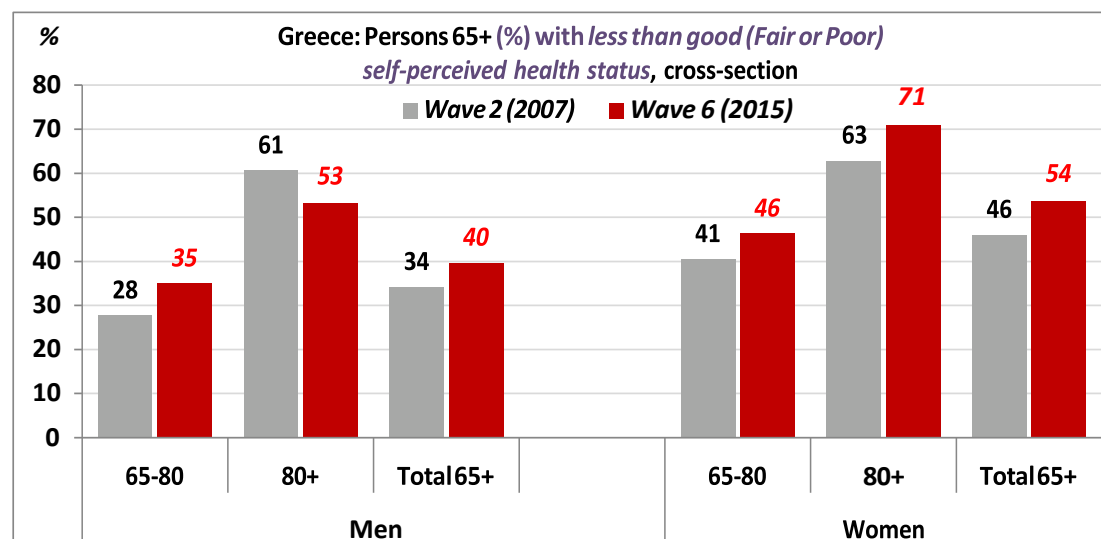
Source: SHARE (Survey on Health, Ageing and Retirement in Europe), Wave 6 (2015), Release: 6.0.0, March 31st 2017. Information on working life has been obtained from (SHARELIFE) 10.6103/SHARE.w3.600, see Börsch-Supan et al. (2013) for methodological details.

Note: SHARE average is the weighted average of AT, BE, CZ, DK, FR, DE, GR, IT, PL, ES, SE and CH.

### Evidence on health and needs for care

Health – as measured by self perceived health – appears to have deteriorated between 2007 and 2015, comparing wave 2 and wave 6 SHARE data (Figure 2). However, there appears an important gender difference – for the over 80s. Women’s SPH is better for that group, whereas it is worse for men.

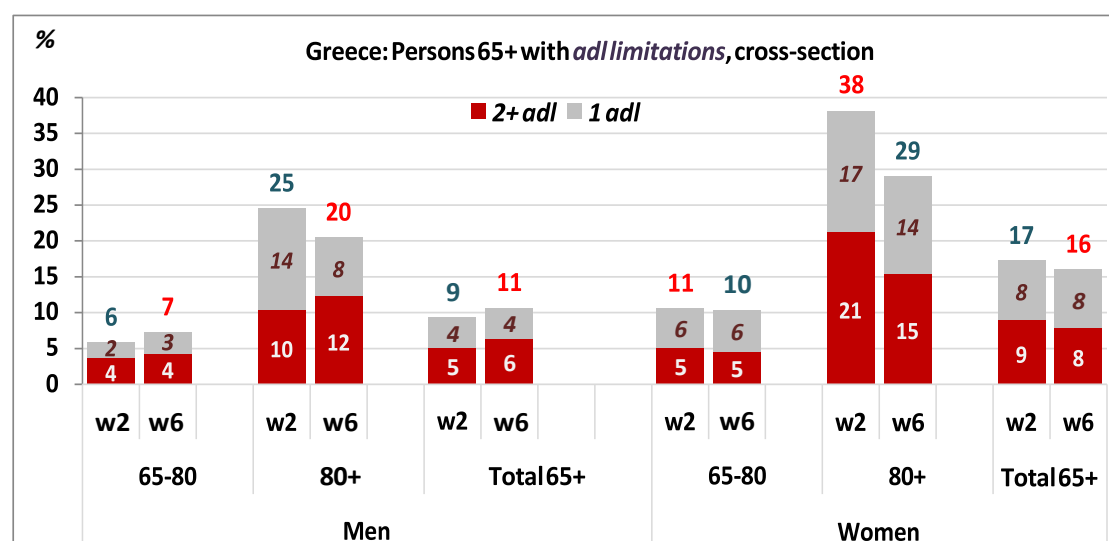
**Figure 2:** Changes in self-perceived health, 2007-2015, persons 65+, Greece



Source: Lyberaki *et al.* 2017.

In contrast, the need for care – the extent of personal independence in daily life activities – as measured by the number of Activities of Daily Living SHARE respondents could not fulfil was stable and even fell among women over 80 -whose health paradoxically had deteriorated (Figure 3).

**Figure 3:** Changes in adl limitations, 2007-2015, persons 65+, Greece



Source: Lyberaki *et al.* 2017.

***Crisis stylized fact 5: Danger to backtrack: caring obligations revert to female members.***

Review of the care economy: As in other Mediterranean countries, social protection in Greece was traditionally built around pensions, leaving a large residual role for the family. Attitude surveys from previous SHARE waves (Lyberaki, 2009; Lyberaki and Tinios, 2010; Lyberaki *et al.* 2013) indicate that the observed care mix between formal and informal, and in terms of gender roles reflects attitudes and preferences which differ across individuals and across Europe. In Greece the ‘informal welfare state’ (Lyberaki and Tinios, 2014) relied to a large extent on women, and supplied all social risk management services that formal state social protection did not. Despite formally stated intentions, the process of ‘recalibration and reform’ (Ferrera, 2010) from the family towards formal social protection had not advanced. As a result, the 2010 crisis found Greece without a functioning social safety net, implying that much of the emergency social protection had to be provided by the family – meaning chiefly its female members.

The *formal* provision of personal long-term care is small and severely limited (Tinios, 2016a). Public involvement was traditionally provided in medicalized form by the hospital sector and in outdated residential care institutions, which were frequently charitable institutions set up decades before. These were supplemented after 2000 by the Help-at-Home programme, which delivered practical or social help at people’s homes. The programme services were provided by municipalities, a fact giving rise to locational inequalities of provision. It was financed by the European Social Fund on a pilot basis, as an exhibition project, which covered funds necessary to set up, as well as the initial running costs. Once the programme became established, continued finance had to be sought outside the ESF. Municipalities proved unwilling to find new finance for the programme, which was in danger of being suspended. A solution was found by renaming the programme as one directed to *pensioners*, even though it was not limited to them. This allowed the tapping of funds from pension providers.

Help-at-Home as it currently stands is in a paradoxical situation of being financed as though it were social insurance on the revenue side, but providing universal services to all, including non-pensioners, on the services side. The programme, in this way, was saved from being discontinued; optimistic expectations of its spreading to accommodate demand have, however, all been put on hold.

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

The main danger, though, may come from the demand side: Households hit by unemployment and by liquidity squeezes may not be able to afford outsourcing; caring obligations could revert to female members. The first ever time use data show high time inputs for care on the part of women (Table 9). Evidence from SHARE wave 6 (Lyberaki *et al.* 2017) indicates that women over 50 provide informal care much more than men, *though* slightly less so than in 2007. Younger retirees (under 65) care more than women in general. Men, on the other hand, provide less care when retired. Women retirees thus lose out both directly in monetary terms, but also indirectly by having



to devote more time to informal care (Lyberaki & Tinios, 2016) (Table 10, 11 and 12).

**Table 9:** Average daily time use, in hours & minutes by gender and age in Greece

		Paid work	Household Care				Study	Leisure	Travel
			Total H/hold Care	Core house-work	Other house-work	Care			
Greece									
45-64	W	01:28	04:52	04:03	00:38	00:11	00:01	05:09	00:53
	M	03:01	01:40	00:29	01:00	00:11	00:00	06:17	01:09
65+	W	00:07	04:19	03:38	00:34	00:06	00:00	06:58	00:46
	M	00:11	01:48	00:38	01:07	00:04	00:00	07:57	00:57

Source: Hellenic Statistical Authority (ELSTAT) (2014), *Time Use Survey in households*.

**Table 10:** Personal care for older persons in need: whose responsibility?

<b>Wave 1 (2004)</b>	<b>Personal care (nursing, help with bathing / dressing) for older persons who are in need: who should bear the responsibility?</b>					
	<i>Totally family</i>	<i>Mainly family</i>	<i>Both equally</i>	<i>Mainly state</i>	<i>Totally state</i>	<i>Total</i>
Persons aged 50+ Greece	24.9	40.7	25.2	5.7	3.5	100
SHARE average	4.6	20.3	45.7	22.2	7.3	100

Source: SHARE Wave 1 (2004/2005), release version: 6.0.0 (March 2017).

Note: SHARE average is the weighted average of AT, BE, DK, FR, DE, GR, IT, ES, SE and CH.

**Table 11:** Care provision to persons within or outside the household on a daily basis, by gender and age, SHARE wave 2 and wave 6

SHARE w2 (2007) & w6 (2015) Greece	Carers on a daily basis: (%) of persons who provided care daily to a person outside or within the household					
	Total Men			Total Women		
	2007	2015	Change	2007	2015	Change
	Men in retirement			Women in retirement		
50-59	4.7	7.0	2.3	14.3	11.9	-2.4
60-64	7.8	5.2	-2.7	15.1	13.7	-1.4
65-69	6.3	3.3	-3.0	15.1	11.8	-3.3
70+	7.8	8.0	0.1	9.8	10.3	0.4
50-59	10.4	4.2	-6.2	11.0	18.3	7.3
60-64	12.0	4.4	-7.6	14.8	18.2	3.4
65-69	7.9	3.3	-4.6	18.2	9.5	-8.7
70+	8.1	8.1	0.0	9.4	10.9	1.5

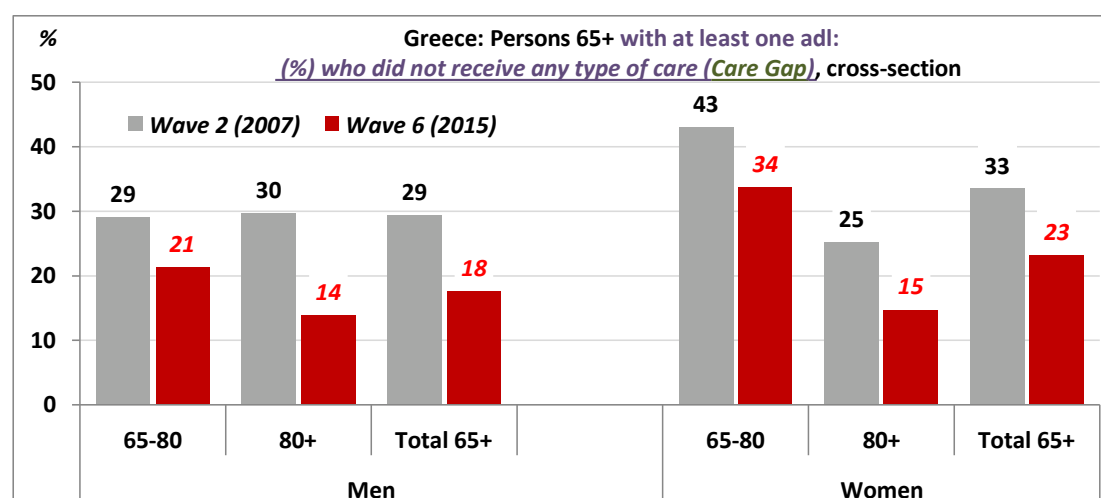
Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

**Table 12:** Panel analysis, changes in employment status, *vis-à-vis* changes in care provision

<i>Panel sample w2-w6; women aged less than 74</i>	<i>Carer only in wave 6</i>	<i>Carer in both waves</i>	<i>Carer only in wave 2</i>	<i>Carer in neither</i>	<i>Total</i>
Employed in both waves	6.9	3.2	12.6	77.3	100
Employed in w2 retired in w 6	3.9	1.4	10.8	83.9	100
Retired in both waves	6.4	5.3	8.9	79.4	100
Homemakers	6.1	3.2	11.7	79.1	100
<b>Total</b>	6.0	3.3	11.2	79.5	100

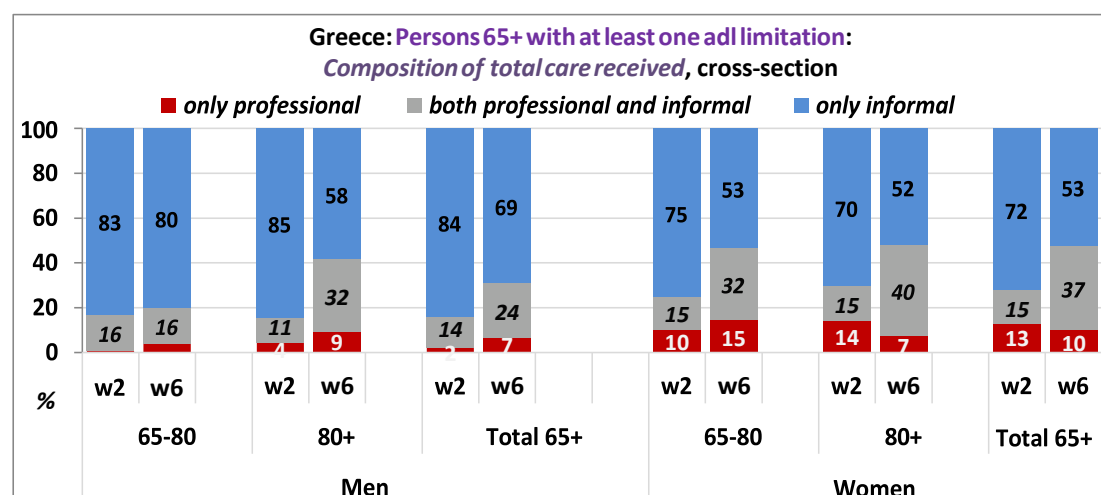
Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

During the crisis, paradoxically care gaps – the percentage that have expressed they are in need of help (in terms of ADLs) but appear to receive no help – shrank. (Figure 4). This is less marked for women than for men- but is noticeable for both. That needs appear to be served better is *not* due to informal (family based) care. Figure 5 which shows changes in care mix between 2007 and 2015 is unequivocal that it is due to greater *formal* (meaning professional) care and not informal care. 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 to generations to pool resources by moving in together (Figure 6). Both should imply a shift in the care mix in favour of informal care. However, *the opposite is observed*.

**Figure 4:** Changes in care gap (no care received) of persons with 1+ adl, by gender and age, wave 2-wave 6, cross section

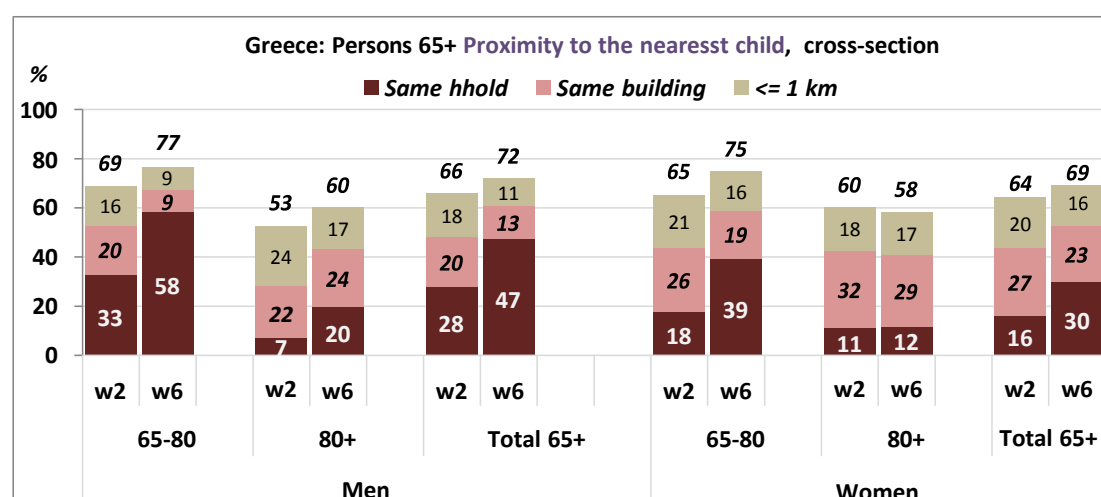
Source: SHARE Wave 2 (2007) and Wave 6 (2015), Release: 6.0.0, March 31st 2017.

**Figure 5:** 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.

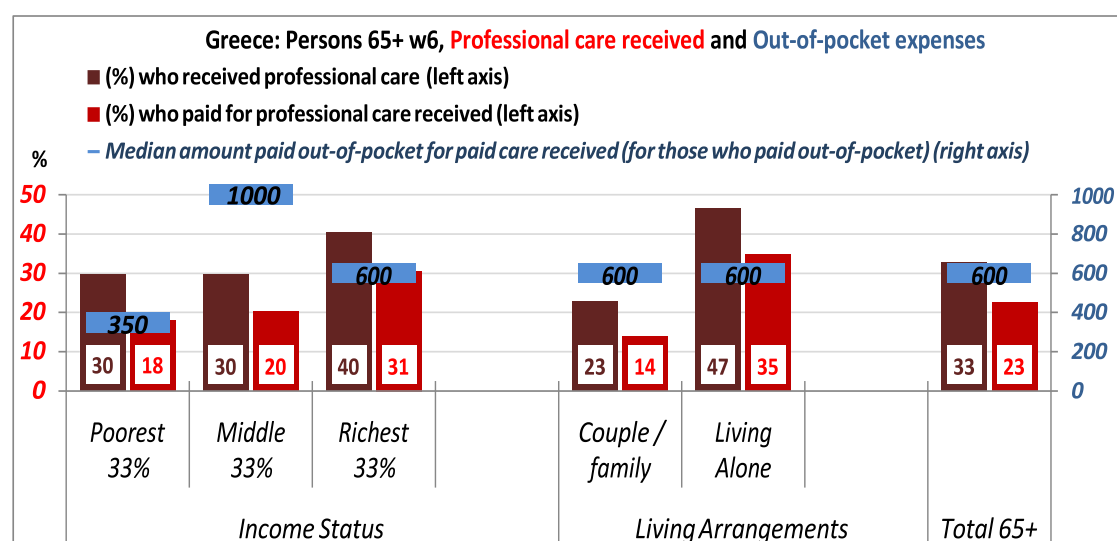
**Figure 6:** Proximity to the nearest child, persons 65+, cross section



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

The apparent paradox is explained by the greater propensity on the part of families to pay out of pocket for formal (professional) care (Figure 7). What appears to be happening is that Greek families are paying out of pocket to access care services. The amounts involved are non-negligible and are paid across the income distribution. One possible economic explanation proposed by Lyberaki *et al.* (2017) is that pensions have fallen by less than wages of carers. Hence pensioners find it easier to devote funds (even from a shrinking overall family budget) to providing care for family members that need it.

**Figure 7:** Paid-out-of pocket for professional care received, persons 65+, Greece, w6



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

### Pension inequalities

**Review of Gender and the Greek pension system:** The Greek pension system was built around a single pension provider, IKA responsible for insuring most private sector employees. Nevertheless, the system was characterised by pervasive fragmentation (Panageas and Tinios 2017; Tinios 2010; Tinos, 2015a). Fragmentation allowed the pension system to be integrated into the clientelistic operation of Greek political economy. General social insurance principles could be brushed aside if they stood in a way of side-deals negotiated with occupational and other groups; most side deals involved special insurance parameters (retirement ages, replacement rates, contribution rates) amounting to cross-subsidisation of some favoured groups financed by the general population.

Women in such a system found themselves in a peculiar situation. Departure from *general* social insurance principles removed an obstacle in the way of equal treatment in the sense of allowing mechanisms to compensate for inequality. The same facility, on the one hand, allowed rules to be bent to accommodate prevailing views about the status of women and their role in the labour market. So the system could in practice operate in directions *opposing* gender balance. These exceptions were more marked the further away a particular group was from IKA. Thus, gender differentiation was more pervasive in the Civil Service, and in pension providers covering oligopolistic sectors- banks or large utilities. On the other hand, women, being underrepresented in client groups, missed out in clientelistic special arrangements.

Greece's pension system entered the bailout period with all main issues outstanding: it was fulfilling its social role badly, it added to public deficits and undermined productive efficiency. The 2002 EU Joint Report on Pension Strategy (Tinios, 2010) in assessing the relative performance of pensions had highlighted its high cost, absorbing in the last pre-crisis year, 2007 12% of GDP, combined with very low social effectiveness in preventing old age poverty (Lyberaki *et al.* 2010; Tinios, 2010).

Demographic prospects were the second most explosive in the EU<sup>2</sup>. Pension reform could have promoted at a stroke economic efficiency, generational justice and social effectiveness; yet it was apparently blocked.

Thus it was ntinioo surprise that pension reform was given priority in the bailout era reforms. The changes began in 2010 law and are still ongoing in 2017. Advance legislation passed in 2017 to be implemented in late 2018 means that all participants- from new entrants to pensioners of long standing were forcibly moved to a new – less generous – two tier system. This was originally applied to new entrants (in 2010) to current contributors (in 2011) to new pensioners (in 2016) and will be applied to existing pensioners in 2018. This long drawn out period was punctuated by a series of ad hoc pension cuts to existing pensions. These were insufficient to stem the increase in pension expenditure which was driven by waves of (publicly encouraged) early retirement; despite cuts pensions appeared a ‘safe haven’ from the labour market (for details, see Panageas and Tinios 2017, Tinios 2017; Tinios 2016a,b).

Women took pride of place in early retirements (as witnessed in earlier sections). They, anyway, were subject to wider pension gender gaps (Betti *et al.* 2015). In 2011 the **effective retirement age** was 59.9 years for women and 61.8 years for men (EU- 28 averages being 61.1 and 61.9 years, respectively). In 2015 it remained almost stable (60.0) years for women (being 2 years below the statutory retirement age of 62) as well as for men 61.6 years for men (while EU-28 averages increased to 61.7 and 62.9 years, respectively). These statistics underestimate variability; whereas the self-employed tend to retire well after 65, there was a large fringe of people (mainly in the public sector) who retired well below 55.

As regards retirement, an interesting additional result that can be outlined regards the **gender gap in pensions for people aged 65 and above**. EU-SILC shows that the gender gap in pension income for people aged 65-74 stood at 35.6% in Greece in 2010, while in 2012 it fell to 25.1% (Betti *et al.* 2015) followed by an increase to 28.6% in 2014. This decline over the 2010-2012 period is explained by the successive cuts in larger pensions, those over EUR 1,200, which are overwhelmingly collected by men. At the same time findings on **gender gap in the pension coverage rate for people aged 65-74** indicate that the proportion of women aged over 65-75 years who receive a pension in 2014 is by 21 p.p. lower compared to the corresponding proportion of men in Greece –more than three times higher compared to the EU average (6.1 p.p.). The February 2017 data, based on the ‘Helios’ system (published by the Ministry of Labour,) indicate that there are 84 women for every 100 men who receive old-age pensions. For these women, the average monthly pension is equal to EUR 817 -27% lower than compared to men’s average pension (Table 13 and 14).

As these changes sweep through society, older people – and particularly older women – may all too often suffer the unintended consequences of policies whose primary impact is thought to be elsewhere. This vulnerability is exacerbated by two gaps in awareness: in politics, older women frequently lack a voice; and in policy- making, very technical discussions can lead to gaps in understanding (Tinios, 2015a).

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<sup>2</sup> According to Government projections (EPC 2009), Greece expected the highest additional pension expenditure of any EU country in 2060, almost doubling compared to 2010. In contrast, Italy which had implemented the ‘Dini’ reforms in 1996 was actually able to expect a fall in expenditure (EPC 2009, 2012).

**Table 13:** Number of pensioners by gender and type of pension received, 2017

<b>Greece, February 2017</b> <b>Type of pensioners</b>	<b>Men</b> <b># of cases</b>	<b>Women</b> <b># of cases</b>	<b>Number of women</b> <b>for every 100 men</b>
<b>Old-age</b>			
Old-age pension	1,066,054	902,158	<b>84.6</b>
Uninsured elderly OGA	8,930	20,034	224.3
<b>Survivors'</b>	28,677	367,236	1280.6
<b>Disability</b>	139,802	85,724	<b>61.3</b>
<b>Other</b>	1,176	1,310	111.4
<b>Total</b>	<b>1,244,639</b>	<b>1,376,462</b>	<b>110.6</b>

Source: Administrative data for February 2017 based on the 'Helios' system (published by the Ministry of Labour, Social Insurance and Social Solidarity). Available at: <http://www.ypakp.gr/>

**Table 14:** Mean pension income by gender and type of pension received, 2017

<b>Greece, February 2017</b> <b>Mean monthly income in EUR</b>	<b>Men</b> <b>In EUR</b>	<b>Women</b> <b>In EUR</b>	<b>Gender Gap in</b> <b>pensions</b>
<b>Old-age</b>			
Old-age pension	1,124 €	817 €	<b>27.3</b>
Uninsured elderly OGA	359 €	360 €	<b>0.0</b>
<b>Survivors'</b>	462 €	649 €	<b>-40.3</b>
<b>Disability</b>	664 €	542 €	<b>18.3</b>
<b>Other</b>	619 €	535 €	<b>13.6</b>

Source: Administrative data for February 2017 based on the 'Helios' system (published by the Ministry of Labour, Social Insurance and Social Solidarity).

### Changes in incomes

The crisis' most prominent impact was on incomes; falling incomes strained the capacity of the families to make ends meet. It is important to distinguish three age groups: early middle age, still connected with the labour market, relatively recent retirees (65-80) and older seniors (80+, increasingly preoccupied by health and care). Median income of persons 50+ declined sharply for all age groups in Greece between 2007 and 2015, by 10% (Table 15). The early middle aged individuals saw the most dramatic decline (by 13%), followed by the older seniors.

**Table 15:** Change in median/mean income and in relative income position by age group, cross sectional analysis SHARE w2 and w6

SHARE W2-W6		<b>Median Income (EUR)</b>		<b>Change (%)</b>	<b>Indexed (50+ median=100)</b>	
Country	Age	<b>wave 2</b>	<b>wave 6</b>		<b>wave 2</b>	<b>wave 6</b>
<b>Greece</b>	50-64	7044	6130	-13.0	95	92
	65-80	7668	7205	-6.0	104	108
	80+	6600	6118	-7.3	89	92
	<b>50+</b>	<b>7397</b>	<b>6647</b>	<b>-10.1</b>	<b>100</b>	<b>100</b>

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

Note: Median/mean equivalent income is set equal to 100 for the 50+ population in each country, and in each wave. Values greater than 100 indicate income status above the median/average of the 50+ population, while the reverse is the case for values lower than 100.

Why did incomes fall most for the younger group -those between 50 and 65? Lyberaki (2017) looks at SHARE data and compares pre and post crisis incomes: the brunt of income cuts affected people in employment (-11%), while the retired suffered far less by comparison (-3%). Those employed lost more than retirees. The other group losing comprises inactives, mainly homemakers. These, mainly women, entered the crisis with lower incomes and saw them decline by 12% during the crisis (Table 16). This reflects the hardships faced by female-headed households, whose income comes in the form of derived pension rights.

**Table 16:** Change in median income and in relative income position by employment status and group of country, cross sectional analysis SHARE w2 & w6

SHARE W2-W6		Median Income (EUR)		Change	Indexed (50+ mean=100)	
Country	Employment status	wave 2	wave 6	(%)	wave 2	wave 6
Greece	Retired	7836	7627	-2.7	106	115
	Employed	7000	6250	-10.7	95	94
	Unemployed	3565	3123	-12.4	48	47
	Permanently sick	6300	6240	-1.0	85	94
	Homemaker	6810	6000	-11.9	92	90
	<b>Total</b>	<b>7397</b>	<b>6647</b>	<b>-10.1</b>	<b>100</b>	<b>100</b>

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

Note: Median equivalent income is set equal to 100 for the 50+ population in each country, and in each wave. Values greater than 100 indicate income status above the median of the 50+ population, while the reverse is the case for values lower than 100.

### Age awareness in Greece

The shift of the population's center of gravity in many developed societies towards older people – what is conventionally called population ageing – is of the dominant issues of the economic and social life in the first decades of the 21st century. Public interest and discussion so far has focused on the expected results in public pay-as-you-go pension schemes, where there exist numerous internationally comparable projections. These projections treat a number of key parameters as constants or known, thus projecting existing relationships in the future in a rather mechanistic manner. This is of particular importance in Greece, where the above projections ignore non-pension aspects, while even pension data and projections have been subjected to criticism. Therefore, critical issues about how, whether, even in what direction will the ageing society differ from the current situation remain substantially unknown. Special mention can be made about the ignorance regarding the differences between cohorts and age groups (age, and cohort effects) but also the linkages between health, social and economic factors.

Despite the speed of the ageing of the population and its importance for long-term financial stability, the study of these issues and the uncertainties associated with them, has received rather limited attention from both academics and policy makers for the formulation of policy in Greece. Knowledge is quite scant of the interactions between individual traits and the socio-economic (public policy) environment.

### ***Research on ageing and data driven analysis***

A greater focus of attention for academics on understanding individual and population ageing has been triggered by the availability since 2004 of SHARE (Survey of Health, Ageing and Retirement in Europe) data for in-depth statistical studies around the ageing process in Greece. The use of SHARE data bridged an important research gap by focussing on the interaction between health and medical factors on the one hand, and socio-economic factors on the other hand, resulting *inter alia* to: **i)** the publication of a book (collective volume) on ageing in Greece (*'Life 50+: Health, Ageing and Retirement in Greece and in Europe'* edited by Lyberaki, Tinios and Philalithis, 2009); **ii)** a 3-year (2012-2015) research project of ageing entitled *'Investigating Crucial Interdisciplinary Linkages in Ageing Societies (ICILAS)'* in which participated 23 researchers forming 5 research teams in 3 Greek universities; **iii)** an on-going HORIZON 2020 research project entitled *'Social Protection Innovative Investment in Long Term Care'* (2015-2018) in which a research team from the University of Piraeus participates in a network of researchers of other 11 European Universities; **iv)** as well as a number of papers published in scientific journals and working papers presented in academic conferences.

**i) the book *'Life 50+: Health Health, Ageing and Retirement in Greece and in Europe'* edited by Lyberaki, Tinios and Philalithis, published in 2009** collects chapters from 17 researchers from Greek universities, who used the SHARE data to look at aspects related to: **i)** health and health care; **ii)** employment, pensions and family finance and **iii)** family relations and long term care. As regards the *health status*, the results indicate that the health status of persons aged 50+ displays significant variations by age (as expected) and mainly by gender (women have poorer health) in all health indicators (self-perceived health status, adl limitations, as well as mental health). The analysis also reveals that there is a statistically significant (negative) relationship between health and the socio-economic status (with the educational level being the most prominent example). It is noteworthy that after controlling for other

socio-economic characteristics gender still exerts an independent effect on health status. Another interesting finding has to do with the out-of-pocket payments for health care indicating that in Greece the proportion of persons aged 50+ who spend more than 5% of their household's income for health services reaches the level of 27% -being the highest among the other SHARE European countries. Turning to the findings on the pathways to retirement, the results portray that one out of five men is still in employment at the age of 65 (quite close to the average of the Southern countries) while in the case of women only 3.7% is in employment at the age of 65. Turning to the *family relations*, the emerging picture highlights the role of family cohesion among the elderly in Greece (in aspects related to the financial transfers, proximity and contacts to the children, receiving and providing care/help etc). So, while the family networks constitute the main pillar for the provision of personal care to the elderly, it is mainly women who perform these functions for free. Women aged 50-64 years are also more engaged, compared to men of the same age, in activities related to the provision of personal care (in dressing, bathing, eating, getting in or out of bed, or using the toilet) to persons *outside* the household (5% of women aged 50-64 provide personal care to a person outside the household daily, while the corresponding figure for men is 1%).

**ii) the research project *'Investigating Crucial Interdisciplinary Linkages in Ageing Societies (ICILAS)'* (Primary investigator Prof. Antigone Lyberaki, University of Panteion):** This project started at 2012 and finished in 2015. The five research teams of this project were organized around the group that had worked for nearly a decade in the collection, production and use of SHARE data for Greece. Furthermore the management structure drew heavily on existing cooperation



networks that had been established through the production of SHARE. The five interconnected teams are also already in close and frequent cooperation with corresponding groups. The interconnected work packages were focused primarily on three critical issues in each of which there is a significant interest from a scientific standpoint, the analysis of which required encompassing insights from more than one scientific disciplines: (i) the retirement process, (ii) the health status and promotion of good health for older individuals, (iii) the family and relationships of care between generations. The three packages were placed in an interdisciplinary framework and ensure the interconnection between different approaches. As regards the *retirement process*, some of the most highlighted findings of the analysis document that the core of the early retirement problem in Greece is evidenced in larger proportions accessing pensions at lower ages: Already at 50 17% of the year-group's women (and 6.5% of men) have received a pension, far larger than the number in any other group of countries. The bulk of early retirement problem occurs before age 55; after 60 the Greek rates for men and for women are not dissimilar to those of Europe. At the same time evidence on working careers (Lyberaki, Tinios & Papadoudis, 2013) indicate that 45% of women aged 50+ in 2007 had never been in employment, while only a moderate share (25%) of working women had been in full working career. Turning to health outcomes, in line with previous findings, the results of this project suggested that ageing appears to be associated with poorer health outcomes in Greece, more so for women. In this context, to fill the gaps of a patchy and inadequate formal system of social protection, families developed tight transactions of financial and care resources between their members (Lyberaki, Papadoudis & Tinios, 2009; Lyberaki & Tinios, 2010). These social protection roles concerned the needs on the part of the elderly (in kind and in services); the needs of children (childcare, mismatch of offered childcare with parents' hours of work) and the needs to insure young market entrants by providing a bridging income until they found their first job.

- iii) **An on-going HORIZON 2020 research project entitled 'Social Protection Innovative Investment in Long Term Care (SPRINT) (2015-2018)'**. The involvement of the University of Piraeus (2 Senior Researchers and 1 post-doc researcher) to this project intends to give meaning to the concept of social investment as applied to long-term care provision. The objective is to articulate in more detail the aspirations of the Social Investment Programme, to provide a means for assessing the social costs and benefits of various ways of providing long-term care for the frail elderly, and to present examples of approaches that do indeed, facilitate provision in a way that social benefits are achieved.

***iv) Review of other recent scientific papers***

**Health status and vulnerability:** Lyberaki *et al.* 2013 map cases of in-need-of care using SHARE wave 2 data. They identify 'deserving need' as arising from one or more of the following conditions: (a) Problem in >2 Activities of Daily Living (Care deficiency) (b) being diagnosed with one of three major diseases: Cardiovascular, Cancer (health deficiency) or (c) being Widows living alone (social networks or Pensions deficiency). It is interesting that all categories of need have an important gender dimension, as women display poorer outcomes compared to men. According to the same study, Greece exhibits the highest gender gap in the prevalence of chronic diseases, as the proportion of women aged over 50 years who suffer from two or more chronic diseases exceeds by over 15 percentage points the corresponding figure for males.

The associations between socio-economic position (SEP) and physical functioning have been investigated by Tabassum *et al.* (2009). This study examined how different SEP indicators related to the physical functioning of men aged 50 or more years in England and Greece. The SEP

indicators studied were: wealth, educational level and occupational class. The findings indicate that respondents with less wealth, fewer educational qualifications and lower occupational class were more likely to experience mild or severe physical disability than those of high SEP. Among Greek older men, wealth was a more important predictor of physical functioning difficulties than either occupational class or education.

In a similar study, Tsimbos (2010) explores socio-economic inequalities in health among Southern countries (Greece, Italy and Spain) for persons aged 50+. The data used in the analysis come from the SHARE survey; the sample includes 2,671 Greek, 2,502 Italian and 2,343 Spanish persons. Seven health indicators are examined using age-sex standardized prevalence rates and logistic regression models. Concentration indices are also computed for self-rated health (SRH). The results show that socio-economic position of individuals declines with age. Persons of lower socio-economic position experience worse health in all instances. Independently of education and gender, Greek persons display the lowest prevalence rates for SRH and physical and depressive symptoms, Spanish exhibit the highest rates for chronic conditions, and Italians perform better regarding functional limitations. Within-country analysis shows that the magnitude of socio-economic inequalities in SRH is greatest in Greece, followed by Spain and lastly by Italy.

Within the same context, Tsimbos and Verropoulou (2008) examined associations of socio-demographic, behavioural risk and health related factors with the physical functioning of Greeks aged 50 or higher, applying logistic regression models to data derived from the SHARE survey. Three aspects of self-reported limitations are considered: in activities of daily living (ADL), in instrumental activities of daily living (IADL) and difficulties related to stamina, strength, arm and fine motor function (Mobility). The findings indicate that limitations are more severe among the older old and among women. A strong inverse relationship has been found between IADLs, Mobility and socio-economic indicators while education was proved a more robust predictor than income. Obesity and lack of regular physical activity are significant risk factors. Considering specific chronic conditions, stroke and cerebrovascular disease, Parkinson's, arthritis or rheumatism, hip and femoral fractures and cataracts have the strongest associations with functional impairment.

Turning to dimensions related to mental health status, Verropoulou and Tsimbos (2007) using SHARE data focused on 857 Greek males and 1,032 females aged 50 or higher investigating associations of socio-demographic and health related indicators with depressive symptoms (EURO-D). Their results highlight that women, less educated persons, those with poor physical health, declining cognitive function and a history of depression are significantly more at risk of scoring higher than three at the EURO-D scale.

On the determinants of self-rated health in Greece focuses also the study of Zarvas *et al.* (2012) using two national cross-sectional surveys conducted in 2006 and 2011 were combined, and their data were pooled giving information for 10 572 individuals. The sample in both studies was random and stratified by gender, age, degree of urbanization and geographic region. Logistic regression analysis was used to determine the impact of several factors on self-rated health. Poor self-rated health was most common in older people, unemployed, pensioners, housewives and those suffering from chronic disease. Men, individuals with higher education and those with higher income have higher probability to report better self-rated health. Furthermore, the probability of reporting poor self-rated health is higher at times of economic crisis. The findings of this study confirm the association of self-rated health with economic crisis and certain demographic and socio-economic factors.

An age-specific study concerns the study of Tigani *et al.* (2010) which examined self-rated health in centenarians in Greece. This is a nationwide cross-sectional study on 400 Greek centenarians that was carried out between 2007 and 2010. SRH was evaluated by a simple question with a 5-point scale. Various sociodemographic, disease-related, lifestyle and psychosocial variables were assessed as candidate determinants of SRH. According to the results, SRH ratings among centenarians were better than that expected according to previous studies showing worse SRH ratings with increasing age in Greece. The 22.4% of the variance in SRH among centenarians was predicted by gender, habitat region and status, financial problems, disease presence and autonomy. Among lifestyle and psychosocial variables, obesity, good relationships with children, lack of feelings of loneliness, high optimism, adaptability and an internal health locus of control profile were independently associated with good SRH. These results indicate that SRH in individuals of extreme longevity were related to specific personal psychosocial factors that contribute to healthy aging and thus support the biopsychosocial model of health promotion.

Efklides *et al.* (2003) investigated the effect of demographic, health, affective, and adaptation-to-old-age factors on the above attributes of subjective quality of life. The sample was comprised of 160 elderly of both genders, aged 63 to 100 years. Half of them lived in a Greek city and the rest came from a small town and nearby villages. Participants filled in questionnaires on (a) demographic information; (b) subjective perception of their health condition; (c) emotional state; (d) adaptation to old age; (e) Life Satisfaction Index. Pearson correlation and regression analyses showed that the effect of demographic and health factors was mediated by affect and adaptation-to-old-age factors. Positive affect contributed to all aspects of subjective quality of life, whereas negative affect was important for the determination of happiness and SWB. Particularly important for LS proved to be good adaptation to old age and generativity toward one's children, whereas self-control and efficacy, and downward social comparison for one's health condition contributed to morale. Having children had a significant contribution to happiness, morale, and LS but not to SWB.

Bamia *et al.* (2007) focus on the investigation of the health effects of retirement and age at retirement. In the Greek segment of the European Investigation into Cancer and Nutrition study, 16,827 men and women enrolled from 1994 to 1999 were either gainfully employed or had retired from such employment at enrollment; had not previously been diagnosed with stroke, cancer, coronary heart disease, or diabetes mellitus; and had complete information on important covariates and documented survival status as of July 2006. All-cause and cause-specific mortality in relation to employment status and age at retirement (among retirees) was analyzed through Cox regression models, controlling for potential confounders. In comparison to subjects still employed, retirees had a 51% increase in all-cause mortality (95% confidence interval: 16, 98). The results suggest that among retirees, a 5-year increase in age at retirement was associated with a 10% decrease in mortality (95% confidence interval: 4, 15). Findings were more evident for cardiovascular than for cancer mortality, whereas, for injury mortality, there was no evidence of association. Overall, the findings of this study indicate that early retirement may be a risk factor for all-cause and cardiovascular mortality in apparently healthy persons.

Much commentary on the crisis laments a deterioration in health outcomes, chiefly as a direct result of health system retrenchment. This is *not* borne out by the survey evidence in Greece (Lyberaki, 2017; Lyberaki *et al.* 2017). ADLs (Activities of daily living) have not deteriorated with the exception of women between 65 and 80 years of age. The health disadvantage of women remains strong, while the connection between health outcomes and incomes is visible only for people over 80 years of age. In particular, health problems related to hypertension deteriorated for people above

65. The picture is different for chronic diseases: chronic diseases prevalence increased for all age groups (Tountas, 2017; Lyberaki et al. 2017). The most remarkable change concerns men aged 65-80: 45% of them in wave 2 suffered from 2+ chronic diseases, while in wave 6 that rose to 58%. *As regards gender differences*, women's risk exceeds men's for all age groups -around 9pp in wave 6 for persons aged 50-64 and 13pp for persons aged 80+).

**Family ties and care:** Earlier findings on family dynamics reported in the First Results Book of SHARE (Kohli, Kühnemund & Ludicke, 2005; Attias-Donfut, Ogg & Wolff, 2005) demonstrate a *North-South gradient in family structure*, as reflected in the frequency of contact and the rates of co-residence (Kohli, Kühnemund & Ludicke, 2005; Lyberaki & Tinios, 2005; Lyberaki et al. 2013). High rates of co-residence in Greece (Lyberaki & Tinios 2010) imply that family support is focused around the immediate kin group inside the household and is *performed almost exclusively by women* (Attias-Donfut, Ogg & Wolff, 2005; Lyberaki, 2008, 2011). With respect to *intergenerational financial transfers*, there exists a North/south variation in the composition of the networks of support recipients: *while younger respondents receive more in the North, older respondents receive more in the South, reflecting the differences in welfare systems*. Help in cash is important towards older households in Greece, compensating for a *pensions adequacy problem* (COM, 2012; Figari et al. 2013; Lyberaki and Tinios, 2005; Zaidi, 2010).

At the same time, the elderly family members (and primarily the women) offer abundant and frequent childcare and child-minding services to working parents (Lyberaki 2009; Lyberaki & Tinios, 2016). This is true also during the summer holidays (longer stays of grandparents with their grandchildren). All in all, the picture emerging suggests that care provision to grandchildren in Greece is more intensive than elsewhere in Europe. In Greece, one out of three women aged 50+ (31%) provides childcare to grandchildren almost daily.

Examining how the needs for care are met across the SHARE countries Lyberaki et al. 2013 as well as Tinios et al. 2017, distinguish between *informal* and *formal* care: *Informal* care is defined as unpaid personal care provided by family members, friends, or other persons outside the household, on daily or weekly basis. Informal care defined thus is unpaid care that bypasses the market, being largely met via informal networks, either based on or organised by the family. In contrast, *formal* care stands for the paid help provided by professionals and private providers via the market mechanism. Informal networks fulfill an important role in providing care to persons aged 75+ in Greece as in other Southern countries, while their corresponding contribution in meeting the needs of persons aged 75+ in the Northern countries is almost negligible (less than 2% of persons 75+ in Sweden, Denmark and Netherlands receive unpaid care on daily or weekly basis). This finding is in line with the findings of other studies which document that the care for the elderly in the 'strong family' Southern European countries is almost exclusively family based (Bettio, Simonazzi & Villa 2006; Lyberaki 2011). Turning to the role of formal (paid) care in meeting the needs of the elderly, the emerging picture is reversed: in most of the Northern and Continental countries the proportion of persons aged 75+ that receive systematically paid care exceeds 30%, portraying a striking contrast compared to the corresponding figures of the 'strong family countries' (in Greece is less than 7%). To sum up, it can be argued that the *same needs for elderly care are met via different channels* across European countries. This is largely due to the different family structures across Europe: Southern countries appear to rely more on informal channels of care provision, while private providers (i.e. paid care) represent the dominant pattern in the North, as well as in most of the Continental countries. This difference is mirrored by a greater involvement of formal structures linked to the Welfare State the further North one goes; indeed the two – family ties and welfare state involvement – proceed in parallel.

Using data from the Time-Use Study (conducted for first time in 2014 in Greece) Lyberaki and Tinios (2016) focus on time use allocation by gender in different age categories look like in Greece. Evidence from this study shows that the gender differential in time devoted to paid work increases with age: while among the youth (20-24 years) women dedicate to paid work 14% less time compared to men of the same age; in prime age (25-44) they spent on average 45% less time compared to men; women aged 45-64 dedicate on paid work on average 50% less time that men of the same aged do. Time dedicated to unpaid work increases with age for men and for women also (however up to the age of 65 years in the case of women). Nevertheless, in all age groups women spend more time in unpaid work. The estimated gender differential in time devoted to unpaid work follows an inverted U pattern: among the youngest (20-24) women spend 2.9 times more time on core household than men; for the prime-aged the corresponding ratio increases to 3.4; for those aged 45-64 it falls to 2.9 and among the over-65s it decreases further to 2.4. Time spent in core housework increases with age for both men and women (again up to the age of 65 years), but in the case of women it does so at a faster rate. As a result, the gender differential in time spent in core housework increases with age; women aged 20-24 spend 5.3 times more time in core housework compared to men; for persons aged 25-44 this ratio reaches 7.2 and increases further to 8.4 for persons aged 45-64; decreasing to 5.7 for person in retirement age (65+). On the contrary, the gender differential in time devoted to care decreases with age up to the age of retirement (when it increases again). In particular, while women aged 20-24 spend 6.3 times more time in care compared to men, among the prime-aged the corresponding ratio decreases to 2.4 and reaches parity for persons aged 45-64 years. Thereafter, it increases again to 1.5 for persons aged over 65 years. Lastly, after the age of 25 years, the time spend in leisure decreases for both men and women, while it increases again after the age of 45 years and even more after retirement for both men and women at an almost equal rate. As a result, the gender differential in time spent in leisure fluctuates around 1.2 to 1.3 for all age groups.

As regards the trends throughout the crisis, Lyberaki (2017) using SHARE data shows that solidarity remained strong, albeit it had changed direction: it moved away from the older citizens towards children in need, mainly due to rampant unemployment. Even among the Southern strong-family-ties group, only in Greece is there an increase between wave 2 and wave 6 in the proportion of people 50+ who live in the same household with one of their children (from 21% to 27%). So, in Greece, the crisis encouraged a movement from living in the same building to moving with the children in the same household.

**Income status:** As regards trends in income status evidence reported in Tinios (2015b) indicate that the incidence of poverty changed, altering some features that had always characterised the pre-crisis period. *First*, the age profile of the at-risk-of-poverty rate has been reversed. Whereas before the crisis the old were far more likely to be poor ('poverty was grey in colour') (Lyberaki *et al.* 2010), this was no longer the case. The old-age at-risk-of- poverty rate *fell* in absolute terms by over 6p.p. over the same period (from 21.3 % in 2010 to 14.9 % in 2014), confirming the supposition that pensioners were hurt less than other low income people (Lyberaki, 2017). The poverty increase was concentrated among individuals of working age. So, attachment to the labour market is now a greater poverty risk factor, faced chiefly by the unemployed, but also by other groups with irregular or limited access to paid employment.

## Pension policies

**Pensions and pensions policy.** Pension reform was the first reform passed in the first bailout in July 2010. Since then there have been a multitude of other pension changes, while the last major pension reform was passed in May 2017. Policy has been proceeding as an unsteady interplay between two sets of objectives and two sets of actors. The objectives refer to the long and medium terms; there was retrenchment in the long term, combined with an attempt to shelter new pensions in the medium term and to encourage early retirement as a substitute to employment adjustment. The actors involved were the creditors, who tried to implement the programme, and the Greek governments, who were more concerned with blame avoidance. Those two sets of influences affected all the three generations participating in the pensions social contract, but in different ways. That is, different gender effects characterized the young, the working generation and the older generation. Finally the outcome of those changes was to apply the new system retrospectively to all system participants (Tinios, 2017).

The changes involved abrupt changes in retirement ages – finally raised to 67 for all participants in 2016 and eliminating special cases which were feeding early retirement between 2010 and 2015. Change was reinforced by **pension provider consolidation** for primary pensions into a single provider, EFKA. All contributions rates in 2017 are brought in line with those faced by employees in the private sector; this entailed major contribution increases for the self employed and non-standard employment contracts.

Thus the attempt to protect incumbents and shift all costs to the future was ultimately fruitless. There were **extensive ‘grandfathering’ measures for those close to retirement in the early years of the reform.** Rights to lower retirement ages and higher replacement rates were ostensibly preserved for people close to 50 years of age but were ultimately withdrawn after 2015. This happened through repeated pensions cuts affecting existing pensioners; these pensions cuts are still ongoing. The cuts entailed a major redistribution within pensioners towards those with low pensions. Indeed, pensioners’ relative poverty fell by more than half between 2010 and 2014.

The early years of the crisis (2010-2015) were characterised by the government legislating for later retirement in the steady state, while at the same time vigorously pursuing **early retirement** during the crisis, especially among women (Lyberaki & Tinios, 2012). For example, those close to retirement age in 2010 were allowed to ‘buy in’ up to 7 years of extra contributions to facilitate exit. Many mothers in the private sector acquired a *new* right to retire at 50. Whereas previously mothers of underage children had the right to early retirement, after 2010 whether a child is underage is judged when the mother completes 20 years of contributions. So, the right to retire at 50 of a woman who started to work at 20 will be judged when she is 40 rather than ten years later. At the time when the retirement takes place, the ‘underage child’ -for whose benefit the early pension is granted- may be up to 30 years of age. This provision led to large scale exits of women from better paid jobs in banks and public enterprises; though it was rescinded in 2015, large numbers of women had already retired. The legacy of the first 5 years of the crisis is a large cohort of women who retired early (with relatively low pensions) and who are already suffering from pensions cuts. They are facing an uncertain future.

## Employment policies

Policies, laws and measures promoting gender equality were generous in the public sector, but were essentially ignored in the private sector. This attitude of selective protection has been termed ‘**Legalistic Formalism**’ (Lyberaki, 2010), or protection existing predominantly on paper. This

definitely improved the position of women in the public sector and contributed to a two-speed labour market. In many instances, the promotion of gender equality was appropriated as a weapon to maintain the position of relatively protected groups. Legalistic formalism in combination with unchecked discrimination in the unregulated part of the market, worked to the detriment of the most vulnerable in the insider/outsider divide.

Employment protection legislation and social protection of workers was enforced in a way that in practice guaranteed the position of well-placed groups (*'insiders'*) at the expense of residual groups of *'outsiders'*. Outsiders, were found in the private sector, or in areas where *internal* protection could not compensate for openness. In turn, employment protection for insiders implied large queues at the entrance of the labour market and a concentration of unemployment among the young labour market entrants, but also among women. This gender dimension implied persistently higher unemployment risk for women, but also a low participation rate, especially for mothers of small children. The most disadvantaged group among *'outsiders'* consists of immigrant women.

Until the crisis, the Greek labour market operated on the implicit assumption of the male breadwinner model. Most regulations were implicitly oriented to serve this compromise between the genders: Men were treated as 'normal' workers and women as ancillary helpers, in practice as second class workers. This gender dimension evidenced itself both in gender gaps in employment and unemployment; a very low participation rate, especially for mothers of small children; as well as over-representation of women in precarious and low paid jobs.

The Greek working time regime was characterised by a very low part-time rate and an extremely limited use of flexible working time arrangements in comparison to European norms. Although part time still remains low for the stock of people employed, new hires are part time to a far greater extent. Administrative data (obtained from ERGANI)<sup>3</sup> suggest that full-time employment represents less than half (45%) of the total number of new hires during 2016; a further 40% of the total hires concerns part-time jobs and 15% shift work. There is some evidence that this preference may be due to employers attempting in this way to evade social insurance contributions and could be simply disguised full time employment.

The Third MoU (August 2015) contains very detailed and mostly front-loaded actions, subject to quarterly reviews. In the employment field, protection is gradually eased, but mainly for non-typical workers.

Early retirement was stopped abruptly by the legislative preconditions of the third bailout. For those who had not vested rights by August 2015, these meant large increases in minimum retirement ages– in some cases by 17 years but in most of between 3 and 5 years. These changes amount to a closing of the door for retirement for a number of years; as the stock of those with vested rights is exhausted, there will be no individuals eligible to retire. This impact will begin to be felt by 2018. It amounts to a major shock in the supply of labour of mature workers, most of whom will be women. It must be noted that, to date, no measures are planned to compensate by action on the demand side by employers – so that older individuals, most of whom will be women, barred from retirement can continue working. A key issue faced by the increasing number of unemployed people over 50 is the non-existence of a market for new hires of mature workers.

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<sup>3</sup> <http://www.ypakp.gr/uploads/docs/10142.pdf>

## **Long-term care (LTC) and ageing**

Despite the acceleration of ageing, SHARE data show a seemingly paradoxical drop in the care gap (the percentage of people in need of care who do not get any). This is not due to an increase of state-funder, formal LTC; the Help-At-Home program has been beset by financial and organisational problems and was unable to expand services. The improvement in outcomes appears to be due to an expansion of bought-in care, financed by households themselves.

Though this appears to have met immediate needs, it is unclear whether it is a sustainable option for the long term giving rise to distributional concerns (Tinios *et al.* 2017). A major problem area is likely to be the supply of carers. In the past, female migrants provided affordable care in the unregulated private market. However, their number is shrinking, as the crisis is encouraging them to leave Greece. The gap in the supply of labour could be filled, in principle, by tapping into the labour supply of pensioners who retire early. However, this avenue is largely closed through new restrictions placed on the employment of pensioners on a part-time basis in the 2016 Pensions Reform Bill. Similar disincentives (a major increase in Social Insurance contributions, equating the self-employed with salaried employees, necessitating paying a minimum of 27% of earnings plus tax) are preventing the expansion of caring as a secondary occupation or by self-employed individuals.

## **Health Care and ageing**

Health sector policy-making does not appear to be concerned with ageing. Health-care, nevertheless, was a major concern in the retrenchments and structural reform effort from 2010 onwards. Despite some alarmist reports, health outcomes did not suffer a major blow. Considerable retrenchment of expenditure in the initial period was able to claw-back some of the precipitous rise in expenditure in 2000-2010 (chiefly in pharmaceuticals, diagnostic tests, but also remuneration). Structural change has affected health insurance, which was consolidated into a single insurance- single buyer system. Primary care shifted towards family-doctor referral system – playing the role of gate-keeper. These changes have created considerable transition problems, but are unlikely to affect the long-term picture.

Souliotis *et al.* 2016 reveal that, due to severe financial pressure, there is a growing unwillingness of citizens to pay informally and an increasing demand for these payments as a prerequisite for access to services or to redeem services provided. This “hidden” financial burden of at least 27 % impacts negatively on the living conditions of households and is not reported as purchasing ability or cost of living. According to Kyriopoulos *et al.* 2014, a total of 25% of chronic patients face geographical barriers while 63.5% and 58.5% of them are in front of economic and waiting list barriers, respectively. Unemployed, low-income and low-educated are more likely to face economic barriers in access. Moreover, women, low-income patients, and patients with lower health status are more likely to be in front of geographical barriers. In addition, the probability of waiting lists occurrence is greater for unemployed, employees and low income patients. Barriers in access can be mainly attributed to income decrease and unemployment. In this context, health policy measures are essential for removing barriers in access.

Socially isolated individuals were found to receive fewer preventive services (Vozikaki *et al.* 2017). This finding confers important evidence on the potential factors that affect the use of preventive health services among older adults. It is also suggestive of the need to develop public health and social policies with the aim to alleviate social isolation and as a means to enhance preventive care uptake in later life.



Of greater worry in the long term is the sharp drop in prevention expenditure, which could lead to future deterioration in health outcomes. Moreover, health sector planning to meet the ageing challenge is still lacking.

### **Conclusions: The policy challenge**

Greece is one of the countries in the EU, which is ageing fastest. This is exacerbated by emigration (especially of younger, well qualified people as well as of migrants of the previous migration waves). Nevertheless, there is very little policy awareness of ageing as an integrated societal challenge. Commentary is concentrated on the projected fall in the total population number but is hardly aware of other issues that longevity poses. There is little awareness of ageism as a problem in society, a factor which is probably behind its frequent manifestation. Indeed, the term “ageism” has yet to find a Greek translation.

Hence, policy seems to be overwhelmingly –if not exclusively- concerned with the issues of retirement, and to a lesser extent its flip side, the position of older workers in the labour market.

We have seen that early retirement of women was the most significant impact of the crisis. Whether as a misguided attempt to limit unemployment, or as an attempt to limit the size of the public sector when direct redundancies were politically unpalatable, all the evidence points that the legacy of the crisis to the post-crisis world will be a substantially and permanently increased body of retirees. This has a number of implications in a number of policy areas, each of which will be sketched.

Before we enter into this, we may ask whether the change is reversible or whether the larger stock of retirees has to be borne no matter what. Panageas and Tinios 2016 borrow a term from the Geneva Association of Insurance Economists and talk of increased employment of older individuals as a putative ‘fourth pillar’ to cope with ageing. Such, includes pensioners’ employment either voluntary or part-time, which is increasingly familiar in Europe and not unknown in Greece (though in the latter it is met mainly in the grey economy). However, policy is moving in the opposite direction, that of placing increasing obstacles in the way of working pensioners.

***Echo effects of early retirement:*** The obvious problem of retirement as opposed to other labour market adjustment is that it creates a public finance problem, which will last at least until the time that the young new retirees would have retired. In the extreme though not unusual case of mothers of ‘underage children’ this might be fully for 17 years (between 50 and their new age of 67). During that time the State will be paying pensions and not collecting contributions. These will be counterbalanced after that period by having to pay smaller pensions than otherwise.

However, public finance is not the only area where early retirement will affect. We look at each area in turn:

First, **the early retired *themselves*** will have to live with lower pensions. They will, thus, not be able to participate into any post-crisis output gains; low entitlements will be permanently locked to crisis levels. This will translate into lower independence as those women will have to rely more on their menfolk and family. It will also mean a far increased poverty risk in the future. Marginalisation and psychological effects may well be side-effects.

Second, **the implications for the labour market and for enterprises.** Public enterprises and the higher reaches of the civil services are being emptied of female staff. Continued hiring constraints will mean that the equalising impact of the public sector, plus its role as a kind of leading sector in gender equality will wane. In the private sector, the fact that early retirement was limited to women

means that there will be a smaller supply of senior female cadres to compete for the hierarchy of business and of public administration. The obverse of that is that activities still open to pensioners may be of greater interest to women – voluntary activity, politics, even working in the grey economy. However, the net result will be a lower representation of women in the economic sphere, and whatever this means for gender stereotypes.

**Third, the implications for those trapped in the labour market.** The other side of the coin of a system which bets on women's early retirement is the large number of women 'caught out' by the abrupt change of the summer of 2015. Those women *would have* retired early, but are prevented from doing so by recent legislation. They have to navigate a labour market, which is still attuned to men and cannot accommodate women leaving much later. While the supply of labour is thus forcibly and abruptly increased, the demand by employers will be essentially unchanged. For example, tenure linked pay scales make employment of older individuals more costly for employers. Similarly a labour market for the over-50s is essentially non-existent. Training programs ignore the needs of the over-50s when not barring them outright. Loans for starting a business frequently discriminate by age. Those issues will become increasingly relevant as the stock of those trapped grows with time, which will start happening with increasing frequency from 2016 on.

Greece will have to adapt from being a country where older women's place was in retirement (even if it was not in the home) to one where they will be trying to find work. If nothing is done, they will not be able to *find* any.

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