EUROMOD Country Report – Greece

2021-2024

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EUROMOD is the tax-benefit microsimulation model for the European Union (EU). It 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.

EUROMOD covers the 27 Member States and is yearly updated to cover the most recent changes in countries' policy systems. It uses input databases which are also updated on a yearly basis, coming mainly from the European Union Statistics on Income and Living Conditions (EU-SILC) and Household Budget Surveys (HBS). The model yearly update is supported by the following Directorate-Generals of the European Commission: DG EMPL, DG ECFIN, DG TAXUD, DG REFORM, DG JRC, DG ESTAT.

Originally maintained, developed and managed by the Institute for Social and Economic Research (ISER), since 2021 these responsibilities are taken over by the Joint Research Centre (JRC) of the European Commission, in collaboration with Eurostat and 27 national teams from the EU countries.

The EUROMOD governance structure consists of a Steering Committee, allowing partner DGs to monitor the process of the EUROMOD update, and a Scientific Advisory Board to monitor and guide the scientific development of the model.

This report documents the work done in the most recent annual update for Greece. This work was carried out by the EUROMOD core development team, based at the JRC in Seville, in collaboration with the national team.

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The results presented in this report are derived using EUROMOD version J1.0+. EUROMOD is continually being improved and the results presented here may not match those that would be obtained with earlier or later versions of EUROMOD.

EUROMOD documentation: https://euromod-web.jrc.ec.europa.eu/resources/documentation
Glossary of EUROMOD terms: https://euromod-web.jrc.ec.europa.eu/resources/glossary
Policy parameters used in EUROMOD: https://euromod-web.jrc.ec.europa.eu/resources/parameters

CONTENTS

1. BASIC INFORMATION

1.1 Basic information about the tax-benefit system

- The tax-benefit system is a unified, national system.
- The fiscal year runs from 1st January to 31st December.
- 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 used to be provided by a multiplicity of social insurance agencies or "funds". The conditions of pension provision (retirement ages, replacement rates, contributions etc.) varied significantly, chiefly by pension fund, though there remains considerable variability within funds by occupational subgroups. In 2017 all funds providing main pensions were consolidated into one (*ΕΦΚΑ*).
    - *Differences by date of first contact with the system.* A new system was created for those entering the labour market after 1st January 1993, which is essentially uniform for the non-rural social insurance sector. Another system was also created for those entering the labour market after 1st January 2016. The general retirement age for those who began working after this date is 67 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 the means-tested child benefit are defined as (a) unmarried, aged under 18, (b) unmarried, aged under 23 and enrolled in post-secondary or tertiary education or fulfilling their military service, (c) suffering from any kind of disability over 67% aged under 23.
    - dependent children for taxation purposes are defined as: (a) unmarried, aged under 18, (b) unmarried, aged under 20 and registered in the Public Employment Service ΔΥΠΑ – former ΟΑΕΔ) 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 ΔΥΠΑ as unemployed, (e) suffering from any kind of disability over 67% irrespective of age.
- Any single person living with one or more children defined as dependent for taxation purposes is considered to be a lone parent.
- Even though spouses usually 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. Corporate profits are taxed at a flat rate. Different rules and tax rates also apply to gains from the sale of real estate located in Greece.
- All employees and self-employed are required by law to file a tax return in spring of year ***x*** for fiscal year ***x***-1 (all persons except from those defined as dependent children are required to file a tax return since 2013). 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. Indexation of benefits is usually ad hoc and often skipped altogether. Revaluation policy is erratic, with some benefits receiving higher rises than others, for no apparent reason.
- 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 benefits. These practices often give rise to inconsistencies and distortions of the original benefits' design.
- All tax and benefit rates provided below are those valid in 30th June of each respective year.
- Consumption taxes consist of (1) VAT with four rates (zero, super lower/reduced, lower/reduced, higher/standard), and (2) harmonised excises on tobacco, alcohol and energy goods.
- The policy parameters saved as constants in the model and their values for the most recent year are available at https://euromod-web.jrc.ec.europa.eu/resources/parameters.

1.2 Benefits

Old-age pension (*σύνταξη γήρατος*): Since January 2017 all pensions are provided by *ΕΦΚΑ* (i.e. the 'Unified Social Security Fund'). Prior to the creation of *ΕΦΚΑ*, *ΙΚΑ* was the social insurance fund for most employees, *ΟΑΕΕ* was the social insurance fund for most self-employed workers (except those in the 'liberal' professions of medicine, law and engineering) and *ΟΓΑ* was the one for farmers. Despite the creation of *ΕΦΚΑ*, some differences in the rules still remain among people previously insured in those funds. The standard age of retirement is 67 for both men and women. Also, a *reduced pension* may be granted from the age of 62. A new pension structure was established for new pensions provided since May 2016. The structure combines a tax-funded basic pension with a contributory proportional pension.

Survivors' pension *(σύνταξη θανάτου)*: 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 a survivor's pension depends on the person(s) entitled to it. For workers first insured *after 1st January 1993*, only the surviving spouse and orphaned children may be beneficiaries.

Social pension (*σύνταξη ανασφαλίστων υπερηλίκων*): social pension is paid to the non-insured elderly, aged above 67 on a means-tested basis. For more information, see section 2.5.1.

Child benefit (*ενιαίο επίδομα τέκνων/ επίδομα παιδιού*): it was established in 2013. It is paid monthly to families with one or more children that are considered as dependent for taxation purposes. The benefit rates are related to the household's equivalent income. Three rates apply (full rate, 2/3 and 1/3 of the full rate). The benefit was substantially reformed in 2018. For more information, see section 2.5.2.

Unemployment assistance benefit (*επίδομα μακροχρονίως ανέργων)*: this benefit is paid to unemployed for more than 12 months who are aged 45-65 (22-66 since 2014) and are not receiving the unemployment insurance benefit (see above). It is means-tested and payable for a maximum period of 12 months. The level of the benefit is set at €200 per month (unchanged since 2003). For more information, see section 2.5.3.

Unemployment insurance benefit (*επίδομα ανεργίας*): dependent workers may be eligible for this benefit if they are involuntarily unemployed, capable and available for work, have an adequate contributory record and are registered with an *ΔΥΠΑ* employment office. In 2020-2021 the benefit rate was €399.25 per month. In 2022 it was raised to €438 and in April 2023 it went up to €479. As of April 2024, the benefit amount is set to €509.75. The rate is raised by 10% for each dependent family member. Since 2013 the benefit is also granted to self-employed workers. Its 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 2.5.4.

Birth grant *(επίδομα γέννησης)*: the benefit, (re)introduced on 1st January 2020, is paid as a lump sum to mothers giving birth to their first child with increased amounts applying for every child born thereafter. It is not taxed, and it is paid in two equal instalments. For more information, see section 2.5.6.

Guaranteed minimum income *(ελάχιστο εγγυημένο εισόδημα)*: this benefit was established in 2017. It is a means-tested benefit given to low-income households on a monthly basis. It is not taxed. For more information, see section 2.5.7.

Housing benefit *(επίδομα στέγασης)*: it is a means-tested benefit that was legislated in 2019. It is granted to low-income/asset families who rent a house as their main residence. Its amount ranges from €70 up to €210 per month depending on the household composition. It is not taxed. For more information, see section 2.5.8.

Maternity and parental leave benefits (*επιδόματα κυοφορίας-λοχείας)*: Women insured with *ΕΦΚΑ* and working in the private sector are entitled to maternity allowance provided that they have accumulated a minimum of 200 insurance days in the 24 months before delivery. It is paid for 17 weeks (8 weeks before and 9 after child birth). Civil servants' maternity allowance is paid for a total of five months (two months before and three months after child birth). In the case of self-employed and farmers, the allowance is paid as a lump sum. It is not taxed. For more information, see sections 2.5.9 and 2.5.10.

Supplementary maternity subsidy: The supplementary maternity subsidy is paid to insured persons of e-EFKA with a private law employment relationship (provision of dependent work). The subsidy is paid after childbirth, provided that two conditions are met: receipt of maternity leave benefits from e-EFKA and completion of at least 10 days of work for the employer until the beginning of the pregnancy and maternity leave. The amount is equal to the difference that arises between the remuneration paid by the employer at the time of the start of the maternity leave and the allowance paid by e-EFKA for the same period.

Special maternity subsidy: This is paid post maternity leave (or parental leave if opted for) for up to nine (9) months to employees and self-employed and is equal to the minimum wage (half the minimum wage for part-time employees). For more information, see section 2.5.10.

Youth pass: it was introduced in September 2023 as a permanent measure subsidising the expenditure of young individuals on services relating to civilisation, tourism and transport. It is not taxed. For more information, see section 2.5.14.

Contributory family allowances: they are automatically added to civil servants' and banking employees' pay. Lower allowances are also paid by *ΔΥΠΑ* to private sector employees irrespective of social insurance affiliation. They are taxed.

Seasonal unemployment insurance benefit (*εποχιακά βοηθήματα*): payable 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.

Sickness / accident allowance (*επίδομα ασθένειας / εργατικού ατυχήματος*): civil servants and workers insured with *ΕΦΚΑ* are entitled to sickness allowance. The period of receipt is conditional on prior contributions. It is taxed as income. In case of an accident at work, they are also entitled to accident allowance with no eligibility conditions related to prior contributions. No benefit is paid for the first three days of absence. Self-employed workers are entitled to accident allowance when an accident at work leaves them unfit for work for at least 30 days. The allowance can be paid for up to four months and it is taxed. No sickness allowance exists for these workers.

Death or "funeral expenses" grant (*έξοδα κηδείας*): it is paid as a lump sum in case of death of an insured employee, self-employed or pensioner. It is not taxed.

Birth grant to non-insured (*επίδομα μητρότητας ανασφαλίστων*): 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. It is not taxed.

Contributory disability benefits: *ΕΦΚΑ* provides contributory disability benefits and invalidity pensions, related to the contribution history or the employment status of its members. No contributory record is required for invalidity pensions paid to insured workers who suffered from an accident at work or an occupational disease, provided it resulted to a degree of disability of at least 50%. The most important disability benefit 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. Disability benefits are not taxable whereas invalidity pensions are subject to taxation.

Non-contributory disability benefits: they are administrated by local government at the prefecture level and funded out of general taxation. Although not explicitly income tested, most of them are reduced or withdrawn if the recipient is in employment, a pensioner, or in receipt of invalidity pension. They are highly heterogeneous by type of disability (i.e. blindness benefit, severe mental retardation benefit etc.) and sometimes by category of recipient, but almost 60% of beneficiaries are in receipt of 'severe disability benefit' (*επίδομα βαριάς αναπηρίας*). They are not taxed.

Housing benefit for non-insured elderly (*στεγαστική συνδρομή ανασφαλίστων*): 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. It is not taxed.

Student housing benefit (*φοιτητικό στεγαστικό επίδομα*): it is a means-tested benefit, paid for every dependent child enrolled in tertiary education residing in a town other than his/her family's main residence.

Emergency social help (*ειδικό επίδομα άμεσης προστασίας*): paid as a lump sum for families suffering loss of life or whose home was damaged due to natural disasters.

Special allowance for released prisoners (*επίδομα αποφυλακισμένων)*: this is paid to recently released non-reoffending prisoners within two months of their release for a period of three months. The allowance is indexed to unemployment insurance benefit. Since 2010, it became means-tested.

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 *ΟΑΕΔ* unemployed lists. It is indexed to unemployment insurance benefit and it is paid thrice, once every four months.

Benefit for households in less favoured areas (*εισοδηματική ενίσχυση ορεινών και μειονεκτικών περιοχών*): it is a small-scale benefit, paid to households residing in one of a list of 'less favoured areas'. It is income-tested.

1.3 Social insurance contributions

Pensioners: pensioners' social insurance contributions (SIC) are levied at a flat 6% of pension income. Such contributions pay for sickness insurance and are deducted at source. For more information, see sections 2.6.4.

Employed: Unified Social Security Institution (*ΕΦΚΑ*) was established on 1 January 2017. ΕΦΚΑ operates as a single administrative and financial organisation, and those insured by it (i.e. those previously insured in *ΙΚΑ*, *ΟΑΕΕ*, *ΟΓΑ,* banking employees, civil servants, public enterprise workers and liberal professions) are subject to uniform rules and contributions and receive unified benefits. For more information, see section 2.6.

1.4 Taxes

Personal income tax (*φόρος εισοδήματος φυσικών προσώπων*): it applies to income from dependent employment, liberal professions, commercial activities, agricultural activities, pensions etc. With the exception of some cases that are treated separately (such as interest income, farming income, dividend income and property income), all income is added together before allowances and deductions are taken into account. Married couples usually fill in a joint tax return, even though each spouse's income is taxed separately. The list of tax allowances and tax credits is revised on an ad hoc basis. Taxable income is subject to a progressive tax schedule. For more information, see section 2.7.1.

Pensioners' solidarity contribution (*εισφορά αλληλεγγύης συνταξιούχων)*: since 1st August 2010 main pensions exceeding €1,400 per month are subject to taxation. The tax rates vary from 3% to 14%. Since 1st August 2011 pensioners below 60 with main pensions exceeding €1,700 per month are subject to an additional solidarity contribution. Its rates vary from 6% to 10%. Since 1st August 2011 supplementary pensions exceeding €300 per month are also subject to taxation. The tax rates vary from 3% to 10%. For more information, see section 2.7.2.

Solidarity contribution *(εισφορά αλληλεγγύης)*: this emergency measure applied retrospectively from 2010 onwards. Individuals with taxable incomes exceeding €12,000 are taxed. It was fully abolished in 2023. For more information, see section 2.7.3.

Self-employed and liberal professions contribution (*τέλος επιτηδεύματος*): a special levy paid since 2010 by self-employed and liberal professionals. The amount of tax depends on where the business activity takes place and its duration. For more information, see section 2.7.4.

Corporate income tax *(φορολόγηση εισοδήματος 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.

Joint tax on the ownership of real estate *(Ενιαίος Φόρος Ιδιοκτησίας Ακινήτων ΕΝΦΙΑ)*: In 2014, the previously in place 'emergency property tax' was replaced by a joint tax on the

ownership of real estate. The tax is divided into a "primary" and a "supplementary" part. For more information, see section 2.7.5.

Real estate transfer tax (*φόρος μεταβίβασης ακινήτου*): the transfer of property is taxed according to *cadastral values*. A progressive tax schedule applies. A 3% *municipality tax* on real estate transfer tax is also applicable. The real estate transfer tax is paid only by the buyer of the property in any transaction of the property.

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.

Regional and municipal taxes *(δημοτικά τέλη ακίνητης περιουσίας)*: a number of individual flat taxes and duties are paid to local authorities, at rates set locally. They are collected with electricity bills, and apply to the cadastral values of flats and houses.

Value added tax (*φόρος προστιθέμενης αξίας*): three VAT rates apply: a *super-lower/reduced rate* (6% from 1st June 2020), applicable to a limited number of goods and services; a *lower/reduced rate* (13% from 1st January 2011), applicable to some basic commodities and services; and a *higher/standard rate* (23% in 2015 and 24% from 1st June 2016), applicable to all other items.

Excise duties (*φόροι κατανάλωσης*): special consumption taxes apply for alcohol, tobacco, fuel and luxury goods. Most excise consumption taxes on tobacco products are ad-valorem, while excises on alcohol, fuel and goods are typically ad-quantum.

1.5 Extraordinary measures

Special purpose monetary compensation *(αποζημίωση ειδικού σκοπού):* it is granted to employees of firms affected by the coronavirus crisis, whose labour contracts have been suspended. The amount of €800 covered the period between mid-March and end April 2020, while the monthly equivalent amount (€534) was also granted from May onwards. The measure was in place until September 2021. The beneficiaries are determined on the basis of NACE codes of the firms in which they are employed. The same policy also applies to self-employed, freelancers and employers with up to 20 employees that have been affected by the health crisis. For the period between mid-March and end April 2020, this compensation was provided in the form of a training voucher of €600 to six scientific sectors (economists/accountants, engineers, lawyers, doctors, freelance teachers and researchers). From May 2020 onward, the compensation of these sectors was aligned with the main compensation regime. For more information, see section 2.8.1.

Credited social insurance contributions: the social insurance contributions of employees of firms affected by the coronavirus crisis and whose labour contracts have been suspended are covered by the state. The same applies to their employers' contributions. For more information, see section 2.8.2.

Special leave scheme *(άδεια ειδικού σκοπού):* it was partially funded (25%) by the Greek state, to facilitate parents of children below 15 years of age working in the private and public sector following the general closure of schools and/or children having to quarantine due to Covid-19 in 2020.

Covid-19 related policies also included, among others, tax and SIC deferrals and a 25% discount on tax and SIC obligations (excluding VAT) to self-employed and employers that decide not to defer, a 40% reduction in commercial rent paid by firms affected by the coronavirus crisis, a 40% reduction in primary and student residence rent for employees of affected firms, suspension of

tax payment obligations for property owners that receive reduced rent, more flexible work times etc.

Lump sum benefit for low-paid pensioners *(έκτακτη οικονομική ενίσχυση ενάλωτων συνταξιούχων)*: this inflation-related benefit was paid to low-paid pensioners as a lump sum in December 2021, April 2022 and December 2022. It amounted to €250 in 2021 and €200 in 2022. It was not taxed. For more information, see section 2.8.3.

Lump sum support to vulnerable population groups *(ενίσχυση ενάλωτων ομάδων)*: this inflation-related benefit was paid to various vulnerable population groups as a lump sum in December 2021, April 2022, December 2022 and December 2023. It was not taxed. For more information, see section 2.8.4.

Market pass: this benefit was designed to subsidise increased food expenditure incurred by low income households due to inflation. It was paid in February-December 2023. It was not taxed. For more information, see section 2.8.5.

2. SIMULATION OF TAXES, SOCIAL INSURANCE CONTRIBUTIONS 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, while others are included as output variables, as it is impossible to be simulated. Tables 2.1 and 2.2 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.

2.1.1 Partially simulated tax-benefit components

The unemployment insurance benefit (bunct_s) is partially simulated; as not all required information (e.g. unemployment history) is available in the SILC data, benefit recipients are imputed using information on the reported receipt of the respective benefit in the SILC data. Therefore, the benefit simulation is conditional on the reported benefit receipt in the micro-data.

Table 2.1 Simulation of benefits in EUROMOD (2021-2024)

	Variable	2021	2022	2023	2024	Comments
Retirement benefits/pensions						
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	
Survivors pension	psuwd	I	I	I	I	1
Orphans pension	psuor	I	I	I	I	1
Social pension	boanc_s	S	S	S	S	
Abolishment of 13th and 14th pension and compensations	pxp_s	S	S	S	S	
Main pensions recalibration	pxp03_s	S	S	S	S	
Unemployment benefits						
Unemployment insurance	bunct_s	PS	PS	PS	PS	1
Unemployment assistance for older workers	bunnc_s	S	S	S	S	

Other (minor) unemployment benefits	bunot	I	I	I	I	2
Monetary compensation scheme: employees	bwkmcee_s	NBS	NBS	-	-	
Monetary compensation scheme: self-employed	bwkmcse_s	NBS	NBS	-	-	
Family benefits						
Child benefit	bch_s	S	S	S	S	
Other (minor) family benefits	bfaot	I	I	I	I	2
Sickness – maternity benefits						
Sickness benefits	bhl	I	I	I	I	1
Maternity benefits	bmact	I	I	I	I	1
Maternity leave benefit	bfama_s	IO	IO	IO	IO	
Parental leave benefit	bfapl_s	IO	IO	IO	IO	
Disability benefits						
Disability pensions (contributory)	pdi	I	I	I	I	1
Disability benefits (non-contributory)	bdi	I	I	I	I	2
Housing benefits						
OEK housing benefits	bho	I	I	I	I	2
Housing benefit	bho00_s	S	S	S	S	
Scholarships and grants	bed	I	I	I	I	2
Social assistance benefits						
Guaranteed minimum income	bsa00_s	S	S	S	S	
Other social assistance benefits	bsaot	I	I	I	I	2
Heating benefit	bht	I	I	I	I	2
Lump sum benefit for low-paid pensioners	boaxp_s	S	S	-	-	
Lump sum support to vulnerable population groups	bsals_s	S	S	S	-	
Market pass	bsatm_s	-	-	S	-	
Youth pass	bsaya_s	-	-	S	S	
Minimum wage	yem	NBS	NBS	NBS	NBS	

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
"IO": *included* in the micro-data, simulated but switched off in the baseline
"PS": *partially simulated* as some of its relevant rules are not simulated
"NBS": *simulated* but not as part of the baseline
"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 2.2 Simulation of taxes and social insurance contributions in EUROMOD (2021-2024)

	Variable	2021	2022	2023	2024	Comments
Taxes						
Personal income tax	tin00_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	il_tva_s	S	S	S	S	2
Excise duties	il_tx_s	S	S	S	S	2
Real estate transfer tax	-	E	E	E	E	1
Solidarity contribution	txc00_s	S	S	S	S	
Pensioners' solidarity contribution	txcpe_s	S	S	S	S	
Additional taxes on pensions	txcpe00_s	S	S	S	S	
Self-employed and liberal professions contribution	txcse_s	S	S	S	S	
Joint tax on ownership of real estate	tpr_s	IO	IO	IO	IO	
Capital gains tax	-	E	E	E	E	1
Regional and municipal taxes	-	E	E	E	E	1
Excise duties	-	E	E	E	E	1
Social insurance contributions						
Employers	tscer*_s					
private sector		S	S	S	S	
Employees	tscee*_s					
private sector		S	S	S	S	
civil servants		S	S	S	S	
public enterprise workers		S	S	S	S	
banking employees		S	S	S	S	
liberal professions		S	S	S	S	
Self-employed	tscse*_s					
previously in ETAA (liberal professions)		S	S	S	S	
previously in OAEE (own account workers)		S	S	S	S	
Farmers	tscfr*_s	S	S	S	S	
Pensioners	tscbesi_s	S	S	S	S	
Credited SIC	tscct*_s	NBS	NBS	-	-	

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
NBS: *simulated* but not as part of the baseline
S: policy is *simulated* although some minor or very specific rules may not be simulated
IO: *included* in the micro-data, simulated but switched off in the baseline
1: data available not sufficient to simulate the policy
2: calculations based on extended input files with consumption expenditures from HBS

2.2 Main policy changes

- ***Between 2021 and 2022***

In 2022 employees' and employers' social insurance contributions were reduced and the minimum wage was increased. The minimum wage increase also affected the level of the unemployment insurance benefit, which is connected to it. Finally, additional GMI and child benefit instalments were provided as a way to counter the impact of increased inflation. Reduction of the VAT on Recreational and sporting services to the lower/reduced rate (13%).

- ***Between 2022 and 2023***

In 2023 the self-employed social insurance contributions were increased in line with inflation. The minimum wage, affecting the level of unemployment insurance benefit, was increased. The social solidarity contribution was abolished for pensioners and those working in the public sector. After being frozen for more than 10 years, pensions were increased by approximately 8%. A market pass was paid to subsidise increased food expenditure incurred by low income households due to inflation. A non-means tested benefit, the youth pass, was paid to people aged 18-19 to subsidise expenditure on specific services. An increase was also applied retroactively in the birth grant. In addition, there was an extension of the duration of s the special maternity subsidy from 6 to 9 months for employees. Finally, a bonus payment (€300) was made to the long-term unemployed, while GMI and child benefit recipients were provided with additional instalments.

- ***Between 2023 and 2024***

In 2024, the self-employed social insurance contributions were increased in line with inflation. As of 01/04/2024, the minimum wage increased, affecting the level of unemployed insurance benefits. Pensions were increased by approximately 3%. Moreover, there was an increase in the employment and pensions income tax credit for taxpayers with dependent children. There was an increase by 8% of the guaranteed minimum income (GMI). The special maternity subsidy was extended to the self-employed and farmers. Finally, there was an increase in the VAT on books and newspapers & periodicals to the higher/standard rate (24%) (from currently 6%).

- ***Policy changes related to inflation (simulated)***

In 2021 and 2022, additional GMI and child benefit instalments (only in 2022) were provided due to the spike in inflation. Moreover, lump sum income support packages were paid to various vulnerable population groups in December 2021,in April and December 2022 and in December 2023 (for more information, see sections 2.5.11 and 2.5.12). In 2023, a means-tested allowance was paid to households to cater for the increased cost of food due to inflation. The so-called "market pass" was paid from February to October, or up December in areas affected by the September floods.

2.3 Order of simulation and interdependencies

Some of the characteristics of the Greek system which affect the order of simulations are the following:

- Pensioners' solidarity contributions, temporary pension reductions and pensioners' SIC are run twice, once before and once after the main and the supplementary pensions recalculation.
- Imputed income is also run twice, once before and once after the simulation of social pension.
- The last policy included in the spine is tco_cc (consumption taxes) (update cc). It is placed at the very end because consumption tax liabilities (VAT and excises) depend on household consumption expenditures, and these are estimated by the model based on the

income shares (xs_* variables included in the input data) and simulated disposable income (ils_dispy). This is why before running any simulation of consumption tax policy it is required to activate all the other policies intervening in the simulation of disposable income.

2.4 Policy extensions

The Greek model includes various 'extensions' (previously called 'switches'), that enable users to choose whether to account for issues that seriously affect the implementation of most policies. They are indicated by little coloured symbols in the row-number column of the spine. Switchable policies can be turned ON or OFF through the run dialog box without changing the model itself. In the baseline a switchable policy is set to its default (ON or OFF) as specified in this documentation. The following global extensions are applicable for the case of Greece:

Tax compliance adjustments (TCA): the tax compliance extension controls which set of gross earnings variables – see section 3.3.3 for more information – are used to derive disposable income and whether to limit the tax bases and benefit means-test to reported earnings only. In the baseline scenario, it is set to on (i.e. accounting for tax evasion).

Benefit take-up adjustments (BTA): they allow the user to apply non-take-up corrections. The extension is used for the simulation of child benefit, unemployment assistance for older workers, social dividend, food stamps, rent allowance and guaranteed minimum income. The default for the baseline is on. When the extension is on, a share of (weighted, in the case of guaranteed minimum income) eligible observations equal to the take-up rate is selected randomly as beneficiaries, removing the benefit from the rest of the eligible observations; when off, all eligible observations are kept as beneficiaries. In the case of guaranteed minimum income, this extension shares most of its functions with the BCA extension; as a general rule, only one of the extensions should be on, but if both are, the lowest rate between the take-up rate and the calibration rate will be applied. More details on the specific implementation of BCA and BTA extensions are provided in the subsections describing the corresponding benefits.

Benefit calibration adjustments (BCA): they allow the user to calibrate the receipt of benefits to match the simulated total expenditure of a benefit to real expenditure from external statistics. The extension is implemented for the simulation of the guaranteed minimum income (bsa00_s). The default for the baseline is off. When the extension is on, a subset of eligible of observations is selected randomly as beneficiaries so that the real expenditure is reached, removing the benefit from the rest of the eligible observations; when off, all eligible observations are kept as beneficiaries. This extension shares most of its functions with the BTA extension; as a general rule, only one of the extensions should be on, but if both are, the lowest rate between the take-up rate and the calibration rate will be applied. More details on the specific implementation of BCA and BTA extensions are provided in the subsections describing the corresponding benefit.

Full-year adjustments (FYA): while EUROMOD in general simulates policies as of 30th June in the respective year, it is also possible to simulate within year policy changes. In the period under consideration, with this switch we are able to account for the reduction in the unemployment insurance contributions, which took place in June 2020. This extension is set to on in the baseline.

Minimum wage (MWA): 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, level of education 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. In 2012 the government imposed a 22% cut on the standard minimum monthly wage of €751. For those under 25, the reduction was even more severe and reached 32%. The minimum wage remained frozen for several years and was increased by 11% in February 2019; the sub-minimum wage for those under 25 was also abolished. In January 2022 it was increased by 2%, and in May 2022 by another 7.7%, reaching €713 per month. In April 2023 it was again raised by 9.4%, reaching €780 per month (payable 14 times a year). In April 2024, the minimum wage was raised by 6.4%, reaching €830 per month.

This extension allows for switching on and off the minimum wage policy (yem_el). By default, this extension is switched off in the baseline.

HHoT – Unemployment extension (HHoT_un): this extension improves the simulation accuracy of the unemployment insurance benefit when EUROMOD is run with hypothetical data. For instance, in most countries the legislation of this benefit requires information on variables such as individuals' employment history, which are not available in SILC; we can define these variables in HHoT and use them to simulate the policy's rules more precisely when running the model with hypothetical data. This extension is set to on when the model is used with HHoT data.

Moreover, the model contains one country-specific switch:

Tax data (taxdata): this extension allows for choosing the underlying data that will be used for running EUROMOD: the standard SILC-based microdata or a dataset based on a large sample of income tax returns provided by the Greek tax authorities. As the latter is only available to the Greek Ministry of Finance and JRC, this extension is switched off in the baseline. However, it is not set to private so that interested users can have access to the modelling of the additional policy rules that can be simulated with this dataset. Please also note that, for the time being, policy yiv_el (Impute income - *τεκμαρτό εισόδημα*) only works with tax data; for this reason, it is not commented in the Country Report.

2.5 Benefits

2.5.1 Social pension (boanc_el)

This is a non-contributory, income-tested pension. Since 2013 it is reserved for people over 67 years of age who lack independent means of support.

- ***Definitions***

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

- ***Eligibility conditions***

Beneficiaries must be 67 years old and over. They must not be in receipt of any other pension provided by a Greek social insurance fund.

- ***Income test***

The benefit is granted if personal income does not exceed the benefit amount itself (i.e. €4,320 per year) and if the couple's income does not exceed twice the benefit amount itself (i.e. €8,640 per year).

For the calculation of personal (and couples') 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, family and child benefits, sickness and maternity benefits, disability pensions, main old-age pension and all sorts of retirement benefits/pensions apart from *ΕΚΑΣ*.

- ***Wealth test***

In 2016 a wealth threshold was also established. Specifically, the annual wealth threshold corresponds to the total taxable immovable property of the beneficiary which should not exceed €90,000.

- ***Benefit amount***

The pension is payable 12 times a year to all eligible beneficiaries. The benefit rate is variable, equal to the difference between a recipient's sum of pensions and farmers' basic pension (amounts below €20 are not paid out). The farmers' basic pension was €360 per month in 2020-2022, €387.90 in 2023 and €399.54 in 2024.

- ***EUROMOD modelling***

Please note that, due to data limitations, in EUROMOD we have only been able to approximate the cadastral value of beneficiaries' main residence (and not the total taxable value of their immovable property).

2.5.2 Child benefit (bch_el)

This benefit was established in 2013. It is paid to low-income families with dependent children regardless of the number of children.

- ***Definitions***

The family unit comprises the head, the spouse and dependent children. The latter are defined as: (a) unmarried, aged under 18, (b) unmarried, aged under 23 and enrolled in post-secondary or tertiary education or fulfilling their military service, (c) suffering from any kind of disability over 67% aged under 23.

- ***Eligibility conditions***

Beneficiaries are families with one or more dependent children.

- ***Income test – benefit amount***

An equivalence scale is used for the purposes of means-testing. It assigns the value of 1 to the household head, 1/2 to the spouse and 1/4 to each dependent child of the tax unit. Equivalent family taxable income is calculated by dividing family taxable income by the sum of the weightings. The 2021-2024 income thresholds and monthly benefit rates are shown in Table 2.3. It is not taxable.

Table 2.3 Child benefit income thresholds and benefit rates (2021-2024)

Equivalent income thresholds (€ per year)	
Equivalent income for:	
Full rate	0 - 6,000
Reduced rate A	6,001 - 10,000
Reduced rate B	10,001 - 15,000
Benefit rates (€ per month)	
Full rate for	
…the first dependent child	70
…the second dependent child	70
…the third dependent child and beyond	140
Reduced rate A for	
…the first dependent child	42
…the second dependent child	42
…the third dependent child and beyond	84
Reduced rate B	
…the first dependent child	28
…the second dependent child	28
…the third dependent child and beyond	56

As a way to counter the impact of increased inflation, in April and December 2022 as well as in December 2023 and December 2024 beneficiaries received additional instalments equal to 1.5 month of the benefit's worth each.

- ***EUROMOD modelling***

The Council of Economic Advisors of the Greek Ministry of Finance has calculated that the non-take-up rate of the benefit is 18% (for 2015). This rate was applied for the whole period of the benefit's implementation.

2.5.3 Unemployment assistance for long-term unemployed (bunnc_el)

This benefit is paid to long-term unemployed, as eligibility for contributory unemployment insurance expires after 12 months. There is no general unemployment assistance scheme.

- ***Definitions***

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

- ***Eligibility conditions***

The benefit is targeted to long-term unemployed workers aged 22-66 on low incomes. Moreover, beneficiaries must have already been in receipt of the unemployment insurance benefit for its maximum duration (i.e. 12 months).

- ***Income test***

Since 2014, the threshold is €10,000 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

servants' family benefit, disability pensions, large family and child benefit as well as all sorts of retirement benefits/pensions apart from social pension.

- ***Benefit amount***

The monthly benefit rate in 2021-2024, paid 12 times per year, is €200.

- ***EUROMOD modelling***

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

Non take-up for this benefit is known to be rife.[1] In order to account for that fact, a user can activate the function in the policy sheet which restricts the benefit receipt to a fraction of simulated recipients. The non-take-up rates used vary according to EUROMOD's underlying dataset. They are calculated on the basis of data on the number of actual recipients, provided by *ΔΥΠΑ*. This adjustment is switched on in the baseline scenario. The benefit's take-up rates for 2021-2024 are indicated below:

Table 2.4 Unemployment assistance for older workers take-up rates (2021-2024)

Dataset	2021	2022	2023	2024
el_2008*	0.15	0.15	0.15	0.15
el_2010*	0.12	0.12	0.12	0.12
el_2012*	0.04	0.04	0.04	0.04
el_2014*, el_2015*, el_2016*, el_2017*, el_2018*, el_2019*, el_2020*, el_2021*, el_2022*	0.02	0.02	0.02	0.02

2.5.4 Unemployment insurance benefit (bunct_el)

This benefit is paid to dependent workers who are involuntarily unemployed, capable and available for work and registered with a *ΔΥΠΑ* employment office. In order to receive the benefit, they have to be insured and have a specific contributions history. Since 2013 it is also paid to self-employed workers under strict eligibility conditions.

- ***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.

- ***Eligibility conditions***

Dependent workers 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

[1] When the benefit was first introduced (2002), the official prediction was that the beneficiaries would amount to 35,000; the benefit reached 711 persons instead.

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 - benefit duration***

In the end of 2022, the benefit was equal to €438. In April 2023 it was raised to €479, along with the increase in the minimum wage. In April 2024, it was raised to €510, in line with the increase in the minimum wage. It is raised by 10% for each dependent family member. 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.

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

Table 2.5 Duration of unemployment insurance benefit

Number of contributory days			Benefit duration in months
General category Over the last 14 months excl. the last 2 months	**Seasonal workers** Over the last 12 months	**Construction workers** Over the last 14 months	
125-149[a]	100-149[a]	100-149[a]	5
150-179[b]	150-179[b]	150-179[b]	6
180-219[c]	180-219[c]	180-219[c]	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

- ***Special provision related to Covid-19***

The provision of unemployment insurance benefits that were due to expire in 2020 and 2021 was extended by two additional months.

- ***EUROMOD modelling***

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) or observed number of months in receipt of unemployment insurance benefit (bunctmy), whichever is longer. If modelling unemployment insurance 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. It is effectively also assumed that unemployment spells start in the reference year. 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, liwmy 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 (bunctmy_s) is derived from the underlying dataset. For currently employed, a further cap is imposed corresponding roughly to the average duration observed.

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).

The benefit amount is adjusted with the number of months in receipt. In special cases, Christmas and Easter bonuses are also provided. These are not simulated due to lack of information (i.e. beneficiaries must be in receipt during specific months of the year).

Finally, since the unemployment insurance benefit to self-employed workers suffers from severe non take-up and its receipt depends on conditions that cannot be simulated due to lack of information (i.e. beneficiaries must not have any debts to social insurance funds and the income test in period t depends on people's incomes in periods t-1 and t-2), it has not been simulated.

Table 2.6 Unemployment insurance benefit: basic information

		2021-2024
Eligibility	Contribution period	(i) 80 days p.y. over the last two years, of which at least 125 days in the last 14 months excluding the last two months; (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
	Other conditions	n/a
	Eligibility of self-employed	yes, under strict conditions (not simulated)
Payment	Contribution base	statutory minimum wage
	Basic monthly amount	€399.25 in 2021; €438 in 2022; €479 in 2023; €510 in 2024
	Additional amount	10% increase for each dependent family member
	Floor	n/a
	Ceiling	n/a
Duration	Standard (in months)	5 to 12 months
	Special cases (in months)	n/a
Subject to	Taxes	only for individuals with (other) taxable income over €10,000
	SIC	No

2.5.5 Temporary pension reductions (prd_el)

These are reductions on main and supplementary pensions, introduced in November 2011, January 2012 and January 2013. They were abolished in 2021.

- ***Tax unit***

The unit of analysis is individual.

- ***Tax schedule***

Since 1st January 2012 all main old-age pensions exceeding €1,300 are subject to a 12% cut. Note that the cut applies to the pension amount exceeding €1,300 after the deduction of the above mentioned solidarity contribution. Pensions are not allowed to fall below €1,300.

Since 1st November 2011 all pensioners below 55 with main old-age pensions exceeding €1,000 are subject to a 40% cut. The cut applies to the pension amount exceeding €1,000 after all other solidarity contributions concerning main pensions have been deducted.

Persons aged above 55 with main old-age pensions exceeding €1,200 are subject to a 20% cut. The cut applies to the pension amount exceeding €1,200 after all other solidarity contributions concerning main pensions have been deducted.

Since 1st January 2012 all supplementary pensions are subject to a cut as shown in Table 2.9. Note that the rates apply to the entire pension amount minus the solidarity contribution for supplementary pensions. Supplementary pensions are not allowed to fall below the amounts shown in Table 2.7.

Table 2.7 Additional cut on supplementary pensions (2021-2024)

Tax band	**Pension bracket** (€ per month)		**Low Limit**	**Cut rate (%)**
1	0	250	200	10
2	250.01	300	225	15
3	301.01	…	255	20

Since 1st January 2013 if the sum of main and supplementary pensions received by pensioners exceeds €1,000 they are subject to a cut as shown in Table 2.8.

Table 2.8 Additional cut on main and supplementary pensions (2021-2024)

Tax band	**Pension bracket** (€ per year)		**Low Limit**	**Cut rate (%)**
1	0	1,000	-	0
2	1,000.01	1,500	1,000	5
3	1,500.01	2,000	1,425	10
4	2,000.01	3,000	1,800	15
5	3,000.01	...	2,550	20

Note that the cut rates apply to the entire pension amount after the deduction of all pensioners' solidarity contributions and temporary cuts. The sum of main and supplementary pensions is not allowed to fall below the amounts shown in Table 2.8 (i.e. low limit amounts).

In 2020 the Greek High Court ruled that some of these cuts have been unconstitutional. Hence, lump sum retroactive pension payments of around €1.4 billion were paid out at the end of the year.

- ***EUROMOD modelling***

The above pension reductions can be fully simulated in EUROMOD, without any particular data or modelling limitations. As they were abolished in 2021, they are only performed when the model is run on input data with income reference period prior to this year.

2.5.6 Birth grant (bchba_el)

This means-tested benefit was (re-)established in January 2020 after its abolishment in 2013. It is not taxed.

- ***Definitions***

The family comprises the head, the spouse and own children of age 0.

- ***Eligibility conditions***

Beneficiaries are tax units below a certain income threshold.

- ***Income test***

The equivalence scale of the child benefit is used for the purposes of the birth grants' means-testing. The yearly equivalised income of the tax unit should be less than €40,000.

- ***Benefit amount***

The benefit rate was €2,000 per child (lump sum) in 2021-2022, and was provided in two equal instalments. In 2024, the benefit rate increased as follows: by €400 for the first child, by €700 for the second child, by €1,000 for the third child, by €1,500 for each additional child. This change in the policy was applied retroactively as of 01/01/2023.

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.5.7 Guaranteed minimum income (bsa00_el)

After two pilot programmes, a nation-wide guaranteed minimum income (GMI) scheme was introduced in February 2017. This means-tested benefit is given to low-income households on a monthly basis. It is not taxed.

- ***Definitions***

The assessment unit is the household. Children are defined as individuals aged < 18 for the purposes of determining eligibility (incomes and assets test) and the benefit rate. Older persons are treated as adults, even when they are considered as 'dependent children' for tax purposes.

- ***Eligibility conditions***

Beneficiaries are low-income households.

- ***Income and asset test***

The income which is assessed comprises the taxable income of the family unit, all taxable pensions and benefits received excluding non-contributory disability benefits, minus social insurance contributions. Assessed incomes also exclude 20% of earnings from dependent employment, reducing the resulting benefit withdrawal rate for salaries and wages to 80%.

The incomes test provides that an assessment unit's assessed income must be below €2,400 per annum (for single-person assessment units), increased by €1,200 per annum for each additional adult, plus €600 per annum for each child. In the case of single-parent families, the eligibility threshold for the first child is increased by €1,200 (rather than by €600) per annum. The maximum

annual income of an assessment unit, irrespective of the number of the members it comprises, is €10,800.

The assets test provides that the taxable value of the main residence must be below €90,000 (for single-person assessment units), increased by €15,000 for each additional member of the household, subject to an overall ceiling per assessment unit of €150,000.

Finally, the tax unit's income from investments should be less than the double of the annual income threshold.

- ***Benefit amount and duration***

The benefit rate is variable, equal to the difference between a recipient unit's assessed income and the eligibility income threshold (adjusted for the size and composition of each recipient unit), with a benefit withdrawal rate of 100%. The maximum benefit rate is €900 per month and the minimum is €10 per month. Its receipt is simulated for a period of 12 months. In 2024, GMI was increased by 8%.

- ***Special provisions related inflation (2021-2024)***

In 2021, GMI recipients received two additional benefit instalments, payable in December 2021.

In 2022, GMI recipients received two additional instalments (one in April and one in December) due to inflation.

In 2023, GMI recipients received an additional half instalment in December 2023.

In 2024, GMI recipients received an additional half instalment in December 2024.

- ***EUROMOD modelling***

In actual practice, the assessment unit of this benefit can be made up of single individuals, married or cohabiting couples, and dependents (as defined for income tax purposes). Individuals declaring themselves to be 'guests' (i.e. grown up children of the household head) are subject to additional eligibility conditions and a lower income threshold. However, 'guests' cannot be identified in the EU-SILC dataset. In view of that, our simulations assume that all members of a given household apply as a single assessment unit.

The taxable value of the main residence is approximated using the average cadastral value (per square meter) of urban vs. rural areas, multiplied by the size of the residence (per square meter). The taxable value of any secondary residence is calculated more precisely, as there is also information on its cadastral value. Other aspects of the taxable value of the main residence (e.g. the location and age of dwelling), are not simulated because the relevant information is unavailable in the underlying dataset.

Information on incomes from liquid assets such as deposits, bonds, shares and so on is available in the underlying dataset and, therefore, drawn upon to simulate the relevant part of asset testing. Nevertheless, such incomes are severely under-reported, as a result of which our estimates of costs and participation will be conservative.

Finally, the BTA extension is on, so the baseline model adjusts for non-take-up of the benefit; BCA extension is off, so it does not calibrate its receipt according to external statistics, but the user can activate it if necessary. See section 2.4 for technical details on both extensions and their interactions.

Users can enable or disable the necessary extensions in Country Tools/Set Switches. For proper functioning, the extensions require the following inputs:

- BTA: the estimated take-up rate of the benefit should be set as the value of the $bsa00_BTA_rate constant in the model. Currently, the constant's value is equal to 0.
- BCA: The aggregate expenditure needs to be filled out in the External Statistics table, so that the calibration rate ($bsa00_BCA_rate) is computed accordingly. Data are currently available for the years 2017-2023; given the absence of information for 2024, the calibration rate is not computed within the 2024 system, but the one computed within the 2023 system is used instead. For the modelling of reforms, the 2024 system should be used in order to allow for variation in the number of beneficiaries (hence expenditure): beneficiaries will change when the eligibility conditions change by applying the share of 2023 to the new pool of eligible units. If previous systems were used for reforms, total expenditure would remain constant irrespective of the reform applied, since the model would always stick to the existing external statistics.

2.5.8 Housing benefit (bho00_el)

This is a benefit awarded to low incomes renters, introduced in 2019.

- ***Definitions***

The unit of analysis comprises the whole household. Minor individuals are defined as individuals up to the age of 18.

- ***Eligibility conditions***

Eligibility depends on household income and assets. Moreover, beneficiaries should live in rented accommodation and must have been legal and permanent residents of the country during the last five years preceding the submission of the application.

- ***Income test***

To be eligible for the benefit the total annual income of a single-person household cannot exceed €7,000, while for each additional household member (adult or child) this amount is increased by €3,500. Irrespective of the composition of the household, the total eligible annual income cannot exceed €21,000.

- ***Movable and immovable assets test***

The total value of immovable assets of the household should be less than €120,000 for single-member households, increased by €15,000 for each additional household member, subject to an overall ceiling of €180,000.

The total amount of bank deposits or/and the current value of shares, bonds, etc. of the single-person household cannot exceed €7,000, increased by €3,500 for each additional household member (adult or child) and up to a maximum of €21,000.

- ***Benefit amount***

The benefit amount is shown in Table 2.9. Note that if the actual amount of the rent paid by the household is lower than the amount of the housing benefit for which the household is eligible, the total amount of the benefit paid is equal to the actual rent.

Table 2.9 Housing benefit amount (2021-2024)

Benefit rates	€ per month
Rate for:	
… single-person households	70
… each additional household member (adult/child)	35
Maximum amount	210

- ***EUROMOD modelling***

In EUROMOD, this benefit's receipt is restricted to the amount of budget that is allocated to the policy. This is done via the BTA switch, which restricts the benefit receipt to a fraction of simulated recipients. This random allocation aligns the aggregate simulated benefit amount with the envisaged expenditure.

2.5.9 Maternity leave benefit (bfama_el)

This benefit is only simulated from 2015 onwards. The simulation is, however, switched off as part of the baselines, i.e., non-simulated components (bmact) are being used.

A. Employees in the private sector

- ***Brief description***

The benefit is received by a working mother who is employed, 8 weeks before and 9 weeks after the birth of a child (children). ***Definitions***

The unit of analysis is the family, which consists of partners (or lone parents) and own dependent children aged 0.

- ***Eligibility conditions***

The beneficiary must have been insured for 200 days (i.e. 8 months) during the previous two years.

- ***Benefit amount***

The benefit is equal to the beneficiary's average net wage, obtained during the 30-days period preceding work-leave, with a maximum of €2,373.5 per month. It is paid by (a) the employer, (b) the employee's social insurance fund and (c) the Hellenic Manpower Employment Organisation (ΟΑΕΔ).

- ***EUROMOD modelling***

Note that the exact month of birth is not available in the data; only the quarter of the year is known in SILC. Hence, it was assumed that children born in the first, second, third, fourth quarter of the year are born on 1st February, 1st May, 1st August, 1st November respectively. We also assume that a month has 4.3 weeks so 8 and 9 weeks correspond to 1.9 and 2.1 months respectively.

The benefit duration (depending on the child's month of birth) is described in the following table:

Table 2.10 Duration of maternity leave benefit (number of months)

for mothers of…	born in February	born in May	born in August	born in November
children aged 0	3.1	4	4	3.9

children aged 1	0	0	0	0.1

Due to the very short period of receipt, the benefit is not simulated for children aged 1.

B. Employees in the public sector

- ***Brief description***

The benefit is received by a working mother who is employed, 2 months before and 3 months after the birth of a child. For every child after the third, the length of the post-natal leave is equal to 5 months. In case of twins, triplets etc. the length of the post-natal leave is extended by 1 month per child (i.e. 4 months for twins, 5 months for triplets etc.).

- ***Definitions***

The unit of analysis is the family, which consists of partners (or lone parents) and own dependent children aged 0 or 1.

- ***Benefit amount***

The benefit is equal to the beneficiary's net wage, obtained during the 30-days period preceding the leave.

- ***EUROMOD modelling***

The benefit duration (depending on the child's month of birth) in 2021-2024 is described in the following table.

Table 2.11 Duration of maternity leave benefit (number of months)

for mothers of…	**born in February**	**born in May**	**born in August**	**born in November**
<= 3 children, youngest aged 0	4	5	5	4
<= 3 children, youngest aged 1	0	0	0	1
> 3 children, youngest aged 0	6	7	7	4
> 3 children, youngest aged 1	0	0	0	3

In cases of twins and triplets the above-mentioned months are increased by 1 and 2 respectively.

C. Self-employed

- ***Definitions***

The unit of analysis is the family, which consists of partners (or lone parents) and own dependent children aged 0.

- ***Benefit amount***

The benefit was equal to €600 and is paid in four equal instalments. It is paid to the mother and it is not taxed.

D. Farmers

- ***Definitions***

The unit of analysis is the family, which consists of partners (or lone parents) and own dependent children aged 0.

- ***Benefit amount***

The benefit is equal to €486.77 and is paid as a lump sum. In case of twins, triplets etc. it is increased by 50% for each additional child. It is paid to the mother and it is not taxed.

E. Uninsured mothers

- ***Definitions***

The unit of analysis is the family, which consists of partners (or lone parents) and own dependent children aged 0.

- ***Income test***

The maximum monthly income (from all sources) of the tax unit should be €586.94.

- ***Benefit amount***

The benefit is equal to €440.2 and is paid in two instalments.

- ***EUROMOD modelling***

The benefit is only provided to mothers who can prove that are working regularly, but without any insurance coverage. As social insurance coverage is compulsory in Greece, this benefit is only given in very rare cases and is thus not simulated in EUROMOD.

2.5.10 Parental leave benefit (bfapl_el)

This benefit is only simulated from 2015 onwards. The simulation is, however, switched off as part of the baselines, i.e., non-simulated components (bmact) are being used.

- ***Brief description***

The benefit is received by employees in the public or private sector taking care of small children.

- ***Definitions***

The unit of analysis consists of partners (or lone parents) and own dependent children aged 0 to 2.

- ***Benefit duration***

a. Private sector

A parent can take 3.75 months of parental leave with full payment as an alternative option to a scheme which allows parents to work reduced hours (i.e. one hours less per day for up to 30 months after maternity leave or two hours less per day for the first 12 months and one hour less per day for another six months). The leave is paid by the employer and funded through general taxation and is granted after the maternity leave. Legally, it can be used by either or both parents, but in practice it is almost solely used by mothers.

A **special parental leave** of 6 months (2021-2022) extended to 9 months since 25 November 2022 (2023-2024) is also granted to private sector workers after maternity leave and before the beginning of the use of flexible working (reduced hours of daily work). In case mothers decide not to use flexible working and take the 3.75 months of leave, the special parental leave is granted after the end of these 3.75 months. The subsidy is equal to the minimum wage for full-time employees (half the minimum wage for part-time employees). The subsidy is extended to the self-employed and farmers for births post 24.9.2023.

b. Public sector

A parent can take 9 months of parental leave with full payment as an alternative option to a scheme which allows parents to work reduced hours (i.e. two hours less per day if he/she has children of less than two years old and one hour less per day if he/she has children between two and four years old), with full earnings replacement. The leave is paid by the employer and funded through general taxation, and is granted after maternity leave. Legally, it can be used by either or both parents within the total nine month period, but in practice it is almost solely used by mothers. In the case of multiple births, an extra six month is provided for each additional child. For a parent who is unmarried, widowed, divorced or severely disabled, the leave is extended by one month.

- ***Benefit amount***

The benefit is equal to the beneficiary's average wage obtained during the 30-days period preceding work-leave.

The monthly amount of the special parental leave is equal to the minimum wage of workers aged above 25. It is subject to health and pension-related contributions.

- ***EUROMOD modelling***

The benefit duration (depending on the child's month of birth) in 2020-2023 is described in the following tables. Note that the special rules for lone parents, parents with disabilities, twins, triplets, etc. that apply to the public sector are not simulated in EUROMOD.

Table 2.12 Duration of parental leave benefit (number of months): private sector

for mothers of…	**born in February**	**born in May**	**born in August**	**born in November**
children aged 0	3.75	3.75	2.9	0
children aged 1	0	0	0.85	3.65

Table 2.13 Duration of special parental leave benefit (number of months): private sector

For mothers of…	**born in February**	**born in May**	**born in August**	**born in November**
children aged 0	5.15	2.15	0	0
children aged 1	0	3.85	6	6

Table 2.14 Duration of parental leave benefit (number of months): public sector

for mothers of…	**born in February**	**born in May**	**born in August**	**born in November**
children aged 0	8	5	2	0
children aged 1	1	4	7	9

2.5.11 Youth pass (bsaya_el)

The youth pass was introduced in September 2023 as a permanent measure subsidising the expenditure of young individuals on services relating to civilization, tourism and transport.

- ***Eligibility conditions***

Individuals aged 18-19.

Benefit amount

€150 per year paid by means of a digital debit card.

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.6 Social insurance contributions

In 2017 all funds providing main pensions were consolidated into one, called *ΕΦΚΑ*. Rules became uniform for employees previously insured in IKA, public sector employees and employees previously insured in "noble" funds (proxied here by the doctors' ex fund, TSAY) and in 2020 this was also the case for public enterprise workers and banking employees.

2.6.1 Employers (tscer_el)

- ***Liability to contributions***

All private sector employers are required to pay social insurance contributions.

- ***Income base used to calculate contributions***

Employers' contributions are paid as a proportion of their employee's earnings. An upper earnings threshold applies. In 2021-2022, it was equal to €6,500 per month and in 2023 to €7,126.94.

- ***Contribution rates***

Table 2.15 Employer social contributions simulated (2021-2024)

Social insurance contributions	**% of earnings**			
	2021	**2022**	**2023**	**2024**
Case 1: general regime				
Primary pension	13.33	13.33	13.33	13.33
Supplementary pension	3.25	3.00	3.00	3.00
Sickness insurance	4.55	4.55	4.55	4.55
Unemployment insurance	1.20	1.20	1.20	1.20
Housing and other benefits	0.21	0.21	0.21	0.21
Total SIC: general regime	**22.54**	**22.29**	**22.29**	**22.29**
Case 2: hazardous occupations				
Primary pension (extra SIC)	1.40	1.40	1.40	1.40
Supplementary pension (extra SIC)	0.75	0.75	0.75	0.75
Extra SIC: hazardous occupations	2.15	2.15	2.15	2.15
Total SIC: hazardous occupations	**24.69**	**24.44**	**24.44**	**24.44**

Since 2019 employers pay 50% of primary pension SIC (i.e. 6.67%) if they employ workers aged less than 24. In June 2022 supplementary pension SIC were set to 3%. In June 2020 unemployment insurance contributions were set to 2.69%. In January 2021 unemployment insurance contributions were set to 1.2% and housing and other benefit contributions to 0.21%.

- ***EUROMOD modelling***

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

2.6.2 Employees (tscee*_el)

- ***Liability to contributions***

All private and public sector employees are required to pay social insurance contributions.

- ***Income base used to calculate contributions***

Contribution rates are related to gross earnings. The upper and lower earnings thresholds are the same for both employers' and employees' social insurance contributions and are presented in Table 2.16.

- ***Contribution rates***

Table 2.16 Private sector employees' social insurance contributions (2021-2024)

Social insurance contributions	% of earnings			
	2021	**2022**	**2023**	**2024**
Case 1: general regime				
Primary pension	6.67	6.67	6.67	6.67
Supplementary pension	3.25	3.00	3.00	3.00
Sickness insurance	2.55	2.55	2.55	2.55
Unemployment insurance	1.20	1.20	1.20	1.20
Housing and other benefits	0.45	0.45	0.45	0.45
Total SIC: general regime	**14.12**	**13.87**	**13.87**	**13.87**
Case 2: hazardous occupations				
Primary pension (extra SIC)	2.20	2.20	2.20	2.20
Supplementary pension (extra SIC)	1.25	1.25	1.25	1.25
Extra SIC: hazardous occupations	3.45	3.45	3.45	3.45
Total SIC: hazardous occupations	**17.57**	**17.32**	**17.32**	**17.32**

In June 2020, supplementary pension SIC were set to 3%. In June 2020 unemployment insurance contributions were set to 1.56% and contributions towards other benefits to 1.30%. In January 2021 unemployment benefits' SIC were set to 1.2% and contributions towards other benefits to 0.45%.

Table 2.17 Public sector employees' social insurance contributions (2021-2024)

% of reference earnings		Derivation
Case 1: contributors to the "old" regime		
Primary pension	5.34	6.67% × (80% of RE)
Supplementary pension (*ΤΕΑΔΥ*)	3.25	3.25% × RE
Other benefits (*ΜΤΠΥ*)	3.80	4.5% × (80% of RE) + 1% × (20% of RE)
Sickness benefits *(ΟΠΑΔ)*	2.55	2.55% × (100% of RE)
Separation payment (*ΤΠΔΥ*)	3.20	4% × (80% of RE)
Unemployment benefits *(ΟΑΕΔ)*	2.00	2% × (100% of RE)
Total SIC	**20.14**	
Case 2: contributors to the "new" regime		
Primary pension	6.67	6.67% × (100% of RE)
Supplementary pension (*ΤΕΑΔΥ*)	3.25	3.25% × RE
Other benefits (*ΜΤΠΥ)*	3.80	4.5% × (80% of RE) + 1% × (20% of RE)
Sickness insurance *(ΟΠΑΔ)*	2.55	2.55% × (100% of RE)
Separation payment (*ΤΠΔΥ*)	4.00	4% × (100% of RE)
Unemployment benefits *(ΟΑΕΔ)*	2.00	2% × (100% of RE)
Total SIC	**22.27**	

In June 2022, supplementary pension SIC were reduced to 3%.

Public enterprise workers and banking employees' social insurance contributions were gradually adjusted and they became the same as all other private sector employees in 2020. In 2021-2024, they were as follows:

Table 2.18 Public enterprise workers and banking employees' social contributions (2021-2024)

Social insurance contributions	% of earnings			
	2021	**2022**	**2023**	**2024**
Case 1: general regime				
Primary pension	6.67	6.67	6.67	6.67
Supplementary pension	3.25	3.00	3.00	3.00
Lump sum pension	4.00	4.00	4.00	4.00
Sickness insurance	2.55	2.55	2.55	2.55
Unemployment insurance	1.20	1.20	1.20	1.20
Housing and other benefits	0.45	0.45	0.45	0.45
Total SIC: general regime	**18.12**	**17.87**	**17.87**	**17.87**
Case 2: hazardous occupations				
Primary pension (extra SIC)	2.20	2.20	2.20	2.20
Supplementary pension (extra SIC)	1.25	1.25	1.25	1.25
Extra SIC: hazardous occupations	3.45	3.45	3.45	3.45
Total SIC: hazardous occupations	**21.57**	**21.32**	**21.32**	**21.32**

- ***EUROMOD modelling***

IKA contribution rules are applied to all private sector employees and seamen (lpmfc=1). Upper threshold on earnings is adjusted with the number of months receiving employment income (yemmy). A factor equal to 0.916 is applied to public sector employees' supplementary pension SIC in order to capture the income base used to calculate those contributions.

2.6.3 Self-employed workers (tscse_el)

- ***Liability to contributions***

All individuals earning self-employment income from more than two clients are subject to the below-mentioned social insurance contributions. Individuals earning self-employment income from up to two clients are considered as employees. However, due to lack of relevant information this cannot be simulated in EUROMOD.

- ***Contribution rates***

A structural reform took place in 2020. From 01/01/2020 onwards SIC for self-employed (former *OAEE*), liberal professions (former *ETAA*) and farmers (former *ΟΓΑ*) are no longer calculated as a percentage of self-employment/farming income. Instead, six insurance classes are created. Each insurance class corresponds to a lump sum amount of contributions for main pensions and health. The amounts increase from class 1 to class 6, and insured persons can freely select one of the six insurance classes (as can be seen in Tables 2.27 and 2.28). For self-employed and liberal professionals with up to five years of contributions history, a lower level of SIC applies.

Table 2.19 Own account workers and self-employed liberal professions SIC (2020 -2022)

Insurance class	Pension insurance	Sickness insurance	Total
up to 5 years of history	93	33	126
1	155	55	210

2	186	66	252
3	236	66	302
4	297	66	363
5	369	66	435
6	500	66	566

Table 2.20 Farmers' SIC (2020 - 2022)

Insurance class	Pension insurance			Sickness insurance	Other benefits	Total		
	2020	2021	2022	2020-22	2020-22	2020	2021	2022
1	87	89	91	32	2	121	123	125
2	104	107	110	38	2	144	147	150
3	132	136	139	38	3	173	177	180
4	166	171	175	38	4	208	213	217
5	207	212	218	38	4	249	254	260
6	280	288	295	38	6	324	332	339

Table 2.21 Own account workers and self-employed liberal professions SIC (2023)

Insurance class	Pension insurance	Sickness insurance	Total
up to 5 years of history	101.97	36.18	138.15
1	169.95	60.30	230.25
2	203.94	72.37	276.31
3	258.76	72.37	331.13
4	325.65	72.37	398.02
5	404.59	72.37	476.96
6	548.23	72.37	620.60

Table 2.22 Farmers' SIC (2023)

Insurance class	Pension insurance	Sickness insurance	Other benefits	Total
1	99.78	35.09	2.19	137.06
2	120.61	41.67	2.19	164.47
3	152.41	41.67	3.29	197.37
4	191.88	41.67	3.29	236.84
5	239.08	41.67	4.39	285.09
6	323.45	41.67	6.58	371.70

Table 2.23 Own account workers and self-employed liberal professions SIC (2024)

Insurance class	Pension insurance	Sickness insurance	Total
up to 5 years of history	105.50	37.43	142.93
1	175.83	62.39	238.22
2	211.00	74.87	285.87
3	267.72	74.87	342.59
4	336.91	74.87	411.78
5	418.59	74.87	493.46
6	567.19	74.87	642.06

Table 2.24 Farmers' SIC (2024)

Insurance class	Pension insurance	Sickness insurance	Other benefits	Total
1	103.23	36.30	2.27	141.80
2	124.78	43.10	2.27	170.15

3	157.68	43.10	3.40	204.18
4	198.52	43.10	3.40	245.02
5	247.30	43.10	4.54	294.94
6	334.65	43.10	6.81	384.56

- ***EUROMOD modelling***

According to the example provided by the Greek Ministry of Labour, self-employed with an income base lower/higher than €1,336 per month are placed in class 1/class 2; farmers with an income base lower/higher than €835.17 per month are placed in class 1/class 2.

2.6.4 Pensioners (tscbesi_el)

Pensioners' social contributions are levied at a flat rate of 6% of total pension income.

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.7 Taxes

2.7.1 Personal income tax (tin00_el)

2.7.1.1 Tax unit

Tax unit for 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 ΔΥΠΑ 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 ΔΥΠΑ 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. Since 2013 the tax unit definition was slightly modified to include parents and disabled siblings as dependent members in the household. Furthermore, any member (including children) of the household earning more than 3,000 euro per year (6,000 euro if disabled) cannot be considered as dependent.

- ***EUROMOD modelling***

Dependent child definition used in the model is simplified and excludes military condition and condition (d) (the latter is not considered to be followed in practice anyway).

2.7.1.2 Exemptions

Unemployment benefits, social assistance and some family benefits provided by local government at the prefecture level (such as unprotected children benefit and single parent benefit) are not included in taxable income. Employment or pension income of persons suffering from any kind of disability over 80% is also tax-exempted. From 1st January 2010, unemployment benefits, large

family benefit, disability benefits are taxed for individuals with (other) taxable over €30,000 (€10,000 since 2014).

2.7.1.3 Tax allowances

Tax allowances here are defined as deductions from taxable income and most of them are per tax unit. In 2021-2024 they only include social insurance contributions. Note that tax allowances are usually shared between the main taxpayer and his/her spouse.

2.7.1.3.1 Social insurance contributions tax allowance

All social insurance contributions are fully deducted from taxable income.

2.7.1.4 Tax base

Taxable income includes reported employment and self-employment income, other market income, income from rent, private transfers received, education allowances, civil servants' family benefit, sickness benefits, disability pensions, main old age pensions (and supplementary since 2014), minor old age pensions, orphans' and widows' pensions). Unemployment benefits are also part of the tax base for individuals with (other) taxable income over €10,000. The tax base is defined as taxable income minus the tax allowances described above. Income from interest and dividends is taxed separately.

Since 2023 the tax base of the self-employed is subject to a minimum imputed income, which in 2023-24 amounted to €10,920 per year. The presumption does not apply to profits from agricultural business activity.

- ***EUROMOD modelling***

Investment income reported in EU-SILC includes income from interest, dividends and profit from capital investments in unincorporated business. However, in the personal income tax simulation this variable is treated as interest income.

Under certain conditions, minimum imputed income for self-employed may reach €50,000 and is subject to an adjustment on an annual basis depending on the characteristics of the sole proprietorship such as the cost of employee payroll of the previous fiscal year. Special provisions also apply for newly established sole proprietorships[2] or in cases where the activity is carried out in villages with a population of up to 500 inhabitants and on islands with a population of up to 3,100 inhabitants, as well as in cases where the freelancer has a disability equal to or greater than 80%.[3] Currently none of these special provisions are simulated in EUROMOD.

2.7.1.5 Tax schedule

Income taxation is graduated, with progressively higher marginal tax rates applying to higher income brackets. The tax schedules applicable for the period 2021-24 are shown in the following tables. Note that the tax schedule depicted in Table 2.25 is applied *separately* to farming income.

[2] The imputed income is applied in a graduated manner and is reduced during the first five years from the start of the activity, while it is then increased every three years.
[3] Presumptive income is reduced by 50%.

Table 2.25 Tax schedule: employment, pension, self-employment & farming income (2021-24)

Tax band	Income bracket (€ per year)		Tax rate (%)
	Lower limit	Upper limit	
1	0	10,000	9
2	10,001	20,000	22
3	20,001	30,000	28
4	30,001	40,000	36
5	40,001	…	44

Table 2.26 Tax schedule: property income (2021-2024)

Tax band	Income bracket (€ per year)		Tax rate (%)
	Lower limit	Upper limit	
1	0	12,000	15
2	12,001	35,000	35
3	35,000	…	45

- ***EUROMOD modelling***

The tax rate of the first tax band is 50% reduced for self-employed who started their business activity since 2013 and have a yearly taxable income of up to €10,000. This reduction holds for a period of three years. Note that this cannot be simulated in EUROMOD due to lack of relevant information.

2.7.1.6 Tax credits

Tax credits are defined as deductions from tax due.

2.7.1.6.1 Charitable donations tax credit

Since 2013 charitable donations tax credit is calculated as 10% of donations greater than 100 per annum but less than 5% of tax base.

2.7.1.6.2 Disability tax credit

In 2021-2024 the tax credit was €200 annually per eligible taxpayer.

2.7.1.6.3 Employment & pensions income tax credit

It was established in 2013. Since 2016, it applies to the sum of employment, pensions and farming income (EPF incomes). In 2019 it was equal to €1,900/€1,950/€2,000/€2,100 for taxpayers with zero/one/two/three or more dependent children and EPF incomes up to €20,000 per year and it is capped to the amount of people's actual tax liability; it was decreased by €10 for each additional €1,000 of EPF incomes over €20,000.

In 2020-2023 the tax credit was equal to €777/€810/€900/€1,120/€1,340 for taxpayers with zero/one/two/three/four dependent children and EPF incomes up to €12,000 per year and it is capped to the amount of people's actual tax liability; for each additional dependent child after the fourth it increases by €220. The tax credit decreased by €20 for each additional €1,000 of EFP incomes over €12,000. In 2024 the tax credit increased by €90/€220/€220/€240/€220 for taxpayers with one/two/three/four/five dependent children respectively, while the tax credit was further increased by €220 for each additional dependent child after the fifth.

2.7.2 Pensioners' solidarity contributions (txcpe_el)

The first solidarity contribution on main pensions (old age, survivors, orphans and disability) was introduced in August 2010.

- ***Tax unit***

The unit of analysis is individual.

- ***Tax schedule***

Main pensions exceeding €1,400 per month are subject to taxation as shown in Table 2.27. Note that the tax rates apply to the entire pension amount.

Table 2.27 Pensioners' solidarity contribution (2021-2024)

Tax band	**Pension bracket** (€ per year)		**Tax rate (%)**
1	0	1,400	0
2	1,401	1,700	3
3	1,701	2,000	6
4	2,001	2,300	7
5	2,301	2,600	9
6	2,601	2,900	10
7	2,901	3,200	12
8	3,201	3,500	13
9	3,501	...	14

An *additional solidarity contribution on main pensions* was introduced in August 2011. The contribution applies to pensioners below 60 (except from mothers of underage children) with main pensions exceeding €1,700 per month. The contributions' rates are shown in Table 2.28. Note that the tax rates apply to the entire pension amount.

Table 2.28 Additional pensioners' solidarity contribution (2021-2024)

Tax band	**Pension bracket** (€ per year)		**Tax rate (%)**
1	0	1,700	0
2	1,701	2,300	6
3	2,301	2,900	8
4	2,901	…	10

A *solidarity contribution for supplementary pensions* was introduced in September 2011. In 2021-2024 supplementary pensions exceeding €300 per month are subject to taxation as shown in Table 2.29. Note that the tax rates apply to the entire pension amount. Pensions of the second tax band are not allowed to fall below €300 per month.

Table 2.29 Pensioners' solidarity contribution for supplementary pensions (2021-2024)

Tax band	Pension bracket (€ per year)		Tax rate (%)
1	0	300	0
2	301	350	3
3	351	400	4
4	401	450	5
5	451	500	6
6	501	550	7
7	551	600	8
8	601	650	9
9	651	…	10

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.7.3 Solidarity contribution (txc00_el)

This is another emergency tax introduced in 2010, paid by individuals with net taxable incomes exceeding €12,000 per year.

- ***Tax unit***

The unit of analysis is individual.

- ***Tax schedule***

The contribution rates applied in the period 2021-2022 are shown in Table 2.30.

Table 2.30 Solidarity contribution (2021-2022)

Tax band	Income bracket (€ per year)		Tax rate (%)
1	0	12,000	0
2	12,001	20,000	2.2
3	20,001	30,000	5.0
4	30,001	40,000	6.5
5	40,001	65,000	7.5
6	65,001	220,000	9.0
7	220,001	…	10.0

The tax is not applicable to long-term unemployed with zero self-employment, property and investment incomes.

In 2021-2022 it **only** applied to individuals receiving income from pensions and public sector employees. In 2023 the solidarity contribution was fully abolished.

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.7.4 Self-employed and liberal professions' contribution (txcse_el)

This is a special levy on self-employed and liberal professions aged less than 63 who are professionally active for more than 5 years, introduced in 2010.

- ***Tax unit***

The unit of analysis comprises individuals. The concept used for the eligibility condition was individuals' social insurance fund (lpmfc=3,6,8).

- ***Tax schedule***

Since 2012, the tax is set to €650 per year regardless the working area's population. In 2024 the tax was reduced by 50% to €325 per year.

- ***EUROMOD modelling***

The policy can be simulated in EUROMOD without any particular data or modelling limitations. The only clause that cannot be simulated is a reduction in the contribution in case these professionals have up to three clients or if 75% of their income comes from one client.

2.7.5 Joint Tax on the Ownership of Real Estate (tpr_el)

- ***Tax unit***

The unit of analysis is individual.

- ***Tax schedule***

As of 1 January 2014, full ownership titles to real estate, including other property rights, such as usufruct, bare ownership etc., became subject to the so-called Joint Tax on the Ownership of Real Estate (*Ενιαίος Φόρος Ιδιοκτησίας Ακινήτων, ΕΝΦΙΑ*). The tax is divided into a 'primary' and a 'supplementary' part.

The 'primary' tax is computed based on an elaborate formula which, amongst other parameters, takes account of the geographic position of the property, its surface, use and age as well as the floor it is located at (where applicable). Accordingly, the law includes a social provision which grants discounts of 50% or even 100% on the tax assessed to taxpayers with low family income, families of 3 dependent kids or with members suffering serious disabilities. In particular, tax payers who have annual income up to €12,000 (increased by €1,000 per dependent member) and own property of a total area of up to 150 square meters are fully exempted. Similarly, tax payers who have annual income up to €9,000 (increased by €1,000 per dependent member), own property of a total area of up to 150 square meters and the value of this property is up to €85,000 (€150,000 for childless couples and lone parents with one child, €200,000 for couples with children and lone parents with two or more children) get a 50% discount.

The 'supplementary' tax is computed based on the value of the full ownership rights, bare ownership and usufruct on buildings and land within the urban plans. It is calculated in proportion of the total value of the property which exceeds €200,000, with rates ranging from 0.1% to 1.15%.

- ***EUROMOD modelling***

In EUROMOD the age factor was set to 1 for all of the tax payers due to lack of information about the age of buildings. The tax rates per square meter used were the average rates for urban and rural/ semi-rural areas according to tax data provided by the Greek authorities (i.e. €3.91 per square meter for those residing in urban areas and €2.63 per square meter for those residing in

rural/ semi-rural areas). Note that the supplementary part of the tax has not been simulated in EUROMOD. Due to all these limitations, the policy is **switched off** in the baseline.

In 2019 *ΕΝΦΙΑ* was reduced, as shown in table 2.31. This reduction is simulated in EUROMOD only in case simulations are performed with input datasets where it is not already accounted for.

Table 2.31 ENFIA reduction (2021-2024)

band	Immovable property value bracket (€)		reduction
1	0	60,000	30%
2	60,001	70,000	27%
3	70,001	80,000	25%
4	80,001	1,000,000	20%
7	1,000,001	…	10%

2.8 Extraordinary measures

2.8.1 Special purpose monetary compensation (bwkmcee_el and bwkmcse_el)

This monetary compensation was received by employees and self-employed that were severely affected by the Covid-19 health crisis.

- ***Definitions***

The compensation was received by employees and self-employed.

- ***Eligibility conditions***

The monetary compensation was received by (a) employees of firms affected by the Covid-19 health crisis, whose labour contracts have been suspended. Beneficiaries are determined on the basis of NACE codes of the firms in which they are employed; (b) self-employed affected by the Covid-19 health crisis.

- ***Income test***

No income test applies.

- ***Benefit amount***

The amount of €800 covered the period between mid-March and end April, while the monthly equivalent amount (€534) was granted from May 2020 to September 2021.

- ***EUROMOD modelling***

There is not enough information in the data regarding the eligibility of each worker (employed, self-employed). Therefore, employees were randomly chosen with probabilities that vary by industry, according to the information provided by the Greek Ministry of Labour in October 2020.

Table 2.32 Probabilities to obtain the wage compensation, by industry: employees

Industry	Base probability
Agriculture and Fishing	0.05
Mining, Manufacturing and Utilities	0.30
Construction	0.15
Wholesale and retail trade	0.35
Hotels and restaurants	0.82
Transport and communication	0.22
Financial intermediation	0.06
Real estate and business activities	0.41
Public administration and defence	0.00
Education	0.23
Health and social work	0.21
Other or unknown	0.73

According to the Ministry of Finance (information provided in Aug. 2021), in 2020, 15% of employees got the compensation for 1.5 month, 7% for 2.5 months, 15% for 3.5 months, 47% for 4.5 months and 16% for more than 4.5 months, with maximum duration being 9.5 months. In 2021, 15% of employees got the compensation for 1 month, 5% for 2 months, 5% for 3 months, 44% for 4 months and 32% for more than 4 months, with maximum duration being 8 months.

Self-employed individuals were randomly selected in an effort to reach the official number of recipients; 67% of self-employed got the compensation for 1.5 month and 33% for 2.5 months in 2020. There were no beneficiaries in 2021 (Ministry of Labour, Aug. 2021).

The two policies can only produce results if the model is run in combination with the LMA add-on and with input data that do not already contain those compensations. The individuals that are selected to undergo transitions to the monetary compensation schemes are defined in the TransLMA_el policy, which is switched on automatically by the add-on. For more information about the modelling of labour market transitions please consult the *'Simulating labour market transitions in EUROMOD'* document.

2.8.2 Credited social insurance contributions due to Covid-19 (tsccter_el and tscctee_el)

Social insurance contributions of employees who received a monetary compensation were fully covered by the state (both theirs and their employers'). The contribution base was based on their original earnings, according to the rules described in sections 2.6.1 and 2.6.2.

- ***EUROMOD modelling***

The policies can only produce results if the model is run in combination with the LMA add-on and with input data that do not already contain those compensations. The individuals that are selected to undergo transitions to the monetary compensation schemes are defined in the TransLMA_el policy, which is switched on automatically by the add-on.

2.8.3 Lump sum benefit for low-paid pensioners (boaxp_el)

It was paid to low-paid pensioners as a lump sum in December 2021, April 2022 and December 2022 (in 2022, as a way to counter the impact of increased inflation). It was not taxed.

- ***Definitions***

The assessment unit is the same as for personal income tax purposes (see section 2.7.1.1).

- ***Eligibility conditions***

Beneficiaries are low-income public pension recipients.

- ***Income and asset test***

In December 2021 and April 2022, the benefit was granted if personal income did not exceed €7,200 per year and if the couple's income did not exceed €14,400 per year. The total taxable immovable property of the beneficiary should not exceed €200,000.

In December 2022, the benefit was granted if personal income did not exceed €9,600 per year and if the couple's income did not exceed €16,800 per year. The total taxable immovable property of the beneficiary should not exceed €300,000.

- ***Benefit amount and duration***

In December 2021 the benefit was set to €250. It was increased by €50 for each dependent member of the tax unit. In April 2022 it was set to €200 (with no top-ups). In December 2022 it was again set to €250 (with no top-ups).

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.8.4 Lump sum support to vulnerable population groups (bsals_el)

It was paid to various vulnerable population groups as a lump sum in December 2021, April 2022, December 2022, March 2023 and December 2023 (in 2022 and 2023, as a way to counter the impact of increased inflation). It was not taxed.

- ***Definitions***

The assessment unit is individual.

- ***Eligibility conditions***

Dec 2021, Apr 2022: beneficiaries had to be recipients of social pension and/or non-contributory disability benefits.

Dec 2022: recipients of social pension and/or non-contributory disability benefits, long-term unemployed.

Mar 2023: long-term unemployed.

Dec 2023: disabled, uninsured elderly (recipients of social pension)

- ***Income and asset test***

An income test applies only to long-term unemployed. In 2022, their tax unit's income should not exceed €16,800 per year. The tax unit used is the same as for personal income tax. In 2023, the threshold was set equal to €16,400 per annum for single-person assessment units, increased by €8,000 per annum for the spouse, plus €3,000 per annum for each additional dependent child. In the case of single-parent families, the eligibility threshold is further increased by €11,000 per year.

- ***Benefit amount***

Dec 2021: a lump-sum of €250

Apr 2022: a lump-sum of €200

Dec 2022: a lump-sum of €250

Mar 2023: a lump-sum of €300

Dec 2023: a lump-sum of €200/€150 for the disabled/uninsured elderly

- ***EUROMOD modelling***

The policy can be fully simulated in EUROMOD, without any particular data or modelling limitations.

2.8.5 Market pass (bsatm_el)

The market pass was designed to subsidise increased food expenditure incurred by low income households due to inflation. It was paid in February-December 2023, but in November and December only to low income households residing in areas affected by the September 2023 floods. Beneficiaries could choose to receive the benefit by means of either a digital debit card or a direct bank deposit. The market pass was not taxable.

- ***Eligibility conditions***

Nov-Dec 2023: households residing in Thessaly and the prefecture of Evros.

- ***Income and asset test***

An income test is applied to 2022 income, which should not exceed €16,000 per annum for singles or €24,000 per annum for married plus €5,000 per annum per dependent child. An asset test is also applicable, according to which the value of 2022 property should not exceed €250,000 for singles or €400,000 for married. The tax unit used is the same as for guaranteed minimum income.

Benefit amount

Feb -Oct 2023: €22 per month for singles plus €10 supplement per extra household member up to a monthly ceiling of €100.

Nov-Dec 2023: €44 per month for singles plus €20 supplement per extra household member up to a monthly ceiling of €200.

In case beneficiaries chose to be paid via a direct bank deposit, the benefit amount was reduced by 20%.

- ***EUROMOD modelling***

The policy was simulated in EUROMOD assuming all beneficiaries chose the direct bank deposit payment option. The November -December 2023 eligibility condition relating to residence in the prefecture of Evros was approximated by residence in the Northern Greece region.

2.9 Consumption taxes

Consumption taxes simulated in EUROMOD can be divided in two groups: VAT (value added tax) and excises (additional duties paid over consumption, typically on energy, alcoholic beverages, tobacco and luxury goods).

Simulated consumption tax liabilities paid by households depend on the tax rules (e.g. the VAT rate) and on the tax base (consumption expenditures or quantities). This is why, to simulate consumption taxes in EUROMOD, the input data must contain information on household expenditures. The expenditures matched in the EUROMOD input files based on SILC are reported directly by households in the HBS surveys at purchasing prices. Therefore, they already include the consumption taxes paid.

i) **VAT** (il_tva variable in EUROMOD) is the value-added tax. The model also simulates at high disagregation level the VAT liabilities paid for each consumption category (output variables are tva01111, tva01112, and so on and so forth, corresponding to COICOP codes 01111 and 01112, etc.)

ii) **Excises** (il_tx variable in EUROMOD) are additional duties paid over consumption and can be classified in two groups: ad-valorem excises (il_txv) that depend on producer prices, and of specific or ad-quantum excises (il_txa) that depend on consumed quantities.

Since consumption data from HBS refers to expenditures (price times quantity), for the simulation of specific excises information on consumption prices are needed.

Further information on methodology and specific calculations and the independence of these consumption taxes is common across countries (this is why they are placed in an add-on and not in the policy spine of each country) and can be found in Akoğuz et al (2020).[4]

2.9.1 VAT (il_tva)

To extract the baseline VAT embedded in the expenditure consumption reported by households we only need the VAT rate of the policy system year. VAT rates usually do not vary too much across product, and are typically four rates (standard, reduced, super reduced and zero).

Table 2.33 VAT rate (2021-2024)

	Products	2021-24
Standard		24%
Reduced	Mainly applies non alcoholic beverages, transport services, recreational & cultural services, package holidays, catering services	13%
Super reduced	Mainly applies to electricity, gas & other fuels	6%
Zero	Mainly applies to actual rentals for housing, out-patient services, education, social protection services, insurance connected with dwelling/health/transport & other insurance, and financial services.	0%

2.9.2 Ad-valorem excises (il_txv)

Ad-valorem excises cover tobacco products.

[4] Akoğuz, Elif Cansu, Bart Capéau, André Decoster, Liebrecht De Sadeleer, Duygu Güner, Kostas Manios, Alari Paulus, and Toon Vanheukelom. A new indirect tax tool for EUROMOD: Final Report (November 2020).

Table 2.34 Ad-valorem excise rates (2021-2024)

Products	2021-2024
Cigarettes	26%
Cigars.	35%

2.9.3 Specific excises (il_txa)

Specific excises apply to alcohol, and energy goods. In this case, we collect both tax parameters and consumer prices, to allow the model to estimate the implicit quantities behind the reported household consumption expenditure amounts.

Table 2.35 Specific (ad-quantum) excise rates

Products	2021	2022	2023	2024
Ethyl alcohol (per 100 l of pure alcohol)	2450	2450	2450	2450
Wine (per 100 l)	0	0	0	0
Sparkling wine (per 100 l)	0	0	0	0
Beer (per 100 L per Plato of finished product)	5	5	5	5
Cigarettes (per 1000 pieces)	82.5	82.5	82.5	82.5
Cigars	0	0	0	0
Other tobacco (Fine cut, per kg)	170	170	170	170
Electricty (per MWh)	2.2	2.2	2.2	2.2
Natural Gas- Heating (per gigajoule)	0.3	0.3	0.3	0.3
Liquefied hydrocarbons (per 1000 kg)	60	60	60	60
Gas Oil- Heating (per 1000 L)	410	410	410	334.2
Coal and Coke - Heating (per gigajoule)	0.3	0.3	0.3	0.3
Petrol-Leaded (per 1000 L)	681	681	681	681
Petrol-Unleaded (per 1000 L)	700	700	700	700
Gas Oil- Propellant (per 1000 L)	410	410	410	410

Table 2.36 Prices of Excise products

Products	2021	2022	2023	2024
Ethyl alcohol (per 100 l of pure alcohol)	27.6	27.5	28.6	29.5
Wine (per 1 l)	13.8	14.3	15.4	16.3
Sparkling wine (per 1 l)	32.2	33.7	37.0	39.0
Beer (per 1 L of lager)	2.7	2.8	2.9	3.0
Cigarettes (per 1000 units)	209.7	209.2	208.5	209.7
Cigars (per 1000 units)	321.8	334.6	347.4	359.4
Other tobacco (Fine cut) (per kg)	251.6	255.3	260.0	262.3
Electricity (per MWh)	192.0	264.5	247.5	236.4
Natural Gas- Heating (per gigajoule)	21.2	29.7	31.6	23.6
Liquefied hydrocarbons (per 1000 kg)	1700.5	1892.5	2034.0	2036.0
Gas Oil- Heating (per 1000 L)	1013.3	1453.4	1269.8	1313.3
Coal and Coke - Heating (per gigajoule, 1 GJ = 0,0316 ton)	30.4	34.2	36.2	36.6
Petrol-Leaded (per 1000 L)				
Petrol-Unleaded (per 1000 L)	1646.2	2051.2	1902.0	1859.9
Gas Oil- Propellant (per 1000 L)	1372.9	1869.0	1698.9	1685.2

n: nowcasted

Consumer prices of goods subject to excise duties are nowcasted, similarly to what the model does to update incomes from SILC. We combine the latest available data from the following sources:

- Prices per product, usually from last year, but for instance, fuel prices have only 15 days delay.
- Inflation: Harmonised Index of Consumer Prices (HICP, Eurostat) at COICOP 5 digits, usually for the first quarter for beta release and up to third quarter 3 for final release.
- Inflation quarter-on-quarter forecasts (DG ECFIN, confidential) by HICP main groups (Unprocessed food, Processed food including alcohol and tobacco, Non-energy industrial goods, Energy, Services - overall index excluding goods) of quarters 2, 3 and 4, as needed for each release.

For more details on the specific source of the price of each good, see Akoğuz et al (2020).

The price of (indicate product) did not followed this general sources/nowcasting strategy but was sourced from (indicate source) because (indicate reason).

- ***EUROMOD modelling***

Consumption taxes (tco_cc policy) require extended EUROMOD input data (with imputed income shares of consumption expenditures at the household level) and an add-on to run. The policy is set to off in the baseline. To activate it, the CT_xbase add-on must be run, and the extended EM input files (see Section 3 for more information on the methodology and features behind these extended input files) should be selected (as defined in the database configuration of each country). The other add-ons (CT_*) are designed for reform simulations and assume different behavioural responses: i) constant quantities (CT_XCQ), ii) constant income shares (CT_XCIS), and iii) constant expenditure shares (CT_XCES). These reform-scenario add-ons require the auxiliary output files are generated by running the first baseline simulation (as either the quantities or expenditures and savings from the baseline are kept constants and enter as inputs in the simulated reform scenarios).

3. DATA

3.1 General description

The Greek database is drawn from the EUROMOD SILC database (EMSD). SILC is a rotating panel that provides quality, timely cross-sectional information on household incomes and social exclusion. This version of EL-SILC, which was specifically developed by Eurostat for the needs of EUROMOD, is derived from the standard UDB SILC in combination with a number of variables from the National SILC (PDB).

Table 3.1 EUROMOD database description

EUROMOD database	**EL_2022_c2**
Original name	EMSD (i.e. UDB C21_release_22_09 & national SILC)
Provider	Eurostat
Year of collection	2022
Period of collection	May – June
Income reference period	1.01.2021 - 31.12.2021
Sampling	Stratified multi-stage sampling

Unit of assessment	Households
Coverage	Private household
Sample size	Indiv: 22,142 / HH: 10,202
Policy Systems	**2021-2024**

3.2 Data adjustments

This section summarises the most important adjustments performed to make data suitable for the purposes of EUROMOD.

3.3 Imputations and assumptions

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 (1st January 2021– 31st December 2021). Similarly, information about pensions and benefits refers to the calendar year before the interview. Self-employment income is based on this reference period too.

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 2021 (56 cases) were excluded from EUROMOD's database, as they were not born in SILC's income reference period. Moreover, 119 non-respondent individuals were also excluded from the EUROMOD input data.

3.3.3 Gross incomes

The income information available in the survey used to be net of income tax and social insurance contributions. Since 2007 gross incomes are also provided. However, the latter were not used; 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 2019.

In common with most tax-benefit models, EUROMOD usually works under the default assumption of full compliance (i.e. that taxes are fully adhered to). However, under-reporting of incomes for the purposes of tax evasion is known to be rife in Greece. As a consequence, ignoring this behaviour would seriously undermine the validity of our results.

Hence, in trying to account for tax evasion we use the assumption that individuals reveal their real total net income (say N_i) to survey interviewers, where *i* = employment income, self-employment income and farming income. Let G_i denote individuals' real gross income (which includes the part of income which is not reported to the tax authorities), and r the rates of income under-reporting. Further, let $T(G_i, r_i)$ denote the personal income tax function for incomes earned in 2018. In the presence of tax evasion, it follows that:

$G_i = N_i + T((1-r_i) * G_i)$

The stylised rates of income under-reporting applied here were as follows:

r_w = 6% for employment income

r_{se} = 24% for self-employment income

r_f = 37% for farming incomes

These rates were derived by comparing data from EU-SILC 2015 (2014 incomes) with a large sample of income tax returns filed in 2015 (2014 incomes) under the assumption that taxpayers concealing part of their income from tax authorities might consider declaring a higher figure to anonymous interviewers. In order to make the two samples comparable, we first had to ensure that income variables in the two datasets are consistently defined: in SILC, incomes are reported net of income tax and social insurance contributions; in tax returns, incomes are reported gross of income tax and net of social insurance contributions. As in the tax returns' sample income taxes are also available as separate variables, we used the latter to construct income variables that are net of both taxes and social insurance contributions, that could then be compared to SILC. In order to refine and check the robustness of these factors, several different scenarios were tested:

a. A scenario where individuals earning income from more than one of these three sources were excluded from comparisons.

b. A scenario where all individuals with positive incomes from each of these three sources were included in the comparisons.

c. Several scenarios where we gradually restricted our samples to individuals earning more than 5 to 50 euros/month.

The factors reported above were derived from the scenario where samples were restricted to individuals earning more than 50 euros/month.

By solving this recursive problem iteratively and for each income source separately, we obtain the values of real gross income, G. The rates of under-reporting are then used to separate the reported income (yemre/ysere) from the unreported part of gross income (yemnr/ysenr). EUROMOD treats the former as subject to income tax and social insurance contributions (and as used in resource assessment for means-tested benefits), while it adds the latter to individuals' disposable income. However, the input dataset also includes an alternative set of gross earnings variables (yem/yse) which is derived assuming full compliance.[5]

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. 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 2.1. In cases where people stated they were insured in two different funds, the allocation rules used are shown in Table 3.2:

Table 3.2 Allocation of persons insured in two social insurance funds

1st fund	2nd fund	Allocated fund

[5] The same procedure was also applied to the 2008 - 2018 EUROMOD datasets. Note that the rates of income under-reporting, drawn from Matsaganis & Flevotomou (2010), were 1% for employment income, 33% for self-employment income and 45% for farming income in the 2008 and 2010 datasets.

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	Banking employees	Private sector workers
Own account workers	Farmers	Own account 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) *ΟΓΑ* and *OAEE* must be allocated to insurance classes.

3.3.4.1 *Identifying contributors in the "old" and "new" regimes*

In order to distinguish the contributors to the "old" regime (i.e. those first employed before 1st January 1993) from contributors to the "new" regime (i.e. those first employed after 1st 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 3.3. Note that this process was only applied to people with missing data information.

Table 3.3 Contributors in the "old" and the "new" regime (*lpm*)

Contributors first employed	**int_lpm**	**lpm**
Before 1st January 1993 ("old" regime)	>27	0
After 1st January 1993 ("new" regime)	<=27	1

3.3.4.2 *Identifying contributors in hazardous occupations (lochz)*

In Greece, a proportion of 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 2.5.1, 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 the country.

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

- person is an active contributor, i.e. "directly insured",
- social insurance fund 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" (*lindi=1* was excluded).

Note that this process was only applied to people with missing data information.

3.3.5 Labour transition data

For labour market transitions to *employment/unemployment*, the data used in TransLMA_el policy are produced by Eurostat, using detailed distributional information from the Labour Force Survey. The impact across different categories of individuals and the duration of unemployment/employment are modelled using the EU-LFS longitudinal and quarterly transitions as target. For more information please consult the methodological note available here.

For labour market transitions to *monetary compensation* schemes, the data used in TransLMA_el policy are provided by the Greek Ministry of Labour. For more information, please see section 2.8.1.

3.4 Updating

To account for any time inconsistencies between the input dataset and the policy year, updating factors are used. Each monetary variable (i.e. each income component) is updated so as to account for changes in the non-simulated variables that have taken place between the year of the data and the year of the simulated tax-benefit system. Updating factors are generally based on changes in the average value of an income component between the year of the data and the policy year.

As a rule, updating factors are provided both for simulated and non-simulated income components present in the input dataset. Note however that in the case of simulated variables, the actual simulated amounts are used in the baselines rather than the uprated original variables in the dataset. Updating factors for simulated variables are provided so as to facilitate the use of the model in cases when the user wishes to turn off the simulation of a particular variable. The list of uprating factors as well as the sources used to derive them can be found in Annex 1.

3.5 Extended input data (with household expenditures for the simulation of consumption taxes)

For the simulation of consumption taxes, the model needs to be run with extended EUROMOD input files. They consist of the core EUROMOD input files based on EU-SILC or National SILC, extended with new variables (household-level income shares of expenditures by product) imputed from EU/National-HBS. The semi-parametric method implemented for the imputation follows the methodology developed by Akoğuz et al (2020).

Table 3.4 summarizes the major features of the most recent database used to be run with the policy systems of 2021-2024.

Table 3.4 Extended EUROMOD database description

Extended EUROMOD database for the simulation of consumption taxes	**SILC 2022 – Income year 2021 – Expenditures from HBS 2015**
EUROMOD database	EL_2022_c2_2015_03_e2
Year of collection (HBS) and source	HBS 2015 – EU
Year of collection (SILC) and source	SILC 2022 – EU
Coverage and sample size	Same as EL_2022_c2
Share of households with negative incomes excluded from the matching procedure	0.9%

These extended EUROMOD files contain all the variables included in the standard EUROMOD input files plus the income shares of each consumption category included in HBS. For example,

for countries with consumption disaggregation at 4 COICOP level (5 digits), there will be close to 200 additional variables, each one with the income shares of expenditure (household level) for that particular consumption category (e.g. starting from the income share of rice consumption: xs_01111; bread: xs_01112, and so on and so forth). The number of additional variables depends on the granularity available in HBS, and it varies across countries).

For the case of Greece, data EL_2022_c2_2015_03_e2, the number of variables included (income shares of expenditures, xs_c*) are 193, corresponding to the harmonized consumption categories defined at COICOP [2003?] level 4 (five digits).

This database is an extension of the core EUROMOD input database, and so it is based on the same sample (i.e., same identifiers "idperson" and "idhh" to identify persons and households, respectively) and contains the same variables plus the income shares of expenditure (xs_* variables).

In Table 3.5 we present the share of households' consumption expenditures by product (and total) captured in our matched databases (extended EM input files) with respect to the original reported expenditures in HBS. The column that refers to the same year (in this case, HBS 2015 with Extended EM Input 2015) directly depends on the quality of the imputation procedure, while the comparison across different years is influenced not only by the matching noise but also by the changes in population characteristics and in the underlining distribution of income. Therefore, the coverage displayed in the second column is just informative but is not and should not be used to evaluate nor validate the imputation procedure.

Information on the coverage of these simulated expenditures (coming from the imputation of HBS 2015 to more recent SILC-based data) with respect to the expenditures reported by National Accounts is included in section 4 of this report, together with the other macro-validation results.

Below we summarize the main findings from the imputation validation checks for CC (your country).

Table 3.5. Expenditure coverage of Extended EM Input files

COICOP group	HBS 2015 – Extended EM Input 2015	HBS 2015 – Extended EM Input 2022
1	106.95	95.18
2	106.86	97.47
3	103.97	90.02
4	108.11	97.62
5	106.27	89.93
6	183.66	171.59
7	100.75	91.20
8	109.74	97.21
9	106.52	90.88
10	105.69	93.04
11	103.59	96.00
12	114.43	98.11
Total	109.61	100.69

4. VALIDATION

4.1 Aggregate Validation

EUROMOD results are validated against external benchmarks. Detailed comparisons of the number of people receiving a given income component and total yearly amounts are shown in Annex 3. Both market incomes and non-simulated taxes and benefits in the input dataset as well as simulated taxes and benefits are validated against external official data. The main discrepancies between EUROMOD results and external benchmarks are discussed in the following subsections. Factors that may explain the observed differences are also discussed.

4.1.1 Components of disposable income

In this section, the main differences between the definition of disposable income in EUROMOD and EU-SILC are presented. According to EU-SILC, company car is included in the definition of disposable income and pension from individual private plans is not included. The former is not included in EUROMOD whereas the latter is included.

Table 4.1 Components of disposable income

	EUROMOD	EU-SILC
	ils_dispy	**HY020**
Employee cash or near cash income	+	+
Employer's social insurance contribution	0	0
Company car	0	+
Contributions to individual private pension plans	0	0
Cash benefits or losses from self-employment	+	+
Pension from individual private plans	+	0
Unemployment benefits	+	+
Old-age benefits	+	+
Survivor' benefits	+	+
Sickness benefits	+	+
Disability benefits	+	+
Education-related allowances	+	+
Income from rental of a property or land	+	+
Family/children related allowances	+	+
Social exclusion not elsewhere classified	+	+
Housing allowances	+	+
Regular inter-household cash transfer received	+	+
Interests, dividends, etc.	+	+
Income received by people aged under 16	+	+
Regular taxes on wealth	-	-
Regular inter-household cash transfer paid	-	-
Taxes on income and SIC	-	-

4.1.2 Validation of market incomes

In Tables A3.1 and A3.2 of Annex 3 selected market incomes are validated with respect to people in receipt and aggregate yearly amounts. In 2021 reported employment earnings are underreported by 9%. Reported self-employment earnings are overreported by 11%. Investment income is heavily underreported in SILC.

4.1.3 Validation of taxes and SIC

The number of tax and SIC payers and total tax and SIC revenues are shown in Tables A3.3 and A3.4 of Annex 3. Again, due to a severe lack of external statistics, the validation is only possible for a small number of annual amounts.

Our (adjusted for tax evasion) model underestimates by around 21% receipts from personal income tax and by 33% receipts from property tax in 2021. Receipts from the self-employed and liberal professions contribution are underestimated by around 32% and those from solidarity contribution by 69%.

4.1.4 Validation of benefits

In Tables A3.5 and A3.6 of Annex 3 means-tested benefits, non means-tested benefits and pensions are validated with respect to recipient numbers, followed by a comparison of figures on aggregate expenditure. Due to a lack of official external statistics, the validation was possible for a limited number of benefits/pensions.

The number of recipients of housing benefit, guaranteed minimum income and child benefit is under-simulated. The same holds for the relevant expenditures. Social pension recipients are oversimulated by around 88% in 2021, whereas recipients of unemployment assistance for long-term unemployed are undersimulated by 61% in 2021. The number of both non-simulated recipients of non-contributory disability benefit and heating benefit are heavily under-reported in SILC.

With respect to expenditure, total pension expenditure in EUROMOD is in line with the external statistics. Finally, EUROMOD overestimates the expenditure on the lump sum benefit for low-paid pensioners in 2022 by approximately 28%.

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 are: first adult=1; additional people aged 14+ = 0.5; additional people aged under 14 = 0.3.

4.2.1 Income inequality

Compared to the SILC figures, EUROMOD estimates on income inequality (Gini, S80/S20) show a bit lower inequality levels. The significantly higher income share of the bottom decile in EUROMOD is the main reason behind this discrepancy (3.29 in EUROMOD vs 2.7 in SILC in 2022).

4.2.2 Poverty rates

As a whole, compared to the SILC figures, EUROMOD estimates show lower income poverty rates for the period 2021-2022; the lower the poverty line, the biggest the discrepancy. This is mostly due to the simulation of a number of social benefits that tend to be under-reported in the SILC questionnaire. With respect to age, and using the 60% poverty line, the biggest discrepancies are observed for people aged 16-24 on average for the period 2021-2022 (19.2% vs 26% respectively for 2022).

4.3 Consumption taxes

Table A3.9 in Annex 3 shows the differences in aggregate annual amounts of consumption and consumption taxes in the input dataset and external statistics. The input dataset is based on the 2022 extended EUROMOD input files, while external statistics come from DG TAXUD.

Our model underestimates revenues from indirect taxes by around 25% in 2021. In particular, VAT revenues are underestimated by 24% while total excise tax revenues are underestimated by 27%. In more detail, the large underestimation in natural gas and electricity (by 89% and 76% respectively) is more than compensated by the large overestimation in other energy products (such as coal-coke), leading to a significant overestimation in the revenues from excises on energy. Moreover, revenues from excises on beer mark an underestimation rate of 60% in 2021. On the expenditure side, the model simulates expenditure on clothing & footwear, furnishings, household equipment and education with accuracy. All the other categories are under-simulated, with the exception of health which is over-simulated by almost 100%.

4.4 Summary of "health warnings"

A certain amount of caution is called for when interpreting the above results. The severe crisis that the country is still undergoing has had a serious impact on the availability of data needed for macrovalidation purposes. The reduction of resources has led to major delays in the publication of administrative statistical data, while some of the publications (such as the Social Budget and *ΟΓΑ*'s statistical bulletin) have been completely abandoned.

Our approach to accounting for tax evasion is a clear improvement on standard practice. Nevertheless, it remains simplistic; assuming that everyone's income from a given source is under-reported by the same rate leaves much to be desired. In addition, simulations may be imperfect when e.g. income tax rules are too complex to be accurately simulated, or when eligibility for means-tested benefits depends on income in previous years.

Uprating incomes from an earlier date to the present amounts to assuming that everybody's income from a given source has risen by the same rate over the relevant period. This assumption clearly understates distributional changes. Moreover, uprating some incomes (e.g. self-employed earnings, incomes from farming etc.) is subject to an even greater degree of uncertainty due to the lack of reliable/timely information.

The simulation of bwkmcee_s and bwkmcse_s is triggered by the simulation of labour market transitions defined in policy TransLMA_el. This policy becomes operational if the model is run in conjunction with the LMA add-on and with input data that do not already contain those compensations. Users are encouraged to refer to the *'Simulating labour market transitions in EUROMOD'* document prior to their use. Labour market transitions (TransLMA_el policy) are switched OFF in EUROMOD baselines. As a consequence, the simulation of monetary compensation schemes does not produce any effect in baseline simulations.

5. REFERENCES

Bank of Greece (2015) "Annual Report 2014", Athens: Bank of Greece.

El.Stat. (2017) "Annual National Accounts, Gross value added by Industry Years 2000-2016", Athens: Hellenic Statistical Authority.

Flevotomou M., Kanavitsa E., Leventi C., A., Matsaganis M. and Tsakloglou P. (2017) "EUROMOD Country Report: Greece 2013-2016", Institute for Social and Economic Research, University of Essex.

INE-ΓΣΕΕ Journal (2002) "The salaries of civil servants in EU countries", issue 79.

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 and Flevotomou M. (2010) " Distributional implications of tax evasion in Greece", Hellenic Observatory Papers on Greece and Southeast Europe GreeSE Paper no.31, The Hellenic Observatory, LSE, London, UK.

ANNEX 1. UPRATING FACTORS

Table 3.4 Raw indices for deriving EUROMOD uprating factors (2021-2024)

		Values of raw indices					
Index	**Constant name**	**2021**	**2022**	**2023**	**2024**	**Source**	**Income components uprated by the index**
Harmonised Index of Consumer Prices	$HICP	101.8	111.2	115.9	119.1	Eurostat; AMECO forecast for 2024	
CPI (non harmonised)	$f_cpi	106.7	117.0	121.1	123.8	ElStat (2024: average of the first 9 months) [a]	afc, amolv, kivho, xcd, xed, xhcmomi, xhl, xhl01, xht, xog, yds, ypp
GDP	$f_gdp	1.00	1.08	1.13	1.17	ElStat (2024: based on Draft Budgetary Plan 2025) [b]	xmpam, xmpot, ydses_o, yds01
employment earnings: all employees	$f_yem	99.6	99.8	107.3	111.9	Eurostat (indicator NAMA_10_A10)	yem, yemnr, yemre, tad, tis, xpp, yivwg, yem00, yse, ysenr, ysere, ypt, kfb, yot, bmact, bhl, kfbcc, kcc, yem_a
employment earnings: public enterprises workers	$f_yem4	95.4	95.6	102.8	110.8	Eurostat (indicator NAMA_10_A10)	yem, yemnr, yemre
employment earnings: banking employees	$f_yem5	96.7	96.9	104.1	108.6	Eurostat (indicator NAMA_10_A10)	yem, yemnr, yemre
employment earnings: civil servants	$f_yem7	103.8	105.8	105.8	116.3	Eurostat (indicator NAMA_10_A10)	yem, yemnr, yemre
employment earnings: other private sector employees	$f_yem189	99.1	99.4	106.8	111.4	Eurostat (indicator NAMA_10_A10)	yem, yemnr, yemre
self-employment income: farming	$f_yse_farm	92.25	108.89	108.89	108.89	ElStat [c], [d]	yse, ysenr, ysere
property income	$f_ypr	76.8	77.8	81.5	84.5	ElStat (2024: average of the first 9 months) [a]	ypr

social solidarity benefit	$f_boact	12	12	12	12	ΕΚΑΣ upper rate	boact
pensions	$f_pen	111.4	111.4	120.1	123.7	Ministerial decisions	poa00, poacm, poaot, psuwd, psuor, pdi
social pension	$f_boanc	360	360	388	400	OGA (pension amount)	boanc
unemployment insurance benefit	$f_bunct	399	438	479	509	ΔΥΠΑ [e]	bunct, bunot
family benefits	$f_famben	108	108	108	108	based on large family benefit	bchlg, bfalg, pfa
disability benefits	$f_bdi	783.3	783.3	846.0	846.0		bdi
unemployment assistance for long-term unemployed	$f_bunnc	200	200	200	200		bunnc
civil servants family benefit	$f_bfacs	100	100	100	100		bfacs
school benefit	$f_bched	300	300	300	300		bched
minor family benefits	$f_bfaot	100	100	100	100		bfaot
housing benefits	$f_bho	109.5	109.5	109.5	109.5	based on OEK subsidy dates	bho
education allowances	$f_bed	100	100	100	100		bed
minor social assistance benefits	$f_bsaot	100	100	100	100		bsaot
property tax	$f_tpr	100	100	100	100		tpr
housing cost (rent)	$f_xhcrt	76.8	77.8	81.5	84.5	ElStat [a]	xhcrt, xhcnhrt
housing cost	$f_xhc	121.4	150.6	138.1	139.0	ElStat [a]	xhc, xhcot
one	$f_one	1	1	1	1		bchba, bsamt, bsa00, bht, bch, yivai, xivbt
leaded index of average earnings	$f_yemLead	99.8	107.3	111.9	111.9	one-year lagged f_yem	ymwdt
heating benefit	$f_bht	207.1	220.0	298.0	298.0	based on MinFin data	bht
Average hourly wage (AHW) Agric. & Fishing	$f_hourly_wage_lindi_1	2.35	2.35	2.44	2.54	[f]	
AHW Mining, Manufact.&Utilities	$f_hourly_wage_lindi_2	10.21	10.24	10.60	11.06	[f]	
AHW Construction	$f_hourly_wage_lindi_3	5.76	5.77	5.98	6.24	[f]	
AHW Wholesale & retail	$f_hourly_wage_lindi_4	6.79	6.80	7.05	7.35	[f]	

AHW Hotels & restaurants	$f_hourly_wage_lindi_5	3.29	3.29	3.41	3.56 [f]
AHW Transport & communication	$f_hourly_wage_lindi_6	12.76	12.80	13.26	13.83 [f]
AHW Financial intermediation	$f_hourly_wage_lindi_7	15.95	16.00	16.57	17.28 [f]
AHW Real estate & business	$f_hourly_wage_lindi_8	6.81	6.83	7.07	7.37 [f]
AHW Public administ.& defence	$f_hourly_wage_lindi_9	9.56	9.59	9.93	10.36 [f]
AHW Education	$f_hourly_wage_lindi_10	11.83	11.87	12.29	12.82 [f]
AHW Health & social work	$f_hourly_wage_lindi_11	9.92	9.95	10.30	10.74 [f]
AHW Other	$f_hourly_wage_lindi_12	8.20	8.22	8.52	8.88 [f]
AHW all sectors	$f_hourly_wage	7.96	7.99	8.27	8.63 [f]

Notes: The links for the statistical sources are the following:

[a] https://www.statistics.gr/statistics/-/publication/DKT87/

[b] https://minfin.gov.gr/wp-content/uploads/2024/10/Greece_DBP_2025_final-2.pdf

[c] https://www.statistics.gr/statistics/-/publication/SEL84/-

[d] https://www.statistics.gr/el/statistics/-/publication/SJO01/-

[e] https://www.dypa.gov.gr/

[f] Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2023 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.

ANNEX 2. POLICY EFFECTS IN 2023-2024

In this section we analyse the direct tax-benefit policy effect on household disposable income in Greece between 2023 and 2024. We try to understand how changes (or non-changes) to tax-benefit policies have affected household incomes in the two periods, abstracting from changes in the population characteristics (e.g. increased unemployment) and the distribution of market/original gross incomes (e.g. reduction in wages).

Table A1 and Figure A1 show the policy effect measured in real terms by income component and income decile group. The effect is estimated as the difference between simulated household disposable income under the baseline 2024 tax-benefit policies (deflating the tax-benefit monetary parameters by Eurostat's Harmonized Index of Consumer Prices, HICP) and disposable incomes simulated under 2023 policies, as a percentage of mean equivalised household disposable income (MEHDI) in 2023. Households are ranked based on their equivalised household disposable income in 2023. The total policy effect on household incomes is decomposed into the different components: public pensions, means-tested benefits (MTB), non-means-tested benefits (non MTB), employees social insurance contributions (EE SIC), pensioners' SIC (other SIC), self-employed SIC (SE SIC) and direct taxes. We isolate the policy effect from changes in market/original income, i.e. changes to market/original incomes are not considered as part of the policy effect and so, they have no effect on disposable income.

For illustrative purposes, Table A2.2 and Figure A2.2 show the policy effect in nominal terms, whereby the 2024 tax-benefit policies are *not* deflated by the HICP, but are left unchanged. The HICP is projected to rise by 2.8% between 2023 and 2024. Because of this relatively high inflation rate, it is informative to first analyse the **nominal policy effect**, which reflects a hypothetical situation without any price increases. In this scenario, MEHDI increases marginally by 0.25% in 2024. This increase is primarily driven by the positive contribution of public pensions, stemming from the 2.95% increase paid out in 2024, following the pension indexation rule operating as of 2023[6] as well as by direct taxes due to changes in the employment and pension income tax credit.

However, as shown in Table A2.1 and Figure A2.1, the picture changes when price changes are accounted for as MEHDI in this scenario marks a marginal decrease compared to 2023 (by 0.75%). As public pensions were uprated by more than the 2024 HICP increase, pension income still increases in **real terms** for all income deciles. However, this positive impact is counterbalanced by other factors. Most importantly, when incomes are uprated by the change in HCPI, eligibility for means-tested benefits falls and hence the net impact is a decrease by 0.75% of MEHDI on average in real terms, and by 2.18% of MEHDI for the poorest income decile. Similarly, income uprating increases tax obligations and thus results in direct taxes positively contributing to MEHDI by 0.13 p.p., versus a lower increase of 0.24 p.p. in nominal terms.

[6] From 1.1.2023 pensions are uprated by the minimum of the sum of past year's inflation and real GDP growth divided by two and past year's inflation.

Table A2.1: Policy effects in 2023-2024 using the CPI indexation, %

Decile	Original income	Public pensions	MTB	Non MTB	Employee SIC	SE SIC	Other SIC	Direct taxes	Disp. income
1	0.00	0.06	-2.97	0.02	0.00	-0.06	0.00	0.78	-2.18
2	0.00	0.06	-2.51	0.00	0.00	-0.04	0.00	0.36	-2.14
3	0.00	0.01	-1.96	0.03	0.00	-0.03	0.00	0.40	-1.56
4	0.00	0.00	-1.69	0.03	0.00	-0.03	0.00	0.32	-1.37
5	0.00	0.03	-1.57	0.01	0.00	-0.05	0.00	0.25	-1.33
6	0.00	0.05	-1.27	0.02	0.00	-0.03	0.00	0.20	-1.03
7	0.00	0.04	-0.94	0.01	0.00	-0.02	0.00	0.20	-0.70
8	0.00	0.04	-0.61	0.01	0.00	-0.02	0.00	0.08	-0.50
9	0.00	0.05	-0.15	0.01	0.00	-0.02	0.00	-0.05	-0.16
10	0.00	0.03	-0.01	0.00	0.03	-0.01	0.00	-0.09	-0.05
Total	**0.00**	**0.04**	**-0.91**	**0.01**	**0.01**	**-0.03**	**0.00**	**0.13**	**-0.75**

Notes: MTB: Means-tested benefits; 'Other SIC' contain pensioners' SIC.
Shown as a percentage change in mean equivalised household disposable income by income component and income decile group. Income decile groups are based on equivalised household disposable income in 2023, using the modified OECD equivalence scale. Each policy system has been applied to the same input data, deflating monetary parameters of 2024 policies by Eurostat's Harmonized Index of Consumer Prices (HICP).

Figure A2.1: Policy effects in 2023-2024 using the CPI indexation, %

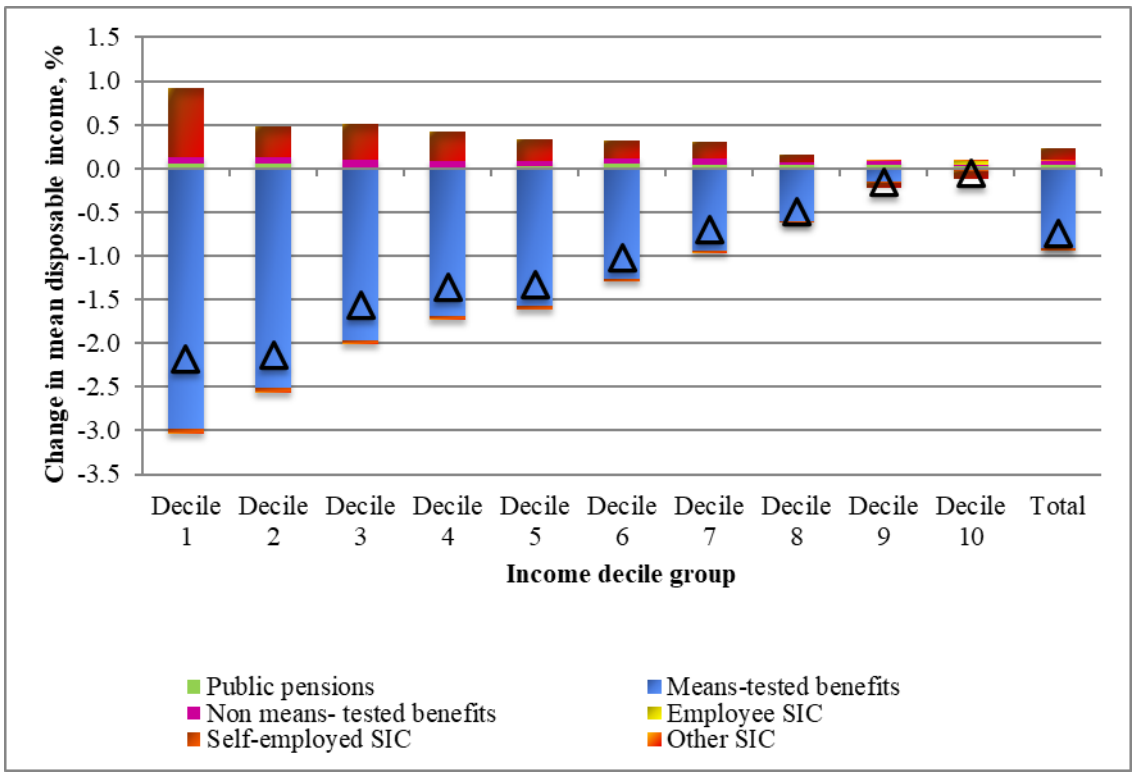
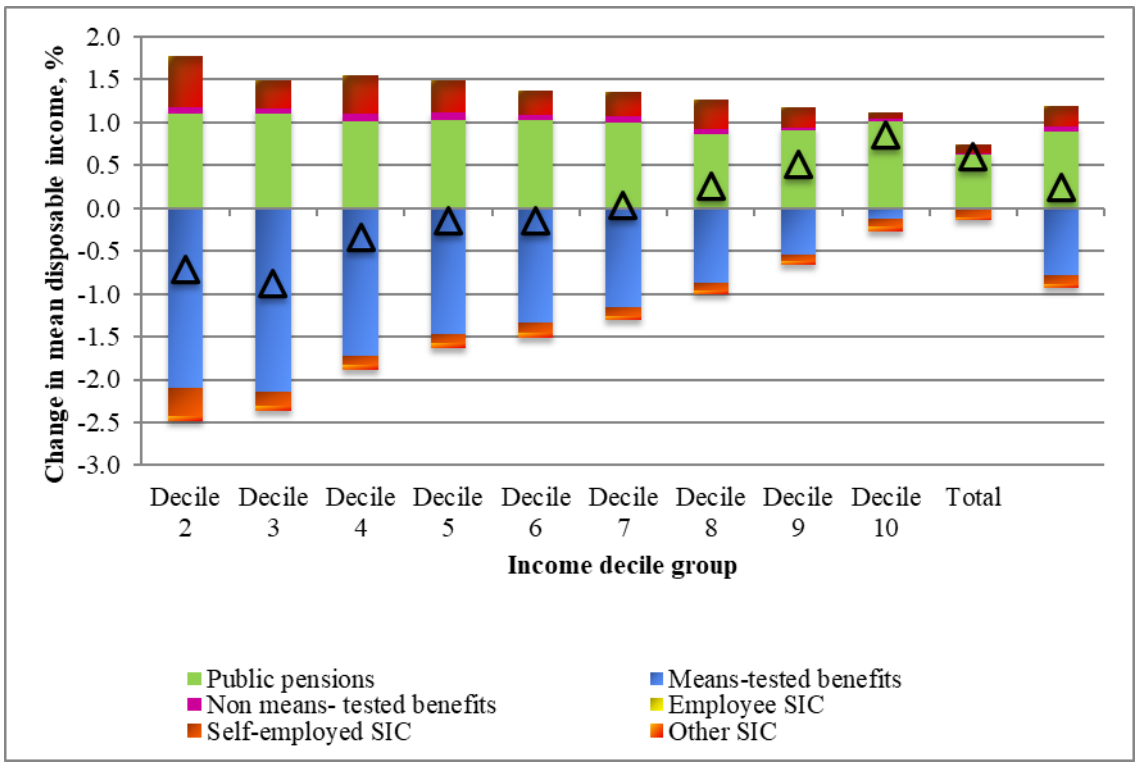


Table A2.2: Policy effects in 2023-2024 without the CPI-indexation, %

Decile	Original income	Public pensions	MTB	Non MTB	Employee SIC	SE SIC	Other SIC	Direct taxes	Disp. income
1	0.00	1.10	-2.10	0.08	0.00	-0.32	-0.06	0.60	-0.71
2	0.00	1.10	-2.14	0.07	0.00	-0.16	-0.06	0.32	-0.87
3	0.00	1.01	-1.72	0.09	0.00	-0.12	-0.06	0.44	-0.34
4	0.00	1.02	-1.47	0.09	0.00	-0.11	-0.06	0.38	-0.15
5	0.00	1.03	-1.34	0.05	0.00	-0.12	-0.06	0.28	-0.15
6	0.00	1.00	-1.16	0.07	0.00	-0.09	-0.06	0.28	0.04
7	0.00	0.86	-0.88	0.06	0.00	-0.08	-0.05	0.34	0.26
8	0.00	0.91	-0.54	0.03	0.00	-0.08	-0.05	0.23	0.51
9	0.00	1.01	-0.13	0.03	0.00	-0.09	-0.05	0.08	0.85
10	0.00	0.62	-0.01	0.02	0.00	-0.09	-0.03	0.11	0.60
Total	**0.00**	**0.90**	**-0.78**	**0.05**	**0.00**	**-0.10**	**-0.05**	**0.24**	**0.25**

Notes: MTB: Means-tested benefits; 'Other SIC' contain pensioners' SIC.
Shown as a percentage change in mean equivalised household disposable income by income component and income decile group. Income decile groups are based on equivalised household disposable income in 2023, using the modified OECD equivalence scale. Each policy system has been applied to the same input data, deflating monetary parameters of 2024 policies by Eurostat's Harmonized Index of Consumer Prices (HICP).

Figure A2.2: Policy effects in 2023-2024 without the CPI-indexation, %



ANNEX 3. VALIDATION TABLES

Table A3.1. Original income in EUROMOD - Number of recipients (thousands)

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Earnings (ils_earns)													
reported earnings (yemre)	N	2,997	2,997	2,997	2,997	3,308	NaN	NaN	NaN	0.91	NaN	NaN	NaN
reported self-employed earnings (ysere)	N	1,136	1,136	1,136	1,136	1,021	NaN	NaN	NaN	1.11	NaN	NaN	NaN
non-reported earnings (yemnr)	N	2,997	2,997	2,997	2,997	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
non-reported self-employment income (ysenr)	N	1,041	1,041	1,041	1,041	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
farming income (yag)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
navy income: officials & staff (ysl)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other original income (ils_origy - ils_earns)													
income of children under 16 (yot)	N	7	7	7	7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income from rent (ypr)	N	778	778	778	778	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
private pension (ypp)	N	3	3	3	3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
investment income (yiy)	N	305	305	305	305	8,971	NaN	NaN	NaN	0.03	NaN	NaN	NaN
private transfers received (ypt)	N	325	325	325	325	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
alimony payments (xmpam)	N	25	25	25	25	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
other maintenance payments (xmpot)	N	167	167	167	167	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income from abroad (yab)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income non-taxable in PIT, taxable in SC (ynt01)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income non-taxable in PIT & SC (ynt02)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Continued...

	Source	Comments
Earnings (ils_earns)		
reported earnings (yemre)	https://www.aade.gr/menoy/statistika-deiktes/eisodima/etisia-statistika-deltia	-
reported self-employed earnings (ysere)	https://www.aade.gr/menoy/statistika-deiktes/eisodima/etisia-statistika-deltia	-
non-reported earnings (yemnr)	-	-
non-reported self-employment income (ysenr)	-	-

Continued...

	Source	Comments
farming income (yag)	-	-
navy income: officials & staff (ysl)	-	-
Other original income (ils_origy - ils_earns)		
income of children under 16 (yot)	-	-
income from rent (ypr)	-	-
private pension (ypp)	-	-
investment income (yiy)	https://www.aade.gr/menoy/statistika-deiktes/eisodima/etisia-statistika-deltia	-
private transfers received (ypt)	-	-
alimony payments (xmpam)	-	-
other maintenance payments (xmpot)	-	-
income from abroad (yab)	-	-
income non-taxable in PIT, taxable in SC (ynt01)	-	-
income non-taxable in PIT & SC (ynt02)	-	-

Table A3.2. Original income in EUROMOD - Annual amounts (millions)

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Earnings (ils_earns)													
reported earnings (yemre)	N	43,021	43,310	45,787	48,341	35,689	NaN	NaN	NaN	1.21	NaN	NaN	NaN
reported self-employed earnings (ysere)	N	14,913	15,506	16,391	17,095	15,497	NaN	NaN	NaN	0.96	NaN	NaN	NaN
non-reported earnings (yemnr)	N	2,309	2,324	2,460	2,595	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
non-reported self-employment income (ysenr)	N	4,432	4,698	4,923	5,135	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
farming income (yag)	N	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
navy income: officials & staff (ysl)	N	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other original income (ils_origy - ils_earns)													
income of children under 16 (yot)	N	15	15	16	16	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income from rent (ypr)	N	3,130	3,170	3,321	3,443	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
private pension (ypp)	N	6	6	6	6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
investment income (yiy)	N	368	368	368	368	5,772	NaN	NaN	NaN	0.06	NaN	NaN	NaN
private transfers received (ypt)	N	1,019	1,021	1,097	1,144	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
alimony payments (xmpam)	N	79	86	90	93	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
other maintenance payments (xmpot)	N	622	672	703	728	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income from abroad (yab)	N	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income non-taxable in PIT, taxable in SC (ynt01)	N	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income non-taxable in PIT & SC (ynt02)	N	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Table A3.3. Direct taxes and SIC - Number of payers (thousands)

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Direct taxes (ils_tax)																					
personal income tax (tin00_s)	Y	4,148	4,186	4,459	4,526	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
withholding tax on benefits (tinwh_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
additional tax on rental income (tinrt_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
extraordinary contribution (txcxt_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
solidarity contribution (txc00_s)	Y	1,150	1,193	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self employed & liberal professions contribution (txcse_s)	Y	511	511	511	511	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
pensioners' solidarity contributions (txcpe_s)	Y	261	261	385	408	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
luxury tax (tlx)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
tax on private pensions (tpp)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
real estate tax (tpr_s)	Y	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
real estate tax (tpr)	N	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employee Social Insurance Contributions (ils_sicee)																					
employee SIC: pension (tsceepi_s)	Y	2,926	2,926	2,926	2,926	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: sickness (tsceesi_s)	Y	2,926	2,926	2,926	2,926	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: unemployment (tsceeui_s)	Y	2,388	2,388	2,388	2,388	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: family benefits (tsceefa_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: other benefits (tsceeot_s)	Y	2,926	2,926	2,926	2,926	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: self-insurance (tscee01)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Self-employed Social Insurance Contributions (ils_sicse)																					
self-employed SIC: pension (tscsepi_s)	Y	581	581	581	581	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employed SIC: sickness (tscsesi_s)	Y	581	581	581	581	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employed SIC: other benefits (tscseot_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employed SIC: unemployment (tscseui_s)	Y	581	581	581	581	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
farmers SIC: pension (tscfrpi_s)	Y	414	414	414	414	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
farmers SIC: sickness (tscfrsi_s)	Y	414	414	414	414	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
farmers SIC: other (tscfrot_s)	Y	414	414	414	414	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employer Social Insurance Contributions (ils_sicer)																					
employer SIC: pension (tscerpi_s)	Y	2,926	2,926	2,926	2,926	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: sickness (tscersi_s)	Y	2,388	2,388	2,388	2,388	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: unemployment (tscerui_s)	Y	2,388	2,388	2,388	2,388	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: family benefits (tscerfa_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: other benefits (tscerot_s)	Y	2,388	2,388	2,388	2,388	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Credited Contributions (ils_sicct)																					
credited employers' SIC (Covid-19) (tsccter_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
credited employees' SIC (Covid-19) (tsccteе_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other Contributions (ils_sicot)																					
contributions by people on pension benefits: sickness (tscbesi_s)	Y	2,490	2,490	2,490	2,490	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Continued...

	Source	Comments
Direct taxes (ils_tax)		
personal income tax (tin00_s)	https://www.aade.gr/menoy/statistika-deiktes/eisodima/etisia-statistika-deltia	-
withholding tax on benefits (tinwh_s)	-	-
additional tax on rental income (tinrt_s)	-	-
extraordinary contribution (txcxt_s)	-	-
solidarity contribution (txc00_s)	https://www.aade.gr/menoy/statistika-deiktes/eisodima/etisia-statistika-deltia	-
self employed & liberal professions contribution (txcse_s)	AADE/GAO	-
pensioners' solidarity contributions (txcpe_s)	2023 Budget report	-
luxury tax (tlx)	-	-
tax on private pensions (tpp)	-	-
real estate tax (tpr_s)	AADE/GAO	-
real estate tax (tpr)	-	-
Employee Social Insurance Contributions (ils_sicee)		
employee SIC: pension (tsceepi_s)	-	-

Continued...

	Source	Comments
employee SIC: sickness (tsceesi_s)	-	-
employee SIC: unemployment (tsceeui_s)	-	-
employee SIC: family benefits (tsceefa_s)	-	-
employee SIC: other benefits (tsceeot_s)	-	-
employee SIC: self-insurance (tscee01)	-	-
Self-employed Social Insurance Contributions (ils_sicse)		
self-employed SIC: pension (tscsepi_s)	-	-
self-employed SIC: sickness (tscsesi_s)	-	-
self-employed SIC: other benefits (tscseot_s)	-	-
self-employed SIC: unemployment (tscseui_s)	-	-
farmers SIC: pension (tscfrpi_s)	-	-
farmers SIC: sickness (tscfrsi_s)	-	-
farmers SIC: other (tscfrot_s)	-	-
Employer Social Insurance Contributions (ils_sicer)		
employer SIC: pension (tscerpi_s)	-	-
employer SIC: sickness (tscersi_s)	-	-
employer SIC: unemployment (tscerui_s)	-	-
employer SIC: family benefits (tscerfa_s)	-	-
employer SIC: other benefits (tscerot_s)	-	-
Credited Contributions (ils_sicct)		
credited employers' SIC (Covid-19) (tsccter_s)	-	-
credited employees' SIC (Covid-19) (tsccteе_s)	-	-
Other Contributions (ils_sicot)		
contributions by people on pension benefits: sickness (tscbesi_s)	-	-

Table A3.4. Direct taxes and SIC - Annual amounts (millions)

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Direct taxes (ils_tax)																					
personal income tax (tin00_s)	Y	7,003	7,145	8,275	8,912	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	8,900	NaN	NaN	NaN	0.79	NaN	NaN	NaN
withholding tax on benefits (tinwh_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
additional tax on rental income (tinrt_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
extraordinary contribution (txcxt_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
solidarity contribution (txc00_s)	Y	167	171	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	530	382	NaN	NaN	0.31	0.45	NaN	NaN
self employed & liberal professions contribution (txcse_s)	Y	332	332	332	166	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	489	513	NaN	NaN	0.68	0.65	NaN	NaN
pensioners' solidarity contributions (txcpe_s)	Y	202	202	300	364	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	446	476	NaN	NaN	0.45	0.63	NaN
luxury tax (tlx)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
tax on private pensions (tpp)	N	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
real estate tax (tpr_s)	Y	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1.00	1.00	1.00	1.00	2,615	2,655	NaN	NaN	0.67	0.66	NaN	NaN
real estate tax (tpr)	N	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employee Social Insurance Contributions (ils_sicee)																					
employee SIC: pension (tsceepi_s)	Y	4,496	4,470	4,652	4,919	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: sickness (tsceesi_s)	Y	1,062	1,069	1,127	1,189	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: unemployment (tsceeui_s)	Y	381	383	410	427	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: family benefits (tsceefa_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: other benefits (tsceeot_s)	Y	764	776	790	857	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee SIC: self-insurance (tscee01)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Self-employed Social Insurance Contributions (ils_sicse)																					
self-employed SIC: pension (tscsepi_s)	Y	1,143	1,144	1,264	1,313	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employed SIC: sickness (tscsesi_s)	Y	406	406	449	466	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employed SIC: other benefits (tscseot_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employed SIC: unemployment (tscseui_s)	Y	69	69	69	69	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
farmers SIC: pension (tscfrpi_s)	Y	453	472	518	543	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
farmers SIC: sickness (tscfrsi_s)	Y	162	165	181	189	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
farmers SIC: other (tscfrot_s)	Y	10	10	11	11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employer Social Insurance Contributions (ils_sicer)																					
employer SIC: pension (tscerpi_s)	Y	6,558	6,552	6,888	7,251	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: sickness (tscersi_s)	Y	1,446	1,451	1,554	1,619	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: unemployment (tscerui_s)	Y	381	383	410	427	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: family benefits (tscerfa_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer SIC: other benefits (tscerot_s)	Y	67	67	72	75	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Credited Contributions (ils_sicct)																					
credited employers' SIC (Covid-19) (tsccter_s)	Y	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
credited employees' SIC (Covid-19) (tsccteе_s)	Y	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other Contributions (ils_sicot)																					
contributions by people on pension benefits: sickness (tscbesi_s)	Y	1,550	1,550	1,666	1,713	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Table A3.5. Benefits - Number of recipients (thousands)

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Pensions (ils_pen)		2,542	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2,919	NaN	NaN	NaN	0.87	NaN	NaN	NaN
main old age pension (poa00)	N	2,012	2,012	2,012	2,012	2,012	2,012	2,012	2,012	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
supplementary old age pension (poacm)	N	549	549	549	549	549	549	549	549	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor old age pensions (poaot)	N	38	38	38	38	38	38	38	38	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
orphan's pension (psuor)	N	7	7	7	7	7	7	7	7	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
survivors' pensions (psuwd)	N	456	456	456	456	456	456	456	456	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
disability pension (pdi)	N	117	117	117	117	117	117	117	117	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
social pension (boanc_s)	Y	66	66	65	63	22	22	22	22	3.01	2.99	2.97	2.87	35	NaN	NaN	NaN	1.88	NaN	NaN	NaN
compensations for survivor pension reduction & 13th pension (psuxp_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
compensations for old age pension reduction & 13th pension (poaxp_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
13th disability pension (pdixp_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary old age pension reductions (poard_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary supplementary old age pension reductions (poacmrd_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary orphan pension reductions (psuorrd_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary survivor pension reductions (psuwdrd_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary disability pension reductions (pdird_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump-sum pension (αναδρομικά) (pxp04_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Means-tested benefits (ils_benmt)																					
child benefit (bch_s)	Y	754	748	722	691	795	795	795	795	0.95	0.94	0.91	0.87	855	NaN	NaN	NaN	0.88	NaN	NaN	NaN
school benefit, simulated (bched_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
same as above, non simulated (bched)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
heating benefit (bht)	N	290	290	290	290	290	290	290	290	1.00	1.00	1.00	1.00	691	NaN	NaN	NaN	0.42	NaN	NaN	NaN
large family benefit (bfalg_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
pensioners' social solidarity benefit (boact_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
unemployment assistance for long-term unemployed (bunnc_s)	Y	9	8	8	8	10	10	10	10	0.83	0.76	0.76	0.76	22	NaN	NaN	NaN	0.39	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
housing benefits (bho)	N	12	12	12	12	12	12	12	12	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor social assistance benefits (bsaot)	N	113	113	113	113	113	113	113	113	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum benefit to civil servants (bcsxp_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum benefit for low-paid pensioners (boaxp_s)	Y	789	1,247	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
social dividend 2014 (bsamttm_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2017-2019 social dividend (bsacm_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
food stamps (bsamt_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
rent allowance (bho_s)	Y	0	0	0	0	12	12	12	12	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
GMI (bsa00_s)	Y	188	180	174	180	105	105	105	105	1.79	1.72	1.67	1.72	243	NaN	NaN	NaN	0.77	NaN	NaN	NaN
housing benefit (bho00_s)	Y	226	225	202	192	118	118	118	118	1.91	1.90	1.71	1.62	275	NaN	NaN	NaN	0.82	NaN	NaN	NaN
birth grant (bchba_s)	Y	40	40	40	39	28	28	28	28	1.42	1.42	1.42	1.40	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum support to vulnerable population groups (bsals_s)	Y	143	224	168	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
market pass (bsatm_s)	Y	0	0	2,597	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	3,200	NaN	NaN	NaN	0.81	NaN
Non-means-tested benefits (ils_bennt)																					
third child benefit (bchlg_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
non-contributory disability benefits (bdi)	N	79	79	79	79	79	79	79	79	1.00	1.00	1.00	1.00	174	NaN	NaN	NaN	0.45	NaN	NaN	NaN
education allowances for students (bed)	N	22	22	22	22	22	22	22	22	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
civil servants' family benefit (bfacs)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
large family benefit (bfalg_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor family benefits (bfaot)	N	9	9	9	9	9	9	9	9	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
sickness benefits (bhl)	N	10	10	10	10	10	10	10	10	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
unemployment insurance benefit (bunct_s)	Y	236	236	236	236	236	236	236	236	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor unemployment benefits (bunot)	N	11	11	11	11	11	11	11	11	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lifetime pension for mothers of many-children (pfa)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
birth grant (bchba_s)	Y	40	40	40	39	28	28	28	28	1.42	1.42	1.42	1.40	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum heating benefit (bhoxp_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
maternity benefits (bmact)	N	24	24	24	24	24	24	24	24	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
maternity benefit (bfama_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
parental benefit (bfapl_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
covid-19 MC employees (bwkmcee_s)	Y	0	0	0	0	297	297	297	297	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
covid-19 MC self-employed (bwkmcse_s)	Y	0	0	0	0	51	51	51	51	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
covid-19 MC employees (from data) (bwkmcee)	N	297	0	0	0	297	297	297	297	1.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
covid-19 MC self-employed (from data) (bwkmcse)	N	51	0	0	0	51	51	51	51	1.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum support to vulnerable population groups (bsals_s)	Y	143	224	168	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	75	NaN	NaN	NaN	2.24	NaN
youth pass (bsaya_s)	Y	0	0	186	186	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Continued...

	Source	Comments
Pensions (ils_pen)		
main old age pension (poa00)	-	-
supplementary old age pension (poacm)	-	-
minor old age pensions (poaot)	-	-
orphan's pension (psuor)	-	-
survivors' pensions (psuwd)	-	-
disability pension (pdi)	-	-
social pension (boanc_s)	GAO	-
compensations for survivor pension reduction & 13th pension (psuxp_s)	-	-
compensations for old age pension reduction & 13th pension (poaxp_s)	-	-
13th disability pension (pdixp_s)	-	-
temporary old age pension reductions (poard_s)	-	-
temporary supplementary old age pension reductions (poacmrd_s)	-	-
temporary orphan pension reductions (psuorrd_s)	-	-
temporary survivor pension reductions (psuwdrd_s)	-	-
temporary disability pension reductions (pdird_s)	-	-
lump-sum pension (αναδρομικά) (pxp04_s)	-	-
Means-tested benefits (ils_benmt)		
child benefit (bch_s)	GAO	-
school benefit, simulated (bched_s)	-	-

Continued...

	Source	Comments
same as above, non simulated (bched)	-	-
heating benefit (bht)	GAO	-
large family benefit (bfalg_s)	-	-
pensioners' social solidarity benefit (boact_s)	-	-
unemployment assistance for long-term unemployed (bunnc_s)	GAO	-
housing benefits (bho)	-	-
minor social assistance benefits (bsaot)	-	-
lump sum benefit to civil servants (bcsxp_s)	-	-
lump sum benefit for low-paid pensioners (boaxp_s)	2023 Budget report	-
social dividend 2014 (bsamttm_s)	-	-
2017-2019 social dividend (bsacm_s)	GAO	-
food stamps (bsamt_s)	-	-
rent allowance (bho_s)	-	-
GMI (bsa00_s)	GAO	-
housing benefit (bho00_s)	GAO	-
birth grant (bchba_s)	GAO	-
lump sum support to vulnerable population groups (bsals_s)	-	-
market pass (bsatm_s)	2023 Budget report	-
Non-means-tested benefits (ils_bennt)		
third child benefit (bchlg_s)	-	-
non-contributory disability benefits (bdi)	GAO	-
education allowances for students (bed)	-	-
civil servants' family benefit (bfacs)	-	-
large family benefit (bfalg_s)	-	-
minor family benefits (bfaot)	-	-
sickness benefits (bhl)	-	-
unemployment insurance benefit (bunct_s)	-	-
minor unemployment benefits (bunot)	-	-

Continued...

	Source	Comments
lifetime pension for mothers of many-children (pfa)	-	-
birth grant (bchba_s)	-	-
lump sum heating benefit (bhoxp_s)	-	-
maternity benefits (bmact)	-	-
maternity benefit (bfama_s)	-	-
parental benefit (bfapl_s)	-	-
covid-19 MC employees (bwkmcee_s)	GAO	-
covid-19 MC self-employed (bwkmcse_s)	GAO	-
covid-19 MC employees (from data) (bwkmcee)	-	-
covid-19 MC self-employed (from data) (bwkmcse)	-	-
lump sum support to vulnerable population groups (bsals_s)	2023 Budget report	-
youth pass (bsaya_s)	-	-

Table A3.6. Benefits - Annual amounts (million)

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Pensions (ils_pen)		26,290	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	25,484	NaN	NaN	NaN	1.03	NaN	NaN	NaN
main old age pension (poa00)	N	20,635	20,635	22,246	22,913	20,635	20,635	20,635	20,635	1.00	1.00	1.08	1.11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
supplementary old age pension (poacm)	N	1,270	1,270	1,369	1,410	1,270	1,270	1,270	1,270	1.00	1.00	1.08	1.11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor old age pensions (poaot)	N	338	338	365	376	338	338	338	338	1.00	1.00	1.08	1.11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
orphan's pension (psuor)	N	33	33	36	37	33	33	33	33	1.00	1.00	1.08	1.11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
survivors' pensions (psuwd)	N	3,067	3,067	3,306	3,405	3,067	3,067	3,067	3,067	1.00	1.00	1.08	1.11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
disability pension (pdi)	N	689	689	743	765	689	689	689	689	1.00	1.00	1.08	1.11	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
social pension (boanc_s)	Y	258	236	253	250	95	95	95	95	2.73	2.50	2.67	2.64	142	170	170	NaN	1.82	1.39	1.49	NaN
compensations for survivor pension reduction & 13th pension (psuxp_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
compensations for old age pension reduction & 13th pension (poaxp_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
13th disability pension (pdixp_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary old age pension reductions (poard_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary supplementary old age pension reductions (poacmrd_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary orphan pension reductions (psuorrd_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary survivor pension reductions (psuwdrd_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
temporary disability pension reductions (pdird_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump-sum pension (αναδρομικά) (pxp04_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Means-tested benefits (ils_benmt)																					
child benefit (bch_s)	Y	909	1,126	961	909	946	946	946	946	0.96	1.19	1.02	0.96	1,038	1,335	1,070	NaN	0.88	0.84	0.90	NaN
school benefit, simulated (bched_s)	Y	NaN	NaN	NaN	NaN	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
same as above, non simulated (bched)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
heating benefit (bht)	N	57	61	83	83	57	57	57	57	1.00	1.06	1.44	1.44	163	234	280	NaN	0.35	0.26	0.30	NaN
large family benefit (bfalg_s)	Y	NaN	NaN	NaN	NaN	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
pensioners' social solidarity benefit (boact_s)	Y	NaN	NaN	NaN	NaN	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
unemployment assistance for long-term unemployed (bunnc_s)	Y	21	19	19	19	19	19	19	19	1.08	0.99	0.99	0.99	39	NaN	NaN	NaN	0.53	NaN	NaN	NaN
housing benefits (bho)	N	7	7	7	7	7	7	7	7	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor social assistance benefits (bsaot)	N	29	29	29	29	29	29	29	29	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
lump sum benefit to civil servants (bcsxp_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum benefit for low-paid pensioners (boaxp_s)	Y	199	471	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	367	NaN	NaN	NaN	1.28	NaN	NaN
social dividend 2014 (bsamttm_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2017-2019 social dividend (bsacm_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
food stamps (bsamt_s)	Y	NaN	NaN	NaN	NaN	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
rent allowance (bho_s)	Y	NaN	NaN	NaN	NaN	7	7	7	7	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
GMI (bsa00_s)	Y	471	489	435	481	256	256	256	256	1.84	1.91	1.70	1.88	707	778	807	NaN	0.67	0.63	0.54	NaN
housing benefit (bho00_s)	Y	345	339	302	288	188	188	188	188	1.83	1.80	1.60	1.53	388	410	396	NaN	0.89	0.83	0.76	NaN
birth grant (bchba_s)	Y	81	81	108	107	46	46	46	46	1.74	1.74	2.33	2.30	153	160	160	NaN	0.53	0.50	0.68	NaN
lump sum support to vulnerable population groups (bsals_s)	Y	36	85	33	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
market pass (bsatm_s)	Y	NaN	NaN	662	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Non-means-tested benefits (ils_bennt)																					
third child benefit (bchlg_s)	Y	NaN	NaN	NaN	NaN	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
non-contributory disability benefits (bdi)	N	334	334	360	360	334	334	334	334	1.00	1.00	1.08	1.08	852	946	933	NaN	0.39	0.35	0.39	NaN
education allowances for students (bed)	N	26	26	26	26	26	26	26	26	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
civil servants' family benefit (bfacs)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
large family benefit (bfalg_s)	Y	NaN	NaN	NaN	NaN	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor family benefits (bfaot)	N	3	3	3	3	3	3	3	3	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
sickness benefits (bhl)	N	16	16	17	18	16	16	16	16	1.00	1.00	1.08	1.12	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
unemployment insurance benefit (bunct_s)	Y	640	504	552	586	472	472	472	472	1.36	1.07	1.17	1.24	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
minor unemployment benefits (bunot)	N	17	19	21	22	17	17	17	17	1.00	1.10	1.20	1.28	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lifetime pension for mothers of many-children (pfa)	N	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
birth grant (bchba_s)	Y	81	81	108	107	46	46	46	46	1.74	1.74	2.33	2.30	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
lump sum heating benefit (bhoxp_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
maternity benefits (bmact)	N	31	31	33	35	31	31	31	31	1.00	1.00	1.08	1.12	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
maternity benefit (bfama_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
parental benefit (bfapl_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
covid-19 MC employees (bwkmcee_s)	Y	0	0	0	0	406	406	406	406	0.00	0.00	0.00	0.00	2,017	39	NaN	NaN	0.00	0.00	NaN	NaN
covid-19 MC self-employed (bwkmcse_s)	Y	0	0	0	0	23	23	23	23	0.00	0.00	0.00	0.00	95	0	NaN	NaN	0.00	0.00	NaN	NaN
covid-19 MC employees (from data) (bwkmcee)	N	406	0	0	0	406	406	406	406	1.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
covid-19 MC self-employed (from data) (bwkmcse)	N	23	0	0	0	23	23	23	23	1.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
lump sum support to vulnerable population groups (bsals_s)	Y	36	85	33	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	112	80	NaN	NaN	0.76	0.42	NaN
youth pass (bsaya_s)	Y	NaN	NaN	28	28	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Table A3.7. Distribution of equivalised disposable income

	EUROMOD				External				Ratio			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Decile 1	3.18	3.29	3.20	3.14	2.60	2.70	NaN	NaN	1.22	1.22	NaN	NaN
Decile 2	5.04	5.15	5.13	5.01	4.80	4.80	NaN	NaN	1.05	1.07	NaN	NaN
Decile 3	6.15	6.20	6.16	6.09	6.00	6.10	NaN	NaN	1.03	1.02	NaN	NaN
Decile 4	7.15	7.21	7.17	7.13	7.10	7.10	NaN	NaN	1.01	1.01	NaN	NaN
Decile 5	8.18	8.18	8.20	8.17	8.20	8.10	NaN	NaN	1.00	1.01	NaN	NaN
Decile 6	9.28	9.26	9.28	9.24	9.40	9.30	NaN	NaN	0.99	1.00	NaN	NaN
Decile 7	10.51	10.49	10.50	10.53	10.70	10.50	NaN	NaN	0.98	1.00	NaN	NaN
Decile 8	12.15	12.02	12.09	12.16	12.40	12.00	NaN	NaN	0.98	1.00	NaN	NaN
Decile 9	14.53	14.50	14.47	14.61	14.80	14.40	NaN	NaN	0.98	1.01	NaN	NaN
Decile 10	23.83	23.70	23.79	23.92	24.10	25.10	NaN	NaN	0.99	0.94	NaN	NaN
Median	9,827	9,965	10,518	10,846	9,520	10,050	NaN	NaN	1.03	0.99	NaN	NaN
Mean	11,271	11,401	12,030	12,416	10,832	11,546	NaN	NaN	1.04	0.99	NaN	NaN
Gini	30.05	29.64	29.86	30.32	31.40	31.80	NaN	NaN	0.96	0.93	NaN	NaN
S80/20	4.66	4.53	4.59	4.73	5.20	5.28	NaN	NaN	0.90	0.86	NaN	NaN

Table A3.8. At-risk-of-poverty rates (%) by sex and age

	EUROMOD				External				Ratio			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
40% median HDI by sex												
Total	5.63	5.24	5.34	5.66	6.70	6.50	NaN	NaN	0.84	0.81	NaN	NaN
Males	5.80	5.38	5.42	5.72	6.70	6.50	NaN	NaN	0.87	0.83	NaN	NaN
Females	5.47	5.12	5.26	5.59	6.80	6.40	NaN	NaN	0.80	0.80	NaN	NaN
50% median HDI by sex												
Total	10.04	9.42	9.69	10.17	11.90	11.60	NaN	NaN	0.84	0.81	NaN	NaN
Males	9.81	9.40	9.56	9.84	11.60	11.30	NaN	NaN	0.85	0.83	NaN	NaN
Females	10.25	9.43	9.82	10.48	12.20	12.00	NaN	NaN	0.84	0.79	NaN	NaN
60% median HDI by sex												
Total	16.04	15.08	15.75	16.41	18.80	18.90	NaN	NaN	0.85	0.80	NaN	NaN
Males	15.53	14.58	15.15	15.72	18.20	17.90	NaN	NaN	0.85	0.81	NaN	NaN
Females	16.52	15.56	16.32	17.06	19.40	19.80	NaN	NaN	0.85	0.79	NaN	NaN
70% median HDI by sex												
Total	24.07	24.15	24.28	24.95	26.20	25.10	NaN	NaN	0.92	0.96	NaN	NaN
Males	23.15	23.31	23.34	24.04	25.30	23.70	NaN	NaN	0.91	0.98	NaN	NaN
Females	24.94	24.94	25.17	25.81	27.00	26.40	NaN	NaN	0.92	0.94	NaN	NaN
60% median HDI by age group												
0-15 years	18.01	16.76	17.16	17.89	22.20	20.90	NaN	NaN	0.81	0.80	NaN	NaN
16-24 years	21.42	20.27	20.61	21.39	26.50	27.40	NaN	NaN	0.81	0.74	NaN	NaN
25-49 years	15.27	14.37	14.88	15.31	18.30	17.50	NaN	NaN	0.83	0.82	NaN	NaN
50-64 years	15.82	15.29	15.81	16.10	17.60	17.40	NaN	NaN	0.90	0.88	NaN	NaN
65+ years	14.09	12.92	14.23	15.48	15.80	17.60	NaN	NaN	0.89	0.73	NaN	NaN

Table A3.9. Consumption taxes (non-calibrated) - Annual amounts (millions)

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Consumption-tax-related statistics non-calibrated (ils_extstat_ittncal)													
Aggregate expenditures non-calibrated (ils_extstat_ittncal_il_itt_expnc)													
01 Food and non-alcoholic beverages (il_x01)	Y	20,410	20,795	21,826	22,472	23,112	25,560	26,006	26,006	0.88	0.81	0.84	0.86
02 Alcoholic beverages, tobacco, etc. (il_x02)	Y	3,870	3,936	4,137	4,270	5,645	5,795	5,998	5,998	0.69	0.68	0.69	0.71
03 Clothing and footwear (il_x03)	Y	4,993	5,063	5,323	5,505	4,805	5,365	5,484	5,484	1.04	0.94	0.97	1.00
04 Housing, water and fuel (exc. imputed rent) (il_x04)	Y	12,893	13,128	13,775	14,178	15,264	16,933	17,046	17,046	0.84	0.78	0.81	0.83
05 Furnishings, household equipment, etc. (il_x05)	Y	3,966	4,025	4,235	4,370	3,938	4,483	4,445	4,445	1.01	0.90	0.95	0.98
06 Health (il_x06)	Y	12,212	12,413	13,070	13,427	6,054	6,663	6,976	6,976	2.02	1.86	1.87	1.92
07 Transport (il_x07)	Y	9,939	10,074	10,606	10,966	14,826	20,138	22,729	22,729	0.67	0.50	0.47	0.48
08 Communications (il_x08)	Y	3,916	3,976	4,178	4,311	5,493	5,706	5,747	5,747	0.71	0.70	0.73	0.75
09 Recreation and culture (il_x09)	Y	3,556	3,597	3,791	3,925	6,472	9,417	9,955	9,955	0.55	0.38	0.38	0.39
10 Education (il_x10)	Y	2,980	3,027	3,183	3,300	2,555	3,072	3,252	3,252	1.17	0.99	0.98	1.01
11 Hotels and restaurants (il_x11)	Y	9,697	9,866	10,370	10,699	16,159	22,929	26,635	26,635	0.60	0.43	0.39	0.40
12 Miscellaneous good and services (il_x12)	Y	6,400	6,496	6,828	7,050	9,875	11,543	14,188	14,188	0.65	0.56	0.48	0.50
Revenue from indirect taxes (non calibrated) (ils_extstat_ittncal_il_itt_revnc)													
VAT Total Revenue (il_tva)	Y	11,453	11,638	12,232	12,706	15,160	18,621	19,756	NaN	0.76	0.62	0.62	NaN
Excises Total Revenue (il_tx)	Y	4,736	4,098	4,526	4,532	6,502	NaN	NaN	NaN	0.73	NaN	NaN	NaN
Total excises (non calibrated) (ils_extstat_ittncal_il_itt_excnc)													
Revenues Excises 0211 - Spirits (il_tx0211)	Y	154	157	159	159	266	NaN	NaN	NaN	0.58	NaN	NaN	NaN
Revenues Excises 02121 - Still Wine (il_tx02121)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Revenues Excises 02122 - Sparkling Wine (il_tx02122)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Revenues Excises 0213 - Beer (il_tx0213)	Y	67	68	68	68	170	NaN	NaN	NaN	0.40	NaN	NaN	NaN
Revenues Excises 022 - Tobacco (il_tx022)	Y	1,718	1,746	1,832	1,882	2,125	NaN	NaN	NaN	0.81	NaN	NaN	NaN
Revenues Excises 045 - Energy (electricity, natural gas, coal-coke) (il_tx045)	Y	885	631	754	623	194	NaN	NaN	NaN	4.57	NaN	NaN	NaN
Revenues Excises 0451 - Electricity (il_tx0451)	Y	36	27	30	33	155	NaN	NaN	NaN	0.24	NaN	NaN	NaN
Revenues Excises 04521 - Natural Gas (il_tx04521)	Y	4	3	3	4	39	NaN	NaN	NaN	0.11	NaN	NaN	NaN
Revenues Excises All Energy (il_tx045_072)	Y	2,796	2,126	2,466	2,422	3,940	NaN	NaN	NaN	0.71	NaN	NaN	NaN

Table A3.10. Consumption taxes (calibrated) - Annual amounts (millions)

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Consumption-tax-related statistics calibrated (ils_extstat_ittcal)													
Revenue from indirect taxes (calibrated) (il_itt_revc)													
VAT Total Revenue (il_tva_na)	Y	14,975	18,117	19,574	21,210	15,160	18,621	19,756	NaN	0.99	0.97	0.99	NaN
Excises Total Revenue (il_tx_na)	Y	6,727	6,705	7,589	7,971	6,502	NaN	NaN	NaN	1.03	NaN	NaN	NaN
Total excises (calibrated) (il_itt_excc)													
Revenues Excises 0211 - Spirits (il_tx0211_na)	Y	225	231	230	239	266	NaN	NaN	NaN	0.85	NaN	NaN	NaN
Revenues Excises 02121 - Still Wine (il_tx02121_na)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Revenues Excises 02122 - Sparkling Wine (il_tx02122_na)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Revenues Excises 0213 - Beer (il_tx0213_na)	Y	98	100	99	103	170	NaN	NaN	NaN	0.58	NaN	NaN	NaN
Revenues Excises 022 - Tobacco (il_tx022_na)	Y	2,506	2,570	2,656	2,832	2,125	NaN	NaN	NaN	1.18	NaN	NaN	NaN
Revenues Excises 045 - Energy (electricity, natural gas, coal-coke) (il_tx045_na)	Y	1,047	813	932	803	194	NaN	NaN	NaN	5.41	NaN	NaN	NaN
Revenues Excises 0451 - Electricity (il_tx0451_na)	Y	43	35	37	42	155	NaN	NaN	NaN	0.28	NaN	NaN	NaN
Revenues Excises 04521 - Natural Gas (il_tx04521_na)	Y	5	4	4	5	39	NaN	NaN	NaN	0.13	NaN	NaN	NaN
Revenues Excises All Energy (il_tx045_072_na)	Y	3,898	3,803	4,603	4,797	3,940	NaN	NaN	NaN	0.99	NaN	NaN	NaN

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