European Commission

EUROPEAN SOCIAL POLICY NETWORK (ESPN)

Financing social protection

Greece

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European Social Policy Network (ESPN)

ESPN Thematic Report on Financing social protection

Greece

2019

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2019

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Quoting this report: Ziomas D., Theodoroulakis M., Economou Ch. & Konstantinidou D., (2019). ESPN Thematic Report on Financing social protection – Greece, European Social Policy Network (ESPN), Brussels: European Commission.

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Summary

The data presented in this report reveal that over the period 2005-2016, total expenditure on social protection in Greece, as a percentage of GDP, has shown a significant increase (from 20.4% of GDP in 2005 to 26.6% in 2016), though in real terms this appears to be almost unchanged (from 100 units at constant 2005 prices in 2005 to 102.8 units in 2016). The main explanation for the rather 'artificial' increase observed in the rate of social protection expenditure is related to the fact that the Greek GDP (denominator) has shown a dramatic decrease, especially over the period 2010-2016, which has been a result of the deep and prolonged economic crisis that the country was faced with. Nevertheless, the data show that the share of general government contribution to the total financing for social protection has presented a notable increase over this period, whereas the share of social contributions has shown a decline. The latter was mainly due – especially since 2010 – to the significant reduction in the number of employed persons and in the level of their salaries on which social contributions are calculated, while at the same time there has been an increase in certain flexible forms of employment (non-standard employment), and particularly in (involuntary) part-time employment.

The evolution of social protection expenditure by function throughout the period 2005-2016 shows that both social protection receipts and expenditure have been largely oriented to 'old-age' benefits and, to a lesser extent, 'healthcare and sickness' benefits, while the level of receipts and expenditure allocated to the other social protection functions, mainly non-contributory social welfare benefits, remains low. The only notable changes that took place over this period concern a significant increase in the share of 'old-age' benefits in the total financing, and a decrease in the share of 'healthcare and sickness' benefits. All these changes appear to have been largely a result of the consequences of the crisis and of the strict austerity measures, and less a result of structural reforms of the social protection system (or of those reforms specifically targeted at financing of the system).

Until 2015, the various reforms of the social protection system had a limited influence in the mix of social protection financing. However, relevant national data suggest that the recent reforms in social protection-related policies – and especially the social insurance reform and the social welfare reform – have played a significant role in shaping the current mix of social protection financing. Efforts have been concentrated over recent years to increase public social protection spending, while at the same time particular emphasis has been placed on making social transfers more efficient and better targeted at those in need, with the ultimate aim of improving the social protection system's redistributive power. This is reflected in the significant increase observed between 2017 and 2019 in the public expenditure on social welfare (non-contributory) benefits, which is mainly attributed to the introduction of new means-tested welfare benefits and the reform of existing ones.

The existing mix of social protection financing is largely based on social insurance contributions receipts, the contribution rates of which have been harmonised for all employed persons since 2017. Still, though, the lack of effective control mechanisms/insurance inspection mechanisms constitutes one of the main weaknesses of social protection financing. Addressing the problem of undeclared work – and therefore, the evasion of social insurance contributions – is crucial for social protection financing with regard to both the level of total revenues and the share of social contribution receipts. The high level of social insurance rates is another negative element that affects the current mix of social protection financing, since it acts as a disincentive to engage in formal employment relationships.

According to recent projections, the recent social protection reforms are expected to have a positive impact on the financial sustainability of the social protection system in Greece. Yet, demographic, economic and labour market developments will continue to influence the mix of social protection financing. Priority should thus be given to targeted policies and measures to address specific social protection-related challenges, while further prioritising of public social protection spending is required in favour of welfare benefits, so as to ensure an adequate social safety net for all those in need in Greece.

1 Current levels and past changes in financing social protection

Over the period 2005-2016, total expenditure on social protection in Greece, as a percentage of GDP, showed an increase of 6.2 percentage points (from 20.4% of GDP in 2005 to 26.6% of GDP in 2016), which is 2.2 percentage points greater than the increase observed for the EU-28 as a whole over the same period. In particular, the data in Table 1 below reveal that social protection expenditure in Greece saw a significant increase over the period 2005-2010 (of 2.4 percentage points between 2005 and 2008 and 3.1 percentage points between 2008 and 2010). This increase is mainly due to the fast growth of pension expenditure during this period – a result of the rapid increase in pensions being paid and in the number of pensioners, given the generous options available at the time for early retirement. Yet – and although an increase of 2.2 percentage points could also be observed in the period 2010-2012 – the period 2012-2016 saw a decrease of 1.5 percentage points. It should be noted, however, that, in spite of the overall increase observed over the period 2005-2016, social protection expenditure in Greece as a percentage of GDP continued to lag behind the EU-28 average throughout this period.

Table 1: Share of gross expenditure on social protection in total GDP, Greece and EU-28, 2005-2016

	Year	Greece	EU-28
% of GDP	2005	20.4	26
	2006	20.6	25.6
	2007	21.3	25.3
	2008	22.8	25.9
	2009	24.8	28.7
	2010	25.9	28.6
	2011	27.3	28.3
	2012	28.1	28.7
	2013	26.4	28.9
	2014	26	28.7
	2015	26.2	28.4
	2016	26.6	28.2
Percentage point change	2005-2008	2.4	-0.1
	2008-2010	3.1	2.7
	2010-2016	0.7	-0.4
	2005-2016	6.2	2.2

Source: Spasova and Ward (2019), Annex ESSPROS tables.

It is necessary to point out that the increase observed during the period 2010-2016 in the share of expenditure on social protection in total GDP is rather 'artificial' and hardly reflects the actual situation in Greece. For, when examining total expenditure on social protection in absolute numbers, one observes that there has been a dramatic decrease since 2010 (with the outbreak of the crisis). That is, from €58.549 billion in 2010 it dropped to €46.264 billion in 2016.[1] This decrease is mainly due to the fiscal consolidation/economic adjustment programmes implemented in Greece during the period 2010-2018 in the framework of three bail-out agreements.[2] However, during the period 2010-2016, there was also a dramatic decrease of 21.9% in Greek GDP, i.e. from €226.03 billion in 2010 to

[1] Eurostat database, European System of Integrated Social Protection Statistics (ESSPROS) data [spr_exp_sum] (provisional data); data extracted: 16 February 2019.

[2] During the period 2010-2017, Greece signed three bail-out agreements – Memorandums of Understanding (MoU) – and a Supplementary MoU (SMoU): the first MoU on 3 May 2010; the second on 9 March 2012; the third on 19 August 2015; and the SMoU on 5 July 2017. These entailed, among other things, the imposition of upper ceilings on the share of public expenditure on pensions, healthcare and social welfare in the total Greek GDP, which led to serious cutbacks on public expenditure for social protection.

€176.40 billion in 2016. Thus, despite the cuts imposed on public expenditure on pensions, healthcare and other social benefits in the context of the fiscal consolidation programmes, social protection expenditure as a percentage of GDP appears to have shown a slight increase over the period 2010-2016. This is mainly due to the fact that Greek GDP declined even more substantially in the same period (Figure A1 in Annex A).

This nominal decrease in social protection expenditure is also confirmed by the relevant data expressed in real terms (at constant 2005 prices), as presented in Table 2 below. In particular, in contrast to the period before 2010, when social protection expenditure recorded a notable increase, expenditure in real terms showed a significant decline during the period 2010-2016, presenting an annual average change of -3%. This inverted U-shape of the expenditure in real terms – observed between the periods 2005-2010 and 2010-2016 – is mainly attributable to the serious cutbacks in public expenditure on social protection over the period 2010-2016 within the framework of the three bail-out agreements for Greece. More specifically, as the data in Table 2 reveal, during the period 2005-2008 there was a significant increase in social protection expenditure in real terms – 21.3 units (i.e. from 100 units in 2005 to 121.3 in 2008), with an annual average change of 6.6%; this was followed by a slight increase of 1.9 units over the period 2008-2010, with an annual average change of 0.8%. However, after 2010, one could observe a dramatic decrease of 20.4 units (i.e. from 123.2 units in 2010 to 102.8 units in 2016). Yet overall, the change in the period 2005-2016 is marginally positive, presenting a negligible annual average increase of 0.3% (against the EU-28 average of 1.9%) and a total increase in social protection expenditure in real terms of only 2.8 units (EU-28: 22.6 units).

Table 2: Gross expenditure on social protection in real terms (i.e. at constant 2005 prices), Greece and EU-28, 2005-2016

	Year	Greece	EU-28
Index, 2005=100	2005	100	100
	2006	106.8	101.9
	2007	113.7	103.9
	2008	121.3	106.5
	2009	126.9	114
	2010	123.2	115.1
	2011	117.3	114.9
	2012	111.3	115.4
	2013	101.1	116.7
	2014	100.7	118
	2015	101.9	120.8
	2016	102.8	122.6
Annual average change %	2005-2008	6.6	2.1
	2008-2010	0.8	4
	2010-2016	-3	1
	2005-2016	0.3	1.9

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Turning to the evolution of social protection expenditure by function, the data in Table 3 reveal that expenditure on 'old age' in Greece presented the largest share throughout the period 2005-2016. This showed a significant increase of 6.7 percentage points between 2005 and 2016. The figures are particularly striking from 2010: from 48.2% in 2005, the share fell to 47% in 2010, before soaring to 54.9% in 2016. It is worth noting that expenditure on old age in Greece in 2016 was far higher than the EU-28 average (54.9% against 40.1%). An increase of 1.3 percentage points can also be observed in expenditure

on 'other' social benefits during the period 2005-2016 – from 23.3% in 2005 to 24.6% in 2016 (though it remained considerably lower than the EU-28 average of 30.4% in 2016).

As to the expenditure on 'sickness/healthcare' (Table 3), this constitutes the second-largest share of social protection expenditure in Greece, accounting in 2016 for 20.5% of total expenditure on social protection (though that was considerably lower than the EU-28 average of 29.5%). It should be noted, however, that, in contrast to the expenditure on 'old age' and 'other' social benefits, this saw a significant decrease of 8.1 percentage points in the period 2005-2016 (from 28.6% in 2005 to 20.5% in 2016), having followed a steady downward trend during the entire period. In particular, it dropped by 2 percentage points between 2005 and 2010 (from 28.6% to 26.6%); with the outbreak of the economic crisis, it fell further – by 6.1 percentage points (from 26.6% in 2010 to 20.5% in 2016). This latter drop can be attributed to a significant decrease in 'sickness/healthcare' expenditure of 46.8% between 2009 and 2014 (from €15.743 billion in 2009 to €8.376 billion in 2014), followed by a modest increase of 11.7% after 2014 (from €8.376 billion in 2014 to €9.354 billion in 2016) (see Table A1 in Annex A). The slight increase observed in 2015, and especially in 2016, in the share of 'sickness/healthcare' in social protection expenditure can be partly attributed to the measures introduced for the healthcare coverage of the uninsured population.

The detailed breakdown of sickness/healthcare benefits, as presented in Table A1 in Annex A, shows that the above-mentioned downward trend in sickness/healthcare social expenditure during 2009-2014 was related mainly to cuts in inpatient and outpatient care of 44.9% and 51.2%, respectively. This was because, under the three Memorandums of Understanding signed by Greece in the context of the economic adjustment programme implemented after 2010, the country was obliged to keep public health expenditure at below 6% of GDP, and public pharmaceutical expenditure at below 1% of GDP. The decline in GDP observed after 2009, and the simultaneous imposition of public health spending restrictions, meant a cut in financial resources for the public health sector. As part of the measures aimed at reducing public debt and deficit, horizontal funding cuts were applied to healthcare (Economou et al., 2017; Economou and Panteli, 2019).

Table 3: Breakdown of gross expenditure on social protection by function, Greece and EU-28, 2005, 2008, 2010, 2016 (% total expenditure)

	2005			2008			2010			2016		
	Sickness/ Health	Old age	Other	Sickness/ Health	Old age	Other	Sickness/ Health	Old age	Other	Sickness/ Health	Old age	Other
Greece	28.6	48.2	23.3	28.1	46.7	25.2	26.6	47.0	26.5	20.5	54.9	24.6
EU-28	28.7	38.6	32.7	29.3	39.4	31.3	29.1	39.1	31.8	29.5	40.1	30.4

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Following from the above, it may be said that the distribution of expenditure on social protection across the various functions implies that the social protection system in Greece continues to give particular priority to social transfers for pensioners, rather than to other social transfers. This comes in spite of the fact that the at-risk-of-poverty rates of the younger population groups are higher than the rate for pensioners. This priority is also reflected in the distribution of expenditure across the functions under the category 'other' social benefits. More specifically, as Table 4 shows, expenditure on pension benefits for 'survivors' represented 10.2% of the total social protection expenditure in 2016, which was almost double the EU-28 average (5.5%). Meanwhile, the rest of the functions continued to present far lower shares in 2016 (i.e. disability – 5.9%; family – 4%; unemployment – 3.7%; housing – 0.1%; social exclusion – 0.8%). It should be stated, however, that all functions under the category of 'other' social benefits showed only marginal changes as regards their share in total expenditure during the period 2005-2016.

Table 4: Breakdown of gross expenditure by function in 'other' category, Greece and EU-28, 2005, 2008, 2010, 2016 (% total expenditure)

	Disability	Survivors	Family	Unemployment	Housing	Social exclusion n.e.c	Disability	Survivors	Family	Unemployment	Housing	Social exclusion n.e.c
	2005						2008					
Greece	6.0	9.4	3.9	3.5	0.2	0.2	6.2	9.4	3.9	5.3	0.3	0.2
EU-28	8.0	6.7	8.4	5.8	2.0	1.8	7.6	6.1	8.6	5.0	2.0	1.9
	2010						2016					
Greece	6.4	9.4	4.0	6.2	0.2	0.2	5.9	10.2	4.0	3.7	0.1	0.8
EU-28	5.8	8.6	6.0	2.1	1.9	7.4	7.4	5.5	8.7	4.6	2.0	2.2

Source: Spasova and Ward (2019), Annex ESSPROS tables.

When examining the expenditure on means-tested benefits as a share of total social protection expenditure in Greece, the data in Table 5 show that, even though there was a slight increase (of 1.8 percentage points) between 2005 and 2016 (from 3.3% in 2005 to 5.1% in 2016), it remains far below the EU-28 average (12.1% in 2016). An increasing trend can be observed since 2013, which is mainly due to the fact that most of the non-means-tested family/child allowances were converted into two means-tested benefits: namely, the Single Child Support Allowance and the Special Large Family Benefit. In addition, the government provided low-income households with an *ad hoc* means-tested social dividend in both 2014 and 2016.

Table 5: Share of expenditure on means-tested benefits, 2005-2016

	% Total expenditure												Percentage point change			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2005-2008	2008-2010	2010-2016	2005-2016
Greece	3.3	3.4	4.0	3.6	3.4	3.5	3.2	3.2	4.7	6.0	5.4	5.1	0.2	-0.1	1.6	1.8
EU-28	10.3	10.4	12.0	11.8	12.0	12.1	12.1	12.0	11.8	12.0	12.1	12.1	1.5	0.3	0.0	1.8

Source: Spasova and Ward (2019), Annex ESSPROS tables.

When looking at the shares of gross and net social protection expenditure as a percentage of GPD for the years 2007, 2010 and 2015, as presented in Table 6 below, one can see that their differences over the period 2007-2015 are minor and that the figures remain more or less stable throughout the period. Nevertheless, both gross and net social protection expenditure saw an increase as a percentage of GPD between 2007 and 2015, though they remain lower than the EU-28 averages.

Table 6: Gross and net social protection expenditure, Greece and EU-28, 2007, 2010, 2015

	% of GDP						Percentage point change		
	Gross expenditure			Net expenditure			Net minus gross		
	2007	2010	2015	2007	2010	2015	2007	2010	2015
Greece	21.3	25.9	26.2	19.9	24.6	25.1	-1.4	-1.3	-1.1
EU-28	25.2	28.6	28.3	23.5	26.5	26.1	-1.7	-2.1	-2.2

Source: Spasova and Ward (2019), Annex ESSPROS tables.

As to the effective tax and social contribution rates on gross social protection expenditure (Table 7), these in total appear to have shown a decrease of 1.2 percentage points over the period 2007-2015 (from 6.2% in 2007 to 5% in 2015), unlike the EU-28, where the rate increased from 7% in 2007 to 7.8% in 2015, an increase of 0.8 percentage points. However, one observes that the rate of social contributions appears in all years (i.e. 2007, 2010 and 2015) to have been underestimated, given that it shows almost zero rates of expenditure. Once again, it should be pointed out that it seems the ESSPROS data do not take into consideration pensioners' contributions to healthcare coverage, which, since July 2015, have been set at 6% (until 2015 the rate was 4%) of monthly pension benefits (old-age, survivor's and invalidity pension benefits). Nor do these data take account of the 'pensioners' solidarity contribution', which has been in force since 2010 and ranges from 3% to 14% of the monthly pension benefit, depending on the level of the benefits.

Table 7: Effective tax and social contribution rates on social protection expenditure, Greece and EU-28, 2007, 2010, 2015

	% of Gross social protection expenditure								
	2007			2010			2015		
	Tax	Contrib.	Sum	Tax	Contrib.	Sum	Tax	Contrib.	Sum
Greece	6.1	0.1	6.2	4.9	0.0	4.9	5.0	0.0	5.0
EU-28	5.2	1.7	7.0	5.2	2.1	7.2	5.7	2.1	7.8

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Overall, the evidence suggests that over the period 2005-2016, total expenditure on social protection in Greece, as a percentage of GDP, showed a significant increase, even though in real terms it appears almost unchanged. The main explanation for this rather 'artificial' increase is related to the fact that Greek GDP, as the denominator of the social protection expenditure rate, has shown a dramatic decrease, especially in the period 2010-2016. The decrease observed in Greek GDP is a result of the deep and prolonged economic crisis that the country faced, along with the implementation of strict austerity measures in the framework of the three bail-out agreements for Greece.

It should be noted, however, that throughout the period 2005-2016, both social protection receipts and expenditure were largely oriented toward 'old-age' benefits, and to a lesser extent 'healthcare and sickness' benefits, while the level of receipts and expenditure allocated to the other social protection functions – mainly non-contributory social welfare benefits – remains low. As regards evolution of the social protection receipts and expenditure by function, it is evident that the only notable changes in this period concerned a significant increase in the share of 'old-age' benefits in the total financing, and a decrease in the share of 'healthcare and sickness' benefits. All these changes appear to have been largely a result of the consequences of the crisis and the strict austerity measures, and less a result of structural reforms of the social protection system (or reforms specifically targeted at financing).

2 Current mix and past changes in the sources of financing social protection

Since 2009, following a period of growth, Greece has been experiencing a deep and prolonged recessionary phase, resulting mainly from the fiscal crisis and the implementation of strict austerity measures in the framework of three economic adjustment programmes. This, in turn, brought about significant adverse effects on both the employment and the social situations, while a number of reform actions in various policy areas were implemented as part of the fiscal consolidation efforts. However, as discussed in Section 1, these reform actions have hardly influenced the mix of financing social protection. On the other hand, certain changes concerning the level of both social protection receipts and expenditure have come about as a result of the specific socioeconomic conditions during the crisis period.

In particular, the consequences of the economic crisis on the labour market over the period 2008-2016 (i.e. a reduction in the number of employed persons, a reduction of wages, an increase in part-time work and undeclared work, which has led to a reduction in social insurance contributions) have significantly affected the social protection receipts. Moreover, the fiscal consolidation measures that were agreed and implemented in the framework of the two MoUs in the period 2010-2014 to a great extent shaped the level of social protection expenditure, mainly through the imposition of cuts in pensions and healthcare, while they had no effect on the structure of social protection financing. In other words, as the analysis in the preceding section shows, the decisive factors for the changes in the level of the different sources of social protection financing during the period 2005-2016 appear to have been mainly related to developments in economic activity and the labour market, and also to the fiscal consolidation measures, but less so to structural changes/reforms of the social protection system.

In general, it may be said that during the period 2005-2016, no crucial changes took place in the design of social insurance contributions. Yet, a number of changes did take place which affected employers' and employees' rates of social contributions. In particular, the increase of 0.5 percentage points in social contributions for unemployment benefit, the abolition of certain benefits specifically targeted at private-sector employees (such as housing benefit, family benefit, employees conscripted for military service allowance, etc.) and the reduction in the rate of healthcare social contributions all led to a total reduction of 5 percentage points in the rate of social insurance contributions for private-sector employers and employees (from 45.06% of monthly salary to 40.06%) during this period. On the other hand, an increase in pensioners' monthly contributions for healthcare insurance was imposed by law in 2015: there was a rise from 4% to 6% for pensioners on main pension benefits, while a 6% contribution for healthcare insurance for pensioners receiving supplementary pension benefits was introduced for the first time.

Turning to financing of social protection by the main source of funding (Table 8), it becomes evident that in both the EU-28 and Greece, social contributions constituted the main source of funding throughout the period 2005-2016. In the case of Greece, in particular, this is in line with the fact that the country is a typical example of a Southern European country, where the Bismarckian social insurance system, based primarily on the first pillar, is prevalent (Martin, 2015). However, the data in Table 8 reveal that the share of 'social contributions' in total financing for social protection followed a downward trend in the period 2005-2016 (from 59.1% in 2005 to 55.3% in 2016). This was mainly due – especially after 2010 – to the significant reduction in the number of employed persons (see Table B1 in Annex B) and in the level of their salaries (see Table B2 in Annex 2) on which social contributions are calculated, while at the same time there was an increase in certain flexible forms of employment (non-standard employment), and particularly in (involuntary) part-time employment (see Tables B1 and B2 in Annex B). A decrease can also be observed in the share of 'other receipts' in total financing over the same period (from 7.9% in 2005 to 5.3% in 2016). This is mainly due to the fact that the revenues of social protection organisations – and in particular of social insurance funds – deriving from property, capital and real estate returns, and other sources fell sharply as a result of the economic crisis.

In contrast to the declining trend observed in the share of 'social contributions' and 'other receipts', as Table 8 shows, the share of 'government contributions' in total financing for social protection rose markedly, by 6.3 percentage points (from 33% in 2005 to 39.3% in 2016), against an increase of 4.2 percentage points for the EU-28 over the same period. This increase can be explained by the fact that the financing of the social protection system in Greece is based on a specific tripartite funding model (i.e. employers, employees and the state), so that the government is obliged to fill any gap in the financing of social protection.[3]

Table 8: Division of financing for social protection by main source, Greece and EU-28, 2005, 2008, 2010, 2016 (% total financing)

		Greece	EU-28
2005	Social contrib.	59.1	58.7
	General govern. contrib.	33	37.8
	Other receipts	7.9	3.5
2008	Social contrib.	57.4	55.7
	General govern. contrib.	36	38.4
	Other receipts	6.6	6
2010	Social contrib.	57.5	54.9
	General govern. contrib.	36.6	39.4
	Other receipts	5.9	5.7
2016	Social contrib.	55.3	54.5
	General govern. contrib.	39.3	40.4
	Other receipts	5.3	5.1

Source: Spasova and Ward (2019), Annex ESSPROS tables.

If we examine the financing of social protection by main source in real terms (at constant 2005 prices), we find that – although they confirm the trends described above – the data presented in Table 9 below show that there was a significant decrease (of just over 5 units) in the total social protection receipts over the period 2005-2016: that is, from 100 units in 2005 to 94.99 units in 2016. During the period 2005-2008, there was an increase of just over 18 units; thereafter (with the outbreak of the economic crisis), total social protection receipts fell dramatically, by just over 23 units. Also worthy of note are the decreases observed in the revenues from 'social contributions' and 'other receipts' in the period 2005-2016.

As regards, in particular, the significant decrease observed in revenues from 'social contributions', this – as explained earlier – is a consequence of the dramatic reduction in the number of employed persons and the marked increase in non-standard forms of employment (and indeed of undeclared employment), along with the cuts in salaries/wages, especially after the cut in the statutory minimum wage in 2012. More specifically, the total number of employed persons aged 15-64 fell dramatically (by 19.67%) in the period 2005-2016 – from 4.361 million in 2005 to 3.610 million in 2016; meanwhile, part-time employment increased from 211,000 persons (4.8% of total employment) in 2005 to 354,000 (9.8% of total employment) in 2016 (see Table B1 in Annex B).[4] As for the reduction in wages, OECD data reveal that average annual wages in Greece in real terms (at constant 2005 prices) declined from 2009 to 2016, falling by almost 20 units (from 103.02 units in 2009 to 83.31 units in 2016), while the overall decrease over the period 2005-2016 was almost 17 units (see Table B2 in Annex B).[5]

[3] As provided by Law 2084/1992 and Law 3029/2002, as well as by Law 4387/2016. The latter provides, in particular (Article 1), that 'the State has the obligation to ensure the financial viability of the Unified Social Security System, together with the provision of benefits to all those who fulfil the legal requirements for social protection benefits entitlement'.

[4] Eurostat database, LFS survey [lfsi_emp_a] and [lfsi_pt_a], data extracted: 16 February 2019.

[5] OECD data, available at: https://stats.oecd.org/viewhtml.aspx?datasetcode=av_an_wage&lang=en

Moreover, as mentioned earlier, another explanatory factor is the fact that, since 2011, there has been a total decrease (of 5 percentage points) in the share of social contributions paid by employers and salaried private-sector employees (i.e. from 45.06% of the monthly salary to 40.06%).[6] This also had a bearing on the decrease in revenues from 'social contributions' over the period 2010-2016. Furthermore, it should be noted that, following the outbreak of the economic crisis in Greece, a large number of self-employed persons and employers have failed to pay their mandatory social insurance contributions to the social insurance funds.[7] This, in turn, has led to a dramatic increase in due social contributions (see Table B3 in Annex B), which currently exceed €34.78 billion,[8] 48.34% of which concern social insurance contributions which were not paid during the period 2010-2016.

Table 9: Social protection receipts, by main source, in real terms (at constant 2005 prices), Greece, 2005-2016

Index, 2005=100				
	2005	2008	2010	2016
Total receipts	100	118.40	117.67	94.99
Social contributions	100	115.05	114.50	88.98
General govern. contrib.	100	129.00	130.41	113.15
Other receipts	100	99.10	87.98	64.05

Source: Spasova and Ward (2019), Annex ESSPROS tables.

When it comes to the breakdown of 'social contributions' by category of contributor (employers, employees, self-employed and benefit recipients) as a percentage of total financing for social protection, Table 10 shows that the share of each category of contributor declined slightly in the period 2005-2016, with the greatest decline (1.7 percentage points) being in the share of the self-employed. This is mainly due to the fact that, according to Labour Force Survey (LFS) data, 15.6% of the self-employed (with or without employees) terminated their professional activity in the period 2010-2016 (i.e. the number of the self-employed fell from 1.314 million in 2010 to 1.108 million in 2016) (see Table B4 in Annex B); meanwhile, as mentioned earlier, a large number of self-employed persons owe social insurance contributions to their social insurance funds.

As regards employers' contributions, the data in Table 10 reveal that in 2016 these continued to constitute the largest share of the contributors (32.2% of total financing), followed by (salaried) employees' contributions (18.8% of total financing); both are far greater than the share of the self-employed (4.3% of total financing). The first two categories together represented more than 92% of the total revenues from 'social contributions' in 2016, while the share of self-employed contributions remained very low, at 7.8%. As for the social contributions of benefit recipients, which appear to be almost zero throughout the period 2005-2016, a word of caution should be issued: it seems that the relevant ESSPROS data do not reflect the actual situation, since they appear not to take into consideration either pensioners' contributions to healthcare coverage, which since July 2015 have been set at 6%[9] (until then the rate was 4%)[10] of any kind of monthly pension benefit (old-age, survivor's and invalidity pension benefits), or the pensioner's solidarity contribution, which has been in force since 2010 and ranges from 3% to 14% of the monthly pension benefit, depending on the level of benefits.[11]

[6] Law 4986/2011 and Law 4254/2014.

[7] In January 2017, the vast majority of the social insurance funds were integrated into the Unified Agency for Social Insurance (EFKA).

[8] Social Insurance Debt Collection Centre (KEAO) (2018).

[9] Law 4336/2015.

[10] Law 2084/1992.

[11] Law 3863/2010 and Law 3986/2011.

Table 10: Breakdown of social contributions by employers, employees, self-employed and benefit recipients, Greece and EU-28, 2005, 2008, 2010, 2016 (% total financing)

		Greece	EU-28
2005	Employers	33	38.5
	Employees	20	16.1
	Self-employed	6	2.4
	Benefit recipients	0.1	1.7
2008	Employers	33.6	36.4
	Employees	17.2	15.1
	Self-employed	6.5	2.5
	Benefit recipients	0.1	1.7
2010	Employers	33.8	35.9
	Employees	17.3	14.6
	Self-employed	6.3	2.5
	Benefit recipients	0	2
2016	Employers	32.2	34.9
	Employees	18.8	15.2
	Self-employed	4.3	2.4
	Benefit recipients	0	2.1

Source: Spasova and Ward (2019), Annex ESSPROS tables.

With regard to the general government contribution, which has seen a significant increase as a share of total financing for social protection over the period 2005-2016 (from 33% in 2005 to 39.3% in 2016) (see Table 8), it should be noted that this is heavily based on general revenues and less on earmarked taxes for social protection. This is reflected in the data presented in Table 11, which show that general revenues increased significantly, by 8.7 percentage points, between 2005 and 2016 (from 29% to 37.7%), whereas earmarked taxes dropped dramatically from 4% in 2005 to 1.6% in 2016. The main reason for the drop in earmarked taxes is the adoption of Law 4254/2014, which provided for the abolition of most earmarked taxes for social insurance.

When examining earmarked taxes, in particular, one observes that there has been a significant decreasing trend in their use to finance social protection (see Table 11). The abolition of most of earmarked taxes for social protection by Law 4254/2014 had a significant bearing on this. However, it should be underlined that, since 2011 (Law 3986/2011), a special tax (the so-called 'special solidarity contribution') has been imposed on the income of anyone whose annual income exceeds €12,000; and in addition, a special tax (the so-called 'business fee') has been imposed on the income of self-employed persons. These taxes cannot be regarded as signalling a shift from social contributions to general taxes in the mix of social protection financing; they are rather tax measures to increase general government revenues, so as to plug the financial gaps in a number of public domains, including the social protection system. Nevertheless, it should be underlined that, since 2010 Greece has been obliged to keep public expenditure on pensions at below 16.2% of GDP and on healthcare below 6% of GDP, in the context of the economic adjustment programmes implemented in the country.[12]

[12] Law 3863/2010.

Table 11: Division of general government contribution by source, Greece, 2005, 2008, 2010, 2016 (% total financing)

Year	Source	% of total financing
2005	Earmarked taxes	4
	General revenue	29
2008	Earmarked taxes	3.2
	General revenue	32.8
2010	Earmarked taxes	3.3
	General revenue	33.3
2016	Earmarked taxes	1.6
	General revenue	37.7

Source: Spasova and Ward (2019), Annex ESSPROS tables.

When it comes to the share of the main sources of financing in the total net social protection expenditure (Table 12), it is evident that the share of social contributions followed a downward trend over the period 2007-2015 (from 63.3% in 2007 to 59.1% in 2015), in contrast to the share of general government, which follows an upward trend (from 27.3% in 2007 to 36.2% in 2015). These trends are similar to the trends identified in the share of the main sources in the total gross social protection expenditure, while the difference between net and gross social protection expenditure remains almost stable throughout the period 2007-2015.

Table 12: Division of financing for net social protection expenditure by main source, 2007, 2010, 2015

			Greece	EU-28
% of total receipts	2007	Social contributions	63.3	57.3
		General government	27.3	35.6
		Other	9.4	7.1
	2010	Social contributions	60.4	56.9
		General government	33.4	37
		Other	6.2	6.2
	2015	Social contributions	59.1	55.3
		General government	36.2	38.7
		Other	4.7	6
Difference, net minus gross	2007	Social contributions	3.5	2.1
		General government	-4.1	-2.5
	2010	Social contributions	2.9	2
		General government	-3.2	-2.4
	2015	Social contributions	3	2.1
		General government	-3.3	-2.6

Source: Spasova and Ward (2019), Annex ESSPROS tables.

As mentioned earlier, the share of expenditure on 'old age' constitutes the largest share of expenditure on social protection in Greece. As for the main source of the financing of this

function, the data in Table 13 reveal that social contributions remain by far the biggest source of financing. Yet, they declined by 7 percentage points over the period 2005-2015 (from 65.8% to 58.8%), while the share of social contributions in the EU-28 remained stable (64.9% in 2005 and 64.8% in 2015). The explanations for this decline were presented earlier in this section, and relate mainly to the consequences (especially the dramatic decrease in the number of employed persons) of the deep and prolonged recession that Greece underwent in the period 2010-2016. On the other hand, the share of government revenue in the financing of old-age benefits increased by 5.6 percentage points between 2005 and 2015 (from 29.1% to 34.7%). In particular, it increased between 2005 and 2008 (from 29.1% to 34.1%), but then dropped between 2008 and 2010 (from 34.1% to 31.9%). It then went up again between 2010 and 2015 (from 31.9% in 2010 to 34.7% in 2015).

The increase observed in government revenue as a share in the total financing of 'old-age' benefits during the period 2005-2015 can partly be explained by the fact that during the period of economic crisis, the number of pensioners increased significantly (see Table B5 in Annex B), leading to an increase in expenditure on 'old-age' benefits. At the same time, the number of social insurance contributors decreased, leading to a reduction in social contributions receipts, and thus to a financial gap in 'old-age' benefits expenditure. In order to plug this gap, consecutive governments increased the share of government revenue in the total financing of 'old-age' benefits over the period. Nevertheless, it should be noted that in the context of the economic adjustment programmes implemented in Greece after 2010, the country was obliged to keep public pensions expenditure at below 16.2% of Greek GDP. This led to successive cuts in pension benefits over the period 2010-2016.

Table 13: Division of financing of old-age benefits by main source, Greece and EU-28, 2005, 2008, 2010, 2015 (% of total financing)

Year	Source	Greece	EU-28
2005	Social contributions	65.8	64.9
	Govt revenue	29.1	18.8
	Other receipts	5.1	16.4
2008	Social contributions	62.3	65.7
	Govt revenue	34.1	19
	Other receipts	3.7	15.3
2010	Social contributions	63.9	64.6
	Govt revenue	31.9	20.1
	Other receipts	4.2	15.3
2015	Social contributions	58.8	64.8
	Govt revenue	34.7	19.8
	Other receipts	6.5	15.4

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Turning to the social contributions by sub-category in the financing of old-age (Table 14), it is evident that in both the EU-28 and Greece, employers' contributions constituted the largest share throughout the period 2005-2015, followed by the share of employees' contributions. In the case of Greece, the data show that the share of employers' contributions remained more or less unchanged during the period 2005-2015. On the other hand, the share of employees' contributions decreased by 5.8 percentage points over the same period (from 22.5% in 2005 to 16.7% in 2015), which is mainly a result of the significant reduction in the total number of employed persons. As for the share of self-employed contributions, this constituted only 6.4% in the total financing of old-age benefits in 2015, having shown a decrease of only 0.8 percentage points between 2005 and 2015. Yet it is worth noting that, until 2008, this share showed an upward trend (from 7.2% in

2005 to 7.8% in 2008); after that, it declined by 1.4 percentage points. This can partly be explained by the fact that, during the crisis period, a large number of the self-employed either terminated their professional activity or failed to pay their social contributions. Needless to say, the share of benefit recipients' contributions remains zero throughout this period.

Table 14: Breakdown of the financing of old-age benefits by social contributions by sub-category,

Greece and EU-28, 2005, 2008, 2010, 2015 (% of total financing)			
		Greece	EU-28
2005	Employers	36	43.4
	Employees	22.5	18.4
	Self-employed	7.2	2.9
	Benefit recipients	0	0.2
2008	Employers	35.3	42.5
	Employees	19.2	19.5
	Self-employed	7.8	3.5
	Benefit recipients	0	0.2
2010	Employers	36.6	42.5
	Employees	19.6	18.6
	Self-employed	7.7	3.3
	Benefit recipients	0	0.2
2015	Employers	35.6	41.8
	Employees	16.7	19.5
	Self-employed	6.4	3.3
	Benefit recipients	0	0.2

Source: Spasova and Ward (2019), Annex ESSPROS tables.

As for the share of total financing of 'old-age' benefits from earmarked taxes (Table 15), this was kept low throughout the period 2005-2015, declining by 2.5 percentage points (from 5% in 2005 to 2.5% in 2015). However, one observes a significant drop between 2014 and 2015, which is explained by the fact that most of the earmarked taxes for the social insurance funds were abolished from 2015 by Law 4254/2014 (see also Table 11).

Table 15: Share of total financing of old-age benefits from earmarked taxes, Greece, 2005-2015 (%)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Greece	5.0	4.8	4.4	4.3	4.6	4.6	4.4	3.3	3.7	5.2	2.5

Source: Spasova and Ward (2019), Annex ESSPROS tables.

As regards social protection for health receipts in Greece, it should be stated right from the outset that traditionally, and until the start of the economic crisis, these were mainly composed of social contributions, although the share of general government contributions was also high (in 2008 the shares were 42.1% and 40%, respectively) (see Table 16). This can be attributed to the fact that in the public sector, a national health service type of system coexists with a social health insurance model. However, since 2008, the share of general government contributions has increased, to reach 46.7% in 2015. A number of

factors, especially after 2010, contributed to this trend: severe unemployment (and especially long-term unemployment), an increase in part-time jobs and non-standard forms of employment, diminishing wages and a decrease in the population of working age, partly due to outward migration.

As a consequence of the above-mentioned development, the number of active contributors eligible for healthcare insurance declined and revenues from social insurance contributions were severely affected by the economic crisis. In addition, social insurance contribution evasion remained an issue; this is compounded by Greece's significant informal economy, which translates into social health insurance contributions lost. In order to deal with these evolutions, the share of annual subsidies from the General Government Budget increased, covering administrative costs and salaries for the employees of public providers, funding primary/ambulatory healthcare, providing subsidies to public hospitals and the National Organisation for the Provision of Health Services (EOPYY) with the aim of covering their deficits, investing in capital stock, and funding medical education (Economou et al., 2017; Economou and Panteli, 2019).

In comparison to social contributions and government revenues, other sources of funding (e.g. property revenues, return on capital and reserves, donations, legacies, income from fines and other penalties and revenues from services provided to those who are privately insured and residents of other countries) represent a small proportion of total health receipts. Their declining share during the crisis period can be attributed to the inability to collect fines, penalties and unmatched liabilities to social health insurance funds; ineffective management of property; and the Private Sector Involvement (PSI) in the Greek Debt Restructuring of 2012, which resulted in losses to social insurance funds' reserves. It should be noted that PSI was part of the restructuring deal to tackle Greek debt in the framework of the second MoU, which hit the assets of the social insurance funds hard, because of a legal obligation to invest those assets in state bonds.

Table 16: Division of financing of healthcare expenditure and sickness benefits by main source,

Greece and EU-28, 2005, 2008, 2010, 2015 (% of total financing)			
		Greece	EU-28
2005	Social contributions	42	38.5
	Govt revenue	39.8	51.4
	Other receipts	18.2	10.1
2008	Social contributions	42.1	41.9
	Govt revenue	40	48.1
	Other receipts	17.9	10.1
2010	Social contributions	42.2	42.2
	Govt revenue	45	47.7
	Other receipts	12.8	10.1
2015	Social contributions	41.4	40.6
	Govt revenue	46.7	49.9
	Other receipts	11.9	9.5

Source: Spasova and Ward (2019), Annex ESSPROS tables.

In examining the social contributions by sub-category in the financing of healthcare and sickness benefits (Table 17), one observes that up until 2010, employers' contributions represented the largest proportion of contributions, accounting for 21% of total social contributions for sickness and healthcare during the period 2005-2010. Their relative

weight declined after 2010, going down to 17.6% in 2015. This was a result of Law 4254/2014, according to which employers' contributions for cash benefits were reduced from 0.8% to 0.25%, in order to limit the adverse effect on work incentives and competitiveness. A second remarkable trend is the sharp decline in the share of self-employed contributions in the total financing of healthcare and sickness benefits – from 6.1% in 2010 to 0.1% in 2015. This is due to the fact that a large part of the recession-stricken self-employed went out of business.

Moreover, it should be noted that healthcare coverage was extended – without, however, an extension of social insurance contributions – to cover uninsured citizens (legally residing in the country) and certain migrant vulnerable social groups (irrespective of legal status). This was a response by the Greek government to the dramatic increase in the number of uninsured citizens, following the outbreak of the economic crisis in Greece and the subsequent inability of a very large number of citizens to cover their health needs. According to estimates by the Ministry of Health, approximately 2.5 million uninsured people did not have access to publicly provided healthcare in 2016. It may be argued that the slight increase in the share of sickness/healthcare in social protection expenditure observed in 2015 and 2016 is attributable to the measures introduced by the government to cover the uninsured population.

Table 17: Breakdown of the financing of healthcare and sickness benefits by social contributions by sub-category, Greece and EU-28, 2005, 2008, 2010, 2015 (% of total financing)

		Greece	EU-28
2005	Employers	21.1	22.2
	Employees	15.1	11.4
	Self-employed	5.3	0.7
	Benefit recipients	0.5	4.2
2008	Employers	21.1	23.3
	Employees	14.2	13.5
	Self-employed	6.4	0.7
	Benefit recipients	0.4	4.3
2010	Employers	21	22.3
	Employees	14.9	13.4
	Self-employed	6.1	1.1
	Benefit recipients	0.1	5.3
2015	Employers	17.6	21.8
	Employees	23.7	12.8
	Self-employed	0.1	0.9
	Benefit recipients	0	5.1

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Table 18 below presents the share of total financing of healthcare and sickness benefits from earmarked taxes. Although there are indications that earmarked taxes have increased during the last decade, especially those imposed on alcohol and tobacco, their share in total healthcare financing has been declining, reaching zero levels in 2012 and 2013. There are two possible explanations for this. The first is that, overall, the result of increased taxes was a steep rise in illicit trade and reduced revenues. The second, and maybe more convincing, is that, given that taxes earmarked specifically for health are not institutionalised, the proportion of collected taxes on consumption allocated to the health sector is politically determined. It can be argued, then, that revenues from indirect 'sin'

taxes were used to cover part of the public deficit, or for other purposes, instead of to meet health goals.

Table 18: Share of total financing of healthcare and sickness from earmarked taxes, 2005-2015 (%)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Greece	3.2	2.5	2.3	2.2	1.7	1.7	1.7	0.0	0.0	0.1	0.1

Source: Spasova and Ward (2019), Annex ESSPROS tables.

At this point, it is necessary to point out that a number of reform actions taken in the period 2005-2016 contributed greatly to a rationalisation of both the pension and the healthcare systems in Greece. More specifically, the pension reform actions undertaken over the period 2010-2015 aimed at strengthening the viability of the social insurance funds, mainly by changing the structure of the public pension system, increasing pensionable age, limiting early retirement and integrating all social insurance funds into one single agency, with a view to ensuring the sustainability of the system as a whole. Yet implementation of some of the reform actions was delayed, while pension adequacy decreased during this period, as a series of laws was passed that brought about significant cuts in pension benefits. Nevertheless, the pension system in Greece continued to be based, until 2016, on the compulsory public (first pillar), operating under a tripartite pay-as-you-go (PAYG) scheme (unfunded scheme) and providing defined-benefit pensions.

As for the reform actions taken in the healthcare sector, it should be pointed out that, since 2011, the healthcare coverage of the population in Greece has been undertaken by a single social health insurance agency, the National Organisation for the Provision of Health Services (EOPYY), which covers the insured and their dependants. The benefit packages of the various social health insurance funds have been standardised to provide the same reimbursable services across all funds, creating a new, common benefits package under EOPYY. In standardising the benefits package, a key feature has been a reduction in some of the benefits to which the insured are entitled. Some expensive examinations that used to be covered (or partially covered) on an outpatient basis by some of the social health insurance funds have been removed from the EOPYY benefit package. There has been an increase in user charges, co-payments have been introduced and monthly ceilings imposed on the activities of doctors contracted with EOPYY, in terms of the number of consultations, diagnostic and laboratory tests and the spending on prescribed pharmaceuticals (Economou et al., 2017; Economou and Panteli, 2019).

Similarly, the pharmaceutical sector has seen a number of measures aimed at containing costs and enhancing efficiency. Overall, reductions in pharmaceutical expenditure are being pursued through price reductions; successive increases in both rebates and clawbacks on pharmaceutical expenditures, imposed on private pharmacies and pharmaceutical companies for both inpatient and outpatient drugs; greater promotion of generics; and, to some extent, control of the volume of consumption via methods such as prescription control mechanisms and e-prescribing. Pharmaceutical expenditure has also been tackled in public hospitals, through more efficient purchasing strategies, including a reduction in the cost of procuring drugs through the implementation of price caps for approved drugs; the establishment of tenders to supply medicines, based on the active substance; and the development of a list of medicines for which the Coordination Committee for Procurement issues unified tenders for supply contracts.

In addition to the measures taken for pharmaceutical cost containment, salary cuts were imposed after 2010 on all public healthcare staff, including administrative personnel, doctors, nurses, pharmacists and paramedical staff, as part of the efforts to reduce public healthcare costs. In this context, since 2012, the Closed Unified Hospital Expenditures/Diagnosis-Related Groups classification system (KEN-DRGs) has been introduced as a payment mechanism for public hospitals and, despite the problems encountered with its implementation, it could be argued that this was a positive step

towards more efficient financing in this area (Economou et al., 2017; Economou and Panteli, 2019).

Notwithstanding the importance of the above-mentioned reform actions implemented during the period 2010-2015, these have had only a limited influence on the mix of social protection financing. Since that period, however, a number of further reforms have been implemented, in the framework of the third MoU (2015-2018), especially in terms of the social insurance system and social welfare (non-contributory) benefits, which have affected social protection financing in many respects.

In particular, the reform of the social insurance system by Law 4387/2016 (as well as by certain provisions of Law 4472/2017 and Law 4578/2018) has contributed greatly to the shaping of the current mix of social protection financing, and especially as regards the social contributions receipts. Among the main changes introduced by Law 4387/2016 and Law 4472/2017 (in effect since 2017), the following can be singled out:

- The change in the structure of the pension system, through replacement of the statutory main (contributory) pension by a state-funded guaranteed national pension plus a contributory pension, which is fully funded by the contributions of employees, employers and the self-employed.

  Thus, pensions in Greece are now based on a unified multi-tier (public) statutory pension scheme, which consists of four parts: first, a 'national' (quasi-universal) non-contributory pension (financed by the General Government Budget); second, a compulsory contributory (primary) pension, which operates under a defined-benefit PAYG scheme (unfunded scheme);[13] third, a contributory auxiliary (secondary) pension, based on a notional defined contribution (NDC) scheme; and, fourth, lump-sum retirement benefits, which are contributory, being provided under an NDC scheme.[14]

  It should be noted that, until the end of 2016, the General Government Budget had to contribute to social protection financing a total amount equal to one third of the amount of the social contributions revenues, and at the same time the state was responsible for covering any financial gaps in social protection financing. From January 2017, however, with the change to the structure of the pension system, the state's contribution is limited to full coverage of the national (non-contributory) part of the pension benefit, though it remains responsible for covering any financial gaps.

- The harmonisation of the rules for social insurance contributions through the adoption of common contribution rates for all employees (two thirds are paid by the employer and one third by the employee) and self-employed persons: these are set at 20% for old-age pensions and 6.95% for health insurance, and apply to the employee's salary or to the monthly net taxable income of the self-employed. It should be noted that the self-employed pay the full amount of the contributions by themselves. Contributions by the self-employed are calculated as a percentage of their net taxable income from the previous year, to be paid in 12 monthly instalments. According to Law 4472/2017, from January 2018, the net taxable income of the self-employed includes their social insurance contributions.

  This change, apart from eliminating past inequalities across the various categories of contributor, has increased the relative share of the self-employed in the social insurance contributions receipts for the social protection system. However, Law

[13] It is worth noting that, in real terms, this part operates under a defined-contribution (DC) pension scheme rather than a defined-benefit scheme. The reason is that, as the law provides, the amount of the contributory pension is also subject to the pension system's fiscal performance.

[14] With regard to the other two pillars of the system – namely, voluntary occupational pension funds and private pension schemes – these make up an insignificant part of the whole pension system. In particular, they provide less than 1% of the total pension benefits in Greece. As regards the coverage rate of occupational pension funds, this is estimated to be only 1.3% of the working-age population (aged 15-64) (European Commission, 2018a).

4578/2018 provides, as of January 2019, for a reduction in the self-employed social insurance contributions for pensions (from 20% to 13.33%). Yet this new arrangement concerns only those self-employed whose annual taxable income is above €7,800, and thus it rather fails to reach poor self-employed persons.

- The gradual increase in the contribution rate of public-sector employees to old-age benefits from 6.67% to 20% by 2020. This increase (13.33 percentage points) is due to the introduction of an employers' contribution rate for public-sector employees, which in this case is the state: prior to 2017, the state's contribution rate was zero. This implies that the relative share of social contributions in the total financing of social protection, as well as the relative share of employers' social contributions in the total social contributions receipts, will be significantly increased.

Box 1: An overview of the current rates of social insurance contributions for insured persons in Greece

At present, the contribution rate for the contributory old-age benefit for all insured employed persons in Greece (with permanent or fixed-term contracts) stands at 20% of their monthly salary (one third paid by the employee and two thirds by the employer). Similarly, 20% is the contribution rate for old-age benefits for insured self-employed persons whose monthly net taxable income does not exceed the minimum salary, while for those whose net taxable income is above the minimum salary, the contribution rate is 13.33%. As for the contribution rate for the supplementary pension, for the self-employed it is 7% of the minimum salary, and for employees it is 7% of their monthly salary (3.50% is paid by the employer and 3.50% is paid by the employee). With regard to the lump-sum benefit, this is 4% of the minimum salary for self-employed persons and 4% of the monthly salary for employees. It should be noted that participation in the supplementary pension scheme is mandatory for employees and the self-employed in the 'liberal professions' (except doctors); for self-employed freelancers and farmers, participation is voluntary. In the case of the lump-sum benefit scheme, participation is mandatory for the liberal professions and some categories of employees, and is voluntary for farmers and freelancers.

As regards the contribution rate for healthcare insurance coverage, this is 7.1% of monthly salary for public- and private-sector employees, and 6.95% of monthly net taxable income for the self-employed. For pensioners, the contribution rate for healthcare coverage is 6% of their monthly pension benefit (of any kind of pension benefit).

Finally, with regard to unemployment insurance, which is mandatory for private-sector employees and self-employed persons in Greece (except farmers), the contribution rate is 5% of monthly salary for private-sector employees, while a monthly contribution of €10 applies to the self-employed (except farmers).

Table: Current rates of social insurance contributions for insured persons in Greece

	Self-employed		Employees on permanent or fixed-term contracts		
Social insurance branch	**Social insurance contributions as percentage (%) of net taxable annual income (including social contributions)**		**Social insurance contributions as percentage (%) of employee's gross salary**		
	Liberal professions and freelancers	**Self-employed farmers**	**Employee**	**Employer**	**Total**
Main pension	20 (for income up to the amount of the minimum salary in force)	18* (for income up to 70% of the amount of the minimum salary in force)	6.67	13.33	**20**
	13.33 (for income above the amount of the minimum salary in force)	12** (for income above 70% of the amount of the minimum salary in force)			

Supplementary Pension	7 fixed as percentage of the minimum salary in force (mandatory for liberal professions – except doctors – and voluntary for freelancers)	7 (voluntary)	3.50	3.50	**7**
Healthcare	6.45	6.45	2.15	4.30	**6.45**
Sickness/maternity cash benefits	0.50	0.50	0.40	0.25	**0.65**
Unemployment	€10 per month	-	1.83	3.17	**5**
Other benefits	-	0.25	1.35	0.75	**2.1**
Lump-sum benefit	4 fixed as percentage of the minimum salary in force (applies only to liberal professions)	**-**	4 (not mandatory for all)	-	**4**

**This rate will be increased gradually, reaching 20% as of 1 January 2022.*
***This rate will be increased gradually, reaching 13.33% as of 1 January 2022.*
Source: Data based on social insurance legal provisions (Law 4387/2016 and Law 4578/2018).

From the above, it is evident that the changes which have taken place over recent years, together with the potential increase in the number of employed persons and the subsequent increase in the social contribution receipts, will eventually lead to an increase in the share of social contributions receipts in the total financing of social protection and, thus, to a decrease in the share of general government revenues. Such a trend is already reflected in the relevant national data, namely the data from the General Government Budget for 2017-2019 and, in particular, from the Social Budget for those years. It should be underlined, however, that these data are presented in real terms (at current prices), and also that no ESSPROS data are available as yet for this period.

According to the Social Budget for 2019 (Table B6 in Annex B), social protection financing amounts to €41.79 billion, of which: €21.60 billion (51.69%) concern social contributions receipts, €18.45 billion (or 44.16%) concern general government revenues, and €1.73 billion (or 4.14%) concern other receipts. This distribution implies that social contributions receipts continue to constitute the largest share in the total financing of social protection. Yet, it is hardly possible to compare these data with the respective ESSPROS data for 2016, given that the national data do not include all social protection receipts, as is the case with the ESSPROS data. Nevertheless, when comparing the State Budget for 2016 with the budget for 2019, it appears that social contributions receipts will rise by 5.09 percentage points between 2016 and 2019, whereas general government revenues will decline by 5.14 percentage points during the same period. Moreover, it is worth noting that, unlike the period up until 2016, during which the state's annual Social Budget was characterised by budget deficit, from 2017 the state's annual Social Budget has returned to surplus.

Turning to examine social protection expenditure over the period 2016-2019 (see Table B7 in Annex B), the data in the Social Budgets for these years reveal that pension expenditure is declining, while there is a significant increase during the period 2017-2019 in public expenditure for social welfare (non-contributory) benefits. The main reason for this increase is the introduction of new means-tested welfare benefits and the reform of existing benefits. These concern mainly the establishment of the Social Solidarity Income scheme (in 2017), the reform of the family benefits scheme (from January 2018), the establishment of a new means-tested housing benefit (as of January 2019) and the transfer of the relevant amount of welfare disability benefits from local authority budgets to the General Government Budget (as of 2019). In short, it appears that public social protection spending in recent years has entered into a process of rebalancing, where attempts are gradually being made to shift resources from pensions to means-tested social welfare (non-

contributory) benefits. Still, though, the level of expenditure allocated to non-contributory social welfare benefits remains low.

Undoubtedly, the recent introduction of the afore-mentioned initiatives is likely to be reflected in ESSPROS data for social protection concerning the period from 2017 onwards (once the data become available). The main change to be brought about in this respect concerns the distribution of total social protection expenditure by function and, in particular, an increase in the share of the 'housing' and the 'family' functions.

Overall, evidence suggests that the share of the general government contribution to the total financing for social protection increased markedly over the period 2005-2016, whereas the share of social contributions declined. The preceding analysis also reveals that up until 2015 the various reforms of the social protection system had a limited influence in the mix of social protection financing. On the other hand, relevant national data suggest that the recent reforms to the social protection-related policies, and especially the social insurance reform and the social welfare reform, have played a significant role in shaping the current mix of social protection financing. Moreover, it seems that efforts have been concentrated over recent years to increase public social protection spending, while at the same time particular emphasis has been placed on making social transfers more efficient and better targeted at those in need, with the ultimate aim of improving the social protection system's redistributive power.

3 Strengths and weaknesses of the existing mix of financing options and potential future sources of financing - national debate on the topic

As the analysis in Sections 1 and 2 shows, no significant changes can be identified in the mix of social protection financing in Greece during the period 2005-2016, other than the changes that were brought about mainly by the consequences of the economic crisis over the period 2010-2016. However, as was emphasised in Section 2, a number of notable changes appear to have been made since 2016, in particular with the adoption of the 2016 social insurance reform and the reform actions of the social welfare system. These reforms have resulted, among other things, in an increase in the share of social contributions receipts and in a decrease in the share of general government revenues, while they have triggered a reallocation of the public financing among the various functions, in favour of means-tested social welfare (non-contributory) benefits.

The shift observed in the public financing of social protection from contributory benefits (pensions) to non-contributory means-tested benefits is expected to significantly improve the redistributive elements of the social protection system. For it mainly aims to address poverty and social exclusion, given that the effectiveness of social transfers (pensions excluded) on poverty reduction has, for many years now, been very low. This is reflected in the EU-SILC data, which reveal that while pensions have a big impact on poverty (bringing about a decrease in the at-risk-of-poverty rate of 26.8 percentage points in 2017 – income reference period 2016), the other social transfers (pensions excluded) reduced the at-risk-of-poverty rate for the total population by only 3.8 percentage points in 2017 (far less than the impact in the EU-28 as a whole – 8.7 percentage points).

When examining the current mix of the social protection financing structure, one observes that social contributions constitute the largest share in total social protection financing, followed by the share of general government contributions. The share of social contributions has increased in recent years, which may be attributed to an increase in the number of insured persons and to the introduction of an employer's (i.e. the state) contribution rate for public-sector employees. This is considered rather a strength of the current mix of financing, given that this part of the state's contribution to social protection financing is not subject to fiscal constraints.

Another positive element of the existing mix of financing is that, since 2017 there has been a harmonisation of the rules for social insurance contributions (for old-age benefits and healthcare coverage), through the adoption of common contribution rates for all employees and self-employed persons. This implies that the social insurance system has become fairer; at the same time, the change facilitates the transition from paid employment to self-employment (and vice versa), as well as the mobility of new employees between different employment types (Theodoroulakis et al., 2017). The harmonisation of contribution rates, along with the fact that, since January 2017, the various social insurance funds have been integrated into the Unified Agency for Social Insurance (EFKA),[15] has led to an improvement in governance and to the simplification of the relevant procedures. According to data from the State Budget, this has already led to an improvement in social contributions collection.

On the other hand, the lack of effective control mechanisms/insurance inspection mechanisms constitutes one of the main weaknesses of the social protection financing. For the lack of such effective mechanisms facilitates social insurance contributions evasion, which, given the very high incidence of undeclared work in Greece,[16] puts at risk the whole sustainability of the social protection system. Besides, those engaged in undeclared work not only do not contribute to the social insurance system, but they become (potential)

[15] EFKA, among other things, has undertaken responsibility for the collection of all social contributions in Greece.

[16] It is estimated that social contributions evasion in Greece remains very high, which is in line with the fact that the undeclared economy is estimated to have been around a quarter of Greek GDP for many years (ILO, 2016).

beneficiaries of the various means-tested benefits, without actually belonging to those vulnerable groups that are in real need of such benefits. This, in turn, puts additional financial pressure on social protection expenditure – to say nothing of the fact that it affects the distributive power of the social protection system. Thus, addressing the problem of undeclared work – and thereby social insurance contributions evasion – is crucial for social protection financing with regard to both the level of total revenues and the share of social contribution receipts.

The high level of social insurance contribution rates[17] is also considered a negative element that affects the current mix of social protection financing, given that it raises labour costs and, in particular, non-wage labour costs. This leads employers to engage workers without officially declaring them (thus avoiding paying their social insurance contributions). Similarly, the application of high contribution rates on the net taxable income of self-employed persons leads them to engage in income concealment, and thus avoid both tax and social contributions. This situation is becoming worse, given the lack of proper and effective control mechanisms, as described above. In general, it may be said that the current high contribution rates in Greece act as a disincentive for potential contributors to the social protection system, and result in the loss of social contribution receipts in the total social protection financing. What is more, the fact that there are no special social insurance arrangements to cover those who work under new forms of employment in the 'gig economy' implies that those engaged in such jobs do not pay social contributions, leading to a further loss of social protection revenues.

When it comes to examining the impact of the recent social protection reforms on the financial sustainability of the social protection system in Greece, various recent studies and projections (European Commission, 2018a; European Commission, 2018b; National Actuarial Authority, 2018) support the view that the reforms are expected to lead in the medium and long term to an economically viable operation of the social protection system. This comes despite the pressure imposed by the rapidly ageing population, which, nevertheless, remains the main challenge for social protection financing.

In particular, projections indicate that Greece is expected to successfully address the effects of population ageing on the different social protection functions, mainly pensions (old-age, disability and survivor's), healthcare and long-term care. It is projected that the share of age-related social protection expenditure (pensions, health, education, long-term care and unemployment) as a percentage of GDP will fall by 5.4 percentage points by 2030 (from 25.8% of GDP in 2016 to 20.4% in 2030) (see Table C1 in Annex C); the respective EU-28 average will be 26.1% of GDP in 2030.

More specifically, over the period 2016-2030, both the share of pension expenditure and the share of unemployment expenditure, as a percentage of GDP, are projected to fall by 5.3 percentage points and 0.3 percentage points, respectively. In contrast, the share of healthcare expenditure is expected to show a slight increase of 0.5 percentage points, while the share of long-term care expenditure will remain stable (see Table C1 in Annex C).

Notwithstanding the above-mentioned positive projections, questions are being raised as regards the adequacy of the benefits of the social protection system and, in particular, of the social insurance system. Besides, in spite of the positive medium- and long-term projections, demographic, economic and labour market developments will continue to influence the mix of social protection financing. In this context, priority should be given to targeted policies and measures to address specific social protection-related challenges, such as: low economic growth, high unemployment, non-standard employment, undeclared work, social insurance contribution evasion, poor quality of public

[17] According to OECD and MISSOC data, Greece is among the countries with the highest social contribution rates (OECD, Table III.1. Employee social security contribution rates, available at: https://stats.oecd.org/Index.aspx?DataSetCode=TABLE_III1; and MISSOC Comparative tables, available at: https://www.missoc.org/missoc-database/comparative-tables/).

healthcare/long-term care and social care services provision. Finally, it is imperative that steps should be taken by the government to further prioritise public social protection spending in favour of welfare benefits, so as to ensure an adequate social safety net for all those in need in Greece.

References

Economou, C. & Panteli, D., (2019), *Monitoring and documenting the systemic and health effects of health reforms in Greece*, WHO Regional Office for Europe.

Economou, C., Kaitelidou, D., Karanikolos, M. & Maresso, A., (2017), Greece: Health system review, *Health Systems in Transition*, 19(5):1-192, available at: http://www.euro.who.int/__data/assets/pdf_file/0006/373695/hit-greece-eng.pdf?ua=1

European Commission, (2018a), *Pension Adequacy Report 2018,* Volume II, *Country Profiles*, Luxembourg: Publications Office of the European Union, http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8085&furtherPubs=yes

European Commission, (2018b), *The 2018 Ageing Report: Economic and budgetary projections for the EU Member States (2016-2070)*, Institutional Paper 079, May 2018, Luxembourg: Publications Office of the European Union, available at: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf

Hellenic Statistical Authority, (2017), *Labour Force Survey Yearly Time Series Since 1981/2017*, available at: https://www.statistics.gr/statistics/-/publication/SJO03/-

Hellenic Statistical Authority, (2018), Press Release: Statistics of the social protection system, year 2016 (provisional data), available at: http://www.statistics.gr/documents/20181/a52ff04b-eac0-40e9-96c7-5b845fb865dc

International Labour Organization (ILO), (2016), *Diagnostic Report on Undeclared Work in Greece*, available at: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/projectdocumentation/wcms_531548.pdf

Martin, C., (2015), Southern Welfare States: Configuration of the welfare balance between state and the family, in Baumeister, M. & Sala, R. (eds), *Southern Europe? Italy, Spain, Portugal, and Greece from the 1950s until the present day*, Frankfurt: Campus, available at https://halshs.archives-ouvertes.fr/halshs-01179541/document

National Actuarial Authority, (2018), *Greek Pension System Fiche - Ageing Projections Exercise 2018*, available at: https://ec.europa.eu/info/sites/info/files/economy-finance/final_country_fiche_el.pdf

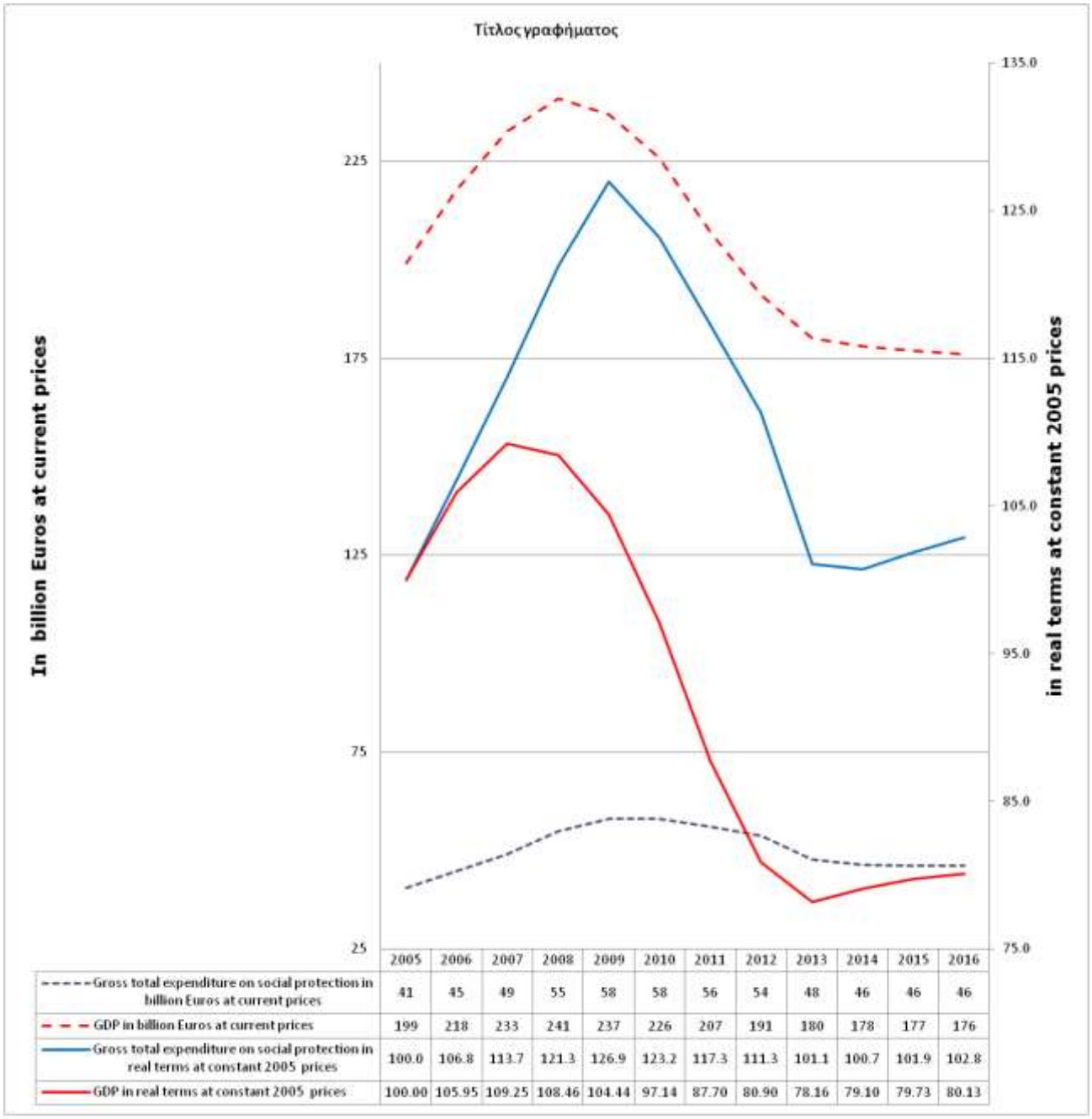
Social Insurance Debt Collection Centre (KEAO), (2018), *3rd Quarterly 2018 Report*, available at: https://www.efka.gov.gr/sites/default/files/2018-11/2018_c_trim_keao.pdf

Spasova S. and Ward T. (2019). Social protection expenditure and its financing in Europe, A study of national policies 2019, European Social Policy Network (ESPN), Brussels: European Commission.

Theodoroulakis, M., Sakellis, I. & Ziomas, D., (2017), ESPN Thematic Report on Access to social protection of people working as self-employed or on non-standard contracts - Greece – Luxembourg, European Social Policy Network (ESPN), Brussels: European Commission, available at: http://ec.europa.eu/social/BlobServlet?docId=17696&langId=en

Annex A

Figure A1: Gross total expenditure on social protection and GDP in billion euros at current and at constant 2005 prices, Greece, 2005-2016



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Gross total expenditure on social protection in billion Euros at current prices	41	45	49	55	58	58	56	54	48	46	46	46
GDP in billion Euros at current prices	199	218	233	241	237	226	207	191	180	178	177	176
Gross total expenditure on social protection in real terms at constant 2005 prices	100.0	106.8	113.7	121.3	126.9	123.2	117.3	111.3	101.1	100.7	101.9	102.8
GDP in real terms at constant 2005 prices	100.00	105.95	109.25	108.46	104.44	97.14	87.70	80.90	78.16	79.10	79.73	80.13

Source: ESSPROS database, AMECO database, Spasova and Ward (2019), Annex ESSPROS tables and own calculations.

Table A1: Detailed breakdown of sickness/healthcare benefits (in million euros), Greece, 2005-2016

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Social protection benefits	11,330	12,131	13,475	15,213	15,743	15,279	12,783	11,528	9,665	8,376	8,695	9,354
Non-means tested	11,313	12,096	13,458	15,196	15,701	15,228	12,739	11,484	9,632	8,339	8,657	9,316
Cash benefits	437	519	559	600	605	562	562	472	438	427	443	458
Periodic	435	464	501	536	545	510	516	439	398	391	408	432
Paid sick leave	435	464	501	536	545	510	453	380	335	329	341	362
Other cash periodic benefits	0	0	0	0	0	0	63	59	63	62	67	70
Lump sum	2	55	58	64	60	52	46	33	40	36	35	26
Other cash lump-sum benefits	2	55	58	64	60	52	46	33	40	36	35	26
Benefits in kind	10,876	11,577	12,899	14,596	15,096	14,666	12,177	11,012	9,194	7,912	8,214	8,858
Inpatient care	5,625	5,566	6,132	6,861	8,144	7,791	5,686	6,161	5,095	4,487	4,549	5,117
Direct provision	5,571	5,512	6,067	6,786	8,046	7,696	5,586	6,076	5,013	4,416	4,472	5,012
Reimbursement	54	54	65	75	98	95	100	85	82	71	77	105
Outpatient care	5,201	5,966	6,718	7,690	6,899	6,830	6,408	4,776	4,040	3,366	3,605	3,671
Direct provision of pharmaceutical products	3,646	4,215	4,671	5,492	4,777	4,786	4,367	3,439	2,480	1,956	1,978	2,034
Other direct provision	1,292	1,437	1,633	1,804	1,734	1,707	1,702	1,295	1,513	1,354	1,486	1,565
Reimbursement of pharmaceutical products	0	0	0	0	0	0	0	0	0	0	0	0
Other reimbursement	263	314	414	394	388	337	339	42	47	56	141	72
Other benefits in kind	50	45	49	45	53	46	83	75	59	59	60	70
Means tested	17	35	17	17	42	51	44	44	33	37	38	38
Cash benefits	0	0	0	0	0	0	0	0	0	0	0	0
Benefits in kind	17	35	17	17	42	51	44	44	33	37	38	38

Source: Hellenic Statistical Authority (2018).

Annex B

Table B1: Employed persons (aged 15-64), full-time and part-time employed persons (thousand persons), Greece, 2005-2016

	Total employed persons	Full-time employed persons	Part-time employed persons
2005	4,361	4,150	211
2006	4,440	4,195	245
2007	4,476	4,233	243
2008	4,523	4,277	246
2009	4,469	4,207	262
2010	4,306	4,036	270
2011	3,979	3,714	265
2012	3,636	3,357	279
2013	3,459	3,170	289
2014	3,480	3,157	323
2015	3,548	3,215	333
2016	3,610	3,257	354

Source: Eurostat database, LFS survey [lfsi_emp_a] and [lfsi_pt_a], data extracted: 16 February 2019.

Table B2: Annual average wages in real terms (at constant 2005 prices), Greece, 2005-2016

	Average annual wages in real terms
2005	100
2006	101.22
2007	101.3
2008	99.33
2009	103.02
2010	97.36
2011	91.75
2012	87.86
2013	82.52
2014	83.84
2015	83.33
2016	83.31

Source: OECD, https:// stats.oecd.org/viewhtml.aspx?datasetcode=AV_AN_WAGE&lang=en#

Table B3: Social insurance due contributions by year of reference, Greece, 2010-2016

Reference year of due contributions	Total amount of due contributions (euros)	% of total due contributions	Cumulative %
2009 and previous years	16,771,360,186	48.21	48.21
2010	2,588,731,488	7.44	55.65
2011	2,700,129,685	7.76	63.42
2012	2,569,853,618	7.39	70.80
2013	2,326,955,936	6.69	77.49
2014	2,422,066,564	6.96	84.45
2015	1,977,403,196	5.68	90.14
2016	2,232,076,587	6.42	96.56
2017	625,955,914	1.80	98.35
2018	572,347,035	1.65	100.00
Total	**34,786,880,209**		

Source: Social Insurance Debt Collection Centre (KEAO) (2018).

Table B4: Employed persons by employment status (thousand persons), Greece, 2005-2016

Year	Employed persons in total	Employers (self-employed with employees)	Own-account workers (self-employed without employees)	Salaried employees	Unpaid family workers
2016	3,673.6	271.7	836.9	2,421.2	143.7
2015	3,610.7	248.4	855.9	2,348.5	157.9
2014	3,536.2	223.8	882.0	2,264.3	166.1
2013	3,513.2	233.8	894.0	2,213.7	171.8
2012	3,695.0	260.7	907.9	2,341.0	185.3
2011	4,054.3	310.6	935.6	2,586.4	221.7
2010	4,389.8	344.6	969.3	2,826.9	248.9
2009	4,556.0	376.9	964.0	2,949.0	266.1
2008	4,610.5	384.6	958.6	2,996.2	271.1
2007	4,564.0	366.1	956.5	2,951.2	290.3
2006	4,527.5	362.8	972.8	2,895.9	296.1
2005	4,443.6	349.9	969.2	2,843.8	280.7

Source: Hellenic Statistical Authority, 2017.

Table B5: Total number of old-age pensioners, Greece, 2006-2016

	Greece
2006	1,922,018
2007	1,948,444
2008	1,987,520
2009	2,020,403
2010	2,044,729
2011	2,103,412
2012	2,135,789
2013	2,135,396
2014	2,122,833
2015	2,121,579
2016	2,087,415

Source: Eurostat, ESSPROS database.

Table B6: State Social Budget estimations: social protection receipts, expenditure, surplus/deficit, Greece, 2016-2019

	State Social Budget 2016		State Social Budget 2017		State Social Budget 2018		State Social Budget 2019	
	Amount in billion euros	As % of the total receipts	Amount in billion euros	As % of the total receipts	Amount in billion euros	As % of the total receipts	Amount in billion euros	As % of the total receipts
Total receipts	**40.237**	**100**	**41.235**	**100**	**41.012**	**100**	**41.788**	**100**
Social contributions	18.768	46.60	20.679	50.15	21.447	52.29	21.602	51.69
General government contributions	19.817	49.30	18.462	44.77	17.757	43.30	18.454	44.16
Other receipts	1.652	4.10	2.094	5.08	1.808	4.41	1.732	4.14
Total expenditure	**41.036**		**39.654**		**39.369**		**40.348**	
Surplus or deficit	**-704**		**+1.581**		**+1.644**		**+1.440**	

Source: General Government Budget, 2016-2019.

Table B7: Social protection expenditure by pensions, unemployment, healthcare/sickness and welfare benefits (amounts in billion euros), Greece, 2016-2019

Functions	State Social Budget 2016	State Social Budget 2017	State Social Budget 2018	State Social Budget 2019
Pensions	31.494	30.202	30.618	29.791
Unemployment	2.441	2.296	2.417	2.578
Healthcare/Sickness	5.806	5.454	5.371	5.095
Welfare benefits	–	0.156	1.258	3.203
Total expenditure	**41.036**	**39.654**	**39.369**	**40.348**

Source: General Government Budget, 2016-2019.

Annex C

Table C1: Projections for pension, healthcare, long-term care and unemployment benefit expenditures, Greece, 2016-2070

Pension expenditure								
Baseline scenario as % of GDP	Change 2016-2070	**2016**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**
Public pensions, gross	-6.6	17.3	13.4	12.0	12.9	12.5	11.5	10.6
Of which: Old-age and early pensions	-4.5	12.9	10.2	9.1	9.9	9.8	9.0	8.3
Disability pensions	-0.4	1.2	1.0	0.9	0.9	0.9	0.9	0.9
Survivor's pensions	-1.2	2.4	1.9	1.7	1.7	1.5	1.3	1.1
Other	-0.5	0.8	0.3	0.3	0.3	0.3	0.3	0.3
Healthcare								
Baseline scenario as % of GDP	Change 2016-2070	**2016**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**
AWG reference scenario	1.2	5.0	5.1	5.5	5.9	6.2	6.3	6.2
Long-term care								
Long-term care spending as % of GDP	Change 2016-2070	**2016**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**
AWG reference scenario	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Unemployment benefit								
Unemployment benefit - baseline	Change 2016-2070	**2016**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**
Unemployment benefit spending as % of GDP	-0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1
Total cost of ageing								
As % of GDP	Change 2016-2070	**2016**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**
AWG reference scenario	-6.4	25.8	21.9	20.4	21.3	21.4	20.6	19.5

Source: European Commission (2018b: 297).

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