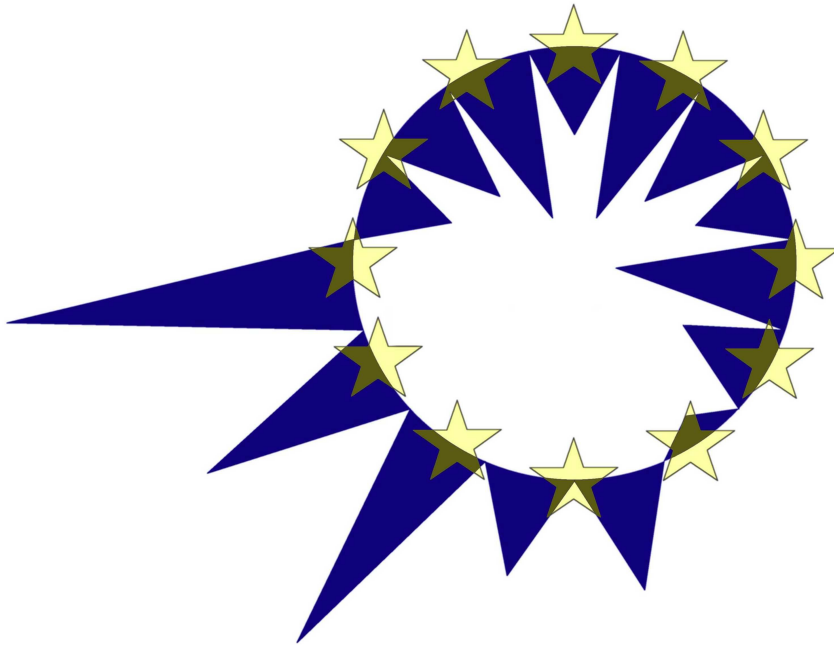


# **EUROMOD**

## **COUNTRY REPORT**



**GREECE (EL)**

**2005-2008**

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**8/12/2010**

**EUROMOD version F3.0**



EUROMOD is a tax-benefit microsimulation model for the European Union (EU) that enables researchers and policy analysts to calculate, in a comparable manner, the effects of taxes and benefits on household incomes and work incentives for the population of each country and for the EU as a whole.

A major EUROMOD development project (*EUROMODUpdate*) is being supported by DG-EMPL with the key objective to improve and extend EUROMOD's usefulness. This will involve enlarging and updating EUROMOD from 19 countries to cover all 27 Member States and recent policy systems, using EU-SILC (European Union Statistics on Income and Living Conditions) data as the input database. *EUROMODUpdate* project began in February 2009 and will last 3 years.

The work is being carried out by the EUROMOD core developer team, based mainly in ISER University of Essex, in collaboration with a group of national teams.

A project Steering Group has been established, under the chairmanship of Sir Tony Atkinson.

Preparatory work in some of the New Member States is being conducted by the European Centre, Vienna, under the leadership of Orsolya Lelkes.

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The results presented in this report are derived using EUROMOD F3.0. EUROMOD is continually being improved and updated and the results presented here represent the best available at the time of writing.

For more information, see: <http://www.iser.essex.ac.uk/research/euromod>



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## 1. BASIC INFORMATION

### 1.1 Acronyms

<i>ΕΓΣΣΕ</i>	National General Collective Labour Agreement
<i>ΕΚΑΣ</i>	Pensioners' social solidarity benefit
<i>ΕΤΕ</i>	National Bank of Greece
<i>ΙΚΑ</i>	Private sector workers' social insurance fund
<i>ΜΤΠΠΥ</i>	Civil servants' additional benefits fund
<i>ΟΑΕΔ</i>	Manpower Employment Organisation
<i>ΟΑΕΕ</i>	Own account and self-employed workers' fund (merger of ΤΕΒΕ, ΤΑΕ, ΤΣΑ)
<i>ΟΓΑ</i>	Farmers' social insurance fund
<i>ΟΕΕ</i>	Workers' Home Organisation
<i>ΟΕΚ</i>	Workers Housing Organisation
<i>ΟΠΙΑΔ</i>	Civil servants' sickness insurance fund
<i>ΤΑΕ</i>	Self-employed workers' fund
<i>ΤΑΠ-ΟΤΕ</i>	Hellenic Telecommunications Organisation's fund
<i>ΤΕΑΔΥ</i>	Civil servants' supplementary pension fund
<i>ΤΕΒΕ</i>	Own account workers' fund, except for the "liberal professions" such as lawyers, engineers, doctors
<i>ΤΠΔΥ</i>	Civil servants' fund
<i>ΤΣΑ</i>	Self-employed workers' fund
<i>ΤΣΔΥ</i>	Medical doctors' social insurance fund



## 1.2 Basic figures

Table 1. Basic figures

	Population	aged 0-19 (%)	aged ≥ 65 (%)	Life expectancy (years)	Fertility rate	Unemployment rate	GDP per head (PPS)	Currency
2005	11,082,751	19.9	18.1	76.82 (men) 81.63 (wom)	1.33	9.9	92.8	€
2006	11,125,179	19.7	18.5	77.21 (men) 81.92 (wom)	1.40	8.9	94.1	€
2007	11,171,740	19.6	18.6	77.07 (men) 81.83 (wom)	1.41	8.3	94.8	€
2008	11,213,785	19.5	18.6	77.69 (men) 82.35 (wom)	1.51	7.7	96.5 (f)	€

Eurostat tables: Unemployment rate for age group 15-74, GDP per head in Purchasing Power Standards (EU-27=100), f: forecast.

Source: Eurostat on line database (2009).

## 1.3 The tax-benefit system

Table 2. Tax-benefit system and government budget

	Total general government revenue % of GDP	Total tax receipts % of GDP	Total general government expenditure % of GDP	Social protection % of GDP
2005	38.1	33.6	43.3	24.6
2006	39.1	33.4	42.2	24.5
2007	40.1	34.4	44.0	24.4
2008	39.9	n/a	44.9	n/a

Source: Eurostat on line database (2009) Annual Summary Government Finance Statistics template tables.

Table 3. Social protection expenditure by function (as % of total social protection expenditure)

	Sickness/ health care	Disability	Old age	Survivors	Family/ children	Unemployment	Housing	Social exclusion
2005	27.8	4.9	47.8	3.4	6.4	5.1	2.2	2.3
2006	28.7	4.7	43.2	8.1	6.2	4.6	2.2	2.3
2007	28.1	4.9	43.6	8.4	6.2	4.5	2.0	2.3

Source: Eurostat on line database (2009).



Table 4. Taxation (as % of total tax receipts)

	Personal income tax	Corporate income tax	Social insurance contributions		Taxes on consumption	Indirect taxes
			Employees	Employers		
2003	13.6	9.1	14.5	16.8	35.7	38.6
2004	14.2	9.6	14.0	16.4	36.0	38.2
2005	14.5	10.3	14.0	16.0	34.9	37.5
2006	14.8	8.5	13.8	16.3	36.0	39.0

Source: Eurostat, Taxation trends in the EU. 2008 Edition, Annex A (tables).

### 1.3.1 Basic information about the tax-benefit system

- The tax-benefit system is a unified, national system.
- The fiscal year runs from January 1 to December 31.
- The public pension system in Greece is the cumulative product of a series of fragmentary measures and legislative initiatives. This fragmentation can be seen in terms of the following dimensions:
  - *Organisational arrangements by sector of employment.* The provision of pension varies by occupation or profession of the insured. They are provided by a multiplicity of social insurance agencies or “funds”. The conditions of pension provision (retirement ages, replacement rates, contributions etc.) vary significantly, chiefly by pension fund, though there remains considerable variability within funds by occupational subgroups.
  - *Differences by date of first contact with the system.* A new system was created for those entering the labour market after 1 January 1993, which is essentially uniform for the non-rural social insurance sector. The general retirement age for those who began working after this date is 65, for both men and women.
- Minimum school leaving age is 15.
- The definition of dependent children varies. Two examples are listed below:
  - dependent children for non-contributory large family benefits are defined as (a) unmarried, aged under 23, (b) suffering from any kind of disability over 67% irrespective of age.
  - dependent children for taxation purposes are defined as: (a) unmarried, aged under 18, (b) unmarried, aged under 20 and registered in OAEΔ as unemployed, (c) unmarried, aged under 25 and enrolled in post secondary or tertiary education or fulfilling their military service, (d) unmarried, aged under 27, enrolled in post secondary or tertiary education and registered in OAEΔ as unemployed, (e) suffering from any kind of disability over 67% irrespective of age.
- Any single person with never-married children living in the household, whatever their age, is considered to be a lone parent.
- Even though spouses file a joint tax report, their income is taxed individually. Some tax allowances and tax credits are shared between spouses in proportion to their taxable income.





- Taxable income is reported under various categories namely employment, property, investments, commerce, agriculture and professions. These income sources are added together before allowances and deductions are taken into account in order to derive total taxable income. Corporate profits are taxed at a flat rate of 32%. Different rules and tax rates also apply to gains from the sale of real estate located in Greece.
- All employees earning over €6,000 p.a. and all selfemployed earning over €3,000 p.a. are required by law to file a tax return in Spring of year  $x$  for fiscal year  $x-1$ . When the tax return is cleared, a supplementary tax may be due. The supplementary tax can be negative (i.e. when one's tax withholdings exceed one's final income tax liability), but is usually positive. Tax withholdings are designed in such a way that taxpayers whose sole source of income is dependent employment with a single employer find that tax withheld matches their entire tax liability (i.e. their supplementary tax is zero).
- There is no single indexing regime for taxes and benefits. Most of them are updated once a year. However, indexation of benefits is usually ad hoc and sometimes skipped altogether. Revaluation policy is erratic, with some benefits receiving higher rises than others, for no apparent reason and with no explanation given.
- Income thresholds for some benefits often fail to keep pace with inflation or are left unchanged in nominal terms. Moreover, the income concept applied when assessing claims varies between benefit agencies. These practices often give rise to inconsistencies and distortions of the original benefits' design.

#### 1.4 Minimum wage

The system for setting wages is different for workers in the private sector and workers in the public sector. In the public sector pay is determined by law, according to the government's annual income policy. Various levels of minimum wage are set, depending on level of education, years of service and hierarchical grade etc.

In the private sector, collective agreements set wages at various levels (national, per sector, enterprise-level). The basis for setting wages is the National General Collective Labour Agreement (*ΕΓΣΣΕ*), which sets the overall minimum wages for white and blue-collar workers. The amount of minimum pay varies depending on a worker's years of service and family status. On the sectoral level, the industry-wide collective agreements set minimum levels for the workers that they cover. Finally, enterprise-level agreements set minimum wages for workers in individual enterprises. Sectoral and enterprise-level agreements are not allowed to contain less favourable provisions than the *ΕΓΣΣΕ*'s. For more information, see section 2.3.

#### 1.5 Social benefits

Social insurance benefits in Greece can be divided into two main categories: *contributory* and *non-contributory* benefits.

Contributory benefits are related to employment and are financed via employer, employee and self-employed contributions. Access to benefits is dependent on claimants' contributory record and the occurrence of a specified contingency such as retirement or unemployment. They are provided by social insurance agencies or "funds" (i.e. semi-autonomous entities created for that purpose) and are, as a rule, positively related to previous earnings.

Non-contributory benefits, funded out of general taxation, can be distinguished into income-tested *social* assistance and non-income-tested *categorical* or *universal benefits*. The latter may also be granted on the basis of a specified contingency (such as disability or birth of a child).



### 1.5.1 Retirement benefits

Retirement benefits form the backbone of social protection in Greece. They are provided by a multiplicity of social insurance funds, mostly operating earnings-related, pay-as-you-go schemes, with different eligibility conditions applying for different categories of workers. Almost one third of all social insurance primary pensions are awarded in the event of either invalidity or widowhood, split evenly between these two types of retirement benefits, with the remaining being old age pensions. Most pensions are contributory.

The vast majority of pensions are provided by three funds: *IKA*, *OΓΑ* and *OAEE*. On the other hand, state pensions are received by retired civil servants and other beneficiaries (except employees of public enterprises who are organised separately). Apart from the primary insurance funds (typically offering replacement of up to 80%), there are also auxiliary insurance funds (offering replacement rates of up to 20%) and “welfare” funds (offering lump-sum severance payments on retirement).

With the exception of social pension which is not taxed, retirement benefits are taxable and paid 14 times per year.

The most important *contributory retirement benefits* are as follows.

#### ***IKA* old-age pension (σύνταξη γήρατος *IKA*)**

*IKA* is the social insurance fund for most dependent workers outside the civil service, banks and the utilities. In 2005 *IKA* accounted for 1,991,000 active contributors and 918,600 pensioners.

For workers first insured *before 1 January 1993*, the standard age of retirement is 65 for men and 60 for women, but various exceptions apply, e.g. for mothers of under-age children, workers in hard and arduous occupations etc. Pension benefits are calculated on the basis of (a) contributions record of at least 15 years, and (b) pensionable earnings calculated as the best five years of the decade prior to retirement. Those with a contributions record of at least 35 years are eligible for a *seniority pension* at 80% of pensionable earnings, irrespective of age. A *reduced pension* may be granted from the age of 55 (for women) or 60 (for men), provided they meet the contributions requirement. In case of early retirement, the pension is reduced by a rate equal to the number of months missing to the standard age of retirement, divided by 267. A *minimum pension* is paid to retirees whose contributions record and pensionable earnings would have entitled them to an “organic amount” below a certain level. In 2005, the level of *IKA* minimum pension was €411.77 per month.

For workers first insured *after 1 January 1993*, the standard age of retirement is 65 for both women and men. Pension benefits are calculated on the basis of (a) contributions record of at least 15 years, and (b) pensionable earnings calculated as the last five years prior to retirement. The accrual rate is 2%. Those with a contributions record of at least 37 years are eligible for a *seniority pension* at 70% of pensionable earnings, irrespective of age. A *reduced pension* may be granted from the age of 60, for those with a contributions record of at least 15 years or from the age of 55, for those with a contributions record of 35 years. In case of early retirement, the pension is reduced by a rate equal to the number of months missing to the standard age of retirement, divided by 267. A *minimum pension* is paid to retirees whose contributions record and pensionable earnings would have entitled them to an “organic amount” below a certain level, set at 70% of the minimum wage.

#### ***IKA* survivors' pension**

In case of death of an insured worker or pensioner, the closest relatives may be entitled to a survivors' pension. Beneficiaries include: a) the surviving spouse; b) the worker's or pensioner's children – provided they are unmarried, do not work, do not receive a pension and are aged below 18 years (24 if in full-time education); c) the worker's or pensioner's adult



children – provided they are disabled or unfit for employment and whose disability started before they were 18; d) the worker's or pensioner's grandchildren – provided they are orphaned and were supported by the deceased; e) the worker's or pensioner's parents – provided they were supported by the deceased. The level of *IKA* survivor's pension depends on the person(s) entitled to it. It varies from 20% to 100% of the pension of the deceased (i.e. 70% of the pension of the deceased if the beneficiary is only the spouse, 90% of the pension if the beneficiaries are the spouse and one child- 70% for the spouse and 20% for the child-, 100% if the beneficiaries are the spouse and two children- 63.64% for the spouse and 18.18% for each child etc).

For workers first insured *after 1 January 1993*, only the surviving spouse and orphaned children may be beneficiaries, while they are entitled to 50% of the pension of the deceased.

#### ***OAE*E old age pension (σύνταξη γήρατος *OAE*E)**

*OAE*E is the social insurance fund for most self-employed workers, except those in the “liberal professions” of medicine, law and engineering. In 2005 *OAE*E accounted for 827,267 active contributors and 278,912 pensioners.

For workers first insured *before 1 January 1993*, the standard age of retirement is 65 for those with a contributions record of at least 15 years, or 60 for those with a contributions record of 35 years. From 2007 all self-employed workers insured with *OAE*E, irrespective of the date they were first insured, are placed in 14 insurance classes (1-10 compulsory, 11-14 optional). Contribution rates and pension benefits rise with insurance class.

For self-employed workers first insured *after 1 January 1993*, the standard age of retirement is 65 for both women and men. Pension benefits are calculated on the basis of (a) contributions record of at least 15 years, and (b) pensionable earnings calculated as the last five years prior to retirement. The accrual rate is 2%. Those with a contributions record of at least 37 years are eligible for a *seniority pension* at 70% of pensionable earnings, irrespective of age. A *reduced pension* may be granted from the age of 60, for those with a contributions record of at least 15 years or from the age of 55, for those with a contributions record of 35 years. In case of early retirement, the pension is reduced by a rate equal to the number of months missing to the standard age of retirement, divided by 267. A *minimum pension* is paid to retirees whose contributions record and pensionable earnings would have entitled them to an “organic amount” below a certain level, set at 70% of the minimum wage.

#### ***Civil servants* old age pension (σύνταξη δημοσίων υπαλλήλων)**

For civil servants insured *before 1 January 1993*, the age of retirement after 25 years of service is 65 for men and 60 for women. After 35 years of service the age of retirement is 58 for both men and women. The accrual rate is 2.286%, corresponding to a replacement rate of 80% after 35 years of service.

For civil servants first employed *after 1 January 1993*, the standard age of retirement is 65 for both women and men. Pension benefits are calculated on the basis of (a) contributions record of at least 15 years, and (b) pensionable earnings calculated as the last five years prior to retirement. The accrual rate is 2%. Those with a contributions record of at least 37 years are eligible for a *seniority pension* at 70% of pensionable earnings, irrespective of age. A *reduced pension* may be granted from the age of 60, for those with a contributions record of at least 15 years or from the age of 55, for those with a contributions record of 35 years. In case of early retirement, the pension is reduced by a rate equal to the number of months missing to the standard age of retirement, divided by 267. A *minimum pension* is paid to retirees whose contributions record and pensionable earnings would have entitled them to an “organic amount” below a certain level, set at 70% of the minimum wage.



### ***ΟΓΑ contributory pension (κύρια σύνταξη γήρατος ΟΓΑ)***

In 1998 a new contributory pension for farmers came into being. Active farmers choose among seven insurance classes. Contribution rates and pension benefits rise with insurance class. The age of retirement is 65 for both men and women. In 2005 those with a contributions records of at least six years were entitled to *ΟΓΑ* contributory pension. One more year of compulsory insurance is added every year until 2013, when the official minimum limit of 15 years will be reached. The accrual rate is 2%.

The most important *non-contributory retirement benefits* are as follows.

### ***ΟΓΑ basic pension (βασική σύνταξη γήρατος ΟΓΑ)***

This basic pension is paid on reaching the age of 65 to men and women who have worked as farmers for at least 25 years and do not receive a pension from any other social insurance fund. The basic pension is phased out as the new contributory pension for farmers (see above) is phased in. The transitional provisions stipulate that all *ΟΓΑ* pensioners already in retirement at the end of 2002 will be eligible to the full basic pension, while those entering retirement after 2003 will be eligible to a reduced basic pension. The rate of reduction is 4% for those retiring in 2003, 8% for those retiring in 2004, 12% for those retiring in 2005, and so on until the basic pension is no longer paid to those retiring in 2027.

Supplements are paid for a dependent spouse below 65 or children below 18, worth €3.1 and €6.2 per month respectively. The 2005-08 *ΟΓΑ* basic pension rates are indicated below:

Table 5. *ΟΓΑ* basic pension rates (2005-2008)

	2005	2006	2007	2008
<i>ΟΓΑ</i> basic pension (€ per month)	212.85	227.75	277.75	330.00

### ***Social pension (σύνταξη ανασφάλιστων υπεργλίκων)***

Social pension is paid to the non-insured elderly. In order to be eligible they must have reached the age of 65 and their total net yearly income must not exceed that corresponding to the social pension itself (i.e. €2,980 per year in 2005).

Supplements are paid for a dependent spouse below 65 or children below 18, worth €3.10 and €6.20 per month respectively. Social pension's rates are the same as *ΟΓΑ* basic pension. It is also provided by *ΟΓΑ*. For more information, see section 2.3.1.

### ***Pensioners' social solidarity benefit (ΕΚΑΣ)***

This is an income-tested supplement to low pensions, restricted to those receiving a contributory social insurance pension (i.e. recipients of a farmer basic pension or a social pension are excluded). Beneficiaries must be over 60 if in receipt of an old age pension or a survivor pension. The age condition does not apply to recipients of invalidity or orphans' pensions.

Three income concepts are assessed separately: (a) personal net income from retirement benefits and employment earnings; (b) personal taxable income from all sources; and (c) family taxable income. The benefit amount is paid at four rates depending on the level of annual net personal income from retirement benefits and employment earnings. It was fully taxable until 2007. From 1<sup>st</sup> January 2008 taxation on ΕΚΑΣ was abolished. For more information, see section 2.3.2.



### 1.5.2 Unemployment benefits

Unemployment insurance is mandatory for all employees except tenured civil servants and agricultural workers. *OAEΔ*, a tripartite organisation funded through employee and employer contributions plus state subsidies, runs a variety of unemployment compensation schemes. None of the benefits provided are taxable.

#### **Unemployment insurance benefit (*επίδομα ανεργίας*)**

Dependent workers may be eligible for this benefit if they are involuntarily unemployed, capable and available for work, and registered with an *OAEΔ* employment office. Moreover:

- First-time claimants need to have worked and paid contributions for either (i) 80 days per year over the last two years, of which at least 125 days must be in the last 14 months excluding the last two months, or (ii) 200 days in the last two years excluding the last 2 months, of which at least 80 days in each of the last 2 years.
- Second-time claimants need to have worked and paid contributions for 125 days over the last 14 months excluding the last two months.
- Seasonal workers need to have worked and paid contributions for 100 days over the last 12 months.
- Construction workers and fishermen need to have worked and paid contributions for 100 days over the last 14 months.

The benefit rate in 2005 was €311.25 per month (a month corresponds to 25 days of unemployment). The rate is raised by 10% for each dependent family member up to the third. The benefit's duration is a function of contributory record; it is payable for at most 12 months, average duration being seven months. A part of the benefit is still payable if the person finds an occasional or part-time employment of up to three non-consecutive days per week. For more information, see section 2.3.7.

#### **Unemployment assistance for older workers (*επίδομα μακροχρονίως ανέργων*)**

This is paid to workers aged 45-65 who have been unemployed for more than 12 months and have already exhausted the right to unemployment insurance benefit (see above), if their annual family income is below €5,000. The income threshold is increased by €587 for each dependent child. The level of the benefit is set at €200 per month (unchanged since 2003), payable for a period of 12 months. For more information, see section 2.3.6.

#### **Seasonal unemployment benefit (*εποχιακά βοηθήματα*)**

This benefit is paid as a lump sum to occupational groups characterized by a pattern of seasonal employment (builders, tobacco workers, actors, ceramists, forest workers, musicians, etc.). Different rates and conditions apply according to the occupational group a worker belongs.

#### **Benefit for young persons aged 20-29 (*επίδομα σε νέους/ες 20-29 ετών*)**

It is paid to persons aged 20-29 on condition that these are out of work and remain in the unemployed records for one year. The benefit is payable for a period of five months; it amounts to €73.37 per month, raised by €5.87 per dependant (child or spouse).



### 1.5.3 Family benefits

Income transfers to families with children include non-contributory benefits and contributory family allowances. Contributory family allowances are automatically added to civil servants' (and some other groups') pay and are taxed. Lower allowances are paid by *OAEΔ* to private sector employees irrespective of social insurance affiliation.

Table 6. Contributory family allowances (2005-2008)

	2005	2006	2007	2008
Banking employees				
Married	85.40	92.20	96.90	104.90
Married with 1 child	128.10	138.30	145.35	157.35
Married with 2 children	149.45	161.35	169.58	183.58
Married with 3 children	170.80	184.40	193.80	209.80
Married with 4 children	213.50	230.50	242.25	262.25
Civil servants				
Married	35.00	35.00	35.00	35.00
Married with 1 child	53.00	53.00	53.00	53.00
Married with 2 children	71.00	71.00	71.00	71.00
Married with 3 children	118.00	118.00	118.00	118.00
Married with 4 children	165.00	165.00	165.00	165.00
Private sector employees				
Married	0.00	0.00	0.00	0.00
Married with 1 child	8.22	8.22	8.22	8.22
Married with 2 children	24.65	24.65	24.65	24.65
Married with 3 children	55.47	55.47	55.47	55.47
Married with 4 children	67.38	67.38	67.38	67.38

Notes: € per month. For banking employees, the amount of family allowance depends on the “salary class” of the employee. The amounts reported correspond to the lowest salary class.

Non-contributory benefits targeted to large families include “lifetime pension for mothers of many children”, “large family benefit” and “3<sup>rd</sup> child benefit”. They are funded out of general taxation. Until 2006 they were either taxed as income or at source at 10%. Since 1<sup>st</sup> January 2007 they are no longer 10% taxed at source. A 1.2% duty stamp is always deducted at source. Large family benefits are delivered by *ΟΓΑ* and are indexed to consumer prices. On 1<sup>st</sup> January 2006 a “lump sum €2,000 birth grant” was also introduced.

#### Large family benefit (*πολυτεχνικό επίδομα*)

It is paid monthly to mothers with four or more children (of any age and irrespective of whether they live together with their parents or not). Since 2006 it is also paid to lone parents with three children, disabled parents (over 67%) with three children and children orphaned from both parents if they are two or more. At least one of the children must be (a) unmarried and aged less than 23 years old or (b) suffering from any kind of disability over 67%. Since 2008 large family benefit is also provided to mothers of three children. The benefit rates are indicated below:

Table 7. Large family benefit rates (2005-2008)

	2005	2006	2007	2008
Large family benefit (€ per month)	38.57	39.95	41.10	42.71



### 3<sup>rd</sup> child benefit (*επίδομα τρίτου παιδιού*)

It is paid to families with three (or more) children until the third child reaches the age of six. The benefit is claimed by the mother, unless she is dead or has left the household, in which case it is drawn by the father. The benefit rates are indicated in Table 8. For more information, see section 2.3.3.

Table 8. 3<sup>rd</sup> child benefit rates (2005-2008)

	2005	2006	2007	2008
3 <sup>rd</sup> child benefit (€ per month)	154.27	159.82	164.45	170.86

### Lifetime pension for mothers of many children (*ισόβια σύνταξη πολύτεκνης μητέρας*)

It is paid to mothers with four or more children (of any age and irrespective of whether they live together with their parents or not) who are no longer eligible for the “many children benefit”. The benefit rates are indicated below:

Table 9. Lifetime pension for mothers of many children rates (2005-2008)

	2005	2006	2007	2008
Lifetime pension for mothers of many children (€ per month)	88.72	91.91	94.58	98.27

### Lump sum €2,000 birth grant (*εφάπαξ παροχή €2,000*)

The benefit, introduced on 1<sup>st</sup> January 2006 is paid as a lump sum to mothers giving birth to a third child and to each child over the third. It is not taxed. For more information, see section 2.3.4.

Other non-contributory family benefits include the following:

#### Unprotected children benefit (*επίδομα απροστάτετων παιδιών*)

A monthly benefit of €44.02 is paid to each unprotected child up to the age of 16, on the condition that the monthly income of the family with which the child resides is below €235 per month (net of rent, for a 3-member family, increased by €20 for each family member after the third).

#### Single parent benefit (*επίδομα μονογονεϊκής οικογένειας*)

It is paid to lone parents who do not receive the “unprotected children benefit” and whose yearly income does not exceed €2,817. The benefit rate is €105.65 per month for lone parents with one child and €148.20 per month for those with two children.

#### Income support to families with children in compulsory education (*εισοδηματική ενίσχυση οικογενειών με ανήλικα τέκνα υποχρεωτικής εκπαίδευσης*)

It is paid to families with children aged six to 16 on the condition that they are in compulsory education and the annual income of the family does not exceed €3,000. The benefit is worth €300 a year per child. For more information, see section 2.3.5.

## 1.5.4 Sickness and maternity benefits

Most social insurance funds provide sickness and maternity benefits in cash. These include statutory sick pay, maternity leave, birth grants, compensation for absence due to accidents at



work, and death grants – plus a variety of other benefits ranging from tuberculosis therapy to children holiday camps (hardly a “sickness benefit” at all). Various schemes are operated by social insurance funds. The most important benefits, provided by *IKA*, *ΟΓΑ*, *ΟΑΕΕ* and *ΟΠΑΔ*, are as follows.

#### ***IKA* sickness / accident allowance (επίδομα ασθένειας / εργατικού ατυχήματος *IKA*)**

Insured workers are entitled to *sickness allowance* when sick, provided that *IKA* Health Boards certify they are temporarily unfit for work. The period of receipt is conditional on prior contributions. Persons insured are entitled to sickness allowance for up to:

- 182 days for the same or a different disease, provided they have completed 100 insurance days in the year prior to their illness or in the last 15 months, excluding the three most recent months
- 360 days for the same disease, provided they have completed 300 insurance days in the last two years prior to their illness or in the last 30 months
- 720 days for the same disease, provided they fulfil *IKA*'s requirements for invalidity pension.

In case of an accident at work causing illness or injury, insured workers are entitled to *accident allowance*. No contributions test applies. If the accident is not work-related, the contributions required are half those demanded for sickness allowance.

The amount of the benefit, which is taxed as income, depends on the employee's insurance class in the last month of the year prior to his/her disease or accident and on the days of absence from work. No benefit is paid for the first three days of absence. The daily amount payable from day 4 to day 15 of absence equals 25% of the notional daily wage corresponding to the person's insurance class. The daily amount payable from day 16 onwards equals 50% of the notional daily wage corresponding to the person's insurance class. The benefit is raised by 10% for each dependent family member up to the fourth.

#### ***IKA* maternity or “pregnancy-confinement” allowance (επίδομα κνοφορίας-λοχείας *IKA*)**

In case of pregnancy, if an insured worker has accumulated a minimum of 200 insurance days in the 24 months before delivery, she is entitled to *maternity allowance*, paid for a total of 17 weeks (8 weeks before and 9 weeks after child birth). The daily amount equals 50% of the notional daily wage corresponding to the person's insurance class. It is increased by 10% for each dependent family member up to the fourth. It is not taxed.

Moreover, during this out-of-work period (17 weeks) employers are mandated to pay one monthly salary for persons employed for more than one year and 50% of the salary for persons employed for less than one year. The salary is reduced by the amount of allowance received from *IKA*. For the remaining out-of-work period the difference between the person's previous earnings and *IKA*'s maternity allowance is made up by an additional maternity allowance, paid as a lump sum by *ΟΑΕΔ*.

#### ***IKA* birth grant (επίδομα τοκετού *IKA*)**

This is paid as a lump sum to insured workers and pensioners (or the non-working wives of an insured worker or pensioner) in case of child birth. The rate is set at 30 times the minimum daily wage of an unskilled manual worker (€766.80 in 2005). It is not taxed.

#### ***IKA* death or “funeral expenses” grant (έξοδα κηδείας *IKA*)**

This is paid as a lump sum in case of death of an insured worker or pensioner, on the condition that the deceased had accumulated 100 insurance days in the year preceding their death. The





rate is set at 8 times the reference earnings of IKA's higher insurance class (€668.40 in 2005) and it is not taxed.

***OAEΕ accident allowance (επίδομα εργατικού ατυχήματος OAEΕ)***

Self-employed workers are entitled to *accident allowance* when an accident at work leaves them unfit for work for at least 30 days. The rate is set at 3 times the amount of contributions paid per month by the insured worker (i.e. maximum €1,398 in 2005) and it is taxed. The allowance can be paid for up to four months. Note that *OAEΕ* pays no sickness allowance.

***OAEΕ birth grant (επίδομα τοκετού OAEΕ)***

This is paid as a lump sum to self-employed workers and pensioners (or the non-working wives of an insured worker or pensioner) in case of child birth. In 2005-08 the value of the grant was €800, increased in case of multiple births by 50% for each child after the first. It is not taxed. Note that *OAEΕ* pays no maternity allowance.

***OAEΕ death or “funeral expenses” grant (έξοδα κηδείας OAEΕ)***

This is paid as a lump sum in case of death of an insured self-employed worker or pensioner. In 2005-08 it was worth €1,200. It is not taxed.

***OΓΑ maternity or “pregnancy-confinement” allowance (επίδομα κνοφορίας-λοχείας OΓΑ)***

In case of pregnancy, insured farmers are eligible for *maternity allowance*. It is paid as a lump sum. Its value is set at the amount of contributions paid per month by the insured worker (i.e. maximum €398 in 2005), increased in case of multiple births by 50% for each child after the first. It is not taxed.

***OΓΑ birth grant (επίδομα τοκετού OΓΑ)***

It is paid as a lump sum if delivery occurs in a private hospital or a private clinic not contracted to *OΓΑ*. Its amount equals 50% of *OΓΑ*'s maternity allowance and it is not taxed.

***Civil servants sickness allowance (επίδομα ασθένειας δημοσίου)***

Civil servants are entitled to *sickness allowance* when sick, provided that Civil Service Health Boards certify they are temporarily unfit for work. The allowance can be paid for a maximum period of 12 months, while its value exactly matches expected earnings. It is taxed.

***Civil servants maternity allowance (επίδομα κνοφορίας-λοχείας δημοσίου)***

In case of pregnancy, female civil servants are entitled to a *maternity allowance* paid for a total of five months (two months before and three months after child birth). The value of the allowance exactly matches expected earnings. It is not taxed.

***Civil servants birth grant (επίδομα τοκετού δημοσίου)***

This is paid as a lump sum to female civil servants and pensioners (or the non-working wives of an insured worker or pensioner) in case of child birth. In 2005-08 the value of the grant was €1,000, raised by 50% in case of twins, 75% in case of triplets, 100% in case of quadruples etc. It is not taxed.

***Birth grant to non-insured (επίδομα μητρότητας ανασφαλιστων)***

Those unable to claim maternity benefit from an insurance fund, either because they failed to meet the contributory conditions or because they were uninsured, can apply for this grant, paid as a lump sum and administrated by local government at prefecture level (*Νομαρχία*). Its amount was €440.20 in 2005-08 (€220.10 before and €20.10 after delivery). It is not taxed.



### 1.5.5 Disability benefits

Most social insurance funds provide **contributory disability benefits and invalidity pensions** in cash. Disability benefits are not taxable whereas invalidity pensions are subject to taxation.

Various benefits are available, related to the contributions history or the employment status of their members. The most important disability benefit provided by *IKA*, *ΟΓΑ* and *ΟΑΕΕ* is the “**extra-institutional benefit**” (*εξωιδρυματικό επίδομα*), paid to pensioners suffering from quadriplegia - paraplegia over 67% or other conditions with the same effects on mobility. Active workers may also be eligible, provided they meet the contributory conditions (350 insurance days over the last four years for *IKA*, 40 contribution months for *ΟΑΕΕ*, one contribution year for *ΟΓΑ* and so on). The benefit may also be payable to dependants. The value of benefit (€511.20 per month in 2005) is set at 20 times the minimum daily wage of an unskilled manual worker, and is withdrawn if the claimant is institutionalised or in receipt of any other benefit for the same disability.

Social insurance funds also provide invalidity pensions. *IKA*'s minimum contributory record for an invalidity pension is:

- a) 300 insurance days for workers aged less than 21. The number of insurance days of retirement rises with age (by 120 per year) to 4,200 insurance days for workers aged less than 54, of which 300 in the 5 years prior to claiming, *or*
- b) 1,500 insurance days, of which 600 in the five years prior to claiming, *or*
- c) 4,500 insurance days

No contributory record is required for insured workers suffering from an accident at work or an occupational disease, provided it results to a degree of disability of at least 50%, same as the minimum degree of disability required for an invalidity pension due to ordinary disease. The amount of pension varies according to the degree of invalidity.

**Non-contributory disability benefits** are also available, funded out of general taxation and administered by local government at the prefecture level. In the past, the benefits were subject to various forms of means testing (abolished in 1987). Although not explicitly income tested, most benefits are reduced or withdrawn altogether if the recipient is in employment, a pensioner, or in receipt of invalidity pension. Non-contributory disability benefits are not taxable.

Non-contributory disability benefits are highly heterogeneous by type of disability and sometimes by category of recipient. There are 10 categories and 21 sub-categories of disability, in addition to a generic “mobility allowance”. In 2005, out of a total 168,515 disability benefit claimants, over 101,000 received “severe disability benefit”. The most important non-contributory disability benefits, ranked by number of recipients, follow.

#### **Severe disability benefit (*επίδομα βαριάς αναπηρίας*)**

It is paid to those unable to take up paid employment because they suffer from severe disability (at least 67%), provided they are not in receipt of a contributory disability benefit. The amount of benefit is indicated below:

Table 10. Severe disability benefit rates (2005-2008)

	2005	2006	2007	2008
Severe disability benefit (€ per month)	210	220	230	248



### Blindness benefit (*επίδομα τυφλότητας*)

It is paid to persons whose eyesight is below 1/20. The amount of benefit during the period of 2005-2008 is indicated below:

Table 11. Blindness benefit rates (2005-2008)

	2005	2006	2007	2008
Blindness benefit (€ per month)				
<i>Workers, pensioners, working students</i>	222.00	244.00	266.00	287.28
<i>Unemployed workers, non-working students, children in primary/secondary education, lawyers, university teachers</i>	460.00	500.00	532.00	569.00

### Severe mental retardation benefit (*επίδομα βαριάς νοητικής καθυστέρησης*)

It is paid to persons whose IQ is below 30. The amount of benefit during the period of 2005-2008 is indicated below:

Table 12. Severe mental retardation benefit rates (2005-2008)

	2005	2006	2007	2008
Severe mental retardation benefit (€ per month)	305	332	360	396

### Kidney disease sufferers nutritional allowance (*διατροφικό επίδομα νεφροπαθών*)

It is paid to kidney disease sufferers, irrespective of social insurance coverage. The amount of benefit is indicated below:

Table 13. Kidney disease sufferers nutritional allowance rates (2005-2008)

	2005	2006	2007	2008
Kidney disease sufferers nutritional allowance (€ per month)	222.00	244.00	266.00	287.28

### Fuel benefit for the disabled (*επίδομα κίνησης αναπήρων*)

It is paid to amputees or persons with leg paralysis owning a specially converted vehicle. The amount of benefit during the period of 2005-2008 is indicated below:

Table 14. Fuel benefit for the disabled rates (2005-2008)

	2005	2006	2007	2008
Fuel benefit for the disabled (€ per month)	158	160	165	165

### Quadriplegic/ paraplegic benefit (*επίδομα τετραπληγίας/ παραπληγίας*)

It is paid to those affected, if unable to claim the corresponding benefit from an insurance fund, either because they failed to meet the contributory conditions or because they were uninsured. The amount of benefit is indicated below:



Table 15. Quadriplegic/ paraplegic benefit rates (2005-2008)

	2005	2006	2007	2008
Quadriplegic/paraplegic benefit (€ per month)	511.20	528.20	588.00	629.00

**AIDS-hemophilia benefit (επίδομα AIDS-αιμορροφιλίας)**

It is paid to affected persons, irrespective of social insurance coverage. The amount of benefit is indicated below:

Table 16. AIDS-hemophilia benefit rates (2005-2008)

	2005	2006	2007	2008
AIDS-hemophilia benefit (€ per month)	460	500	532	569

**Benefit for the deaf-mute (επίδομα κωφάλλων)**

It is paid to affected persons of non-working age, and to those of working age if unable to take up paid employment. The amount of benefit is indicated below:

Table 17. Benefit for the deaf-mute rates (2005-2008)

	2005	2006	2007	2008
Benefit for the deaf-mute (€ per month)	222.00	244.00	266.00	287.28

**Thalassemia benefit (επίδομα μεσογειακής αναιμίας)**

It is paid to affected persons, irrespective of social insurance coverage. The amount of benefit is indicated below:

Table 18. Thalassemia benefit rates (2005-2008)

	2005	2006	2007	2008
Thalassemia benefit (€ per month)	232	249	266	287

**Hansen's disease benefit (επίδομα χανσενικών)**

It is paid to affected persons, irrespective of social insurance coverage. It is also paid to dependent members of their family (i.e. spouse/parents/siblings if economically dependent and children below 18) for as long as the patient is institutionalised. The amount of benefit is indicated below:

Table 19. Hansen's disease benefit rates (2005-2008)

	2005	2006	2007	2008
Hansen's disease benefit (€ per month)				
<i>Institutionalised patients/ dependent family members</i>	222	244	266	287
<i>Non-institutionalised patients, unable to take up paid employment</i>	400	470	532	569

**Brain paralysis benefit (επίδομα εγκεφαλικής παράλυσης)**

It is paid to affected persons aged 0-18. The amount of benefit is indicated below:



Table 20. Brain paralysis benefit rates (2005-2008)

	2005	2006	2007	2008
Brain paralysis benefit (€ per month)	360	440	532	569

### 1.5.6 Housing benefits

*OEK* covers all dependent workers, except civil servants, and provides them a range of housing benefits, including subsidized housing loans and a rent subsidy.

#### *OEK* rent subsidy (*επιδότηση ενοικίου OEK*)

The rent subsidy is conditional on contributory record. Single applicants need to have at least 10 years of contributions. Lower eligibility criteria apply to various other categories of claimants, such as large families, single mothers, the disabled, young couples, temporary workers etc. It is not taxed.

The rent subsidy is open to workers whose annual net family income did not exceed €11,000 in 2005-06, €11,500 in 2007 and €12,000 in 2008. The income threshold is increased by €2,000 for each dependent child. Above the threshold the benefit is subject to a 100% implicit tax rate (i.e. it is reduced €1 per €1), until it falls to 1/3 of its original value, at which point it is fully withdrawn. An asset test also applies. The benefit rates are presented below:

Table 21. *OEK* rent subsidy rates (2005-2008)

	2005	2006	2007	2008
<i>OEK</i> rent subsidy (€ per month) for:				
Unmarried/ married with no children	105	115	115	115
Married with 1 child	130	140	140	140
Married with 2 children	155	165	165	165
Married with 3 children	205	215	215	215
Married with 4 children	205	215	215	215

Note: The benefit is increased by €25 for each child after the fourth.

#### *OEK* interest rate subsidy programme

*OEK* subsidizes mortgage interest rates taken up by eligible workers, while a similar role is played by a state loans agency in the case of civil servants. The subsidy varies by income and marital status, and is provided for a period of 9 and 7.5 years respectively. The subsidy may reduce interest repayments by up to 60%.

Moreover, about 1,500 housing units on average are ceded annually by *OEK* at cost which represents approximately 2/5 of their commercial value in the free market.

#### Housing benefit for non-insured elderly (*στεγαστική συνδρομή ανασφαλιστών*)

This is a non-contributory benefit, administrated by local government at prefecture level. It is paid directly to landlords on behalf of uninsured persons aged over 65 on low income (i.e. less than €5,000, increased by 30% for a spouse and by 20% per dependent child). It is not taxable. The amount of benefit during the period of 2005-2008 is indicated below:

Table 22. Housing benefit for non-insured elderly rates (2005-2008)

	2005	2006	2007	2008
Housing benefit for non-insured elderly (€ per month)	222.00	244.00	266.00	287.00



### Student housing benefit (*φοιτητικό στεγαστικό επίδομα*)

An allowance of €1,000 per year may be payable for every dependent child enrolled in tertiary education residing in a town other than his/her family's main residence, provided annual family income is below €30,000, raised by €3,000 for each child after the first.

### 1.5.7 Other benefits

Other benefits include emergency benefits, special allowances for ex-prisoners or repatriated Greeks as well as benefits for poor households living in less favoured areas. They are provided by various agencies, such as municipalities, *OAEΔ*, tax offices etc. The number of recipients and annual expenditure are presented in Tables 26 and 27.

#### Emergency social help (*ειδικό επίδομα άμεσης προστασίας*)

Emergency help may be available for victims of natural disasters. Families suffering loss of life, or serious injury, or disability, may receive a €4,402 payment, paid as lump sum. Those whose home was damaged may receive a grant of €587, also paid as lump sum to cover basic needs. Several additional conditions apply: beneficiaries must be Greek residents, on low income (i.e. less than €5,000 per year, increased by 30% for a spouse and by 20% per dependent child), the damaged home must be their primary one (i.e. no help for holiday homes).

#### Emergency allowance (*επίδομα έκτακτης κοινωνικής βοήθειας*)

A similar allowance of €250, paid as lump sum, may be available for those unable to cover basic needs due to an emergency (such as illness, death in the family etc).

#### Special allowance for released prisoners (*επίδομα αποφυλακισμένων*)

This is paid to recently released non-reoffending prisoners within three months of their release for a period of three months. The allowance is indexed to unemployment benefit and its amount is indicated below:

Table 23. Special allowance for released prisoners rates (2005-2008)

	2005	2006	2007	2008
Special allowance for released prisoners (€ per month)	186.75	186.75	220.43	242.40

#### Special allowance for repatriated Greeks (*επίδομα παλλινιστούντων*)

This allowance is paid to political refugees who left Greece during the civil war or to ethnic Greeks from the countries of Eastern Europe, provided they are on the *OAEΔ* unemployed lists. It is indexed to unemployment benefit and it is paid thrice, once every three months. The allowance amount is indicated below:

Table 24. Special allowance for repatriated Greeks (2005-2008)

	2005	2006	2007	2008
Special allowance for repatriated Greeks (€ per month)	311.25	311.25	367.38	404.11

#### Benefit for households in less favoured areas (*εισοδηματική ενίσχυση ορεινών και μειονεκτικών περιοχών*)

It is paid to households residing in one of a list of "less favoured areas" and it is income-tested. Its income thresholds and rates are presented below:



Table 25. Benefit for households in less favoured rates (2005-2008)

	2005	2006	2007	2008
<b>Income threshold for:</b>				
Full rate	2,000	2,000	2,000	2,200
Reduced rate	3,000	3,000	3,000	3,300
<b>Benefit rates (€ per month)</b>				
Full rate	600	600	600	600
Reduced rate	300	300	300	300



- *Scope and scale*

Table 26. Social benefits in cash: recipients (as % of population)

	2005	2006	2007	2008
<b>Retirement benefits</b>				
Main pensions	23.92	24.15	24.42	25.06
<i>IKA main old age pensions</i>	4.98	5.07	5.33	6.32 <sup>[a]</sup>
<i>IKA invalidity pensions</i>	1.18	1.16	1.17	1.18 <sup>[a]</sup>
<i>IKA survivor pensions</i>	2.20	2.23	2.30	2.54 <sup>[a]</sup>
<i>OAEF old age pensions</i>	2.52	2.59	2.60	2.72
<i>civil servant' pensions</i>	3.30	3.33	3.37	n/a
<i>OFA pensions</i>	7.76	7.73	7.64	7.40
Supplementary pensions	8.30	8.68	8.91	9.25
Pensioners' social solidarity benefit	3.56	3.49	n/a	n/a
Social pension	0.55	0.57	0.59	0.60
<b>Sickness-maternity benefits<sup>[b]</sup></b>				
<i>IKA funeral expenses grant</i>	0.30	0.30	n/a	n/a
<i>IKA maternity allowance</i>	0.45	0.49	n/a	n/a
<b>Disability benefits<sup>[c]</sup></b>				
Severe disability benefit	0.92	0.94	1.11	1.04
Other disability benefits	0.60	0.62	0.71	0.70
<b>Family benefits</b>				
Large family benefit	0.78	0.76	0.75	2.11
3 <sup>rd</sup> child benefit	0.47	0.48	0.50	0.48
Lifetime pension for mothers of many children	1.73	1.69	1.64	1.59
Lump sum €2,000 birth grant	-	0.07	0.13	0.09
Unprotected children benefit	0.27	0.19	0.19	n/a
<i>OAEF</i> family allowance	3.23	3.20	3.21	3.54
Income support to families with children in compulsory education	0.21	0.25	0.23	0.15
<b>Unemployment benefits</b>				
Unemployment insurance	3.00	2.60	2.66	2.18
Unemployment assistance for older workers	0.01	0.01	0.01	0.01
<b>Housing benefits</b>				
OEK rent subsidy	0.58	0.74	0.91	1.13
Housing benefit for non-insured elderly	0.01	0.01	0.02	0.02
Student housing benefit	0.59	0.56	0.45	0.40
<b>Other benefits</b>				
Special allowance for released prisoners	0.03	0.02	0.02	0.02
Special allowance for repatriated Greeks	0.09	n/a	n/a	n/a
Benefit for households in less favoured areas	0.45	0.36	0.39	0.45

Notes:

[a] In 2008 public utilities and banking social insurance funds were merged with IKA

[b] No aggregate data available

[c] The figure refers to non-contributory disability benefits alone.

Source: Own elaboration of data derived from various official sources.





Table 27. Social benefits in cash: expenditure

	2005	2006	2007	2008
<b>Annual expenditure (million €)</b>	<b>26,069</b>	<b>26,935</b>	<b>29,662</b>	<b>31,993</b>
as % of total expenditure				
<b>Retirement pensions</b>				
Main pensions	75.10	75.64	77.28	76.73
Supplementary pensions	11.76	12.16	12.45	13.19
Pensioners' social solidarity benefit	2.70	2.67	n/a	n/a
Social pension	0.75	0.81	0.92	1.02
<b>Sickness benefits</b>	1.33	1.33	1.23	1.19
<b>Maternity benefits</b>	0.53	0.55	0.55	0.57
<b>Disability benefits<sup>[a]</sup></b>				
Severe disability benefit	0.98	0.99	1.15	1.07
Other disability benefits	0.85	0.88	1.03	1.00
<b>Family benefits</b>				
Large family benefit	0.52	0.48	0.45	1.06
3 <sup>rd</sup> child benefit	0.39	0.36	0.36	0.37
Lifetime pension for mothers of many children	0.79	0.75	0.70	0.66
Lump sum €2,000 birth grant	-	0.05	0.10	0.07
Unprotected children benefit	0.06	0.04	0.04	n/a
OAEΔ family allowance	0.38	0.35	0.33	0.30
Income support to families with children in compulsory education	0.03	0.03	0.03	0.02
<b>Unemployment benefits</b>				
Unemployment insurance	2.69	2.26	2.15	2.07
Unemployment assistance for older workers	0.01	0.01	0.01	0.01
<b>Housing benefits</b>				
OEK rent subsidy	0.42	0.53	0.62	n/a
Housing benefit for non-insured elderly	0.01	0.02	0.02	n/a
Student housing benefit	0.25	0.22	0.17	0.14
<b>Other benefits</b>				
Special allowance for released prisoners	0.00	0.00	0.00	0.00
Special allowance for repatriated Greeks	0.01	n/a	n/a	n/a
Benefit for households in less favoured areas	0.10	0.08	0.08	0.08

Notes: [a] The figure refers to non-contributory disability benefits alone

Source: Own elaboration of data derived from various official sources

- *Not elsewhere classified*

#### **Social contributions rebate for low earners (επιδότηση εργατικής εισφοράς χαμηλομισθών)**

It is targeted to minimum wage earners as a rebate of their *IKA* social contributions for pension insurance (6.67% of gross earnings). The monthly minimum value of the rebate for manual workers in 2005 was €42.62.

## **1.6 Social contributions**

Social contributions are paid by all members of social insurance organisations, whether active or retired. As elsewhere in continental Europe, membership of a social insurance organisation is compulsory.

Social insurance in Greece is highly fragmented, with contribution rates varying considerably between (and sometimes within) social insurance funds. Each fund is responsible for collecting social contributions. The most significant cases are presented below.



## **IKA**

Workers insured with *IKA* (96.1% of all private sector employees) pay social contributions at a flat rate of 12.22% of “reference earnings”. Reference earnings reflect the notional wage for every one of *IKA*’s 28 insurance classes, where private sector employees are placed according to their actual earnings. Employer contributions are charged at 21.43% of reference earnings. *IKA* contributions are deducted at source, and pay for pension and sickness insurance. Hazardous occupations are subject to extra contributions (2.15% for employers and 3.45% for employees). In 2005 an upper earnings threshold of €2,140.50 and €4,881.26 applied to contributors first employed before and after 1<sup>st</sup> January 1993 respectively.

In addition to *IKA* contributions, *IKA* workers (and their employers) also pay contributions for related benefits: to *OAEA* for family and unemployment benefits, to *OEK* for housing benefits, and to *OEE* for various other benefits such as book vouchers, reduced theatre tickets, “social tourism” etc. In 2005 these amounted to 3.78% and 6.63% of reference earnings for employees and employers respectively. For more information, see sections 2.4.1 and 2.4.2.1.

### **Own-account workers**

The main social insurance agency for self-employed workers is *OAEE*, created in 1999 after the merger of *TEBE* with two smaller funds (*TAE* and *TΣA*).

Social contributions for self-employed workers are set at fixed amounts per insurance class, according to a schedule revised annually. In 2005, 10 insurance classes applied for former *TEBE* members first active before 1 January 1993. Contributors were first allocated to insurance class E, after one year they were moved to insurance class F, after another 5 years to insurance class G, and after another four years to insurance class H (highest compulsory one). Pension contributions varied from €504 (insurance class A) to €4,860 (insurance class J) per year, while sickness contributions were charged at a flat €732 per year. For those insured in *TAE* 3 insurance classes applied. For those first insured after 1<sup>st</sup> January 1993 there were 14 insurance classes (1 to 14); the first five were compulsory, the next nine optional. However, social contributions still varied by constituent fund.

In 2007 insurance classes were harmonised for all *OAEE* members, irrespective of constituent fund and of the date they were first insured; 14 insurance classes apply (ten compulsory and four optional). *OAEE* members are placed in the 1<sup>st</sup> (lowest) class, then transferred to the next after three years. Contributions were also (partly) harmonised for those first insured before 1<sup>st</sup> January 1993.

For more information, see sections 2.4.3.1 and 2.4.3.2.

### **Civil servants**

Civil servants, with the exception of public enterprise employees, pay social contributions for pension and sickness insurance. Pension insurance here includes primary and supplementary benefits, plus a separation benefit paid as a lump sum. The contribution rate is 17.29% or 19.62% of earnings, for contributors first employed before and after 1<sup>st</sup> January 1993 respectively. For more information, see section 2.4.2.2.

### **Public enterprise workers**

Persons working in public utilities<sup>1</sup> are insured in a variety of enterprise-specific insurance schemes. Compared to *IKA*, these schemes generally levy higher contributions and provide

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<sup>1</sup> Although some of these public enterprises have been partly or fully privatised since the early 1990s, this has not affected the special status enjoyed by their employees in terms of social insurance.



more generous benefits. In 2008 public enterprise workers' social insurance funds were merged with IKA. For more information, see section 2.4.2.3.

### **Banking employees**

Employees of (formerly) state-controlled banks are insured in separate social insurance schemes, generally levying higher contributions and providing more generous benefits. Although most of these banks have been partly or fully privatised since the early 1990s, this has not affected the special status enjoyed by their employees in terms of social insurance. In 2008 banking employees' social insurance funds were merged with IKA. For more information, see section 2.4.2.4.

### **Liberal professions**

The definition of liberal professions mainly includes medical doctors, lawyers and engineers. The relevant social insurance funds insuring these categories are collectively known as "noble funds" for the high level of benefits and quality of services they usually provide. For more information, see sections 2.4.2.5 and 2.4.3.3.

### **Farmers**

Persons active in agriculture and related occupations such as fishing, as well as those active in other sectors but resident in rural areas (defined as settlements with a population below 2,000) are all insured with the farmers' social insurance fund *OΓA*. Until recently *OΓA* mostly provided non-contributory benefits, such as farmer basic pensions. Since 1998 it has been gradually developing into a social insurance organisation, collecting social contributions and providing contributory benefits such as the new main pension. Contribution rates and contributory benefits both vary by insurance class. Farmers voluntarily choose to be placed in one of seven insurance classes. Contributions are set as a proportion of notional income, at 7% and 1.5% for pension and sickness insurance respectively. For more information, see section 2.4.4.

### **Pensioners**

Pensioner social contributions are levied at a flat 4% of pension income. Such contributions pay for sickness insurance and are deducted at source. For more information, see section 2.4.5.



- *Scope and scale*

Table 28. Social contributions: main pension contributors (as % of population)

	2005	2006	2007	2008
<b>Employees</b>				
Private sector workers	17.96	17.90	18.05	19.60
Seamen	0.21	0.52	0.21	0.19
Other private sector workers	0.27	0.22	0.10	0.22
Press workers	0.24	0.20	0.18	0.20
Civil servants	4.01	3.92	3.97	3.98
Banking employees	0.19	0.14	0.14	[a]
Public utilities employees	0.62	0.59	0.55	
<b>Self-employed</b>				
Own-account workers ( <i>TEBE</i> )	5.27			
Other self-employed ( <i>TAE-TΣA</i> )	2.19	7.56	7.20	7.48
Lawyers, doctors & engineers	2.16	2.25	2.28	2.33
Miscellaneous	0.08	0.08	0.08	0.20
Farmers	6.48	6.48	6.40	6.47

Notes: [a] In 2008 public utilities and banking social insurance funds were merged with IKA.

Source: Own elaboration of data derived from Social Budgets 2005-09.

Table 29. Social contributions: revenue

	2005	2006	2007	2008
<b>Social contributions (million €)</b>	31,281	34,314	37,755	n/a
<i>As % of total social contributions revenue:</i>				
Contribution of insured persons	31.33	30.11	30.60	n/a
Employers' contribution	29.60	29.05	29.70	n/a
State contribution <sup>[a]</sup>	4.19	4.30	4.19	n/a
Earmarked resources <sup>[b]</sup>	5.53	5.04	4.75	n/a
State subsidies <sup>[c]</sup>	21.16	22.32	22.94	n/a
Property income	4.29	5.07	4.65	n/a
Other revenue	3.89	4.11	3.17	n/a

Notes:

[a] State contribution to social insurance funds at 10% of gross earnings was officially established in 1993. From 2003, official State contribution to IKA was set equal to 1% of yearly GDP.

[b] Revenue from indirect taxation on certain products and transactions directed to specific social insurance funds (mainly *OΓA* and noble funds).

[c] Ad hoc subsidies to indebted social insurance funds, additional to official State contribution.

Source: Hellenic Statistical Authority.

## 1.7 Taxes

### Personal income tax (*φόρος εισοδήματος φυσικών προσώπων*)

Personal income tax applies to income from dependent employment, liberal profession, commercial activities, agricultural activities, property, investment etc. With the exception of some cases that are treated separately, all income is added together before allowances and deductions are taken into account. All residents with an annual income of over €3,000 are required to file an income tax return. Under certain conditions, such as the purchase of property, the obligation to file an income tax return applies even to those earning less than €3,000 per year. Married couples fill in a joint tax return, even though each spouse's income is taxed



separately. Tax relief takes the form of tax allowances (reducing taxable income) and tax deductions (reducing tax due). The list of allowances and deductions is revised annually, but generally includes medical expenses and elderly care, private insurance contributions, education expenses, mortgage interest repayments, rent and maintenance payments, charitable donations and household expenses. Taxable income is subject to a progressive tax schedule, with rates ranging from 15% to 40% in 2005-08. A personal tax allowance is available (€11,000 per annum for salary earners and pensioners, €9,500 per annum for the self employed in 2005). Moreover, a dependent child tax allowance is added to the personal tax allowance (€1,000 for one child, €2,000 for two children, €10,000 for three children, €11,000 for four children and so on). For more information, see section 2.5.

#### **Corporate income tax (φόρος στο εισόδημα νομικών προσώπων)**

Companies registered as *Sociétés Anonymes* (S.A.), other than banks and insurance companies, are taxed on their total net income or profit derived from business activities in Greece or abroad. Distributed profits are net of corporate income tax. The tax rate fell from 35% in 2004 to 32% in 2005, and further to 29% in 2006, and 25% from 2007. Shares to non-listed companies are taxed at 5% upon transfer (0.15% if listed). Dividends are tax-free.

#### **Interest income tax (φόρος επί τόκων καταθέσεων)**

Interest on bank deposits is taxed at 10%.

#### **Value added tax (φόρος προστιθέμενης αξίας)**

Two VAT rates apply: a *lower rate* of 8% (9% from 1 April 2005), applicable to food and other basic commodities and some services; and a *higher rate* of 18% (19% from 1 April 2005), applicable to all other items. Books and print are subject to half the lower rate (4% to 4.5%).

#### **Large property tax (φόρος μεγάλης ακίνητης περιουσίας)**

Property worth in excess of €243,600 in terms of *cadastral values* is taxed at 0.3% to 0.8% of the excess value, depending on its level. Property owned by corporations is taxed at a flat 0.7% of the excess value. The tax-free value is raised to €487,200 for married couples, to €548,850 for couples with one child, €610,500 for couples with two children, €683,900 for couples with three children and so on. Large property tax was abolished on 31<sup>st</sup> December 2007 and replaced by **Single Property Fee (ETAK)**. Hence, since 1<sup>st</sup> January 2008 property worth in excess of €300,000 in terms of *cadastral values* is taxed at 0.1% and property owned by corporations is taxed at a flat 0.6% of the excess value. The tax-free value is not raised for married couples or couples with children.

#### **Capital gains tax (φόρος αυτόματου υπερτιμήματος)**

Properties purchased or donated after 1<sup>st</sup> January 2006 are subject to a capital gains tax. The tax is formally imposed on the seller, and is levied on the difference between the purchase and the sales price of a property. The tax rate is 20% for properties owned for less than five years, 10% for properties owned for six to 15 years, 5% for properties owned for 16 to 25 years and 0% for properties owned for more than 25 years.

#### **Real estate transfer tax (φόρος μεταβίβασης ακινήτου)**

The transfer of property is taxed according to *cadastral values*. The tax rate is 7% for the first €15,000, and 9% for the remainder. These rates increase by 2% when the property is situated in an area covered by a public fire brigade. A 3% *municipality tax* on real estate transfer tax is also applicable.

For first-time buyers of a primary residence (house / flat) taxation rules apply for values above €75,000. The tax-free value is raised to €115,000 for married couples, to €138,000 for couples



with one child, €161,000 for couples with two children, €196,000 for couples with three children and so on.

For first-time buyers of land purchased for primary residence construction, taxation rules apply for values above €35,000. The tax-free value is raised to €64,000 for married couples, to €74,000 for couples with one child, €84,000 for couples with two children, €96,000 for couples with three children and so on.

After 1<sup>st</sup> January 2006 only properties purchased or donated for the *first* time are subject to real estate transfer tax. Sellers of properties that have already been sold or donated in the past are subject to capital gains tax plus an additional 1% transaction fee on the cadastral value of the property.

#### **Additional tax on rental income (συμπληρωματικός φόρος εισοδήματος από μισθώματα)**

In addition to its taxation as personal or corporate income, rental income is also subject to a 1.5% tax, increased to 3% for rentals exceeding 300m<sup>2</sup> and for rentals belonging to corporations. The amount of additional tax may not exceed total liability in terms of personal or corporate income tax.

#### **Inheritance tax (φόρος κληρονομιάς)**

Property and other assets transferred as gifts and bequests are subject to inheritance tax. The tax rates vary according to the amount of inheritance and the degree of the relationship between taxpayer and donor, from 0% to 40%.

#### **Regional and municipal taxes (δημοτικά τέλη ακίνητης περιουσίας)**

A number of individual taxes and duties are paid to local authorities, at rates set locally. In Athens, a tax of 0.035%, collected with electricity bills, applies to the cadastral values of all flats and houses.

#### **Excise duties (φόροι κατανάλωσης)**

Special consumption taxes apply for alcohol, tobacco and fuel.

- *Scope and scale*

Table 30. Taxes: personal income tax; taxpayers

	2005	2006	2007	2008
<b>Tax filers excl. dependants</b>	<b>8,169,236</b>	<b>8,169,236</b>	<b>8,169,236</b>	n/a
<i>Main earner</i>	5,480,354	5,530,427	5,598,885	"
<i>Spouse</i>	2,688,882	2,685,805	2,647,476	"
<i>As % of population</i>	73.71%	73.43%	73.12%	"
<b>Tax filers incl. dependants</b>	<b>10,489,084</b>	<b>10,546,271</b>	<b>10,583,892</b>	"
<i>As % of population</i>	94.64%	94.80%	94.74%	"
<b>Tax filers reporting &gt;0 income</b>	<b>6,790,981</b>	<b>6,865,612</b>	<b>6,940,190</b>	"
<i>Main earner</i>	5,023,355	5,069,759	5,128,009	"
<i>Spouse</i>	1,767,626	1,795,853	1,812,181	"
<i>As % of tax filers</i>	83.10%	84.04%	84.96%	"
<i>As % of population</i>	61.50%	61.95%	62.38%	"
<b>Tax filers paying &gt;0 tax</b>	<b>2,486,784</b>	<b>2,440,168</b>	<b>2,631,946</b>	"
<i>Main earner</i>	1,983,047	1,945,570	2,097,124	"
<i>Spouse</i>	503,737	494,598	534,822	"
<i>As % of tax filers</i>	30.40%	29.87%	32.22%	"
<i>As % of population</i>	22.50%	22.02%	23.66%	"

Source: Own elaboration of data derived from the Ministry of Economy and Finance (General Secretariat for Information Systems).



Table 31. Tax receipts (2005-2008)

	2005	2006	2007	2008
	Million €			
<b>Total tax revenue</b>	<b>42,615</b>	<b>45,799</b>	<b>47,452</b>	<b>n/a</b>
Direct taxes	17,364	18,513	19,148	"
<i>Personal income tax</i>	8,315	9,282	9,768	"
<i>Corporate income tax</i>	4,207	4,414	4,813	"
<i>Interest income tax</i>	439	492	635	"
<i>Large property tax<sup>[a]</sup></i>	236	227	315	"
<i>Inheritance tax</i>	141	137	133	"
Indirect taxes	25,251	27,286	28,304	"
<i>Value added tax</i>	14,855	16,134	14,480	"
<i>Excise duties</i>	6,242	6,766	6,846	"
	% of GDP			
<b>Total tax revenue</b>	<b>20.25</b>	<b>20.23</b>	<b>19.84</b>	<b>n/a</b>
Direct taxes	8.25	8.18	8.01	"
<i>Personal income tax</i>	3.95	4.10	4.08	"
<i>Corporate income tax</i>	2.00	1.95	2.01	"
<i>Interest income tax</i>	0.21	0.22	0.27	"
<i>Large property tax<sup>[a]</sup></i>	0.11	0.10	0.13	"
<i>Inheritance tax</i>	0.07	0.06	0.06	"
Indirect taxes	12.00	12.05	11.84	"
<i>Value added tax</i>	7.06	7.13	6.05	"
<i>Excise duties</i>	2.97	2.99	2.86	"

Note: [a] Large property tax was replaced by Single property fee (*ETAK*) in 2008.

Source: Ministry of Finance, National Budget Reports 2005-07.

## 2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD

### 2.1 Scope of simulation

EUROMOD is a cross-country comparative benefit-tax model. The model simulates a variety of taxes and benefits. However, not all taxes and benefits mentioned in section 1 are simulated. Some are entirely beyond the scope of the model, and are not included either in the EUROMOD input database or as output variables. Others are impossible to simulate accurately with the available data, but are included in the database and may be chosen as components of output variables (even if the relevant policy rules may not be changed by the model). Tables 32 and 33 classify the main tax and benefit instruments according to how each is treated in EUROMOD, and provide a brief explanation as to why the instrument is not fully simulated when this is the case.

In the case of Greece, we have been able to simulate two retirement benefits that are related to current not past conditions (social pension, pensioners' social solidarity benefit), unemployment benefits (unemployment assistance for older workers, and, partially, unemployment insurance), family benefits (3rd child benefit, income support to families with children in compulsory education), personal income tax, interest income tax, as well as social insurance contributions for a large number of occupational categories.



Table 32. Simulation of benefits in EUROMOD

	Variable name	Treatment in EUROMOD				Main limitations
		2005	2006	2007	2008	
<b>Retirement benefits/pensions</b>						
Main old age pension	poa00	I	I	I	I	1
Supplementary old age pension	poacm	I	I	I	I	1
Other minor old age pensions	poaot	I	I	I	I	1
Survivors pension	psuwd	I	I	I	I	1
Orphans pension	psuor	I	I	I	I	1
Pensioners' social solidarity benefit	boact_s	S	S	S	S	
Social pension	boanc_s	S	S	S	S	
<b>Unemployment benefits</b>						
Unemployment insurance	bunct_s	S	S	S	S	1
Unemployment assistance for older workers	bunnc_s	S	S	S	S	
Other (minor) unemployment benefits	bunot	I	I	I	I	2
<b>Family benefits</b>						
Large family benefit	bfa1g	I	I	I	I	2
3 <sup>rd</sup> child benefit	bchlg_s	S	S	S	S	
Lump sum €2,000 birth grant	bchba	-	S	S	S	
Lifetime pension for mothers of many children	pfa	I	I	I	I	2
Civil servants family benefit	bfacs	I	I	I	I	2
Income support to families with children in compulsory education	bched_s	S	S	S	S	
Other (minor) family benefits	bfaot	I	I	I	I	2
<b>Sickness – maternity benefits</b>						
Sickness benefits	bhl	I	I	I	I	1
Maternity benefits	bmact	I	I	I	I	1
<b>Disability benefits</b>						
Disability pensions (contributory)	pdi	I	I	I	I	1
Disability benefits (non-contributory)	bdi	I	I	I	I	2
<b>Housing benefits</b>	bho	I	I	I	I	2
<b>Scholarships and grants</b>	bed	I	I	I	I	2
<b>Other (minor) social assistance benefits</b>	bsaot	I	I	I	I	2
<b>Minimum wage</b>	yem	S	S	S	S	

Notes: “-”: policy did not exist in that year;

“E”: *excluded* from the model as it is neither included in the micro-data nor simulated;

“I”: *included* in the micro-data but not simulated;

“PS”: *partially simulated* as some of its relevant rules are not simulated;

“S”: *simulated* although some minor or very specific rules may not be simulated;

“1”: no data on contribution history;

“2”: data available not sufficient to simulate all eligibility conditions.





Table 33. Simulation of taxes and social contributions in EUROMOD

	Variable name(s)	Treatment in EUROMOD				Why not fully simulated?
		2005	2006	2007	2008	
<b>Taxes</b>						
Personal income tax	tin_s	S	S	S	S	(except for some tax credits)
Corporate income tax		E	E	E	E	1
Interest income tax	tinktdt_s	S	S	S	S	
Value added tax		E	E	E	E	1
Large property tax	tpr	I	I	I	I	2
Real estate transfer tax		E	E	E	E	1
Additional tax on rental income		E	E	E	E	1
Capital gains tax		E	E	E	E	1
Regional and municipal taxes		E	E	E	E	1
Excise duties		E	E	E	E	1
<b>Social insurance contributions</b>						
Employers	tscer*_s					<b>Rules simulated:</b>
Private sector		S	S	S	S	<i>IKA</i>
Employees	tscee*_s					
Private sector		S	S	S	S	<i>IKA</i>
Civil servants		S	S	S	S	<i>civil servants scheme</i>
Public enterprise workers		S	S	S	S	<i>TAII-OTE</i>
Banking employees		S	S	S	S	<i>ETE</i>
Liberal professions		S	S	S	S	<i>TΣAY</i>
Self-employed	tscse*_s					
liberal professions		S	S	S	S	<i>TΣAY</i>
own account workers		S	S	S	S	<i>TEBE</i>
other self-employed		S	S	S	S	<i>TAE</i>
Farmers	tscfr*_s	S	S	S	S	<i>OΓA</i>
Pensioners	tscbe_s	S	S	S	S	

Notes: “-”: policy did not exist in that year;  
 “E”: policy is *excluded* from the model’s scope as it is neither included in the microdata nor simulated by Euromod;  
 “PS”: policy is *partially simulated* as some of its relevant rules are not simulated;  
 “S”: policy is *simulated* although some minor or very specific rules may not be simulated;  
 “1”: no data on contribution history;  
 “2”: data available not sufficient to simulate all eligibility conditions.



## 2.2 Simulated policies and order of simulation

### 2.2.1 Simulated policies

Table 34. Simulated policies

Section	Policy	Description	Year			
			2005	2006	2007	2008
2.3	Min_Wage	Minimum wage	X	X	X	X
2.4.1	boanc	Social pension	X	X	X	X
2.4.2	boact	Pensioners' social solidarity benefit	X	X	X	X
2.4.3	bchlg	3rd child benefit	X	X	X	X
2.4.4	bchba	Lump sum €2,000 birth grant	-	X	X	X
2.4.5	bched	Income support to families with children in compulsory education	X	X	X	X
2.4.6	bunnc	Unemployment assistance for older workers	X	X	X	X
2.4.7	bunct	Unemployment insurance	X	X	X	X
2.5.1	tscee	Private sector employees SIC	X	X	X	X
2.5.2.1	tscer	Private sector employers SIC	X	X	X	X
2.5.2.2	tscee04	Civil servants SIC	X	X	X	X
2.5.2.3	tscee03	Public enterprise workers SIC	X	X	X	X
2.5.2.4	tscee02	Banking employees SIC	X	X	X	X
2.5.2.5	tscee01	Liberal professions, employees SIC	X	X	X	X
2.5.3.1	tscseA	Own-account workers SIC	X	X	-	-
	tscseB		-	-	X	X
2.5.3.2	tscse02	Other self-employed SIC	X	X	-	-
2.5.3.3	tscse01	Liberal professions, self-employed SIC	X	X	X	X
2.5.4	tscfr	Farmers SIC	X	X	X	X
2.5.5	tscbe	Pensioners SIC	X	X	X	X
2.6.1-6	tin	Personal income tax	X	X	X	X
2.6.7	tinwh	Withholding tax on benefits	X	X	X	X
2.7.1-2	tinktdt	Interest income tax	X	X	X	X

Note that minimum wage is included but switched off in the baseline. Lump sum €2,000 birth grant was introduced in 2006. A group of self-employed (TAE, sheet tscse02) was merged with the main group (TEBE, sheet tscseA) in 2007 which is modelled in a separate sheet (tscseB).



## 2.2.2 Order of simulation

- *Order of simulation in 2005-2008*

Table 35. EUROMOD Spine: order of simulation, 2005-2008

Policy	Description	Main output
MinWage	Minimum wage	MinWage_s
tscer	Employer social insurance contributions - private sector ( <i>IKA</i> )	tscer*_s
tscee	Employee social insurance contributions - private sector ( <i>IKA</i> )	tscee*_s
tscee01	Employee social insurance contributions - liberal professions ( <i>TΣAY</i> )	tscee01*_s
tscee02	Employee social insurance contributions - banking employees ( <i>ETE</i> )	tscee02*_s
tscee03	Employee social insurance contributions - public enterprises ( <i>TAII-OTE</i> )	tscee03*_s
tscee04	Employee social insurance contributions - civil servants	tscee*_s
tscseA	Self-employed social insurance contributions - main group ( <i>TEBE</i> )	tscseA*_s
tscseB	Self-employed social insurance contributions - main group ( <i>OAE</i> )	tscseB*_s
tscse01	Self-employed social insurance contributions - liberal professions ( <i>TΣAY</i> )	tscse01*_s
tscse02	Self-employed social insurance contributions - other ( <i>TAE</i> )	tscse02*_s
tscfr	Social insurance contributions - farmers ( <i>OΓA</i> )	tscfr*_s
bunct	Unemployment insurance benefit	bunct_s
boanc	Social pension	boanc_s
tscbe	Social insurance contributions - pensioners - 1 <sup>st</sup> run (with $EKA\Sigma=0$ )	tscbe*_s
tin	Personal income tax - 1st run (with $EKA\Sigma=0$ )	tin*_s
boact	Pensioner's social solidarity benefit	boact_s
tscbe	Social insurance contributions - pensioners - 2nd run	tscbe*_s
tin	Personal income tax - 2nd run	tin*_s
bchlg	Third child benefit	bchlg_s
tinwh	Withholding tax on benefits	tinwh_s
bched	Income support to families with children in compulsory education	bched_s
bunnc	Unemployment assistance for older workers	bunnc_s
bchba	Birth grant - since 2006	bchba_s
tinktdt	Interest income tax	tinktdt_s

Minimum wage is simulated first as it changes employment income for those observed below the legal limit (although this policy is switched off in the baseline scenario). This is followed by employer and employee SIC – which are levied on employment income – self-employed (including farmers) SIC and unemployment insurance benefit. Those policies are based on individuals as the tax unit, so that the income concept for determining the head of the unit is not relevant. The only exception is a supplement of unemployment insurance benefit for dependent family members and here original income is used to determine the head of the unit. For all other policies using a tax unit comprised of more than one individual, original income together with replacement incomes (*ils\_origrepy*) are used to determine the head of the unit.

Further characteristics which affect the order of simulations:

- Unemployment insurance benefit is included in the means-test of social pension and affects the calculation of unemployment assistance for older workers.
- Social pension is subject to pensioners' SIC.
- Means-test for EKAS is net of employee and pensioners' SIC and income tax. At the same time EKAS is also subject to pensioners' SIC and income tax. Therefore, pensioners' SIC and income tax are run twice: first with EKAS set to zero, after which EKAS is calculated, and then again with EKAS final values. Since 2008 EKAS is no



longer subject to income tax, so that income tax can be run only once while pensioners' SIC is still run twice.

- Employee, self-employed SIC and pensioners' SIC are deducted from the income tax base.
- Means-test for benefit for families with children at school is based on taxable income.
- 3<sup>rd</sup> child benefit is subject to withholding income tax on benefits.
- EKAS and 3<sup>rd</sup> child benefit are included in the means-test of unemployment assistance for older workers.

### 2.3 Minimum wage

ΕΓΣΣΕ sets the overall minimum wages for private sector white and blue-collar workers. The amount of minimum pay varies depending on a worker's years of service and family status.

- *Eligibility conditions*

ΕΓΣΣΕ only covers private sector workers. Minimum wages for functionaries and employees in the public sector, state-law entities and local government, permanent officers of the armed forces, Hellenic Police Force, Fire Brigade and Coast Guard are set not by collective bargaining but by governmental legislative regulations. These regulations are not simulated in EUROMOD. The definition of white and blue-collar workers also excludes banking employees, as these are covered by more favorable sectoral agreements (also not simulated in EUROMOD).

- *Minimum wage amounts*

ΕΓΣΣΕ's 2005-08 minimum wages are presented below:

Table 36. Minimum daily wage of blue-collar workers

Min daily wage (€)	2005	2006	2007	2008
	Unmarried			
Seniority				
Up to 3 years	25.56	27.18	29.39	30.40
4 to 6 years	26.51	28.17	30.47	31.52
7 to 9 years	27.78	29.52	31.93	33.03
10 to 12 years	29.03	30.86	33.37	34.52
13 to 15 years	30.30	32.21	34.83	36.03
16 to 18 years	31.56	33.55	36.28	37.53
More than 18 years	31.56	33.55	36.28	39.05
	Married			
Seniority				
Up to 3 years	28.12	29.89	32.33	33.45
4 to 6 years	29.06	30.89	33.41	34.56
7 to 9 years	30.33	32.24	34.87	36.07
10 to 12 years	31.59	33.58	36.31	37.56
13 to 15 years	32.86	34.92	37.77	39.07
16 to 18 years	34.12	36.26	39.22	40.57
More than 18 years	34.12	36.26	39.22	42.09



Table 37. Minimum monthly wage of white-collar workers

Min monthly wage (€)	2005	2006	2007	2008
Unmarried				
Seniority				
Up to 3 years	572.30	608.32	657.89	680.59
4 to 6 years	619.97	659.00	712.70	737.29
7 to 9 years	676.33	718.91	777.49	804.31
More than 9 years	732.69	778.82	842.28	871.34
Married				
Seniority				
Up to 3 years	629.53	669.16	723.68	748.65
4 to 6 years	677.20	719.84	778.49	805.35
7 to 9 years	733.56	779.75	843.28	872.37
More than 9 years	789.92	839.65	908.07	939.40

- **EUROMOD notes**

Minimum wage is simulated in the model, except for civil servants, workers in public enterprises and banking employees, but switched off in the baseline (from the spine). In case someone reports lower earnings (yem) compared to the minimum wage, adjusted for the hours worked last week (lhw) and assuming full time corresponds to 40 hours per week, the earnings are increased up to the minimum level.

## 2.4 Social benefits

### 2.4.1 Social pension

This is a non-contributory, income-tested pension. It is reserved for people over 65 years of age who lack independent means of support.

- **Eligibility conditions**

Beneficiaries must be 65 years old and over. They must not be in receipt of another pension or, if they are, its value should be lower than that of *OFA* basic pension.

- **Income test**

The benefit is granted if personal income does not exceed the benefit amount itself, or if family income does not exceed twice the benefit amount itself (i.e. €2,980 and €5,960 per year in 2005 respectively – that is 14 times monthly rate).<sup>2</sup>

For the calculation of personal (and family) income the following income sources are taken into account: employment, self-employment and other market income, income from rent, private pensions, investment income, maintenance payments received, minor family benefits, sickness and maternity benefits, unemployment insurance and minor unemployment benefits, disability pensions, lifetime pension for mothers of many-children as well as all sorts of retirement benefits/pensions apart from *EKAΣ*.

<sup>2</sup> Therefore, it is possible for one spouse to be eligible for social pension if the other spouse receives *OFA* basic pension (same amount as social pension), provided s/he has no other income.



- **Benefit amount**

The pension is payable 14 times a year to all eligible beneficiaries. Supplements are paid for a dependent spouse aged less than or equal to 65 and children aged less than or equal to 18, worth €3.1 and €6.2 per month respectively. The 2005-08 social pension rates are indicated below:

Table 38. Social pension rates (2005-2008)

	2005	2006	2007	2008
Social pension (€ per month)	212.85	227.75	277.75	30.00

Applications reporting incomes above the threshold are rejected. In other words, rather than the benefit being gradually reduced as (other) income rises, it is fully withdrawn. Therefore, either the full amount is paid or no benefit at all.

- **Definitions**

The unit of analysis comprises the head, the spouse and own children aged up to 18.

- **EUROMOD notes**

Not receiving other pensions is modelled by excluding recipients of pension from *OΓA* (lpmfr=2).

#### 2.4.2 Pensioners' social solidarity benefit

This benefit, known as *EKAΣ*, is an income-tested supplement aimed at recipients of old age and survivor pension aged 60 and over, or recipients of invalidity pension or orphan's pension irrespective of age. It is restricted to those receiving a contributory social insurance pension; *OΓA* pensioners thus are excluded.

- **Eligibility conditions**

Beneficiaries must be 60 and over if in receipt of an old age pension or a survivor pension. There is no age condition if in receipt of an invalidity or orphans pension. Recipients of a farmer basic pension or a social pension are excluded.

- **Income test – Benefit amount**

Three income concepts are assessed separately:

1. personal net income from retirement benefits and employment earnings
2. personal taxable income from all sources
3. family taxable income.

The annual income thresholds<sup>3</sup> and the monthly benefit rates to which they corresponded in 2005-08 are shown in Table 39. The benefit is payable 14 times a year.

<sup>3</sup> Note that assessment is based on tax returns of the year before the application, for incomes earned two years before the application (that is the most recent year for which a tax return is available). Since information on past incomes is not incorporated in EUROMOD, the income conditions are treated as if they referred to incomes earned in the application year.

Table 39. *EKAΣ* income thresholds and benefit rates (2005-2008)

<b>Pension income thresholds (€ per year)</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
(a) Pension income and earnings for:				
Full rate	6,215.12	6,525.91	6,786.93	7,058.41
Reduced rate A	6,458.88	6,781.86	7,053.12	7,335.25
Reduced rate B	6,621.33	6,952.43	7,230.51	7,519.74
Reduced rate C	6,824.25	7,165.71	7,452.32	7,750.42
(b) All personal income	7,961.87	8,360.00	8,694.38	9,042.16
(c) Family taxable income	12,389.65	13,009.20	13,529.50	14,070.73
<b>Benefit rates (€ per month)</b>				
Full rate	149.67	160.15	195.15	230.00
Reduced rate A	112.25	120.11	146.36	172.50
Reduced rate B	74.84	80.08	97.58	115.00
Reduced rate C	37.42	40.04	48.79	57.50

- **Definitions**

The income concept used for the first income condition comprises employment earnings, sickness benefits, civil servant's family benefits and social insurance pensions of all types except farmer basic pension and social pension; net of employee social insurance contributions and income tax.

The income concept used for the second and third condition is the tax base. The tax base is defined as taxable income less employee and self-employed social insurance contributions. This is analysed in section 2.5.4.

The family unit is the same as for income tax purposes, i.e. it comprises the head, the spouse and dependent children. The latter are defined as: (a) unmarried, aged under 18, (b) unmarried, aged under 20 and registered in OAEΔ as unemployed, (c) unmarried, aged under 25 and enrolled in post secondary or tertiary education or fulfilling their military service, (d) unmarried, aged under 27, enrolled in post secondary or tertiary education and registered in OAEΔ as unemployed, (e) suffering from any kind of disability over 67% irrespective of age.

- **EUROMOD notes**

Dependent child definition used in the model is simplified and includes own unmarried children aged up to 18 or up to 25 if in upper secondary or tertiary education.

### 2.4.3 3<sup>rd</sup> child benefit

This benefit is targeted to families with a third child aged six years or less.

- **Eligibility conditions**

Access to 3<sup>rd</sup> child benefit is limited to families with three (or more) children until the third child reaches the age of six.

- **Income test**

The income test for access to 3<sup>rd</sup> child benefit was abolished in 2002.



- *Benefit amount*

The 2005-08 3<sup>rd</sup> child benefit rates are indicated below:

Table 40. 3<sup>rd</sup> child benefit rates (2005-2008)

	2005	2006	2007	2008
3 <sup>rd</sup> child benefit (€ per month)	154.27	159.82	164.45	170.86

- *Definitions*

The family comprises the head, the spouse and own children irrespective of age.

#### 2.4.4 Lump sum €2,000 birth grant

This is a lump sum birth grant, introduced in 2006.

- *Eligibility conditions*

Access to the benefit is limited to mothers giving birth to a third child or to each child over the third.

- *Benefit amount*

The benefit rate in 2006-08 was €2,000 per child (lump sum).

- *Definitions*

The family comprises the head, the spouse and own children irrespective of age.

#### 2.4.5 Income support to families with children in compulsory education

This is a non-contributory, income based benefit, introduced in 2002.

- *Eligibility conditions*

It is paid to families with children aged six to 16 on the condition that they are in compulsory education.

- *Income test*

The annual taxable income of the family must not exceed €3,000. The definition of taxable income is provided in section 2.5.4.

- *Benefit amount*

In 2005-08, the benefit was worth €300 a year per child.

- *Definitions*

The unit of analysis for the income test comprises the head, the spouse and own unmarried children aged up to 18 or up to 25 if in upper secondary or tertiary education. For the eligibility condition, children's definition is narrowed to those aged six to 16 and in compulsory education.





- ***EUROMOD notes***

As we have no information about the educational level of people below 16, the benefit was assigned to persons whose current educational status was imputed as “primary”, “lower secondary” or “upper secondary”. Additionally, we have extended the family concept to the so-called loose children (i.e. a child without parents specified).

#### **2.4.6 Unemployment assistance for older workers**

This benefit, introduced in 2002, was aimed partly to fill the coverage gap left by contributory unemployment insurance. Note that the latter explicitly excludes the long-term unemployed, as eligibility expires after 12 months at the latest. No general unemployment assistance scheme exists.

- ***Eligibility conditions***

Unemployment assistance for older workers is targeted to long-term unemployed workers aged 45-65 on low incomes.

- ***Income test***

The annual income threshold in 2005-08 was €5,000 plus €587 for every child. Once family income is equal or higher than that, the benefit is fully withdrawn. Incomes that are taken into account for the calculation of the threshold are: employment and self-employment income, other market income (received by children), income from rent and private transfers, education allowances, civil servant's family benefit, disability pensions, *OFA* large family benefits as well as all sorts of retirement benefits/pensions apart from social pension.

- ***Benefit amount***

The monthly benefit rate in 2005-08, paid 12 times per year, was €200.

- ***Definitions***

The unit of analysis comprises the head, the spouse and own children aged up to 18.

- ***EUROMOD notes***

Being long-term unemployed is modelled as being unemployed in the current year ( $lunmy > 0$ ) and not in receipt of the contributory unemployment benefit ( $bunct\_s = 0$ ). Benefit amount is additionally adjusted with the number of months in receipt ( $lunmy\_s$ , defined in the contributory unemployment benefit policy).

#### **2.4.7 Unemployment insurance**

This benefit is paid to dependent workers who are involuntarily unemployed, capable and available for work and registered with an *OAEA* employment office. In order to receive the benefit, they have to be insured and have a specific contributions history.

- ***Eligibility conditions***

Person must have been insured with any social insurance fund, and have accumulated the following contribution days:

- First-time claimants need to have worked and paid contributions for either (i) 80 days per year over the last two years, of which at least 125 days must be in the last 14



months excluding the last two months, or (ii) 200 days in the last two years excluding the last two months, of which at least 80 days in each of the last two years.

- Second-time claimants need to have worked and paid contributions for 125 days over the last 14 months excluding the last two months.
- Seasonal workers need to have worked and paid contributions for 100 days over the last 12 months.
- Construction workers and fishermen need to have worked and paid contributions for 100 days over the last 14 months.
- **Benefit amount**

The benefit rates in 2005-2008 are indicated in Table 41. The rate is raised by 10% for each dependent family member up to the third. The benefit is payable for at most 12 months, average duration being seven months. A part of the benefit is still payable if the person finds an occasional or part-time employment of up to three non-consecutive days per week.

Table 41. Unemployment insurance benefit rates (2005-2008)

	2005	2006	2007	2008
Unemployment insurance benefit (€ per month)	311.25	311.25	367.38	404.11

- **Benefit duration**

The benefit's duration is a function of contributory record according to the table below:

Table 42. Duration of unemployment insurance benefit

General category	Number of contributory days		Benefit duration in months
	Seasonal workers	Construction workers	
Over the last 14 months excl. the last 2 months	Over the last 12 months	Over the last 14 months	
125-149 <sup>[a]</sup>	100-149 <sup>[a]</sup>	100-149 <sup>[a]</sup>	5
150-179 <sup>[b]</sup>	150-179 <sup>[b]</sup>	150-179 <sup>[b]</sup>	6
180-219 <sup>[c]</sup>	180-219 <sup>[c]</sup>	180-219 <sup>[c]</sup>	8
220-249	220-249	220-249	10
250+	250+	250+	12
210+ if aged 49+	210+ if aged 49+	210+ if aged 49+	12

Notes: [a] or 200 days over the last 2 years  
[b] or 250 days over the last 2 years  
[c] or 300 days over the last 2 years

- **Definitions**

The definition of family members includes: a) the spouse, b) unmarried children up to 18 or up to 26 if in full time education or up to 24 if unemployed, c) the parents of the beneficiary, d) unmarried, orphan grandchildren and siblings up to 18. In order to be considered as dependent, the person has to be registered to the family health booklet of the unemployed.

- **EUROMOD notes**

The benefit is modelled in such a way that those currently employed can be also covered if needed (e.g. to simulate their entitlement if they become unemployed, for replacement rates calculations).

Unemployment duration (lunmy\_s) is set equal to the observed unemployment duration (lunmy). If modelling unemployment benefit for those currently employed, unemployment



duration is set equal to the reported number of months in employment in the current year (liwmy), once contribution history (see the next step) is modelled. Simulated unemployment duration is also used for unemployment assistance for older workers.

Modelled contribution history is based on the reported number of months in employment (liwmy), controlling for the total number of months in work (liwwh).

- For those currently employed ( $yem \neq 0$  &  $lunmy\_s = 0$  &  $bunct = 0$ ), this is used.
- For those currently unemployed ( $lunmy\_s > 0$ ) and in receipt ( $bunct > 0$ ), this is set at least equal to the minimum qualifying period.
- For those currently unemployed ( $lunmy\_s > 0$ ) and not in receipt ( $bunct = 0$ ), this is set to zero.

At this point, people who are unemployed ( $lunmy\_s > 0$ ) and with sufficient contribution history are considered eligible. It is assumed that all of them belong to the general category, are involuntarily unemployed and capable and available for work (there is a variable in the SILC data identifying the latter but only filled in for those currently unemployed).

Benefit duration ( $bunmy\_s$ ) is calculated according to the rules above, using modelled contribution history, while also controlling for the unemployment duration ( $lunmy\_s$ ).

The condition for dependent family member (being registered to the family health booklet) is proxied by the lack of certain sources of income (employment income, self-employment income and income from state pensions).

Finally, the benefit amount is adjusted with the number of months in receipt ( $bunmy\_s$ ).

## 2.5 Social contributions

Social insurance in Greece, as explained earlier, is highly fragmented. In view of that, attempting to simulate all possible cases would be rather futile. Instead, each occupational category is represented by the largest social insurance organisation for that category. This is shown in Table 33. Pensioners' social contributions are also simulated.

- *EUROMOD notes*

Identifying contributors in the "old" and "new" regimes, contributors in hazardous occupations, as well as the procedure for placing contributors in insurance classes for all self-employed workers, is explained in section 3.4.3.

Reference earnings (see more below) are equated to employment earnings reported in EU-SILC.



## 2.5.1 Employers

IKA rules are used to simulate private sector employer social contributions, as shown in Table 43.

Table 43. Employer social contributions simulated (2005-2008)

Social insurance contributions (SIC)	% of reference earnings
<b>Case 1: general regime</b>	
Primary pension	13.33
Supplementary pension	3.00
Sickness insurance	5.10
Unemployment insurance (OAEΔ)	2.67
Family benefits (OAEΔ)	1.00
Housing and other benefits (OAEΔ, OEK, Εργαστική Εστία)	2.96
<b>Total SIC: general regime</b>	<b>28.06</b>
<b>Case 2: hazardous occupations</b>	
Primary pension	1.40
Supplementary pension	0.75
Extra SIC: hazardous occupations	2.15
<b>Total SIC: hazardous occupations</b>	<b>30.21</b>

- *Upper threshold on earnings*

The 2005-2008 upper earnings thresholds, applicable to both employers' and employees' social insurance contributions, are presented in Table 45.

- *EUROMOD notes*

IKA contribution rules are applied to all private sector employees (lpmfc=1) and seamen (lpmfc=9).

Upper threshold on earnings is adjusted with the number of months receiving employment income (yemmy).

## 2.5.2 Employees

### 2.5.2.1 Private sector employees

Workers insured with IKA pay social contributions at a flat rate of 16% of “reference earnings”. Reference earnings reflect the notional wage for every one of IKA’s 28 insurance classes where private sector employees are placed according to their actual earnings. Civil servants, employees in public enterprises and banking employees are covered by separate schemes.

Occupations that are officially classified as “hazardous” are subject to extra contributions at 3.45% of earnings. This is shown in Table 44 and further discussed in section 3.



Table 44. Private sector employees' social contributions simulated (2005-2008)

Social insurance contributions (SIC)	% of reference earnings
<b>Case 1: general regime</b>	
Primary pension	6.67
Supplementary pension	3.00
Sickness insurance	2.55
Unemployment insurance ( <i>OAEA</i> )	1.33
Family benefits ( <i>OAEA</i> )	1.00
Housing and other benefits ( <i>OAEA</i> , <i>OEK</i> , <i>OEE</i> )	1.45
Total SIC: general regime	<b>16.00</b>
<b>Case 2: hazardous occupations</b>	
Primary pension	2.20
Supplementary pension	1.25
Extra SIC: hazardous occupations	3.45
Total SIC: hazardous occupations	<b>19.45</b>

The 2005-2008 upper earnings thresholds are presented in Table 45.

Table 45. IKA upper earnings thresholds (2005-2008)

	2005	2006	2007	2008
Workers first insured before 31 December 1992	2,140.50	2,226.00	2,315.00	2,384.50
Workers first insured after 1 January 1993	4,881.26	5,076.51	5,279.57	5,437.96

- **EUROMOD notes**

IKA contribution rules are applied to all private sector employees (lpmfc=1) and seamen (lpmfc=9).

Upper threshold on earnings is adjusted with the number of months receiving employment income (yemmy).

### 2.5.2.2 Civil servants

Civil servant's total wage is the sum of the basic wage and of various allowances (for seniority etc). It is thought that such allowances comprise approximately 20% of a civil servant's total earnings.<sup>4</sup> Reference earnings (RE) are civil servants' total wage. Different contribution rates apply for the basic wage (assumed to be equal to 80% of RE) and for the additional allowances (assumed to be equal to 20% of RE). Social contribution rates of civil servants are analysed in Table 46.

<sup>4</sup> "The salaries of civil servants in EU countries", Journal of *INE-TΣEE*, issue 79, Jan 2002.



Table 46. Civil servants' social contributions simulated (2005-2008)

Social insurance contributions (SIC)	% of reference earnings	
	Rate	Derivation
<b>Case 1: contributors to the "old" regime</b>		
Primary pension	5.34%	6.67% × (80% of RE)
Supplementary pension ( <i>TEAAY</i> )	2.80%	3.00% × (80% of RE) + 2.00% × (20% of RE)
Other benefits ( <i>MTIYY</i> )	3.40%	4.00% × (80% of RE) + 1.00% × (20% of RE)
Sickness benefits ( <i>OIIAA</i> )	2.55%	2.55% × (100% of RE)
Separation payment ( <i>TIIAY</i> )	3.20%	4.00% × (80% of RE)
Total SIC	<b>17.29%</b>	
<b>Case 2: contributors to the "new" regime</b>		
Primary pension	6.67%	6.67% × (100% of RE)
Supplementary pension ( <i>TEAAY</i> )	3.00%	3.00% × (100% of RE)
Other benefits ( <i>MTIYY</i> )	3.40%	4.00% × (80% of RE) + 1.00% × (20% of RE)
Sickness insurance ( <i>OIIAA</i> )	2.55%	2.55% × (100% of RE)
Separation payment ( <i>TIIAY</i> )	4.00%	4.00% × (100% of RE)
Total SIC	<b>19.62%</b>	

### 2.5.2.3 Public enterprise workers

Those working in the public utilities are insured in a variety of enterprise-specific insurance schemes. Compared to *IKA*, these schemes generally levy higher contributions and provide more generous benefits. The rules simulated here are those applying to the social insurance fund of *TAII-OTE*. Employee social contributions at *TAII-OTE* are shown in Table 47. In 2008 the vast majority of public enterprise workers' social insurance funds were merged with *IKA*. However, the merger did not affect contributions paid or benefits received for that year.

Table 47. *TAII-OTE* social contributions simulated (2005-2008)

Social insurance contributions (SIC)	% of reference earnings
<b>Case 1: contributors to the "old" regime</b>	
Primary pension	11.00
Supplementary pension	3.00
Sickness insurance	2.55
Additional benefits	7.00
Total SIC	<b>23.55</b>
<b>Case 2: contributors to the "new" regime</b>	
Primary pension	6.67
Supplementary pension	3.00
Sickness insurance	2.55
Separation payment	4.00
Unemployment insurance ( <i>OAEA</i> )	1.33
Family benefits ( <i>OAEA</i> )	1.00
Housing and other benefits ( <i>OAEA, OEK, Εργατική Εστία</i> )	1.45
Extra SIC: hazardous occupations	3.45
Total SIC: non hazardous occupations	<b>20.00</b>
Total SIC: hazardous occupations	<b>23.45</b>



### 2.5.2.4 Banking employees

Employees of (formerly) state-controlled banks<sup>5</sup> are insured in separate social insurance schemes, generally levying higher contributions and providing more generous benefits. The rules simulated here are those pertaining to the social insurance agency of the National Bank of Greece (*ETE*). Employee social contributions at *ETE* are shown in Table 48. In 2008 banking employees' social insurance funds were merged with IKA. However, the merger did not affect contributions paid or benefits received for that year.

Table 48. *ETE* social contributions simulated (2005-2008)

Social insurance contributions (SIC)	% of reference earnings
<b>Case 1: contributors to the “old” regime</b>	
Primary pension	11.00
Supplementary pension	3.50
Sickness insurance	2.55
Unemployment insurance ( <i>OAEA</i> )	1.33
Family benefits ( <i>OAEA</i> )	1.00
Housing and other benefits ( <i>OAEA</i> , <i>OEK</i> , <i>Εργατική Εστία</i> )	1.45
Separation payment	4.50
Total SIC	<b>25.33</b>
<b>Case 2: contributors to the “new” regime</b>	
Primary pension	6.67
Supplementary pension	3.00
Sickness insurance	2.55
Unemployment insurance ( <i>OAEA</i> )	1.33
Family benefits ( <i>OAEA</i> )	1.00
Housing and other benefits ( <i>OAEA</i> , <i>OEK</i> , <i>Εργατική Εστία</i> )	1.45
Separation payment	4.00
Extra SIC: hazardous	3.45
Total SIC: non hazardous occupations	<b>20.00</b>
Total SIC: hazardous occupations	<b>23.45</b>

### 2.5.2.5 Liberal professions

The liberal professions mainly include medical doctors, lawyers and engineers. The relevant social insurance funds insuring these categories are collectively known as “noble funds” for the high level of benefits and quality of services they usually provide. The rules simulated here are those applying to the social insurance agency of medical doctors (*ΤΣΑΥ*). *ΤΣΑΥ*'s 2005-2008 social contribution rates for employees are presented in Annex 6.3.

- **EUROMOD notes**

Fixed amounts paid by employees are adjusted with the number of months receiving employment income (yemmy).

<sup>5</sup> Although most of these banks have been partly or fully privatised since the early 1990s, this has not affected the special status enjoyed by their employees in terms of social insurance.



## 2.5.3 Self-employed workers

### 2.5.3.1 Own account workers

Social contributions of own-account workers are simulated on the basis of *TEBE*. In 2005 there were 10 insurance classes (A to J) for those first insured in *TEBE* before 1<sup>st</sup> January 1993. Contributors were first allocated to insurance class E. After a year they moved to insurance class F, after another five years to insurance class G, and after another four years to insurance class H, the highest compulsory one. For those first insured in *TEBE* after 1<sup>st</sup> January 1993 there are 14 insurance classes (1 to 14); the first five are compulsory, the next nine optional. Contributors are first allocated to insurance class 1. Every two years contributors move up one class, until they reach insurance class 5 where they can remain until retirement, unless they choose to be insured according to an optional class. From 2007 all self-employed workers insured with *OAE* (merger of *TEBE*, *TAE* and *TΣA*), irrespective of the date they were first insured, are placed in 14 insurance classes (1-10 compulsory, 11-14 optional). *TEBE*'s 2005-2008 social contribution rates are presented in Annex 6.1.

- **EUROMOD notes**

*TEBE* contributions for 2005-06 are modelled in sheet *tscseA\_el* and for 2007-08 (together with *TAE* workers) in sheet *tscseB\_el*.

### 2.5.3.2 Other self-employed workers

Social contributions of other self-employed workers are simulated on the basis of *TAE* (the social insurance agency for shopkeepers). Social contributions are set at fixed amounts per insurance class, according to a schedule revised annually. In *TAE* there are three insurance classes for those first employed before 1<sup>st</sup> January 1993 plus another five for later entrants to the labour market. *TAE*'s 2005-2008 social contribution rates are presented in Annex 6.2.

- **EUROMOD notes**

*TAE* contributions for 2005-06 are modelled in sheet *tscse02\_el* and for 2007-08 (together with *TEBE* workers) in sheet *tscseB\_el*.

### 2.5.3.3 Liberal professions

The rules simulated here are again those applying to the social insurance agency of medical doctors (*TΣAY*). *TΣAY*'s 2005-2008 social contribution rates for self-employed are presented in Annex 6.3.

## 2.5.4 Farmers

The most typical unit of the agricultural economy in Greece is the small family farm. As a consequence of that, most farmers are self employed. In view of that, contributions are defined in proportion to a notional income in seven insurance classes, revised annually. The social contributions rate corresponding to each insurance class is set at 7% of notional income for pension insurance and 1.5% of notional income for sickness insurance. Fixed amounts per insurance class are paid for additional benefits.

Contributors can choose freely which insurance class to place themselves in. In 2005, about 80% of contributors were in (lowest) class 1. Farmers' 2005-2008 social contribution rates are presented in Annex 6.4.





### 2.5.5 Pensioners

Pensioner social contributions are levied at a flat rate of 4% of pension income (i.e. main and supplementary old age pensions, minor old age pensions, orphans' and widows' pensions, disability pensions, pensioners' social solidarity benefit and social pension). Such contributions pay for sickness insurance and are deducted at source.

## 2.6 Personal income tax

The main tax simulated for Greece is personal income tax. Personal income tax receipts amounted to €8,315 million in 2005, which corresponds to about 20% of all tax revenue or 4% of GDP (i.e. excluding social contributions that are treated separately).

### 2.6.1 Tax unit

Personal income tax is individual. Spouses file a joint income tax return, but their incomes are entered separately and taxed individually.

However, there is a partial exception to this rule: some tax allowances and/or tax credits are jointly assessed. The tax unit for the joint assessment of tax allowances/credits is broader as it includes both spouses and dependent children. The latter are defined as: (a) unmarried, aged under 18, (b) unmarried, aged under 20 and registered in OAEΔ as unemployed, (c) unmarried, aged under 25 and enrolled in post secondary or tertiary education or fulfilling their military service, (d) unmarried, aged under 27, enrolled in post secondary or tertiary education and registered in OAEΔ as unemployed, (e) suffering from any kind of disability over 67% irrespective of age. Note that once such allowances/credits (e.g. child tax allowance) are determined these are shared between (relevant) adults only.

- *EUROMOD notes*

Dependent child definition used in the model is simplified and includes own unmarried children aged up to 18 or up to 25 if in upper secondary or tertiary education.

### 2.6.2 Tax schedule

Income taxation is graduated, with progressively higher marginal tax rates applying to higher income brackets. The tax schedule in 2005-2008 is shown in Tables 49-51.

Table 49. Tax schedule: general case (2005-2006)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	9,500	0
2	9,501	13,000	15
3	13,001	23,000	30
4	23,001	...	40



Table 50. Tax schedule: general case (2007)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	10,500	0
2	10,501	12,000	15
3	12,001	30,000	29
4	30,001	75,000	39
5	75,001	...	40

Table 51. Tax schedule: general case (2008)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	10,500	0
2	10,501	12,000	15
3	12,001	30,000	27
4	30,001	75,000	37
5	75,001	...	40

In the case of tax payers with income from employment earnings and/or retirement benefits (i.e. main and supplementary old age pensions, minor old age pensions, disability pensions, orphans' and widows' pensions, social pension and pensioners' social solidarity benefit) the upper limit to tax band 1 could be extended by up to €1,500 per annum in 2005-2008<sup>6</sup>. The resulting tax schedule is shown in Tables 52-54.

Table 52. Tax schedule: employees and pensioners (2005-2006)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	11,000	0
2	11,001	13,000	15
3	13,001	23,000	30
4	23,001	...	40

Table 53. Tax schedule: employees and pensioners (2007)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	12,000	0
2	12,001	30,000	29
3	30,001	75,000	39
4	75,001	...	40

<sup>6</sup> The justification for this seems to be the perceived need to compensate employees and pensioners for the fact that other categories of tax payers (e.g. the self-employed) are widely believed to understate their true incomes in order to evade tax.



Table 54. Tax schedule: employees and pensioners (2008)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	12,000	0
2	12,001	30,000	27
3	30,001	75,000	37
4	75,001	...	40

### 2.6.3 Exemptions

Unemployment benefits, social assistance benefits and some family benefits provided by local government at the level of prefecture (such as unprotected children benefit and single parent benefit) are not taxed as income. Employment or pension income of persons suffering from any kind of disability over 80% is also tax-exempted.

### 2.6.4 Tax allowances

Tax allowances here are defined as deductions from taxable income. They include employee and self-employed social insurance contributions, child tax allowance, mortgage interest, private insurance contributions as well as charitable donations. Note that tax allowances are per tax unit, i.e. they are all shared between the main taxpayer and his/her spouse. The allowances simulated in EUROMOD are child tax allowance and mortgage interest tax allowance. However in this section some basic information is also provided for allowances that are currently not simulated with the model.

#### 2.6.4.1 Child tax allowance

Depending on the number of children in the family, the lowest income bracket (tax rate 0%) is raised by the amounts shown in Table 55.

Table 55. Child tax allowance (2005-2008)

No. of children	Child tax allowance (€ per tax unit per annum)
0	0
1	1,000
2	2,000
3	10,000
4	11,000
5	12,000
6	13,000

A further €1,000 increase in the lowest income bracket is applicable for each subsequent child after the 6<sup>th</sup>. As an illustration, Table 56 below shows the tax schedule faced by a single earner employee with two dependent children in 2005. Note that the child tax allowance affects the tax schedule as well.



Table 56. Tax schedule: single earner employee with two dependent children (2005)

Tax band	Income bracket (€ per annum)		Tax rate (%)
	Lower limit	Upper limit	
1	0	13,000	0
2	n.a.	n.a.	15
3	13,001	23,000	30
4	23,001	...	40

In the case of two-earner households, the child tax allowance is allocated to the highest earner (i.e. the spouse with the highest taxable income). If, taking into account the child tax allowance, the main earner's taxable income does not reach the upper bound of tax band 1 (tax rate 0%), the balance is transferred to the secondary earner.

#### 2.6.4.2 Mortgage interest tax allowance

The interest – not capital – component of housing loan repayments is tax deductible, in part or in full, according to the date the housing loan was taken out.

Current tax rules distinguish between three cases as follows:

- Housing loans taken out before 31<sup>st</sup> December 1999: interest repayments are fully exempted from taxable income.
- Housing loans taken out between 1<sup>st</sup> January 2000 and 31<sup>st</sup> December 2002: interest repayments are exempted in full for housing units of up to 120m<sup>2</sup>; for housing units exceeding 120m<sup>2</sup>, the exemption is calculated on a *pro rata* basis.
- Housing loans taken out after 1<sup>st</sup> January 2003: tax relief is provided as a **tax credit** at a flat rate of 20% of interest repayments for mortgages of up to €200,000 and housing units of up to 120m<sup>2</sup>; for mortgages exceeding that amount and housing units exceeding 120m<sup>2</sup>, the tax credit is calculated on a *pro rata* basis. Note that the €200,000 limit applies to the tax unit, not individual taxpayers.
- **EUROMOD notes**

Mortgage interest payments are reported at the household level in the original data but split (equally) between people responsible for accommodation in the household (as defined in the original data) in EUROMOD input dataset. Subsequently, mortgage interests allowance is first split between people responsible for accommodation in proportion to their taxable income and in the second step between spouses (again in proportion to their taxable income). Mortgage interest tax credit is in the second step split between spouses in proportion to their *gross tax liability*. Moreover, as information on floor space measured by square meters is not available, the number of rooms is used instead assuming that 120m<sup>2</sup> correspond to four rooms.

#### 2.6.4.3 Private insurance contributions tax allowance (not simulated)

Private insurance contributions in 2005-07 were exempted from taxable income in full up to a maximum of €1,100 per year. In 2008 the maximum amount was raised to €1,200 per year. Note that this tax allowance is jointly assessed, and that the maximum amount applies to the tax unit (not individual taxpayers).



#### **2.6.4.4 Disability tax allowance (not simulated)**

In 2005, a €1,900 increase in the lowest income bracket was applicable for blind persons, persons suffering from disability over 67%, kidney disease or thalassemia. In 2007 the increase in the lowest income bracket was raised to €2,400.

#### **2.6.4.5 Charitable donations tax allowance (not simulated)**

Charitable donations over €100 per year are fully exempted from taxable income. The tax allowance is jointly assessed: individual expenditures on charitable donations are summed up across all tax unit members.

### **2.6.5 Tax base**

Taxable income includes several sources of income. More specifically, the definition of taxable income includes the following income sources: employment and self-employment income, other market income (received by children in SILC), income from rent, private transfers received, education allowances, civil servant's family benefit, sickness benefits, pensioners' social solidarity benefit, disability pensions, main and supplementary old age pensions, minor old age pensions, orphans' and widows' pensions.

The tax base is defined as taxable income minus the various tax allowances described above. In EUROMOD, the latter covers social insurance contributions (employee SIC, self-employed SIC (incl. farmers), pensioners SIC) and mortgage interest tax allowance. Note that, different from these, the child tax allowance does not affect tax base but changes the tax schedule.

### **2.6.6 Tax credits**

Tax credits are defined as deductions from tax due.

#### **2.6.6.1 Rent tax credit**

The rent tax credit is calculated as 20% of rent paid (xhcr) up to a maximum tax credit of €220 annually in 2005-2006 and €240 in 2007-2008. To be eligible one cannot be in receipt of housing benefits.

#### **2.6.6.2 Maintenance payments tax credit**

The tax reduction is 20% of maintenance payments for alimonies (xmpal) up to a maximum tax credit of €600 per year.

#### **2.6.6.3 Medical expenses and care for the old tax credit (not simulated)**

Medical expenses and expenditure on care for the old are partly deducted from tax due.

In 2005-08, the tax credit was calculated as 20% of the sum of medical expenses plus *half* the expenditure on care for the old. Throughout this period, the tax credit could not exceed €6,000 per taxpayer.



#### **2.6.6.4 Education expenses tax credit (not simulated)**

Expenses on private lessons or cramming school fees are partly deducted from tax due.

In 2005-06 the tax credit was calculated as 20% of education expenses up to a maximum of €220 per year. In 2007-08 the tax credit was again calculated as 20% of education expenses but up to a maximum of €240 per year.

#### **2.6.6.5 Household expenses tax credit (not simulated)**

During 2005-06 this tax credit was abolished. From 1<sup>st</sup> August 2007, household expenses tax credit was reintroduced, calculated as 40% of household expenses up to a maximum tax credit of €2,300 per annum for both spouses. Such expenses include weddings and christenings expenses, restaurant meals, various services, housing maintenance etc.

- **EUROMOD notes**

As rent payments are reported at the household level in the original data, maximum credit amount is applied at the household level and rent tax credit is split between people responsible for accommodation in the household (as defined in the original data) in proportion to their taxable income. In the next step it is then split between spouses in proportion to their tax base. The same approach is used for mortgage tax credit.

Maintenance payments are also reported at the household level in the original data, but assigned to the person whose age is closest to 45 (either below or above). If there is more than one such person then it is assigned to the one who appears first in the household (by idperson). Hence maintenance payments tax credit is also simulated for that person.

Tax credits 2.6.6.3 to 2.6.6.5 are not simulated due to data constraints.

#### **2.6.7 Withholding tax on benefits**

Certain benefits are taxed at source at 10% plus 1.2% stamp duty. When, after the financial year is over, beneficiaries file a tax return, they can choose either to have their benefits taxed as normal income, or to have their liability exhausted with the tax already withheld. In the former case, the 10% tax deducted at source (not the stamp duty) will be assessed against tax due. In the latter case, benefits will be taxed at a flat rate of 10% + 1.2%.

In theory, the rule means that rational taxpayers have benefits taxed as income only when their marginal tax rate is below 10%. In practice, few tax payers enter income from certain benefits in their tax return.

In view of the above, the withholding tax on benefits is assumed to apply to the following benefits alone:

- 3<sup>rd</sup> child benefit (bchlg)
- large family benefit (bfalg)
- lifetime pension to many-children mothers (pfa)

By contrast, all other taxable benefits are assumed to be taxed as normal income. On 1<sup>st</sup> January 2007 the 10% withholding tax on the above benefits was abolished (the 1.2% stamp duty still remains).



## 2.7 Interest income tax

### 2.7.1 Tax unit

Interest income tax is individual.

### 2.7.2 Tax schedule

Interest on bank deposits is taxed at 10%.

- *EUROMOD notes*

Investment income reported in EU-SILC includes both interest and dividend income. However, since their disentanglement is not possible due to data constraints, investment income is treated as interest income.

## 3. DATA

### 3.1 General description

The Greek database is drawn from the Community Statistics on Income and Living Conditions (EU-SILC), both the national (PDB) and the European (UDB) version. EU-SILC is a rotating panel that provides quality, timely cross-sectional information on household incomes and social exclusion.

Table 57. EUROMOD database description

	<b>Year</b> <b>2005</b>
EUROMOD database	EL_2006_a1.txt
Original name	SILC_UDB_c06 (ver 2006-1), SILC_06
Provider	EUROSTAT, EΣYE
Year of collection	2006
Period of collection	May – June
Income reference period	1.01.2005 - 31.12.2005
Sampling	Stratified multi-stage sampling
Unit of assessment	Households
Coverage	Private household
Sample size	Indiv: 15,151 HH: 5,700
Response rate	88%

### 3.2 Sample quality and weights

#### 3.2.1 Non-response

Commission Regulation 28/2004 defines indicators aimed at measuring unit non-response in EU-SILC final quality reports.

For Greece, the overall personal interview non-response rate and the overall household interview non-response rate were 13% and 12% respectively. Overall personal interview non-response rate, averaged over countries, is somewhat above 20%. There is a large variation



around this average among countries, with the non-response rate varying from 5% in Cyprus to 40% in Denmark and Belgium.<sup>7</sup>

### 3.2.2 Weights

The original SILC sample for Greece consisted of 5,700 households and 15,190 individuals. The weights provided by SILC are household weights aiming to correct for selective non-response and panel attrition. In the sample no households with zero incomes from all sources were found. Hence no re-weighting was needed. Sample statistics and output estimates were projected to a reference population of 10,764,222 individuals. Table 58 presents some basic descriptive statistics for the grossing-up weight (*dwt*).

Table 58. Descriptive Statistics of the grossing-up weight

	<b>EM_data1</b>
Number	5,700
Mean	703.42
Median	640.63
Maximum	6,611.82
Minimum	45.12
Max/Min	146.50
Decile 1	239.49
Decile 9	1,322.29
Dec 9 / Dec1	5.5

### 3.2.3 Item non-response and under-reporting

Income and household composition data are collected by interviews with all household members aged 16 or over. The SILC response rules require detailed information on all income components to be provided by direct reporting, but proxy answers are allowed.

In the Greek sample 100 individuals reported zero income from all sources. To these individuals income was imputed using SILC's non-response inflation factor (*hy025*). For individuals younger than 65 the adjustment income was assigned according to the main income source of the household, whereas for individuals over 65 the adjustment income was imputed as old age pension income.

## 3.3 Data adjustment

This section summarises the most important adjustments performed to make data from both sources (national and European SILC) suitable for the purposes of EUROMOD.

### 3.3.1 Time period

In the SILC user database, the income reference period is a 12-month period. Information on earnings refers to the last tax year (1<sup>st</sup> January 2005 – 31<sup>st</sup> December 2005). Similarly, information about pensions and benefits refers to the calendar year before the interview. Self-employment income is based on this reference period too.

<sup>7</sup> Source: Comparative Final EU Quality Report 2006, version 3.





EU-SILC’s User Database Description clarifies that the interval between the end of the income reference period and the time of the interview for the respondent concerned shall be limited to 8 months as far as possible.

All monetary amounts in the SILC are expressed in annual terms. These are converted into monthly terms (dividing by 12) for the EUROMOD database.

### 3.3.2 Dropped observations

People with year of birth equal to 2006 were excluded from EUROMOD’s database, as they were not born in SILC’s income reference period.

### 3.3.3 Gross incomes

The income information available in the survey is net of income tax and social insurance contributions. In order to obtain gross figures, a procedure has been developed *ad hoc*, taking into account legislation on income tax and social insurance contributions in 2005.

### 3.3.4 Social contributions

As explained earlier, a large number of social insurance funds exist in Greece. The national SILC dataset contains information on the social insurance affiliation to all of them (variables *P0501\_L*, *P0771\_L* which include more than 140 different answers). For this reason, we constructed EUROMOD variable *lpmfc* where contributors were allocated to the largest representative fund of their category. The categories created and the funds selected to represent them are described in Table 33. In cases where people stated they were insured in two different funds, the allocation rules used are shown in Table 59:

Table 59. Allocation of persons insured in two social insurance funds

1 <sup>st</sup> fund	2 <sup>nd</sup> fund	Allocated fund
Liberal professions	Own account workers	Own account workers
Liberal professions	Civil servants	Liberal professions
Private sector workers	Own account workers	Own account workers
Private sector workers	Farmers	Private sector workers
Private sector workers	Other self-employed workers	Other self-employed workers
Private sector workers	Banking employees	Private sector workers
Other self-employed workers	Farmers	Other self-employed workers

Several other issues also arise:

- (a) contributors must be allocated to the “old” or to the “new” regime,
- (b) employees must be allocated to “standard” or “hazardous” occupations,
- (c) *OIA*, *TEBE* and *TAE* must be allocated to insurance classes.



### 3.3.4.1 Identifying contributors in the “old” and “new” regimes

In order to distinguish contributors to the “old” regime (i.e. those first employed before 1<sup>st</sup> January 1993) from contributors to the “new” regime (i.e. those first employed after 1<sup>st</sup> January 1993), the difference in years between a person’s age at the time of the interview and the age he/she began his/her first regular job or business was calculated (*int\_lpm*). In view of the above, contributors were allocated to the “old” or to the “new” regime as shown in Table 60.

Table 60. Contributors in the “old” and the “new” regime (*lpm*)

Contributors first employed	<i>int_lpm</i>	<i>lpm</i>
Before 1 <sup>st</sup> January 1993 (“old” regime)	>13	0
After 1 <sup>st</sup> January 1993 (“new” regime)	<=13	1

### 3.3.4.2 Identifying contributors in hazardous occupations (*lochz*)

About 34% of all *IKA* contributors and a lower proportion of other employees work in occupations officially designated as “hazardous”. Workers in “hazardous” occupations have the right to retire on a full pension up to five years before others (i.e. those in “standard” occupations). On the other hand, as explained in section 2.4.1, workers in “hazardous” occupations (and their employers) pay social contributions at a higher rate. It is for this reason that identifying those contributors is important for the purposes of modelling the tax-benefit system of Greece.

The following conditions were specified to identify workers in “hazardous” occupations:

- person is an active contributor, i.e. “directly insured”,
- social insurance agency is “*IKA*” (*lpmfc=1*) or “banking employees” (*lpmfc=5*) or “public enterprise workers” (*lpmfc=4*),
- labour economic status is “employee” (*les=3*) or “unemployed” (*les=5*),
- occupation is “technician or associate professional” (*loc=3*) or “craft or trades worker” (*loc=7*) or “plant or machine operator” (*loc=8*), or
- occupation is “skilled agricultural” (*loc=6*) or “elementary occupation” (*loc=9*), except when industry is “agriculture” (*lin=1* was excluded).

### 3.3.4.3 Allocating self-employed contributors to insurance classes

Since reference earnings are not known in advance in the case of self employment, social contributions are set at fixed amounts per “insurance class”, according to a schedule revised annually. This is the case with own-account workers (*TEBE*), other self-employed workers (*TAE*) and farmers (*OΓA*).

Therefore, before social insurance contributions could be modelled, self-employment earnings were used to allocate contributors to insurance classes. To mimic the quasi-proportional effect intended, the higher one’s earnings the higher their insurance class. Income brackets were chosen so that the resulting distribution of contributors between insurance classes matched the actual one. The 2005-08 distributions for own own-account workers, other self-employed workers and farmers are presented in the Annex.



### 3.3.5 Disentangling social pension recipients from OGA main old age pension recipients

In the original PDB dataset social pension recipients were wrongly registered as OGA main old age pension recipients. The process of disentangling them from OGA basic pension recipients was as follows: the poorest 75% of OGA old age pensioners with pension values equal (or approximately equal) to social pension, fulfilling social pension's age and income criteria and residing in densely or intermediately populated areas and the poorest 25% of OGA old age pensioners with pension values equal (or approximately equal) to social pension, fulfilling social pension's age and income criteria and residing in thinly populated areas were considered to be social pension recipients.

### 3.3.6 Other data issues

For the construction of EUROMOD variables *bfa* (family benefits), *bmact* (contributory maternity benefits), *bun* (unemployment benefits), *poa* (old age pensions), *bho* (housing benefits) and *pdi* (non contributory disability benefits) both the national and the European version of SILC were used in order to aggregate all relevant variables in the most accurate way. Hence, the definition of the above variables is as follows:

*bfa* = large family benefit (*bfa1g*) + third child benefit (*bch1g*) + lifetime pension for mothers of many-children (*pfa*) + income support to families with children in compulsory education (*bched*) + civil servants family benefit (*bfacs*) + minor family benefits (*bfaot*)

*bmact* = maternity allowance + birth grant + parental leave benefit (PDB variables included in *hy050n*)

*bun* = unemployment insurance (*bunct*) + unemployment assistance for older workers (*bunnc*) + other unemployment benefits (*bunot*)

*poa* = main old age pension (*poa00*) + supplementary old age pension (*poacm*) + minor old age pensions (*poaot*)

Separation payments, paid as lump sum, were excluded from the latter aggregation.

*bho* = housing allowances (*hy070n*) + housing benefit for students in tertiary education (PDB variable included in *hy050n*)

*bdi* = benefit for persons with special needs + care allowance for incapacitated persons + care allowance for incapacitated children + nutrition allowance for people suffering from kidney's disease + other disability benefits/ allowances + disabled child care allowance (PDB variables included in *hy050n* and *py130n*)

As social exclusion benefits (aggregated in UDB variable *hy060n*) comprise a wide range of dissimilar benefits, varying from social pension to special allowances for released prisoners or drug addicts, the creation of such a EUROMOD aggregate variable was avoided.

## 3.4 Up-rating

The dataset used for Greece is SILC 2006. As information on earnings, pensions and benefits refers to the past tax year (2005) no up-rating was required for 2005 policy simulations. 2006-08 up-rating factors are presented in the Table below.



Table 61. EUROMOD uprating factors

	Variable name	2005	2006	2007	2008
<b>Employment income</b>					
Dependent employment income	yem	1.000	1.057	1.112	1.185
Public sector employees		1.000	1.031	1.077	1.167
Private sector employees outside banking		1.000	1.068	1.133	1.207
Banking employees		1.000	1.108	1.207	1.207
Workers in public enterprises		1.000	1.070	1.146	1.240
Self-employed income	yse	1.000	1.068	1.193	1.323
Farmers		1.000	0.983	1.038	0.966
Own account workers/ other self-employed		1.000	1.068	1.193	1.323
Liberal professions		1.000	1.068	1.193	1.323
<b>Investment - property income</b>					
Investment income	yyi	1.000	1.065	1.098	1.192
Property income – rent	yprrt	1.000	1.044	1.091	1.134
<b>Other income</b>					
Private transfers	ypt	1.000	1.057	1.112	1.185
Non-cash income	kfb	1.000	1.057	1.112	1.185
Income received by people aged under 16	yot	1.000	1.057	1.112	1.185
<b>Retirement pensions/ benefits</b>					
Main old age pension	poa00	1.000	1.040	1.082	1.114
Supplementary old age pension	poacm	1.000	1.040	1.082	1.114
Other minor pensions	poaot	1.000	1.040	1.082	1.114
Survivors pension	psuwd	1.000	1.040	1.082	1.114
Orphans pension	psuor	1.000	1.040	1.082	1.114
Pensioners' social solidarity benefit	boact	1.000	1.070	1.303	1.537
Social pension	boanc	1.000	1.070	1.305	1.550
Private pension	ypp	1.000	1.033	1.064	1.109
<b>Unemployment benefits</b>					
Unemployment insurance	bunct	1.000	1.000	1.181	1.299
Unemployment assistance for older workers	bunnc	1.000	1.000	1.000	1.000
Minor unemployment benefits	bunot	1.000	1.000	1.181	1.299
<b>Family benefits</b>					
3rd child benefit	bchlg	1.000	1.036	1.066	1.107
Large family benefit	bfalg	1.000	1.036	1.066	1.107
Lifetime pension for mothers of many-children	pfa	1.000	1.036	1.066	1.107
Civil servants family benefit	bfacs	1.000	1.000	1.000	1.000
Income support to families with children in compulsory education	bched	1.000	1.000	1.000	1.000
Minor family benefits	bfaot	1.000	1.000	1.000	1.000
<b>Sickness – maternity benefits</b>					
Contributory maternity benefits (pregnancy-confinement benefit, birth grant, parental leave grant)	bmact	1.000	1.057	1.112	1.185
Health benefits	bhl	1.000	1.057	1.112	1.185
<b>Disability pensions – benefits</b>					
Disability pensions	pdi	1.000	1.040	1.080	1.110

Continued...



	Variable name	2005	2006	2007	2008
Disability benefits	bdi	1.000	1.048	1.095	1.181
Housing benefits	bho	1.000	1.095	1.095	1.095
Scholarships and grants	bed	1.000	1.000	1.000	1.000
Minor social assistance benefits	bsaot	1.000	1.000	1.000	1.000
Large property tax	tpr	1.000	1.000	1.000	1.000
<b>Assets</b>					
Loan value	amolv	1.000	1.033	1.064	1.109
Financial capital	afc	1.000	1.033	1.064	1.109
<b>Expenditure items</b>					
Rent paid	xhcrt	1.000	1.044	1.091	1.134
Housing cost	xhc	1.000	1.065	1.098	1.192
Interest on mortgage payment	xhcmomi	1.000	1.033	1.064	1.109
Alimony expenditure	xmpam	1.000	1.031	1.061	1.099
Other maintenance payments	xmpot	1.000	1.031	1.061	1.099
Nominal GDP deflator		1.000	1.031	1.061	1.099
Harmonised consumer price index		1.000	1.033	1.064	1.109

Sources: Hellenic Statistical Authority (national accounts, consumer prices, trade-services indices), Bank of Greece (2009 Governors' Report), EUROSTAT (economic accounts for agriculture), various benefit-providing agencies.

## 4. VALIDATION

### 4.1 Aggregate Validation

#### 4.1.1 Gross earnings from employment

In Table 62 simulated gross earnings from employment are validated with respect to people in receipt and aggregate yearly amounts. EUROMOD findings seem to underestimate gross earnings by approximately 25%.

Table 62. EUROMOD validation: gross earnings from employment

EUROMOD estimates	Recipients		Earnings (million €)		
	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>2005</b>					
3,091,743	n/a	n/a	51,422	53,687	0.96
<b>2006</b>					
3,091,743	n/a	n/a	54,426	57,961	0.94
<b>2007</b>					
3,091,743	n/a	n/a	57,558	62,808	0.92
<b>2008</b>					
3,091,743	n/a	n/a	61,531	66,834	0.92

Source: Eurostat, Gross wages and salaries (ESA95, 4.03 and 4.04).

Note: Gross wages and salaries also include remuneration in kind.



#### 4.1.2 Non simulated benefits

The number of recipients and total expenditure on non simulated benefits are shown in Tables 63-66. On the whole, EUROMOD seems to estimate correctly main old age pension recipients. However, this is not the case for disability, survivors and supplementary old age pension recipients. Disability pensions are severely underestimated due to the fact that in EU-SILC disability pension recipients are registered as old-age pension recipients after the age of 65. Other benefits that are also underestimated in EU-SILC are large family benefits, disability benefits and (minor) social assistance benefits. Expenditures estimates are generally in line with the estimates of recipient numbers.

Table 63. EUROMOD validation: benefits included but not simulated, [2005]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions - benefits</b>						
Main old age pension	1,812,420	1,885,539	0.96	15,714	16,108	0.98
Supplementary old age pension	273,202	651,908	0.42	1,077	2,452	0.44
Other old age pensions <sup>[a]</sup>	96,318	n/a	n/a	521	n/a	n/a
Survivors pension	345,815	578,475	0.64	2,279	2,194	1.09
Orphans pension	25,296			109		
<b>Family benefits</b>						
Large family benefit	41,896	86,810	0.48	63	137	0.55
Lifetime pension for mothers of many children	196,120	192,208	1.02	209	207	1.01
Civil servants family benefit	35,002	n/a	n/a	35.20	n/a	n/a
Other family benefits <sup>[b]</sup>	123,628	388,501	0.32	88	115	0.77
<b>Unemployment benefits</b>						
Other unemployment benefits	71,321	169,465	0.42	109	105	1.03
<b>Sickness – maternity benefits</b>						
Contributory maternity benefits <sup>[c]</sup>	29,410	n/a	n/a	40	132	0.30
Health benefits <sup>[d]</sup>	41,188	n/a	n/a	83	334	0.25
<b>Disability pensions - benefits</b>						
Disability pensions	124,316 <sup>5</sup>	309,900 <sup>6</sup>	0.40	758 <sup>[e]</sup>	1,733 <sup>[f]</sup>	0.44
Disability benefits	53,699	168,515	0.32	154	477	0.32
Housing benefits	102,879	130,455	0.79	101	179	0.56
Minor social assistance benefits <sup>[g]</sup>	14,707	53,600	0.27	21	28	0.75

Notes (applicable for Tables 63-66):

[a] Early retirement pensions due to resignation, national resistance pensions, deputy/ mayor pensions etc.

[b] Unprotected child benefit, marriage grant, OAED family allowance

[c] Pregnancy-confinement benefit, birth grant, parental leave grant

[d] Pay sick leave, benefit for working accidents, assistance of movement of sick persons, benefit for spa therapy, airing etc.

[e] Only including disability pension recipients below 65

[f] Including all disability pension recipients (irrespective of age)

[g] Emergency social help, special allowance for released prisoners/ repatriated Greeks/ drug addicts/ alcoholics, benefit for households in less favoured areas etc.

Source: Own elaboration of data derived from various administrative sources.



Table 64. EUROMOD validation: benefits included but not simulated, [2006]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions - benefits</b>						
Main old age pension	1,812,420	1,911,503	0.95	16,343	17,443	0.94
Supplementary old age pension	273,202	682,029	0.40	1,120	2,686	0.42
Other old age pensions	96,318	n/a	n/a	542	n/a	n/a
Survivors pension	345,815	602,919	0.62	2,371	2,388	1.04
Orphans pension	25,296			113		
<b>Family benefits</b>						
Large family benefit	41,896	85,014	0.49	78	133	0.59
Lifetime pension for mothers of many children	196,120	187,505	1.05	216	208	1.04
Civil servants family benefit	35,002	n/a	n/a	35	n/a	n/a
Other family benefits	123,628	376,941	0.33	88	109	0.81
<b>Unemployment benefits</b>						
Other unemployment benefits	71,321	163,987	0.43	109	107	1.01
<b>Sickness – maternity benefits</b>						
Contributory maternity benefits	29,410	n/a	n/a	42	149	0.28
Health benefits	41,188	n/a	n/a	87	358	0.24
<b>Disability pensions - benefits</b>						
Disability pensions	124,316	307,825	0.40	789	1,805	0.44
Disability benefits	53,699	173,472	0.31	161	523	0.31
Housing benefits	102,879	145,387	0.71	110	215	0.51
Minor social assistance benefits	14,707	43,145	0.34	21	24	0.86

Source: Own elaboration of data derived from various administrative sources.



Table 65. EUROMOD validation: benefits included but not simulated, [2007]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions - benefits</b>						
Main old age pension	1,812,420	1,946,322	0.93	17,003	19,087	0.89
Supplementary old age pension	273,202	704,708	0.39	1,166	3,051	0.38
Other old age pensions	96,318	n/a	n/a	563	n/a	n/a
Survivors pension	345,815	620,090	0.60	2,466	2,585	1.00
Orphans pension	25,296			118		
<b>Family benefits</b>						
Large family benefit	41,896	83,581	0.50	81	135	0.60
Lifetime pension for mothers of many children	196,120	182,915	1.07	223	209	1.06
Civil servants family benefit	35,002	n/a	n/a	35	n/a	n/a
Other family benefits	123,628	379,808	0.33	88	109	0.81
<b>Unemployment benefits</b>						
Other unemployment benefits	71,321	163,253	0.44	128	114	1.12
<b>Sickness – maternity benefits</b>						
Contributory maternity benefits	29,410	n/a	n/a	45	162	0.28
Health benefits	41,188	n/a	n/a	92	364	0.25
<b>Disability pensions - benefits</b>						
Disability pensions	124,316	304,515	0.41	819	1,977	0.41
Disability benefits	53,699	203,389	0.26	168	652	0.26
Housing benefits	102,879	154,659	0.67	110	242	0.46
Minor social assistance benefits	14,707	56,186	0.26	21	287	0.07

Source: Own elaboration of data derived from various administrative sources.





Table 66. EUROMOD validation: benefits included but not simulated, [2008]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions - benefits</b>						
Main old age pension	1,812,420	2,010,593	0.90	17,505	20,797	0.84
Supplementary old age pension	273,202	724,998	0.38	1,200	3,530	0.34
Other old age pensions	96,318	n/a	n/a	580	n/a	n/a
Survivors pension	345,815	656,204	0.57	2,539	2,496	1.07
Orphans pension	25,296			121		
<b>Family benefits</b>						
Large family benefit	41,896	236,447 <sup>[a]</sup>	0.18	84	342	0.24
Lifetime pension for mothers of many children	196,120	177,831	1.10	231	214	1.08
Civil servants family benefit	35,002	n/a	n/a	35	n/a	n/a
Other family benefits	123,628	397,574	0.31	88	97	0.91
<b>Unemployment benefits</b>						
Other unemployment benefits	71,321	157,606	0.45	141	132	1.06
<b>Sickness – maternity benefits</b>						
Contributory maternity benefits	29,410	n/a	n/a	48	181	0.26
Health benefits	41,188	n/a	n/a	98	380	0.26
<b>Disability pensions - benefits</b>						
Disability pensions	124,316	300,778	0.41	842	2,278	0.37
Disability benefits	53,699	194,725	0.28	182	671.37	0.27
Housing benefits	102,879	173,690	0.59	110	n/a	n/a
Minor social assistance benefits	14,707	62,876	0.23	21	78	0.27

Notes: [a] Significant difference from 2007 due to the fact that from 2008 the benefit was also provided to mothers of three children.

Source: Own elaboration of data derived from various administrative sources.

### 4.1.3 Simulated benefits

In Tables 67-70 simulated retirement, family and unemployment benefits are validated separately with respect to recipient numbers, followed by a comparison of figures on aggregate expenditure. Expenditure estimates are generally in line with the estimates of recipient numbers and are thus not commented.

EUROMOD overestimates the number of social pension recipients and underestimates the number of pensioners' social solidarity benefit recipients. Both of these benefits are underestimated in the original EU-SILC dataset.

Given that social pension and pensioners' social solidarity benefit are both income-tested, the discrepancy between EUROMOD and administrative figures could be attributed to targeting errors. If this is the case, it would appear that pensioners' social solidarity benefit suffers from "leakages" (award of benefit to illegitimate recipients) and social pension from "non-take up" (no award of benefit to legitimate recipients), as the enlargement of social pension's eligibility criteria during the period of 2005-08 was never broadly announced. However, EUROMOD's overestimation of social pension recipients might well be attributed to the fact that in the original dataset social pension recipients were wrongly registered as *OIA* main old age pension recipients and, hence, a disentangling process was necessary. A degree of caution is thus



advisable when interpreting this particular EUROMOD result. Moreover, as we can observe from the tables below, the large yearly increase of social pension recipients estimated in EUROMOD is not reflected in the administrative data. A plausible explanation for that is the respective increase of non-take up, due to the fact that the gradual enlargement of the benefit's eligibility criteria was never broadly announced.

Generally speaking, over/underestimation of income-tested benefits may be partly due to the way the income test for access to benefits is interpreted in the model vs. administrative practice. In real life, assessment of applications to income-tested benefits is based on tax returns from the year before the application for incomes earned two years before the application. Since information on past incomes is not incorporated in EUROMOD, the income conditions are treated as if they referred to incomes earned in the application year.

Regarding family benefits, EUROMOD underestimates the recipients of income support to families with children in compulsory education and 3<sup>rd</sup> child benefit. Since 3<sup>rd</sup> child benefit is a universal benefit, its underestimation has to be attributed to the dataset's misrepresentation of such benefit-deserving households (which is supported by the fact that the aggregates of simulated variable and original SILC variable are very close).

Finally, the model seems to underestimate the number of recipients of unemployment insurance and to overestimate unemployment assistance to older workers by a substantial margin. Unemployment insurance benefit has complex eligibility conditions which can be only partly simulated with EUROMOD and hence the simulations have been partly tied to observed receipt which itself is much underreported. In the case of unemployment assistance, also overestimated in the original EU-SILC dataset, the most plausible explanation is that the benefit suffers from massive non-take up.

Table 67. EUROMOD validation: simulated benefits [2005]

	Recipients			Expenditure (million €)		
	EUROMOD estimates <i>Dataset estimates</i>	Admin data	Ratio  <i>Ratio</i>	EUROMOD estimates <i>Dataset estimates</i>	Admin data	Ratio  <i>Ratio</i>
<b>Retirement pensions – benefits</b>						
Social pension	91,933 <i>36,747</i>	60,714	1.51 <i>0.61</i>	274 <i>108</i>	195	1.41 <i>0.55</i>
Social solidarity benefit	331,387 <i>226,634</i>	393,996	0.84 <i>0.58</i>	641 <i>368</i>	704	0.91 <i>0.52</i>
<b>Family benefits</b>						
3 <sup>rd</sup> child benefit	36,085 <i>34,198</i>	52,581	0.69 <i>0.65</i>	67 <i>63</i>	103	0.65 <i>0.61</i>
Income support to families with children in compulsory education	15,898 <i>2,805</i>	23,296	0.68 <i>0.12</i>	6 <i>3</i>	7	0.89 <i>0.36</i>
<b>Unemployment benefits</b>						
Unemployment insurance	134,023 <i>149,195</i>	332,722	0.40 <i>0.45</i>	198 <i>319</i>	701	0.28 <i>0.45</i>
Unemployment assistance for older workers	27,652 <i>2,098</i>	1,437	19.24 <i>1.46</i>	60 <i>7</i>	3	19.93 <i>2.15</i>

Source: Own elaboration of data derived from various administrative sources.



Table 68. EUROMOD validation: simulated benefits [2006]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions - benefits</b>						
Social pension	106,186	63,806	1.66	339	226	1.50
Social solidarity benefit	323,820	388,418	0.83	667	745	0.90
<b>Family benefits</b>						
3 <sup>rd</sup> child benefit	36,085	53,798	0.67	69	100	0.69
Income support to families with children in compulsory education	15,898	27,628	0.58	6	8	0.78
Lump sum €2,000 birth grant	7,288	7,541	0.97	15	15	0.98
<b>Unemployment benefits</b>						
Unemployment insurance	134,023	289,338	0.46	198	630	0.31
Unemployment assistance for older workers	27,652	1,089	25.39	60	3	19.93

Source: Own elaboration of data derived from various administrative sources.

Table 69. EUROMOD validation: simulated benefits [2007]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions - benefits</b>						
Social pension	140,015	65,963	2.12	545	277	1.97
Social solidarity benefit	298,952	n/a	n/a	752	n/a	n/a
<b>Family benefits</b>						
3 <sup>rd</sup> child benefit	36,085	55,370	0.65	71	106	0.67
Income support to families with children in compulsory education	15,898	25,289	0.63	6	8	0.78
Lump sum €2,000 birth grant	7,288	14,608	0.50	15	30	0.51
<b>Unemployment benefits</b>						
Unemployment insurance	134,023	297,038	0.45	234	642	0.36
Unemployment assistance for older workers	27,652	913	30.29	60	2	29.90

Source: Own elaboration of data derived from various administrative sources.



Table 70. EUROMOD validation: simulated benefits [2008]

	Recipients			Expenditure (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Retirement pensions – benefits</b>						
Social pension	189,536	66,838	2.84	638	330	2.66
Social solidarity benefit	290,722	n/a	n/a	877	n/a	n/a
<b>Family benefits</b>						
3 <sup>rd</sup> child benefit	36,085	54,011	0.67	74	119	0.62
Income support to families with children in compulsory education	16,776	17,168	0.98	6	6	1.00
Lump sum €2,000 birth grant	7,288	10,537	0.69	15	21	0.70
<b>Unemployment benefits</b>						
Unemployment insurance	134,023	245,017	0.64	257	669	0.38
Unemployment assistance for older workers	27,717	733	37.81	60	1.80	33.44

Source: Own elaboration of data derived from various administrative sources.

#### 4.1.4 Simulated taxes

The number of contributors and total receipts collected on simulated taxes are shown in Tables 71-74. Comparisons between EUROMOD and administrative figures on personal income tax must be handled with care, as tax evasion in Greece is known to be rife<sup>8</sup>. The model overestimates both the number of taxpayers and the amount of tax receipts collected. Apart from tax evasion, another possible reason for this overestimation is the fact that EU-SILC dataset did not contain adequate information for the simulation of a number of tax allowances and deductions applicable in 2005-08.

Table 71. EUROMOD validation: simulated taxes [2005]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Taxes</b>						
Personal income tax	2,886,532 <sup>[a]</sup>	2,486,784 <sup>[a]</sup>	1.16	11,448	8,315	1.38
Withholding tax on benefits	267,410	331,599	0.81	39	n/a	n/a
Interest income tax	87,465	n/a	n/a	31	n/a	n/a

Notes: [a] Number of persons paying non-zero income tax.

Source: Own elaboration of data derived from various administrative sources.

<sup>8</sup> Matsaganis & Flevotomou (2010) estimated that in 2004 personal income tax receipts in the absence of tax evasion would have been 35% higher.



Table 72. EUROMOD validation: simulated taxes [2006]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Taxes</b>						
Personal income tax	3,079,901 <sup>[a]</sup>	2,440,168 <sup>[a]</sup>	1.26	12,732	9,282	1.37
Withholding tax on benefits	267,410	326,317	0.82	41	n/a	n/a
Interest income tax	87,465	n/a	n/a	33	n/a	n/a

Notes: [a] Number of persons paying non-zero income tax.

Source: Own elaboration of data derived from various administrative sources.

Table 73. EUROMOD validation: simulated taxes [2007]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Taxes</b>						
Personal income tax	3,026,969 <sup>[a]</sup>	2,631,946 <sup>[a]</sup>	1.15	13,563	9,768	1.39
Withholding tax on benefits	267,410	321,866	0.83	5 <sup>[b]</sup>	n/a	n/a
Interest income tax	87,465	n/a	n/a	34	n/a	n/a

Notes: [a] Number of persons paying non-zero income tax.

[b] Significant difference from 2006 due to the fact that from 2007 the 10% withholding tax on OGA large family benefits was abolished. The 1.2% stamp duty remained.

Source: Own elaboration of data derived from various administrative sources.

Table 74. EUROMOD validation: simulated taxes [2008]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Taxes</b>						
Personal income tax	3,202,263 <sup>[a]</sup>	n/a	n/a	14,686	n/a	n/a
Withholding tax on benefits	267,410	468,289 <sup>[b]</sup>	0.57	5	n/a	n/a
Interest income tax	87,465	n/a	n/a	36	n/a	n/a

Notes: [a] Number of persons paying non-zero income tax.

[b] Significant difference from 2007 due to the fact that from 2008 large family benefit was also provided to mothers of three children.

Source: Own elaboration of data derived from various administrative sources.

#### 4.1.5 Simulated social contributions

The number of contributors and total receipts collected on simulated social contributions are shown in Tables 75-78. As shown in the tables, EUROMOD estimates correctly the number of private sector employees, overestimates the number of civil servants, banking employees (by a very significant margin) and public enterprise workers while it underestimates number of contributors in all other categories. Discrepancies may be attributed to a combination of sampling error and reporting error in the underlying database. They may also be partly attributed to the way contributors were identified in EUROMOD as “old” and “new” or as working in hazardous occupations.

Regarding receipts collected, we also observe a disparity between administrative data and EUROMOD estimates. On the whole, however, differences seem to cancel each other out to a considerable extent.



EUROMOD validation: simulated social insurance contributions [2005]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Private sector employees</b>				<b>3,870</b>	<b>3,627</b>	<b>1.07</b>
<i>Primary pension</i>					1,894	
<i>Supplementary pension</i>	2,099,079	2,043,928	1.03	3,161	632	1.25
<i>Sickness insurance</i>				709	1,101	0.64
<b>Civil servants</b>				<b>2,177</b>	<b>1,458</b>	<b>1.49</b>
<i>Primary pension</i>					649	
<i>Supplementary pension</i>	584,355	444,293	1.32	1,690	182	1.54
<i>Lump sum pension</i>					268	
<i>Other benefits</i>				487	359	1.36
<b>Public enterprise workers</b>				<b>573</b>	<b>532</b>	<b>1.08</b>
<i>Primary pension</i>					248	
<i>Supplementary pension</i>	77,236	68,582	1.13	341	111	0.95
<i>Sickness insurance</i>				63	124	0.51
<i>Additional benefits</i>				169	49	3.45
<b>Banking employees</b>				<b>272</b>	<b>158</b>	<b>1.72</b>
<i>Primary pension</i>					75	
<i>Supplementary pension</i>	42,352	21,444	1.98	168	21	1.75
<i>Sickness insurance</i>				32	39	0.82
<i>Additional benefits</i>				72	23	3.13
<b>Liberal professions</b>				<b>442</b>	<b>697</b>	<b>0.63</b>
<i>Primary pension</i>					479	
<i>Sickness insurance</i>	159,908	266,500	0.60	130	119	1.09
<i>Additional benefits</i>				42	99	0.42
<b>Own-account workers</b>				<b>1,591</b>	<b>1,700</b>	<b>0.94</b>
<i>Primary pension</i>					1,292	
<i>Sickness insurance</i>	535,192	584,132	0.92	1,195	408	0.92
<b>Other self-employed</b>				<b>311</b>	<b>572</b>	<b>0.54</b>
<i>Primary pension</i>					458	
<i>Sickness insurance</i>	103,192	248,665	0.41	235	114	0.51
<b>Farmers</b>				<b>254</b>	<b>477</b>	<b>0.53</b>
<i>Pension insurance</i>					269	
<i>Sickness insurance</i>	547,674	718,000	0.76	199	195	0.73
<i>Additional benefits</i>				43	13	0.22
<b>TOTAL</b>	<b>4,148,988</b>	<b>4,395,544</b>	<b>0.94</b>	<b>7,638</b>	<b>9,221</b>	<b>0.83</b>
<b>Pensioners<sup>[a]</sup></b>	<b>2,349,091</b>	<b>3,452,630</b>	<b>0.68</b>	<b>855</b>	<b>n/a</b>	<b>n/a</b>

Notes: [a] The 2005-2008 figure includes both main and supplementary pension recipients. Note that administrative data refer to number of pensions, not pensioners. Since some pensioners receive more than one pension, administrative data overstate the real number of pensioners.

Source: 2005, 2006 social budgets, own elaboration of data.



Table 75. EUROMOD validation: simulated social insurance contributions [2006]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Private sector employees</b>				<b>4,120</b>	<b>4,033</b>	<b>1.02</b>
<i>Primary pension</i>					2,001	
<i>Supplementary pension</i>	2,099,079	2,038,677	1.03	3,366	687	1.25
<i>Sickness insurance</i>				754	1,345	0.56
<b>Civil servants</b>				<b>2,118</b>	<b>1544</b>	<b>1.37</b>
<i>Primary pension</i>					690	
<i>Supplementary pension</i>	584,355	436,557	1.34	1,742	217	1.48
<i>Lump sum pension</i>					272	
<i>Other benefits</i>				376	365	1.03
<b>Public enterprise workers</b>				<b>614</b>	<b>550</b>	<b>1.12</b>
<i>Primary pension</i>					231	
<i>Supplementary pension</i>	77,236	65,148	1.19	365	59	1.26
<i>Sickness insurance</i>				68	121	0.56
<i>Additional benefits</i>				181	139	1.30
<b>Banking employees</b>				<b>301</b>	<b>167</b>	<b>1.80</b>
<i>Primary pension</i>					77	
<i>Supplementary pension</i>	42,352	15,466	2.74	186	22	1.88
<i>Sickness insurance</i>				35	39	0.90
<i>Additional benefits</i>				80	29	2.76
<b>Liberal professions</b>				<b>487</b>	<b>809</b>	<b>0.60</b>
<i>Primary pension</i>					545	
<i>Sickness insurance</i>	159,908	272,703	0.59	293	207	0.54
<i>Additional benefits</i>				150	57	0.72
<b>Own-account workers</b>				<b>1,666</b>	<b>1,812</b>	<b>0.92</b>
<i>Primary pension</i>					1,359	
<i>Sickness insurance</i>	535,192	850,500	0.75	1,250	453	0.92
<b>Other self-employed</b>				<b>328</b>	<b>603</b>	<b>0.54</b>
<i>Primary pension</i>					484	
<i>Sickness insurance</i>	103,192			248	119	0.51
<b>Farmers</b>				<b>328</b>	<b>603</b>	<b>0.54</b>
<i>Pension insurance</i>					267	
<i>Sickness insurance</i>	547,674	721,000	0.76	208	200	0.78
<i>Additional benefits</i>				45	14	0.23
<b>TOTAL</b>	<b>4,148,988</b>	<b>4,400,051</b>	<b>0.94</b>	<b>9,962</b>	<b>10,121</b>	<b>0.98</b>
<b>Pensioners</b>	2,352,787	3,578,834	0.66	891	n/a	n/a

Source: 2006, 2007 social budgets, own elaboration of data.



Table 76. EUROMOD validation: simulated social insurance contributions [2007]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Private sector employees</b>	2,099,079	2,049,879	1.02	<b>4,571</b>	<b>4,221</b>	<b>1.08</b>
<i>Primary pension</i>					2,218	1.22
<i>Supplementary pension</i>				3,593	735	
<i>Sickness insurance</i>				978	1,268	0.77
<b>Civil servants</b>				<b>2,344</b>	<b>1685</b>	<b>1.39</b>
<i>Primary pension</i>					753	
<i>Supplementary pension</i>	584,355	443,031	1.32	1,820	232	1.41
<i>Lump sum pension</i>					302	
<i>Other benefits</i>				524	398	1.32
<b>Public enterprise workers</b>	77,236	61,931	1.25	<b>657</b>	<b>559</b>	<b>1.18</b>
<i>Primary pension</i>					234	
<i>Supplementary pension</i>				391	62	1.32
<i>Sickness insurance</i>				73	145	0.50
<i>Additional benefits</i>				193	118	1.64
<b>Banking employees</b>	42,352	15,369	2.76	<b>328</b>	<b>161</b>	<b>2.04</b>
<i>Primary pension</i>					66	
<i>Supplementary pension</i>				203	31	2.09
<i>Sickness insurance</i>				38	39	0.97
<i>Additional benefits</i>				87	25	3.48
<b>Liberal professions</b>	159,908	274,694	0.58	<b>503</b>	<b>924</b>	<b>0.54</b>
<i>Primary pension</i>				310	720	0.43
<i>Sickness insurance</i>				147	127	1.16
<i>Additional benefits</i>				46	77	0.60
<b>Own-account workers</b>	638,385	813,927	0.66	<b>1,666</b>	<b>2,543</b>	<b>0.66</b>
<i>Primary pension</i>				1,308	1,909	0.69
<i>Sickness insurance</i>				358	634	0.56
<b>Farmers</b>	547,674	715,000	0.77	<b>276</b>	<b>512</b>	<b>0.54</b>
<i>Pension insurance</i>				217	262	0.83
<i>Sickness insurance</i>				46	234	0.20
<i>Additional benefits</i>				13	16	0.81
<b>TOTAL</b>	<b>4,148,989</b>	<b>4,373,831</b>	<b>0.95</b>	<b>10,345</b>	<b>10,605</b>	<b>0.98</b>
<b>Pensioners</b>	2,362,672	3,649,107	0.65	937	n/a	n/a

Source: 2007, 2008 social budget, own elaboration of data.





Table 77. EUROMOD validation: simulated social insurance contributions [2008]

	Contributors			Receipts collected (million €)		
	EUROMOD estimates	Admin data	Ratio	EUROMOD estimates	Admin data	Ratio
<b>Private sector employees</b>				<b>4,623</b>	<b>4,683</b>	<b>0.99</b>
<i>Primary pension</i>					2,491	
<i>Supplementary pension</i>	2,099,079			3,777	796	1.15
<i>Sickness insurance</i>				846	1,396	0.61
<b>Public enterprise workers</b>				<b>711</b>	<b>548</b>	<b>1.30</b>
<i>Primary pension</i>					233	
<i>Supplementary pension</i>	77,236			423	66	1.41
<i>Sickness insurance</i>		2,222,347 <sup>[a]</sup>	1.00	79	126	0.63
<i>Additional benefits</i>				209	123	1.70
<b>Banking employees</b>				<b>328</b>	<b>170</b>	<b>1.93</b>
<i>Primary pension</i>					69	
<i>Supplementary pension</i>	42,352			203	26	2.14
<i>Sickness insurance</i>				38	49	0.78
<i>Additional benefits</i>				87	26	3.35
<b>Civil servants</b>				<b>2,539</b>	<b>1,877</b>	<b>1.35</b>
<i>Primary pension</i>					864	
<i>Supplementary pension</i>	584,355	445,826	1.31	1,971	264	1.35
<i>Lump sum pension</i>					335	
<i>Other benefits</i>				568	414	1.37
<b>Liberal professions</b>				<b>531</b>	<b>974</b>	<b>0.55</b>
<i>Primary pension</i>					709	
<i>Sickness insurance</i>	159,908	261,330	0.61	327	145	1.07
<i>Additional benefits</i>				49	120	0.41
<b>Own-account workers</b>				<b>1,825</b>	<b>2,578</b>	<b>0.71</b>
<i>Primary pension</i>					1,909	
<i>Sickness insurance</i>	638,385	848,916	0.75	1,412	669	0.74
<b>Farmers</b>				<b>287</b>	<b>557</b>	<b>0.52</b>
<i>Pension insurance</i>					272	
<i>Sickness insurance</i>	547,674	725,000	0.76	226	269	0.83
<i>Additional benefits</i>				48	16	0.18
				13		0.81
<b>TOTAL</b>	<b>4,148,989</b>	<b>4,503,419</b>	<b>0.92</b>	<b>10,844</b>	<b>11,387</b>	<b>0.95</b>
<b>Pensioners</b>	2,379,156	3,847,278	0.62	982	n/a	n/a

Notes: [a] Banking employees and public enterprise workers are included (as their social insurance funds were merged with IKA).

Source: 2008, 2009 social budgets, own elaboration of data.



## 4.2 Income distribution

All income distribution results presented here are computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions. The weights in the OECD equivalence scale are: first adult=1; additional people aged 14+ = 0.5; additional people aged under 14 = 0.3.

As a whole, EUROMOD estimates on poverty and inequality seem to be in line with the external source estimates based on EU-SILC data. It is very likely that one of the main reasons for discrepancies is the fact that no adjustment was made for the country’s -well known- issue of excessive tax evasion.

### 4.2.1 Poverty

Table 78. EUROMOD validation: poverty rates at different poverty lines, [2005]

Percentage of individuals below:	EUROMOD	External source	Ratio
40% of median equivalent income	<b>6.98</b>	<b>8.00</b>	<b>0.87</b>
Males	6.64	7.60	0.87
Females	7.31	8.30	0.88
50% of median equivalent income	<b>12.58</b>	<b>13.50</b>	<b>0.93</b>
Males	12.02	12.70	0.95
Females	13.12	14.20	0.92
60% of median equivalent income	<b>19.54</b>	<b>20.50</b>	<b>0.95</b>
Males	18.71	19.50	0.96
Females	20.35	21.40	0.95
70% of median equivalent income	<b>26.72</b>	<b>28.00</b>	<b>0.95</b>
Males	25.97	27.00	0.96
Females	27.45	28.90	0.95

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 79. EUROMOD validation: poverty rates at different poverty lines, [2006]

Percentage of individuals below:	EUROMOD	External source	Ratio
40% of median equivalent income	<b>6.95</b>	<b>7.70</b>	<b>0.90</b>
Males	6.65	7.40	0.90
Females	7.24	7.90	0.92
50% of median equivalent income	<b>12.46</b>	<b>13.20</b>	<b>0.94</b>
Males	12.01	12.70	0.95
Females	12.89	13.70	0.94
60% of median equivalent income	<b>19.44</b>	<b>20.30</b>	<b>0.96</b>
Males	18.66	19.60	0.95
Females	20.19	20.90	0.97
70% of median equivalent income	<b>26.51</b>	<b>28.10</b>	<b>0.94</b>
Males	25.81	27.10	0.95
Females	27.19	29.00	0.94

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.



Table 80. EUROMOD validation: poverty rates at different poverty lines, [2007]

Percentage of individuals below:	EUROMOD	External source	Ratio
40% of median equivalent income	<b>6.89</b>	<b>6.70</b>	<b>1.03</b>
Males	6.67	6.60	1.01
Females	7.10	6.80	1.04
50% of median equivalent income	<b>12.33</b>	<b>12.70</b>	<b>0.97</b>
Males	11.90	12.40	0.96
Females	12.74	13.00	0.98
60% of median equivalent income	<b>18.66</b>	<b>20.10</b>	<b>0.93</b>
Males	17.93	19.60	0.91
Females	19.38	20.70	0.94
70% of median equivalent income	<b>26.11</b>	<b>26.90</b>	<b>0.97</b>
Males	25.31	26.40	0.96
Females	26.88	27.50	0.98

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 81. EUROMOD validation: poverty rates at different poverty lines, [2008]

Percentage of individuals below:	EUROMOD	External source	Ratio
40% of median equivalent income	<b>7.18</b>	n/a	n/a
Males	6.97	n/a	n/a
Females	7.37	n/a	n/a
50% of median equivalent income	<b>12.65</b>	n/a	n/a
Males	12.24	n/a	n/a
Females	13.05	n/a	n/a
60% of median equivalent income	<b>18.58</b>	n/a	n/a
Males	17.84	n/a	n/a
Females	19.29	n/a	n/a
70% of median equivalent income	<b>26.31</b>	n/a	n/a
Males	25.53	n/a	n/a
Females	27.05	n/a	n/a

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 82. EUROMOD validation: poverty rates by age groups, [2005]

Percentage of individuals below:	EUROMOD	External source	Ratio
Population	<b>19.54</b>	<b>20.50</b>	<b>0.95</b>
0-15	21.08	21.50	0.98
16-29	21.31	21.80	0.98
30-44	16.08	16.30	0.99
45-64	18.27	18.90	0.97
65-	22.53	25.50	0.88

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.



Table 83. EUROMOD validation: poverty rates by age groups, [2006]

Percentage of individuals below:	EUROMOD	External source	Ratio
Population	<b>19.44</b>	<b>20.30</b>	<b>0.96</b>
0-15	20.91	22.50	0.93
16-29	21.18	21.30	0.99
30-44	16.11	17.80	0.91
45-64	18.20	18.60	0.98
65-	22.28	22.90	0.97

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 84. EUROMOD validation: poverty rates by age groups, [2007]

Percentage of individuals below:	EUROMOD	External source	Ratio
Population	<b>18.66</b>	<b>20.10</b>	<b>0.93</b>
0-15	19.89	22.80	0.87
16-29	20.57	20.60	1.00
30-44	15.22	18.20	0.84
45-64	17.70	18.60	0.95
65-	21.32	22.30	0.96

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 85. EUROMOD validation: poverty rates by age groups, [2008]

Percentage of individuals below:	EUROMOD	External source	Ratio
Population	<b>18.58</b>	<b>n/a</b>	<b>n/a</b>
0-15	19.69	n/a	n/a
16-29	20.72	n/a	n/a
30-44	15.34	n/a	n/a
45-64	18.16	n/a	n/a
65-	20.11	n/a	n/a

Note: Computed for individuals according to their household disposable income (HDI) equivalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.



#### 4.2.2 Income inequality

Table 86. EUROMOD validation: income inequality, [2005]

	EUROMOD	External source	Ratio
Gini Coefficient	0.33	0.34	0.97
Income quintile ratio (S80/S20)	5.74	5.90	0.97
Average income share per decile			
1	2.56	2.72	0.94
2	4.52	4.50	1.00
3	5.73	5.59	1.03
4	6.72	6.60	1.02
5	7.82	7.71	1.01
6	9.06	9.07	1.00
7	10.51	10.58	0.99
8	12.44	12.34	1.01
9	15.23	15.28	1.00
10	25.42	25.61	0.99
Mean income (unequalised)	1,956.83	1,930.92	1.01
Mean income (equalised)	975.66	973.83	1.00
Median income (equalised)	824.74	820.83	1.00

Note: Computed for individuals according to their household disposable income (HDI) equalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 87. EUROMOD validation: income inequality, [2006]

	EUROMOD	External source	Ratio
Gini Coefficient	0.33	0.34	0.97
Income quintile ratio (S80/S20)	5.74	5.96	0.96
Average income share per decile			
1	2.56	2.55	1.00
2	4.53	4.52	1.00
3	5.73	5.71	1.00
4	6.75	6.57	1.03
5	7.84	7.86	1.00
6	9.03	9.20	0.98
7	10.48	10.56	0.99
8	12.39	12.56	0.99
9	15.17	15.33	0.99
10	25.53	25.14	1.02
Mean income (unequalised)	2,047.09	2,000.25	1.02
Mean income (equalised)	1,020.49	1,011.08	1.01
Median income (equalised)	861.73	850.00	1.01

Note: Computed for individuals according to their household disposable income (HDI) equalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.



Table 88. EUROMOD validation: income inequality, [2007]

	EUROMOD	External source	Ratio
Gini Coefficient	0.34	0.33	1.03
Income quintile ratio (S80/S20)	5.77	5.69	1.01
Average income share per decile			
1	2.57	2.72	0.94
2	4.54	4.48	1.01
3	5.70	5.80	0.98
4	6.73	6.79	0.99
5	7.77	8.04	0.97
6	8.97	9.24	0.97
7	10.39	10.89	0.95
8	12.33	12.53	0.98
9	15.10	15.14	1.00
10	25.91	24.38	1.06
Mean income (unequalised)	2,206.63	2,097.42	1.05
Mean income (equalised)	1,098.85	1,066.08	1.03
Median income (equalised)	918.87	900.00	1.02

Note: Computed for individuals according to their household disposable income (HDI) equalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.

Table 89. EUROMOD validation: income inequality, [2008]

	EUROMOD	External source	Ratio
Gini Coefficient	0.34	n/a	n/a
Income quintile ratio (S80/S20)	5.97	n/a	n/a
Average income share per decile			
1	2.52	n/a	n/a
2	4.44	n/a	n/a
3	5.66	n/a	n/a
4	6.67	n/a	n/a
5	7.73	n/a	n/a
6	8.89	n/a	n/a
7	10.32	n/a	n/a
8	12.26	n/a	n/a
9	15.22	n/a	n/a
10	26.30	n/a	n/a
Mean income (unequalised)	2,353.96	n/a	n/a
Mean income (equalised)	1,171.83	n/a	n/a
Median income (equalised)	971.27	n/a	n/a

Note: Computed for individuals according to their household disposable income (HDI) equalised by the “modified OECD” equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Source: Bank of Greece estimates using EU-SILC data.



### **4.3 Summary of “health warnings”**

As the Greek social insurance system is highly fragmented and official data are scattered over various administrative sources a degree of caution is advisable when interpreting validation results on social contributions.

Moreover, comparisons between EUROMOD and administrative figures on personal income tax have to take into serious consideration the existence of tax evasion as well as the lack of adequate information for the simulation of a number of tax allowances and deductions.

Finally, the underlying dataset’s misrepresentation of some population groups (such as recipients of large family benefit, unemployment insurance benefit, disability benefits, banking employees, liberal professionals, farmers etc) has to be taken into account when trying to interpret EUROMOD’s results.



## 5. REFERENCES

Bank of Greece, “Governor’s 2009 Annual Report”

Budget spending bulletins (2005-2008)

European Social Charter (2009) “19<sup>th</sup> Greek Report”

Eurostat (2006) “Comparative Final EU-SILC Quality Report”, version 3

Eurostat (2008) “Taxation trends in the EU”, Annex A

Eurostat (on line database)

Hellenic Statistical Authority (statistical indices)

Leventi C., Matsaganis M., Mitrakos T. and Tsakloglou P. (2009) "Poverty targeting and the design of policies towards groups at high risk of social exclusion", Report submitted to the Greek Ministry of Labour and Social Security, Athens (in Greek)

Matsaganis M., Flevotomou M. (2010) Distributional implications of tax evasion in Greece. GreeSE Paper 31. Hellenic Observatory, London School of Economics (<http://www.lse.ac.uk/collections/hellenicObservatory/pdf/GreeSE/GreeSE31.pdf>)

National Strategy Reports on Social Protection and Social Inclusion (2005-2006, 2008-2010)

Social Budget (2005-2009)

*INE-ΓΣΕΕ* Journal (2002) “The salaries of civil servants in EU countries”, issue 79

*IKA* annual statistical reports (2005-2006)

*OΓA* annual statistical reports (2005-2008)

- ***Sources for tax-benefit descriptions/rules***

Sites of various social insurance funds and benefit agencies:

[www.ika.gr](http://www.ika.gr)

[www.oaee.gr](http://www.oaee.gr)

[www.oaed.gr](http://www.oaed.gr)

[www.oek.gr](http://www.oek.gr)

[www.oga.gr](http://www.oga.gr)

[www.tapote.gr](http://www.tapote.gr)

[www.tsay.gr](http://www.tsay.gr)





## 6. ANNEX

### 6.1 *TEBE* social contributions simulated

Table 90. *TEBE* social contributions simulated (2005, € per year)

<b>Case 1: contributors to the “old” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
A	504	732	1,236
B	720	732	1,452
C	936	732	1,668
D	1,152	732	1,884
E	1,524	732	2,256
F	1,752	732	2,484
G	2,148	732	2,880
H	2,640	732	3,372
I	3,984	732	4,716
J	4,860	732	5,592
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,025	560	1,585
2	1,261	689	1,949
3	2,135	817	2,952
4	2,468	944	3,412
5	2,787	1,066	3,853

Table 91. *TEBE* social contributions simulated (2006, € per year)

<b>Case 1: contributors to the “old” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
A	540.00	780.00	1,320.00
B	768.00	780.00	1,548.00
C	996.00	780.00	1,776.00
D	1,224.00	780.00	2,004.00
E	1,620.00	780.00	2,400.00
F	1,860.00	780.00	2,640.00
G	2,280.00	780.00	3,060.00
H	2,796.00	780.00	3,576.00
I	4,224.00	780.00	5,004.00
J	5,148.00	780.00	5,928.00
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,066.08	582.48	1,648.56
2	1,311.00	716.40	2,027.40
3	2,220.36	849.24	3,069.60
4	2,566.92	981.84	3,548.76
5	2,898.72	1,108.80	4,007.52



Table 92. *TEBE* social contributions simulated (2007, € per year)

<b>Case 1: contributors to the “old” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,612.80	780.00	2,392.80
2	1,969.80	780.00	2,749.80
3	2,351.40	780.00	3,131.40
4	2,567.04	780.00	3,347.04
5	2,961.00	780.00	3,741.00
6	3,339.48	780.00	4,119.48
7	3,570.96	780.00	4,350.96
8	3,861.36	780.00	4,641.36
9	4,122.24	780.00	4,902.24
10	4,383.24	780.00	5,163.24
11	4,644.12	780.00	5,424.12
12	4,905.00	780.00	5,685.00
13	5,166.00	780.00	5,946.00
14	5,427.00	780.00	6,207.00
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,128.96	616.92	1,745.88
2	1,378.80	753.48	2,132.28
3	2,351.40	899.40	3,250.80
4	2,567.04	981.84	3,548.88
5	2,961.00	1,132.56	4,093.56
6	3,339.48	1,277.40	4,616.88
7	3,570.96	1,365.84	4,936.80
8	3,861.36	1,476.96	5,338.32
9	4,122.24	1,576.80	5,699.04
10	4,383.24	1,676.64	6,059.88
11	4,536.12	1,776.36	6,312.48
12	4,905.00	1,876.20	6,781.20
13	5,166.00	1,976.04	7,142.04
14	5,427.00	2,075.76	7,502.76



Table 93. *TEBE* social contributions simulated (2008, € per year)

<b>Case 1: contributors to the “old” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,741.44	900.00	2,641.44
2	2,127.36	900.00	3,027.36
3	2,539.44	900.00	3,439.44
4	2,772.36	900.00	3,672.36
5	3,197.88	900.00	4,097.88
6	3,606.72	900.00	4,506.72
7	3,856.68	900.00	4,756.68
8	4,170.24	900.00	5,070.24
9	4,452.00	900.00	5,352.00
10	4,733.88	900.00	5,633.88
11	5,015.64	900.00	5,915.64
12	5,297.40	900.00	6,197.40
13	5,579.28	900.00	6,479.28
14	5,861.16	900.00	6,761.16
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,393.44	666.24	2,059.68
2	1,701.84	813.72	2,515.56
3	2,539.44	971.28	3,510.72
4	2,772.36	1,060.44	3,832.80
5	3,197.88	1,223.16	4,421.04
6	3,606.72	1,379.52	4,986.24
7	3,856.68	1,475.16	5,331.84
8	4,170.24	1,595.16	5,765.40
9	4,452.00	1,702.92	6,154.92
10	4,733.88	1,810.68	6,544.56
11	5,015.64	1,918.44	6,934.08
12	5,297.40	2,026.20	7,323.60
13	5,579.28	2,134.08	7,713.36
14	5,861.16	2,241.84	8,103.00



6.2 TAE social contributions simulated

Table 94. TAE social contributions simulated (2005, € per year)

<b>Case 1: contributors to the “old” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
E	2,292	732	3,024
F	3,180	732	3,912
G	3,540	732	4,272
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,464	564	2,028
2	1,800	684	2,484
3	2,136	816	2,952
4	2,472	948	3,420
5	2,784	1,068	3,852

Table 95. TAE social contributions simulated (2006, € per year)

<b>Case 1: contributors to the “old” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
A	852	780	1,632
B	1,188	780	1,968
C	1,560	780	2,340
D	1,992	780	2,772
E	2,424	780	3,204
F	3,372	780	4,152
G	3,756	780	4,536
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,524	588	2,112
2	1,872	720	2,592
3	2,220	852	3,072
4	2,568	984	3,552
5	2,904	1,104	4,008
6	3,156	1,212	4,368
7	3,396	1,296	4,692



Table 96. TAE social contributions simulated (2007, € per year)

<b>Case 1: contributors to the “old” regime</b>			
Same as TEBE (Table 93, case 1)			
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,612.80	616.92	2,229.72
2	1,969.80	753.48	2,723.80
3	2,351.40	899.40	3,250.80
4	2,567.04	981.84	3,548.88
5	2,961.00	1,132.56	4,093.56
6	3,339.48	1,277.40	4,616.88
7	3,570.96	1,365.84	4,936.80
8	3,861.36	1,476.96	5,338.32
9	4,122.24	1,576.80	5,699.04
10	4,383.24	1,676.64	6,059.88
11	4,536.12	1,776.36	6,312.48
12	4,905.00	1,876.20	6,781.20
13	5,166.00	1,976.04	7,142.04
14	5,427.00	2,075.76	7,502.76

Table 97. TAE social contributions simulated (2008, € per year)

<b>Case 1: contributors to the “old” regime</b>			
Same as TEBE (Table 94, case 1)			
<b>Case 2: contributors to the “new” regime</b>			
<b>Insurance class</b>	<b>Pension insurance</b>	<b>Sickness insurance</b>	<b>Total</b>
1	1,741.80	666.24	2,408.04
2	2,127.36	813.72	2,941.08
3	2,539.44	971.28	3,510.72
4	2,772.36	1,060.44	3,832.80
5	3,197.88	1,223.16	4,421.04
6	3,606.72	1,379.52	4,986.24
7	3,856.68	1,475.16	5,331.84
8	4,170.24	1,595.16	5,765.40
9	4,452.00	1,702.92	6,154.92
10	4,733.88	1,810.68	6,544.56
11	5,015.64	1,918.44	6,934.08
12	5,297.40	2,026.20	7,323.60
13	5,579.28	2,134.08	7,713.36
14	5,861.16	2,241.84	8,103.00



### 6.3 TΣAY social contributions simulated

Table 98. TΣAY social contributions simulated (2005)

Social insurance contributions (SIC)	Contributors first employed before 1 January 1993		Contributors first employed after 1 January 1993	
	<5 years	>5 years	<5 years	>5 years
Length of service				
<b>Case 1: employees</b>				
<b>A. contributions paid as % of reference earnings</b>				
Primary pension	0.00	0.00	4.00	6.67
Sickness insurance	5.00	5.00	2.55	2.55
Additional benefits	0.00	0.00	4.00	4.00
<b>Total</b>	<b>5.00</b>	<b>5.00</b>	<b>10.55</b>	<b>13.22</b>
<b>B. contributions paid as a lump sum (€ per month)</b>				
Primary pension	94.90	158.00	0.00	0.00
Sickness insurance	0.88	0.88	0.88	0.88
Additional benefits	2.93	2.93	0.00	0.00
<b>Total</b>	<b>98.71</b>	<b>161.81</b>	<b>0.88</b>	<b>0.88</b>
<b>Case 2: self-employed (€ per month)</b>				
Primary pension	94.90	150.00	73.20	122.00
Sickness insurance	40.28	40.28	40.28	40.28
Additional benefits	2.93	2.93	24.40	24.40
<b>Total</b>	<b>137.61</b>	<b>193.21</b>	<b>137.88</b>	<b>186.68</b>

Table 99. TΣAY social contributions simulated (2006)

Social insurance contributions (SIC)	Contributors first employed before 1 January 1993		Contributors first employed after 1 January 1993	
	<5 years	>5 years	<5 years	>5 years
Length of service				
<b>Case 1: employees</b>				
<b>A. contributions paid as % of reference earnings</b>				
Primary pension	0.00	0.00	4.00	6.67
Sickness insurance	5.00	5.00	2.55	2.55
Additional benefits	0.00	0.00	4.00	4.00
<b>Total</b>	<b>5.00</b>	<b>5.00</b>	<b>10.55</b>	<b>13.22</b>
<b>B. contributions paid as a lump sum (€ per month)</b>				
Primary pension	100.50	167.50	0.00	0.00
Sickness insurance	2.00	2.00	2.00	2.00
Additional benefits	2.93	2.93	0.00	0.00
<b>Total</b>	<b>105.43</b>	<b>170.43</b>	<b>2.00</b>	<b>2.00</b>
<b>Case 2: self-employed (€ per month)</b>				
Primary pension	100.50	167.50	76.20	126.90
Sickness insurance	42.90	42.90	42.90	42.90
Additional benefits	2.93	2.93	25.40	25.40
<b>Total</b>	<b>146.33</b>	<b>213.33</b>	<b>144.50</b>	<b>195.20</b>



Table 100. TΣAY social contributions simulated (2007)

Social insurance contributions (SIC)	Contributors first employed before 1 January 1993		Contributors first employed after 1 January 1993	
	<5 years	>5 years	<5 years	>5 years
Length of service				
<b>Case 1: employees</b>				
<b>A. contributions paid as % of reference earnings</b>				
Primary pension	0.00	0.00	4.00	6.67
Sickness insurance	5.00	5.00	2.55	2.55
Additional benefits	0.00	0.00	4.00	4.00
<b>Total</b>	<b>5.00</b>	<b>5.00</b>	<b>10.55</b>	<b>13.22</b>
<b>B. contributions paid as a lump sum (€ per month)</b>				
Primary pension	106.50	177.60	0.00	0.00
Sickness insurance	2.00	2.00	2.00	2.00
Additional benefits	2.93	2.93	0.00	0.00
<b>Total</b>	<b>111.43</b>	<b>182.53</b>	<b>2.00</b>	<b>2.00</b>
<b>Case 2: self-employed (€ per month)</b>				
Primary pension	106.50	177.60	79.20	132.00
Sickness insurance	44.60	44.60	44.60	44.60
Additional benefits	2.93	2.93	26.40	26.40
<b>Total</b>	<b>154.03</b>	<b>225.13</b>	<b>150.20</b>	<b>203.00</b>

Table 101. TΣAY social contributions simulated (2008)

Social insurance contributions (SIC)	contributors first employed before 1 January 1993		contributors first employed after 1 January 1993	
	<5 years	>5 years	<5 years	>5 years
Length of service				
<b>Case 1: employees</b>				
<b>A. contributions paid as % of reference earnings</b>				
Primary pension	0.00	0.00	4.00	6.67
Sickness insurance	5.00	5.00	2.55	2.55
Additional benefits	0.00	0.00	4.00	4.00
<b>Total</b>	<b>5.00</b>	<b>5.00</b>	<b>10.55</b>	<b>13.22</b>
<b>B. contributions paid as a lump sum (€ per month)</b>				
Primary pension	113.00	188.30	0.00	0.00
Sickness insurance	2.00	2.00	2.00	2.00
Additional benefits	2.93	2.93	0.00	0.00
<b>Total</b>	<b>117.93</b>	<b>193.23</b>	<b>2.00</b>	<b>2.00</b>
<b>Case 2: self-employed (€ per month)</b>				
Primary pension	113.00	188.30	81.60	136.00
Sickness insurance	45.80	45.80	45.80	45.80
Additional benefits	2.93	2.93	27.20	27.20
<b>Total</b>	<b>161.73</b>	<b>237.03</b>	<b>154.60</b>	<b>209.00</b>



#### 6.4 OGA social contributions simulated

Table 102. OGA social contributions simulated (2005, € per year)

Insurance class	Pension insurance	Sickness insurance	Additional benefits	Total
1	310.56	66.60	21.12	398.28
2	384.96	82.56	21.12	488.64
3	463.32	99.24	21.12	583.68
4	571.68	122.52	21.12	715.32
5	680.04	145.68	33.12	857.40
6	787.68	168.84	33.12	988.20
7	894.48	191.64	33.12	1,117.80

Table 103. OGA social contributions simulated (2006, € per year)

Insurance class	Pension insurance	Sickness insurance	Additional benefits	Total
1	323.04	69.24	22.08	414.36
2	400.44	85.80	22.08	508.32
3	481.80	103.20	22.08	607.08
4	594.60	127.44	22.08	744.12
5	707.28	151.56	33.12	891.96
6	819.24	175.56	33.12	1,027.92
7	930.24	199.32	33.12	1,162.68

Table 104. OGA social contributions simulated (2007, € per year)

Insurance class	Pension insurance	Sickness insurance	Additional benefits	Total
1	336.00	72.00	22.08	430.08
2	416.40	89.28	22.08	527.76
3	501.12	107.40	22.08	630.60
4	618.36	132.48	22.08	772.92
5	735.60	157.56	33.12	926.28
6	852.00	182.52	33.12	1,067.64
7	967.56	207.36	33.12	1,208.04

Table 105. OGA social contributions simulated (2008, € per year)

Insurance class	Pension insurance	Sickness insurance	Additional benefits	Total
1	349.44	74.88	22.32	446.64
2	433.08	92.76	22.32	548.16
3	521.16	111.72	22.32	655.20
4	643.08	137.76	22.32	803.16
5	765.00	163.92	33.48	962.40
6	886.08	189.84	33.48	1,109.40
7	1,006.20	215.64	33.48	1,255.32





## 6.5 2005-08 distributions of self-employed contributors

Table 106. Distribution of *TEBE* contributors by insurance class (2005)

<b>Case 1: contributors to the “old” regime</b>		
<b>Insurance class</b>	<b>No. of contributors</b>	<b>%</b>
A	3	0.0
B	0	0.0
C	38	0.0
D	64	0.0
E	14,514	2.6
F	68,107	12.0
G	54,513	9.6
H	233,649	41.1
I	2,529	0.4
J	11,804	2.1
<b>Total “old” regime</b>	<b>385,221</b>	<b>67.8</b>
<b>Case 2: contributors to the “new” regime</b>		
<b>Insurance class</b>	<b>No. of contributors</b>	<b>%</b>
1	58,282	10.3
2	41,304	7.3
3	30,764	5.4
4	22,528	4.0
5	30,098	5.3
<b>Total “new” regime</b>	<b>182,976</b>	<b>32.2</b>
<b>Total <i>TEBE</i></b>	<b>568,197</b>	<b>100.0</b>



Table 107. Distribution of *TEBE* contributors by insurance class (2006)

<b>Case 1: contributors to the “old” regime</b>		
<b>Insurance class</b>	<b>No. of contributors</b>	<b>%</b>
A	4	0
B	0	0
C	42	0
D	74	0
E	21,112	5
F	63,834	17
G	52,810	14
H	226,077	60
I	2,587	1
J	12,324	3
<b>Total “old” regime</b>	<b>378,864</b>	<b>100</b>
<b>Case 2: contributors to the “new” regime</b>		
<b>Insurance class</b>	<b>No. of contributors</b>	<b>%</b>
1	84,287	39
2	44,452	20
3	32,316	15
4	23,774	11
5	33,599	15
6	36	0
7	27	0
8	19	0
9	8	0
10	24	0
11	7	0
12	5	0
13	1	0
14	59	0
<b>Total “new” regime</b>	<b>218,614</b>	<b>100</b>

Note: For contributors to the “new” regime insurance classes 1-5 are compulsory and 6-14 optional.



Table 108. Distribution of *TAE* contributors by insurance class (2004 data<sup>1</sup>)

<b>Case 1: contributors to the “old” regime</b>		
<b>Insurance class</b>	<b>No. of contributors</b>	<b>%</b>
E	165,902	73.5
F	1,169	0.5
G	16,509	7.3
<b>Total “old” regime</b>	<b>183,580</b>	<b>81.3</b>
<b>Case 2: contributors to the “new” regime</b>		
<b>Insurance class</b>	<b>No. of contributors</b>	<b>%</b>
1	12,043	5.3
2	9,580	4.2
3	8,533	3.8
4	7,374	3.3
5	4,623	2.0
<b>Total “new” regime</b>	<b>42,153</b>	<b>18.7</b>
<b>Total <i>TAE</i></b>	<b>225,733</b>	<b>100.0</b>

Notes: 1. No data available for *TAE*'s 2005-06 distributions. Hence, 2004 data were used for the 2005-06 allocation of other self-employed workers to insurance classes.

Table 109. Distribution of *OAE*E contributors by insurance class (2007-2008)

<b>Case 1: contributors to the “old” regime</b>				
<b>Insurance class</b>	<b>2007</b>		<b>2008</b>	
	<b>No. of contributors</b>	<b>%</b>	<b>No. of contributors</b>	<b>%</b>
1	22,938	5	39,631	8
2	58,276	12	55,328	11
3	49,492	10	47,354	10
4	64,328	13	62,141	13
5	271,721	55	256,428	53
6	27	0	106	0
7	666	0	703	0
8	11,984	2	10,674	2
9	26	0	65	0
10	2,445	0	2,241	0
11	41	0	112	0
12	24	0	82	0
13	22	0	46	0
14	12,972	3	13,189	3
<b>Total <i>OAE</i>E</b>	<b>494,962</b>	<b>100</b>	<b>488,100</b>	<b>100</b>

<b>Case 2: contributors to the “new” regime</b>				
<b>Insurance class</b>	<b>2007</b>		<b>2008</b>	
	<b>No. of contributors</b>	<b>%</b>	<b>No. of contributors</b>	<b>%</b>
1	145,039	47	176,458	53
2	55,746	18	53,116	16
3	40,996	13	39,212	12
4	27,566	9	26,536	8
5	40,942	13	39,412	12
6	84	0	91	0
7	46	0	53	0
8	30	0	44	0
9	20	0	21	0
10	46	0	64	0
11	16	0	19	0
12	8	0	7	0
13	2	0	3	0
14	112	0	134	0
<b>Total <i>OAE</i>E</b>	<b>310,653</b>	<b>100</b>	<b>335,170</b>	<b>100</b>

Notes: From 2007 (when insurance classes were harmonised for all *OAE*E members) there are no separate data for *TEBE* and *TAE* contributors.


 Table 110. Distribution of *OIA* contributors by insurance class (2005)

2005		
Insurance class	No. of contributors	%
1	583,515	81.3
2	34,381	4.8
3	34,666	4.8
4	19,308	2.7
5	10,249	1.4
6	2,993	0.4
7	32,666	4.6
<b>Total <i>OIA</i></b>	<b>717,778</b>	<b>100.0</b>

 Table 111. Distribution of *OIA* contributors by insurance class (2006-2008)

Insurance class	2006		2007		2008	
	No. of contributors	%	No. of contributors	%	No. of contributors	%
1	589,501	81.8	585,215	81.9	594,872	82.1
2	32,442	4.5	30,889	4.3	29,374	4.1
3	32,955	5.6	31,720	4.4	30,724	4.2
4	18,876	2.6	18,487	2.6	18,432	2.5
5	10,286	1.4	10,507	1.5	11,336	1.6
6	2,937	0.4	2,891	0.4	3,066	0.4
7	33,818	4.7	34,917	4.9	36,989	5.1
<b>Total <i>OIA</i></b>	<b>720,815</b>	<b>100.0</b>	<b>714,626</b>	<b>100.0</b>	<b>724,792</b>	<b>100.0</b>