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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). 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 France. 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 I6.0+. 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.

For more information see https://euromod-web.jrc.ec.europa.eu/

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1. BASIC INFORMATION

1.1 Basic information about the tax-benefit system

The tax-benefit system in France is mainly a national system where people are taxed the same way in whatever region they live. There are, however, exceptions for local taxes such as the land tax ("*taxe foncière"*) and the tax on occupied housing ("*taxe d'habitation"*), which are defined at the regional level. For local taxes, the rates are set every year by the local authorities.

The fiscal year runs from 1st of January to the 31st of December. The tax rules usually determine in November each year defining the tax policy of the next year. The state pension age was 60 up to 30/06/2011. After this date in 2011, reforms increased the state pension age between 62 and 67 for the full-pension. In June 2012, this reform was reversed. The amount of pension paid depends on the number of quarters worked. The state pension minimum age was 62 when the retiree have the necessary numbers of quarters of contribution which entitle to a full pension (if not, they can leave at 62 years old but they don't received a full pension, they have penalities. If they want to earn a full pension they have to work until they have the good number of contribution quarters, that is to say at an age older then 62 years old but less than 67). From 1st september 2023, a reform introduces a minimum retirement age of 64 years old. This reform will be applied progressively according to the year of birth of workers (63 years and 3 months in 2027 to 64 years in 2030, with 43 years of contribution).

The minimum school leaving age is 16 and the school obligation start at 3 (since September 2019, before it was 6). The conditions to be considered as a dependent child entitled to family benefits are being aged less than 20 years old and earning less than 55 % of the minimum wage (based on being employed 169 hours per month, looking at the gross wage) or to be disabled and under 20. These conditions are used for the calculation of social benefits.

For both benefit and tax purposes, lone parents are the parents of resident dependent children aged under 18, who

- Do not cohabit with others adults who are not dependant (disabled)
- Cohabit with adults with whom they cannot marry (mother, brother, cousin...)

The income tax system is a joint system. It is based on a tax group: the "foyer fiscal". Spouses are assessed together. People who are married or who have signed a contract of civil partnership (PACS) are considered spouses.

This tax group consists of one taxpayer plus the persons who are "fiscally" dependent like dependent children and dependent parents.

Children are considered to be fiscally dependent if:

- They are aged under 18 (automatically)
- They are aged under 21 (and they want to be declared with their parents)
- They are aged under 25 and they are students (and want to be declared with their parents)
- They are disabled (automatically whatever their age).

Other adults can be dependent if they are disabled.

All incomes of people in the tax group are combined to calculate income tax. In France, there is a family ratio system ("*quotient familial*") which is applied before the calculation of income

tax. This family ratio gives a weight to each person in the tax group. The family ratio is applied to the total income of the tax group before it is subjected to the tax schedule.

Taxpayers have to fill in a tax return with the total of the revenue of the previous year in April-May.

Until 2018, there were two different ways to pay income tax .

- A monthly withholding, evaluated based on the amount paid the previous year. The difference between the amount actually paid and the amount payable is adjusted in September.
- 3 payments in the year evaluated on the amount paid the previous year ("*Tiers provisionnel*"). The third payment is reassessed in September depending on the amount effectively due for the year.

From 2019, France introduces a withholding income tax, the tax is deducted by the employer directly from the wage of the employee, by the pension funds for pensioner and by the employment office ("*pôle emploi*") for the unemployed. For the self-employed professions, the levy can be paid monthly or quarterly, depending on their choice.

The amount of the withholding income tax depends on the tax rate that is proposed by administration and that is based on previous years' amount of income tax. The taxpayer may choose to increase or decrease this rate. The rate chosen by taxpayers is transmitted to employers or funds. The taxpayer must file a return of income in the spring, then, the rates will automatically be revised for the subsequent months.

Most benefits in France are indexed every year to take account of inflation (particularly for social minima). In the same way, tax brackets and the amounts involved in tax computation are re-evaluated to take account of inflation.

Most benefits are assessed monthly based on past income (of the previous year or the year before or of the last 3 months).

1.2 Social Benefits

There are broadly three types of social welfare payments in France: family benefits (means and non-means tested), replacement incomes and social assistance.

Family benefit (*"Allocations Familiales"*, AF): Family benefit is the main child benefit in France. It is granted to households with two or more dependent children. The amount varies with the number of children and their age. There is an income threshold since July 2015.

Mean-tested benefit for young children (*"Prestation d'accueil du jeune enfant"*, PAJE): This mean-tested benefit is for families with children under 3.

Means-tested family complement (*"Complément familial"*): This mean-tested allowance is targeted at families with at least three dependent children aged 3 and over.

Mean-tested education grant (*"Allocation de rentrée scolaire"*, ARS): is an annual lump-sum allowance for school children, paid in September. It is paid for each dependent child aged between 6 and 18. There is an income threshold.

Family support allowance ("*Allocation de soutien Familial*", ASF): is not mean-tested. The benefit is paid to children under 20 who are not raised by both parents.

Education allowance for handicapped children (*"Allocation d'Education de l'Enfant Handicapé"*, AEEH) : A family is entitled to the allowance if a child under 20 has at least a 79 % disability or a disability between 50 % and 80 % while attending special school, or if the condition requires the use of special education. The benefit amount is increased for lone parents.

Disabled benefit (*"Allocation aux adultes handicaps"*, AAH): is an allowance for disabled working age adults who cannot work because of disability. It concerns people over 20 and under 62 years of age. It is paid to persons who suffer from permanent disability of at least 80 % or between 50 % and 79 % and have difficulties in finding substantial and sustainable employment. There is an income threshold.

Solidarity Labour Income (*"Revenu de solidarité active"*, RSA): The RSA is a guaranteed minimum income and low-earnings top-up. It was tested in 34 counties from May 2007 and then generalized to the entire country from 1 June 2009. The RSA replaces the minimum income (RMI), the single parent allowance (API) (in this case the RSA is increased), and some lump-sum aids like the grant of temporary return to work.

Activity allowance (*"Prime d'activité"*): This allowance was created from 1 January 2016 and replaces the RSA activity allowance and the PPE tax credit. There is an income threshold.

Back-to-work allowance (*"Prime de retour à l'emploi"*): Until 31 december 2022, a back-to-work financial aid is allocated to the beneficiaries of RSA who find a job.

Solidarity allowance for the elderly (*"Allocation de solidarité aux personnes agées"*, ASPA): provides a minimum pension for persons aged 65 and over with limited resources. It varies according to household income.

Since 1st of January 2006, the minimum pension for elderly (*"Minimum vieillesse"*, MV) was replaced by the solidarity allowance for the elderly (*"Allocation de solidarité aux personnes agées"*, ASPA). ASPA replaces a dozen benefits merging into a single allowance (like the allowance for elderly employed persons, allowance for elderly non-employed persons, allowance for mother etc.).

Means-tested benefit for widows/widowers: Survivor Minimum Pension (*"Allocation veuvage"*): is a minimum pension limited in time (2 years) to a spouse of a previously insured person. It applies for persons who were widowed at less than 55 years old with resources under a threshold income.

Personalized housing benefit (*"Aide personnalisée au logement"*, APL): is an aid granted to people whose principal residence meets certain conditions, to help reduce expenses related to their principal primary residence. It applies only to tenants living in subsidized housing or owners who have to repay certain types of loans (state-subsidized loan). The amount depends on the resources and the rent paid or loan repayment.

Housing benefit (*"Allocation logement"*, AL): applies to people not eligible for the APL because their principal residence does not respect some conditions of the APL. This allowance is divided into *"Allocation de logement familiale"*, ALF and *"Allocation de logement sociale"*, ALS. ALF is for tenants and owners if they are eligible for other benefits like the Family benefit, Family support allowance, etc. ALS is granted only to tenants and changes according to resources of the household and the number of dependent persons.

Contributory Pensions: The pension system in France is based on a PAYG system, employees contributions are used to pay pensions for retirees. It is managed by a number of bodies known as pension funds and has two components: the basic pension and supplementary pension. Retirees receive a pension which is proportional to the amount of contributions made by them during their career.

Unemployment Benefit: the unemployment compensation system consists of two regimes: the unemployment insurance ("*Régime d'assurance chômage"*, RAC) and the National Solidarity Plan (*"Régime de solidarité nationale"*, RSN). The RAC is funded by contributions from employees and employers. RSN compensates the unemployed who have exhausted their rights to unemployment insurance.

The insurance agreement in force at the time of becoming unemployed defines the maximum duration of benefits and the amount of the allowance based on past wages.

Sickness Benefit: The Health Insurance body (*"l'Assurance Maladie"*) is one of the four branches of the *"Securité Sociale"* (the French social protection system). It manages, at the national level, the disease and accident branches and includes the three main insurance schemes (general, agricultural and independent). It provides protection against five risks: sickness, maternity, disability, death, accidents / illnesses. Its funding is mainly provided by social security contributions on wages (employee and employer charges) as well as social contributions (CSG). Contributors (employees, unemployed, pensioners, students) and their spouses and children are insured. Universal health coverage (CMU, with income threshold) offers basic health insurance for everyone (especially for people who do not meet the criteria for entitlement to Social Security) and supplemental health coverage for people whose incomes are lower.

Parental leave (*"congé maternité"*, *"congé paternité"*, *"congé d'adoption"*): The Health Insurance (*"l'Assurance Maladie"*) also provides a replacement income in case of maternity, paternity or adoption in the same conditions of sickness benefit.

- *Not strictly benefits*

Student grants (*"Bourse étudiante"*): The grant is non-taxable and is means-tested on parental income. Student must be under 28 years on 1 October of the academic year, and the training must qualify to receive the grant. The aid is then awarded based on three criteria: household income tax, the number of children in the family's tax burden and the remoteness of the place of study.

1.3 Social contributions

General Social Security Contribution (*"Contribution sociale généralisée"*, CSG): The general social security contribution is a levy with a social purpose. The CSG is allocated to the social security budget and, specifically, to the national family fund, the old-age solidarity fund and compulsory health insurance schemes. The contribution is paid on the income of residents of France and individuals subject to the a French compulsory health insurance scheme.

Social security debt repayment contribution (*"Contribution au remboursement de la dette sociale"*, CRDS): The CRDS is intended to clear the deficits of the social security system. Like the CSG, it is paid by individuals who are domiciled in France for tax purposes and who contribute to the French compulsory health insurance scheme.

Social contribution and other additional contributions: Individuals are liable to a social contribution (*"Prélèvement social"*), introduced in 1998, on income from personal assets and investment income. The proceeds are allocated to the old-age solidarity fund, the national retirement pension fund and the pension reserve fund. An additional contribution (*"Contribution additionnelle au prélèvement social"*) on income from personal assets and investment income, allocated to the national solidarity fund for autonomy (CNSA), was introduced in 2004. In 2009, a new additional contribution (*"Contribution additionnelle RSA"*) on income from personal assets and investment income was created, intended to fund the earned-income supplement (*"revenu de solidarité active"*, RSA). In 2013, this contribution has been removed and replaced by the solidarity contribution (*"Prélèvement de solidarité"*) based on the same incomes. In 2018, all this social contributions on capital income is 17.2 % (to wich is added a flat tax of 12.8 %).

The collection methods for contributions are similar to those for the CSG relating to the same income. These contributions are not deductible from the income tax base.

Employee social contributions: Employee social contributions are aimed at financing the Social Security System which protects employees against the financial consequences of differents risks (illness, accident, disability, unemployment) or situations (old age, widowhood). These contributions are taken on all employee wage and related incomes, on the whole gross income. There are several regimes for different types of workers.

Self-employed social contributions: Like employees, the self-employed have to pay social contributions on their gross profit into the Social Security System. There are three types of self-employed (farmers, artisans and industry/trader workers) whose contribution rate are quite different.

Employer social contributions: Employers are liable for social contributions for cover their employees against the financial consequences of old-age, illness, unemployment etc. In addition, there are social contributions used to finance the social system in differents areas (family, housing) and to provide employees with the opportunity to be trained (professional training, apprenticeship).

1.4 Taxes

To finance replacement incomes, family benefits and social assistance, a number of taxes and contributions have to be paid. Employees and employers pay contributions on their wages to cover a variety of risks, old age pensions for instance whereas family benefits, sickness (since 2018), unemployment insurance (since 2019) and housing are financed only by employer contributions.

Personal Income Tax (*"Impôt sur le revenu des personnes physiques"*, IRPP) :

Personal income tax is, in principle, a comprehensive tax levied on an individual's total income in a given year. All incomes, regardless of origin, are aggregated to give an overall (net of social contributions for the wage part) income to which a single tax scale is applied. The scale has progressive income bands. However, there are many provisions in the method for calculating income tax that allow taxation to be adjusted to personal circumstances. Personal income tax is assessed annually on a tax unit's (a *"foyer fiscal"*) taxable income in a calendar year. The system of taxation is based on the family quotient: the sum of all household incomes are added together and then divided by the number of shares before being submitted to the tax schedule.

Value Added Tax (*"Taxe sur la valeur ajoutée"*, TVA): There are 4 main rates: the standard rate of 20 % since 01/01/2014 (19.6 % before) applies to all taxable transactions for which no other rate exists, the reduced rate of 10 % since 01/01/2014 (before it was 7 % since 01/01/2012) applies to goods and services such as restaurants, hotels, transport etc. The second reduced rate of 5.5 % applies to food, utilities etc. from 01/01/2012. Before this date, the reduced rate of 5.5 % applied to restaurants, hotels etc. and food utilities etc. The specific rate of 2.1 % essentially concerns certain medications and certain cultural products.

Excise Duty (*"Droit d'accises"*): They are charged on alcohol and alcoholic beverages, tobacco and fuel (TIPP).

Wealth tax ("*Impôt de solidarité sur la fortune"*, ISF): is an annual progressive tax paid by individuals on account of their ownership of personal assets, when the net value of these exceeds a certain amount (1,300,000 € Euros since 1 January 2012). The tax is assessed by household, which comprises spouses, cohabiting partners and minor children. This tax has been removed in 2018 and replaced by the tax on real estate wealth (IFI).

Tax on real estate Wealth ("*Impôt sur la fortune immobilière"*, IFI): is an annual progressive tax paid by individuals because of their real estate ownership (except professional real estate) when the net value of these net real estate exceeds a certain amount (1,300,000 € Euros). The tax is assessed by household, which comprises spouses, cohabiting partners and minor children. There is a 30 % abatement on the principal residence value of the tax household.

Exceptional contribution on high incomes (*"Taxe exceptionnelle sur les hauts revenus"*): is an annual tax based on the same incomes that personal income tax. It concern people whose incomes (incomes as "*revenu fiscal de reference, RFR*") are higher than EUR 250, 000 for singles and EUR 500 000 for couples.

Inheritance tax ("*Droits de succession"*): It is charged using a progressive tax schedule. There are many exemptions and deductions related to the type of relationship with the previous owner (spouse, children) and the nature of the donation or bequest.

Housing Tax (*"Taxe d'habitation"*, TH): Residential premises are liable for housing tax. The tax is paid by any person who, on 1 January of the year of taxation, has taxable premises at their disposal, whatever their status (owner, tenant, free occupier, but only one tax by premises independantly of the number of person living here). Housing tax is assessed on the value of residential premises resulting from valuations by the authorities. The amount of tax is calculated by multiplying the tax base by the rates voted by each beneficiary local authority for the year in question. In 2018, the government decided to reform the housing tax only for the main residence in order to exclude about 80 % of the taxable households of the housing tax in 2020, for eligible household depending on their income (RFR), the *"taxe d'habitation"* was reduced by 30 % in 2018, 65 % in 2019 and will be exonerated by 100 % in 2020 and after. For the remaining 20 % of wealthiest households, it will be from 2021 to 2023 (30 % in 2021, 65 % in 2022 and 100 % in 2023 and after).

Table 1.1- Applicable thresholds for housing tax exoneration [2020-2022]

Family quotient (in number of shares)	Maximum RFR		
	2020	2021	2022
1	27 706 €	27 761 €	28 150 €
1,5	35 915 €	35 986 €	36 490 €

2	44 124 €	44 211 €	44 830 €
2.5	50 281 €	50 380 €	51 085 €
3	56 438 €	56 549 €	57 340 €
3.5	62 595 €	62 718 €	63 595 €
Each additional 0.5	6 157 €	6 169	6 255

Land Tax (*"Taxe Foncière"*, TF): is levied annually on land situated in France. Taxable property includes permanent constructions perpetually attached to the ground such as premises intended to accommodate people (residential properties) or business assets (workshops, sheds) etc. The tax base is equal to 50 % of the value, which is regularly updated by the authorities. The amount of tax is calculated by multiplying the tax base by the rates voted by each beneficiary local authority for the year in question. The tax is paid by the owner of the property at 1 January of the year of taxation.

Waste Tax (*"Taxe sur les ordures ménagères"*): Communes that collect household waste may introduce a household waste collection tax. When responsibility for waste disposal has been transferred to a public establishment for intercommunal cooperation, it may levy a tax provided that it at least collects the waste. The tax is assessed on the cadastral income used as the base for property tax on developed land.

1.5 Temporary support measures following the Covid-19 crisis

2020

In May and November 2020, an exceptional solidarity aid for poor households linked to Covid-19 crisis was paid to beneficiaries of RSA, ASS or APL. This allowance was paid twice in one lump sum on May 15 and November 15. The government forecasts that 4.1 million of households and 5 million of children could benefit of the allowance for a total cost of 900 million.

Planned reforms were postponed to later date, it's the case for unemployment benefit and housing benefit (see below in the sections specific to each benefit).

Several other measures have been taken in France to reduce the effects of the Covid-19 crisis, such as an exceptional solidarity fund to compensate firms and self-employed for turnover losses higher than 50 %, when comparing March/April/May 2020 to the same months of the previous year. Eligible firms and self-employed are those with less than 10 employees, turnover below 1 million EUR and taxable profits below 60,000 EUR. The maximum compensation is 1500€ per month. Firms and self-employed fullfiling certain conditions can get an additional amount between 2000€ and 5000€.

Financial assistance can be granted to self-employed (artisans-commerçants and micro-entrepreneurs) with a maximum of 1250€ (once a year), the amount given depend on the previous contributions paid by the self-employed). They can have a postponement of social and tax contributions (exoneration for micro company less then 10 employees during the lockdown period). Struggling companies can obtain government guaranteed loans or can reschedule their loans payments with their bank.

Workers can receive sickness benefit if they cannot telework or have to take care of their children while the schools are closed (until April 30, after they are in partial unemployment). The use of partial unemployment is facilitated (simplification and reinforcement), the firm pays 70 % of the gross wages (100 % for minimum wage, SMIC, and less) and will be reimbursed by the administration.

The partial unemployment is facilited and the eligibility conditions are simplified (see section 2.8 and 2.9).

From November 2020 to May 2021, an exceptional monthly allowance is granted to precarious workers who combine short contracts and unemployment periods. This allowance garantees a minimum income of 900 € per month (see section 2.8 and 2.9).

2021

Several 2020's measures have been renewed in 2021 to reduce the effects of the Covid-19 crisis, such as an exceptional solidarity fund to compensate firms and self-employed for turnover losses (the rate of loss to be eligible depends on the sector of activity). The amount of the solidarity fund depends on the sectors and on the previous turnover.

Financial assistance can be granted to self-employed (artisans-commerçants and micro-entrepreneurs) with a maximum of 1250€ (once a year), the amount given depend on the previous contributions paid by the self-employed). They can have a postponement of social and tax contributions (exoneration for micro company less then 10 employees during the lockdown period). Struggling companies can obtain government guaranteed loans or can reschedule their loans payments with their bank.

Workers can receive sickness benefit if they cannot telework or have to take care of their children while the schools are closed. The use of partial unemployment is facilitated (simplification and reinforcement), at the beginning in 2020, the firm pays 70 % of the gross wages (100 % for SMIC and less) and will be reimbursed by the administration but not fully since June 2020 the rate reimbursed has decreased to 60 % of the 70 %, and decrease regularly in June, July and August 2021 (see section 2.8 and 2.9).

The partial unemployment is facilited and the eligibility conditions are simplified (see section 2.8 and 2.9).

From November 2020 to May 2021, an exceptional monthly allowance is granted to precarious workers who combine short contracts and unemployment periods. This allowance garantees a minimum income of 900 € per month (see section 2.8 and 2.9).

2022

Following the resumption of the Covid-19 epidemic in December 2021 and January 2022, some measures taken in previous years have been renewed and reinforced in the most affected sectors subject to the ban on receiving the public or to the imposition of gauging (culture, tourism, events, nightclubs, hotels and restaurants, caterers, indoor intertainment) (see section 2.8 and 2.9 for details).

2. SIMULATION OF TAXES, SOCIAL INSURANCE CONTRIBUTIONS AND BENEFITS IN EUROMOD

2.1 Scope of simulation

We do not simulate the entire tax-benefit system in France in EUROMOD. In some cases, adequate data to feed into the simulations is not available. Some examples include lack of information on the contribution history to simulate long-term contributory benefits such as pensions, lack of information on wealth to simulate property taxes etc. As a result, some instruments are not simulated. Instead, the values reported by responded households are taken directly from the underlying microdata. Information about which tax-benefit instruments are simulated and which not, along with information about why some instruments could not be simulated is displayed in tables 2.1 and 2.2.

Table 2.1- Simulation of benefits in EUROMOD [2020-2023]

Benefit	Variable name	2020	2021	2022	2023	Comments
Family benefit (AF)	bch00_s	S	S	S	S	
Means-tested allowances for young children (PAJE)	bchyc_s	S	S	S	S	
Free choice of activity-PreParE(PAJE)	bchcc_s	S	S	S	S	
Large family benefit (CF)	bchlg_s	S	S	S	S	
Means-tested education benefit (ARS)	bched_s	S	S	S	S	
Family support allowance (ASF)	bchor_s	S	S	S	S	Benefit can only be simulated for widows/widowers with underage children; children where one parent has deserted them, as well as children where both parents have died/abandoned the child cannot be identified in the data
Special education allowance (AEEH)	bchot	IA	IA	IA	IA	No information on the disability status of children; included in other benefits for children
Disability benefit (AAH)	bdi_s	S	S	S	S	
Solidarity labour income (RSA)	bsa00_s	S	S	S	S	
Activity bonus	bsawk_s	S	S	S	S	
Return to work allowance	bsaot	IA	IA	IA	IA	No information about previous status before work; no information about continuous employment
Solidarity allowance for the elderly (ASPA)	bsaoa_s	PS	PS	PS	PS	Eligibility is based on observed receipt in the data; although eligibility can be simulated fully, non-take-up of the benefit leads to severe overestimation
Survivor minimum pension (AV)	bsuwd	I	I	I	I	Simulated but turned off in the baseline; no information about when a person became widowed
Housing benefit (APL)	bhoot	IA	IA	IA	IA	No information on subsidized loans; no information on eligible subsidized tenancies; not available informations on asset values
Housing benefit (AL)	bhotn_s	S	S	S	S	Benefit simulated for rent paying tenants only; benefits paid for owners are included in bhoot; not available informations on asset values
Housing benefit (AL)	bhoot	IA	IA	IA	IA	Benefits for homeowners cannot be simulated; they are included alongside other housing benefits; not available informations on asset values

Contributory unemployment insurance benefit (ARE)	bunct_s	PS	PS	PS	PS	No information on contribution history; eligibility approximated by receipt in the data
Means-tested unemployment assistance benefit (ASS)	bunmt_s	PS	PS	PS	PS	Eligibility is based on observed receipt in the data; eligibility conditions can be simulated only approximately because of lack of information on previous contributions and previous receipt of the contributory unemployment insurance benefit
Contributory pensions	poa	I	I	I	I	No information on contribution history and on past wages
Sickness benefits (AM)	bhl	I	I	I	I	No information on days of sickness; no information on previous contribution history
Disability pension	pdi00	I	I	I	I	No information on degree of disability; no information on contribution history
Survivor pensions	psu	I	I	I	I	No information about contribution history
Energy bonus		E	E	E	E	Not yet included in the microdata
Partial unemployment linked to Covid-19	bwkmcee_s	PS	PS	PS	PS	Eligibility rules are not simulated, since they refer to firms. Allocation of workers is done randomly
Self-employment compensation linked to Covid-19	bwkmcse_s	PS	PS	PS	PS	Eligibility rules are partially simulated, but allocation among the eligible is done randomly
Exceptional support for self-employed linked to Covid-19 (Aide CPSTI RCI COVID-19)	bseec_s	S	S	S	S	Simulation uses current self-employed social insurance contributions as a proxy of previous contributions, which are not available in the dataset
Social assistance linked to Covid-19	bsaeccm_s	S	S	S	S	
Energy Bonus	bhoey_s	S	S	S	S	
Inflation compensation	binxp_s	-	-	S	S	Exceptional 2021-2022 lump-sum to compensate inflation increase
Purchasing power public servants	binps_s	-	-	-	S	Exceptional 2023 lump sum to purchase power of some public servants

Notes: "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; "IA": not simulated but *included in an aggregate variable* from the microdata;"PS" *partially simulated* as some of its relevant rules are not simulated; "S" *simulated* although some minor or very specific rules may not be simulated.

Table 2.2- Simulation of taxes and social insurance contributions in EUROMOD [2020-2023]

Tax/SIC	Variable name	2020	2021	2022	2023	Comments
Personal income tax (IRPP)	tin_s	S	S	S	S	Some tax allowances and tax credits cannot be simulated due to absence of relevant information in the data
Exceptional contribution on high incomes	tinto_s	S	S	S	S	Simulation is based in the current year only and no account of the averaging with the previous 2 years is taken into account
Generalised social insurance contributions (CSG)	tscxc_s	S	S	S	S	
Insurance contributions for the repayment of the deficit (CRDS)	tscdf_s	S	S	S	S	
Social insurance contributions paid on capital income	tsckt_s	S	S	S	S	
Social insurance contributions paid by employees	tscee_s	S	S	S	S	Only the general 'regime' is simulated; it is not possible to identify employees belonging to the various 'regimes'

Social insurance contributions paid by employers	tscer_s	S	S	S	S	Only the general 'regime' is simulated; it is not possible to identify employees belonging to the various 'regimes'
Social insurance contributions paid by the self-employed	tscse_s	S	S	S	S	
Wealth tax (ISF)	twl	-	-	-	-	Detailed information about asset values is not available in the underlying input dataset
Real estate wealth tax (IFI)	tpr	I	I	I	I	Detailed information about asset values is not available in the underlying input dataset
Housing tax (TH)	tmu	E	E	E	E	Detailed information about housing values and municipality of residence are not available in the underlying input dataset

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; "S" policy is *simulated* although some minor or very specific rules may not be simulated.
* The EUROMOD input data based on EU-SILC does not include the land tax. The EUROMOD input data based on national SRCV (e.g. 2012) does include the land tax.

2.1.1 Partially simulated tax-benefit components

Some benefits use eligibility information from the data due to lack of information in the data to simulate all eligibility rules and are therefore only partially simulated. This is the case for the Solidarity allowance for the elderly (bsoa_s), Contributory unemployment insurance benefit (bunct_s) and Means-tested unemployment assistance benefit (bunmt_s) in France. These benefits are only simulated for those with receipt of the benefit in the data. Covid-19-related Monetary compensations for employees (bwkmcee_s) and self-employed (bwkmcse_s) are also partially simulated, since some of the eligibility conditions cannot be simulated and individuals are randomly allocated using external statistics.

2.2 Main policy changes

- *Main policy changes between 2019 and 2020*

Since November 2019, the government instaured changes in unemployment insurance benefit (ARE); This reform will be in two stages. First stage in November 2019, the duration of payment of the benefit, the conditions of access to the benefit and the minimum necessary working period changed. The self-employed can now access to the benefit and new possibilities are offered to those who have resigned to access to the benefit. The amount of the benefit has also been changed, but only for those who earn more than €4500 per month (this part of the reform has been temporarily suspended until January 2021 because of the Covid-19 crisis). In a second stage, in April 2020, the calculation of the benefit amount should have been changed but this part of the reform was postponed because of Covid-19 crisis.

The family benefit (AF) and the housing benefit (APL) increase less than inflation, only 0.3 % of increase in 2020 for an inflation 2019 around 1.1 %. ASPA has been revalorised around 35€. ARS has been exceptionally increased by 100 € per child at school due to the Covid-19 crisis.

Regarding the housing benefits, the benchmark period for income should have been changed at 1st of April but has been postponed.The reform should decrease the current time lag. For instance, the current policy rules stipulate that the housing benefits for 2020 are calculated using incomes from 2018, the income period of reference is then income n-2. From 2020, the housing benefit will use more recent incomes, the benefit will be calculated on the income of the previous quarter for a better match between current needs and the benefit amount paid. Because

EUROMOD uses the income of the same year when simulating the entitlement to a benefit, this policy change will not influence EUROMOD simulations. The reform was postponed in 2019 to April 2020, and in April 2020, the Covid-19 crisis led to a postponement probably to January 2021.

For the second year, an exceptional bonus for purchasing power can be paid by employers who want to their employee. This bonus only concerns employees whose wages are under 3 SMIC (in gross). The bonus is exempt from all social contributions and income tax, the bonus can go up to 1000€. There is however something new in 2020, the payment of this bonus is subjected to a profit-sharing agreement within the company and must be paid before July. This bonus is not implemented in EUROMOD due to the lack of information on the number of beneficiaries and to the amount of the bonus.

Regarding income tax, a reform has changed the income brackets and the associated marginal rates for the second income tax bracket (which goes from 14 to 11 %) and whose income ceiling has been lowered, that has led to a reduction in the income tax of a part of the middle class (according to the government, 17 million of households should benefit from this reduction which would correspond to a drop in income tax of 5 billion Euros). Similarly, the calculation of the « décote» and its ceilings has been modified.

Pensions have been indexed to the inflation rate for retirees with low pensions (pension less than 2000 in gross per month, 1 % of indexation for these households against 0.3 % for the others).

Since 2020, overtime pay is fully exempted from PIT. Until 2019, only the first 5,000 EUR/year were exempted.

Several social measures have been taken in France to reduce the effects of the Covid-19 crisis including an exceptional solidarity aid for poor households for beneficiaries of RSA, ASS or APL and the postponement of planned reforms (see specific section of the beneficiary for details).

For workers, sickness benefit can be granted during lockdown for those who can't telework and partial unemployment is facilitated.

For small firms and self-employed whose turnover is impacted by the Covid crisis, postponement of social tax and contribution can be granted, and under conditions, financial assistance can be granted (see below in section 2.7).

- *Main policy changes between 2020 and 2021*

Due to the Covid-19 crisis, the planned unemployment benefit reform (change in the way the benefit is calculated) has been postponed and was implemented in October 2021, changing the benefit's amount and leading to a decrease in the monthly benefit (but the benefit is paid for a longer period than before). A second feature of the reform concerns people whose gross wages are over 4500 € per month. From the 7th month onwards, their unemployement benefit is reduced by 30 %.

The PSS ("Plafond de la sécurité sociale") was not revalued in 2021 and social contributions have not changed for employees, a little bit for self-employed.

The critical sanitary situation led to a quasi-freeze of all the social benefits, with an increase of only 0.1 % while the inflaton rate was around 0.5 % in 2020. A reform previously postponed on housing benefit was implemented on January 1, 2021, it modifies the income reference

period for the calculation of the benefit (income from the previous 12 months instead of those n-2 and reassessment of eligibility every 3 months).

Regarding old age pensions, there is an increase of 0.4 % from January 1, 2021.

The increase of 0.99 % of the SMIC leads to an increase of the general reduction of employers contributions ("reduction Fillon") for the eligible employees.

The exceptional 2020's covid-19 measures to avoid high unemployment have been renewed (it's the case for solidarity fund, use of partial unemployment, the allowance for precarious workers, the guaranteed loans, the postponement of some taxes and contributions, the only measure that has not been renewed is the exceptional solidarity aid for beneficiaries of RSA, ASS or APL) to try to absorb the crisis impact (paradoxically, this led to a decrease in business failures in 2020 compared to previous years, despite the crisis).

To cope with rising energy and fuel prices, a lump sum of 100 € called "indemnité inflation" was paid in one go between December 2021 until February 2022, to people over 16 years old with net monthly incomes of less than 2000 €. This is applied to people in activity (employees, self-employed), retired, unemployed, ill or in maternity/paternity, recipients of minimum social benefits (like RSA, AAH or invalidity beneficiaries…), apprentices, students on scholarship and students receiving housing benefits.

- *Main policy changes between 2021 and 2022*

For the second year, the PSS has not been revalued in 2022 and social contributions have not changed for employees, employers and very little for self-employed.

In 2022, a first increase in the SMIC of 0.99 % took place in January 2022, but due to high inflation, a second increase of 2.65 % also planned from May, which leads to an increase in the general reduction of employers contributions ("reduction Fillon") for the eligible employees.

Regarding old age pensions, there is an increase of 1.1 % from January 1, 2022.

In April 2022, social benefits increased by 1.8 % to compensate the inflation caused by higher energy prices.

A teleworking tax-free allowance is given (2.5 €/ day of teleworking with a ceiling of 55 €/ month and 580 €/year), which is not implemented in EUROMOD due to the lack of information on teleworking.

Policy changes related with inflation:

- From the 1st of July 2022, a further 4% increase in several social and family benefits is provided.
- A new 2.01 % increase in SMIC was instaured from August. This amounts to 1678.95€ per month and 11.07€ per hour.
- The Government decided to increase the pensions by 4 % from the 1st of July.
- An Exceptional Inflation compensation is given to recipients of social minimas (RSA, AAH, ASPA, AV, ASS, activity allowance, housing benefits or invalidity), apprentices, and scholarship students. It consists in 100 € one-off payment and November or December, and an additional 50 € for each dependent children in the household.

- An Exceptional energy voucher of €100 to €200 will be paid to 40% of the most modest households from December 2022.

- *Main policy changes between 2022 and 2023*

The PSS has been revalued by 6.9% in 2023 and social contributions have not changed for employees, employers and self-employed.

In 2023, a first increase in the SMIC of 1.81 % took place in January 2023, but due to high inflation, a second increase of 2.22 % also occurs in May, which leads to an increase in the general reduction in employers' contributions ("reduction Fillon") for the eligible employees.

An exceptional increase in unemployment benefit of 1.9% took place in April 2023 to reduce the inflation impact. From February 2023, a reform reduced the duration of the ARE by 25% in case of good on labour market conditions.

Regarding old age pensions, there is an increase of 0.8 % from January 2023 (after the two rises of 2022, 1.1% in January and 4% in July)

In April 2023, social benefits increased by 1.6 % to compensate for inflation caused by higher energy prices. The one-year inflation rate from April 2022 was estimated as +5.6%, so after the anticipated +4% increase in July 2022, the government decided to increase benefits by +1.6% to compensate inflation.

The 2023 energy voucher (between 48 EUR and 277 EUR) is given to the poorest 20% of households with an RFR/CU<11 000 EUR. In 2023, a new energy voucher was conditionally allocated to poor households that use wood to heat their home.

An exceptional allowance of 100 EUR on their petrol expenses was granted to poor workers under income conditions and on request.

From 1st October, the income conditions for the means-tested disabled benefit (AAH) have changed. Only the recipient's income is taken into account, independently of his/her spouse's income.

From 1st October, the housing benefits increase by 3.5%.

To limit the impact of the increase in income granted to compensate for inflation, the income tax brackets has been raised by +5.4%.

For public servants, the basic salary has been increase by 1.5 % from 1st July 2023 (after an increase of 3.5% in July 2022) and an exceptional purchasing power bonus for certain public servants has been introduced, subject to income conditions, and paid in a single lump sum in the last quarter of the year.

2.3 Order of simulation and interdependencies

- *Order of simulation in 2020- 2023*

The order in which the components of the tax benefit system in France are simulated is shown in Table 2.3 below. The order in which simulations take place is largely determined by the existing interactions within the system. For example, net taxable income which serves to determine eligibility for many means-tested benefits is simulated before these benefits. Contributory unemployment benefits which are liable to income taxation are simulated before income tax, etc.

Table 2.3- EUROMOD Spine: order of simulation, [2020- 2023]

Policy	2020	2021	2022	2023	Description	Main output
Setdefault_fr	on	on	on	on	Definition of default values for variables not present in the input dataset	
uprate_fr	on	on	on	on	Uprating of input data	
IlsDef_fr	on	on	on	on	Standardized income concepts	
Ilsudbdef_fr	on	on	on	on	Standard UDB income concepts	
constdef_fr	on	on	on	on	Definition of constants used in the model	
ildef_fr	on	on	on	on	Definition of standardized income lists	
tudef_fr	on	on	on	on	Definition of assessment units used in the model	
random_fr	on	on	on	on	Generation of random numbers for the take-up of RMI/RSA	i_takeup & i_takeup2
transLMA_fr	off	off	off	off	Modelling labour market transitions	
yem_fr	switch	switch	switch	switch	Minimum wage	Yem
neg_fr	on	on	on	on	Recoding of negative values of self-employment income	Yse
yemcomp_fr*	on	on	on	on	Wage compensation scheme Covid-19	bwkmcee_s
ysecomp_fr*	on	on	on	on	Self-employment compensation scheme Covid-19	bwkmcse_s
bmact_fr	switch	switch	switch	switch	Maternity leave benefit	bmact_s
bpact_fr	switch	switch	switch	switch	Paternity leave benefit	bpact_s
bunct_fr	on	on	on	on	Unemployment insurance benefit (Allocation de retour à l'emploi ARE)	bunct_s
bchor_fr	on	on	on	on	Family Support Allowance (Allocation de soutien familial ASF)	bchor_s
tscee_fr	on	on	on	on	Employee social insurance contributions	tscee_s
bch00_fr	on	on	on	on	Universal child benefit (Allocation Familiale AF)	bch00_s
tscer_fr	on	on	on	on	Employer social insurance contributions	tscer_s
tscse_fr	on	on	on	on	Self-employed social insurance contributions	tscse_s
bseec_fr	on	on	on	on	Exceptional support for self-employed linked to Covid-19	bseec_s
tsckt_fr	on	on	on	on	Social insurance contributions paid on capital income	tsckt_s
bsuwd_fr	off	off	off	off	Minimum survivor pension (Allocation veuvage AV)	bsuwd_s
tinty_fr	on	on	on	on	Net taxable income	il_rniy
tscxc_fr	on	on	on	on	Generalized social insurance contributions (Contribution Sociale Généralisée CSG)	tscxc_s
tinkt_s	on	on	on	on	Personal income tax when using flat rate taxation of capital income (Prélèvement forfaitaire non libératoire PFL)	temp_tingt1
tin_fr	on	on	on	on	Personal income tax when using the progressive tax schedule only and optimization of gross tax	temp_tingt2; tingt_s
tincot_fr	on	on	on	on	Tax credits other than PPE	tintcch_s; tintcmi_s; tintced_s
tintcee_fr	n/a	n/a	n/a	n/a	Low earner refundable tax credit (Prime Pour L'Emploi PPE) & net tax	tintcee_s; tin_s
bdi_fr	on	on	on	on	Means-tested disability benefit (Allocation aux adultes handicapés AAH)	bdi_s

bunmt_fr	on	on	on	on	Unemployment assistance benefit (Allocation de solidarité spécifique ASS)	bunmt_s
bchyc_fr	on	on	on	on	Means-tested benefit for young children (Prestation d'Accueil du Jeune Enfant PAJE)	bchyc_s
bchba_fr	on	on	on	on	Means-tested birth grant (Prime de naissance PN)	bchba_s
bchcc_fr	on	on	on	on	Parental leave supplement (Complément de libre choix d'activité PreParE)	bchcc_s
bched_fr	on	on	on	on	Means-tested education grant (Allocation de rentrée scolaire ARS)	bched_s
bchlg_fr	on	on	on	on	Means-tested benefit for large families (Complément familial CF)	bchlg_s
bhotn_fr	on	on	on	on	Means-tested housing benefits (Allocation Logement AL)	bhotn_s
bsaoa_fr	on	on	on	on	Means-tested solidarity allowance for the elderly (Allocation de solidarité aux personnes agées ASPA)	bsaoa_s
tscdf_fr	on	on	on	on	Contribution for the deficit repayment (Contribution pour le Remboursement de la Dette Sociale CRDS)_	tscdf_s
bsa00_fr	on	on	on	on	Minimum guaranteed income (Revenu minimum d'insertion RMI/Revenue de solidarité active RSA)	bsa00_s
bsawk_fr	on	on	on	on	Activity allowance (Prime d'activité)	bsawk_s
bsaeccm_fr	n/a	n/a	on	on	Social assistance linked to Covid-19	bsaeccm_s
bhoey_fr	on	on	on	on	Energy bonus	bhoey_s
binxp_fr	n/a	on	on	on	Exceptional 2021-2022 inflation compensation	binxp_s
binps_fr	n/a	n/a	n/a	on	Exceptional 2023 purchasing power premium	binps_s
output_std_fr	on	on	on	on	Standard output file at the individual level	
output_std_hh_fr	off	off	off	off	Standard output file at the household level	

*Covid-19 policies are not included in the baseline even if they are "on" in the spine given that they only work when labour market transitions (TransLMA) are switched on.

2.4 Policy extensions

Four policies can be switched on or off from the Run dialogue box using extensions:

- *Uprating by Average Adjustment (UAA). It is turned off by default. Turning it on from the Run dialog box causes pension income to be uprated by charges in the average pension rather than using indexation rules.*

- *Minimum wage (yem_fr). Individual earnings in the micro-data are checked against the minimum wage in force at the 30th of June of the respective policy years. The correction consists in increasing wages of individuals showing lower earnings (adjusted for hours worked and time in employment) than the minimum wage up to the minimum wage threshold. Since there may be many reasons for having earnings lower than the minimum wage, this policy is turned off in the baseline, but it can be turn on from the Run dialogue box.*

- *Parental leave benefits (maternity, bmact_fr, and paternity, bpact_fr). They are implemented in EUROMOD for the policy years 2015-2023. Due to issues in the validation and consistency over different policy years, the policy is turned off in the baseline and it can be switched on in the Run dialogue box.*

- *Full Year Adjustments (FYA). While EUROMOD usually simulates policies as of June 30th of the respective year, it is also possible to simulate within-year policy changes. In the baseline scenario for 2022 and 2023 it is switched on by default. It is calculated with a weighted average, considering the amounts before and after the change of amounts (weighted by the number of months the amounts are in application)*

- *Benefit Take-Up Adjustment (BTA). It controls the simulation of random non-take up the for the main social assistance benefit(s) –"Revenu de Solidarité Active" (RSA) and "Prime d'activité". By default, it is turned on. Turning it off causes the simulation of RSA/PA to assume zero non-take-up.*

Addtionally, four policies are turned off in the baseline and can be switched on manually:

- *LMA transitions (selection of individuals that do the transition to wage unemployment). It trigger transitions to wage unemployment, to be used with the LMA add-on. It is turned off in the baseline, so that there are no transitions to unemployment.*
- *Months and hours in wage compensation scheme (yemcomptime_fr). It triggers transitions to Covid-19-related wage compensation schemes in 2020. It is turned off in the baseline, so that there are no eligible individuals for the corresponding policy (yemcomp_fr).*
- *Months and hours in self-employment compensation scheme (ysecomptime_fr). It triggers transitions to Covid-19-related self-employment compensation schemes in 2020. It is turned off in the baseline, so that there are no eligible individuals for the corresponding policy (ysecomp_fr)*
- *Survivors pension for widowhood ("Allocation Veuvage", AV) (bsuwd_fr). It is simulated using a number of assumptions due to lack of information in the micro dataset (See sections 2.5.7 and 2.5.11 respectively). As simulation results do not match very well administrative statistics, the simulation of AV is turned off in the baseline.*

2.5 Benefits

2.5.1 Universal child benefit: Family benefit – bch00_s – (*Allocation Familiale, AF*)

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (based on SMIC for 169 hours/month).

- *Eligibility conditions*

The benefit is paid in arrears and is received by households with two or more dependent children. In case of legal separation or divorce of the parents, the beneficiary is the parent who maintains the children.

- *Income test*

There was no income test for this benefit until 1st July 2015. From 1st July 2015, family benefit and the increased amount for child over 14 years have become means-tested. The family net taxable income (RFR) will be taken in account to determine the benefit amount. The family can receive a full rate, 50 % of the benefit amount or 25 % of the benefit amount depending on their n-2 income (RFR), that is to say income 2018 for benefit in 2020. The next table shows the differents thresholds depending on the number of children.

Table 2.4- Family benefit income thresolds [2020-2023]

Thresholds 2020:

Benefit rate	2 dependent children	3 dependent children	Income increase for each child after the 3rd
Maximum annual family RFR amount (for basic benefit and for over 14 years old increase)			
Full rate	≤ 69309	≤ 75084	+ 5775
Rate at 50 %	69309 <RFR≤ 92381	75084 <RFR ≤98156	+ 5775
Rate at 25 %	> 92381	> 98156	+ 5775

Thresholds 2021:

Benefit rate	2 dependent children	3 dependent children	Income increase for each child after the 3rd
Maximum annual family RFR amount (for basic benefit and for over 14 years old increase)			
Full rate	≤ 69933	≤ 75760	+ 5827
Rate at 50 %	69933 <RFR≤ 93212	75760 <RFR ≤99039	+ 5827
Rate at 25 %	> 93212	> 99039	+ 5827

Thresholds 2022:

Benefit rate	2 dependent children	3 dependent children	Income increase for each child after the 3rd
Maximum annual family RFR amount (for basic benefit and for over 14 years old increase)			
Full rate	≤ 70074	≤ 75913	+ 5839
Rate at 50 %	70074 <RFR≤ 93399	75913 <RFR ≤99238	+ 5839
Rate at 25 %	> 93399	> 99238	+ 5839

Thresholds 2023:

Benefit rate	2 dependent children	3 dependent children	Income increase for each child after the 3rd
Maximum annual family RFR amount (for basic benefit and for over 14 years old increase)			
Full rate	≤ 71194	≤ 77126	+ 5932
Rate at 50 %	71194 <RFR≤ 94893	77126 <RFR ≤100825	+ 5932
Rate at 25 %	> 94893	> 100825	+ 5932

- *Benefit amount*

The benefit amount is the amount below multiplicated by the percent above.

The monthly amount depends on the number and age of dependent children in the household (gross from CRDS) and on the household income:

Table 2.5- Family benefit amount [2020-2023]

	2020	2021	2022	2022*	2023
Monthly amount					
2 dependent children	132.61	132.74	135.14	140.53	142.70
3 dependent children	302.51	302.81	308.26	320.59	325.54
Each child after the 3rd	169.91	170.07	173.14	180.06	182.83
Increase for child over 14**	66.30	66.37	67.57	70.27	71.36

Fixed amount paid to families of 3+ children with eldest of 20-21	83.86	83.94	85.45	88.86	90.24

The amounts changed each 1st of April
* On July 1st 2022, the bonus amount increased by 4%

For families with only 2 dependent children, the increased amount for children over 14 year concerns only the second child. The increases for children over 14 is not paid for the first child.

The fixed amount paid to families of 3+ children is paid under two conditions:

- One of the children is 20 years old, lives at home, and do not work, or whose remuneration is less than 55 % of the minimum wage calculated on 169 hours/month in gross (or 78 % of net SMIC based on 151.67 hours/month), i.e. 943.44 EUR in 2020, 952.74 EUR in 2021, 982.48 EUR in 2022 / 1028.96 EUR from July 2022 and 1070.78 EUR from April 2023.
- The family has received benefits for at least three children in the month before the 20th birthday.

Qualifying families receive a monthly lump sum until the month before the child turns 21. As AF, this lump sum is payed at full rate, 50 % or 25 % depending on net taxable income (RFR).

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits. If one the children receives APL, it means that he has his own home, therefore the household is no longer eligible to AF.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for activity allowance and RSA), but subjected to CRDS.

- *EUROMOD modelling*

The benefit is simulated based on the age of children at the end of the income reference period. No benefit is simulated for children who reach the age threshold during the income reference period as their month of birth is unknown. Similarly, the age-based increase is simulated for the entire year for children who turn 14 in the income reference period. The supplement for children aged 20 is simulated for the entire year whenever a person aged 20 (who is not head or partner) is living with at least two dependent children.

The increment on the family benefit amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the amounts before and after the 1st July.

2.5.2 Mean-tested benefit for young children – bchyc_s – (*Prestation d´Accueil du Jeune Enfant PAJE- Allocation de base*)

Mean-tested benefit for young children contains:

- The PAJE base amount (*"allocation de base"*): mean-tested benefit for children under 3.
- The baby bonus (*"prime de naissance"*): mean-tested bonus for childbirth.

- The supplement for free choice of custody (*"complément de libre choix du mode de garde"*): for families with children born after 2004 and aged less than 6 when parents work, are under the income threshold and employ a certified person for care their child. Not simulated in EUROMOD due to the lack of information about child minding.
- The supplement for free choice of activity (*"complément de libre choix d'activité, CLCA*"): this allowance replaces the Parent education allowance ("*allocation parentale d'éducation"*, APE) for children born after 2004. Since 1st January 2015, the supplement for free choice of activity was modified and replaced by *"Prestation partagée d'éducation de l'enfant, PreParE"*.

- *Eligibility conditions*

PAJE: The benefit is received by households with children under 3.

Starting with April 1st 2014, the benefit was reformed. Children born after April 1st are subject to a new set of rules. The entitlement of children born before this date is unaffected, i.e. the old rules apply.

The income test depends on the number of parents who work. For two earner couples, a minimum threshold applies to the earnings of each parent in order to be considered a two earner couple. If each member of the couple earnes less than the threshold (see below) they are considered as a one earner couple and the one earner threshold applies.

Annual individual income threshold to be considered as an earner (for income n-2):

Table 2.6- Annual individual income threshold to be considered as an earner for PAJE base, income n-2 [2020-2023]

	2020 income 2018	2021 income 2019	2022 income 2020	2023 income 2021
Each member of the couple should earn more then	5404	5511	5594	5594

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (calculated on a 169 h/month basis). The assessment unit includes parents (married or cohabiting) and their dependent children.

- *Income test*

Entitlement to the PAJE base amount is subject to an income test. Household's resources in year n-2 must be below the threshold. The different ceilings depend on the date of birth of the child.

For children born after 1st of April 2014, there are new ceilings. Also, the benefit is no longer flat rate but depends on income.

Table 2.7- PAJE base, Ceilings C1: Ceilings granting access to the benefit, children born or adopted after April 2018 [2020-2023]:

Yearly amount	2020	2021	2022	2023

One earner couples				
One dependent child	32165	32455	32520	33040
Two dependent children	38598	38946	39024	39648
Three dependent children	46318	46735	46829	47578
Each child after the third	7720	7789	7805	7930
Two Earner couples or lone parent				
One dependent child	42509	42892	42978	43665
Two dependent children	48942	49383	49482	50273
Three dependent children	56662	57172	57287	58203
Each child after the third	7720	7789	7805	7930

- *Benefit amount*

Since the 1st of April 2014, the monthly amount depends on parents' income.

If the income of the parents is below ceiling 2, the family is entitled to 100 % of the benefit amount. If income is above ceiling 2 but below ceiling 1, the benefit is reduced to 50 % of the full amount.

The families whose incomes are above ceilings 2, but below ceilings 1 receive the partial amount of the benefit.

Table 2.8- PAJE base, Ceilings C2 for full rate after 1st of April 2018 [2020-2023]:

Yearly amount for full benefit	2020	2021	2022	2023
One earner couples				
One dependent child	26923	27165	27219	27654
Two dependent children	32308	32598	32663	33185
Three dependent children	38769	39118	39196	39822
Each child after the third	6461	6520	6533	6637
Two Earner couples or lone parent				
One dependent child	35580	35900	35971	36546
Two dependent children	40965	41333	41415	42077
Three dependent children	47426	47853	47948	48714
Each child after the third	6461	6520	6533	6637

The families whose incomes are above ceilings 2, but below ceilings 1 receive the partial amount of the benefit.

The monthly amount per family (and not per child except for multiple births) is (gross from CRDS):

Table 2.9- PAJE base, monthly amount per family [2020-2023]

	2020*	2020**	2021*	2021**	2022**	2022***	2023**
Monthly amount (full rate)	185.54	172.60	185.54	172.77	175.89	182.91	185.74
Monthly amount (partial rate)	92.77	86.30	92.77	86.38	87.95	91.47	92.86

*child born between 1st of April 2014 and 31 March 2018 whose parents earn income above the second ceilings (ceilings B2) and below the first ceilings (ceilings B1).

**child born after 1st of April 2018 whose parents earn income above the second ceilings (ceilings C2) and below the first ceilings (ceilings C1).
*** On July 1st 2022, the bonus amount increased by 4 %

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits, except for the Family Complement and Family Support allowance (ASF).

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for activity allowance and RSA), but subjected to CRDS.

- *EUROMOD modelling*

The income test is calculated based on yearly net taxable income during the income reference period (rather than past taxable income). The simulation is based on the age of children at the end of the income reference period. Consequently, no benefit is simulated for children turning three during the income reference period. Conversely, the benefit is simulated for the entire year for children born during the income reference period.

Regarding the modelling of the transition to the new ceilings and benefit amounts implemented on the 31st of March 2018, we took the assumption that all the kids were born at the same time of the year, after March 31st. Consequently, from 2020 onwards, kids born before 2018 affected by the previous ceilings are already 3 years or older, then they are not longer eligible for this benefit.

For the adoption of children over 3 years old, due to the lack of information on adopted children over 3 years old, we cannot simulate the benefit, as they may receive the benefit for 3 years before their 20th birthday. The new rules are simulated for all children born in 2014 or 2018 irrespective of their month of birth. Variable bchyc_s contains only the PAJE base amount. The baby bonus and the supplement of free choice of activity are simulated and stored in variables bchba_s and bchcc_s (see below). The supplement for free choice of custody is not simulated due to absence of information about child minding.

The increment on the PAJE benefit amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the amounts before and after the 1st July.

2.5.2.1 Means-tested birth grant: Baby bonus – bchba_s – *(PAJE-Prime de naissance*)

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (based on 169h/month).

- *Eligibility conditions*

Have a child born in the year, or have adopted a child under 20 years of age, comply with the conditions of eligibility to the baby bonus ("*PAJE allocation de base"*).

- *Income test*

For child born after1st of April 2018, the annual family net taxable income must be below (these are the same as Ceilings C1):

Table 2.10- PAJE baby bonus, income thresholds for child born after 1st of April 2018 [2020-2023]

	2020	2021	2022	2023
One earner couples				
One dependent child	32165	32455	32520	33040
Two dependent children	38598	38946	39024	39648
Three dependent children	46318	46735	46829	47578
Each child after the third	7720	7789	7805	7930
Two Earner couples or lone parent				
One dependent child	42509	42892	42978	43665
Two dependent children	48942	49383	49482	50273
Three dependent children	56662	57172	57287	58203
Each child after the third	7720	7789	7805	7930

- *Benefit amount*

The lump-sum is for each child born in the year (gross from CRDS):

Table 2.11- PAJE baby bonus amount [2020-2023]

	2020	2021	2022	2022*	2023
Childbirth	952.08	953.03	970.19	1008.99	1024.55
Adoption	1904.17	1906.05	1940.38	2018	2049.09

* On July 1st 2022, the bonus amount increased by 4 %.

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits, but subjected to CRDS.

- *EUROMOD modelling*

No information exists in the data about adoptions. Only the benefit for childbirth is simulated. The income test is based on current yearly net taxable income rather the previous taxable income.

The increment on the childbirth benefit amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the amounts before and after the 1st July.

2.5.2.2 Supplement for free choice of activity – bchcc_s – *(PAJE-PreParE)*

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (based on 169h/month).

- *Eligibility conditions*

- Have at least one child under 3 years of age
- Stop or partially stop working to take care of the child. The beneficiary must have made social security contributions for 8 quarters out of the previous two years if it is the first child, of the previous 4 years if it is the second child or of the previous 5 years if it is the 3rd + child.

- *Income test*

The benefit is not means-tested.

- *Benefit amount*

For the first child if parents are in couple, each parent can have the benefit for at most 6 months from the birth/end of maternity leave within the child's first birthday. For lone parents the benefit is paid at most 12 months within the child's first birthday.

If there are two or more children, the benefit is paid from the birth/end of maternity leave until the month before the 3rd birthday of the youngest but the benefit can be claimed (by either parent) for a maximum of 24 months (within the limit of the youngest child's third birthday). For lone parents the benefit is paid from the birth/end of maternity leave until the month before the 3rd birthday of the youngest.

If birth is given to triplets, the benefit is paid from the birth/end of maternity leave until the month before the 6th birthday but each parent can have this benefit only at most 48 months. For lone parents the benefit is paid from the birth/end of maternity leave until the month before the 6th birthday of the child.

Concerning child adoptions, if there is one child in the family, each parent can have the benefit for at most 12 months. If thereare other children in the family, each parent can have the benefit for at most 12 months. If after this period, the child is less than 3 years old, the parents can have the benefit until the 3rd child birthday.

If an adoption concerns at least 3 children, parents can have the benefit for the first 36 months after adoption.

Table 2.12- PAJE-PreParE amount [2020-2023]

Gross amount from CRDS	2020	2021	2022	2022*	2023
Full rate (stop working completely)	400.39	400.79	408.01	424.33	430.86
Reduce work to < 50 %	258.83	259.09	263.77	274.31	278.53
Reduce work to 50-80 %	149.32	149.47	152.15	158.23	160.67

* On July 1st 2022, the amount increased by 4 %.

If there are three children, the family can opt for "*PreParE Majorée*". Each parent can have the benefit for at most 8 months from the birth/end of maternity leave until the child's first birthday. For lone parents, the benefit is paid for at most 12 months until the child's first birthday.

It's subjected to the same contribution requirements as the *PreParE* at the following rate (gross from CRDS):

Table 2.13- PAJE-PreParE majorée amount [2020-2023]

PreParE Majorée	2020	2021	2022	2022*	2023
	654.46	655.11	666.91	693.59	704.27

* On July 1st 2022, the amount increased by 4 %.

- *Compatibilities*

This benefit is not compatible with paid holidays, maternity/paternity/adoption leave, sick leave or unemployment benefit.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for activity allowance and RSA), but subjected to CRDS.

- *EUROMOD modelling*

Detailed information on contribution history is not available. Eligibility is based on fulfilling the contributory requirement of 2 years of contributions during the entire work history. Thus, the difference in contribution requirements between children of different birth orders is not simulated. Amounts are simulated based on earnings and current working hours. Entitlement to the out of work amount is based on absence of earnings during the entire income reference period. Reduced amounts corresponding to reduced working time are based on current (rather than contemporaneous) working hours. When only one child is present, the benefit is simulated for 6 months during the income reference period conditional on the child being aged 0 (i.e. it is assumed the benefit is paid in the first year after birth) and no entitlement of children aged 1 & 2 is simulated when only one child is present. It is assumed a parent always takes up the "*PreParE Majorée"* if entitled. In practice, this means this benefit is simulated for all entitled parents (i.e. parents who fulfil the contribution requirements and stop working) whose third child is aged 0. It is assumed this benefit is not paid for children aged 1 and 2. The simulation is based on the ages of the children at the end of the income reference period, i.e. benefits received for only part of the year (before a child turns 3 or 1) are not simulated. Only the incompatibility with unemployment benefits and sickness benefits is simulated, since the other benefits are short term ones and no information about their receipt within the year is available. Other incompatibilities are not simulated.

Higher benefits for adoption and longer benefits for triplets are not simulated.

The increment on this benefit amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the amounts before and after the 1st July.

2.5.3 Mean-tested education grant – bched_s – (*Allocation de rentrée scolaire, ARS*)

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (based on 169h/month).

- *Eligibility conditions*

Have at least one child aged 6 to 18 who is attending school. The child must not earn more than 55 % of the minimum wage (based on 169h/month).

- *Income test*

The income test depends on the number of dependent children:

Table 2.14- ARS, income test [2020-2023]

Euros per year	2020	2021	2022	2023
One dependent child	25093	25319	25370	25775
Two dependent children	30884	31162	31225	31537
Three dependent children	36675	37005	37080	37392
Each child after the third	5791	5843	5855	5948

Starting in 2012, households who slightly exceed the income threshold are eligible for the residual amount of this benefit ("*ARS différentielle"*, AD) if their revenue is less than the threshold, plus the relevant benefit amount, where N is the number of children.

$(AD=\text{income threshold} + (ARS_{6\text{-}10}*N_{6\text{-}10}) + (ARS_{11\text{-}14}*N_{11\text{-}14}) + (ARS_{15\text{-}18}*N_{15\text{-}18})) - \text{income})/N$

with a minimum payment of €15

The income used here is the net taxable income.

- *Benefit amount*

The benefit is paid by child. The yearly amount depends on the child's age (gross from CRDS):

Table 2.15- ARS, amounts [2019-2022]

Benefit amount per child	2020**	2020**	2021	2022	2022***	2023
6-10 years	371.81	472.31	372.17	378.87	394. 02	400.09
11-14 years	392.31	492.82	392.70	399.78	415.77	422.14
15-18 years	405.91	506.41	406.31	413.63	430.17	436.78

* 2020 original amounts before exceptional Covid-19 increase
** in 2020, due to covid-19 crisis, the allowance's amounts are exceptionaly revalorised by 100 € (in net)
*** On July 1st 2022, the bonus amount increased by 4 %.

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits, but subjected to CRDS.

- *EUROMOD modelling*

The simulation is based on current rather than previous taxable income. It uses ages of children at the end of the income reference period rather than at the start of the school year.

2.5.4 Family support allowance – bchor_s – (*Allocation de soutien familial, ASF*)

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (based on 169h/month).

- *Eligibility conditions*

Must be a lone parent or other (e.g. grandparent) where the other parent (or both) is deceased or has abandoned the child or does not pay alimony.

- *Income test*

This benefit is not means tested

- *Benefit amount*

The monthly amount per child is (gross from CRDS):

Table 2.16- ASF, amount [2020-2023]

Benefit amount	2020	2021	2022	2022*	2022**	2023
Child living with lone parent	116.57	116.69	118.79	123.55	185.34	188.18
Child living with no parents	155.41	155.56	158.36	164.69	247.03	250.84

* On July 1st 2022, the bonus amount increased by 4 %.
** On November 1st 2022, support for single-parent families is one of the government's priority policies and has been increased by 50 %.

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for social assistance (*RSA*) and Activity allowance), but subjected to CRDS.

- *EUROMOD modelling*

The benefit is simulated only for children of widows/widowers. It is not possible to identify children whose parents have abandoned them. Likewise it is not possible to identify children whose both parents are deceased.

The increment on this benefit amount on July and November 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the amounts before and after the change on the amount.

2.5.5 Means-tested family complement – bchlg_s – (*Complément familial, CF*):

- *Definitions*

Children are considered as dependent persons if they are aged under 21 and earning less than 55 % of the minimum wage (based on 169h/month). Children under 21 who are themselves parents may be considered dependent if not receiving family benefits.

- *Eligibility conditions*

Have at least 3 children all aged 3 years or more. The amount is the same for all families regardless of the number of dependent children, but since 1st of April 2014, the monthly benefit amount depends on parents' income and on the number of dependent children.

The child must not earn more than 55 % of the minimum wage (based on 169h/month).

- *Income test*

The income test depends on the number of parents who work. For two earner couples, a minimum threshold applies to the earnings of each parent in order to be considered a two earner couple. If each member of the couple earnes less than the threshold (see below) they are considered as a one earner couple and the one earner threshold applies.

Table 2.17- CF, annual individual income threshold to be considered an earner [2020-2023]	2020 income 2018	2021 income 2019	2022 income 2020	2023 Income 2021
Each member of the couple should earn more then	5404	5511	5594	5594

Table 2.18- CF, income Ceiling 1 [2020-2023]

Yearly income for family with 3 children	2020	2021	2022	2023
One earner couples	38769	39118	39196	39822
Two earner couples or lone parent	47426	47853	47948	48714
Increase for each dependent child after 3rd	6461	6520	6533	6637

The income used here is the net taxable income.

Table 2.19- CF, income Ceiling 2 for receiving the increased amount after 1st April 2014 [2020-2023]

Yearly income for family with 3 children	2020	2021	2022	2023
One earner couples	19388	19562	19603	19915
Two earner couples or lone parent	23716	23929	23979	24362
Increase for each dependent child after 3rd	3231	3260	3267	3319

- *Benefit amount*

Before 2014, the amount is flat rate for all families that qualify. Since 1st of April 2014, the monthly amount depends on parents income and new ceilings have been established to determine the benefit amount. If parents' income is below ceiling 2, the family receive the increased amount. If the income is between ceiling 1 and ceiling 2, it receives the standard amount.

Table 2.20- CF monthly amount per household (gross from CRDS) [2020-2023]

	2020	2021	2022	2022**	2023
Basic monthly amount	172.60	172.77	175.89	182.92	185.74
Increased monthly amount*	258.92	259.18	263.85	274.39	278.62

* Increased monthly amount (after 1st of April 2014 for parents whose income are below ceilings 2).
** On the 1st July 2022 this amount is increased by 4 %

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits except with the PAJE (basic allowance and supplement for free choice of activity). If the household is eligible to PAJE, the CF is not paid. If one the children receives APL, it means that he has his own home, therefore the hosehold is no longer eligible to CF.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for activity allowance and RSA), but subjected to CRDS.

- *EUROMOD modelling*

The simulation of the income test is based on current rather than previous net taxable income. The age condition relating to the definition of a child is implemented using the age at the end of the income reference period, i.e. children who turn 21 during the year are not considered to be dependent children. Thus, any partial year entitlements on account of such children are not simulated.

The increment of the benefit on July 1st 2022 is introduced in the model with the FYA. The amount is calculated with a weighted average, considering the amounts before and after the 1st July.

2.5.6 Means-tested disabled benefit – bdi_s – (*Allocation aux adultes handicapés, AAH*)

- *Definitions*

Adult: To be aged over 20 and less than 62.

Dependent children: aged under 20 and earning less than 55 % of the minimum wage

- *Eligibility conditions*

The beneficiary must be disabled with a permanent disability of at least 80 %, or a disability between 50 and 80 % and be unemployable (for medical reasons). The income test is carried out using total couple income, including any income of dependent children. From 1st October

2023, the partner's income will no longer be taken into account in the eligibility conditions (which will increase the benefit by an average of about 350€ per month for concerned people).

- *Income test*

Table 2.21- AAH, income threshold [2020-2023]

Annual income	2020	2021	2022	2023*
Single	10832	10843.2	11038	11656
Couple	19607	19626.19	19979	21098
for each child	5417	5421.6	5519	5829

** From 1st October 2023, only the single income threshold is taken is into account.*

There is a 100 % withdrawal rate if the (threshold – benefit) < income< threshold

Since January 2022 and until September 2023, for disabled people receiving AAH and living as a couple, a flat-rate deduction is applied to the partner's income if the partner is not recipient of AAH. An increase of the deduction is also applied for each child. If the partner is not recipient of AAH, his/her annual income taking into account for the income test is reduced by 5000 EUR and a further reduction of 1400 EUR per dependent child is also applied to his/her annual income (these reductions are applied only to earned income, not to capital income).

Table 2.22- AHH, income deduction for recipient living in couple [2022-September 2023]

Deduction on partner income (if not AAH recipient) Yearly amounts	2022 to September 2023
For AAH recipient living in couple	5000
For each child	1400

Until September 2023, partner's income is taken into account, it will not be longer the case after. Only the beneficiary income will be taken into account for the income threshold.

- *Benefit amount*

The benefit is differential, the monthly benefit is:

AAH = (Threshold– Income)/12

Income is defined as the monthly net taxable income, used for the establishment of the income tax.

Table 2.23- AAH, monthly maximum benefit amount [2020-2023]

	2020	2021	2022	2022**	2023
Maximum Monthly benefit	902.7	903.6	919.86	956.65**	971.37
Supplement for those disabled for at least one year * (with a minimum of 80 % incapacity)	179.31*	179.31*	179.31*	179.31*	179.31*

* This supplement has been removed for new requests since Decembre 1, 2019, for disabled who received it before this date, they will continue to received it during 10 years if they fulfill the conditions (80 % incapacity, disabled for at least one year, are under 62, receive AAH at full rate, live in an independent accomodation).
** On the 1st July 2022 this amount is increased by 4 %.

There are additional amounts which are allowed with an increasing level of disability. All cannot be simulated.

The increase for independent living (*"Majoration pour la vie autonome"*) is awarded to the disabled who receive AAH at a full rate or AAH as a complement to old age or invalidity (i.e. who do not work). The monthly lump-sum is:

Table 2.24- AAH, increased amount [2020-2023]

	2020-2023
Increase for independent living	104.77

Those who are eligible for both the supplement and for the increase for independent living have to choose between the two benefits.

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits except with AEEH.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for activity allowance and social assistance (*RSA*). Not subject to CRDS.

- *EUROMOD modelling*

No information on the degree of disability exists in the data, then the Supplement for those with at least 80 % of disability is not modeled. The benefit is simulated for all individuals who fulfil the income criterion and report themselves as being disabled (pl031=8). The income test is simulated on current rather than previous taxable income. The increase for independent living is simulated for individuals receiving AAH at the full rate, as well as for individuals reporting zero earnings. No other additional amounts are simulated.

The increment on the benefit from July 1st 2022, is introduced in the model with the FYA. The 2022 benefit amount is calculated with a weighted average, considering the benefit amounts before and after the 1st July.

2.5.7 Means-tested benefit for widows/widowers: Survivor Minimum Pension – bsuwd_s – (*Allocation veuvage, AV*)

- *Eligibility conditions*

Widow/er not remarried aged under 55. The deceased spouse must have contributed to the old-age insurance at least 3 months during the year preceding the death. This pension is paid for 2 years.

- *Income test*

The monthly widow/er's income for the 3 last months must be below the following ceiling.

Table 2.25- AV, monthly widow/er's income for the 3 last months [2020-2023]

	2020	2021	2022	2022*	2023

Monthly income	778.53	781.64	790.24	821.812	828.37

** From 1st August*

The income taken into account includes the net taxable income of the widow/er (i.e. earned income, pensions, unemployment benefit, self-employment and capital income, all in gross terms) excluding family benefits and AAH.

- *Benefit amount*

Table 2.26- AV, monthly benefit [2020-2023]

	2020	2021	2022	2022*	2023
Monthly benefit	622.82	625.31	632.19	657.45	662.70

** From 1st July*

- *Compatibilities*

This benefit is compatible with national or regional benefits.

- *Taxation and income testing*

Taxable like pension income for personal income tax but not subject to CRDS and CSG.

- *EUROMOD modelling*

The simulation of this benefit is turned off and the original variable in the dataset used instead in the baseline. There is no information in the input dataset about the year a person has become widowed. As a result, the benefit is simulated for all widows/widowers who pass the income test. The income test is simulated using current rather than past taxable income.

The increment on the benefit from July 1st 2022, is introduced in the model with the FYA. The 2022 benefit amount is calculated with a weighted average, considering the benefit amounts before and after the 1st July.

2.5.8 Main means-tested social assistance benefit : Solidarity Labour Income – bsa00_s – (*RSA*) from 2009

The RSA aims to ensure a minimum income per month. The amount of the benefit is the difference between the maximum RSA (lump sum + 62 % of net household income from work until 2016, and only lump sum after) and others household resources (including the package of housing benefit). Since 2016, this benefit is given only to those out of work or with very low incomes (below the benefit amount). For low-paid workers, a new benefit has been introduced: the activity allowance, "*Prime d'activité*".

The lump-sum is determined by the household composition and the number of dependent children.
The RSA is increased for those who meet the previous conditions for Mean-tested lone parents benefits (API).

- *Definitions*

Dependent Children: Children under 20. Children over 20 years and under 25 living at home may be considered dependent in the RSA sense provided their own income is very low (< 55 % of SMIC).

- *Eligibility conditions*

Be over 25, or less than 25 with a dependent child or pregnant, and be aged under 65 (or not entitled to the Minimum Pension for Elderly). Youths 18-25 years of age and without children are eligible if they have worked for at least two years out of the last three years. As induced by the benefit amount calculation method, the income from the entitled beneficiaries should not exceed the current benefit limits.

- *Benefit amount*

RSA = (Maximum minimum income based on family characteristics) – (family quarterly income/3 + housing package)

The housing package is a lump-sum subtracted only for people who received the AL.

The family quarterly income (= household's quarterly resources) includes:

- the quarterly net taxable income (all working income, replacement income (unemployment, ARE, sickness, maternity,invalidity pensions), alimonies, others pensions and incomes from capital (investment income, savings income and property income), extraordinary income (sale of property, inheritance, gambling winnings),
- All quarterly social minima (AAH), and family benefits (AF, ASF, PAJE and CF only).

Table 2.27- RSA, Maximum minimum incomes and Housing package lump-sums [2020-2023]

	2020	
	Minimum Income	Housing Package
Lone parent with children under 3		
Pregnant without child	725.24	67.77
One dependent child	966.99	135.55
Two dependent children	1208.74	167.74
Each child after the 2nd	241.74	
Everyone else		
Single Without dependent child	564.78	67.77 (12 % of rsa MI)
One dependent child	847.17	135.55 (16 %)
Two dependent children	1016.6	167.74 (16.5 %)
Each child after 2nd	225.91	
Couple		
Without dependent child	847.17	135.55 (16 %)
One dependent child	1016.60	167.74 (16.5 %)
Two dependent children	1186.04	167.74
Each child after 2nd	225.91	

	2021		2022*	
	Minimum Income	Housing Package	Minimum Income	Housing Package
Lone parent with children under 3				

Pregnant without child	725.97	67.84	739.03	69.06
One dependent child	967.96	135.68	985.38	138.12
Two dependent children	1209.95	167.91	1231.72	170.93
Each child after the 2nd	241.99		246.34	
Everyone else				
Single				
Without dependent child	565.34	67.84 (12 % of rsa single MI)	575.52	69.06
One dependent child	848.01	135.68 (16 %)	863.28	138.12
Two dependent children	1017.61	167.91 (16.5 %)	1035.94	170.93
Each child after 2nd	226.14		230.21	
Couple				
Without dependent child	848.01	135.68 (16 %)	863.28	138.12
One dependent child	1017.61	167.91 (16.5 %)	1035.94	170.93
Two dependent children	1187.21	167.91	1208.6	170.93
Each child after 2nd	226.14		230.21	

** Until end of June*

	2022**		2023	
	Minimum Income	Housing Package	Minimum Income	Housing Package
Lone parent with children under 3				
Pregnant without child	768.60	71.82	780.42	72.93
One dependent child	1024.80	143.65	1040.56	145.86
Two dependent children	1281.00	177.77	1300.70	180.50
Each child after the 2nd	256.19		260.14	
Everyone else				
Single				
Without dependent child	598.54	71.82	607.75	72.93
One dependent child	897.81	143.65	911.62	145.86
Two dependent children	1077.37	177.77	1093.95	180.50
Each child after 2nd	239.42		243.10	
Couple				
Without dependent child	897.81	143.65	911.62	145.86
One dependent child	1077.37	177.77	1093.95	180.50
Two dependent children	1256.93	177.77	1276.27	180.50
Each child after 2nd	239.42		243.10	

**From July 1st 2022, this value is increased by 4 %.

Table 2.28- RSA, end of year bonus [2020-2023]

End of year bonus	2020-2023
Single	
Without dependent child or pregnant	152.45
One dependent child	228.67
Two dependent children	274.41
Each child after 2nd	60.98
Couple	
Without dependent child	228.67
One dependent child	274.41
Two dependent children	320.14
Each child after 2nd	60.98

Exceptional solidarity allowance linked to **Covid-19** crisis :

This allowance is paid in one lump sum to poor households in order to deal with unforeseen expenses linked to **Covid-19** crisis. Indeed, modest families have to feed their children for lunch (in normal times, they eat in the canteen, which cost is almost entirely borne by the community), and they have to deal with the impossibility to go the food banks. This exceptionnal allowance is paid to RSA beneficiaries, 150€ for single person or for a couple, with 100€ in addition for each child. This allowance is also paid to ASS beneficiaries only if they are not beneficiaries of RSA. This allowance is also paid to APL beneficiaries (only the child part, not the household lump sum) if they are not beneficiaries of RSA or ASS.

This exceptional allowance was paid twice, in May 2020 and in November 2020.

- *Compatibilities*

This benefit is compatible with national or regional lump-sum child benefits. Additionally,it is possible to combine the RSA with ASS, but the RSA amount has to be deducted of ASS.

- *Taxation and income testing*

The RSA is not taxable and not included in the income test of other benefits and not subjected to CRDS.

- *EUROMOD modelling*

No benefit is simulated for pregnant women. To simulate the benefit, age at the end of the income reference period is used. Lone parents are identified as parents of dependent children without a partner in the dataset. Children aged less than 25, earning less than 55 % of SMIC and living with other adults are always considered as dependent. The income test is simulated using current yearly income rather than previous quarterly income. Thus, shorter periods of eligibility may be missed. When a household receives housing benefits, the lower between the actual benefits and the housing package is deducted. A random long term non-take up of approximately 20 % is simulated from 2016 to 2022:

https://www.secours-catholique.org/m-informer/publications/non-recours-une-dette-sociale-qui-nous-oblige

https://drees.solidarites-sante.gouv.fr/publications/les-dossiers-de-la-drees/le-non-recours-aux-prestations-sociales-mise-en-perspective?utm_source=Sarbacane&utm_medium=email&utm_campaign=DD%2093%20PUB

https://drees.solidarites-sante.gouv.fr/publications-communique-de-presse/les-dossiers-de-la-drees/mesurer-regulierement-le-non-recours-au

https://drees.solidarites-sante.gouv.fr/sites/default/files/2022-07/Regularly%20measuring%20the%20non-take-up%20of%20the%20RSA%20and%20the%20employment%20bonus%20method%20and%20results.pdf

Employment is established based on the presence of yearly earnings. Thus, individuals having no earnings throuout the year are considered to be not working. Otherwise, they are considered to be in work. Starting in 2016, only individuals not in work (or with very low incomes lower thant the benefit amount) are simulated to receive this benefit. Individuals in work are assumed to receive activity allowance (*"Prime d'activité"*). Entitlement to the end of year bonus is calculated based on annual average incomes and the benefit is then assigned to approx. 16 % of those eligible to mimic the fact that only families receiving the benefit in November and December would be entitled.

The increment on the benefit for a single person without children from July 1st 2022, is introduced in the model with the FYA. The 2022 benefit amount is calculated with a weighted average, considering the benefit amounts before and after the 1st July.

2.5.9 Activity allowance – bsawk_s – (*Prime d'activité*) from 2016

Since 1st January 2016, the Activity allowance (*"Prime d'activité"*) replaced the *"RSA activité"* and *"PPE"*. This benefit address low- income workers (employed or self-employed). It is given to families (or single people) with at least one person in work, and calculated each 3 months and given monthly.

In January 2019, after large social movement of discontent, the bonus amount increased by 90 EUR and earnings limits were increased between 222€ and 854€, depending on the family composition.

- *Definitions*

Children under 20 are considered as dependent children for the activity allowance. Children over 20 years and under 25 living at home may be also considered dependent provided that their own income is below 55 % of SMIC.

- *Eligibility conditions*

This benefit concern both employees and self-employed persons. For the self-employed, the turnover is used to know if they can access to the benefit.The turnover ceilings depends ont the specificity of self-employment.

- *Benefit amount*

The allowance amount depends on the family composition and on the family quarterly income and is based on the following formula:

Allowance amount = (Maximum minimum income based on family circumstances + 61 % family work income + Bonus) – (*max* (Household's resources; Maximum minimum income) + Housing package)

Important comments:

- Household's resources resources are disregarded if they exceed the Maximum minimum income lump sums based on family circumstances. Otherwise, Maximum minimum income lump sums are disregarded.
- If amount < 0, then the allowance amount is set to 0.
- The percent of income have changed in October 2018, before it was 62 %.

The maximum minimum income is based on the lump sum (gross from CRDS):

Table 2.29- Activity allowance, lump sum [2020-2023]

	2020	2021	2022	2022*	2023
Lump sum	555.94	556.49	566.51	589.17	598.24

*On July 1st 2022, this value is updated by 4 %

This lump sum could be increased according to the household composition:

- 50 % for the first additional person

- 30 % for the second additional person

- 40 % per additional person beyond the 3rd person if the household has more than 2 dependent children or persons under 25, except for the person who live in couple with the beneficiary.

Concerning lone persons with children or pregnant, the increased amount is 128.412 % of the maximum minimum income, adding to it 42.804 % of the maximum minimum income for every child.

The family working income includes income from work (wages, bonuses, overtime pay, unemployment benefits and sickness benefits) net of social security contributions (i.e. employment and self-employment income before taxes and transferts). The household's resources are defined in the same way as for RSA : all work income, replacement income (unemployment, ARE, sickness, maternity, invalidity pensions), alimonies, others pensions and income from capital (investment income, savings income and property income), extraordinary income (sale of property, inheritance, gambling winnings) and social minima or family benefits (AAH, APL, ALS, AF, CLCA/PreParE, Paje base and CF are included). Except Paje PN, CMG and ARS who are not taken into account in the calculation of the total income. Since 2018, disability pensions, pensions for accident at work and pensions for occupational diseases are not taken into account too.

Table 2.30- Activity allowance, housing package [2020-2023]

	2020	2021	2022	2022*	2023
Single person	66.38	66.45	69.06	70.35	71.43
Lone parent with 1 child	132.76	132.89	138.12	140.69	142.86
Lone parent with 2+ children	164.29	164.45	170.93	174.11	176.79
Couple with no children	132.76	132.89	138.12	140.69	142.86
Couple with 1 or more children	164.28	164.45	170.93	174.11	176.79

*On July 1st 2022, this value is increased

The housing package is a percentage of the activity allowance lump sum net from CRDS, 12 % for single, 16 % for lone parent with a child and 16.5 % for lone parent with 2+ children. For example in 2021, the Lump sum for activity allowance is in gross: 556.49€, in net from crsd: 553.71€, then:

- for single: HP is 12 %*553.71=66.45€

- for lone parent with 1 child: HP is 16 %*(553.71(1+50 %)= 132.89€

- for lone parent with 2+ children: HP is 16.5 %*(553.71(1+80 %)= 164.45€

Bonus amount for activity allowance:

Concerning the bonus, each family member who works can benefit from the bonus but the amount is capped for each worker in the family. The individual bonus amount depends on individual work income; the bonus is paid if individual work income is between 0.5 and 1.4 SMIC in 2018, 0.5 to 1.5 SMIC since 2019 (based on net SMIC).

- For individuals with a monthly work income less than 0.5 SMIC (=59*hourly gross SMIC), the bonus is equal to 0.
- For individuals with a monthly work income over 120 times the hourly gross SMIC, the bonus is fixed and capped at the following monthly amounts:
  - 12.782% of the lump sum (net from CRDS) until 2018 (67.27 € in April 2018)
  - 29.101% of the lump sum (net from CRDS) since 2019 (2021: 161.14€ net, 161.94 gross; 2022: 164.04€ net, 164.86 € gross; 2023:173.22€ net, 174.09)
- For individuals with a monthly work income between 59 and 120 times the hourly gross SMIC (604.75€/1230€ in 2021, 623.63€/1268.40€ in 2022, 664.93€/1352.40€ in 2023) or between 59 and 95 gross hourly SMIC before 2019, the amount is **variable** but less **than the capped amount**.

These amounts are calculated with the formula:

- From 2016 to 2018:

(0.12782*lump sum)*(1-((95*hourly gross SMIC)-work income)/(95*hourly gross SMIC-59*hourly gross SMIC))

- Since 2019:

(0.29101*lump sum)*(1-((120*hourly gross SMIC)-work income)/(120*hourly gross SMIC-59*hourly gross SMIC))

This activity allowance is paid from 18 years old.

The allowance is not taken into account in the income for calculation of the income tax and is not given for amounts less than 15 €.

- *Taxation and income testing*

The activity allowance is not taxable and not included in the income test of other benefits but subjected to CRDS.

- *EUROMOD modelling*

This benefit is simulated for all individuals who fulfil the income test and are observed to have positive earnings. Earnings are calculated over the year. As a result, the model may overestimate PA receipt and an underestimate RSA receipt. The earnings limit to qualify for the benefit is likewise calculated using information about annual earnings. There is no information about the turnover of self-employed in the dataset. As a result, specific eligibility conditions for the self-employed are not simulated. Instead, the self-employed are assumed to be eligible if their net profit satisfies the same conditionality as that applicable to employees. The bonus amount is calculated using annual information about work income. The take-up rate

is 73 % at the end of the year 2016 (57 % at the beginning of the benefit in 2016, 80% in 2019. The variable is not disaggregated in the UDB but simulated since 2019 in EUROMOD. Since this year, the variable is disaggregated in EMSD.

The increment on the Activity Allowance lup-sump on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the benefit amounts before and after the 1st July

https://solidarites-sante.gouv.fr/IMG/pdf/rapport_d_evaluation_prime_d_activite.pdf

https://www.caf.fr/sites/default/files/cnaf/Documents/Dser/dossier_etudes/DE%20213_Caf.pdf

https://drees.solidarites-sante.gouv.fr/publications/les-dossiers-de-la-drees/le-non-recours-aux-prestations-sociales-mise-en-perspective?utm_source=Sarbacane&utm_medium=email&utm_campaign=DD%2093%20PUB

https://drees.solidarites-sante.gouv.fr/publications-communique-de-presse/les-dossiers-de-la-drees/mesurer-regulierement-le-non-recours-au

https://www.senat.fr/rap/a19-143-7/a19-143-77.html#:~:text=%2D%20l'%C3%A9largissement%20en%20cons%C3%A9quence%20du,de%2052%20%25%20en%20un%20an

2.5.10 Energy bonus– bhoey_s (*Chéque energie*)

From 2018, this bonus replaces the gas and electricity social prices granted to low-income households. It takes the form of a voucher that is sent directly to the beneficiaries without any administrative action. This voucher can be used in paiement of a part of the energy bill, the beneficiaries have just to give it to their energy supplier.

This bonus is given at once in March-April each year.

- *Eligibility conditions*

Persons with limited resources and who filed in his income tax return.

The bonus is granted according to the household composition and on his the "*Revenu Fiscal de Référence*" (RFR, see below 2.6- Personal income tax).

The household members are taken into account as consumption unit (CU).

Table 2.31- Energy bonus, Consumption unit [2020-2023]

	2020-2023
First person of the household	1
Second person of the household	+ 0.5
Each supplementary person	+ 0.3

The access is granted if the household's RFR by consumption unit is under the ceiling below:

Table 2.32- Energy bonus, income ceilings [2020-2023]

	2020	2021	2022	2023
Maximum RFR by comsuption unit	10700	10800	10800	11000

For example, a couple with 2 children must not exceed a RFR of 22.680 € in 2022 (2.1*10.800=22.680).

- *Benefit amount*

The benefit amount is based on the household composition and on the RFR.

Table 2.33- Energy bonus amounts [2020-2023]

	2020-2022			
	(RFR/CU) < 5600€	5600€ ≤ (RFR/CU) < 6700€	6700€≤ (RFR/CU) < 7700€	7700€≤ (RFR/CU) < 10700€ (10800€ in 2021-2022)
1CU (1 person)	194	146	98	48
1 < CU < 2 (2 or 3 people)	240	176	113	63
≥ 2 CU (4 people or more)	277	202	126	76
	2023			
	(RFR/CU) < 5700€	5700€ ≤ (RFR/CU) < 6800€	6800€≤ (RFR/CU) < 7850€	7850€≤ (RFR/CU) < 11000€
1CU (1 person)	194	146	98	48
1 < CU < 2 (2 or 3 people)	240	176	113	63
≥ 2 CU (4 people or more)	277	202	126	76

Additional Energy Voucher:

- In 2021, an exceptional additional energy bonus of 100€ is given to beneficiaries.
- In 2022, a new exceptional energy voucher in the amount of 100€ to 200€ will be paid to 40.% of the most modest households from December 2022:
    - 200€ for households which reference tax income per consumption unit is strictly less than 10800€
    - 100€ for households whose reference tax income per consumption unit is between 10800€ and 17400€.
- In 2023, several exceptional vouchers are given to eligible households only if they apply. First, an energy voucher for wood expenses for households with RFR< 27500€ and who have apply for the voucher and on presentation of an invoice for wood or pellet purchase. The voucher amount are:
  For pellets: 200€ if RFR<14400, 100€ if 14400<RFR< 27500
  For logs: 100€ if RFR<14400, 50€ if 14400<RFR< 27500

- *Secondly, a petrol allowance of 100 € is given to the most modest households under resources conditions (RFR<14700€ for 1 part of RFR) and only if they apply for it.Compatibilities*

This benefit is compatible with national or regional benefits.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits and not subjected to CRDS.

- *EUROMOD modelling*

The variable is simulated in EUROMOD since 2018, we do not have information of the actual use of this voucher but we assume that all eligible beneficiaries use it. Regarding additional energy voucher, they are simulated in 2021 and 2022 but not in 2023 because of lack of information on wood consumption and on kind of transport used.

The 2023 Additional Energy vouchers cannot be implemented in EUROMOD because there is no data on EU-SILC for wood consumption or transportation used by eligible low-income earners to commute to work.

2.5.11 Solidarity allowance for the elderly – bsaoa_s – (*Allocation de solidarité aux personnes âgées, ASPA*)

- *Eligibility conditions*

Persons aged 65 and over with limited resources and retired (not working).

- *Benefit amount*

The benefit is differential at the level of the couple:

ASPA= Monthly Maximum amount – Quarterly Family income/3

If the amount calculated is < 0, the amount is set to 0.

Family quarterly income does not include family benefits or housing benefits (i.e. the quarterly net taxable income + AAH) and concerns only the beneficiary and his partner's income.

The maximum income depends on the family situation:

Table 2.34- ASPA, monthly maximum income [2020-2023]

	2020	2021	2022	2022*	2023
Single	903.20	906.81	916.78	953.45	961.08
Couple	1402.22	1407.82	1423.31	1480.24	1492.08

The couple amount is applied if at least one person is aged 65 or over.
*On July 1st 2022, this value is updated by 4 %

- *Compatibilities*

This benefit is compatible with national or regional benefits.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits and not subjected to CRDS.

- *EUROMOD modelling*

Eligibility for this benefit is restricted to individuals reporting receipt in the data. While it is technically possible to fully simulate the benefit, doing so results in substantial overestimation of both the number of recipients and the amounts. The income test is carried out using current yearly income rather than previous quarterly income. The age condition is simulated using age at the end of the income reference period. Thus, a full year worth of benefits is simulated for individuals turning 65 during the income reference period who in reality, would have been entitled only during part of the reference year.

The increment of the amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the benefit amounts before and after the 1st July.

2.5.12 Housing Benefits – bhotn_s – (*Allocation Logement, APL and AL*)

- *Definitions*

Children are considered as dependent persons if they are aged under 20 and earning less than 55 % of the minimum wage (based on 169h/month).

Dependent persons: all the dependent children and disabled close family members (parents, grandparents, sisters, brothers…) or parents and grandparents over 65 living in the household who earn less than 55 % of the minimum wage.

The unit of assessment is the entire household.

- *Eligibility conditions*

Be a renter of subsidized housing, sub-renter or first time buyer.

Since July 2016, if the real rent paid is over a threshold, the benefit is suppressed. If the rent is over a determined ceiling but under a maximum threshold then the benefit is decreased.

Since October 2016, the value of the assets is taken into account in the allowance amount calculation when this is higher than 30000 EUR. This concern the real estate assets (excluding the main residence and properties for occupational use), financial assets and movable assets.

Furthermore, beneficiaries who are dependant on a household subject to wealth tax or tax on real estate wealth are no longer entitled to such assistance.

A reform, initially planned for 2019 but finally taking place on the 1st of January 2021 due to covid-19, changed the income reference period and now correspond to the previous 12 months. This reform also modifies the eligibility conditions which are checked every 3 months.

- *Benefit amount*

The general formula giving the amount of housing benefit is as follows (it is the same for APL and AL):

AL or APL = L+C-Pp-Mfo

L: real rent up to the limit of a certain ceiling
C: lump-sum charge
Pp: minimal personal participation
Mfo: lump sum voted each year

The system presented here is the more "general" system relating to the rental sector. We do not take into account the specificities of the calculation on residential homes (*"Logement-foyer"*), roommates or specific loans.

(1) Real Rent (L):

The real rent is taken into account up to a limit of a monthly ceiling, depending on the number of dependent persons and on the geographical zone. Children older than 20 are not considered dependent persons but their incomes are included in the assessed household income.

Table 2.35- Housing benefits, rent taking into account in calculation [2020-2023]

Year	October 2019 to September 2020		
Geographical Zone	I	II	III
Single	295.93	257.92	241.73
Couple without dependent person	356.92	315.69	293.04
Lone parent/couple with one dependent person	403.39	355.23	328.57
Lone parent/couple with two dependent people	461.91	406.93	375.66
Increase for each dependent person	58.52	51.70	47.05

Year	October 2020 to September 2021			October 2021 to June 2022		
Geographical Zone	I	II	III	I	II	III
Single	296.82	258.69	242.46	298.07	259.78	243.48
Couple without dependent person	357.99	316.64	293.92	359.49	317.97	295.15
Lone parent/couple with one dependent person	404.6	356.3	329.56	406.30	357.80	330.94
Lone parent/couple with two dependent people	463.3	408.16	376.79	465.25	409.88	378.37
Increase for each dependent person	58.7	51.86	47.23	58.95	52.08	47.43

On July 1st 2022, these values are updated in advance to compensate inflation by 3.5 %.
https://www.legifrance.gouv.fr/loda/article_lc/LEGIARTI000046206217

The usual annual increase occurs from October 2023, +3.5%.

Year	July 2022 to September 2023			October 2023 to September 2024		
Geographical Zone	I	II	III	I	II	III
Single	308.50	268.87	252.00	319.30	278.28	260.82
Couple without dependent person	372.07	329.10	305.48	385.09	340.60	316.17
Lone parent/couple with one dependent person	420.52	370.32	342.52	435.24	383.28	354.51
Lone parent/couple with two dependent people	481.54	424.22	391.61	498.39	439.07	405.32
Increase for each dependent person	61.01	53.90	49.09	63.15	55.79	50.81

The zone depends on the geographical area:

Zone I : Paris and region "*Ile de France*"
Zone II: cities with more than 100.000 inhabitants and Corsica
Zone III: all others cities.

Since July 2016, real rent paid is used to determine if the benefit is abolished or not. It depends on the geographic zone and on the previous L amount who intergrate the family composition.

If the rent actually paid is above C1 but under C2 then the allowance is decreased, if rent paid is above C2 the benefit is abolished.

Table 2.36- Housing benefits, decrease parameters [2020-2023]

2020-2023	C1	C2	Eg. from July 2022 For Single
Zone I	>3.4 L	≥ 4 L	(between 1048.9 € and 1234 €)
Zone II	>2.5 L	≥3.1 L	(between 672.17 € and 833.5 €)
Zone III	>2.5 L	≥3.1 L	(between 630 € and 781.2 €)

The increase for each dependent person are also multiplied by the corresponding coefficient.

If the rent actually paid is between C1 and C2, the decreasing rate applied to the allowance amount is defined as:

$$\alpha = \frac{rent\ paid - C1}{C2 - C1}$$ with $\alpha = 0$ when the rent paid is ≥ C2 and then APL = 0

$\alpha = 1$ when the rent paid is = C1

$0 < \alpha < 1$ when the rent paid is between C1 et C2

So, if and only if rent actually paid is between C1 and C2, the allowance amount will be:

new APL = APL (1 - α)

(2) <u>Lump-sum charge (C):</u>

The monthly amount depends on the number of dependent persons:

Table 2.37- Housing benefits, lump-sum charge [2020-2023]

	2020	2021	2022	2022*-2023	2023**-2024
Single person/couple without dependent person	53.83	53.99	54.22	56.12	58.08
Single person/couple with one dependent person	66.03	66.23	66.51	68.84	71.25
Increase for each dependent person	12.20	12.24	12.29	12.72	13.17

* From July 2022, increase by 3.5 %
** From October 2023, increase by 3.5 %

(3) <u>Minimal personal participation (Pp):</u>

Pp is computed as follows:

Pp=P0 + Tp*Rp

P0 : minimal participation
Tp: Personal participation rate
Rp : Resources

- *P0 minimal participation:*

P0 = Max ($P0_{forf}$,[8.5 %*(L+C)])

Table 2.38- Housing benefits, minimal participation [2020-2023]

	2020	2021	2022	2022*-2023	2023**-2024
$P0_{forf}$ (€ per month)	35.13	35.24	35.39	36.63	37.91

* From July 2022, increase by 3.5 %
** From October 2023, increase by 3.5 %

- *Tp Personal participation rate:*

Tp is computed as:
Tp=Tf+Tl

Table 2.39- Housing benefits, parameter Tf [2020-2023]

	2020-2023
Single	2.83 %
Couple without dependents	3.15 %
Lone parent/couple with one dependent person	2.70 %
Lone parent/couple with two dependent persons	2.38 %
Lone parent/couple with three dependent persons	2.01 %
Lone parent/couple with four dependent persons	1.85 %
Lone parent/couple with five dependent persons	1.79 %
Increase for each dependent person	-0.06 %

Tl:

Tl is computed as follow:

RL= L / Rent Baseline

Table 2.40- Housing benefits, Rent Baseline [2020-2023]

	2020	2021	2022	2022*-2023	2023**-2024
Single	257.92	258.69	259.78	268.87	278.28
Couple without dependent	315.69	316.64	317.97	329.10	340.62
Lone parent/couple with one dependent	355.23	356.3	357.80	370.32	383.28
Lone parent/couple with two dependents	406.93	408.16	409.88	424.22	439.07
Increase for each dependent	51.70	51.86	52.08	53.90	55.79

* From July 2022, increase by 3.5 %
** From October 2023, increase by 3.5 %

Finally, Tl is as follows:

Table 2.41- Housing benefits, RL parameter [2020-2023]

RL	2020-2023 Tl
0-45 %	0 %
45-75 %	0.45 %*(RL- 45 %)
>75 %	0.45 %*30 %+0.68 %*(RL-75 %)

- *Rp Resources:*

Rp is defined as the difference between the household's resources (2 years before until 2020, 12 previous months since January 2021, incorporating assets values) and a lump-sum R0.

R0 is given by (yearly amounts):

Table 2.42- Housing benefits, R0 parameter [2020-2023]

	2020-2021	2022	2022*	2023
Single	4588	4683	4870	4949
Couple without dependent person	6572	6709	6977	7090
Lone parent/couple with one dependent person	7839	8002	8322	8456
Lone parent/couple with two dependent persons	8015	8182	8509	8646
Increase for each dependent child	305	311	323	328

* From July 2022, increase by 4 %

The household's resources is the "*Revenu Brut global*" used in the income tax.

(4) Lump sum (Mfo):

Since October 2017, the AL amount is reduced by a lump sum voted each year, since October this amount is 5 Euros. Moreover, since October 2017, the minimum payment goes from €15 to €10 for AL, and 0 for APL.

RLS *«Réduction du loyer de solidarité»* (not computed in EUROMOD)

In February 2018, a reduction of solidarity rent, RLS, was introduced. It consists in a decrease of housing benefit APL for tenants with low incomes living in social housing. This decrease of APL is compensated by an equivalent reduction in the monthly rent. Only people eligible for RLS are entitled to a decrease in housing benefit, the reduction in rent being linked to the APL decrease.

To be eligible:

- the beneficiaries must rent a social housing (except sheltered house and overseas housing).
- they must respect the following resource ceilings

Table 2.43- Housing benefits, monthly resources ceilings [2020-2023]

Year	2020-2023		
Geographical Zone	I	II	III
Single	915	854	828
Couple without dependent person	1102	1042	1008
Lone parent/couple with one dependent person	1403	1329	1289
Lone parent/couple with two dependent people	1669	1583	1536
Lone parent/couple with three dependent people	2043	1943	1877
Lone parent/couple with four dependent people	2357	2243	2169
Lone parent/couple with five dependent people	2624	2497	2411
Lone parent/couple with six dependent people	2905	2764	2671
Increase for each dependent person	283	266	247

https://www.anil.org/aj-reduction-loyer-solidarite-rls-apl/
https://www.legifrance.gouv.fr/loda/id/JORFTEXT000044560604/2023-05-17/

The RLS amount is updated each year in January. Similarly, the maximum ceiling is indexed to the rent reference index (IRL).

Monthly amount of rents decreases for social housing (RLS):

Table 2.44- Housing benefits, RLS [2020-2023]

Year	01/2020 to 09/2020			10/2020 to 12/2020			01/2021 to 09/2021			10/2021 to 12/2021		
Geographical Zone	I	II	III	I	II	III	I	II	III	I	II	III
Single	49.50	43.14	40.43	34.10	29.72	27.85	46.67	40.51	37.96	52.24	46.21	43.20
Couple without dependent person	59.70	52.79	49.01	41.13	36.37	33.76	56.05	49.57	46.01	63.29	56.26	52.24
Lone parent/couple with one dependent person	67.46	59.40	54.95	46.47	40.92	37.85	63.33	55.77	51.59	71.33	62.29	58.27
Increase for each dependent person	9.78	8.65	7.87	6.74	5.96	5.42	9.18	8.12	7.39	10.05	9.04	8.04

Monthly amount of rents decreases for social housing (RLS):

Year	01/2022 to 09/2022			10/2022 to 12/2022			2023			October 2023		
Geographical Zone	I	II	III	I	II	III	I	II	III	I	II	III
Single	50.95	44.60	41.76	48.77	42.70	39.98	52.16	45.66	42.76	54.51	48.22	45.08
Couple without dependent person	61.53	54.49	50.59	58.90	52.16	48.43	63	55.79	51.80	66.05	58.71	54.51
Lone parent/couple with one dependent person	69.48	61.04	56.64	66.51	58.43	54.22	71.14	62.50	57.99	74.43	65.00	60.80
Increase for each dependent person	10.00	8.88	8.03	9.57	8.50	7.69	10.24	9.09	8.22	10.48	9.44	8.39

In the case someone is living on the same address, but is not part of the households, each of these persons or households can benefit from the rent reduction if his income does not exceed the ceilings, but within the limit of 75 % of the reduction.

The Amount of APL decreases for the eligible beneficiaries is set to **98 % of RLS** since 2018. The rate is fixed each year and varies from 90 % to 98 %.

In fact, this rent reduction only applies to the poorest families benefiting from APL. This reform doesn't result to any loss since the decrease in APL is fully offset by the reduction in rent, the gains generated are minimal.

Due to lack of information on the use of social housing, this reform cannot be implemented in EUROMOD.

Exceptional solidarity allowance linked to **Covid-19** crisis :

In 2020, an exceptional allowance was paid twice, in one lump sum in May and November 2020, to poor households in order to deal with unforeseen expenses linked to **Covid-19** crisis. This allowance is paid to all APL beneficiaries if they are not beneficiaries of RSA or ASS. The amount is 100€ per child.

- *Compatibilities*

This benefit is compatible with national or regional benefits.

- *Taxation and income testing*

Not taxable and not included in the income test of other benefits (except for activity allowance and RSA) but subjected to CRDS.

- *EUROMOD modelling*

Only the general benefit for tenants paying rent is simulated. Benefits for home owners/ tenants in free accommodation are not simulated due to absence of required information in the dataset. The three zones upon which the benefit depends are imputed based on geographical region (db040) and population density (db100). The income used in the income test is yearly rather than quarterly. Also rent paid is calculated using a monthly average of rent paid throughout the entire year. The change in the income reference period in 2019 has no impact on EUROMOD simulations because EUROMOD uses the income of the same year when simulating the entitlement to a benefit. Due to lack of information on social housing the reform of February 2018 (a reduction of the solidarity rent, RLS) is not simulated in EUROMOD.

The increment of the amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the benefit amounts before and after the 1st July

2.5.13 Unemployment insurance Benefit – bunct_s – (*Allocation de retour à l'emploi, ARE*)

- *Eligibility conditions*

Since November 2019, people who have worked at least 6 months over the previous 24 months (or 36 months for employees 53 years old and older) at the time of the termination of the employment contract, are eligible to receive unemployment insurance benefits if they did not leave their job voluntarily and are actively looking for work. Due to Covid-19 crisis, the period of 6 months was exceptionally reduced to 4 from August 2020 to November 2021.

On conditions, people who leave their job voluntarily (if they have an approval professional project and if they worked 5 years during the last 60 months) can benefit. For self-employed, the benefit is called ATI, *Allocation des Travailleurs Indépendants*, they can earn an amount of 800€/month during 6 months if their previous income of the last 2 years is more than 10 000€

per year and if their company is in legal redress. These last two cases, people who leave their job voluntarily and the self-employed, are not simulated in EUROMOD as there is yet no information on the beneficiairies in the original EU-SILC data.

Before November 2019, people who have worked at least 4 months over the previous 28 months (or 36 months for employees 53 years old and older) are eligible to receive unemployment insurance benefits if they did not leave their job voluntarily and are actively looking for work. No benefit for people who leave their job voluntarily nor for self-employed.

In October and December 2021, the unemployment reform previously postpoped was implemented.

From 1st October, the calculation of the daily reference wage (SJR) has changed and takes into account the non-worked days. The SJR, which is used as a basis for calculating the unemployment benefit, is no longer calculated on the basis of days worked in the last 12 months, but on an average monthly income taking into account days worked but also periods of inactivity. I.e., it takes into account the total number of calendar days between the first day of the first work contract and the last day of the last work contract, excluding days of illness, maternity/paternity and work accident, during the last 24 months for those under 53 years of age (36 months otherwise). Thus, the more jobseekers have a split work pattern, the more likely they are to be affected by a reduction in their unemployment benefit.

An impact study by Unédic published in April 2021 estimates that these new calculation rules will lead to a drop in daily benefit of 17 % on average in the first year for 1.15 million recipients. However, the compensation time is expected to be longer: 14 months on average, compared to 11.

As these new calculation methods lead to a breach of equality between recipients in continuous employment and those in discontinuous employment, a decree of 30 March 2021 introduced a floor mechanism to limit the decrease in the daily reference wage. The benefit cannot decrease more than 43 % in relation to the old calculation method. Of the 1.15 million recipients, 365 000 will benefit from this floor (obtained by capping the number of days not worked taken into account to 75 % of the days worked).

For jobseekers under 57 years old with an income of more than 4500 € per month in gross, (4518 in 2022), the reform which reduces their unemployment benefit by 30 % from the 7th month of unemployment started on 1 December 2021 after being postponed several times.

- *Income test*

There is no income test for this benefit. The benefit amount depends on the salary earned during the last 12 months.

- *Benefit amount*

The benefit amount depends on:

- the sum of gross earned income received during the last 12 months before the last day worked
- the mode of activity : full-time, part-time.

The calculation of this amount is based on the gross daily reference wage (*"Salaire journalier de référence", SJR*) with:

Until september 2021:

SJR= sum of gross earned income during the last 12 months before the last day worked / (365- days of absence or without a contract (= number of worked days(capped at 261)*1.4))

From October 2021:

SJR= sum of gross earned income during the last 24 months (36 for 53 years old and more) before the last day worked / (731- days of illness, partenity/maternity or in work accident) or 1096 for 53+.

In the event of a reduction in the SJR with this new calculation method, the reduction in SJR is capped at 43 % of the SJR calculated with the previous method.

The amount of the benefit is 40.4 % of the SJR + the fixed allocation (12.71 euros per day in 2023). The benefit cannot be lower than the minimum benefit mentioned in the table below (31*RF euros for 2023) and cannot be higher than 75 % of the SJR.

Since 1st of july 2014, the amount of the benefit is the higher amount between 40.4 % of the SJR + the fixed allocation and 57 % of the SJR (the benefit's amount is between 57 % and 75 % of the SJR).

For part-time workers, we compute the reduction factor as:

RF= (number of hours worked in part-time work) / (legal number of hours)

After several postponements, since 1st November 2019, people less than 57 years old whose wage is more than €4500/month in gross, (4545 in 2022, 4766 in 2023) had a reduction of their benefit by 30 % starting from the 7th month of unemployment, with a min threshold of €2261 net/month (2679 in 2023) (this part of the reform was postponed and apply from 1 december 2021(the countdown began on December 1, 2021), so the first reduction of 30 % will begin after 7 months, that is, in the amount of benefits of july 2022.

Table 2.45- ARE parameters [2020-2023]

Parameters	2020	2021	2022	2022*	2023
Fixed allocation	12*RF	12.05*RF	12.12*RF	12.47*RF	12.71*RF
Minimum Benefit	29.26*RF	29.38*RF	29.56*RF	30.42*RF	31*RF

Note: since July 2011, the amount is increased each first of July. In this table it's the amount at 30th June.
*From July, increase by 2.9 %

The monthly benefit is the daily benefit multiplied by the number of days in the month. The benefit duration is based on the rule "one day worked, one day of compensation", the duration is one day worked*1.4 in order to converts the days worked (5 per week) into days of allowance (7 per week))

Before 2009, the eligibility condition was to have worked at least 4 months in the last 28 months (88 days or 610 hours) and to be registered to the employment office. The maximum duration (age at the date of the end of the work contract) is 24 months for people under 50 years old and 36 months over 50 years old.

From 2009 to October 2019, the eligibility condition was to have worked at least 4 months in the last 28 months (88 days or 610 hours) for people under 53 years and during the last 36 months for people over 53 years old, and to be registered to the employment office. The maximum duration depended on age (age at the date of the end of the work contract) and on number of days worked (see below), it extends from 4 to 36 months.

Since November 2019, the eligibility condition is to have worked 130 days (6 months) or 910 hours during the last 24 months for people less than 53 years old (36 months for those more than 53 years old). The maximum duration depends on the number of days worked and on age, 24 months for less then 53 years old, for those 53 years and more, it's then between 30 and 36 months (53-54 years old=30 months, 55 years old=36 months). From August 2020 to November 2021, the eligibility condition has been exceptionnaly reduced to 4 months due to the Covid-19 crisis, it will return to 6 months from December 2021.

Since February 2023, the duration was reduce by 25%, except for those who have only 6 months of duration before the reform (6 months is the minimum duration threshold). At the end of the benefit period, if they have not find a job, the jobseekers may be entitled to an end-of-right supplement extending their benefit period (by the same duration as the 25% previously deduced) in the event of a deterioration in the state of labour market, i.e. when the unemployment rate exceeds 9% or in the event of a very rapid deterioration in the labor market situation.

- *Taxation and income testing*

Taxable and included in the income test of other benefits, subjected to CRDS and CSG.

Table 2.46 Characteristics of the unemployment insurance benefit [2019-2023]

		Until 30/10/2019	November 2019 to January 2023				Since February 2023
Eligibility	Contribution period	Min of 4 months in the last 28 months (88 days or 610 hours)	Min of 6 months in the last 24 months (130 days or 910 hours)				
	Other conditions	(for +53 years, 4 months in the last 36 months)	(for +53 years, 6 months in the last 36 months) These conditions are reduced to 4 months since august 2020 to November 2021 due to Covid crisis				
	Self-employed	No (specific help before November 2019)	800€/month during 6 months under conditions*				Same rules
	Workers who quit	Resignation deemed legitimate by administration**	Resignation deemed legitimate by administration**				
Payment	Contribution base	Gross earning	Gross earning				
	Basic amount	40.4 % of the gross daily reference wage + fixed allocation	40.4 % of the gross daily reference wage + fixed allocation				
	Additional amount						
	Floor	29.06/day (2019)	29.26/day (2020)	29.38/day (2021)	29.56/day° (2022)	31/day (2023)	

	Ceiling	Maximum 75 % of the gross daily reference wage	Maximum 75 % of the gross daily reference wage	
	Regressivity		For gross wages >4766€ in 2023 (4500 in 2019, 4518 in 2020, 4545 until June 2022, 4677 until end of 2022), and less than 57 years old, up to 30 % less than the initial allocation starting from the 7th months of unemployment (after 182 days of unemployment = 6 months, 8 months from July 2021 except if the unemployement situation in France is better at this date) ***	Same rules
Duration	Standard (in months)	number of days worked *1.4 with a maximum of 730 calendar days for less than 53 years old (913 for 53-54 years old, and 1095 for 55 and more)	number of days worked *1.4 with a min of 182 calendar days and a maximum of 730 calendar days for less than 53 years old (913 for 53-54 years old, and 1095 for 55 and more)	For demands after 1 February, the duration is reduced by 25% with a minimum threshold of 6 months of duration.
	Special cases (in month)	In case of part time activity, the maximum is 12 months	In case of part time activity, the part time rate is taken into account (rate=nb hours/35 apply to the 31€ (in 2023) and to the fixed allocation) the maximum depend on the same calculation of the full time	
Subject to	Taxes	Yes	Yes	
	SIC	Yes (3 % for retirement)	Yes (3 % for retirement)	

**The self-employed must have been in the same company for 2 years, the company must be in reorganization or liquidation and the 2 previous years annual turnover must be at least 10 000€. The income of the applicant for the benefit must be less then RSA at the time of the request and he must prove he's seriously looking for a job.*

***For workers who have resigned, the resignation is legitimate if objective reasons justify it, such as follow his partner or parents in other region, after a marriage, in case of domestic violence…or if the applicant has left his job for another one and he lost this other job within 65 days of recruitment. In other cases of risignation, the benefit can be obtained after 4 months (121 days) of unemployment (4 months not compensated) if the eligibility conditions are fulfilled and in case of serious and active job search. Since November 2019, a new possibility has been offered to resigners to access to the benefit, it's to resign to build another professional project (the project must be accepted by administration before resignation).*

° amount increased to 30.42 in July 2022

**** This part of the reform was temporarily suspended until December 2021 so, for eligible peole, the degressivity of the benefit will start in fact from July 2022 after 182 days of unemployment.*
From June 2022, those who daily allowance is higher than 149.5€ per day (156.70 in 2023) are eligible for degressivity. After application of the 30 % degressivity, the minimum daily allocation cannot be less than 87.65€/ day, 89,32 in 2023(i.e. 2666€ of allowance per month, 2679 in 2023).
From June 2022, for gross wages >4677€ (4518 in 2020 and 4545 until June 2022), and less than 57 years old up to 30 % less than the initial allocation starting from the 7th months of unemployment (after 182 days of unemployment = 6 months, 8 months from July 2021 except if the unemployement situation in France is better at this date).

Covid-19 measures for employment :

- Exceptional extension of compensation period for ARE for those whose rights expire between March 1 and May 31 2020 (addition of 92 calendar days if the end of rights is between March 1 and 31 2020, 61 calendar days if rights expire between April 1 and 30 , 31 calendar days for an end between May 1 and 31). The measure has been extended until May 2021 This measure is not simulated in EUROMOD due to lack of data.

- Affiliation reference period has been automatically extended by the number of days between March 1 and May 31 2020 and after. This period becomes 27 months (24 before) for employees under 53 years old and 39 months (36 before) for employees aged 53 and over. This measure is not simulated in EUROMOD. This measure is not simulated in EUROMOD due to lack of data.

- Adjustment of the duration of compensation and the daily reference wage (SJR): The days not covered by an employment contract between March 1 and May 31, 2020 will not be taken into account to determine the duration of the compensation and the amount of the reference daily wage (SJR) which is used as the basis for the calculation of the daily amount of unemployment benefit for job seekers whose employment contract ends from January 1, 2021. This measure is not simulated in EUROMOD due to lack of data.

- Exceptionally, the required contribution period is reduced for employees whose employment contract ends between August 1, 2020 and December 31, 2020 (extented until unemployment improves). It is set at 4 months in order to take into account the health crisis related to **Covid-19** (decree n ° 2020-929 of July 29, 2020). This measure is not simulated in EUROMOD due to lack of data.

- Exceptionnally, for the degressivity introduced for the "richest" unemployed in November 2019, the 2 months of lockdown were not taken into account in the 6 months after witch the benefit decreases. During summer 2020, it was decided to suspend the 182 days counter after which the degressivity will appear until June 2021 (from March 2020 to June 2021, the 182 days counter doesn't run). For those whose 182-day counter started before lockdown, after several postponement, the reform was fully applied 1st of December 2021, with a start of the 182 days of unemployement countdown at this date and an effect on amount given in July 2022 (the count will start on December 1 and the allowance will be reduced 182 calendar days later).

Because of lack of information, we can't simulate this reform in EM, indeed, we have to know exactly the situation of the unemployment month after month, we have to know the history of unemployment, we can't simulate it if we cannot count the number of days of unemployment.

- 2 new cases of legitimate resignation are authorized (applicable from April, 16 until May,31 and June 1 until October 29, 2020) for employees who resigned from their job before the lockdown period in order to take another salaried activity which did not finally materialize, or which the employer has terminated.

- Extension of the deadline for registering with Pôle emploi (normally, registration must take place within 12 months of the end of the employment contract. This period is extended by days not covered by an employment contract between March 1, 2020

and May 31, 2021) 275 days in addition to the usual timeframe of 12 months. This measure is not simulated in EUROMOD due to lack of data.

- In the context of the **Covid-19** health crisis, access to partial unemployment was facilitated in order to avoid massive dismissal (see section 2.8 and 2.9).
- An exceptional allowance has been introduced for those who work part of year as seasonal or intermittent entertainment workers. This measure is not simulated in EUROMOD due to lack of data.
- An exceptional allowance has been introducef for young graduates former scholarship holders who encountered difficulties in finding a job. This measure is not simulated in EUROMOD due to lack of data.

Several of these measures for unemployement have been renewed for 2022 for sector concerned (see part 2.8 and 2.9).

- *EUROMOD modelling*

No information exists in the dataset on contribution history. As a result, the simulation of eligibility approximates to a large extent observed receipt in the data. The age condition is simulated using age at the end of the income reference period. Thus, individuals who have turned 65 during the period and might have been entitled to the benefit for part of the year are considered ineligible. Previous earnings have been imputed from the observed amount of the received benefit by inverting the benefit rules. The difference between full-time and part-time workers is not simulated as the number of hours worked in the previous year is not observable in the data. All entitled individuals are considered to have worked full time. If the upper limit of the benefit (75 % of SJR) is lower than the minimum benefit, the upper limit is enforced based on the assumption that such a situation may arise only for part-time workers for whom the minimum benefit is not properly simulated (i.e. it is over simulated). Duration of the benefit is simulated assuming the same number of months has been worked in each year as in the current year. Duration of benefit receipt is simulated to be at least the number of months in receipt observed in the data.

New rules regarding the period for computing the benefit amount, in force since October 2021, cannot be implemented due to lack of relevant information in the input data.

The increment of the amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the benefit amounts before and after the 1st July

2.5.14 Unemployment Assistance– bunmt_s – (*Allocation de solidarité spécifique, ASS*)

- *Eligibility conditions*

People who have exhausted their rights to unemployment insurance, who have been employed for at least 5 years during the last 10 years, are aged under 62 and actively looking for a job are eligible for unemployment assistance.

- *Income test*

The income taken into account for the income test is the couple's net taxable income (RNI) except the unemployment benefit previously earned, family allowance, housing benefits, but including the ASS itself.

The monthly amount is calculated as the sum of the eligible income of the 12 previous months before the month of the demand, divided by 12.

The monthly income should be under:

Table 2.47- ASS income limit

Monthly income	Differential rate
Single	70 times the daily amount
Couple	110 times the daily amount

The computation method also depends on the same couple's income. The benefit is either a lump-sum (full rate) or calculated differentially. The thresholds for receiving the full rate are:

Table 2.48- ASS, threshold for full rate

Monthly income	Full rate
Single	Under 40 times the daily amount
Couple	Under 80 times the daily amount

- *Benefit amount*

Table 2.49- ASS daily benefit amount [2020-2023]

	2020	2021	2022	2022*	2023
Daily amount	16.89	16.91	17.21	17.90	18.17

The monthly amount is obtained by multiplying the daily amount by 30.

If the couple's income is below the full rate threshold (i.e. 40 times the daily amount for a single person, 80 times for a couple), the monthly benefit is the daily amount multiplied by 30.

If the couple income is above the threshold for the full rate amount, the benefit will be

30*daily amount – (Couple's income – Full rate threshold)

- *Compatibilities*

This benefit is not compatible with unemployment insurance benefit ARE and RSA, but compatible with AAH before 2017 (not after for new request, for those who received the two allowances before January 2017, under eligibility conditions, the two allowances combined for 10 years).

- *Taxation and income testing*

The Unemployment Assistance is taxable, but it is not subjected to CRDS and CSG. The benefit is included in the income test of other benefits.[1]

Table 2.50- ASS, characteristics of the unemployment assistance [2020-2023]

		2020-2023			
Eligibility	Contribution period	n/a			
	Other conditions	Employed at least 5 years in the last 10 years, under 62 years old (for those who have all the quarters to receive a full pension), looking for a job, exhausted unemployement insurance.			
	Eligibility of self-employed	No			
Payment	Contribution base	Net taxable income (couple)			
	Basic amount	16.89/day in 2020	16.91/day in 20021	17.21/day in 2022	18.17/day in 2023
	Additional amount	-			
	Floor	n/a			
	Ceiling	If the household income is below the full rate threshold (i.e. 40 times the daily amount for a single person, 80 times for a couple): daily amount*30 If the houshold income is above the threshold for the full rate amount, the benefit will be 30*daily amount – (households' income – Full rate threshold)			
Duration	Standard (in months)	6 months renewable as long as the beneficiary fulfilld the conditions of eligibility			
	Special cases (in month)	-			
Subject to	Taxes	Yes			
	SIC	No			

Exceptional solidarity allowance linked to **Covid-19** crisis :

This allowance is paid in one lump sum to poor households in order to deal with unforeseen expenses linked to **Covid-19** crisis. This exceptionnal allowance is paid twice in May and November 2020 to all ASS beneficiaries only if they are not beneficiaries of RSA or APL, 150€ for single person or for a couple, with 100€ in addition for each child.

- *EUROMOD modelling*

There is no detailed information about contribution history in the data. The condition of 5 years worked in the last 10 is approximated by checking that the individual has worked at least 5 years throughout his entire work career. It is assumed that all potential recipients are actively looking for work. The exhaustion of contributory unemployment insurance benefits (ARE) is checked by comparing months in unemployment with the imputed/ simulated number of months receiving ARE. The income test is simulated based on current yearly income. Due to time period mismatched, the simulated benefit does not approximate well observed receipt in the

[1] **Simulation assumption**: ASS is taxable and at the same time its income test depends on taxes. In order to deal with this circularity, taxes (including income tax and CRDS) are calculated using the data variable and not the simulated variable. The simulated variable is calculated after taxes are computed.

data. Incompatibilities with RSA are not simulated. Instead, ASS is included in the income test of RSA.

The increment of the amount on July 1st 2022 is introduced in the model with the FYA. It is calculated with a weighted average, considering the benefit amounts before and after the 1st July.

2.5.15 Exceptional 2021-2023 lump sum to compensate inflation increase (binxp_s) – (*Indemnité inflation)*

In 2021, to compensate inflation, a lump sum of 100 € was paid in one go for people over 16 years old, earning on average less than 2000€ net per month. Net monthly income is calculated as the average on the salaries received from January to October 2021 for employees, and on the amounts received in October 2021 for the other cases. This lump-sum is individualised, if both members of a household earn less than 2000€ net per month, they will both receive assistance. This assistance is not subjected to any tax or social contributions, and not taken into account for income tax, nor when qualifying for social assistance.

The potential beneficiaries are people in activity (employees and self-employed), retired, unemployed, ill or in maternity/paternity, recipients of minimum social benefits (like RSA, AAH or invalidity beneficiaries…), apprentices and students on scholarship or students receiving housing benefits. The date of payment is between December 2021 and February 2022, depending on their status.

In 2022, an other exceptional solidarity lump-sum to cope with inflation was given to recipients of social minimas (RSA, AAH, ASPA, AV, ASS, housing benefits or invalidity), apprentices, and scholarship students. In November and December, they have received 100 € one-off payment per household, and 50 € additionally for each dependant in the household. For recipients of the activity allowance, there is also an exceptional lump-sum of 28EUR with an increase of 14EUR for each dependent child. These 2 allowances cannot be combined (if you receive the activity allowance, you cannot claim to exceptional solidarity allowance for another social minima).

2.5.16 Exceptional 2023 purchasing power bonus for public servants (binps_s) – (*Indemnité inflation)*

In 2023, for public servants, an exceptional purchasing power bonus for certain public servants has been introduced, subject to income conditions, and paid in a single lump sum in the last quarter of the year.

Conditions :

- have been recruited or appointed by a public employer before 1er January 2023;
- remain in place as of June 30, 2023;
- to have received, between 1er July 2022 and June 30, 2023, a remuneration of up to €39,000 gross for 12 months or €3,250 gross per month maximum.

Note : if you have not been employed for the whole period from 1er july 2022 as of june 30, 2023, you can verify whether you are eligible for the bonus by dividing your total gross remuneration by the number of paid months, then multiplying the result by 12. If you have had more than one employer, you must consider the total remuneration paid by the last employer and then make the same calculation.

The amount of the exceptional premium is staggered **between €300 - €800 and prorated for part-time work** or if the period of work is less than 12 months.

The lump sum is calculated on the basis of the gross remuneration received for the period from **of 1er july 2022 to june 30, 2023** :

Gross remuneration (GR)	Lump sum amount
GR ≤ € 23 700	€800
€ 23 700 < GR ≤ € 27 300	€700
€ 27 300 < GR ≤ € 29 160	€600
€ 29 160 < GR ≤ € 30 840	€500
€ 30 840 < GR ≤ € 32 280	€400
€ 32 280 < GR ≤ € 33 600	€350
€ 33 600 < GR ≤ € 39 000	€300

This lump sum is submited to social contributions and income tax.

2.5.17 Sickness benefit (*« congé maladie »*) and Parental leave (*« congé maternité »*, *« congé patérnité »*, *« congé adoption »*)

- *Definitions*

The parental leave and the sickness benefit are replacement income provide by The Primary Health Insurance (CPAM) for employee. In case of sick leave, maternity, paternity or adoption leave, the employee receives daily social security benefits.

The parental leave and the sickness benefit are subject to almost the same conditions of grant detailed below.

Concerning the three different parental leave in France, the duration of leave changes depending on the situation in view of the number of children in the household, and the number of children expected or adopted.

The benefit is paid fortnightly in arrears, it depends on the previous salaries and on the number of days of leave. The first payment will be received after 14 days.

1- Sickness benefit (bhl)

- *Eligibility*

If you are an employee, you receive daily social security allowances if you fulfill the conditions of entitlement, which vary according to the duration of inactivity and the contributions.

If the individual is out of work for **less than 6 months**

- the employee must have worked at least 150 hours in the 3 calendar months or 90 days prior to the inactivity; or have contributed on a salary equal to at least 1015 times the amount of the hourly SMIC during the 6 calendar months preceding the inactivity.

- or, failing that, in the case of a seasonal or intermittent activity, having worked at least 600 hours or contributing on a salary of at least 2030 times the amount of the hourly SMIC, during the 12 calendar months or 365 days before the beginning of the inactivity.

If the period of inactivity is **longer than 6 months**, it is considered a long-term inactivity. The employee **must be registered at least 12 months** as a socially insured at the date of the beginning of the inactivity; and he (she) must have worked at least 600 hours in the 12 calendar months or 365 days prior to the inactivity; or have contributed on a salary equal to at least 2030 times the amount of the hourly SMIC during the 12 calendar months preceding the inactivity.

- *Benefit amount*

The daily allowance is equal to half of the daily wage for the last 3 months (the last 12 months in the case of a seasonal or intermittent activity). This daily wage is equal to the total of the last 3 wages (in gross) divided by 91.25 (to take into account the fact that the benefits paid include Sundays and holidays).

Importantly, these remunerations are taken into account only up to a ceiling equal to 1.8 times the SMIC (maximum amount in January 2022 was 47.43 Eur $\left(\frac{1603.15*1.8*50\,\%}{30.42}\right)$, 50.58 in 2023). From the 31st day of absence from work, this amount is increased to 2/3 of the daily wage, calculated on the same basis, **only** for employees with at least 3 children (maximum amount in January 2022 was 63.23 Eur $\left(\frac{1603.15*1.8*66.66\,\%}{30.42}\right)$ 67,47 in 2023. The daily allowance cannot be less than the minimum amount of the disability pension, increased by one third for employees with at least 3 dependent children.

Table 2.51- SMIC amounts [2020-2023]

	Gross hourly SMIC	Gross monthly SMIC		Gross annual SMIC		Date of entry in force
		for 151.67 hours of work*	for 169 hours of work	for 151.67 hours of work*	for 169 hours of work	
2020	10.15	1539.42	1715.35	18473	20584.20	01/01/2020
2021	10.25	1554.58	1732.25	18655.41	20787	01/01/2021
2021	10.48	1589.50	1771.12	19074.02	21253.44	01/10/2021
2022	10.57	1603.15	1786.33	19237.82	21435.96	01/01/2022
2022	10.85	1645.58	1833.67	19746.96	22004.04	01/05/2022
2022	11.07	1678.95	1870.83	20147.40	22449.96	01/08/2022
2023	11.27	1709.28	1904.63	20511.85	22855.56	01/01/2023
2023	11.52	1747.20	1946.88	1747.24	23362.56	01/05/2023

Table 2.52- Sickness benefit, amounts [2020-2023]

	2020	2021	2022	2023

Minimum monthly amount of disability pension, sickness/maternity/paternity benefit	289.90 (9.53/day)	289.90 (9.53/day)	292.89 (9.66/day)	310.47 (10.24/day)
Maximum amount for sickness benefit	45.55	46	47.43	50.58
Maximum amount for sickness benefit for employees with at least 3 children and from the 31st day of sickness	60.73	61.33	63.23	67.47
Maximum amount for maternity/paternity/adoption leave	89.03	89.03	89.03	95.22

The employee may also be entitled to additional compensation paid by the employer or to the maintenance of the salary, in particular because of collective agreements.

For the jobseekers, the daily allowance is calculated using the last 3 wages received, rather than the unemployment benefits.

Measures linked to **Covid-19** crisis: Workers who can't telework or who have to take care of their less then 16 years old children during the different lockdowns, can benefit from sickness benefit from 1 to 21 days (until 1st May), after they have to resort to partial unemployment.

- *Duration*

The health insurance fund has a waiting period of three days. That is, daily allowances are only paid from the fourth day of sick leave in the private sector, from the second day in the public sector. This waiting period applies to each period of inactivity, except for the case of a recognized long-term illness.

Except in recognized cases of long-term illness, the employee cannot receive more than 360 daily allowances over a period of three years. The maximum duration of payment is increased to three years for long-term illnesses or chronic diseases. Any resumption of work for a period greater than or equal to one year restarts a new maximum period of three years of compensation. Beyond three years, employees may be eligible for a disability pension.

- *EUROMOD modelling*

Due to lack of information on sickness (number of days of sickness) and on previous contribution history, the sickness benefit is not simulated in EUROMOD but included in the microdata.

2- Maternity leave (bmact_s)

- *Eligibility*

Maternity leave is not subject to any conditions regarding seniority in the company or in the nature of the contract. Being pregnant confers entitlement to maternity leave if the employee has been insured for 10 months on the presumed date of delivery. It must also satisfy the two conditions mentioned in sickness benefit for being out of work for less than 6 months (the date

taken into account in the eligibility conditions is the beginning of pregnancy or prenatal leave)[2].

- *Duration*

The minimum duration of maternity leave is calculated in weeks. Maternity leave breaks down into a prenatal period and a postnatal period, before and after childbirth. The duration of prenatal leave and postnatal leave depends on the nature of the birth and the number of children.

- The duration of maternity leave for a first pregnancy or for the birth of a second child is the same. It is fixed at 16 weeks, 6 weeks before delivery and 10 weeks after delivery.

- From the third child, maternity leave is 26 weeks in total, 8 weeks before delivery and 18 weeks after childbirth.

- When the mother is expecting twins, the duration of maternity leave is 34 weeks, 12 weeks before delivery and 22 weeks after delivery. When the mother expects triplets or more, the duration is 46 weeks, 24 weeks before delivery and 22 weeks after delivery.

Legal durations may be extended in certain situations. In case of premature birth, the days of prenatal leave that could not be taken because of the early onset of the child extend the postnatal leave accordingly. In the case of illness related to pregnancy or childbirth, these periods may be increased by up to two weeks for prenatal leave and up to four weeks for leave. When the mother of the child dies while on maternity leave (during delivery, for example), the father's employment contract may be suspended for 10 weeks from the day of birth of the child.

- *Benefit amount*

The maternity leave remunerations follow the same rules as sick leave except for maximum amount (see table above, the calculation is $\frac{PSS*79\,\%}{30.42}$). The employee on maternity leave receives daily social security benefits. The collective agreement of the company may also provide for the full maintenance of the salary.

3- Paternity leave (bpact_s)

[2] The pregnant woman must inform her employer generally at the beginning of the second trimester of pregnancy, by transmitting a medical certificate and a letter specifying the presumed date of the delivery and the dates of beginning and end of the maternity leave. An employee cannot be dismissed during her maternity leave. However, a breach of contract is possible in the event of serious misconduct or if it is impossible to maintain it in the company for reasons unrelated to its maternity. But even in this case, the termination cannot be notified to her during her maternity leave.

- *Eligibility*

Paternity leave applies not only to employees but also to jobseekers, trainees in vocational training, non-salaried workers, whether agricultural or non-agricultural, as well as the liberal professions[3].

- *Duration*

Fathers can take 11 consecutive days of paternity leave if they want (it's not an obligation for the father to take these days). These are calendar days, including days not worked, such as Saturdays, Sundays or holidays. Since July 2021,1st the number of days is increased to 25 days.

In case of birth of twins or triplets, the rules applicable to paternity leave are identical. But the duration of the paternity leave is increased to 18 days instead of 11(32 days since July 2021,1st).

Paternity leave must be taken within four months after the birth of the child. This is the date of departure from the paternity leave which is taken into account: the paternity leave can therefore end after this period of 4 months.

In order to benefit from paternity leave, if the father concerned is an employee, he must notify his employer at least one month in advance of his departure and return dates in the company. He can do it before the birth of the child. The employer cannot refuse a request for paternity leave unless the employee has not respected the notice period of one month. In addition to this, the employee must, after the birth of the child, send a complete copy of birth certificate or a copy of the current family record to his health insurance to benefit from the payment of daily allowances during his period of paternity leave. The employees' employment contract is suspended for the duration of the leave.

In addition to paternity leave, the father is entitled to a *birth holiday of three days*. A new father can therefore benefit from 14 consecutive days of absence if he accumulates both leaves (or 21 days for twins). However, you do not have to take your paternity leave following your 3-day birth holiday.

- *Amount*

As in the case of paternity leave, employees on paternity leave are therefore not paid by their employer but by social security. The conditions of payment of daily allowances by CPAM are the same as those for maternity leave.

4- Adoption leave

- *Eligibility*

An employee who adopts a child is entitled to a compensated adoption leave of varying duration depending on the situation (number of children adopted, number of children already dependent).

[3] From the birth of the child, the salaried father benefits from a protection period of 10 weeks from birth, whether or not the father takes the paternity leave: he can only be dismissed for serious misconduct independent of birth or for economic reasons.

It can be taken by one of the parents or be divided between the two employed parents.

Adoption leave is open to any employee who has been entrusted with a child:

- by the child welfare service (ASE),
- by the French Agency for Adoption (AFA),
- by a French agency authorized for adoption,
- by decision of the competent foreign authority, provided that the child has been authorized, as such, to enter France[4].

- *Duration*

The legal duration of adoption leave varies according to the number of children adopted, the number of children already dependent in the household before adoption and the possible distribution of the leave between parents:

Table 2.53- Adoption leave, duration

Number of adopted children	Number of already dependent children in the household	Duration leave before July 2021		Duration leave after July 2021	
		Only one parent takes the adoption leave	The two parents take the adoption leave	Only one parent takes the adoption leave	The tw take th leave
1	0 or 1	10 weeks	10 weeks + 11 days	16 weeks	16 wee
1	2 or more	18 weeks	18 weeks + 11 days	18 weeks	18 wee
2 or more	Whatever	22 weeks	22 weeks + 18 days	22 weeks	22 wee

When the adoption leave is divided between the two parents, it can only be divided into two periods, the shortest of which is at least 11 days (25 since July 2021)(or 18 /32 in 2023 days in the case of multiple adoptions). These 2 periods can follow or be taken simultaneously.

The leave begins on the date of arrival of the child in the home. However, it can start earlier, within the limit of 7 consecutive days preceding the arrival of the child at home. The employee must notify the employer by registered letter with acknowledgment of receipt (or delivery against receipt). He specifies in the letter the reason for his/her absence and the date on which he/she intends to terminate the suspension of his/her employment contract. The employer cannot refuse the benefit of the leave. Unless there is a contractual or collective agreement to the contrary, no time limit is imposed on the employee to warn the employer.

- *Amount*

During the adoption leave, any adoptive parent is entitled to the payment of daily rest allowances if he/she complies with the 3 previous conditions of the maternity leave (the date taken in account is the date of arrival of the child in the home).

[4] If you adopt a child in France, you must obtain a certificate linking the departmental adoption services indicating the beginning of the adaptation period or a certificate of placement. If you are adopting a child abroad, you must provide a photocopy of the child's passport or any other official document containing the visa issued by the Intercountry Adoption Mission (IAM).

- *Taxation and income testing*

Note that *bchcc_s* (supplement for free choice of activity) is not compatible with paid holidays, maternity/paternity/adoption leave, sick leave or unemployment benefit, hence this should be accounted for when modelling *bchcc_s*.

Taxable and included in the income test of other benefits, and subjected to CRDS and CSG.

- *EUROMOD modeling*

This benefit is not simulated in EUROMOD due to lack of information about adoption in the data.

2.6 Social insurance contributions

Discrepancies exist in regimes of social security depending on the employment status of individuals and sometimes on the sector they work in.

There are 4 main social systems in France:

- The general regime for employees
- The regime for the self-employed (*travailleur non salarié*, TNS) run by independent groups (RAM)
- The agricultural system managed by *Mutuelle Sociale Agricole* (MSA)
- The local *Alsace-Moselle* plan
- Some more specific schemes (SNCF. EDF…)

The most important regime (*"régime général"*) covers employees against the financial consequences of different risks (illness, accident) or situations (family, old age, widowhood).

These systems are financed by contributions from both employees and employers (sometimes either one or the other) on wages and related income.

2.6.1 Employee social contributions (tscee_s)

Employee social contributions are mainly aimed at financing the Social Security system (*Sécurité Sociale*). Different types of contributions are paid by employees on their whole gross income:

- Employee contributions for health insurance and widowhood
- Employee contributions for old age
- Employee contributions for unemployment insurance

- *Liability to contributions*

All employees pay social contributions but there are some exemptions or rates reductions for certain contributions in order to help employment:

- For entrepreneurship when they invest in disadvantaged areas or were unemployed or were employed and create or take over a business.
- For hiring an employee with low-income or in a disadvantaged area, or for young innovative enterprises
- For the employment of young people or unemployed people who have particular employment contract like "*Contrat d'apprentissage*", "*Contrat de professionnalisation*" or "*Contrat d'accompagnement dans l'emploi*".
- For the employment of home help for the elderly or disabled, or child custody.
- Between 2007 and 2012, overtime pay is exempted from social insurance contributions. Since 2013, overtime pay is again subject to the standard social insurance contributions rates.

- *Income base used to contributions*

The tax base depends on the gross income and on the type of contribution. Some contributions are taxed on whole incomes, others are capped (i.e. only one part of the income is taxed). The ceiling depends on the monthly social security ceiling. Depending on the contribution concerned, the ceiling of social security is increased by multiplying it by 1, 3, 4 or 8. The income considered in the base column of the next table, is the gross income on the payroll for all jobs, part-time or full-time, occasional or not.

Table 2.54- Employee social contribution, monthly ceilings [2020-2023]

	2020-2022	2023
Income group A	0 to 3428	0 to 3666
Income group B	3428 to 13712	3666 to 14664
Income group C	13712 to 27424	14664 to 29328
Income group 1	0 to 3428	0 to 3666
Income group 2	3428 to 10284	3666 to 10998

Remark: 3666=1*monthly PSS, 14664=4* monthly PSS, 29328=8* monthly PSS, 10998=3* monthly PSS
Since 2019, income groups were renamed, group A became Tranche 1 (less than 1*PSS), Group B and C became Tranche 2 (between 1 and 8*PSS) and Tranche 3 (>8*PSS).

- *Contribution rates*

The different rates depend on the employment status and on the regime. The different employee social contributions are summarised below.

Table 2.55- Employee social contribution, rates [2020-2023]

	Base	2020-2023
Sickness	Whole income	0 %
Old age	Income group A	6.90 %

	Whole income	0.40 %
Complementary pension for non-white collars	Income group 1	3.15 %
	Income group 2	8.64 %
Complementary pension for white collars	Income group A	3.15 %
	Income group B	8.64 %
	Income group C	8.64 %
AGFF (Old age), CEG (general equilibrium contribution)	Income group 1/A	0.86 %
	Income group 2/B	1.08 %
Unemployment insurance	Income group A/B	0 %
White collar (APEC)	Income group A+B	0.024 %
Outstanding contribution (CET)	Income group A/B/C	0.14 %

Since 2019, overtime pay is exempted from employee SIC contribution.

- *EUROMOD modelling*

There is not enough information in the dataset to identify to which specific contribution regime an individual contributes to. As a result, only the "*regime general*" is simulated for all employees. The simulation of the contributions takes into account the number of months an individual has been working during the income reference period recorded in the data but does not take into account any variation in earnings that may have occurred throughout the year. White collar workers have been approximated based on occupation (senior officials and managers and professionals). No exemption from contributions with the exception of overtime pay or entitlement to lower rates is simulated due to absence of information in the underlying micro-data. Complementary pensions for white-collar employees are simulated based on the assumption that the split of contributions between employer and employee on Income Group C is similar to the one pertaining to income Group B. In practice, a portion of this split is subject to firm level negociations.

2.6.2 Employer social contributions (tscer_s)

Like employees, employers are liable for social contributions on medical insurance, pensions, unemployment insurance and additional contributions such as family contributions and housing.

Since 1st January 2016, employers have to provide a mutual company insurance ("*mutuelle d'entreprise*") to their employee. The employer pays half of the contributions and the employee the other half. The aim is to provide all employee a minimal social coverage in addition to social security.

- *Liability to contributions*

The definitions are the same as those for employee social contributions mentioned in the previous section.

- *Income base used to calculate contributions*

The definitions of income groups are the same as those for employee social contributions mentioned in the previous section. Likewise, the income base refers to gross employment income.

- *Contribution rates*

Table 2.56- Employer social contributions, rates [2020-2023]

	Base	2020-2023
Sickness*	whole income	
	Income>2.5 SMIC	13%
	Income≤2.5 SMIC	7%
Family benefits*	whole income	5.25% (3.45%*°)
Housing		
FNAL firms with less than 20 employees*°	Income group A	
FNAL firms with more than 20 employees*°	Whole income	
FNAL firms with less than 50 employees*°	Income group A	0.10%
FNAL firms with more than 50 employees*°	Whole income	0.50%
Old age*	Income group A	8.55%
	whole income*	1.90%
CSA (autonomy solidarity)*°	whole income	0.30%
Complementary pension for non white collars (AGIRC-ARRCO)**	Income group 1	4.72%
	Income group 2	12.95%
Complementary pension for white collars (AGIRC-ARRCO)**	Income group A	4.72%
	Income group B	12.95%
	Income group C	12.95%
AGFF (old age)(CEG)**	Income group A/1	1.29%
	Income group 2/B	1.62%
White collars contingency	Income group A	1.50%
Unemployment insurance	Income group A+B	4.05%
Wage guarantee fund	Income group A+B	0.15%

APEC	Income group A+B	0.036%
Outstanding contribution (CET) (white collars only)	Income group A/B/C	0.21%
Professional training	Whole income	
-less than 10 employees		0.55%
-10-19 employees		1%
-more than 19 employees		1%
Apprenticeship tax	Whole income	0.68%
Participation in the construction effort (more than 20 employees in 2019, 50 after)	Whole income	0.45%
Contribution to professional and unions organizations	Whole income	0.016%
Arduousness contribution	One factor of arduousness	0%
-for exposed employees only		
	Several factors	0%
-for all employers		0%

*subject to "Réduction Fillon", *° subject to "Réduction Fillon" since 2015, ** since 2019
For family benefit, 5.25 is the standard rate. Since 2015, for incomes below 3.5 smic, the reduced rate of 3.45 is applied, but for those with incomes above 3.5 smic 5.25 is applied on the whole income (and not 3.45 up to 3.5 smic and 5.25 above).

- *Reductions in employers' social security contributions (since 2020 "Réduction générale des cotisations patronales", called "Réduction Fillon" before)*

Since 2003, a general reduction on employers contributions paid for low-income employees exists ("*Réduction Fillon*"). This reduction is decreasing and varies with the level of the employee's income, the coefficient is maximum at the minimum wage (SMIC). It applies to all employees whose income is less than 1.6 SMIC whatever form or nature of the employment contract and working hours, the amount being maximum for employees paid at the minimum wage. It applies for each calendar year for each employee.

This reduction was amended in 2015. Since 2011, the reduction is calculated on the yearly income, before it was calculated on the monthly income (annual income includes bonuses such as the 13th month, before bonuses were not included). In 2012, overtime was included in the yearly income (excluded before). From 2015, there are, under certain conditions, no employer contributions for sickness, maternity, pension, invalidity and death for employees with low earnings.

The employer social contributions affected by the "*Réduction Fillon*" are sickness, family benefits, and old age. Since 1st of January 2015, housing (FNAL), solidarity autonomy (CSA), occupational diseases and work accident (the rate of this contribution changes according to the company) are also included. Since 2019, the tax credit for competitiveness and employment ("*Crédit d'impôt pour la compétitivité et l'emploi", CICE)* was removed and replaced by a reduction in employers social contribution rates. So since January 2019, the complementary pension (AGIRC-ARRCO only up to 4.72 %) and AGFF-CEG (only up to 1.29 %) contributions are also included in the general reduction (6.01 pts for 1 SMIC). Since October 2019, the unemployment contribution is included too (at the rate 4.05 %). From October 2019, an additional reduction of 4.05 points on employers' social contributions is implemented for

salaries up to 1.6 SMIC. In EUROMOD, the addition of unemployment contributions to the list of contributions taking into account for the calculation of the general reduction and the additional reduction of 4.05 points will be added from 2020.

The reduction concerns private companies who paid unemployment insurance and must do salary negociation each year (for companies with more than 50 employees where there are trade-union representatives). The reduction only concerns work contracts that do not qualify for other social security exemptions (generally, cumulating exemptions is not possible: cumul with standard deduction of employer contributions for overtime, exemption for employees of home help).

The reduction amount is the product of the yearly gross income by a coefficient who changes with the number of the company employees at December 31.

The reduction is calculated on an annual basis, but the application is made in advance. The reduction is applied each month on contributions paid (it is then based on the monthly SMIC and monthly remuneration) and regularized if necessary (eg if the monthly pay varies during the year, when there are bonuses). The regularization on contributions is made in December for monthly employers, in the 4th quarter for the quarterly employers, if the contract ends during the year, the regularization applies to the last month or quarter due.

The reduction is calculated per employee, and its amount can not be superior to contributions due.

Since 2020, the amount of the reduction calculated after application of the specific deduction for professional expenses (déduction forfaitaire spécifique) is capped by 130 % of the amount of the reduction calculated without application of the deduction.

Since 2022, the general reduction concerns also the contributions due for accidents at work and occupational diseases up to a limit of 0.59 % of the remuneration (0,55% in 2023). The rate of this employers contribution is not indicated in the previous table because it depends on the work done and on the activity sector.

The coefficients are:

- <u>Companies with less than 20 employees (50 since 2020)</u>

2020	2021	2022	2023
Income ≤1.6 SMIC			
=(0.3205/0.6)*[(1.6* (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3205	=(0.3206/0.6)*[(1.6* (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3206	=(0.3195/0.6)*[(1.6* (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3195	=(0.3191/0.6)*[(1.6* (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3191

For a full time job, the SMIC gross annual amount = 1820 * gross hourly SMIC, or the sum of 12 identical fractions corresponding to its value multiplied by the 52/12^{e} of the legal weekly working hours.
For a part time job, the SMIC gross annual amount is calculated *prorata temporis*, depending on the work duration : for 50 %, the gross hourly SMIC is multiplied by 1820/2.

The gross annual income taken into account includes all cash or in-kind compensation elements.

- Companies with 20 employees and more (50 for 2020)

2020	2021	2022	2023
Income ≤1.6 SMIC			
=(0.3245/0.6)*[(1.6 * (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3245	=(0.3246/0.6)*[(1.6 * (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3245	=(0.3235/0.6)*[(1.6 * (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3235	=(0.3231/0.6)*[(1.6 * (SMIC gross annual amount/gross annual income subject to social security contributions))-1] with a cap of the coefficient to 0.3231

Table 2.57- SMIC amounts [2020-2023]

	Gross hourly SMIC	Gross monthly SMIC		Gross annual SMIC		Date of entry in force
		for 151.67 hours of work*	for 169 hours of work	for 151.67 hours of work*	for 169 hours of work	
2020	10.15	1539.42	1715.35	18473	20584.20	01/01/2020
2021	10.25	1554.58	1732.25	18655.41	20787	01/01/2021
2021	10.48	1589.50	1771.12	19074.02	21253.44	01/10/2021
2022	10.57	1603.15	1786.33	19237.82	21435.96	01/01/2022
2022	10.85	1645.58	1833.67	19746.96	22004.04	01/05/2022
2022	11.07	1678.95	1870.83	20147.40	22449.96	01/08/2022
2023	11.27	1709.28	1904.63	20511.85	22855.56	01/01/2023
2023	11.52	1747.20	1946.88	1747.24	23362.56	01/05/2023

*Source : ministry of labour, * legal working time*

- *EUROMOD modelling*

There is not enough information in the dataset to identify to which specific contribution regime an individual contributes. As a result, only the "*régime général*" is simulated for all employees. The simulation of the contributions takes into account the number of months an individual has been working during the income reference period recorded in the data but does not take into account any variation in earnings that may have occurred throughout the year. White collar workers have been approximated based on occupation (senior officials and managers and professionals). No exemption from contributions with the exception of or entitlement to lower rates is simulated due to absence of information in the underlying micro-data. Similarly, the reduction related to contributions due to accidents at work and occupational diseases have not been simulated due to the lack of information on the rates applied which depend on the sector of activity. Although companies need to fill in a declaration and apply for the reduction with the Organization for Social Security and Family benefits (*Urssaf*), in EUROMOD the reduction in employer social contributions has been simulated for all employers.

The 130 % cap for the "*réduction générale des cotisations patronales*" since 2020 is not simulated due to lack of data.

2.6.3 Self-employed social contributions (tscse_s)

- *Liability to contributions*

All self-employed in activity must pay the social contributions, but there are some exemptions or rates reductions for certain contributions in order to help employment:

- For entrepreneurship when they invest in disadvantaged areas or were unemployed or were employed and create or take over a business.
- For hiring an employee with low-income or in a disadvantaged areas, or for young innovative enterprises
- For the employment of young people or unemployed people who have particular employment contract like "*Contrat d'apprentissage*", "*Contrat de professionnalisation*" or "*Contrat d'accompagnement dans l'emploi*".
- For the employment of home help for the elderly or disabled, or child custody.
- For self-employer when they start their activity.

- *Income base used to calculate contributions*

The tax base depends on the gross self-employment activity income (i.e. gross profit) and on the type of contribution. Some contributions are taxed on whole income, others are capped (i.e. only one part of the income is taxed). The ceiling depends on the annual social security ceiling. Depending on the contribution concerned, the ceiling of social security is increased by a multiplicative factor.

PSS is the annual Social Security ceiling ("*plafond de la sécurité sociale*"):

Table 2.58- PSS annual amounts [2020-2023]

	2020-2022	2023
Annual PSS	41136	43992

- *Contribution rates*

For self-employment, the social contributions rates depending on the type of self-employment, they are different for "Artisan", " Industry and traders" and "Farmers".

Table 2.59- Self-employed social contributions, rates [2020-2023]

2020	Artisan	Industry and trader	Farmers
Family benefits	3.1 % if r > 1.4 PSS	3.1 % if r > 1.4 PSS	if r≤ 1.1PSS: 0 %

	0 % if r ≤ 1.1 PSS if 1.1 PSS < r ≤ 1.4 PSS Rate= [(3.1/0.3PSS)*(r-1.1PSS)]	0 % if r ≤ 1.1 PSS if 1.1 PSS < r ≤ 1.4 PSS Rate= [(3.1/0.3PSS)*(r-1.1PSS)]	if r>1.4PSS:3.1 % if r between 1.1 et 1.4 PSS: 0%≤rate≤3.1 % Rate=[(3.1 %)/(0.3PSS)] * (r-1.1PSS)
Sickness	if r≤0.4PSS, 0 %≤rate<3.16 % rate=[(7.2 %-2.2 %) /(1.1PSS)]*r+[(2.2 %-0.85%)/(0.4PSS))*r]+0.85% if 0.4 PSS < r ≤ 1.1 PSS 3.16%≤rate<6.35 % rate= [(7.2%-2.2 %) /(1.1PSS)]*r+2.2 % if 1.1PSS<r≤5 PSS rate = 6.35 % if r> 5 PSS, rate= 6.50 %	if r≤0.4PSS, 0 %≤rate<3.16 % rate=[(7. 2%-2.2 %) /(1.1PSS)]*r+[(2.2 %-0.85 %)/(0.4PSS)*r]+0.85 % if 0.4 PSS < r ≤ 1.1 PSS 3.16 %≤rate<6.35 % rate= [(7. 2%-2.2 %) /(1.1PSS)]*r+2. 2% if 1.1PSS<r≤5 PSS rate = 6.35 % if r> 5 PSS, rate= 6.50 %	If r≥1.1PSS: 6.50 % If r<1.1PSS: 1.5%≤rate≤6.5% rate= [(6.5%-1.5 %) /1.1PSS]*r+1.5 %
Supplementary sickness	0.85 % of r < 5*PSS. minimum payment calculated on 0.4*PSS (140€ in 2020)	0.85% of r < 5*PSS. minimum payment calculated on 0.4*PSS (140€ in 2020)	
Pension	17.75 % of r<PSS and 0.60 % of r>PSS (min contribution calculated on 11.5 %*PSS=840 € in 2020)	17.75% of r<PSS and 0.60% of r>PSS (min contribution calculated on 11.5%*PSS=840 € in 2020)	14.87 % of r < PSS 2.24 % of r>PSS
Complementary pension	7 % of r<38 340 8 % of 38 340<r<4*PSS	7% of r< PSS 8% of PSS<r<4*PSS	4 %
Professional training contribution	0.29 % of PSS	0.25% of PSS	
Invalidity + death insurance	1.3 % of r<PSS (min contribution based on 11.5%*PSS (62 € in 2020)	1.3 % of r<PSS (min contribution based on 11.5 %*PSS (62 € in 2020)	0.8 % in 2020 (min 11.5 % PSS=38€) + IJ Amexa = 180 euros and invalidity pension=25 euros

Note: r=gross self-employment income

2021	Artisan	Industry and trader	Farmers
Family benefits	3.1 % if r > 1.4 PSS 0 % if r ≤ 1.1 PSS if 1.1 PSS < r ≤ 1.4 PSS Rate= [(3.1/0.3PSS)*(r-1.1PSS)]	3.1 % if r > 1.4 PSS 0 % if r ≤ 1.1 PSS if 1.1 PSS < r ≤ 1.4 PSS Rate= [(3.1/0.3PSS)*(r-1.1PSS)]	if r≤ 1.1PSS: 0 % if r>1.4PSS:3.1 % if r between 1.1 et 1.4 PSS: 0 %≤rate≤3.1 % Rate=[(3.1 %)/(0.3PSS)] * (r-1.1PSS)
Sickness	if r≤0.4PSS, 0 %≤rate<3.17 % rate=[(7.2 %-2.2 %) /(1.1PSS)]*r+[(2.2 %-0.85%)/(0.4PSS))*r]+0.85% if 0.4 PSS < r ≤ 1.1 PSS 3.17%≤rate<6.35 % rate= [(7.2%-2.2 %) /(1.1PSS)]*r+2.2 % if 1.1PSS<r≤5 PSS rate = 6.35 % if r> 5 PSS, rate= 6.50 %	if r≤0.4PSS, 0%≤rate<3.17 % rate=[(7.2 %-2.2 %) /(1.1PSS)]*r+[(2.2 %-0.85 %)/(0.4PSS)*r]+0.85 % if 0.4 PSS < r ≤ 1.1 PSS 3.17%≤rate<6.35 % rate= [(7.2 %-2.2 %) /(1.1PSS)]*r+2.2 % if 1.1PSS<r≤5 PSS rate = 6.35 % if r> 5 PSS, rate= 6.50 %	If r≥1.1PSS: 6.50 % If r<1.1PSS: 1.5%≤rate≤6.5% rate= [(6.5 %-1.5 %) /1.1PSS]*r+1.5 %
Supplementary sickness	0.85 % of r < 5*PSS. minimum payment calculated on 0.4*PSS (140€ in 2021-2022)	0.85% of r < 5*PSS. minimum payment calculated on 0.4*PSS (140€ in 2021-2022)	

Pension	17.75 % of r<PSS and 0.60 % of r>PSS (min contribution calculated on 11.5%*PSS=840 € in 2021-2022)	17.75 % of r<PSS and 0.60 % of r>PSS (min contribution calculated on 11.5%*PSS=840 € in 2021-2022)	14.87 % of r < PSS 2.24 % of r>PSS
Complementary pension	7 % of r<38 340 8 % of 38 340<r<4*PSS	7 % of r<38 340 8 % of 38 340<r<4*PSS	4 %
Professional training contribution	0.29 % of PSS	0.25 % of PSS	
Invalidity + death insurance	1.3 % of r<PSS (min contribution based on 11.5%*PSS (62 € in 2021-2022)	1.3 % of r<PSS (min contribution based on 11.5%*PSS (62 € in 2021-2022)	1 % in 2021, 1.1 % in 2022 (min 11.5 % PSS=38€) + IJ Amexa = 180 euros and invalidity pension=25 euros

2022-2023	Artisan	Industry and trader	Farmers
Family benefits	3.1 % if r > 1.4 PSS 0 % if r ≤ 1.1 PSS if 1.1 PSS < r ≤ 1.4 PSS Rate= [(3.1/0.3PSS)*(r-1.1PSS)]		if r≤ 1.1PSS: 0 % if r>1.4PSS:3.1 % if r between 1.1 et 1.4 PSS: 0 %≤rate≤3.1 % Rate=[(3.1 %)/(0.3PSS)] * (r-1.1PSS)

Sickness	0.5% if r≤0.4PSS
	
	if 0.4 PSS < r ≤ 0.6 PSS: 0.5%≤rate<4.5 %
	rate={[(4.5 %-0.5 %) /(0.2PSS)]*[r-(0.4PSS)]}+0.5%
	
	if 0.6 PSS < r ≤ 1.1 PSS: 4.5%≤rate<7.2 %
	rate={[(7.2 %-4.5 %) /(0.5PSS)]*[r-(0.6PSS)]}+4.5%
	
	if 1.1PSS<r≤5 PSS rate = 7.20%
	
	if r> 5 PSS, rate= 6.50 %
			0% if r≤0.4PSS
			
			if 0.4 PSS < r ≤ 0.6 PSS:
			0%≤rate<4%
			rate=[(4 %) /(0.2PSS)]*r+[0% -
			[(4%/0.2PSS)]*0.4PSS]
			
			if 0.6 PSS < r ≤ 1.1 PSS:
			4%≤rate<6.5%
			rate=[(2.5%) /(0.5PSS)]*r+[4%-
			[(2.5%/0.5PSS)]*0.6PSS]
			
			If r≥1.1PSS: 6.50 %

Supplementary sickness	0.85 % of r < 5*PSS. minimum payment calculated on 0.4*PSS (140€ in 2022)		
Pension	17.75 % of r<PSS and 0.60 % of r>PSS (min contribution calculated on 11.5%*PSS=840 € in 2022)		14.87 % of r < PSS 2.24 % of r>PSS
Complementary pension	7 % of r< PSS 8 % of -PSS<r<4*PSS		4 %
Professional training contribution	0.29 % of PSS	0.25 % of PSS	
Invalidity + death insurance	1.3 % of r<PSS (min contribution based on 11.5%*PSS (62 € in 2022)		1.1 % (min 11.5 % PSS + IJ Amexa = 180 euros and invalidity pension=25 euros

Note: r=gross self-employment income

The rates for professionals are not reported here because there are many professional categories, not subjected to the same system. We can assume that it is the same system as Industry and Trader (the only difference is the pension and complementary pension, which is a lump-sum depending on the professional class).

- *EUROMOD modelling*

The three types of self-employment have been approximated based on industry (Agriculture vs. non agriculture) and occupation (non–agricultural craft and trade workers are assumed to be artisans; the rest are assumed to be contribute to the industry & trade regime). Contributions are simulated based on the current yearly self-employment income.

2.6.4 General Social contribution – tscxc-s – ("*Contribution Sociale Généralisée*", CSG)

CSG applies to:

- Employement income
- Self-employment income
- Pension Income and survivor pension
- Unemployment insurance Benefit (ARE)
- Capital income
- Sickness Benefit (only the daily allowances but not the reimbursement for medical procedures)

The tax base is gross income after a reduction of 1.75 % (3 % before 2012) for professional expenses (on employment income and unemployment benefit but not on capital income and sickness benefits), (98.25 % on gross income until four times the annual PSS, 100 % above or for pension).

Benefits like ASPA or RSA and, more generally, minimum incomes (AAH and AV), all the family benefits and housing benefits are excluded from the tax base.

The tax rate depends on the income category as follow:

Table 2.60- CSG rates [2020-2023]

	2020-2023			
	CSG	Reduced rate	Median rate	Deductible CSG
Employment income	9.2 %			6.8 %
Pension Income	8.3 %	3.8 %	6.6 %	5.9 % or 4.2 %
Unemployment benefit	6.2 %	3.8 %		3.8 %
Sickness benefit	6.2 %	3.8 %		3.8 %
Capital Income	9.2 %			6.8 %

* For pension income, the rate of 8.3 % was introduced for all pensioners in 2018 (except for those who depend on the 3.8 % rate). In 2019, the government abolished the increase in this rate but only for pensioners earning less than 2000€ per month. These pensioners pay a rate of 6.6 % from January 2019. Moreover, since 2013, an additional contribution for solidarity and autonomy (CASA) has been applied to pension income (0.3 %). This contribution applies to pensionners subject to CSG rate 6.6 % and more.

A fraction of the CSG can be removed from the tax base before income tax.

Pensioners with low incomes are exempted from CSG and CRDS. The income threshold depends on the tax unit (*"Quotient Familial"*). The income here is the household net taxable income in n-2:

CSG Rate: 0 %:

Table 2.61- CSG, income limit for exoneration [2020-2023]

Annual Tax Base	2020	2021	2022	2023
1 share	11306	11408	11431	11614
Each 0.5 share	3019	3046	3052	3101

If pensioners exceed the ceiling above but income tax is less than 61 Euros the CSG rate is decreased to 3.8 % and totally deductible from income for the tax calculation. Otherwise the CSG is paid at a rate of 8.3 % or 6.6 %. If a pensioner has several types of income, only the pension incomes are exempted from CSG but the income threshold takes into account all his types of income. The reference income (RFR) is the n-2 income.

Since 2015, ceilings have changed, a ceiling threshold was introduced for pensioners. Now, the income tax amount is no longer considered for application of reduced rate of 3.8 %. The reference income (RFF "Revenu fiscal de référence") is the only thing taken in account. If pensioners' income (RFF) in n-2 exceeds the RFF lower threshold below but are under the ceiling below, the rate is decreased to 3.8 % and totally deductible from income for the tax calculation.

CSG reduced rate: 3.80 %:

Table 2.62- CSG, income limit for 3.80 % reduced rate [2020-2023]

	2020		2021		2022		2023	
RFF	lower threshold	ceiling threshold	lower threshold	ceiling threshold	lower threshold	ceiling threshold	lower threshold	ceiling threshold
1 share	11306	14781	11408	14914	11431	14944	11615	15183
Each 0.5 share	3019	3946	3046	3982	3052	3990	3101	4054

In 2019, new ceilings have been introduced for modest pensioners with a median rate of CSG of 6.6 %, see ceilings below.

CSG median rate: 6.60 %:

Table 2.63- CSG, income limit for 6.60 % reduced rate [2020-2023]

	2020		2021		2022		2023	
RFF	lower threshold	ceiling threshold	lower threshold	ceiling threshold	lower threshold	ceiling threshold	Lower threshold	Ceiling threshold
1 share	14782	22941	14914	23146	14944	23193	15183	23564

Each 0.5 share	3947	6124	3982	6179	3990	6191	4054	6290

Above to this ceiling threshold, pensions are subjected to full CSG rate of 8.30 %

- *EUROMOD modelling*

CSG is simulated on current yearly incomes. The full exception from CSG for pensioners with low incomes is simulated.

2.6.5 Social security debt repayment contribution – tscdf_s – (CRDS)

Like CSG, CRDS is levied on different income categories:

- Employment income
- Self-Employment income
- Pension income
- Unemployment income and activity allowance
- Family benefits (AF, ASF, ARS, CF, PAJE)
- Capital income
- Housing benefits
- Sickness Benefits (only the daily allowances but not the reimbursement for medical procedures)

Unlike CSG, Family benefits are subjected to CRDS. The rate applied is the same for all these income categories and amounts to 0.5 %. CRDS applies globally on the same basis as CSG, paid on gross income after a reduction of 1.75 % (3 % until 2011), except for capital income, pensions and sickness benefits (98.25 % on gross income until four times the annual PSS, 100 % above).

The CRDS is not deductible for tax purposes.

- *EUROMOD modelling*

CRDS is simulated using observed incomes (where they are not simulated in the model) and simulated benefits. The simulation is done using current yearly incomes.

2.6.6 Social contribution on capital income (tsckt_s)

In addition to CSG and CRDS, other additional social contributions apply on capital (investment & property) incomes as follows:

Table 2.64- Social contribution on capital income, rates [2020-2023]

	2017	2018	2020-2023
Social contribution	4.50 %	4.50 %	------
Additional contribution	0.30 %	0.30 %	------
Solidarity contribution	2.00 %	2.00 %	------

Solidarity levy	------	------	7.5 %
Total	6.80 %	6.80 %	7.5 %
Total with CSG and CRDS	15.5 %	17.2 %	17.2 %

These contributions are not deductible for tax purposes.

- *EUROMOD modelling*

These contributions are simulated using observed investment and property income. Current yearly income is used.

2.7 Direct taxes

2.7.1 Personal income tax- tin_s- (Impôt sur le Revenu des Personnes Physiques, IRPP):

The tax unit for income taxation is neither individual nor based on the household. It is known as "*Foyer fiscal*" which is a sub-group of the household. It consists of one taxpayer plus the persons who fiscally depend on him. That also concerns taxation of capital income (tinkt-s).

Spouses (if they are married or have signed a contract of civil partnership (PACS)) and all dependent children / persons are grouped in the same unit.

Dependent children are:

- Children under 18 (automatically)
- Children strictly under 21 (and they agree to be declared with their parents)
- Children strictly under 25 who are students (and they agree to be declared with their parents)
- Disabled Children (automatically whatever their age).

Other adults can be dependent if they are disabled.

2.7.2 Exemptions

All the Family benefits, social minima (RSA) and social assistance benefits (AAH) are exempted from taxation.

The only taxable allowance is the survivor's pension (AV) which has to be considered a pension.

As mentioned in the social contribution part, a share of the CSG can be deducted from income before taxation.

Not all the sickness benefits are taxable. These benefits are composed of cash benefits for the maintenance of an earned income called daily allowances (in case of sick leave, injury on duty leave or maternity leave) and of the reimbursement of medical, surgical or maternity procedures. Only the daily allowances are taxable except in the case of workplace accidents and benefits paid to people with a disease with prolonged treatment and a particularly costly therapy. This amount is added to the earned income.

Between 2007 and 2012, overtime payments are not subject to tax or to employee/employer contributions. Overtime is paid at a standard rate in France (25 % extra for the first 8 hours after 35 hours and 50 % extra for the next hours of overtime). Since 1 January 2013, overtime payments are subject to standard income tax and to employee/employer contributions. Since 2019, overtime payments are not subjected to income tax up to 5000 EUR (the excess is taxed normally) until 2021, 7500 EUR from 2022. With regard to employee social contributions, the reduction rate on contributions is at most 11.31 % (it represents the sum of old-age insurance contributions but only for overtime worked).

In 2009, there was an income tax holiday for low earners in France. Those whose incomes did not exceed the first tax band per households unit (i.e. EUR 11.893 in 2012) were given relief on two thirds of their income tax bill ("*les deux derniers tiers provisionnels"*).

2.7.3 Tax allowance

There are deductions ("*abattement*") for certain categories of income such as category C1 (earned income, pension and unemployment).The deduction amounts to 10 % with ceilings (for each earner/ pensioner/ UB recipient):

Table 2.65- IRPP, 10 % deductions ceilings [2020-2023]

Yearly amounts Min and Max	Income 2020 Taxation 2020	Income 2021 Taxation 2021	Income 2022 Taxation 2022	Income 2023 Taxation 2023
Earned income	441 12 627	442 12 652	448 12 829	472 13 522
Pension**	393 3850	394 3858	400 3912	422 4123

** for pension, the minimum is for one person and the maximum is for all the people in the same tax declaration.
* In 2019, introduction of a withholding income tax, 2018 income will not be taxed in 2019 (except for extraordinary income from 2018 that will be taxed in 2019 and 2020).

In category C3 (capital income), property income (rent) can also be deducted by 30 % if the annual property income < EUR15.000 annually. The income limit has not changed between 2006 and 2023. There are more complicated deductions for property income > EUR 15.000 annually (not simulated).

There is a deduction for private retirement savings ("*épargne retraite*") per person which is equal to 10 % of earned income from the previous years (less the deduction for professional expenses) within the following limits:

Table 2.66- IRPP, deduction ceilings for private retirement saving [2020-2023]

	Income 2020 Taxation 2020	Income 2021 Taxation 2021	Income 2022 Taxation 2022	Income 2023 Taxation 2023
Maximum	32419	32909	32909	32909
Minimum	4052	4114	4114	4114

2.7.4 Tax base

To calculate the tax base called Net taxable income ("*Revenu net imposable*"), intermediate incomes have to be calculated.

- *« Revenu Brut global »*

The tax base differs according to the income category.

The existing classes are:

- Earned income, pensions (with the exception of ASPA, AAH) and unemployment benefit (C1)
- Self-employment (C2)
- Capital income (C3)

For each class, the non-deductible CSG is added to gross income minus the social insurance contributions (as mentioned in the previous section on social contribution).

The « *Revenu Brut global* » is equal to the sum of all the income classes for all the persons of the tax unit:

SUM (
C1-deduction
+ C2
+ C3
+ Non deductible CSG and CRDS (on C1. C2 et C3))

- *« Revenu Net global RNG »*

From the *« Revenu Brut global*", we obtain the "*Revenu Net global*" by removing certain charges (such as alimony, investments in particular sectors, hospitality expenditures for people over 75, etc.)

Revenu Net global =Revenu Brut Global - Particular charges (these cannot be simulated)

For alimony paid for minor children or ascendants, the deductible amount is not limited and totally deductible.

For alimony paid for each adult child (who is declared with their parent and has a separate home), the amount of the deduction is capped at the following amounts:

Table 2.67- IRPP, capped amount deduced as alimony for adult child [2020-2023]

Income taxation	2020	2021	2022	2023
Complementary reduction	5947	5959	6042	6368

A fixed amount can be deducted as a payment in kind for ascendants or major children living in the household (tax unit):

Table 2.68- IRPP, amount deduced for ascendants of major children

Income taxation	2020	2021	2022	2023
	3535	3542	3592	3786

For each person 65 and over or disabled in the tax unit, an amount can be deducted which depends on "Revenu Net Global" (RNG) being below some thresholds as follow:

Table 2.69- IRPP, amount deduced for person over 65 or disabled [2020-2023]

2020		2021		2022		2023	
Deduction	RGN	Deduction	RGN	Deduction	RGN	Deduction	RGN
2442	<15300	2446	<15340	2476	<15514	2484	<15560
1221	15301 < r < 24640	1224	15340 < r < 24690	1238	15514 < r < 24985	1242	15560 < r < 25040

- *Net taxable Income ("Revenu net imposable")*

Net taxable income = "Revenu Net global" – special deductions (disabled people…)

- *Family ratio:*

To take into account the family size, the taxation system gives a weight to each member of the family, and adds them together to compute the Family Ratio ("*Quotient Familial*" QF).

Table 2.70- IRPP, weight for family ratio

Person in the tax unit	Weight
Taxpayer	1
Partner (if married)	1
First child	0.5
Second child	0.5
Each child after the second	1

Supplementary weights can be added in specific cases:

- Widow/er with at least one dependent child : +1 (from 2008 onwards)
- Each Disabled adult / Child: +0.5
- Lone parent : +0.5 (if not a widow/er)

QF is the total weight obtained for each tax unit.

- *Tax Base*

The amount which is submitted to the tax schedule is the net taxable income divided by the QF. Tax Base = Net Taxable Income / QF.

- *Capital Income:*

The capital income are taxed depending on their type.

2014-2017: The "*prélèvement forfaitaire non libératoire*" is applied, it's a levy that a taxpayer pay in advance as a deposit (year n), the rate does not depend on the taxpayer's total income at the first time, it is determined by type of investment. At the second time (year n+1), the taxplayer declare all his income and that determines the overall tax rate on the capital income, they are subject to the progressive tax on income. If the amount paid in advance is to high, il will be refunded by the tax authorities, if it is too low, the taxpayer's have to pay the difference between its deposit and the actual amount of tax.

Since 2014, taxpayer with low-income may ask to be exempted from the levy if their RFF income in n-1 being less than a threshold (75000€ for a couple and 50000€ for a single person).

In this case, the capital income are subjected to a 40 % deduction applies on the gross amount of divident income (in 2018, this deduction is made only if the progessive taxation is chosen). Interest income from dividends is treated the same way but the income limits are 25000€ for a single and 50000€ for a couple.

Since 2018, a unique flat tax is introduced at the level of 30 % (12.8 % for unique flat rate and 17.2 % for social contributions). No more progressive tax unless the taxpayer chose it if it's more avantagous for him.

Table 2.71- IRPP, capital income taxation rate [2020-2023]

	2019-2022	
	Flat rate	Social contributions
All capital income		
Fixed rate investment income	12.8 %	17.2 %
Interest and dividends	12.8 %	17.2 %

Social contributions must be added to the flat rate paid at the source

2.7.5 Tax schedule

The tax schedule is progressive, as shown in the table below. Income brackets apply to annual income.

Table 2.72- IRPP, marginal income rates [2020-2023)]

Taxation 2020 income 2020		**Taxation 2021 income 2021**		**Taxation 2022 income 2022**		**Taxation 2023 income 2023**	
Income bracket	Marginal Tax Rate	Income bracket	Marginal Tax Rate	Income bracket	Marginal Tax Rate	Income bracket	Marginal Tax Rate
0 to 10 064	0 %	**0 to 10 084**	0 %	**0 to 10 225**	0 %	**0 to 10 777**	0 %
10 065 to 25 659	11 %	**10 085 to 25 710**	11 %	**10 226 to 26 070**	11 %	**10 778 to 27 478**	11 %
25 660 to 73 369	30 %	**25 711 to 73 516**	30 %	**26 071 to 74 545**	30 %	**27 479 to 78 570**	30 %
73 370 to 157 806	41 %	**73 517 to 158 122**	41 %	**74 546 to 160 336**	41 %	**78 571 to 168 994**	41 %
>157 807	45 %	**>158 123**	45 %	**>160 336**	45 %	**>168 994**	45 %

The tax amount obtained is then multiplied by QF to give the total tax for the tax unit.

Limit on Tax reduction due to Family Ratio ("*Plafonnement du quotient familial*):

There are corrections to make on the "gross tax" above. The aim is to limit the benefits of dependent children's weight (or dependent adults).

Tax cuts for these additional weights are capped at:

Table 2.73- IRPP, capping of the family ratio [2020-2023]

	2020	2021	2022	2023
The two first 0.5 for lone parent	3697	3704	3756	3959
Each 0.5 after the second for lone parent	1567	1570	1592	1678
Each 0.5	1567	1570	1592	1678

To compute the final gross tax liability, we must recalculate the tax with a new QF:

- 1 for single
- 2 for couples (married or who have signed a PACS)

and subtracting the caps from the table above:

Imax= "new tax" calculated - ceiling

The tax to pay is therefore the maximum between the "normal" tax liability and "Imax".

Complementary reduction ("*réduction complémentaire*"):

If the tax to pay was corrected because of Limit on Tax reduction due to Family Ratio, the income tax is reduced for disabled people. The amount of tax is reduced by the following amounts for each disabled person:

Table 2.74- IRPP, complementary reduction [2020-2023]

Complementary reduction Yearly amounts	2020	2021	2022	2023
Disabled	1562	1567	1587	1673
Widower with dependent child	1745	1748	1772	1868

Tax rebate ("Décote"):

A (non-refundable) tax rebate is given to any tax unit whose gross tax liability is under:

Table 2.75- IRPP, tax rebate ceilings[2020-2023]

Tax rebate	2020	2021	2022	2023
Single	1717	1722	1746	1840
Couple	2842	2849	2889	3045

The amounts used for the calculation of the rebate are:

Table 2.76- IRPP, tax rebate parameter for calculation [2020-2023]

Tax rebate	2020	2021	2022	2023
Single	777	779	790	833
Couple	1286	1289	1307	1378

The rebate is computed as the difference between the amounts in the previous table minus:

- From 2017 to 2019. ¾ of the gross tax liability previously calculated.
- Since 2020, 45.25 % of the gross tax liability previously calculated.

2.7.6 Tax credits

The final tax payable is the gross tax minus:

- Tax reductions
- Tax credits
- Employment Bonus (Prime pour l'emploi, PPE)

Tax reductions:

Reductions are allowed for charitable spending, school fees for dependent children, specific investments.

There is also a reduction for families who have children at school. This deduction has not changed between 2009 and 2022:

- 61 EUR/year per child in junior high school (11-14)

- 153 EUR/year per child in upper high school (15-18)

- 183 EUR/year per child in third level education

Supplementary tax reduction from 2017 to 2019: an additional flat-rate reduction on income tax for low income earners is applied after the tax rebate.

2019

For RFR less than 19 175 EUR (single) or 38 350 EUR (couple), with an increased by 3 835 EUR for each additional half-share, a flat-rate reduction of 20 % of the theoretical amount of income tax is granted.

For RFR above 19 175 EUR (single) or 38 350 EUR (couple), a phase-out is applied to limit the thresold effects and give a degressive reduction. Starting from 19 176 EUR of RFR (for a single person) or 38 351 EUR (for a couple), plus a possible half-share (3 835 per half-share), the percentage of reduction applied is calculated as follows:

- R1 is equal to 21 248 EUR for a single and 42 496 EUR for a couple, plus any eventual half-share
- R2 is the household RFR
- N= R1-R2
- D is equal to 2000 EUR for a single and 4000 EUR for a couple

The reduction rate of the income tax is : 20 %*(N/D)

2020

The new calculation method of the tax rebate "décote" take into account the tax rebate and the supplementary 20 % tax reduction for low income. So this tax reduction is therefore deleted in its previous form.

Tax credits:

The main tax credits are:

- Tax credits allowed for green investments (purchase of a clean vehicle, solar panels, etc.).
- Tax credit for interest paid on the loan for the acquisition of housing. Since May 2007 to December 2010, people who bought their principal residence can deduct approximately 40 % of the interest on their mortgage for 5 years (suppressed for new loan since January 2011, no more tax credit since 2017).
- Tax credit for childcare fees. Households employing people for the custody of their child can deduct 50 % of the amount paid up to a ceiling of EUR 2300 per child per year.
- Tax credit for home service employment (tutoring, homemaker…)
- Tax credit for energy transition, « *crédit d'impôt transition énérgétique* » (CITE). The tax credit covers the work to improve the energy efficiency done in the main house. The tax benefit is 30 % of expenses incurred, capped at 8000 euros (16000 for a couple, plus 400 euros per dependent) over a period of five years. In 2018 and 2019, the rates are 15 % or 30 % depending on the restoration work and only available until 30 june. This tax credit has been replaced in January 2020 by "Ma Prime rénov" for the modest household. This new tax credit is more intented for modest and very modest households for 2020 and has been extented to all household in 2021 (except wealthier households). The amount depend on the energy efficiency and the household income in order to highliht the most efficient work. The tax credit amount depend on the region and the household composition, it is capped at 2400€ for a single and 4800 for a couple with 120€ for each dependent person, the aid amount can't be superior to 75 % of the bill. In 2020, for more intermediary households or more wealthier household, the aid became lump sum (intermediary households: 40€ for window replacement, 15€/m^2 for insulation and 2000€ for installation of a heat pomp; for wealthier households: 10€/ m^2 for inside insulation and 25€/m^2 for exterior insulation). This Tax credit was renewed in 2021, 2022 and 2023.

- Tax credit for competitiveness and employment, « *crédit d'impôt pour la compétitivité et l'emploi, CICE* » was introduced from 2013 to 2019. In 2019, it was removed and replaced by a reduction on certain employers' social contributions. The objective was to reduce the cost of work of French companies compared to foreign companies. This tax credit only concerns the workers whose wage is below 2.5 SMIC. The rate of the tax credit has changed over the years (4 % of the wage bill of the concerned workers in 2013, 6 % in 2014, 2015 and 2016, 7 % in 2017 and 6 % in 2018). Although companies need to fill in a declaration and apply for the reduction with the Organization for Social Security and Family benefits (*Urssaf*), in EUROMOD the reduction in employer social contributions has been simulated for all employers.

- Tax reduction for some rental property investments, subject to fulfilling the conditions linked to the tenant and rent, several devices have existed through time: Robien, Duflot, Pinel etc. This reduction depend on the device, conditions and rates reduction have changed between these devices, the time during which the tax reduction is applied is changing also according to the differents devices.

- PPE until 2015

The PPE, an individual tax credit to encourage the return to employment, was abolished at 31 December 2015 and was integrated in the Activity Allowance (RSA) from 1st January 2016.

Exceptional contribution on high income (*"Contribution exceptionnelle sur les hauts revenus"*):

Since 2013 this new contribution on high incomes was introduced. It is an annual tax based on the same incomes as the personal income tax, the "*revenu fiscal de reference, RFR*" (RFR is calculated as RNI plus taxable capital income). It concern people whose incomes are higher than EUR 250 000 for singles and EUR 500 000 for couples.

The fraction of income above the set threshold is taxed as follows:

Table 2.77- Exceptional contribution on high income, rate [2020-2023]

The tax rates are:	Single	Couple
RFR≤250 000	0 %	0 %
250 000<RFR≤500 000	3 %	0 %
500 000<RFR≤1 000 000	4 %	3 %
RFR>1 000 000	4 %	4 %

When it concerns exceptional income (sale of property, etc.), a smoothing mechanism of the annual RFR is established under two conditions:

1. The RFR of the taxation year must be greater (or equal) than one and a half times the average of the previous two years RFR.

2. The RFR of the previous two years must be less (or equal) than the release threshold for the exceptional tax on high incomes.

The tax is then calculated similarly to the "*quotient familial, QF*" system:

Tax base = M + [(RFR_n - M)/2]

With

M: (RFR_{n-2}+RFR_{n-1})/2, the average of the last two years RFR

RFR_n: RFR of the taxation year

Then, the rate of 3 % and 4 % are applied on this tax base. The tax amount is twice this result.

- *EUROMOD modelling*

All children under 21 and all students under 25 co-residing with their parents are assumed to be declared on their parents' tax return. No account can be taken of children under 21 /students under 25 who are not co-residing with their parents, as they are not observed in the data. All alimonies paid are assumed to be paid for underage children and thus, they are considered to be fully deductible from the tax base. All children aged 18 and above and dependent adults are assumed to entitle the taxpayer to the specific allowance that may be claimed on their behalf. Disability is based on observed status in the data (pl031=8). In the case of capital income, an optimization is simulated. Both flat rate taxation and inclusion into total income subject to progressive taxation are simulated and the option which yields the lower tax liability is chosen. No information exists on the source of investment income. Consequently, the tax deduction for dividends when not applying the PNFL regime is simulated for all types of investment income.

The following tax credits have been simulated-tax credit for child care fees, tax credit for mortgage interest expenditure, tax credit for children of school age and the refundable employment credit (PPE until 2015). Since 2016, the activity allowance replace the PPE. Tax credits for child care expenses are simulated for all families where both parents are in work and there is a child younger than 6. The maximum yearly deduction is simulated in all cases. The tax credit on mortgage interest expenditure is approximated based on the age of the head. Households paying mortgage interests with a head under 45 are assumed to be eligible for this credit. More accurate simulations actually replicating existing rules are simulated but can be run only with national SILC data.

The employment bonus (PPE) was simulated based on current rather than previous year's income. If an individual has both employment and self-employment income, the conversion factor was calculated by summing the partial income source specific factors. In calculating the conversion coefficient, account was taken only on the number of months worked and not on the number of hours. Persons who were married but whose partner was missing from the data were considered to be part of a two earner couple.

The smoothening mechanism of the exceptional contribution on high incomes is not simulated due to absence of information on the RFF income in the previous years.

The cap on direct taxes is not simulated.

2.8 Wage compensation scheme in response to **Covid-19** (bwkmcee_s)

In the context of the **Covid-19** health crisis, access to partial unemployment was facilitated in order to avoid massive dismissal.
During the lockdowns (2020: March 17 to May 10 and ,October 30 to December 15. 2021:April 3 to May 3) and more generally since the beginning of the sanitary crisis, the following measures were implemented:

- In case of chronic illness or for childcare reasons (children under 16 years old, when their school is closed), workers can apply for sickness benefit (without the usual waiting period) until 1st of May. Afterwards, to avoid the decrease in the benefit taking place from the 31st day (from 90 % to 66 % of the net wage), they go into partial unemployement (84 % of the net wage for wages >SMIC and 100 % for those up to SMIC). From 1st of June, parents who want to continue taking care of their children at home while schools are reopened are no longer eligible for partial unemployment.
- For those who cannot telework or whose activity has decreased or stopped, they can be assigned to partial unemployment (including the option of working zero hours).

Cost and number of beneficiaries since March 2020:

Table 2.78- **Covid-19** partial unemployment, cost and beneficiaries [2020-2021]

	Partial unemployment			Sickness benefit linked to lack of activity or childcare due to covid-19 (costs of the illness itself not included)	
	Beneficiaries	Full time equivalent	Cost (EUR)	Beneficiaries	Cost (EUR)
March 2020	6.7 million of employees (866 000 firms)	2.2 millions	3.2 billion		
April 2020	8.4 million of employees (974 000 firms)	4.6	8.98 billion	2 million of employees	1.1 billion
May 2020	7 million of employees (886 000 firms)	3.1	4.7 billion		
June 2020	3.2 millions of employees (408 000 firms)	1.4	2.1 billion		
July 2020	1.8 millions of employees (237 000 firms)	0.6	1.2 billion		
August 2020	1.1 million of employees (157 000 firms)	0.4	0.7		
September 2020	1.2 million of employees (152 000 firms)	0.5	0.8		
October 2020	1.8 million of employees (261 000 firms)	0.5	0.9		
November 2020	3.1 million of employees (456 000 firms)	1.7	2.3		
December 2020	2.5 million of employees (335 000 firms)	1.1	1.9		
January 2021	2.2 million of employees (300 000 firms)	1.1	1.6		
February 2021	2.2 million of employees (294 000 firms)	1.2	1.7		
March 2021	2.4 million of employees (301 000 firms)	1.1	2		
April 2021	2.7 (251 000 firms)	1.5	2		

Source : https://dares.travail-emploi.gouv.fr/sites/default/files/70d96efc536b7d559fb385a4b2243e56/Dares_TdB-marche-travail_crise-sanitaire_31-mai.pdf

https://dares.travail-emploi.gouv.fr/sites/default/files/39f7b48766297d57360140660b408124/Dares_TdB-marche-travail_crise-sanitaire_26%20avril%202021.pdf

For precarious workers who combine short contracts and periods of unemployment and who are particularly affected by the sanitary crisis, an exceptional allowance garantees a minimum income of 900€ from November 2020 to May 2021. The amount depends on the income or allowance they earn, and is the difference between those amounts and 900 €.

To be eligible to this allowance, workers must have worked at least 138 days in short contrats in 2019 and be in the impossibility to work sufficiently in 2020.

Due to the lack of information on the cumulation of short contracts, this allowance can't be implemented in EUROMOD.

- *Definitions*

Firms can request a partial activity authorisation if they encounter difficulties or they have to stop their activities due to the Covid-19 pandemic, which allows them to allocate employees to partial unemployment.

- *Eligibility conditions*

Employees working in private firms whose activity has been affected by the COVID-19 pandemic and, as a consequence, the firm has requested a partial activity authorisation to temporarily layoff (fully or partially) their employees. Employers pay their employees'wages and these are partially reimbursed retrospectively by the administration. Administration must answer within 15 days. The authorisation is granted for a renewable period up to 12 months.

Since 1st September, in case of school closure or in case of isolation of children due to Covid-19, if neither parent can be in telework, one of them can claim partial unemployement.

To identify workers undergoing the transition to wage compensation in EUROMOD, a random variable drawn from a uniform distribution is used to allocate individuals to the scheme. The following table shows the share of workers in different sectors that are assumed to undergo transitions to wage compensation for at least one month.

Table 2.79- **Covid-19** partial unemployment, share of wage compensation by sector

Sector (EUROMOD variable *lindi*)	**Share of workers**
1: Agriculture & fishing	11 %
2: Mining, Manufact. and Utilities	36 %
3: Construction	62 %
4: Wholesale and retail	18 %
5: Hotels and restaurants	100 %
6: Transport and communication	40 %
7: Financial intermediation	17 %
8: Real estate and business	71 %
9: Public administ. and defence	8 %
10: Education	8 %
11: Health and social work	8 %
12: Others	62 %

The duration of the wage compensation for each worker depends on the time of inactivity or partial activity of the firm. For the simulation in EUROMOD, the following distribution is assumed:

Table 2.80- **Covid-19** partial unemployment, number of months in wage compensation

Number of months in wage compensation	Share of beneficiaries
2 months	10 %
3 months	39 %
4 months	24 %
5 months	27 %

Note: The number of months that each beneficiary spends in wage compensation cannot be higher than the number of months in which the worker worked in the dataset (yemmy).

Workers transitting to compensation schemes are assumed to work a share of their normal hours between 49 % and 58 %.

All the figures above have been computed using official statistics from the Ministry of Labour, Employment and Inclusion as of 15 September (https://dares.travail-emploi.gouv.fr/dares-etudes-et-statistiques/tableaux-de-bord/le-marche-du-travail-pendant-le-covid-19/tableaux-de-bord-hebdomadaires/article/situation-sur-le-marche-du-travail-au-15-septembre).

- *Income test*

There is no income test for this benefit. The benefit amount depends on the salary earned.

- *Benefit amount*

For concerned companies, the amount received by the employee is 70 % of the gross hourly wage for each hour not worked (84 % of the net hourly wage), 100 % up to SMIC is reimbursed by state (ie no remaining to pay for companies), with a minimum of 8.59€ (8.11 in 2021) and a max of 33.30€ (32.29 in 2021) per not worked hour. From July 1 2021, for the companies not administratively closed or in the specific sectors particularly impacted by Covid crisis (hotels and restaurants, tourism, culture, sport and events), the rate decrease to 60 % (72 % of the net hourly wage) which is the usual rate with a minimum of 8.11€ (8.59€ in 2022) and a max of 27.68€ (28.54€ in 2022) per not worked hour with 40 % remaining to pay by employers. See the table below for the specific rate by concerned sectors based on the evolution of health crisis.

In the context of **Covid-19** crisis, the access to partial unemployment is facilitated until summer 2021. Administrative procedures are relaxed for employers. For childcare in case of school closure, employee must give certificate in order to access partial unemployment. Up to 4.5 SMIC (6927€ in 2021, 7152.75€ in 2022), the amount remaining to pay by employer is compensated or partialy compensated (depending on the date, the remaining amount tend to increase in time, see below) up to 4.5 SMIC, the delay for administrative procedures is increased and the adminstration answer time is reduced to 2 days (instead of 15 usually).

In 2021, a progressive decrease of the allowance is introduced, the amounts paid are:

- From March to May 2020, the 70 % (of gross salary, 84 % of net salary) are totally paid by administration.

- From 1st June 2020 to May 2021 the administration pays 60 % of the gross salary and the firm pays the remaining. For sectors particularly impacted by Covid crisis (hotels and

restaurants, tourism, culture, sport, events, passager transport and culture), administration pays all the 70 % of the gross salary.

- In June 2021, the administration pays 52 % of the gross salary and the firm pays the remaining. For sectors particularly impacted by Covid crisis (hotels and restaurants, tourism, culture, sport, events, passager transport and culture), administration pays all the 70% of the gross salary.
- In July 2021, the allowance rate decrease to 60 % of the gross wage. The administration pays 36 % of the gross salary and the firm pays the remaining. For sectors particularly impacted by Covid crisis (hotels and restaurants, tourism, culture, sport, events, passager transport and culture administration pays all the 60 % of the gross salary.
- In August 2021, The administration pays 36 % o of the gross salary and the firm pays the remaining. For sectors particularly impacted by Covid crisis (hotels and restaurants, tourism, culture, sport, events, passager transport and culture), administration pays 52 % of the gross salary.

Table 2.81- **Covid-19** partial unemployment, rates of employees allowance [2020-2022]

<table>
<tr><th rowspan="3">Date</th><th colspan="8">Employees allowance amount</th></tr>
<tr><th colspan="4">in % of employee gross hourly wage</th><th colspan="4">in % of employee net hourly wage</th></tr>
<tr><th>All other sectors</th><th>In protected sectors (Tourism, hotels and restaurants, sports, culture, events and passager transport)</th><th>In related sectors with decrease in turnover</th><th>In closed firms (or partially closed) for sanitary measures</th><th>All other sectors</th><th>In protected sectors (Tourism, hotels and restaurants, sports, culture, events and passager transport)</th><th>In related sectors with decrease in turnover</th><th>In closed firms (or partially closed) for sanitary measures</th></tr>
<tr><td>Mars to May 2020</td><td colspan="4" rowspan="3">70 %</td><td colspan="4" rowspan="3">84 %</td></tr>
<tr><td>June 2020 to May 2021</td></tr>
<tr><td>June 2021</td></tr>
<tr><td>July 2021</td><td rowspan="4">60 %</td><td colspan="3" rowspan="2">70 %</td><td rowspan="4">72 %</td><td colspan="3" rowspan="2">84 %</td></tr>
<tr><td>August 2021</td></tr>
<tr><td>September to 30 October 2021</td><td colspan="2">60 %</td><td>70 %</td><td>72 %</td><td>84 %</td></tr>
<tr><td>December 2021 to February 2022</td><td colspan="3">70 %</td><td colspan="3">84 %</td></tr>
</table>

Table 2.82- **Covid-19** partial unemployment, rates reimbursed and remaining to pay for

firms [2020-2022]

<table>
<tr><th rowspan="2">Date</th><th colspan="4">Administration allowance who is reimbursed to firms (as a % of the gross hourly wage normally paid)</th><th colspan="4">Amount remaining to pay by employers (as a % of the gross hourly wage really paid)</th></tr>
<tr><th>All other sectors</th><th>In protected sectors (Tourism, hotels and restaurants, sports, culture, events and passager transport)</th><th>In related sectors with decrease in turnover</th><th>In closed firms (or partially closed) for sanitary measures</th><th>All other sectors</th><th>In protected sectors (Tourism, hotels and restaurants, sports, culture, events and passager transport)</th><th>In related sectors with decrease in turnover</th><th>In closed firms (or partially closed) for sanitary measures</th></tr>
<tr><td>Mars to May 2020</td><td colspan="4">70 %</td><td colspan="4">0 %</td></tr>
<tr><td>June 2020 to Mars 2021</td><td>63 %</td><td colspan="3" rowspan="2">70 %</td><td>10 %</td><td colspan="3" rowspan="3">0 %</td></tr>
<tr><td>April-May 2021</td><td>60 %</td><td>15 %</td></tr>
<tr><td>June 2021</td><td>52 %</td><td colspan="3">70 %</td><td>25 %</td></tr>
<tr><td>July 2021</td><td rowspan="4">36 %</td><td colspan="2">60 %</td><td rowspan="3">70 %</td><td rowspan="4">40 %</td><td colspan="2">15 %</td><td rowspan="3">0 %</td></tr>
<tr><td>August 2021</td><td colspan="2">52 %</td><td colspan="2">25 %</td></tr>
<tr><td>September to 30 November 2021</td><td colspan="2">36 %</td><td>0 %</td><td>15 %</td></tr>
<tr><td>December 2021 to February 2022</td><td colspan="3">70 %</td><td colspan="3">0 %</td></tr>
</table>

With covid crisis and war in Ukraine until end of 2022, in addition to companies in the protected sectors other companies can pretend to a 10 % remaining to pay for a long-term partial unemployment (70 % of the gross for employees with 60 % of the gross reimbursed to employers), these other companies:

- companies affected by mandatory closure due to health sanitary conditions,
- companies facing a drop in activity and/or difficulties in supply,
- compagnies unable to implement the covid preventive health measures ,
- Employees who have to look after their children as a result of class closures inked to covid (or chilcare facilities) or due to the introduction of gauges.

- *Compatibilities*

This benefit is not compatible with any inactivity benefit (ARE, ASS, RSA).

- *Taxation and income testing*

The amount paid by employer is exonerated from social contributions (both employee and employer part) but submitted to CSG (rate 6.2) and CRDS (0.5 %) on the basis of 98.25 % of the compensation paid (this deductions are not paid if they lead to a remuneration lower than gross SMIC (1539.42€). The amount paid by employer is included in the income test for other benefits.

- *EUROMOD modelling*

This policy is simulated in EUROMOD with the general rules in place on the 30th June, meaning that in 2020, 7 0% of the wage compensation is paid by the administration and the rest by the firm while in 2021 it is 60 %. This is applied to all workers, due to data limitations to identify different sectors to differentiate between rates.

This policy can only produce results if the model is run in combination with the LMA add-on. The individuals that are selected to undergo transitions to monetary compensation schemes are defined in the TransLMA_xx policy, which is switched on automatically by the add-on (it is switched off in the baseline). For more information about the modelling of labour market transitions please consult the *'Simulating labour market transitions in EUROMOD'* document.For 2020, labour transition model based data are produced by Eurostat, using detailed distributional information on the loss of jobs and short-term work schemes from the Labour Force Survey and administrative data. The impact across different categories of individuals, the duration of unemployment/absence and percentage of hours worked are modelled using the EU-LFS longitudinal and quarterly transitions as target. For more information please consult the methodological note available at 9a70fb55-ceb7-d25a-1b31-ab0c030095d2 (europa.eu). For 2021, not enough information was available, so all parameters were set to zero.

2.9 Self-employed and firm compensation scheme in response to **Covid-19** (bwkmcse_s, bseec_s)

- *Definitions*

In order to reduce the effects of the Covid-19 crisis, France implemented a solidarity fund to compensate firms and self-employed for turnover losses higher than 50 %, when comparing March/April/May 2020 to the same months of the previous year. Eligible firms and self-employed are those with less than 10 employees, turnover below 1 million EUR and taxable profits below 60,000 EUR. The maximum compensation is 1500€ per month (maximum 4,500€ for the three months). Firms and self-employed fullfiling certain conditions can get an additional amount between 2000€ and 10000€ in 2021 (between 2000€ and 5000€ in 2020).
These measures are applied in two stages. The first stage ("volet 1") concerns the losses during the lockdown for March, April and May (maximum 1500€ per month). The second stage ("volet 2") concerns those who have benefited of the first stage to apply for an additional allowance between 2 000 and 10 000 € (only for firms or self-employed who are in sectors strongly affected by the crisis and whose loss is 80 % or more).

A one-off financial assistance of 1250€ can also be granted to self-employed in 2020 and also in 2021 (except liberal professions) with the limit of the previous contributions paid by the self-employed. They can also get a deferral of their social and tax contributions. Furthermore, firms with financial problems can obtain government guaranteed loans or can reschedule their loans payments with their bank. In 2022, these exceptional support is only renewed for self-employed in sectors hotels, restaurant, nightlife, events and travel agency sectors.

- *Eligibility conditions*

In 2020:

Until 31st May 2020, self-employed with less than 10 employees, turnover of the previous year below 1 million EUR and taxable profits of the previous year below 60,000 EUR.

From 1st June 2020 onwards, only self-employed of some sectors (restaurants, tourism, culture, sport and events) can benefit, with increased limits of employees (20) and turnover (2 million EUR).

Additional eligbility conditions apply:

- Activity should have started before 01/02/2020
- Cannot be in suspension of payments at 01/03/2020

From 1st June to September, these measures are only applied to sectors strongly affected by the crisis (restaurants, tourism, culture, sport, events, passager transport and culture), doubling the limits of workers (now 20) and turnover (now 2 million EUR).

In October and November, these measures was applied to all sectors (less than 50 workers) without condition on turnover.

From December 2020 onwards, all firms mentioned before, and firms receiving public but closed for administrative reasons related to Covid without size criteria, to firms of the protected sectors which are durably affected by the crisis when they lost at least 50 % of their turnover (no size criteria).

For other sectors, for firms less than 50 employees impacted by the lockdown and with losses of turnover of at least 50 %.

In 2021 :

Can benefit from the solidarity fund:

- firms subjected to an admistrative ban on reception of public with turnover losses from 50 % (without condition on number of employees or on taxable profit),
- firms partially closed with turnover losses of 20 % (without condition on number of employees or on taxable profit),
- firms of protected sectors with turnover losses from 50 % (without condition on number of employees or on taxable profit),
- firms of the other sectors with a turnover losses from 50 % (for firms with less then 50 employees, without condition on taxable profit),

In summer, from June, the solidarity fund will be adapted depending on the re-opening and the sanitary conditions, only firms administratively closed during this period can benefit and firms from protected sectors strongly impacted by the covid crisis.

In October, creation of a new scheme “dispositif loyer” for retail and service businesses with several shops, some of which had to be closed between February and May 2021 because they were in commercial areas subject to a ban on public access due to the health crisis.

Eligibility for the aid is assessed on a month-by-month basis and in relation to other aid already granted to the business. The amount of aid corresponds to the sum of rent and charges calculated per shop in proportion to the days when the store is closed.

In 2022:

With the epidemic rebound at the end of 2021 and beginning of 2022, reactivation or extension of certain aids for the event industry, hotel and restaurant industry, caterers, travel agencies, indoor leisure companies, culture, sport and companies subject to bans on receiving the public or the imposition of a gauge.

For companies in these sectors:

- For micro-enterprises and the self-employed, exceptional financial assistance (AFE) and assistance for contributors in difficulty may be requested,
- Reactivation of the exemption or reduction of social contributions for November-December 2021 and January 2022. 100 % reduction if the drop in activity is > 65 %, 50 % reduction for a drop in activity between 30 and 65 %,
- In December 2021, a "aide renfort" may be granted to compensate for certain charges for companies whose activity is forbidden to receive the public (if the loss of turnover is greater than or equal to 50 %),
- Reinforcement of the "coûts fixes" provision for December and January 2022 following the administrative closure of nightclubs, this provision compensates 100% of operating losses. (Note that previously, this measure was 90 % for companies with less than 50 employees and 70 % for those with more than 50 employees and concerned all companies subject to a ban on receiving the public in the above-mentioned sectors),
- Reinforcement of partial activity until the end of January 2022 without any payment for employers who have suffered a loss of 65 % of their turnover or who are subject to health restrictions,
- Extension of state-guaranteed loans (PGE) until the end of June 2022 with an extension of the repayment period from 6 to 10 years,
- Extension of the solidarity fund in January and February 2022, with the following eligibility conditions for the solidarity fund:
    - firms subject to a total admistrative ban on reception the public with a loss of turnover of 20 % (without any condition on the number of employees or on the taxable profit), the aid is 20 % of the reference turnover up to a limit of 200 000€,
    - firms partially closed (with a miminum of 21 days of closure) with a loss of turnover of 50 % (without any condition on the number of employees or on the taxable profit), the aid is 20 % of the reference turnover within the limit of 200 000€,

- firms in the other sectors subject to a total admistrative ban on reception the public domiciled in an area subject to confinement for at least 8 days during the monthly period under consideration with a loss of turnover of 20 % (without condition on taxable profit). The aid is equal to the turnover loss up to a maximum of 1500€,
- firms in protected sectors with turnover losses from 10 % (without condition on number of employees or on taxable profit), these firms must have benefited from the solidarity fund for at least one month between January and May 2021, must have achieved 15 % of the reference turnover, must be domiciled in a territory subject to a state of health emergency and must have been under confinement or curfew for at least 19 days during the monthly period under consideration. The aid is 40 % of the loss of turnover (up to 20 % of the reference turnover, up to the limit of 200 000€),
- firms in the other sectors domiciled in an area subject to confinement for at least 8 days during the monthly period under consideration with turnover losses from 50 % (for firms with less then 50 employees, without any condition on taxable profit). The aid is equal to the loss turnover up to a limit of 1500€.

The total amount of aids may not exceed €2.3 million over the period March 2020 to June 2022.

The war in Ukraine is also having an impact on various sectors of activity, the partial activity with zero remaining costs for employers being extended for affected companies until the end of 2022.

- *Income test*

Conditions on turnover, turnover losses and taxable profit (see above).

- *Benefit amount*

Turnover loss with a maximum of 1500€ per month for the first stage of the solidarity fund; 2,000€ to 5,000€ for the second stage in 2020 (2,000€ to 10,000€ in 2021); 1,250€ for the extraordinary financial assistance.

From December 2020, for firms subjected to a ban on reception of public, the solidarity fund allowance can take two different forms, on choice: the amount of their losses capped at 10,000€ or an amount corresponding to 20 % of their turnover up to 200,000€.

For partial close, the amount is 1,500€ between 20 % and 50 % of turnover losses, and 10,000€ or 20 % of their turnover up to 200,000€ for turnover losses from 50 %.

For firms of protected sectors, the amount is up to 10,000€ from 50 % losses, 15 % of the turnover for losses from 50 to 70 %, The amount can reach 20 % of the turnover within the limit of 200,000€.

For the other firms, the amount is 1,500€ with o tunrnover losser from 50 %.

During summer, the amounts were adapted but only firms administratively closed can benefit from the fund, the amount is 20 % of the turnover within the limit of 200,000€ for month of close) and for firms in protected sectors. For those firms, the amounts are:

- In June 2021: 40 % of the turnover losses (within the limit of 20 % if the turnover or 200,000€) from 50 % of losses.

- In July, 30 % of the turnover losses from 50 % of losses.

- In August, 20 % of the turnover losses from 10 % of turnover losses.

- September to December 2021, 20 % of the turnover losses from 10 % of turnover losses, and for protected firms or firm on specific area under confinement, 40 % of the turnover losses (within the limit of 20 % if the turnover or 200,000€).

- In January and February 2022, the fund is only available for nightclubs and overseas territories confined or under curfew.

- *Taxation and income testing*

Not taxable.

- *EUROMOD modelling*

For the solidarity fund, only the first stage is simulated, due to data limitations to simulate the second one. However, only the eligibility conditions related to profits in 2020 (<60,000 EUR) and number of employees in 2020 (<=20) and 2021-2022 (<=50) can be simulated. Since there is no information on turnover losses, it is assumed that all eligible self-employed get the actual average benefit: 1,278€ in 2020 (as of 1st October 2020) and 2,272€ for 2021 and 2022 (as of 1st October 2021).

This policy can only produce results if the model is run in combination with the LMA add-on.

The individuals that are selected to undergo transitions to monetary compensation schemes are defined in the TransLMA_xx policy, which is switched on automatically by the add-on (it is switched off in the baseline). For more information about the modelling of labour market transitions please consult the *'Simulating labour market transitions in EUROMOD'* document.

The one-off financial assistance is simulated using current self-employed social insurance contributions as a proxy of previous contributions, which are not available in the dataset.

For 2020, labour transition model based data are produced by Eurostat, using detailed distributional information on the loss of jobs and short-term work schemes from the Labour Force Survey and administrative data. The impact across different categories of individuals, the duration of unemployment/absence and percentage of hours worked are modelled using the EU-LFS longitudinal and quarterly transitions as target. For more information please consult the methodological note available at https://ec.europa.eu/eurostat/documents/7894008/8256843/Methodological-note-2020.pdf/9a70fb55-ceb7-d25a-1b31-ab0c030095d2?t=1625228771763

For 2021 and 2022, not enough information was available, so all parameters were set to zero.

3. DATA

3.1 General description

The French database corresponds to the French part of the European Union Statistics on Income and Living Conditions (EU-SILC) provided by Eurostat. This is a rotating panel survey (9 rotational groups until 2019, 4 since 2020), representative of the French population in private households (all persons aged 16 and over within the household are eligible), excluding French Overseas Departments and territories (DOM). The French survey used to build the French EU-SILC is conducted by INSEE and is named "Statistiques sur les ressources et les conditions de vie" (SRCV).

Before 2010, the reference population is estimated from the 1999 population census and the dwellings built since then. Between 2010 and 2019, the reference population was estimated from Octopusse ("Organisation coordonnée de tirages optimisés pour une utilisation statistique des échantillons") wich was updated each year on the basis of the dwellings enumerated the previous year (only principal residence in metropolitan France), Since 2020, the sample is drawn from the new sampling frame "Fideli-Nautile" based on tax sources (income tax, tax sources on build-up properties and housing taxe. Around 14.000 households are surveyed each year. The sample is stratified to be representative of the French population at the national level. Data collection is annual. The survey is conducted over a period of six weeks in May and June until 2019, since 2020, the collection start in February in order to give early the data to Eurostat (in March N+1). In 2021, the collection took place from February to April 20, but health restrictions due to Covid-19 crisis led to the collection being carried out by phone rather than the usual face-to-face. In addition, in order to facilitate the completion of the questionnaire, questions relating to the cost of housing were not asked this year, The related variable has been imputed by JRC team. The unit of assessment is the sociological household, defined as persons living at the same dwelling.

French EU-SILC 2021 sample statistics project to a reference population of 63.732.522 individuals.

Since 2008, statistical matching is performed with tax sources and the amount of (taxable) income and social benefits actually received by the households over the reference year is collected directly from the public finance body, the DGFIP and the three main Benefit funds in France: the national family benefits fund (CNAF), the national old-age insurance fund (CNAV) and the central agricultural social insurance fund (CCMSA).

For more information on technical issues:
https://www.insee.fr/en/metadonnees/source/serie/s1220

3.1.1 EUROMOD SILC Database (EMSD)

Before 2021, we only use the EU-SILC UDB. From 2021 onward, a new database prepared by Eurostat - EUROMOD SILC database (EMSD) is used to derive EUROMOD input dataset.

The EMSD includes :

- all UDB variables (each variable is described in the doc 65 available https://circabc.europa.eu/ui/group/853b48e6-a00f-4d22-87db-

c40bafd0161d/library/334d943f-6f71-4f4b-9c7e-a6767a3fe164?p=1&n=10&sort=name_ASC%22

- national data supplied by National Statistical Institute (NSI), national variables are described in national codebook;
- EUROMOD variables created and imputed by Eurostat because of restricted data access or knowledge in-house (the generation of those variables is explained in the DRD).

Based on the EMSD, the national team derives additional variables requiring a deep understanding of country specificities (for instance national tax-benefit rules). The final EUROMOD input dataset is therefore made of variables created by both Eurostat and national team.

Some of the EUROMOD variables produced by Eurostat are created and/or imputed with PDB (Production Database) variables. The reason being that the modalities of the PDB variables are more detailed than in UDB (or not top coded). According to the agreement between the NSI and Eurostat, the national team was allowed to use the more detailed information coming from the PDB to derive some EUROMOD variables or to use them as intermediate variable to impute other EUROMOD variables.

However, if the users want to compute their own EUROMOD input data with the formula provided in the DRD file, he/she may encounter differences for some EUROMOD variables because the PDB variables are not available.

The final EUROMOD input datasets is made of variables created by both Eurostat and national teams and is the result of a joint effort of NTs, Eurostat and JRC.

EUROMOD database description

EUROMOD database	FR_2021_c2
Original name	FR_EMSD2_2021
Provider	Eurostat
Year of collection	2021
Period of collection	February to March 2021
Income reference period	Year 2020
Sample size	31.562 IND 14.009 HH
HH Response rate	83.4%

The income reference period of SILC 2021 is year 2020, i.e. that income of year 2020 is used. In 2020, several measures were taken mitigate the impact of Covid crisis on incomes, particularly for the poorest (as detailed in the 2022 Country Report). Utilizing 2020 incomes and the impact of these policies resulted in an unusually low number of people in poverty in the 2021 database, artificially reducing poverty in 2021.

Using the fr_2021_c2 dataset for policy years 2020 to 2023 yielded poverty rates that were too low, attributable to the increase in 2020 income from Covid benefits. As a result, we believe that for these specific years of health crisis, the most suitable match for policy years 2020 to 2023 is the fr_2020_c2 dataset (SILC2020 with incomes from 2019).

3.2 Data adjustment

Adjustments to variables are kept to a minimum. There is some minor data cleaning that is done to make sure that the households and relationships of individuals within households, are coherent (for example, that young children are not living alone or family relations are coherent).

In order to guarantee consistency between demographic variables and income variables which refer to the previous year (and on which EUROMOD simulation are based), all children born between the end of the income reference period and the data of interview have been dropped from the sample (32 observations deleted in 2021), this year, 12 persons with 0 weight have been deleted too.

Item non-response is treated by means of a re-weighting procedure for the first period and by re-interrogation for the following periods in the original SRCV data.

The following variables are used to compute the new weight: age, population density home, household type, number of men and women by age category, reference person's education, profession of reference person.

3.3 Imputations and assumptions

3.3.1 Time period

The EU-SILC information on demographic variables refers to the time of data collection (February-March 2021).

However, some information also indicates the status quo at the end of the income reference period (2020). For example, there are two age variables: one of them indicating age at the time of the survey implementation and one at the end of 2020. A similar situation is observed for some socio-economic and labour variables.

For example, variable rb211 (basic main activity status) refers to the data collection time, while variable pl073 indicates number of month in full time work during the income reference period (the calendar year of 2020). If possible, the corresponding demographic, labour and socio-economic information in the EUROMOD dataset was based on the EU-SILC variables referring to the income reference period.

The EU-SILC information on incomes refers to the calendar year of 2020, based on a 12-month receipt period. All monetary incomes in the EUROMOD database are converted into monthly terms. In the EUROMOD calculations it is implicitly assumed that income is received at the same rate throughout the year.

The legal framework for SILC 2021 has been changed, the new regulation is *Regulation (EU) 2019/1700 of the European Parliament and of the Council of 10 October 2019 establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples* (IESS regulation).
According to this new regulation:

1. some EU-SILC variables were renamed (i.e. pe020 is now pe021),
2. some were moved to a 3 years module (i.e. pe030 used in **dew** computation, pl020 used in **lowas** computation, pl130 used in **lfs** computation, pl160 used in **ltr** computation, hy030g used for **kivho**)

3. and other variables were totally excluded from EU-SILC (rb070 used in **dmb** computation; py200g used in **ymwdt** computation).

For more details please consult "Methodological guidelines and description of EU-SILC target variables – 2021 operation"

3.3.2 Gross incomes

The EU-SILC survey contains information on both gross and net monetary incomes, if applicable. The survey also contains flag variables, which indicate if the observation has been collected either in gross or net form. In most of cases, the incomes are collected in net terms (excepted for work income which is collected net of CSG and non-deductible CRDS). The gross incomes were recalculated by INSEE by adding the social contributions CSG, CRDS and employee social contributions (if applicable for work income). These contributions are estimated using inversion of the tax rules. More information can be found in the Country Quality Report:

https://www.insee.fr/fr/metadonnees/source/serie/s1220

3.3.3 Disaggregation of harmonized variables

A number of variables necessary for the simulation of tax-benefit system in France are not available in the EU-SILC and, as such, have been fully imputed in the EUROMOD dataset. A list of these variables and the way they have been derived follows:

1) The unemployment benefit in SILC has been disaggregated into a contributory unemployment insurance benefit (corresponding to ARE) and a means-tested unemployment assistance benefit (corresponding to ASS). The disaggregation has been performed based on benefit rules and average daily benefit amounts.
2) The aggregate family benefits variable existing in SILC has been split into several components. The universal child benefit (AF) has been separated from the aggregate variable based on benefit rules. Similarly, means-tested child benefits (CF, ARS, PAJE) have been disaggregated based on benefit rules and based on the relationship between gross incomes and net taxable incomes derived from EU-SILC. Residual amounts have been included in a separate variable-other child benefits. Since EU_SILC 2020, the disaggregation is based on the national SILC variables ""prest_fam_autres for AL, CF, ARS and "prest_fam_petite_enfance" for the different components of the PAJE or for PrePare.
3) Means-tested survivor minimum pension (AV) has been separated from contributory survivor benefits by applying benefit rules.
4) Employment income during the previous year -for individuals receiving unemployment insurance benefits- has been imputed by inverting benefit rules.
5) The geographical zone variable used in the calculation of the housing benefit (AL) has been imputed based in the region (NUTS 2 level db040) and urbanization (DB100).
6) The housing benefit in SILC has been disaggregated in two variables-benefits received by tenants and benefits received by the rest based on tenure status.

7) Employment income has been split into pay on account of 'regular hours' and overtime pay. The split has been based on the current number of hours paid reported in SILC. 'Regular hours' are assumed to be 35 hours per week for every employee (i.e. including part-time). An average hourly pay has been calculated based on yearly employment pay, number of months spent in employment and hours worked per week. The disaggregation takes into account the possible statutory rules on overtime pay (i.e. extra 25 % pay for the first 8 hours per week and 50 % for extra thereafter). Overtime pay is assumed to be zero for employees working less than 35 hours per week and for employees observed to be working less than 12 months in the income reference period (the information on number of hours worked is considered too unreliable to perform the split for the latter category).

Since 2021, some variables that were previously disaggregated are available in their detailed version in the SILC national survey SRCV, so we now use these detailed variables:

- Means-tested disability benefits (AAH) previously separated from contributory disability pensions (BDI) based on the observed amounts of the aggregate variable and policy rules are now based on SILC national variable (SRCV) called "prest_precarite_hand".

- Invalidity pension (pdi00) also derived from BDI is now based on SILC national variable (SRCV) called "prest_precarite_invalidite".

- Old-age pensions (POA) were previously splited into contributory pensions (poa00) and a means-tested benefit for the elderly (ASPA, variable bsaoa). The splitting was based on benefit eligibility rules relating to age and income as well as on the observed amount in the dataset. This year, ASPA (bsaoa) is based on SILC national variable (SRCV) called "prest_precarite_vieil".

- Social exclusion benefits (BSA) were splited into the main social assistance benefit (RSA, variable bsa00), the activity allowance (bsawk) and the rest by simulating benefit rules. Any residual amounts was saved in a separate variable-other social assistance benefits. This year RSA and past year (bsa00) and activity allowance (bsawk) are based on SILC national variable (SRCV) called repectively "RSA_soc_i" in SILC 2019 (the variable name has changed since SILC 2020, it's "rsa_men_nsilc") and for activity allowance "RSA_pa_i" in SILC 2019 (the variable name is "ppa_men_nsilc" since SILC 2020), without change for the rest.

- Moreover, several variables are now based on SILC national variable (SRCV), that is the case since in SILC 2019 for personal income tax (tin) based on the variable called "IRPP", for property tax (tpr) on SILC national variable (SRCV) called "TF" (called "taxfon" in SILC 2020). In SILC 2021, "taxfon" has not been collected, so "HY120" is used instead.

In SILC 2020, that is also the case for SIC employee based on national SILC variable "cots_sal", SIC self employed based on "contindep" and SIC employer based on "cotp_sal". In SILC 2021, these SIC variables are not available.

3.4 Updating

EUROMOD currently permits the simulation of 18 policy years, i.e. 2006-2023. Currently, all the simulations are done using eigth datasets, namely FR-SILC 2007, FR-SILC 2010, FR-SRCV2012, FR-SILC2015, FR-SILC2016, FR-SILC2017, FR-SILC2018, FR-EMSD2-2019 , FR-EMSD2-2020 and FR-EMSD2-2021 which contain 2006, 2009, 2011, 2014, 2015, 2016, 2017, 2018, 2019 and 2020 incomes. Thus the data year and policy years are aligned only in 2006, 2009, 2011, 2014, and 2015, 2016, 2017, 2018, 2019 and 2020. To account for any time inconsistencies between the input dataset and the policy year, a set of uprating factors is used. These factors typically correct for changes in the average incomes between the data year and the policy year or indexation rules. Separate factors are used for most income components. No attempt has been made to correct for demographic and other population changes between the data year and the policy year. The list of updating factors for the 2021 dataset as well as the sources used to derive them can be found in annex 1. Note however that in the case of simulated variables, the actual simulated amounts are used in the baseline rather than the uprated original variables in the dataset. Uprating 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.

4. VALIDATION

4.1 Aggregate Validation

The definition of disposable income used in EUROMOD differs slightly from the concept of disposable income calculated in SILC. More specifically, in EUROMOD we add income from private pension plans and since all taxes and benefits are calculated 'exactly' via simulation we disregard tax adjustment repayments. We also do not add the value of the company car to the final household disposable income.

4.1.1 Components of disposable income

Table 4.1 lists the income components included in EU-SILC and EUROMOD separately. Note that there are some slight differences in the two definitions.

Table 4.1 Definitions of disposable income in EU-SILC and EUROMOD

	EUROMOD ils_dispy	EU-SILC HY020
Employee cash or near cash income	+	+
Employer's social insurance contribution	0	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 benefits	+	+
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	-	-
Tax on income and social contributions	-	-
Repayments/receipts for tax adjustment	0	+
Company car	0	+

Notes: a value of 0 is used to denote that the respective income concept does not enter the calculation of household disposable income.

4.1.2 Validation of incomes

Table A.3.1 in Annex 3 displays the number of recipients of original income sources both in EUROMOD and in external administrative data. Note that the concepts used in EUROMOD and in external statistics are slightly different. In EUROMOD, the number of employees/ self-employed is computed as the sum of all individuals who receive some employment/ self-

employment income over the year. Instead, the external data refer to the numbers recorded at a given point in time, i.e. on the 31st of December of the corresponding year. As such, one should expect slightly higher figures in EUROMOD compared to administrative statistics. Indeed, this is the case for employment income. In the base year, the number of recipients is recorded to be approximately 7 % higher for employment in EUROMOD compared to the external benchmark in 2021, 4% in 2022 and 2% in 2023. That is not the case for self-employement income where recipient are underestimated around 13 % in Euromod in 2021.

Table A.3.2 in Annex 3 repeats the same comparisons, but using amounts instead of number of recipients. EUROMOD values in this table refer to what we observe in EU-SILC in 2021 (income reference period 2020). Total employment income is underestimated in SILC compared to external statistics, suggesting, possibly, the inability of SILC to capture high income earners. Total self-employment income in SILC is also underestimated compared to the external figure, like investment income and income from public pensions. This may also be due to a mismatch between our external statistics and EU-SILC data The contribution on investment income changed in France. A significant portion of investment income from productive investments has been removed from taxation. Taxation is now largely focused on real estate assets and moved to IFI, *Impôt sur la fortune immobilière.*
Not all benefits and taxes are simulated in EUROMOD. Instead, when enough information to carry out a reliable simulation is lacking, these income components are taken directly from the underlying micro-data.

Table A.3.3 displays the taxes and SIC number of payer, we can see that the number of tax household is underestimated in EUROMOD around 18 % in 2021. This may be due to the fact that external values are for whole France (with overseas) instead of metropolitan France for EUROMOD.
Table A.3.4 displays the taxes and SIC amounts. Income tax is underestimate by 13% in 2021 and 18 % in 2022, and the two taxes specific to the French system, CSG and CRDS, are also underestimated by 15% for CSG and 14% for CRDS in 2022 in EUROMOD.
The simulated value of personal income tax revenues is generally more or less in line with external statistics. But keep in mind that there are a range of complex tax deductions and credits in France that we are unable to simulate. We simulate the most important ones relating to rental income, dividends, overtime pay and childcare but it is likely that we miss some deductions that are particularly important for those with high income. However, some important market income components (earnings, investment & property) are underreported in the data compared to external statistics.

Table A.3.5 in Annex 3 compares the number of recipients of means-tested benefits and non-means-tested benfits in the EUROMOD baseline and EU-SILC to external administrative information. Note that not all benefits are simulated in EUROMOD. Instead, when enough information to carry out a reliable simulation is lacking, these income components are taken directly from the underlying micro-data.
In this table, it is clear that SILC and EUROMOD approximates the existing number of pensioners quite well but with slight underestimation around 8% in 2021.
For survivor pensions and disability, the number of recipients is significantly overestimated. In all likelihood, the external variables used do not seem to take into account a large share of individuals entitled to disability benefits in EUROMOD. This may be due to an overly strict definition of disability in the external data.
The number of recipients of universal child benefits and the means-tested educational allowance, are well estimated in EUROMOD instead of family support allowance, means-tested

benefit for young children and the means-tested birth grant are clearly underestimated. For family support, this may be due to the low number of recipients of this benefit in the original SILC database. Note that this may also be the case for all benefits that are underestimated in EUROMOD and whose number of beneficiaries is too low in the database and from the lack of information on the payment of alimonies.
The guaranteed min income RSA is quite well estimated in EUROMOD in 2022 comparing to external statistics with a slight underestimation of 6%. This is due to the inaccuracy of the external values which only take into account beneficiaries of the general case (CAF) and not those from MSA (for the agricultural community).
The number of people entitled to the activity allowance is well estimated in 2021 and slightly underestimated by 6% in 2022.
Finally, the number of recipients of the contributory unemployment benefit in EUROMOD is overestimated. This is entirely due to observed receipt in SILC (eligibility in EUROMOD is constructed as to reproduce observed receipt in the data). This can clearly be seen by the fact that simulated numbers and those derived from the original data are indeed very close. Since in SILC the contributory unemployment benefit is aggregated together with the means-tested one, it is possible that errors stemming from the disaggregation process are responsible for the overestimation.

Table A.3.6 in Annex 3 compares the amounts of benefits in EUROMOD and SILC to external administrative information. Whereas survivor and disability pensions are clearly overestimated in EUROMOD, old-age pensions and universal child benefits are quite well estimated. Sickness benefits are also significantly underestimated in EUROMOD. It is not entirely clear what the reason is. Note that the EUROMOD variable contains more benefits than the external benchmarks (related to child disability, adoption, parental care etc.). It has not been possible to reconstitute exactly the EUROMOD variable using external administrative data.
In the case of the main means-tested benefit RSA, total amounts (including a random take-up simulation) are underestimated. Households entitled to small amounts are less likely to claim. To the extent that EUROMOD simulated non-take-up to be random, this introduces errors in the final results. Total spending on contributory unemployment benefits seems to be well estimated whereas activity allowance is clearly overestimated.

4.1.3 Validation of outputted (simulated) incomes

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

Several inequality indicators as obtained in EUROMOD are compared with external benchmarks in Table A3.7 in Annex 3. The external figures come from the EUROSTAT’s statistics database. The table shows that median and mean disposable incomes are rather well aligned in 2021 with a very slight underestimation (3 %). Overall inequality, as expressed by the Gini coefficient and the S80/S20 ratio, is slightly underestimated in EUROMOD when

information is available. Finally the comparison of decile shares indicates that income is rather well aligned in EUROMOD for D3 to D10, while the bottom of the distribution is overestimation around 15 % for D1 and 8 % for D2. There may be several possible explanations for the noted discrepancies. First, note that no adjustments to socio-demographic variables are made in EUROMOD in situations where the policy year does not correspond to the data year. In particular, no adjustment is made for changes in employment and unemployment that have taken place between 2020 and the policy year. Second, it is possible that the uprating factors used to account for changes in incomes are not capturing changes in the income distribution. More specifically, uprating factors are based on changes in average income components. If however incomes are rising faster at the top compared to the bottom, this would both increase inequality and not be captured in the change in averages.

4.2.2 Poverty rates

At-risk of poverty rates using various poverty thresholds are shown in Table A3.8 in Annex 3, both in total and by gender, and by age group for the 60 % of the median threshold. Poverty is underestimated in EUROMOD, both for men and for women, when using lower poverty thresholds. Using higher poverty thresholds, poverty rates estimated by EUROMOD are closer to external benchmarks. This suggests that non take up of some means-tested benefits or administrative errors in the implementation of these benefits may play a role which EUROMOD cannot adequately capture. Only the non-take-up of general social assistance (*RSA*, Activity allowance) is simulated in EUROMOD. Moreover, non-take up is simulated to be random. If marginalized, peripheral groups are less likely to claim benefits to which they are theoretically entitled, and therefore incomes at the bottom will be inflated in EUROMOD. Finally, poverty is underestimated for most age groups, it is not entirely clear what is causing this pattern.

4.3 Summary of "health warnings"

Several things should be kept in mind when interpreting EUROMOD results:

- Employment income appears to be underreported in SILC compared to external benchmarks
- Similarly, some other types of incomes such as sickness benefits, investment and property incomes are lower in SILC compared to external information
- Accurate simulation of the parental leave benefit (CLCA) was not possible given available information in SILC. However, both the amount of benefits and number of recipients appear to be close to external statistics
- Non-take-up of the main social assistance benefits (*RSA*, activity allowance) is simulated to be random. Non-take-up however is most likely to be non-random. Comparisons between results obtained in EUROMOD and external benchmarks suggest that households entitled to lower amounts are less likely to claim
- Simulation of eligibility for the contributory unemployment insurance benefit (*ARE*) is inaccurate due to the quality of data in SILC
- Eligibility for the means-tested solidarity allowance for the elderly (*ASPA*) and means-tested unemployment assistance benefits (*ASS*) is simulated based on observed receipt in the data
- Overall, inequality based on EUROMOD simulated incomes is lower. Poverty rates, especially when calculated using low poverty thresholds, are underestimated

- The simulation of monetary compensation schemes is triggered by the simulation of labour market transitions defined in policy TransLMA_cc. This policy becomes operational if the model is run in conjunction with the LMA add-on. The nature of these simulations only partially validated. Users are encouraged to refer to the "Simulating labour market transitions in EUROMOD" document prior to their use.
- Labour market transitions are switched OFF in EUROMOD baselines. As a consequence, the simulation of monetary compensation schemes does not produce any effect in baseline simulations. Since all policies not linked to labour market transitions are fully functional, it is possible for disposable income in 2020 to be higher than disposable income in previous years.

5. REFERENCES

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ANNEX 1. UPRATING FACTORS

Income component	Uprating factor name	2020	2021	2022	2023	Source
Harmonized Indices of Consumer Prices (HICP)	$f_hicp	105.5	107.68	114.04	117.22	Eurostat / Harmonized Indices of Consumer Prices (HICP);- HICP (2015=100) - Monthly data (prc_hicp_midx) http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_hicp_midx&lang=en EUROSTAT; AMECO Autumn forecast for 2022 values
Harmonized Indices of Consumer Prices (HICP)	$f_hicp	122.007	124.53	131.89	135.56	Eurostat / Harmonized Indices of Consumer Prices (HICP);- HICP (2005=100) - Monthly data (prc_hicp_midx) http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_hicp_midx&lang=en
Average annual net full-time equivalent salary - All salaried workers	$f_yem	29 677	31 867	34 337	36 224	INSEE IdBank 001665118 http://www.bdm.insee.fr/bdm2/affichageSeries?request_locale=en&anneeDebut=2007&codeGroupe=1475&recherche=criteres&idbank=001665118&anneeFin=2012
Average annual net full-time equivalent salary - First quartile	$f_yem_q1	18 607	19 980	21 529	22 712	INSEE IdBank http://www.bdm.insee.fr/bdm2/affichageSeries?anneeDebut=2007&anneeFin=2012&recherche=criteres&codeGroupe=1476&idbank=001665118&idbank=001665121&idbank=001665124&idbank=001665127&idbank=001665130&idbank=001665133&idbank=001665136&idbank=001665139&idbank=001665143&idbank=001665146&idbank=001665148
Average annual net full-time equivalent salary - Second quartile	$f_yem_q2	23 701	25 450	27 423	28 929	INSEE IdBank 001665127 http://www.bdm.insee.fr/bdm2/affichageSeries?anneeDebut=2007&anneeFin=2012&recherche=criteres&codeGroupe=1476&idbank=001665118&idbank=001665121&idbank=001665124&idbank=001665127&idbank=001665130&idbank=001665133&idbank=001665136&idbank=001665139&idbank=001665143&idbank=001665146&idbank=001665148

Income component	Uprating factor name	2020	2021	2022	2023	Source
Average annual net full-time equivalent salary - Third quartile	$f_yem_q3	32 868	35 293	38 029	40 119	INSEE IdBank 001665130 http://www.bdm.insee.fr/bdm2/affichageSeries?anneeDebut=2007&anneeFin=2012&recherche=criteres&codeGroupe=1476&idbank=001665118&idbank=001665121&idbank=001665124&idbank=001665127&idbank=001665130&idbank=001665133&idbank=001665136&idbank=001665139&idbank=001665143&idbank=001665146&idbank=001665148
Gross wages and salaries (totals from AMECO)	$f_yem_Ameco	910.7	977.9	1053.7	1111.6	DG ECFIN/AMECO, household and NPISH/revenue/gross wages and salaries (Mrd euros) http://ec.europa.eu/economy_finance/ameco/user/serie/ResultSerie.cfm
Inflation rate (from INSEE)	$f_cpi	104.77	106.49	112.09	115.36	INSEE IdBank 0001765178 http://www.bdm.insee.fr/bdm2/affichageSeries?idbank=001765178&bouton=OK&codeGroupe=1743
Rent reference index (RRI) - Base 100 on the 4th quarter of 1998	$f_rri	130.56	131.52	135.82	139.60	INSEE IdBank 001515333 http://www.insee.fr/en/bases-de-donnees/bsweb/serie.asp?idbank=001515333
Monthly average amount per retired person	$f_poa	1509	1515	1553	1566	INSEE http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATTEF04571 http://drees.social-sante.gouv.fr/etudes-et-statistiques/publications/panoramas-de-la-drees/article/les-retraites-et-les-retraites-edition-2017
Monthly base for family benefits	$f_bfa	414.4	414.8	428.86	444.24	http://www.dalloz-actualite.fr/indice/base-mensuelle-de-calcul-des-prestations-familiales.VSfD45PK-AB
Basic AF amount	$f_bch00	131.95	132.08	136.55	141.45	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic CF amount	$f_bchlg	171.74	171.91	177.73	183.41	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic PAJE amount	$f_bchyc	184.62	184.62	184.62	184.62	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic ARS amount	$f_bched	469.97	370.32	382.85	396.058	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic Baby Bonus amount	$f_bchba	952.08	953.035	985.30	1020.66	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic BMAF amount	$f_bchot	414.4	414.81	428.86	444.24	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations

Income component	Uprating factor name	2020	2021	2022	2023	Source
Maximum amount of AAH	$f_bdi	900	903.6	934.19	967.69	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic AV amount	$f_bsuwd	622.82	625.31	644.80	662.7	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic RSA amount	$f_bsa00	564.78	565.34	584.48	605.45	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic Activity allowance	$f_bsawk	555.94	556.49	575.33	595.97	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Basic ASPA amount	$f_bsaoa	903.2	906.81	935.11	961.08	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Rent reference level for AL	$f_bho	257.92	258.69	264.05	268.87	https://www.caf.fr/allocataires/aides-et-demarches/droits-et-prestations
Average net full-time salary in the PREVIOUS year	$f_yempv	28 658	29 677	31 867	34 337	INSEE IdBank 001665118 http://www.bdm.insee.fr/bdm2/affichageSeries?request_locale=en&anneeDebut=2007&codeGroupe=1475&recherche=criteres&idbank=001665118&anneeFin=2012
Average disposable income (per hh)	$f_yds	36 622	39 646	42 7199	45 067	INSEE https://www.insee.fr/fr/statistiques/2412465#tableau-Donnes
Pension indexation rules	$f_poa_index	102.3	102.71	105.92[5]	106.77	INSEE IdBank 0001765178 http://www.bdm.insee.fr/bdm2/affichageSeries?idbank=001765178&bouton=OK&codeGroupe=1743
Change in average investment and property income (2006=base)	$f_yiy	1.067	1.136	1.164	1.171	Revenu de la propriété reçus diminués des revenus versés. http://www.insee.fr/fr/ffc/docs_ffc/ref/revpmen11h.pdf
Basic daily rate for ASS	$f_bunmt	16.89	16.91	17.55	18.17	Based on the ASS daily amount
Total amount of ISF collected (billions)	$f_twl	2	2.1	2.3	2.36	Based on the total amount of ISF (Impôt de solidarité sur la fortune) collected: https://www.insee.fr/fr/statistiques/2381408#tableau-Donnes
Total amount of TH collected (billions)	$f_tmu	10.5	7.3	5.4	5.55	Based on the total amount of TH (taxe d'habitation) collected https://www.insee.fr/fr/statistiques/2381408#tableau-Donnes
Total amount of IRPP collected (billions)	$f_tin	74.4	79.8	89.1	91.59	Based on total amount of IRPP https://www.insee.fr/fr/statistiques/2381408#tableau-Donnes

[5] Reflects the increase on pensions on July 1st by 4% on July 1 : (103.8419448*1.04+103.8419448)/2=105.9188

Income component	Uprating factor name	2020	2021	2022	2023	Source
Annual national accounts- GDP Current price	$f_gdp	2 187 870	2 327 893	2 386 091	2 400 407	INSEE IdBank 001690355 http://www.bdm.insee.fr/bdm2/affichageSeries?request_locale=en&codeGroupe=1560&idbank=001690355&bouton=OK 2016 & 2017:GDP :Based on forecasted GDP growth (https://ec.europa.eu/info/sites/info/files/wf2017_statistical_annex_0.pdf)

ANNEX 2. POLICY EFFECTS IN 2022-2023

Table 1: Policy effects in France in 2022-2023, using the CPI-indexation (CPI = 1.05489), %

Decile	Original income	Public pensions	Means-tested benefits	Non means-tested benefits	Employee SIC	Self-employed SIC	Other SIC	Direct taxes	Disposable income
1	0.00	-0.76	-2.83	-1.09	0.00	0.02	0.00	0.13	-4.54
2	0.00	-1.42	-1.73	-0.91	0.00	0.03	0.00	0.19	-3.85
3	0.00	-1.52	-1.40	-1.02	0.00	0.02	0.00	0.25	-3.68
4	0.00	-1.42	-1.12	-0.83	0.00	0.07	0.00	0.27	-3.03
5	0.00	-1.51	-0.77	-0.59	0.00	0.03	0.00	0.39	-2.44
6	0.00	-1.51	-0.49	-0.54	0.00	0.02	0.00	0.49	-2.04
7	0.00	-1.29	-0.29	-0.45	0.00	0.03	0.00	0.43	-1.57
8	0.00	-1.12	-0.20	-0.29	0.00	0.00	0.00	0.35	-1.26
9	0.00	-0.88	-0.08	-0.55	0.00	0.00	0.00	0.37	-1.13
10	0.00	-0.45	-0.03	-0.60	-0.01	-0.01	0.00	0.26	-0.83
Total	0.00	-1.06	-0.55	-0.61	0.00	0.01	0.00	0.33	-1.89

Notes: 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 2022, using the modified OECD equivalence scale. Each policy system has been applied to the same input data, deflating monetary parameters of 2023 policies by Eurostat's Harmonized Index of Consumer Prices (HICP).

Figure 1: Policy effects in 2022-2023, using the CPI-indexation (CPI = 1.05489), %

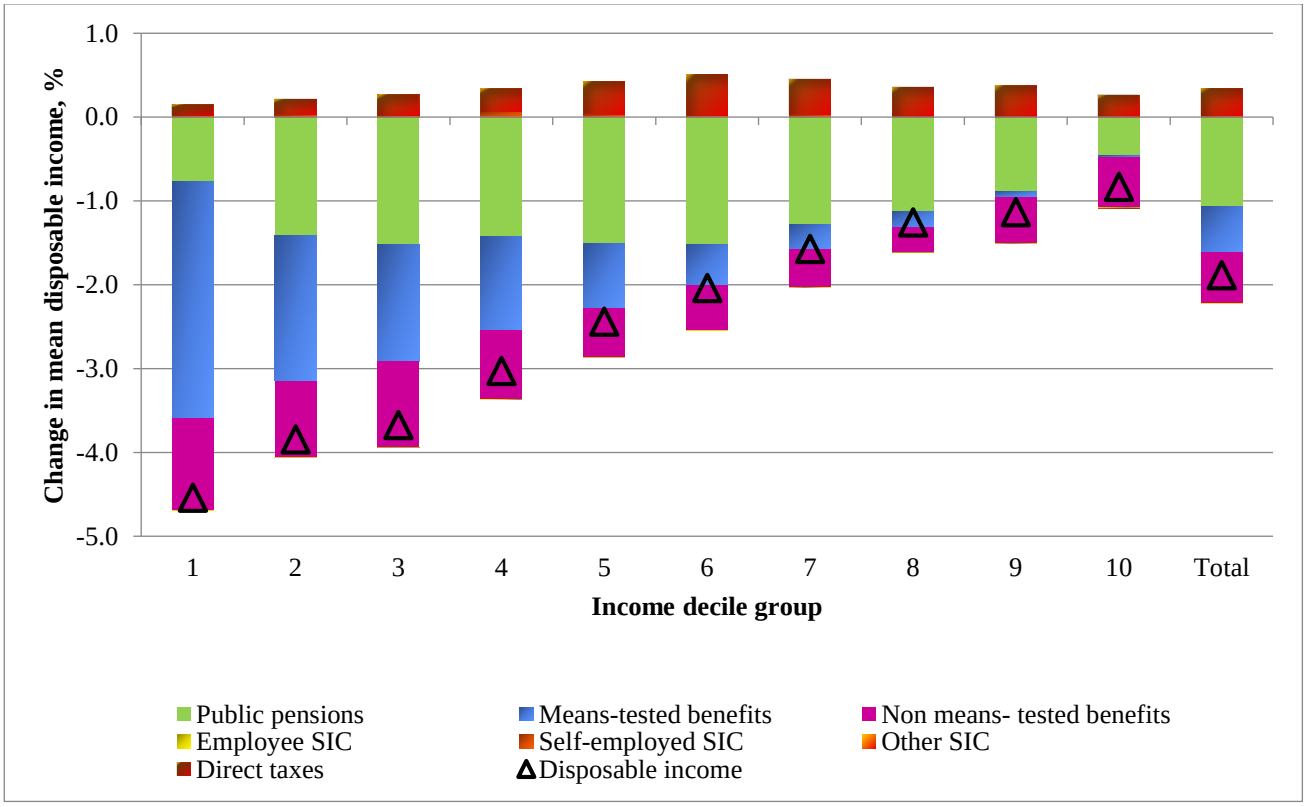


Table 1 and Figure 1 show the changes in mean equivalised household disposable income induced by policy changes between 2022 and 2023, by income component and income decile group. The effect is computed as the difference between equivalised household disposable income under the 2023 tax-benefit policies (deflating monetary parameters by projected Eurostat's Harmonized Index of Consumer Prices, HICP available in the autumn 2023) and that simulated under 2023 policies, as a percentage of the latter.

On average, the 2023 policy changes resulted to a decrease in disposable income of 1.89%. The largest effects are due to a decrease in public pensions (-1.06% of total disposable income), non-means-tested benefits (-0.61% of the total disposable income) and to a decrease in means-tested benefits (-0.55%). The increase in income tax brackets (+5.4%) led to a reduction in direct taxes and helped to increase disposable income by a total of 0.33%.

The increase in the inflation rate in 2023 (around 5.6% in the autumn 2023 compared with the annual index for 2022) and its non-full compensation play a major role in the decrease of the disposable income. Even if several measures have been taken to partially compensate the high inflation, such as an increase in the minimum wage (+ 4.03% in two stages), in the PSS (+ 6.9%), in social benefits (which were increased by 1.6% in April), pensions (+0.8%) and in the unemployment benefit (+ 1.9%); this have been insufficient and the high inflation led to a general fall in disposable income.

All these measures have failed to contain the overall decline in disposable income, especially for the poorest who are the most impacted. In distributive terms, the policy changes in 2023 have led to a decrease in disposable income for all deciles, but more significant for the lowest deciles (decrease of 4.54% for D1, 3.85% for D2 and 3.68% for D3, while D9 and D10 have the smallest reductions (-1.13 for D9 and 0.83% for D10), which is mainly due to the decrease in social benefits and public pensions.

Public pensions were revalued by a 0.8% from January 2023. This increment is below inflation, and then has contributed to a fall in disposable income for all deciles, from -0.76% for D1 to -0.45% for D10. From decile D3 to D6 are the most affected by the reduction in the real value of pensions (between 1.42 to 1.52 % reduction pensions income). For D8 and D9, the reduction in public pension goes from -1.12% for D8 to -0.88% for D9.

The changes in means-tested benefits had a negative impact on disposable income of all deciles, but more strongly for the poorest with -2.83% for D1, -1.73% for D2, -1.40% for D3 and -1.12% for D4. From D5, the reduction in disposable income is less significant (-0.77 for D5 and -0.54 for D6), and finally, changes in means-tested benefits have lesser impact on the last two deciles (-0.08 for D9 and -0.03 for D10).

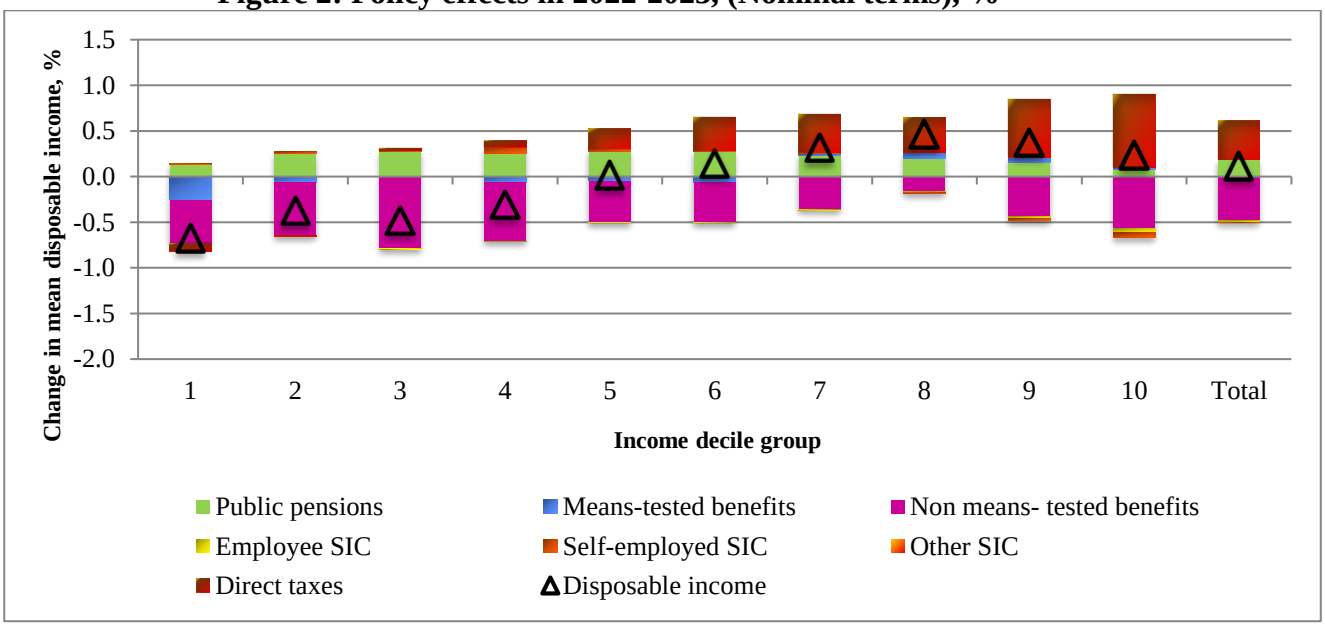
The changes in non-means-tested benefits have also had a much greater negative impact on the lowest deciles than on the upper deciles (-1.09 % for D1 compared with -0.60 for D10). The reduction in the duration of the unemployment benefit could explain part of the disposable income decrease for the lower deciles, who are more dependent from those types of social insurance. Inflation explains the remaining falls in disposable income linked to the low indexation of social benefits, which were only indexed of 1.9% whereas inflation was around 5.6 % in the autumn. The erosion of inflation on the real impact of the social benefits is verified by comparing Table 1 and Table 2, where the policy effects between real terms and nominal terms are compared.

Self-employed SIC participated to increase slightly the disposable income (+0.01 in total) except for D10 with a decrease of -0.01%. The largest increase is 0.07% for D4. Direct taxes were reduced for all deciles, but more for the middle class, that contributed to an increase in disposable income. For the middle class, the increase in disposable income goes from 0.25% for D3 to 0.49% for D6. After D6, for the upper deciles, the percentage starts to fall slowly from 0.43% for D7 to 0.26% for D10. In fact, the annual revaluation of the income tax brackets was very important this year (+5.4 %) in order to compensate inflation and the previous year increase in salaries (taxation is based on the previous year incomes that increase more in 2022 than in 2023), which leads to entering less easily in the upper income brackets, and then to a lower effective marginal tax rate and to a decrease of direct taxes for all.

Table 2: Policy effects in France in 2022-2023 (Nominal terms), %

Decile	Original income	Public pensions	Means-tested benefits	Non means-tested benefits	Employee SIC	Self-employed SIC	Other SIC	Direct taxes	Disposable income
1	0.00	0.14	-0.26	-0.47	0.00	0.01	0.00	-0.09	-0.67
2	0.00	0.25	-0.06	-0.59	0.00	0.02	0.00	0.00	-0.37
3	0.00	0.27	0.00	-0.79	0.00	0.01	0.00	0.02	-0.48
4	0.00	0.26	-0.07	-0.64	0.00	0.07	0.00	0.08	-0.31
5	0.00	0.27	-0.05	-0.46	0.00	0.03	0.00	0.22	0.02
6	0.00	0.27	-0.06	-0.44	-0.01	0.02	0.00	0.36	0.14
7	0.00	0.23	0.02	-0.36	-0.01	0.02	0.00	0.42	0.32
8	0.00	0.20	0.06	-0.16	-0.01	-0.01	0.00	0.38	0.46
9	0.00	0.16	0.05	-0.43	-0.02	-0.02	0.00	0.63	0.37
10	0.00	0.08	0.02	-0.57	-0.05	-0.05	0.00	0.80	0.24
Total	0.00	0.19	-0.01	-0.48	-0.02	0.00	0.00	0.42	0.11

Figure 2: Policy effects in 2022-2023, (Nominal terms), %



ANNEX 3. VALIDATION TABLES

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

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Earnings (ils_earns)													
Self-employment income (yse)	N	2,420	2,420	2,420	2,420	3,057	3,217	NaN	NaN	0.79	0.75	NaN	NaN
Regular hours employment income (yem00)	N	27,286	27,286	27,286	27,286	25,680	25,527	26,284	26,838	1.06	1.07	1.04	1.02
Overtime pay (yemxp)	N	12,469	12,469	12,469	12,469	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Covid-19 compensation paid by the firm (yemmc_s)	Y	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other original income (ils_origy - ils_earns)													
income from private pensions (ypp)	N	422	422	422	422	1,400	1,400	NaN	NaN	0.30	0.30	NaN	NaN
income from investments (yiy)	N	35,482	35,482	35,482	35,482	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income from rent (ypr)	N	7,053	7,053	7,053	7,053	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income received by children under 16 (yot)	N	1,096	1,096	1,096	1,096	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income received through private transfers (ypt)	N	1,843	1,843	1,843	1,843	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
maintainance payments (xmp)	N	2,963	2,963	2,963	2,963	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Continued...

	Source	Comments
Earnings (ils_earns)		
Self-employment income (yse)	https://www.insee.fr/fr/statistiques/5371304) et application des taux de variation pour les années non	-
Regular hours employment income (yem00)	beneficiaries :https://www.insee.fr/fr/statistiques/2424696#tableau-figure1 amounts: https://www.insee.fr/fr/statistiques/2830244#tableau-figure1_radio1	-
Overtime pay (yemxp)	-	-
Covid-19 compensation paid by the firm (yemmc_s)	-	-
Other original income (ils_origy - ils_earns)		
income from private pensions (ypp)	https://drees.solidarites-sante.gouv.fr/publications-documents-de-reference/panoramas-de-la-drees/les-retraites-et-les-retraites-edition	individual private insurance plans independently of their employers
income from investments (yiy)	https://www.insee.fr/fr/statistiques/5371304	-
income from rent (ypr)	https://www.insee.fr/fr/statistiques/5371304	-

Continued...

	Source	Comments
income received by children under 16 (yot)	-	-
income received through private transfers (ypt)	-	-
maintainance payments (xmp)	-	-

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

	Simulated	EUROMOD				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Earnings (ils_earns)													
Self-employment income (yse)	N	73,908	77,379	81,280	85,631	123,654	128,723	124,990	134,615	0.60	0.60	0.65	0.64
Regular hours employment income (yem00)	N	679,020	710,908	748,293	787,424	909,200	969,207	1,006,037	1,083,502	0.75	0.73	0.74	0.73
Overtime pay (yemxp)	N	126,206	132,133	138,794	146,225	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Covid-19 compensation paid by the firm (yemmc_s)	Y	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other original income (ils_origy - ils_earns)													
income from private pensions (ypp)	N	637	637	637	637	2,200	1,400	NaN	NaN	0.29	0.45	NaN	NaN
income from investments (yiy)	N	63,705	68,037	69,702	70,121	83,100	87,255	90,920	97,739	0.77	0.78	0.77	0.72
income from rent (ypr)	N	36,080	36,346	37,534	38,304	164,050	172,252	179,487	192,948	0.22	0.21	0.21	0.20
income received by children under 16 (yot)	N	230	230	230	230	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income received through private transfers (ypt)	N	8,138	8,521	8,950	9,429	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
maintainance payments (xmp)	N	14,566	14,867	15,745	16,184	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Taxes (ils_tax)																					
Personal income tax (IRPP) (tin_s)	Y	14,331	14,945	15,265	16,339	19,226	19,226	19,226	19,226	0.75	0.78	0.79	0.85	17,839	18,207	NaN	NaN	0.80	0.82	NaN	NaN
Property taxes (tpr)	N	15,638	15,638	15,638	15,638	15,638	15,638	15,638	15,638	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Generalized social contributions (CSG) (tscxc_s)	Y	44,721	44,710	44,751	44,691	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Contributions for debt repayment (CRDS) (tscdf_s)	Y	46,909	46,909	46,909	46,909	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Social insurance contributions on capital income (tsckt_s)	Y	35,785	35,785	35,785	35,785	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Exceptional contributions on high income earners (tinto_s)	Y	40	40	40	40	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Wealth tax (ISF) (twl)	N	15,638	15,638	15,638	15,638	15,638	15,638	15,638	15,638	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Residential tax (TH) (tmu)	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
Employee Social Insurance Contributions (ils_sicee)		27,286	27,286	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	25,694	26,515	NaN	NaN	1.06	1.03	NaN	NaN
Sinckness insurance contributions (tsceesi_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
Pension insurance contributions (tsceepi_s)	Y	27,286	27,286	27,286	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment insurance contributions (tsceeui_s)	Y	8,270	8,273	8,277	8,283	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)		2,516	2,516	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3,057	3,212	NaN	NaN	0.82	0.78	NaN	NaN
Family benefits insurance contributions (tscsefa_s)	Y	505	525	538	535	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sickness insurance contributions (tscsesi_s)	Y	2,516	2,516	2,516	2,321	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Pension insurance contributions (tscsepi_s)	Y	2,516	2,516	2,516	2,516	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Death & invalidity insurance (tscsedi_s)	Y	2,420	2,420	2,420	2,420	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Professional training contribution (only for artisans & I&T) (tscseir_s)	Y	2,133	2,133	2,133	2,133	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)		27,275	27,279	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	25,694	26,515	NaN	NaN	1.06	1.03	NaN	NaN
Reductions in employers' social security contributions (Fillon reduction) (tscerrd_s)	Y	17,159	16,516	16,543	16,577	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)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Sickness insurance contributions (tscersi_s)	Y	27,286	27,286	27,286	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Family benefits insurance contributions (tscerfa_s)	Y	27,286	27,286	27,286	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Housing benefits insurance contributions (tscerho_s)	Y	27,233	27,246	27,246	27,246	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
"Pension insurance contributions (includes main contribution, CET & AGF)" (tscerpi_s)	Y	27,286	27,286	27,286	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Contingency insurance for white collar workers (tscerot_s)	Y	8,353	8,353	8,353	8,353	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment insurance contributions (tscerui_s)	Y	27,286	27,286	27,286	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Professional training (tscerir_s)	Y	27,281	27,281	27,281	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Apprenticeship tax (tscerap_s)	Y	27,286	27,286	27,286	27,286	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Credited Contributions (ils_sicct)																					
Other Contributions (ils_sicot)																					

Continued...

	Source	Comments
Taxes (ils_tax)		
Personal income tax (IRPP) (tin_s)	beneficiaries: https://www.impots.gouv.fr/portail/statistiques amounts:	-
Property taxes (tpr)	-	-
Generalized social contributions (CSG) (tscxc_s)	amounts: https://www.insee.fr/fr/statistiques/2381408#tableau-figure1	-
Contributions for debt repayment (CRDS) (tscdf_s)	amounts: https://www.insee.fr/fr/statistiques/2381408#tableau-figure1	-
Social insurance contributions on capital income (tsckt_s)	beneficiaries: https://www.impots.gouv.fr/portail/statistiques amounts: https://www.insee.fr/fr/statistiques/2381408#tableau-figure1	-
Exceptional contributions on high income earners (tinto_s)	-	-
Wealth tax (ISF) (twl)	beneficiaries: https://www.impots.gouv.fr/portail/statistiques amounts:	-
Residential tax (TH) (tmu)	-	-
Employee Social Insurance Contributions (ils_sicee)		
Sinckness insurance contributions (tsceesi_s)	-	-
Pension insurance contributions (tsceepi_s)	-	-
Unemployment insurance contributions (tsceeui_s)	-	-

Continued...

	Source	Comments
Self-employed Social Insurance Contributions (ils_sicse)		
Family benefits insurance contributions (tscsefa_s)	-	-
Sickness insurance contributions (tscsesi_s)	-	-
Pension insurance contributions (tscsepi_s)	-	-
Death & invalidity insurance (tscsedi_s)	-	-
Professional training contribution (only for artisans & I&T) (tscseir_s)	-	-
Employer Social Insurance Contributions (ils_sicer)		
Reductions in employers' social security contributions (Fillon reduction) (tscerrd_s)	-	-
Sickness insurance contributions (tscersi_s)	-	-
Family benefits insurance contributions (tscerfa_s)	-	-
Housing benefits insurance contributions (tscerho_s)	-	-
"Pension insurance contributions (includes main contribution, CET & AGF)" (tscerpi_s)	-	-
Contingency insurance for white collar workers (tscerot_s)	-	-
Unemployment insurance contributions (tscerui_s)	-	-
Professional training (tscerir_s)	-	-
Apprenticeship tax (tscerap_s)	-	-
Credited Contributions (ils_sicct)		
Other Contributions (ils_sicot)		

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

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Taxes (ils_tax)																					
Personal income tax (IRPP) (tin_s)	Y	63,566	69,194	72,748	74,105	65,039	65,039	65,039	65,039	0.98	1.06	1.12	1.14	74,400	79,800	89,100	NaN	0.85	0.87	0.82	NaN
Property taxes (tpr)	N	16,527	16,119	16,981	17,456	16,527	16,527	16,527	16,527	1.00	0.98	1.03	1.06	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Generalized social contributions (CSG) (tscxc_s)	Y	111,424	115,605	121,179	125,660	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	123,600	129,400	141,800	NaN	0.90	0.89	0.85	NaN
Contributions for debt repayment (CRDS) (tscdf_s)	Y	6,757	6,980	7,282	7,532	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	7,400	7,800	8,500	NaN	0.91	0.89	0.86	NaN
Social insurance contributions on capital income (tsckt_s)	Y	7,484	7,829	8,043	8,132	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	6,434	6,511	7,101	NaN	1.16	1.20	1.13	NaN
Exceptional contributions on high income earners (tinto_s)	Y	413	462	520	559	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Wealth tax (ISF) (twl)	N	15,481	16,255	17,803	18,300	15,481	15,481	15,481	15,481	1.00	1.05	1.15	1.18	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Residential tax (TH) (tmu)	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
Employee Social Insurance Contributions (ils_sicee)		75,795	79,231	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	84,572	91,149	NaN	NaN	0.90	0.87	NaN	NaN
Sinckness insurance contributions (tsceesi_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Pension insurance contributions (tsceepi_s)	Y	75,730	79,163	83,147	87,563	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment insurance contributions (tsceeui_s)	Y	65	68	71	75	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Self-employed Social Insurance Contributions (ils_sicse)		20,266	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	20,000	NaN	NaN	NaN	1.01	NaN	NaN	NaN
Family benefits insurance contributions (tscsefa_s)	Y	1,304	1,405	1,518	1,585	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sickness insurance contributions (tscsesi_s)	Y	4,735	4,981	5,260	5,296	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Pension insurance contributions (tscsepi_s)	Y	13,881	14,322	14,807	15,690	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Death & invalidity insurance (tscsedi_s)	Y	122	126	128	137	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Professional training contribution (only for artisans & I&T) (tscseir_s)	Y	224	224	224	240	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employer Social Insurance Contributions (ils_sicer)		234,153	250,513	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	236,872	255,087	NaN	NaN	0.99	0.98	NaN	NaN
Reductions in employers' social security contributions (Fillon reduction) (tscerrd_s)	Y	55,245	53,404	56,113	59,261	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sickness insurance contributions (tscersi_s)	Y	74,485	78,962	83,052	87,340	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Family benefits insurance contributions (tscerfa_s)	Y	31,060	32,715	34,420	36,221	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Housing benefits insurance contributions (tscerho_s)	Y	657	677	699	740	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
"Pension insurance contributions (includes main contribution, CET & AGF)" (tscerpi_s)	Y	133,001	139,153	146,274	154,011	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Contingency insurance for white collar workers (tscerot_s)	Y	3,665	3,729	3,799	4,039	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment insurance contributions (tscerui_s)	Y	31,802	33,261	34,947	36,801	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Professional training (tscerir_s)	Y	9,253	9,687	10,195	10,729	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Apprenticeship tax (tscerap_s)	Y	5,476	5,733	6,032	6,349	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Credited Contributions (ils_sicct)																					
Other Contributions (ils_sicot)																					

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

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Pensions (ils_pen)																					
old-age pensions (poa00)	N	15,581	15,581	15,581	15,581	15,581	15,581	15,581	15,581	1.00	1.00	1.00	1.00	16,907	16,997	NaN	NaN	0.92	0.92	NaN	NaN
disability pensions (pdi00)	N	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1.00	1.00	1.00	1.00	708	827	NaN	NaN	2.09	1.79	NaN	NaN
survivor pensions (psu)	N	2,303	2,303	2,303	2,303	2,303	2,303	2,303	2,303	1.00	1.00	1.00	1.00	574	572	NaN	NaN	4.01	4.03	NaN	NaN
Means-tested benefits (ils_benmt)																					
Means-tested guaranteed minimum income (RMI/RSA) (bsa00_s)	Y	1,574	1,558	1,562	1,625	2,991	2,991	2,991	2,991	0.53	0.52	0.52	0.54	1,780	1,707	1,661	NaN	0.88	0.91	0.94	NaN
Income tested housing allowance for those renting (AL) (bhotn_s)	Y	5,088	4,907	4,892	4,901	6,728	6,728	6,728	6,728	0.76	0.73	0.73	0.73	5,330	4,987	5,080	NaN	0.95	0.98	0.96	NaN
Other means-tested allowances for families with children (bchot_s)	Y	4,059	4,059	4,059	4,059	4,059	4,059	4,059	4,059	1.00	1.00	1.00	1.00	4,774	4,813	NaN	NaN	0.85	0.84	NaN	NaN
Other means-tested benefits (bsaot)	N	1,718	1,718	1,718	1,718	1,718	1,718	1,718	1,718	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other means-tested housing benefits (bhoot)	N	1,029	1,029	1,029	1,681	1,681	1,681	1,681	1,681	0.61	0.61	0.61	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Scholarships (bed)	N	788	788	788	956	956	956	956	956	0.82	0.82	0.82	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Activity allowance (bsawk_s)	Y	4,680	4,302	4,217	4,317	2,486	2,486	2,486	2,486	1.88	1.73	1.70	1.74	4,269	4,306	4,466	NaN	1.10	1.00	0.94	NaN
Covid-19 social assistance (bsaeccm_s)	Y	3,699	NaN	NaN	NaN	0	NaN	NaN	NaN	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Means-tested benefit for young children (PAJE) (bchyc_s)	Y	1,266	1,233	1,195	1,167	1,008	1,008	1,008	1,008	1.26	1.22	1.19	1.16	1,448	1,397	1,366	NaN	0.87	0.88	0.87	NaN
Energy voucher (bhoey_s)	Y	5,543	5,421	11,617	5,139	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Means-tested Survivor Minimum Pension (Allocation veuvage AV) (bsuwd_s)	Y	3	3	3	3	3	3	3	3	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment assitance Benefit (Allocation de solidarité spécifique ASS) (bunmt_s)	Y	598	583	581	582	999	999	999	999	0.60	0.58	0.58	0.58	365	339	306	271	1.64	1.72	1.90	2.15
Means-tested benefit for large families (CF) (bchlg_s)	Y	1,012	1,010	1,008	1,004	671	671	671	671	1.51	1.51	1.50	1.50	842	841	829	NaN	1.20	1.20	1.22	NaN
Means tested educational grant (ARS) (bched_s)	Y	2,856	2,766	2,684	2,565	1,582	1,582	1,582	1,582	1.80	1.75	1.70	1.62	2,826	2,821	2,775	NaN	1.01	0.98	0.97	NaN
Means tested birth grant (PN) (bchba_s)	Y	368	358	349	338	186	186	186	186	1.98	1.92	1.88	1.82	503	541	498	NaN	0.73	0.66	0.70	NaN
Means-tested allowance for the elderly (ASPA) (bsaoa_s)	Y	668	668	668	672	812	812	812	812	0.82	0.82	0.82	0.83	635	664	NaN	NaN	1.05	1.01	NaN	NaN
Income tested disability benefit (AAH) (bdi_s)	Y	492	492	497	507	930	930	930	930	0.53	0.53	0.53	0.55	1,143	1,163	1,191	NaN	0.43	0.42	0.42	NaN
Inflation compensation (binxp_s)	Y	NaN	13,417	22,268	NaN	NaN	0	0	NaN	NaN	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Inflation compensation for civil servants (binpb_s)	Y	NaN	NaN	NaN	1,614	NaN	NaN	NaN	0	NaN	NaN	NaN	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Non-means-tested benefits (ils_bennt)																					
Covid-19 self-employment compensation paid by the state (bwkmcse_s)	Y	0	0	0	NaN	0	0	0	NaN	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Covid-19 exceptional support for self-employed (Aide CPSTI RCI COVID-19) (bseec_s)	Y	1,277	1,277	59	NaN	0	0	0	NaN	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Contributory sickness benefit (bhl)	N	940	940	940	940	940	940	940	940	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Contributory unemployment benefit (ARE) (bunct_s)	Y	3,635	3,635	3,635	3,635	3,659	3,659	3,659	3,659	0.99	0.99	0.99	0.99	3,419	3,274	2,905	2,935	1.06	1.11	1.25	1.24
Universal child benefit (AF) (bch00_s)	Y	4,587	4,587	4,587	4,605	4,401	4,401	4,401	4,401	1.04	1.04	1.04	1.05	4,636	4,609	4,594	NaN	0.99	1.00	1.00	NaN
Supplement for free choice of activity (CLCA) (bchcc_s)	Y	238	238	238	238	158	158	158	158	1.51	1.51	1.51	1.51	244	218	211	NaN	0.98	1.09	1.13	NaN
Family support allowance (ASF) (bchor_s)	Y	149	149	149	149	0	0	0	0	0.00	0.00	0.00	0.00	713	718	727	NaN	0.21	0.21	0.21	NaN
Maternity allowance (PARBEN) (bmact_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
Paternity allowance (PARBEN) (bpact_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 wage compensation paid by the state (bwkmcee_s)	Y	0	0	0	NaN	0	0	0	NaN	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Continued...

	Source	Comments
Pensions (ils_pen)		
old-age pensions (poa00)	https://drees.solidarites-sante.gouv.fr/publications-documents-de-	-
disability pensions (pdi00)	beneficiaries: https://drees.solidarites-sante.gouv.fr/publications-documents-de-	-
survivor pensions (psu)	beneficiaries: https://drees.solidarites-sante.gouv.fr/publications-documents-de-	-
Means-tested benefits (ils_benmt)		
Means-tested guaranteed minimum income (RMI/RSA) (bsa00_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Income tested housing allowance for those renting (AL) (bhotn_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Other means-tested allowances for families with children (bchot_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Other means-tested benefits (bsaot)	-	-
Other means-tested housing benefits (bhoot)	-	-

Continued...

	Source	Comments
Scholarships (bed)	-	-
Activity allowance (bsawk_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-	Figures Metropole
Covid-19 social assistance (bsaeccm_s)	-	-
Means-tested benefit for young children (PAJE) (bchyc_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Energy voucher (bhoey_s)	-	-
Means-tested Survivor Minimum Pension (Allocation veuvage AV) (bsuwd_s)	-	-
Unemployment assitance Benefit (Allocation de solidarité spécifique ASS) (bunmt_s)	beneficiaries :https://statistiques.pole-emploi.org/indem/publication amounts:	-
Means-tested benefit for large families (CF) (bchlg_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Means tested educational grant (ARS) (bched_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Means tested birth grant (PN) (bchba_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Means-tested allowance for the elderly (ASPA) (bsaoa_s)	https://drees.solidarites-sante.gouv.fr/publications-documents-de-reference-communique-de-presse/panoramas-de-la-drees/les-retraites-et-les	Total tous régimes
Income tested disability benefit (AAH) (bdi_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Inflation compensation (binxp_s)	-	-
Inflation compensation for civil servants (binpb_s)	-	-
Non-means-tested benefits (ils_bennt)		
Covid-19 self-employment compensation paid by the state (bwkmcse_s)	-	-
Covid-19 exceptional support for self-employed (Aide CPSTI RCI COVID-19) (bseec_s)	-	-
Contributory sickness benefit (bhl)	amounts: https://www.securite-sociale.fr/la-secu-en-detail/comptes-de-la-	-
Contributory unemployment benefit (ARE) (bunct_s)	https://statistiques.pole-emploi.org/indem/publication	-
Universal child benefit (AF) (bch00_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-	Figures Metropole
Supplement for free choice of activity (CLCA) (bchcc_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Family support allowance (ASF) (bchor_s)	beneficiaries: http://data.caf.fr/dataset/les-beneficiaires-tous-regimes-de-prestations-familiales-et-sociales/resource/b36b9c95-db88-4252-93a0-	Figures Metropole
Maternity allowance (PARBEN) (bmact_s)	-	-

Continued...

	Source	Comments
Paternity allowance (PARBEN) (bpact_s)	-	-
Covid-19 wage compensation paid by the state (bwkmcee_s)	-	-

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

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Pensions (ils_pen)																					
old-age pensions (poa00)	N	279,573	280,691	287,849	290,151	279,573	279,573	279,573	279,573	1.00	1.00	1.03	1.04	294,900	NaN	NaN	NaN	0.95	NaN	NaN	NaN
disability pensions (pdi00)	N	10,091	10,131	10,448	10,531	10,091	10,091	10,091	10,091	1.00	1.00	1.04	1.04	7,480	7,714	8,177	8,697	1.35	1.31	1.28	1.21
survivor pensions (psu)	N	25,517	25,619	26,419	26,630	25,517	25,517	25,517	25,517	1.00	1.00	1.04	1.04	10,449	10,522	10,869	10,662	2.44	2.43	2.43	2.50
Means-tested benefits (ils_benmt)																					
Means-tested guaranteed minimum income (RMI/RSA) (bsa00_s)	Y	7,340	7,229	7,502	7,800	10,237	10,237	10,237	10,237	0.72	0.71	0.73	0.76	10,276	9,604	9,848	NaN	0.71	0.75	0.76	NaN
Income tested housing allowance for those renting (AL) (bhotn_s)	Y	12,160	11,862	12,052	12,521	12,667	12,667	12,667	12,667	0.96	0.94	0.95	0.99	14,251	13,344	NaN	NaN	0.85	0.89	NaN	NaN
Other means-tested allowances for families with children (bchot_s)	Y	9,031	9,040	9,346	9,681	9,031	9,031	9,031	9,031	1.00	1.00	1.03	1.07	8,389	8,904	NaN	NaN	1.08	1.02	NaN	NaN
Other means-tested benefits (bsaot)	N	3,969	3,973	4,107	4,254	3,969	3,969	3,969	3,969	1.00	1.00	1.03	1.07	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other means-tested housing benefits (bhoot)	N	1,668	1,673	1,708	1,739	1,668	1,668	1,668	1,668	1.00	1.00	1.02	1.04	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Scholarships (bed)	N	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1,690	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Activity allowance (bsawk_s)	Y	12,587	11,510	11,652	11,320	3,946	3,946	3,946	3,946	3.19	2.92	2.95	2.87	9,214	9,184	8,408	NaN	1.37	1.25	1.39	NaN
Covid-19 social assistance (bsaeccm_s)	Y	1,536	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Means-tested benefit for young children (PAJE) (bchyc_s)	Y	2,384	2,304	2,321	2,335	1,982	1,982	1,982	1,982	1.20	1.16	1.17	1.18	2,917	2,772	2,791	NaN	0.82	0.83	0.83	NaN
Energy voucher (bhoey_s)	Y	889	1,405	2,505	830	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Means-tested Survivor Minimum Pension (Allocation veuvage AV) (bsuwd_s)	Y	17	17	17	17	17	17	17	17	0.99	0.99	0.99	0.99	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment assitance Benefit (Allocation de solidarité spécifique ASS) (bunmt_s)	Y	1,915	1,881	1,944	2,009	2,026	2,026	2,026	2,026	0.95	0.93	0.96	0.99	2,231	2,088	NaN	NaN	0.86	0.90	NaN	NaN
Means-tested benefit for large families (CF) (bchlg_s)	Y	2,848	2,825	2,894	2,964	1,311	1,311	1,311	1,311	2.17	2.15	2.21	2.26	2,184	2,192	2,230	NaN	1.30	1.29	1.30	NaN
Means tested educational grant (ARS) (bched_s)	Y	2,390	1,839	1,857	1,842	1,390	1,390	1,390	1,390	1.72	1.32	1.34	1.33	2,363	1,880	1,956	NaN	1.01	0.98	0.95	NaN
Means tested birth grant (PN) (bchba_s)	Y	350	341	345	346	141	141	141	141	2.49	2.42	2.46	2.46	505	681	499	NaN	0.69	0.50	0.69	NaN
Means-tested allowance for the elderly (ASPA) (bsaoa_s)	Y	6,416	6,414	6,600	6,814	6,047	6,047	6,047	6,047	1.06	1.06	1.09	1.13	3,530	3,599	NaN	NaN	1.82	1.78	NaN	NaN
Income tested disability benefit (AAH) (bdi_s)	Y	5,009	5,012	5,123	5,485	7,461	7,461	7,461	7,461	0.67	0.67	0.69	0.74	10,073	10,213	NaN	NaN	0.50	0.49	NaN	NaN
Inflation compensation (binxp_s)	Y	NaN	2,026	3,579	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Inflation compensation for civil servants (binpb_s)	Y	NaN	NaN	NaN	933	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

	Simulated	EUROMOD				SILC				Ratio				External				Ratio			
	(Y / N)	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Non-means-tested benefits (ils_bennt)																					
Covid-19 self-employment compensation paid by the state (bwkmcse_s)	Y	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Covid-19 exceptional support for self-employed (Aide CPSTI RCI COVID-19) (bseec_s)	Y	1,579	1,579	74	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Contributory sickness benefit (bhl)	N	3,236	3,149	3,297	3,463	3,236	3,236	3,236	3,236	1.00	0.97	1.02	1.07	11,439	10,446	12,401	NaN	0.28	0.30	0.27	NaN
Contributory unemployment benefit (ARE) (bunct_s)	Y	34,773	34,025	35,216	29,977	32,987	32,987	32,987	32,987	1.05	1.03	1.07	0.91	35,973	34,036	NaN	NaN	0.97	1.00	NaN	NaN
Universal child benefit (AF) (bch00_s)	Y	11,626	11,577	11,962	12,327	10,474	10,474	10,474	10,474	1.11	1.11	1.14	1.18	11,788	11,738	12,087	NaN	0.99	0.99	0.99	NaN
Supplement for free choice of activity (CLCA) (bchcc_s)	Y	941	941	978	1,012	477	477	477	477	1.97	1.97	2.05	2.12	833	739	729	NaN	1.13	1.27	1.34	NaN
Family support allowance (ASF) (bchor_s)	Y	300	300	338	484	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1,563	1,546	1,753	NaN	0.19	0.19	0.19	NaN
Maternity allowance (PARBEN) (bmact_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2,990	3,239	3,293	NaN	0.00	0.00	0.00	NaN
Paternity allowance (PARBEN) (bpact_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	234	333	582	NaN	0.00	0.00	0.00	NaN
Covid-19 wage compensation paid by the state (bwkmcee_s)	Y	0	0	0	NaN	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			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Decile 1	3.80	3.69	3.68	3.58	3.40	3.20	NaN	NaN	1.12	1.15	NaN	NaN
Decile 2	5.58	5.48	5.46	5.39	5.30	5.10	NaN	NaN	1.05	1.08	NaN	NaN
Decile 3	6.50	6.43	6.42	6.29	6.30	6.30	NaN	NaN	1.03	1.02	NaN	NaN
Decile 4	7.32	7.29	7.27	7.21	7.40	7.30	NaN	NaN	0.99	1.00	NaN	NaN
Decile 5	8.20	8.20	8.18	8.13	8.30	8.20	NaN	NaN	0.99	1.00	NaN	NaN
Decile 6	9.15	9.15	9.12	9.12	9.20	9.20	NaN	NaN	0.99	1.00	NaN	NaN
Decile 7	10.26	10.28	10.27	10.33	10.30	10.40	NaN	NaN	1.00	0.99	NaN	NaN
Decile 8	11.74	11.79	11.78	11.86	11.70	11.80	NaN	NaN	1.00	1.00	NaN	NaN
Decile 9	14.03	14.09	14.12	14.24	14.00	14.10	NaN	NaN	1.00	1.00	NaN	NaN
Decile 10	23.41	23.60	23.70	23.88	24.20	24.30	NaN	NaN	0.97	0.97	NaN	NaN
Median	21,632	22,249	23,118	23,681	22,732	23,053	NaN	NaN	0.95	0.97	NaN	NaN
Mean	24,843	25,498	26,525	27,262	26,075	26,419	NaN	NaN	0.95	0.97	NaN	NaN
Gini	27.88	28.36	28.49	29.04	29.30	29.80	NaN	NaN	0.95	0.95	NaN	NaN
S80/20	3.99	4.11	4.14	4.25	4.41	4.60	NaN	NaN	0.91	0.89	NaN	NaN

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

	EUROMOD				External				Ratio			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
40% median HDI by gender												
Total	2.74	3.28	3.26	3.39	3.60	4.10	NaN	NaN	0.76	0.80	NaN	NaN
Males	2.58	3.04	3.04	3.15	3.60	4.10	NaN	NaN	0.72	0.74	NaN	NaN
Females	2.89	3.50	3.48	3.62	3.70	4.10	NaN	NaN	0.78	0.85	NaN	NaN
50% median HDI by gender												
Total	6.18	6.89	6.95	7.39	8.10	9.10	NaN	NaN	0.76	0.76	NaN	NaN
Males	5.94	6.64	6.72	7.08	7.90	8.80	NaN	NaN	0.75	0.75	NaN	NaN
Females	6.40	7.13	7.17	7.69	8.40	9.30	NaN	NaN	0.76	0.77	NaN	NaN
60% median HDI by gender												
Total	11.32	12.37	12.31	12.81	14.30	15.60	NaN	NaN	0.79	0.79	NaN	NaN
Males	11.06	11.94	11.86	12.33	13.40	14.60	NaN	NaN	0.83	0.82	NaN	NaN
Females	11.57	12.77	12.73	13.25	15.10	16.50	NaN	NaN	0.77	0.77	NaN	NaN
70% median HDI by gender												
Total	19.75	20.59	20.82	21.75	22.70	23.40	NaN	NaN	0.87	0.88	NaN	NaN
Males	18.94	19.65	19.95	20.56	21.70	22.30	NaN	NaN	0.87	0.88	NaN	NaN
Females	20.50	21.49	21.63	22.86	23.70	24.50	NaN	NaN	0.86	0.88	NaN	NaN
60% median HDI by age group												
0-15 years	16.44	18.47	18.45	17.97	17.80	21.60	NaN	NaN	0.92	0.85	NaN	NaN
16-24 years	18.17	19.27	18.75	18.98	21.40	21.80	NaN	NaN	0.85	0.88	NaN	NaN
25-49 years	10.73	11.37	11.35	11.47	11.80	13.70	NaN	NaN	0.91	0.83	NaN	NaN
50-64 years	9.90	10.56	10.60	11.50	14.50	12.80	NaN	NaN	0.68	0.82	NaN	NaN
65+ years	5.71	6.84	6.83	8.45	10.90	12.50	NaN	NaN	0.52	0.55	NaN	NaN

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