

EUROMOD

COUNTRY REPORT

SLOVAK REPUBLIC (SK)
2020-2023

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EUROMOD version I6.0+

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 Slovak Republic. 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/>

The information contained within this document does not necessarily reflect the position or opinion of the European Commission.

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1. BASIC INFORMATION

1.1 Basic information about the tax-benefit system

- The tax-benefit system is largely a unified, national system. All major tax components and benefits are governed at the central level. Share of the personal income tax is contributed to municipalities and administration units. A few taxes are set at the local level, such as the real estate tax and tax on specific services, but their share in the overall taxation is negligible.
- The fiscal year is January 1 – December 31.
- The state pension age depends on the year of birth and the number of raised children. For people born in 1953 or later (approximately since 2015), the pension age for women is no longer lower than for men. The approximate pension age in years 2020-2023 is between 58 and 63, depending on the number of children. The pension age will continue to rise with growth in the life expectancy. The constitutional cap at 64 years was abolished in 2023.
- Compulsory education starts at age 6 and continues for 10 years. The minimum school leaving age is 16. A child is considered to be dependent (for tax and benefit purposes) not only if they are under 16, but also if they are under 18 and have long term unfavourable health condition, or are under 26 and studying at an approved institution and have not yet finished post-secondary education or are under 26 and cannot study because of illness or injury.
- Lone parents are not socially protected for tax and benefit purposes. In case of long term unfavourable health conditions of the person or child in the custody, duration of some benefits is extended.
- Taxation of income is done at the individual level. However, an individual may be entitled to a spouse tax allowance if the spouse satisfies certain conditions.
- Incomes from dependent activity and self-employment are taxed at rates of 19% and 25%, depending on the amount of income. Before 2013, the rate was set at a uniform level (19%). Income from certain non-standard temporary contracts¹ receive beneficial treatment. Types of income that fall under the withholding tax are taxed at a flat rate of 19%. Higher 35% tax rate is applicable to payments from countries which do not have a Double Taxation Treaty with the Slovak Republic. Since 2020, there is a reduced 15% rate on self-employment income for individuals with low turnover.
- Tax advances are paid monthly or quarterly based on the previous tax liability. The taxpayer must fill in a tax return and pay any tax liabilities left after the tax clearing by the 31st March of the following year.
- The Minimum Subsistence Level on which the tax allowances and social benefits eligibility depend, is adjusted automatically on 1st July either to the cost of living of low income families or the net income growth of low income families (from 2023, only the former is used). Components of the social assistance scheme and state social support benefits are adjusted by government regulation (usually on the 1st September). Pensions, already in payment, are automatically indexed on 1st January.
- Social assistance benefits are awarded on a monthly basis. The income base that is assessed refers to the income in the previous month.
- The pension system is built on three separate pillars: 1st pillar – mandatory pension insurance defined by benefits, funded on a pay-as-you-go basis and administered by the Social Insurance Agency; 2nd pillar – old age pension saving defined by contributions and fully funded insurance administered by private pension fund management companies;

¹ Agreements on work performed outside employment relationship - *Dohody o prácach vykonávaných mimo pracovného pomeru*

and 3rd pillar - voluntary supplementary pension saving defined by contributions and fully funded insurance administered by supplementary pension companies.

1.2 Social Benefits

The Slovak benefit system is made up of three components, namely contributory benefits, social assistance benefits and state social support. Each component consists of several programs.

- **Contributory benefits**

Old-age pension (*Starobný dôchodok*): Entitlement arises when an insured person reaches the retirement age and has contributed for at least 15 years. Three variables determine the amount of the old age pension paid from first pillar: length of career in years, average personal wage point (the individuals average lifetime position relatively to the average wage) and current point value, which was set so that a person with 40 years of service and average personal wage will receive a pension with approximately 50% replacement rate. In order to keep the replacement rate stable, the current point value is annually indexed by the average wage growth, but from 2023 only 95% of the wage growth is taken. Since 2005, there is a fully funded second pillar. Participation in the 2nd pillar is voluntary. If one participates in both pillars, the pension benefit awarded from the first pillar is reduced by a percentage of social security contributions paid (redirected) to the private pension funds for the years of participation in both pillars.

Early old-age pension (*Predčasný starobný dôchodok*): A person is eligible if she has contributed for at least 15 years, is no more than 2 years below the statutory retirement age and is entitled to a pension higher than 1.2 times the minimum subsistence level (1.6*MSL from 2023). It cannot be combined with old-age pension. The pension amount is lowered by 0.5% for every 30 days remaining until the person's retirement age. Since 2023, a person is eligible after 40 years of pension contribution even if they are more than 2 years below their statutory retirement age. The pension amount is lowered by 0.3% for every 30 days in this case.

Disability pension (*Invalidný dôchodok*): A person is defined as disabled if she has long term unfavourable health conditions with more than 40% work capability decrease. A person is not eligible during temporary work incapacity. The benefit amount depends on the number of accumulated pension points, the number of years contributions have been made, the number of years until reaching the retirement age, the current pension point value and the percentage loss of working capability. The full disability pension is granted if the ability to work decreased by more than 70 %.

Widow's and widower's pension (*Vdovský a vdovecký dôchodok*): The entitlement arises to a widow/ widower if her/his deceased spouse was a recipient of, or entitled to old-age pension, early retirement pension or disability pension or dies as a result of an occupational disease or accident. The entitlement lasts for 1 year after the decease, unless the recipient takes care of a dependent child, is disabled (more than 70% loss of working capacity), reaches the pensionable age, has raised more than 3 children or reaches 52 years and has raised 2 children. The entitlement expires if the widow/ widower becomes married. The benefit amounts to 60% of the old-age pension, early old-age pension or disability pension of the deceased. If the widow or widower was a pensioner already, he/she will receive the higher pension in full amount and 50% of the lower pension.

Orphan's pension (*Sirotský dôchodok*): The entitlement arises to a dependent child whose parent (or guardian) has died. The entitlement arises only if the parent was an old-age pension, early old-age pension or disability pension recipient (or an entitled person), or dies as a result of an occupational disease or accident. A dependent child in foster care cannot receive the pension.

The benefit amounts to 40% of the old-age pension, early old-age pension or disability pension of the deceased parent.

Minimum pension (*Minimálny dôchodok*): Old-age pensioners and disability pensioners after reaching the retirement age are entitled to a minimum pension if the sum of their pension benefits is lower than a predefined level, have paid social insurance for at least 30 years and applied for all pensions to which they might be entitled. The level of the minimum pension is based on the number of years an individual has worked and paid pension insurance.

Parent's pension (*Rodičovský dôchodok*): Since 2023, recipients of old-age pension, or disability or military pension after reaching the statutory retirement age, are entitled to further pension payments depending on the pension contributions paid by their working-age children. The amount of the pension is 1.5% of each child's average assessment base two years ago (at most 1.2-times the average wage) to each living parent. The child can deny the payment of this pension to their parents, but the pension entitlements of the children are not affected by these payments.

Thirteenth pension (*Trinásty dôchodok*): A thirteenth pension is a benefit paid once a year, in December. All pensioners are eligible for the benefit, though its value decreases with higher pensions. If an individual's benefit is below the value of the subsistence level, he/she is eligible to a thirteenth pension of maximum 300 euros. The minimum benefit is set to be 50 euros.

Sickness benefit (*Nemocenské*): The benefit provides compensation for loss of income during own temporary sickness. A person is eligible for this benefit immediately when she is covered by sickness insurance. The entitlement arises due to the illness or injury on the 11th day of work incapability and lasts until the end of work incapability or until the end of the 52nd week. It cannot be combined with the maternity benefit. The benefit amount is 55% of the daily assessment base (gross income subject to the sickness insurance contributions, with the maximum assessment base being equal to double the average wage from two years ago).

Nursing benefit (*Ošetrovné*): This benefit covers income loss due to nursing a close family member (mostly child below 10 years of age). A person is eligible for this benefit immediately when she is covered by sickness insurance. The entitlement arises on the first nursing day and expires on the last, with the maximum number of 14 nursing days (until April 2021 the limit was 10 days). It cannot be combined with the maternity benefit. The benefit amount is 55% of the daily assessment base (gross income subject to the sickness insurance, with the maximum assessment base being equal to double the average wage from two years ago). From April 2021, another type of long-term nursing benefit has been created. This benefit covers income loss when nursing a family member after medical operation or when providing palliative care. This long-term nursing benefit can be paid for a maximum of 90 days.

Accident benefits (*Úrazové dávky*): Insurance against accidents is a mandatory insurance, which aims to protect an employer against an economic loss in case of responsibility for employees' health damage or death caused by a work accident or occupational disease. Insurance against accidents includes 13 different benefits. Employees are eligible for accident pension if their work abilities decrease by more than 40%, owing to a work accident or occupational disease. The amount of the pension is based on the employees' income and a percentage rate of decrease of their work abilities.

Equalization allowance (*Vyrovňavacia dávka*): Equalization allowance is designed to compensate reduced income of a pregnant woman, who had to be moved to a different job position with a lower wage. The equalization allowance is 55% of the difference between the monthly assessment base before and after moving to the other position.

Maternity benefit (*Materská dávka*): This benefit is paid to a pregnant woman or to another

person (typically father) who takes care of a newborn child (up to 3 years of age). The person is eligible for the benefit if she contributed to the insurance system for at least 270 days within the last 2 years prior to the delivery or prior to the start when the other caretaker (typically father) begins to provide full-time care for the dependent child below 3 years of age. The benefit can start being paid off 8 weeks before the delivery for a total of 34 weeks. However, the duration is extended to 37 weeks when the woman is a single mother and to 43 weeks if the woman gives birth to two or more children. It is 28 weeks for the second caretaker – father. The minimum duration is 14 weeks in case of a stillbirth. The benefit is 75% of the daily assessment base (gross income subject to sickness insurance, with the maximum assessment base being equal to double the average wage from two years ago). From October 2022, parallel uptake of maternity benefit by both mother and father, is allowed. Father can move and take up to 2 weeks of the maternity benefit out of the total amount at his disposal (28 weeks) until the child is 6 weeks old.

Pregnancy benefit (*Tehotenská dávka*): This benefit is paid to a pregnant woman in order to cover increased spending associated with pregnancy (clothes, nutrition, medicine etc.). The person is eligible for the benefit if she contributed to the insurance system for at least 270 days within the last 2 years before the start of the 13th week of pregnancy. The benefit is paid from the 13th week until the end of pregnancy. The benefit is 15% of the daily assessment base (gross income subject to sickness insurance, with the maximum assessment base being equal to double the average wage from two years ago), but it must be at least 10 % of the universal daily assessment base which equals to the average wage from 2 years ago.

Unemployment insurance benefit (*Dávka v nezamestnanosti*): An insured person is eligible to receive the benefit if she has contributed for a minimum of two years during the four years prior and she is listed in the unemployment registry. Entitlement ceases if the person reaches pensionable age, or if the person is de-listed from the unemployment registry. The maximum duration of the benefit is 6 months. Accumulation with sickness or maternity benefits, benefit for nursing a sick relative, parental allowance, or a pension is not permitted. The benefit is 50% of the daily assessment base (gross incomes subject to unemployment insurance contributions).

Short-time work support (*Podpora v čase skrátenej práce*): The benefit is part of the compulsory social insurance scheme, but is paid to the employer rather than to the individual worker. During periods of short-time work, employees continue to receive taxable wages from the employer, which are in most cases reduced to 80% of the previous wage. Employers then receive compensation from the state depending on the workers' wages. The benefit is 60% of the employee's previous average hourly wage, with the maximum assessment base equal to $1/174 * 2 * \text{the average wage from two years ago}$. Eligibility arises if the employer has been paying social insurance for at least 24 months. The maximum duration is 6 months over the period of 24 consecutive months.

- ***Social assistance benefits***

Material need benefits (*Dávka v hmotnej núdzi a príspevky k dávke*): Material need benefits are means-tested benefits for families, whose income is below the minimum subsistence and cannot be increased by claimants themselves. The benefit consists of several components (material needs allowance, activation allowance, housing allowance, protection allowance, allowance for dependent child). The amount depends on the structure and incomes of the family and is calculated as the difference between the eligible maximum material need benefits and the income of all assessed individuals.

Subsidies (*Dotácie*): Two types of subsidies are aimed to promote school attendance. One is to cover school supplies (books, pens, etc.) and is paid twice a year to families in need of material assistance. Another subsidy is aimed to pay for lunches of socioeconomically disadvantaged students of nursery or elementary school. Temporarily, a policy of universal free lunches was in

place from September 2019 to the end of August 2021. It was then re-introduced again from May 2023. All children in the last year of nursery school and all students from elementary schools are eligible for this subsidy. Between September 2021 and April 2023, the eligibility was again restricted only to socioeconomically disadvantaged students.

Special Allowance (*Osobitný príspevok*): Additional temporary allowance is provided to a person who has not worked for at least 12 months, was a recipient of the material need assistance, and finds a job paying at least 50% of the minimum wage and at most double the minimum wage. The allowance is paid during the duration of this employment contract but for a maximum of 18 months. The amount is fixed at €126,14 for the first 12 months and €63,07 for the last 6 months.

- *State support benefits*

Child birth allowance (*Príspevok pri narodení dieťa*): It is a one-off payment to parents to cover the needs of their new-born once the child survives 28 days after delivery. Another condition for this allowance is permanent residency in the Slovak Republic. It is higher for the first, second and third child and then the level decreases. In the case of a multiple birth, another surcharge is provided.

Multiple birth allowance (*Príspevok na viac súčasne narodených detí*): The benefit is an annual allowance paid to parents with at least three children born at the same time or parents who have within two years repeatedly twins or more children born at the same time.

Child benefit (*Prídavok na dieťa*): It is a universal monthly social benefit aimed to support care of every dependent child. Only one parent per child is eligible for the benefit. There is no conditionality to this grant other than permanent residency both of the entitled parent and the dependent child in the Slovak Republic. This benefit is increased when the dependent child starts going to elementary school. It is only a one-time increase aimed to cover increased costs associated with starting going to school (school bag, pens, pencils, books, etc.).

Child benefit surcharge (*Príplatok k prídavku na dieťa*): The entitlement arises if the caretaker of the child is not entitled to the tax credit for dependent children, does not work or is a recipient of pension (old-age, early old-age, disability, or military if standard retirement age has been reached) or the benefit for caring for a disabled relative.

Parental allowance (*Rodičovský príspevok*): A monthly benefit for parents taking care of at least one child aged up to 3 years (6 in the case of a disabled child). Only one parent is eligible, and is allowed to work if the child is at grandparents or in a kindergarten. It cannot be combined with the sickness benefit and is reduced in case of receiving the maternity benefit. The benefit is decreased in case other older children do not comply with the compulsory school attendance. The allowance is higher for parents who were working and receiving maternity benefit before the eligibility period for the parental allowance. The allowance is also increased by 25 % per second and every other children in case of a multiple birth. The parent can decide whether she wants to receive the parental or childcare allowance, these two are mutually exclusive.

Childcare allowance (*Príspevok na starostlivosť o dieťa*): A monthly benefit for parents utilizing formal childcare for children below 3 years of age (6 in the case of a disabled child) paid for each eligible child. The parent can decide whether she wants to receive the parental or childcare allowance, these two are mutually exclusive.

Replacement care benefits (*Náhradná starostlivosť*): Caretakers are eligible for cash transfers in case they provide replacement care to a dependent child (for example adoption or guardianship). These benefits are supposed to help cover living costs for nutrition, clothing, education and housing of one or more dependent children. Caretakers are eligible for a replacement care surcharge in case of providing care to a disabled dependent child or children.

Compensation of severe disability (*Kompenzácia ťažkého zdravotného postihnutia*): Several cash allowances are provided to compensate the increased costs of severe disability. The two most used benefits are the cash transfer for nursing (*PP na opatrovanie*) and the cash transfer for personal assistance (*PP na osobnú asistenciu*). The former is paid to a family member providing care to a disabled person, the latter is used to pay for a formal social workers and they are mutually exclusive per disabled person. Then there is additional set of cash transfers to cover living expenses for nutrition, guide animals, medical devices, reconstruction of house, flat or garage etc. Eligibility for one or more of these transfers is assessed case by case and can be paid off on top of the cash transfer for nursing or personal assistance.

Compensatory allowance for miners (*Kompenzačný príspevok baníkom*): A person is eligible, if her underground mining employment has been terminated as a consequence of the mining attenuation program approved by the government and this employment had lasted for at least three years. The amount and duration of the allowance depends on the duration of the mining employment. The person is not eligible if she is receiving pension or the special allowance for miners.

Special allowance for miners (*Osobitný príspevok baníkom*): A person is eligible if she has reached the highest possible exposure to underground mining employment, is not able to perform a job due to occupational disease, or has worked in underground mines for at least 15 years and is at least 55 years old. The person is no longer eligible if she is receiving pension or has reached the standard retirement age.

Funeral allowance (*Príspevok na pohreb*): One-off benefit that covers expenses for a burial of a family member.

Scholarships (*Štipendiá*): Monthly benefit for pupils and students in secondary schools from low-income families. The amount of benefit depends on the average grade received. Scholarships for university students are granted monthly for a period of the academic year (typically from September until June). The amount depends on family income and rises if student is handicapped or lives far away from the university.

- *Not strictly benefits*

Private pensions (*Dôchodky z tretieho piliera*): Private pensions are derived from supplementary pension insurance (SPI) also known as the third pillar. The SPI operates on the principle of regular mutual contributions of employers and employees and are invested on the account of the insured, maintained by supplementary pension companies. The SPI is generally voluntary, with the exception of employees performing the so-called hazardous work.

Meal allowance (*Príspevok na stravovanie*): Employers are obliged to provide one subsidized warm meal per day to each of their employees who has worked more than 4 hours that day or pay an equivalent cash allowance. Both the in-kind benefit or its cash equivalent are tax exempt.

Social Fund payments (*Príspevky zo sociálneho fondu*): Employers are obliged to pay at least 0.6% of their gross wage bill into their private Social Fund. They can then spend the money only on specific “social” purposes benefiting their employees such as financing employees’ meals, transport to work, health checks, holiday packages or similar in-kind benefits.

Alimony (*Výživné a Náhradné výživné*): In case of a divorce or separation of parents, the parent who becomes the primary caretaker is eligible for alimony payments from the other parent. Only courts can decide on the alimony payment (benefit amount and payments schedule). In case the parent is not able to pay the amount of alimony decided by the court, then the caretaker is eligible to receive these payments in the form of a replacement benefit paid for by the government.

Termination pay (*Odchodné*): Benefit provided by the employer based on the provisions of the Labour code in Slovakia. Upon the first termination of employment relationship upon acquiring entitlement to an old-age pension invalidity pension, or pension for years of service an employee is entitled to receive termination pay of at least the amount of his/her average monthly earnings.

Severance payments (*Odstupné*): Benefit provided by the employer based on the provisions of the Labour code in Slovakia. An employee is eligible to receive severance payments upon termination of employment (for reason stated in the Labour code). The amount of payments varies from one to five times of average monthly earnings according to the years in service.

Educational allowances (*Štipendiá a granty*): Students may receive scholarships and educational grants paid by the university they attend. Rules determining eligibility and amounts are set by universities.

1.3 Social contributions

Social insurance contributions (*Sociálne odvody*): Social insurance contributions (SICs) finance pensions, and other contributory benefits (e.g. sickness and maternity). Conditions regarding contributions in the past determine eligibility and amount of contributory benefits. SICs cover eight types of insurances: old-age, disability, sickness, unemployment and short-time work, and accidents as well as guarantee and reserve solidarity fund. SICs are assessed on gross incomes up to a maximum. The calculation of assessment base for the self-employed is slightly different.

Health insurance contributions (*Zdravotné odvody*): Health insurance contributions are compulsory for individuals with permanent residence in the Slovak republic. The government pays insurance for dependent children and persons who fulfil certain conditions. Contributions are assessed on gross income up to a maximum. The assessment base is calculated slightly differently for the self-employed. Others pay voluntary given minimum amount of contributions.

Social Fund contributions (*Príspevok do sociálneho fondu*): The contributions that each employer is obliged to pay to their Social Fund is (at least) 0.6% of the gross wages. This is therefore similar to other employer contributions which increase the total labour cost. However, the revenue does not belong to the government but stays with the employer, who then spends it on benefits for their employees.

1.4 Taxes

Personal income tax (*Daň z príjmu fyzických osôb*): The base of the personal income tax covers income from dependent activity and self-employment as well as income from rent, fringe benefits, severance and termination payment. Social contributions and social benefits are exempted. It is applied at the individual level, but an individual may be entitled to a spouse tax allowance. There is basic tax allowance, supplementary pension savings allowance (savings in the third pension pillar) and allowance on expenses for spa treatment (until 2020), and three types of tax credits (for employees, on dependent children, and on mortgage interest). The flat-rate system was abolished and since 2013 there are two progressive tax rates according to the amount of income. Since 2020, self-employment income is taxed separately with an additional reduced rate for the self-employed with low turnover.

Withholding tax (*Daň vyberaná zrážkou*): Income from dividends and interest at bank accounts, mutual funds and investments from domestic sources are taxed with withholding tax. The rate is set at a uniform level. Although withholding tax is recorded separately, it is a part of the PIT.

Value added tax (*Daň z pridanej hodnoty*): VAT is levied on all goods and services supplied (including imported goods) in the Slovak Republic. It is the most important income source for the

general budget. The rate is set uniformly at 20%, with exemption for some goods (e.g. basic foodstuffs, medicine, books) and services (e.g. hotel accommodation, restaurants), which are taxed at a lower rate (10%).

Excise taxes (*Spotrebné dane*): Excise taxes are indirect taxes, selectively levied on certain products – beer, wine, spirits, tobacco products, mineral oil, coal, natural gas and electricity.

Local taxes (*Miestne dane*): They are set and governed at the municipal level. Local taxes include real estate tax and tax on specific services (charges for dog owners, accommodation tax, tax on non-win gambling machines, etc.).

1.5 Temporary measures introduced in reaction to the COVID-19 pandemic

Kurzarbeit (*Prvá pomoc - zamestnávateľia*): Two mutually exclusive versions of compensation were introduced for employers facing business restrictions that retain work positions for one month during the state of emergency and for two months after its end. First, if workers are unable to perform work assignments at all due to business closures, they receive 80% of their gross salaries (at least the minimum wage) which are fully covered by the government. A monthly cap per employee is set at €1100 in the case of businesses that were compulsorily closed by the order of the government and €880 for businesses that remained closed voluntarily due to other business restrictions. Employers remain liable for the employer part of the SIC on the 80% of the gross wage. This was called First aid. In October 2020, the amount that the government compensates was increased to 80% of total labour cost (gross income + employer contributions) and the monthly cap was increased to €1100 for all employees. This was First aid+. From February to June 2021, the government covers 100% of the total labour cost. The employees continue to receive 80% of their initial salaries. This was First aid++. Since July 2021, the conditions have returned to the initial setup valid in 2020 (as in First aid, this scheme was not active during August 2021). From November 2021 until February 2022, First aid+ setup was active. Since March 2022, the temporary measure was replaced by a permanent scheme of short-time work support as part of the compulsory social insurance.

The second alternative is a lump-sum subsidy per each eligible employee to firms that suffered revenue loss, even when they were able to continue to operate. The monthly subsidy depends on the percentage revenue loss in the given month. Only private sector firms are eligible. The amounts were increased in October 2020 and February 2021. This scheme was not active between June and November 2021. It was reactivated from December 2021 to February 2022, but eligibility criteria became more strict and the scheme was available only for firms with less than 49 employees.

Self-employment grant (*Prvá pomoc - SZČO*): Two types of lump-sum grants to the self-employed and sole owner-managers of incorporated corporations with loss of business income. The first is provided to those who were previously paying social insurance contributions, had their business closed by the order of the government or suffered a loss in revenue, and are not employed at the same time. The monthly grant depends on the percentage revenue loss in the given month. Starting in October 2020, these self-employed might also be employed at the same time and the net income from this employment will be deducted from the original lump-sum grant. The grant amount was increased in October 2020 and then again in February 2021. Since July 2021, the amounts have returned to the initial sums. Since the introduction of the permanent short-time work support scheme for employers in March 2022, the benefit amount has changed to 60% of the assessment base for self-employment social insurance contributions. Eligibility arises if the self-employed experienced at least 40% loss in revenue.

Second, those who were not paying social insurance contributions and lost all income are eligible for a lump-sum monthly amount of €210 (€105 for March 2020, First Aid). The amount was

increased to €315 in October 2020 (First Aid+) and then to €360 again in February 2021 (First Aid++). From July 2021 amounts returned to First aid setup (scheme was not active in August), and from November 2021 First Aid+ setup was active again. These self-employed and corporation owner-managers cannot have any other income from business activity or employment.

SOS subsidy (*Prvá pomoc - SOS dotácia*): Monthly transfer of €210 (€105 for March 2020) to individuals who lost all income from business activity or employment and are ineligible for other support. The transfer has been increased to €300 starting in October 2020. The subsidy was abolished from July 2021.

Pandemic sickness cash benefit (*Pandemické nemocenské*): Extends the standard sickness cash benefit to workers subjected to quarantine measures. Entitlement arises from the 1st day of quarantine and the benefit amount is 55% of the daily assessment base (gross income subject to sickness insurance contributions with the maximum assessment base being equal to double the average wage from two years ago). In April 2021 the wage replacement rate was temporarily increased to 75 % of the daily assessment base. The benefit was abolished from December 2021 (standard sickness benefit rules apply to all covid-19 cases). In case of a long covid, the maximum eligibility period has been increased from 52 weeks by another full year.

Pandemic nursing benefit (*Pandemické ošetrovné*): Extends the standard benefit for nursing a sick relative to parents looking after their children during compulsory school closure even when they are not sick. The duration is not limited and the benefit amount remains 55% of the daily assessment base (gross income subject to sickness insurance contributions with the maximum assessment base being equal to double the average wage from two years ago). In April 2021 the wage replacement rate was temporarily increased to 75 % of the daily assessment base.

Extended Unemployment benefit (*Dávka v nezamestnanosti*): Between March and August 2020, the standard unemployment benefit duration was prolonged by a maximum of four months for those whose unemployment benefit expired during the state of emergency. Between March and May 2021, all those, whose unemployment benefit expired during the emergency, are eligible for unemployment benefit extension by two additional months.

Extended Parental allowance (*Rodičovský príspevok*): During the pandemic the eligibility period for the parental allowance is not restricted to parents whose children turn 3 years of age (or 6 in special cases). Parents are eligible for the allowance as long as the country is still in a state of emergency. The measure ended in December 2021.

Covid-19 accident surcharge (*Pandemický úrazový príplatok*): During the pandemic, workers contracting covid-19 while at work, are eligible for an accident benefit. Measure is targeted mostly at healthcare staff to cover their income loss. Together with sickness benefit, beneficiaries get their previous net income. Valid from November 2020 until now.

SIC abatement (*Odpustenie sociálnych odvodov*): Employers (both public and private sector) and self-employed whose businesses were compulsorily closed by the order of the government do not have to pay their social insurance contributions for April 2020.

One-off support for dependent children (*Jednorazová pomoc pre nezaopatrené deti*): Households which were in material need between March 2020 and April 2021 received additional €333 for each dependent child in August 2021. The child benefit for September 2021 is increased by €74.50 (to a total sum of €100) for each dependent child younger than 18 years who was not eligible for the previous support for households in material need.

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

2.1 Scope of simulation

Table 2.1 Simulation of benefits in EUROMOD

	Variable name(s)	Treatment in EUROMOD				Comments
		2020	2021	2022	2023	
Old age pension	poa00	I	I	I	I	No data on contributions records
Military, police old age pension	poaml	I	I	I	I	No data on contributions records
Early old age pension	pyr	I	I	I	I	No data on contributions records
Disability pension	pdi00	I	I	I	I	No data on contributions records
Widows and widowers pension	psuwd (psu00)	I	I	I	I	No data on contributions records
Orphan's pension	psuor (psu00)	I	I	I	I	No data on contributions records
Parent's pension	pch	-	-	-	E	Not simulated due to lack of data on child's assessment base two years ago, nor included in the micro-data because in effect only since 2023.
Sickness benefit	bhlsi (bhl)	I	I	I	I	Short-term benefit, no data on sick days; included in health related benefits
Nursing benefit	bhlcc (bhl)	I	I	I	I	Short-term benefit, no data on sick days of relatives; included with sickness benefits
Accident benefits	bhlot (bhl)	I	I	I	I	
Equalization allowance	bmapr (bfa)	I	I	I	I	No data on pregnancy related changes in pay; included in other family benefits
Maternity benefit	bma/bmact_s	I/PS	I/PS	I/PS	I/PS	No data on contribution records. Its simulation can be switched on by activating PBE extension. The default for the baseline is off, i.e. the non-simulated component is being used (bma).
Pregnancy benefit	bprct_s	-	E/PS	E/PS	E/PS	No data on contribution records. Its simulation can be switched on by activating PBE extension. The default for the baseline is off. Not included in the micro-data because in effect only since 2021.
Unemployment benefit	bunct_s	PS	PS	PS	PS	No data on contributions records
Material need benefits	bsa00_s	S	S	S	S	Missing data about participation in training/ community work; no information about child disability
Special allowance	bsarw	I/IA	I/IA	I/IA	I/IA	
Child birth allowance	bchba_s	S	S	S	S	
Multiple birth allowance	bchba	IA	IA	IA	IA	Marginal and negligible benefit
Child benefit	bch_s	S	S	S	S	
Child benefit surcharge	bch_s	S	S	S	S	
One-off child benefit	bch_s	S	S	S	S	
School lunch subsidies	bched_s	S	S	S	S	Not included in the standard definition of disposable income
Parental allowance	bcc00_s	S	S	S	S	Missing data about child disability
Childcare allowance	bccot (bfa)	I	I	I	I	
Replacement care benefits	bfaot	IA	IA	IA	IA	
Nursing allowance	bcrdi	I	I	I	I	No data on sickness of a relative
Residual disability benefits	bdiot	I	I	I	I	Residual benefits not possible to be simulated
Funeral benefit	bsu	IA	IA	IA	IA	No data on deceased relatives; included in other survivors benefits
Scholarships	bsaot & bed	IA	IA	IA	IA	No information about grades; means-tested scholarships included in bsaot

	Variable name(s)	Treatment in EUROMOD				Comments
		2020	2021	2022	2023	
Tax refunds	tinrf_s	S	S	S	S	
Employee's meal allowance	yfblv_s	S	S	S	S	Not included in the standard definition of disposable income
Housing benefit	bho	IA	IA	IA	IA	
Residual unemployment benefits	bunot	I	I	I	I	Residual benefits not possible to be simulated
Residual family benefits	bfaot	I	I	I	I	Residual benefits not possible to be simulated
Pandemic nursing benefit (Covid-19)	bccmc_s	S	S	S	-	This benefit can only produce results if the model is run in combination with the LMA add-on.
Kurzarbeit (Covid-19) / short-time work support	bwkmcee_s	S	S	S	-	This benefit can only produce results if the model is run in combination with the LMA add-on.
Self-employment grant (Covid-19)	bwkmcse_s	S	S	S	-	This benefit can only produce results if the model is run in combination with the LMA add-on.

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; “IA”: *included* in the micro-data in an *aggregate* variable, but not simulated; “PS” *partially simulated* as some of its relevant rules are not simulated; “S” *simulated* although some minor or very specific rules may not be simulated.

Table 2.2 Simulation of taxes and social contributions in EUROMOD

	Variable name(s)	Treatment in EUROMOD				Comments
		2020	2021	2022	2023	
Personal income tax	tin_s	S	S	S	S	
Withholding tax	tin_s	PS	PS	PS	PS	Simulated together with personal income tax
Property tax	tpr	I	I	I	I	No information on value of real estate
Value added tax		E	E	E	E	Beyond the scope of Euromod; no data on expenditures
Excise taxes		E	E	E	E	Beyond the scope of Euromod; no data on expenditures
Local taxes		E	E	E	E	Beyond the scope of Euromod; no detailed data on locality
Employee social insurance contributions	ils_sicee					
Sickness contributions	tsceesi_s	S	S	S	S	
Old-age contributions	tsceepi_s	S	S	S	S	
Disability contributions	tsceedi_s	S	S	S	S	
Unemployment contributions	tsceeu_i_s	S	S	S	S	
Health contributions	tsceehl_s	S	S	S	S	
SICs from agreements	tsceej_s	S	S	S	S	
Employer social insurance contributions	ils_sicer					
Sickness contributions	tscersi_s	S	S	S	S	
Old-age contributions	tscerpi_s	S	S	S	S	
Disability contributions	tscerdi_s	S	S	S	S	
Unemployment contributions	tscerui00_s	S	S	S	S	
Short-time work financing	tscerui01_s	-	-	S	S	
Health contributions	tscerhl_s	S	S	S	S	
Guarantee contributions	tscersf_s	S	S	S	S	
Accident contributions	tscerac_s	S	S	S	S	
Reserve solidarity fund	tscerot_s	S	S	S	S	

	Variable name(s)	Treatment in EUROMOD				Comments
		2020	2021	2022	2023	
2 nd pillar component	tscpcpi_s	S	S	S	S	Data on participation in 2 nd pillar only available since 2019 SILC. For previous datasets, participation is simulated randomly based on probabilities derived from external data.
SICs from agreements	tsceraj_s	S	S	S	S	
Social Fund contributions	tscerc_s	S	S	S	S	Not part of the government tax revenue
Self-employed social insurance contributions	ils_sicse					Based on current income; no data about previous income
Sickness contributions	tscsesi_s	S	S	S	S	
Old-age contributions	tscsepi_s	S	S	S	S	
Disability contributions	tscsed_i_s	S	S	S	S	
Reserve solidarity fund	tscseot_s	S	S	S	S	
Health contributions	tscsehl_s	S	S	S	S	
2 nd pillar component	tscpcpitv_s	S	S	S	S	Data on participation in 2 nd pillar only available since 2019 SILC. For previous datasets, participation is simulated randomly based on probabilities derived from external data.
Voluntary health insurance contributions (inactive)	tshlfx_s	S	S	S	S	
Credited health insurance contributions	tscctl_s	PS	PS	PS	PS	Since 2020, the government no longer pays credited health insurance contributions in the form of a percentage of the assessment base. Instead, a fixed amount is paid each month based on the total amount of resources allocated to the healthcare system in the state budget
Credited employer contributions for beneficiaries of <i>Kurzarbeit</i> (Covid-19)	tsctt_s	-	S	-	-	SIC paid by the employer and credited by the government to firms beneficiaries of the wage compensation scheme. Assumed only to be credited if the compensation paid by the government (bwkmcee_s) is below the compensation cap. Otherwise, the total cost of the scheme is already accounted in bwkmcee_s

Notes: “-” policy did not exist in that year; “E” policy is *excluded* from the model’s scope as it is neither included in the microdata nor simulated by EUROMOD; “PS” policy is *partially simulated* as some of its relevant rules are not simulated; “S” policy is *simulated* although some minor or very specific rules may not be simulated.

2.2 Main policy changes

- *Changes between 2019 and 2020*

The basic tax allowance was raised from 19.2 * the Minimum Subsistence Level (MSL) to 21*MSL. The threshold when the tax allowance is phased out was adjusted accordingly to 92.8*MSL.

Higher parental allowance is provided to parents who were in receipt of the maternity benefit before claiming the parental allowance.

Self-employment income is now taxed separately. If the annual turnover is less than or equal to €100 000, a lower flat rate of 15% is applied. If the turnover is higher, the standard progressive tax schedule applies on self-employment income separately. Tax allowances are first used to reduce the tax base on employment income. If employment income is lower than the tax allowances, the left-over allowances then reduce the separate self-employment income tax base.

Credited health insurance contributions are no longer paid in the form of a percentage of the assessment base. Instead, the government pays a fixed amount each month based on the total amount of resources allocated to the healthcare system in the state budget and the expected health insurance contributions paid by the economically active. The implied percentage rate is now calculated from these aggregate payments by the government.

Besides, and as result of the COVID-19 pandemic, three main income compensation schemes are simulated in 2020: the COVID-19 nursing benefit (*Pandemické ošetrovné*), for parents looking after their children during compulsory school closure; a wage compensation scheme (*Prvá pomoc – zamestnávateľia*) for employees unable to perform work assignments at all due to business closures; and a lump-sum grant for self-employed (*Prvá pomoc – SZČO*) whose business closed by the order of the government or suffered a loss in revenue.

- ***Changes between 2020 and 2021***

Introduction of the contributory pregnancy benefit for women from the 13th week until the end of their pregnancy (valid as of April 2021).

The pandemic nursing benefit and pandemic sickness benefit have a higher income replacement rate in April 2021.

From March till May 2021 the second round of extended pandemic unemployment benefit was introduced due to the pandemic.

One-off support for dependent children was provided to households in material need in August 2021 and increased child benefit was provided in September 2021.

Abolition of the universal free lunches policy for children between 5-15 from August 2021. Only children from socioeconomically disadvantaged families or those not eligible for the child tax credit can claim the subsidy.

The replacement rate of the wage compensation scheme *Kurzarbeit* was increased from 80% of gross wage to 80% of total labour cost in October 2020 and then again to 100% of the labour cost in February 2021. The monthly cap per employee was also unified at €1100 for all workers in October 2020. In July 2021, the conditions have changed again back to the initial setup.

The number of brackets and amounts for the self-employment grant were increased both in October 2020 and in February 2021. In July 2021, the conditions have changed again back to the initial setup.

The children tax credit was increased to 1.7 times the basic amount for children 6 to 15 years old from July 2021.

The revenue threshold for the 15% reduced PIT rate on self-employment income was reduced from €100 000 to €49 790.

- ***Changes between 2021 and 2022***

Introduction of social insurance contributions for financing of short-time work support of 0.5% of the assessment base and an equivalent reduction of the contribution rate for the unemployment insurance from 1% to 0.5%.

The children tax credit was increased to 1.85 times the basic amount for children 6 to 15 years old.

The temporary *Kurzarbeit* compensation scheme was replaced by a permanent short-time work support scheme from March 2022.

The self-employment grant was changed from a lump sum to 60% of the SIC assessment base for March 2022. No compensation is provided from April 2022 onwards.

One-off support compensating increasing living costs was provided to selected groups in May 2022.

The child benefit and the child benefit surcharge was increased to €30 from July 2022, and the annual indexation of the benefit and the surcharge in line with the growth in the MSL was abolished.

From July 2022, the following changes were introduced to the child tax credit. The amount was increased to €70 for children younger than 15 years old and to €40 for children above 15 years old. The minimum income threshold of 6 times the minimum wage was abolished. Instead, an upper limit on the amount of the tax credit per taxpayer as a percentage of the partial tax base (from employment and self-employment) was introduced. If any taxpayer received a lower amount because of these changes, the original amount would be provided instead. The annual indexation of the credit in line with the growth in the MSL was abolished.

From November 2022, parallel uptake of maternity benefit by both the mother and the father, is allowed. The father can move and take up to 2 weeks of the maternity benefit out of the total amount at his disposal (28 weeks) until the child is 6 weeks old.

- *Changes between 2022 and 2023*

The child benefit was increased to €60.

The amounts of the child tax credit were temporarily increased to €140 for children younger than 18 years and to €50 for children 18 years old or older. When filing the annual tax return, the sum of the partial tax bases of both parents can be used for the calculation of the annual tax credit.

From May 2023, the higher child birth allowance is paid for the first 4 children rather than the first 3 children.

The gradual increase in the 2nd pillar contribution rate was delayed and will reach the maximum of 6% only in 2027.

The universal free lunches policy for children between 5 and 15 years of age was reintroduced in May 2023.

A new type of parent's pension was introduced (not simulated in the model due to lack of data).

Employees are now also subject to minimum health insurance contributions calculated based on the level of the MSL.

A new type of agreement on seasonal work activities was introduced. Under such agreement both employees and employers are eligible for a new social insurance contribution allowance of 50% of the average wage two years prior. The allowance applies to old-age and unemployment insurance.

A temporary social insurance contribution allowance for employers in the food industry was introduced between August 2023 and 31 January 2024. The monthly allowance is EUR 700

(equivalent to the minimum wage in 2023) and applies on all SICs except employers' guarantee and accidents insurance.

2.3 Order of simulation and interdependencies

The order in which policies are simulated in EUROMOD is the same for all years. Minimum wage is simulated first, as the simulation of this policy affects employment income which is subsequently an input to social insurance contributions, personal income tax and means-tested benefits. However, note that minimum wage is turned off in all years. The simulation of the pandemic nursing benefit, parental leave benefits and unemployment benefit follows thereafter. In particular, the eligibility for the unemployment benefit is conditional upon receipt of the parental allowance and the maternity benefit. As a result, the maternity benefit² and the parental allowance are simulated before the unemployment insurance benefit.

The simulation of the COVID-19 compensation schemes is then implemented as employment incomes and the number of months in employment will be recalculated for those spending at least one month under any compensation scheme. The simulated outputs of the COVID-19 schemes are also used by subsequent policies (i.e. wage compensations for employees are taxable and subject to social insurance contributions)³.

Taxable income excludes all social insurance contributions paid. Therefore, social insurance contributions are simulated before the personal income tax.

Means-tested social assistance (material need benefit) is the second to last benefit to be simulated as the income that is assessed is net of all social insurance and taxes paid, while including social security benefits and regular state support benefits with the exception of the child benefit. The child benefit is the last benefit simulated because the Covid-related one-off increase in 2021 is dependent on not receiving the material need benefits.

The cash equivalent of students' school lunch subsidies are simulated following other benefits because the eligibility in most years depends on the household being in material need. The employee meal allowance is simulated here as well but it only depends on one's labour market status.

Finally, credited health contributions are simulated last as eligibility depends on receipt of the material need benefit. In 2021, this policy also includes employers' credited contributions for beneficiaries of wage compensation, as the scheme simulated in 2021, which was in place until July, compensates total labour costs up to a specific compensation cap.

2.4 Policy extensions

There are four extensions included in the Slovak model:

- **Minimum Wage Adjustment (MWA)**, allowing the user to switch on/off the minimum wage simulation. The default for the baselines is off.

² Even though its simulation is switched off in the baseline. See section 2.4 and the corresponding policies' descriptions for more information.

³ Please, note that these policies can only produce results if the model is run in combination with the LMA add-on. For more information about the modelling of labour market transitions, please consult the "Simulating labour market transitions in EUROMOD" document.

- **Parental Benefits Extension (PBE)**, allowing the user to choose between the observed (non-simulated) parental leave benefits (extension off) or the simulated ones (extension on). The default for the baselines is off.

- **Full Year Adjustment (FYA)**, allowing the user to choose between policies as of 30th June (extension off) or modelling annual policies (extension on), taking into account within-year policy changes. The default for the baselines is on.

- **Benefit Take-up Adjustments (BTA)**, allowing the user to apply non-take-up corrections (if extension is on). The extension is used for the simulation of the material need benefits. The default for the baselines is on. Otherwise, full take-up is assumed.

- **2nd Pillar Pension Insurance Contributions (2PC)**, allowing the user to switch on/off the compulsory private pension (2nd pillar) insurance contributions. The default for the baselines using 2019 SILC data or newer is on. The default for other datasets/systems combinations is off⁴.

Apart from the above-mentioned policy extensions, the Slovak model also includes one policy that is switched off in the baseline, but can be used for specific purposes:

- **TransLMA_sk**. This policy defines the individuals that are selected to undergo transitions to monetary compensation schemes and/or unemployment. The transitions are only enabled if used together with the Labour Market Adjustments (LMA) add-on (i.e. the LMA add-on switches on this policy automatically). The transitions are based on a random allocation of individuals and they might be triggered by feeding the parameters of this policy with official or hypothetical information⁵. This policy, in combination with the LMA add-on, enables the simulation of *Kurzarbeit* and the short-time work support (*yemcomp_sk*), the lump-sum grant for self-employed (*ysecomp_sk*) and the pandemic nursing benefit (*bccmc_sk*).

⁴ For more information about the modelling of this policy, please consult the section 2.6.6 of this report.

⁵ For more information about the modelling of labour market transitions, please consult the “Simulating labour market transitions in EUROMOD” document. The data on transitions to unemployment is obtained from the Labour Force Survey and administrative data. The impact across different categories of individuals and the duration of unemployment 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 \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&plugin=1). The data on transitions to monetary compensation schemes was obtained from national sources and are described in section 2.8.

2.5 Benefits

2.5.1 Parental allowance (*bcc00_sk*)

- **Definitions**

There is a special unit of analysis (*tu_bcc00_sk*) for parental allowance, which contains parents and their children up to 3 years old or up to 6 years old in case of long term unfavourable health conditions.

- **Eligibility conditions**

Only one parent can claim the allowance. It cannot be combined with the sickness benefit. Maternity benefit reduces the amount of the allowance.

EUROMOD modelling: The loss of entitlement due to receiving sickness benefits is actually not simulated in the model due to the short-term nature of sickness benefits, which are usually received only for a few days or weeks. The extension of the allowance eligibility up to 6 years old in case of long term unfavourable health conditions is also not modelled.

- **Income test**

Not applicable

- **Benefit amount**

During 2006 – 2009 the amount of the benefit was fixed independently from the number of children in the tax unit. In 2010 a second higher amount of the parental allowance was defined. Entitled to the higher amount was the parent of a child up to 2 years old, who was receiving the maternity benefit before child birth or had paid sickness insurance contributions at least for a period of 270 days during the two years before the child birth. The parent was not eligible for the allowance in years 2009 and 2010 if she was earning employment or self-employment income. Since 2011, a flat amount is provided to eligible families which increases by 25% for every child born at the same time as the one considered. The parental allowance is decreased by 50% if some other dependent child in the same family has not attended school for 3 months. Since 2020, a higher parental allowance is provided again if the parent was receiving the maternity benefit before claiming the parental allowance.

Table 2.3 Parental allowance benefit amounts (€ per month)

	2020	2021	2022	2023
Per family	€ 270.0	€ 275.9	€ 280.0	€ 301.0
After maternity	€ 370.0	€ 378.1	€ 383.8	€ 412.6

EUROMOD modelling: The reduction in allowance due to other children not attending school is not modelled. The simulation of the higher allowance after maternity is only simulated for parents receiving maternity benefit in the income reference period.

- **Subject to taxes/SIC**

Exempt.

- **Take up**

Nearly all eligible parents take parental allowances.

- **Policy changes**

Changes in 2020

Higher allowance is provided to parents who were receiving the maternity benefit before.

Changes in 2021

No changes

Changes in 2022

No changes

Changes in 2023

No changes

2.5.2 Unemployment benefit (*bunct_sk*)

- **Definitions**

The unit of analysis is an individual.

- **Eligibility conditions**

A person is entitled to receive unemployment benefit if they have contributed for at least two years within the last three (since 2018 within the last four years). After the end of an unemployment spell, the insured person must contribute for another two years before a new claim can be made. They must be listed on the unemployment registry and be under the retirement age. The benefit cannot be combined with sickness, nursing or maternity benefit, or parental allowance. The maximum length of receiving unemployment benefit is 6 months.

- **Income test**

No income test is applied

- **Benefit amount**

The amount of unemployment benefit is 50% of the daily assessment base, which is calculated as the sum of all the bases on which unemployment insurance contributions have been paid, divided by the corresponding number of days. The benefit is provided with respect to the number of days in unemployment. The maximum monthly assessment base is 2 times the average wage two years prior.

The following table summarises the main characteristics of unemployment insurance benefit in Slovakia.

Table 2.4 Characteristics of the unemployment benefit

		2020	2021	2022	2023
Eligibility	Contribution period	2 years out of the last 4	2 years out of the last 4	2 years out of the last 4	2 years out of the last 4
	Other conditions	listed on the unemployment register and under retirement age	listed on the unemployment register and under retirement age	listed on the unemployment register and under retirement age	listed on the unemployment register and under retirement age
	Eligibility of self-employed ^a	no	no	no	no
Payment	Contribution base	gross employment income + company shares + termination and severance pay divided by number of days in employment	gross employment income + company shares + termination and severance pay divided by number of days in employment	gross employment income + company shares + termination and severance pay divided by number of days in employment	gross employment income + company shares + termination and severance pay divided by number of days in employment
	Basic amount	50% of daily contribution base	50% of daily contribution base	50% of daily contribution base	50% of daily contribution base
	Additional amount	N/A	N/A	N/A	N/A
	Floor	N/A	N/A	N/A	N/A
	Ceiling	50% of 2 times the average wage two years prior	50% of 2 times the average wage two years prior	50% of 2 times the average wage two years prior	50% of 2 times the average wage two years prior
	Duration	Standard (in months)	6 months	6 months	6 months
	Special cases (in month)	Up to 8 months	Up to 8 months	N/A	N/A
Subject to	Taxes	no	no	no	no
	SIC	no	no	no	no

Notes: ^a Contributions to unemployment insurance is voluntary for the self-employed. Only those contributing to unemployment insurance are eligible to get the benefit.

EUROMOD modelling: Effectively, this benefit is only partly simulated in the baseline using the information about actual receipt. But rather than only using the observed receipt as part of the eligibility criteria, all eligibility rules in full detail are covered. However, as not all required information (e.g. work history) is available, several assumptions are made, among else considering some rules automatically fulfilled for those observed in receipt of this benefit. This approach is chosen so that the benefit can also be modelled for those currently employed if needed (e.g. to simulate their entitlement if they become unemployed, for replacement rates calculations).

Unemployment duration (lunmy_s) is set equal to the minimum between the maximum duration according to the national rules or the maximum of observed unemployment duration (lunmy) and observed benefit receipt (bunmy). If modelling unemployment benefit for those currently employed, unemployment duration is set equal to the minimum between the maximum duration according to the national rules or the reported number of months in employment in the current

year (*liwmy*), once contribution history (see the next step) is modelled. It is effectively also assumed that unemployment spells start in the reference year.

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

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

At this point, people who are unemployed ($lnunmy_s > 0$), have not reached retirement age yet and have sufficient contribution history are considered eligible. It is assumed that all of them are involuntary unemployed and capable and available for work (there is a variable in the SILC data identifying the latter but only filled in for those currently unemployed).

Benefit duration (*bunmy_s*) is simply set equal to the unemployment duration (*lnunmy_s*) as long as this is smaller than the maximum duration according to the national rules. The maximum duration is 6 months.

Benefit entitlement is calculated based on the variable “previous wage” which is used as the daily assessment base. In case the value is missing imputed wage is used. Previous wage for the simulation of the unemployment benefit is calculated reverting the unemployment benefit rules from the benefit amount reported in data.

The prolongation of the benefit duration (to maximum of 10 months in 2020, or 8 months in 2021) during the COVID-19 pandemic is not simulated because the expiration date of the benefit cannot be identified.

2.5.3 Child birth allowance (*bchba_sk*)

- *Definitions*

There is special unit of analysis (*tu_bchba_sk*) containing parents and their dependent children up to 1 year old.

- *Eligibility conditions*

Only one parent (usually the mother) can receive the allowance. There is no conditionality other than permanent residency of both the entitled parent and the dependent child in the Slovak Republic. The child should be older than 28 days. The additional birth grant was introduced in 2007 and was paid for each new-born child whose mother was at her first childbearing. Since 2009 a higher amount is paid for the first three children. In the case of a multiple birth, an additional amount is paid for each child.

EUROMOD modelling: The benefit is simulated as a yearly amount for all parents, who have a dependent child up to 1 year old.

- *Income test*

No income test is applied

- **Benefit amount**

Benefit amount depends on the number of children and childbirths:

- EUR 829.86 for the first three childbirths (first 4 children since May 2023)
- EUR 151.37 for the child from the fourth (fifth since May 2023) or more childbirths
- For two or more children born at the same time there is additional benefit EUR 75.69 per child.

Table 2.5 Child birth allowance benefit amounts (€ per year)

	2020	2021	2022	2023
First 3 children	€ 829.86	€ 829.86	€ 829.86	€ 829.86
Fourth child	€ 151.37	€ 151.37	€ 151.37	€ 829.86 (May)
Fifth and more children	€ 151.37	€ 151.37	€ 151.37	€ 151.37
Multiple birth surcharge	€ 75.69	€ 75.69	€ 75.69	€ 75.69

2.5.4 Child benefit (*bch_sk*)

- **Definitions**

The unit of analysis is the family (*tu_family_sk*), which contains parents and their dependent children. Dependent child is defined as a child up to 16 years old, or up to 18 years old and disabled or up to 25 years old and studying (not yet finished post-secondary education), or up to 25 years old and cannot study because of illness or injury.

- **Eligibility conditions**

There is no conditionality to the child benefit other than permanent residency in the Slovak republic of both the entitled parent and the dependent child. Since 2008, a surcharge has been introduced. Eligible individuals are those meeting the whole set of the following requirements:

- Recipient of pension (old-age, early old-age, disability, or military if standard retirement age has been reached) or of the benefit for caring for a disabled relative,
- Not receiving any earnings,
- Not entitled to the tax credit on dependent child.

EUROMOD modelling: The extension of benefit for children, who are younger than 25 and not studying at an approved institution because of illness or injury, is not modelled.

- **Income test**

No income test is applied

- **Benefit amount**

The amount of the benefit is indexed every year based on the growth of the Minimum Subsistence Level (MSL). Since September 2019, an additional one-off benefit is given when the child starts elementary school for the first time. In September 2021, a one-off increase of the standard amount by €74.50 (to a total sum of €100) was provided for each dependent child younger than 18 years

who was not eligible for the one-off support for households in material need in August 2021 (*see Section 2.5.7*). A further one-off increase by €74.12 (to a total sum of €100) was provided for May 2022. In July 2022, the amount of the benefit and the surcharge were increased and the annual indexation in line with the growth of the MSL was abolished. The benefit further increased to €60 in January 2023. After that, the amounts can be changed discretionary by a government decree. The monthly amounts per child are presented in the following table.

Table 2.6 Child benefit amounts per child (€ per month)

	2020	2021	2022 (Jan-Jun)	2022 (Jul-Dec)	2023
Child benefit	€ 24.95	€ 25.50	€ 25.88	€ 30.00	€ 60.00
Surcharge	€ 11.70	€ 11.96	€ 12.14	€ 30.00	€ 30.00
One-off benefit	€102.50	€104.76	€106.33	€106.33	€110.00
One-off increase	-	€74.50 (Sep)	€74.12 (May)	-	

EUROMOD modelling: The one-off benefit approved in September 2019 is simulated for that year using the FYA extension. It is simulated only for children 6 years old, which is the standard school entry age. The one-off increase in September 2021 is simulated using the FYA extension. The increase in the benefit and the surcharge from July 2022 is also simulated only using the FYA extension.

- **Take up**

Empirically, the take up is around 90%, so full take up is assumed in the model.

2.5.5 Maternity benefit (*bmact_s*)

- **Definitions**

This is a contributory benefit for the period of maternity leave. Available to employees and insured self-employed persons. The benefit can also be claimed by the father (or other second caretaker) of the child if he is a substitute carer due to taking care of the child. The benefit is paid to mothers/substitute carers of adopted/foster children, but we cannot simulate it for these categories due to the lack of data on adoption/foster status of children.

- **Eligibility conditions**

Giving birth or being a substitute carer (incl. fathers).

- At least 270 days of contributions to sickness payment during the 2 years preceding the take up of maternity benefit. Within this period is included interruption due to the parental allowances.
- Loss of earnings for the period of leave (beneficiary must not have a paid position and may not run their own business).

- **Income test**

No.

- **Benefit duration**

The maternity leave begins 6-8 weeks before expected birth and lasts a total of 34 weeks, or 37 weeks in case of single mother and 43 weeks in case of multiple births. The minimum duration is 14 weeks (if the child is stillborn).

- **Benefit amount**

The amount equals 75 % of the Daily Assessment Base (*Denný vymeriavací základ*), paid during the period of maternity leave. The maximum amount of DAB is calculated as follows: at first it is important to calculate the maximum assessment base (MAB) per month which is $2 * \text{average wage two years before}$. Subsequently the maximum maternity benefit per day is calculated as $MAB * 12 / 365 * 75 \%$.

Table 2.7 Detailed calculation of the maternity benefit per month

	2020	2021	2022	2023
AW t-2	€ 1013.00	€ 1 092.00	€ 1 133.00	€ 1 211.00
multiplication coefficient	2.00	2.00	2.00	2.00
DAB	€ 2 026.00	€ 2 184.00	€ 2 266.00	€ 2 422.00
Percentage of gross wage	75%	75%	75%	75%
Maximum Maternity benefit				
per day	€ 49.96	€ 53.85	€ 55.87	€ 59.72
month (30 days)	€ 1 498.70	€ 1 615.60	€ 1 676.30	€ 1 791.70
month (31 days)	€ 1 548.70	€ 1 669.50	€ 1 732.10	€ 1 851.40

The father of the child can claim maternity benefit but no earlier than when the child is 6 weeks or older and only if the mother forfeits the benefit and leaves the childcare to the father. The amount of the maternity benefit of the father is calculated on the basis of his DAB in the same way as for the mother. The duration of the benefit is 28 weeks or 31 weeks in case of a single father or 37 weeks in case of multiple births. As of November 2022, 2 weeks out of 28 can be paid off during 6 weeks after the birth and parallel uptake of benefit by both mother and father is possible.

- **Subject to taxes/SIC**

Exempt.

- **Take up**

Nearly all eligible mothers take maternity leave.

EUROMOD modelling

The previous insurance record is simulated based on the ratio of months in work in the income reference period to the months of the qualifying period and a minimum work history of 9 months (270 days).

As the benefit amount depends on the previous earnings, we assume those to be equal to the imputed wage (*yivwg*) or the current wage, whichever is higher. The imputed wage is recorded in hourly terms, hence we assume a country-specific standard number of hours worked per week (40 hours) and we recalculate *yivwg* in monthly terms ($yivwg * 40 * (52/12)$).

Besides, the simulation assumes that the mother starts the leave 8 weeks before the birth and takes 26 weeks after.

The simulation of this benefit is switched off in the baseline as not all the rules can be simulated accurately. Its simulation can be switched on, jointly with other parental leave benefits, through the PARBEN extension.

2.5.6 Pregnancy benefit (*bprct_s*)

- **Definitions**

This is a contributory benefit for pregnant women for the duration of the pregnancy from the 13th week onward, introduced in April 2021. Available to employees and insured self-employed persons. During the last 6-8 weeks of pregnancy, the benefit is received together with the maternity benefit.

- **Eligibility conditions**

Being pregnant and having contributed to sickness insurance for at least 270 days during the 2 years preceding the 13th week of the pregnancy.

- **Income test**

No.

- **Benefit duration**

From the 13th week until the end of pregnancy (assumed to be the 40th week).

- **Benefit amount**

The amount equals 15 % of the woman's daily assessment base (DAB) and is at least 10% of 2 times the universal DAB calculated as *average wage two years before* * 12 / 365. The maximum pregnancy benefit per day is calculated as *MAB* * 12 / 365 * 15 %, where the maximum assessment base per month (MAB) is 2 * *average wage two years before*.

Table 2.8 Detailed calculation of the pregnancy benefit per month

	2020	2021	2022	2023
AW t-2	-	€ 1 092.00	€ 1 133.00	€ 1 211.00
AW multiple	-	2.00	2.00	2.00
Maximum DAB	-	€ 71.80	€ 74.50	€ 79.63
Minimum pregnancy benefit				
Percentage of DAB	-	10%	10%	10%
per day	-	€ 7.18	€ 7.45	€ 7.96
month (30 days)	-	€ 215.50	€ 223.50	€ 238.90
month (31 days)	-	€ 222.60	€ 231.00	€ 246.90
Maximum pregnancy benefit				
Percentage of DAB	-	15%	15%	15%
per day	-	€ 10.77	€ 11.18	€ 11.94
month (30 days)	-	€ 323.20	€ 335.30	€ 358.40
month (31 days)	-	€ 333.90	€ 346.50	€ 370.30

- **Subject to taxes/SIC**

Exempt.

EUROMOD modelling

Pregnancy is assumed during the current year if there is a child born in the income reference period (*dag* = 0)

The previous insurance record is simulated based on the ratio of months in work in the income reference period to the months of the qualifying period and a minimum work history of 9 months (270 days).

As the benefit amount depends on the previous earnings, we assume those to be equal to the imputed wage (*yivwg*) or the current wage, whichever is higher. The imputed wage is recorded in hourly terms, hence we assume a country-specific standard number of hours worked per week (40 hours) and we recalculate *yivwg* in monthly terms ($yivwg * 40 * (52/12)$).

The simulation of this benefit is switched off in the baseline as not all the rules can be simulated accurately. Its simulation can be switched on, jointly with other parental leave benefits, through the PARBEN extension.

2.5.7 Material need benefits (*bsa_sk*)

- **Definitions**

The unit of analysis is the family (*tu_bsa_sk*) but with a slightly different definition of dependent child, as for child benefit. The dependent child conditions are following:

A person is defined as dependent child if he/she is aged below 16, or below 18 if disabled, or below 26 if still in education, or below 26 if his/her income is below half of the minimum wage (full minimum wage until March 2019) and does not receive income from disability pensions and unemployment. Besides, children cannot be married to be considered dependent.

- **Eligibility conditions**

The family unit is eligible to receive material need benefit, if its assessed income is below the minimum subsistence level corresponding to its family structure.

The monthly amounts of the minimum subsistence level can be seen in the following table:

Table 2.9 Minimum subsistence level (€ per month)

	2020	2021	2022	2023
Head	€ 210.20	€ 214.83	€ 218.06	€ 234.42
Every next adult	€ 146.64	€ 149.87	€ 152.12	€ 163.53
Dependent child	€ 95.96	€ 98.08	€ 99.56	€ 107.03

- **Income test**

The assessed income consists of:

- 75% of the net employment and self-employment income
- 75% of old-age and early old-age pension for a pensioner with working history up to 25 years For each additional year of working history beyond 25 years, the parameter is decreased by 1 %
- 75% of the maternity benefit

- 75% of the disability benefit
- 75% of the orphan pension
- 75% of the widow and widower pension
- unemployment insurance benefit
- sickness insurance benefit
- private pensions
- property income
- investment income
- maintenance payments
- parental allowance
- termination pay
- severance pay
- equalization allowance
- private transfers

Incomes exempt from the assessed income are:

- One-off state support payments (child birth allowance, multiple birth allowance, foster care allowances, funeral benefit)
- Child benefit and child benefit surcharge
- Scholarships
- Tax credit on a dependent child and employee tax credit
- Income from occasional activities up to twice the minimum subsistence level
- Student income up to 3 times the minimum subsistence level
- Contribution for graduation practice

EUROMOD modelling: Assessed income is derived from original market income (ils_origy) by adding the above named benefits and subtracting simulated social security contributions and income tax, income from occasional activities, educational allowances and 25% of net earnings, maternity benefit and all pensions. The coefficient for old-age pension is adjusted according to length of working history.

- **Benefit amount**

The amount of the material need benefits is calculated summing the **basic benefit for material need** and all the **allowances for material need** to which a family is entitled to, and subtracting the family's assessed income.

The amount of **basic material need benefit** is set according to the structure of the family as in the following table. The benefit was increased by €100 in May 2022 as a one-off compensation of increasing living costs.

Table 2.10 Basic amount of the material need benefit (€ per month)

	2020	2021	2022	2023
Individual	€ 66.30	€ 67.80	€ 68.80	€ 74.00
Single parent, 1-4 children	€ 126.20	€ 129.00	€ 130.90	€ 140.70
Single parent, 5+ children	€ 184.30	€ 188.40	€ 191.20	€ 205.50
Couple, no children	€ 115.30	€ 117.80	€ 119.60	€ 128.60
Couple, 1-4 children	€ 172.60	€ 176.40	€ 179.00	€ 192.40
Couple, 5+ children	€ 232.60	€ 237.70	€ 241.30	€ 259.40

The monthly amount of **health care allowance** is 2 euro per individual. Before 2009 the amount was 50 SKK. This allowance covers care expenditures of a person in state of material need and has no eligibility condition. Since 2014 the allowance has been abolished.

EUROMOD modelling: Basic material needs benefit and health care allowance are simulated for every tax unit. The supplement for pregnant women is not simulated.

The **housing allowance** aims to cover the housing related costs of a household in material need. At least one member must be the owner or tenant of the flat or house and the family must prove she is paying housing costs. Only one person in household is entitled to receive housing allowance. The amount of the allowance depending on the size of the household is shown in the following table. The amount is indexed annually in line with the basic material need benefit.

Table 2.11 Housing allowance amount (€ per month)

	2020	2021	2022	2023
1 member	€ 57.20	€ 58.50	€ 59.40	€ 63.90
2+ members	€ 91.40	€ 93.40	€ 94.80	€ 101.90

EUROMOD modelling: Housing allowance is simulated for every household and it is allocated to the head of the tax unit. We assume the head is responsible for housing.

The **protection allowance** is given to individuals in material need who are above retirement age or disabled (lost more than 70% of work capability), to lone parents taking care of a child up to the age of 31 weeks, or persons taking care of disabled individuals. Lower amounts are given to pregnant women, parents taking care of a child up to the age of 1 year, or individuals who have been sick for a period of more than 30 days. The amount of the allowance is shown in the following table.

Table 2.12 Protection allowance amount (€ per month)

	2020	2021	2022	2023
Individuals above retirement age, disabled, lone parents, carers of individuals with disability	€ 67.90	€ 69.40	€ 70.40	€ 75.70
Individuals with sickness (not simulated)	€ 37.30	€38.10	€38.70	€ 41.60
Pregnant women in the last 8 weeks of pregnancy	€ 37.30	€38.10	€38.70	€ 41.60
Pregnant women from the 4 th month of pregnancy, parents taking care of a child <1 old	€ 14.60	€14.90	€15.10	€ 16.20

EUROMOD modelling: Protection allowance is simulated for persons in retirement age or disabled or lone parents with children up to 1 year or pregnant women. If there is a disabled person in tax unit, one additional amount of protection allowance is simulated for carers. The carer is the oldest adult in tax unit not already eligible for protection allowance. Pregnancy is assumed during the year if a child was born in the reference period. The higher amount (since 2019) is simulated for the last 2 months of pregnancy and the lower amount for the preceding 4 months (last 6 months

before 2019), taking into account the month of birth of the child. The allowance for individuals with temporary sickness is not simulated due to lack of information.

The **activation allowance** aims at obtaining, retaining or increasing the level of qualification, work skills, or work habits of individuals or households in order to encourage them to retain or to look for a job during the period in which they are in material need. The activation allowance cannot be received simultaneously with the protection allowance. The entitlement expires if the person does not participate in programs (part-time attendance in educational activities, training and work programs organized by the municipality or the Labour Office). Since 2019, a higher amount is given to an individual earning at least the minimum wage. The amount of the activation allowance is displayed in the following table.

Table 2.13 Activation allowance amount (€ per month)

	2020	2021	2022	2023
Basic	€ 67.90	€ 69.40	€ 70.40	€ 75.70
For employees earning at least the minimum wage	€ 135.70	€ 138.70	€ 140.80	€ 151.40

EUROMOD modelling: Activation allowance is simulated for every adult not eligible for protection allowance, since there is no information in data about participation in programs mentioned above.

Allowance for dependent child introduced in 2014 aims at education and progress of the child in household. The household receives the allowance for a child which is fulfilling compulsory school attendance. The allowance is paid per child in the amount shown in the following table. The amount was increased by €333 for each child in August 2021 as a one-off compensation due to the covid-19 pandemic.

Table 2.14 Allowance for dependent child amount (€ per month)

	2020	2021	2022	2023
Per child	€ 18.60	€ 19.00	€ 19.30	€ 20.70

EUROMOD modelling: Allowance for dependent child is simulated for every dependent child in compulsory education (until 16 years) and it is allocated to the head of the tax unit. The one-off increase in August 2021 as a temporary covid-19 compensation measure is simulated using the FYA extension.

- **Take up**

Even though external data on the rate of take-up of the benefit are not available, non-take-up is modelled for baseline simulations (best possible combination between policy rules year and input data) using the BTA extension (see section 2.4). The rate is calculated as the ratio between the actual expenditure based on administrative data and the expenditure simulated by EUROMOD using the latest dataset and without correcting for non-take-up. When administrative data are not yet available for the current year, the last known take-up rate is used. The rates used in the model are shown in the following table.

Table 2.15 Take-up rate for the material need benefits

	2020	2021	2022	2023
Take-up rate	41.3%	35.9%	42.9%	42.9%

2.5.8 School lunch subsidies (*bched_sk*)

- **Definitions**

School lunches or other meals of children in nursery and elementary schools are subsidized. The money is usually paid directly to the school and parents thus have to pay lower than usual price for the provided meals. The money can be paid directly to the parents only if the child has specific dietary requirements. There are two different setups in place:

1. Universal free lunches provided to children in the last year of nursery and all years of elementary school. (Jan-Aug 2019 nursery only, Sept2019-Jul2021, Aug2021-Apr2023 only with no tax credit, May 2023-present)
2. Lunch subsidies for children at risk of social exclusion in all years of nursery and elementary school.

The unit of analysis is the family (*tu_family_sk*) in both cases.

- **Eligibility conditions**

1. There are no conditions to the universal free lunches. All children in the last year of nursery and all years of elementary schools are eligible.
2. Children are considered to be at risk of social exclusion if their family is (a) receiving the material need benefits or income is below the minimum subsistence level, or (b) they attend school where at least 50% of students come from families receiving the material need benefits. Between August 2021 and April 2023, children in elementary and the last year of nursery were also eligible if their parents did not receive the child tax credit.

- **Income test**

The income test for children at risk of social exclusion is the same as for the material need benefit.

- **Benefit amount**

A fixed amount is provided for each day that the child attended school and was provided food. In 2011-2018, the amount was €1/day. From January 2019 to July 2021, the amount was €1.20. From August 2021 to April 2023, the amount was €1.30. Since May 2023, €1.40 is given to children in nursery school, €2.10 to children in the first-stage elementary schools (ISCED 1), and €2.30 to children in second-stage elementary schools (or lower-secondary schools ISCED 2).

EUROMOD modelling: A total of 185 days of school attendance is assumed in any given year. The condition of children attending a school where at least 50% of students come from families in material need is not simulated. Changes throughout the year are simulated using the FYA extension.

- **Subject to taxes/SIC**

Exempt.

- **Take up**

Full take-up is assumed both for the universal free lunches and for the socioeconomically disadvantaged students (the latter conditional on taking up the material need benefit).

- **Policy changes**

Changes in 2020

No changes

Changes in 2021

The universal free lunches were abolished from August 2021 and were replaced by the subsidy for children whose parents are not receiving the child tax credit.

Changes in 2022

No changes

Changes in 2023

The universal free lunches policy was reintroduced in May 2023.

EUROMOD modelling: Because this benefit is not a typical cash benefit but instead represents a monetary value of in-kind assistance, it is not considered when calculating the standard disposable income (*ils_dispy*). Nevertheless, a country-specific income list (*il_dpext*) can be utilized to factor in an expanded disposable income that incorporates this benefit.

2.5.9 Employee’s meal allowance (*yfblv_sk*)

- **Definitions**

Based on the Labour Code, employers are obliged to provide one subsidized warm meal per day to each of their standard employees who has worked more than 4 hours that day or pay an equivalent cash allowance. Workers with agreements do not have legal entitlement to the allowance, but employers can agree to provide it voluntarily. Both the in-kind benefit or its cash equivalent are tax exempt.

- **Eligibility conditions**

Workers with a standard employment contract must work more than 4 hours on a given day to be eligible for the allowance on that day. If the employee has worked more than 11 hours on a given day, the employer can provide another tax-exempt allowance for that day.

- **Income test**

No.

- **Benefit amount**

The subsidy for the in-kind meal has to be at least 55% of the meal’s price. The maximum subsidy or cash allowance is 55% of the meal allowance for domestic business trips in the range of 5-12 hours. The minimum cash allowance is 75% of the maximum allowance. The amounts increase if the price index of restaurant catering has increased by at least 5% since the previous change. The respective amounts per day are presented in the following table.

Table 2.16 Employee’s meal allowance amount (€ per day)

	Jul 2019- Apr 2022	May-Aug 2022	Sep-Dec 2022	Jan-May 2023	Jun-Sep 2023	From Oct 2023
Domestic business trip 5-12 hours	€5.10	€6.00	€6.40	€6.80	€7.30	€7.80
Maximum allowance (55%)	€2.81	€3.30	€3.52	€3.74	€4.02	€4.29
Minimum allowance (75% of max.)	€2.11	€2.48	€2.64	€2.81	€3.02	€3.22

EUROMOD modelling: Only the mandatory allowance for standard employees is simulated and only one allowance per each labour day. The condition of at least 4 hours worked on a given day is approximated by the weekly hours worked. The minimum amount is used for all employees. When the amount changes throughout the year, the average amount is used.

- **Subject to taxes/SIC**

Exempt.

EUROMOD modelling: Because this benefit is not a typical cash benefit but instead represents a monetary value of in-kind assistance, it is not considered when calculating the standard disposable income (*ils_dispy*). Nevertheless, a country-specific income list (*il_dpext*) can be utilized to factor in an expanded disposable income that incorporates this benefit.

2.5.10 Short-time work support (*yemcomp_sk*)

- **Definitions**

This is a permanent scheme introduced in March 2022 based on the temporary Covid-19 *Kurzarbeit* compensation measure. The unit of analysis is the individual even though the benefit is in practice provided to the employer.

- **Eligibility conditions**

The employer has been paying social insurance for at least 24 months and cannot give work assignments due to restrictions caused by temporary external factors.

EUROMOD modelling: 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_sk policy, which is switched on automatically by the add-on. For more information about the modelling of labour market transitions, please consult the “Simulating labour market transitions in EUROMOD” document. Eligibility is simulated as a random share of workers in different sectors (*lindi*). However, due to the lack of any external statistics for the year 2022 so far, the model does not simulate the transition for anyone unless the user adjusts the take-up manually.

- **Benefit amount**

Employees in affected businesses receive 80% of their initial gross wages from the employer which are subject to taxes and social security contributions in the usual way. The benefit paid to the employer then equals 60% of the employees’ initial gross wages. The maximum hourly assessment base is equal to $1/174 * 2 * \text{the average wage from two years ago}$. The maximum benefit duration is 6 months over the period of 24 consecutive months.

EUROMOD modelling: Policy changes over the year are not implemented due to lack of information on when individuals started to receive the scheme. Therefore, the policy rules implemented in EUROMOD correspond to those in place on June 30 of each year. The compensation paid by the government is stored in *bwkmcee_s* and is limited to the compensation cap. The part of the reduced wage exceeding the compensation cap is still paid by the firm and is stored in *yemmc_s*.

- **Subject to taxes/SIC**

Yes – treated as standard wages.

- *Take up*

Once eligibility is determined by the random assignment, full take-up is assumed.

2.6 Social insurance contributions

2.6.1 Employee social contributions (*tscee_sk*)

- *Liability to contributions*

Every employee is obliged to pay social contributions. Pensioners are exempted from contributions for disability and unemployment insurance. Recipients of disability pension, who lost more than 70% of their work capability, are exempted from paying unemployment insurance contributions and during 2006 and 2007 they were exempted also from paying disability insurance contributions.

Employees working on agreements were exempted until 2013. Since 2013, temporary workers, that work on the basis of an agreement of service or agreement of student work, should also pay social contributions. Students are entitled to social insurance contribution allowance in monthly amount of 8.39% of average wage two years prior up to 18 years of age, and in monthly amount of 19.72% of average wage two years prior up to 26 years of age. Since 2014, the allowance is in the amount of EUR 200 per month for both groups. There is also an exemption for recipients of old-age, early old-age or disability pension. The exemptions are different if a person is receiving regular or irregular income. The exact rates for each category are shown in the table below. Since 2018 the allowance on social security contributions of pensioners paid on income from agreements has been increased and unified at EUR 200 per month. In 2023, a new type of SIC allowance for agreements on seasonal work activities, equal to 50% of the average wage two years prior, was introduced.

- *Income base used to calculate contributions*

The assessment base consists of gross wage and profit shares. Since 2011, assessment base includes also termination and severance payments. Since 2013, employee social contributions are paid from income from agreements as well (the allowance for students is applicable). The upper limit of the assessment base is unified since 2013 at 5 times the average wage two years prior. Since 2017 the upper limit of the assessment base is at 7 times the average wage two years prior. Before 2013, the maximum assessment base for sickness insurance was set to 1.5 times the average wage two years prior and for other types of insurance to 4 times (3 times during 2006 and 2007) the average wage two years prior.

- *Contribution allowances*

The student allowance applies on income from a specific type of student agreements. The amount is fixed at EUR 200 a month and can be deducted from the assessment base for the old-age and disability insurance. If the student has more agreements in a given month, the allowance can be applied only on one of them.

The pensioner allowance can be deducted from income from agreements of recipients of old-age, early old-age or disability pension, or recipients of military pension if they are above the statutory retirement age. It is also equal to EUR 200 a month and reduces the assessment base for the old-age and disability insurance. It can be applied only on one agreement in a given month.

The allowance for seasonal workers was introduced in 2023 and applies on income from a new type of agreement on seasonal work activities. It reduces the assessment base of old-age and unemployment insurance and is equal to 50% of the average wage two years prior.

Seasonal work is defined as a type of work carried out every year during the same season, is directly dependent upon changing of the seasons, and cannot take up more than 8 months of the year. Eligible work must belong to particular industries including segments of agricultural industry, tourism, food industry, and forestry.

EUROMOD modelling: The student and pensioner allowances are deducted from total annual income from agreements because EUROMOD cannot distinguish if the income comes from multiple agreements and how it is distributed across individual months. The allowance for seasonal workers is simulated for those working in agriculture (*lindi = 1*), hotels & restaurants (*lindi = 5*), and transport & communication (*lindi = 6*) if their main employment income comes from agreements and they work at most 8 months in the given year. Due to its higher generosity, people are simulated to take-up this allowance if eligible over the others. Note that people taking up the new agreement on seasonal work activities will actually be reflected in the input data only from SILC 2024 onwards.

- **Contribution rates**

Table 2.17 Employee contribution rates

Type of insurance	Old-age	Disability	Unemployment	Sickness
rate	4%	3%	1%	1.4%

Table 2.18 Contribution rates on income from agreement

	Regular income	Regular income and recipient of early old age pension	Irregular income	Irregular income and recipient of early old age pension	Student	Recipient of disability pension	Recipient of old age pension
Health insurance	4.00%	4.00%	4.00%	4.00%	0.00%	0.00%	0.00%
Old-age insurance	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Disability insurance	3.00%	0.00%	3.00%	0.00%	3.00%	3.00%	0.00%
Sickness insurance	1.40%	1.40%	0.00%	0.00%	0.00%	0.00%	0.00%
Unemployment insurance	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sum	13.40%	9.40%	11.00%	8.00%	7.00%	7.00%	4.00%

EUROMOD modelling: The difference between regular and irregular income is not modelled. Everyone pays social contributions as with regular income. For persons who are observed as changing their status from employee to old-age or disability pensioner during the income reference period, all employment income is considered to have been generated during their ‘employee period’. The contributed number of months are imputed as 1 for those individuals with positive assessment base but without any number of months in employment.

2.6.2 Employer social contributions (*tscer_sk*)

- **Liability to contributions**

Employers pay social contributions for all employees. The same exemption for pensioners and disabled are in force as in the case of employee social insurance contributions. In addition, there is an exemption for employers in the public sector from paying the guarantee insurance.

Employers had to pay contributions to guarantee and accident insurance on income from agreements during all years. Since 2013, the rules changed and now all types of insurance contributions are paid also on income from agreements, with some exemptions for pensioners and students as in the case of employee social contributions paid from income from agreements. Agreements are also exempt from the new contribution for financing short-time work support, introduced in March 2022. The exact rates for all categories are shown in the table below. The same social insurance contribution allowance is applied for students, pensioners, and seasonal workers.

- *Income base used to calculate contributions*

Employers’ social contributions assessment base is equal to that of employees except in the case of accident insurance because there is no maximum assessment base.

- *Contribution allowances*

The same allowances that apply on the employee contributions apply on the employer contributions as well, but the decision whether to utilise them lies with the employee. **The student allowance** and **the pensioner allowance** in the monthly amount of EUR 200 reduce the assessment base for pension insurance (consisting of old-age, disability, and the reserve solidarity fund).

The allowance for seasonal workers, equal to 50% of the average wage two years prior, reduces the assessment base for old-age and unemployment insurance.

In addition, a **temporary allowance only for employers in certain segments of the food industry** was introduced between August 2023 and January 2024. These include segments of agriculture, forestry and fishery, and parts of manufacturing related to the production food. The allowance amounts to a maximum of EUR 700 per month, and workers on agreements as well as standard employment contracts are eligible. However, if the employer is also eligible for any of the allowances for workers on agreements, the amount of this allowance is reduced by the amount of the other utilised allowance. This allowance applies to sickness insurance, old-age insurance, disability insurance, unemployment insurance, short-time work support, and contributions towards the reserve solidarity fund.

EUROMOD modelling: The same modelling assumptions as for employees apply. The temporary allowance for the food industry is not simulated even using the FYA extension because there is not enough detail about the nature of the work in the data.

- *Contribution rates*

Table 2.19 Employer contributions rates

Type of insurance	Old-age	Disability	Unemployment	Short-time work support	Sickness	Reserve solidarity fund	Guarantee	Accident
rate	14%	3%	0.5%	0.5%	1.4%	4.75%	0.25%	0.8%

Table 2.20 Contribution rates on income from agreement

	Regular income	Regular income and recipient of early old age pension	Irregular income	Irregular income and recipient of early old age pension	Student	Recipient of disability pension	Recipient of old age pension

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Health insurance	10.00%	10.00%	10.00%	10.00%	0.00%	0.00%	0.00%
Old-age insurance	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
Disability insurance	3.00%	0.00%	3.00%	0.00%	3.00%	3.00%	0.00%
Sickness insurance	1.40%	1.40%	0.00%	0.00%	0.00%	0.00%	0.00%
Unemployment insurance	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Short-time work support insurance	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Reserve solidarity fund	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%
Guarantee insurance	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Accident insurance	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
Sum	35.20%	31.20%	32.80%	29.80%	22.80%	22.80%	19.80%

EUROMOD modelling: The difference between regular and irregular income is not modelled. Everyone pays social contributions as with regular income. The exemption from guarantee insurance for the public sector is modelled based on the industry of the workers (*lindi* = 9: public administration and defence).

The one-off abatement during the COVID-19 pandemic is simulated in the baseline based on the industry of the workers (*lindi*). The random share of workers eligible for the abatement are given by the following table:

Table 2.21 Share of industries (*lindi*) eligible for SIC abatement

<i>lindi</i>	Share
2: mining, manufacturing, utilities	2.2%
3: construction	3.2%
4: wholesale & retail	13.8%
5: hotels & restaurants	61.5%
6: transport & communication	7.5%
8: real-estate & business activities	6.8%
9: public administration	24.2%
10: education	76.9%
11: health & social work	3.5%
12: other	30.2%

2.6.3 Self-employed social contributions (*tscse_sk*)

- **Liability to contributions**

Self-employed workers are obliged to contribute to the Social Insurance Agency if their earnings (without deducting the expenses) in the previous year were higher than a given low limit. The lower limit was equal to the minimum wage in 2006-07, 44.2% of the average wage two years prior in 2008-2012 and, since 2013, the limit is set at 50% of the average wage two years prior. The self-employed in their first year of business activity therefore do not pay social contributions. Liability starts from July (or October in the case of a postponed filing of tax return) of the year after the earnings threshold was reached. If the self-employed is a pensioner, he is exempted from paying disability insurance contributions.

- **Income base used to calculate contributions**

The assessment base is half of the net profit in the previous year, which is calculated as revenues reduced by costs and deductible expenses. Since 2013, the assessment base is net profit plus social and health insurance contributions paid in the previous year, all divided by a coefficient. The coefficient is 1.9 in 2013, 1.6 in 2014, and 1.486 since 2015. The maximum assessment base is equal to 5 times the average wage two years prior for all type of insurance. Since 2017 the maximum assessment base is equal to 7 times the average wage two years prior for all type of insurance. Before 2013, the maximum was defined as 1.5 times the average wage two years prior for sickness insurance and 4 times (3 times in 2006 and 2007) the average wage two years prior for other types of insurance.

- **Contribution rates**

Table 2.22 Self-employed contribution rates

Type of insurance	Old-age	Disability	Reserve solidarity fund	Sickness
rate	18%	6%	4.75%	4.4%

EUROMOD modelling: We assume that every self-employed contribute at least the minimum. As the input database does not contain information about the turnover, the condition about earnings higher than 50% of the average wage two years prior cannot be verified and modelled. Without information on previous income, the contributions are calculated based on income in the given year. This also means that the exemption in the first year of business activity cannot be

modelled. Besides, self-employed who are observed to be in receipt of old-age or disability pension for less than 12 months during the income reference period are assumed to have generated all their self-employment income outside periods of pension receipt.

The one-off abatement during the COVID-19 pandemic is simulated based on the industry (*lindi*). The random share of self-employed eligible for the abatement are given by the following table:

Table 2.23 Share of industries (*lindi*) eligible for SIC abatement

<i>lindi</i>	Share
2: mining, manufacturing, utilities	2.2%
3: construction	3.2%
4: wholesale & retail	13.8%
5: hotels & restaurants	61.5%
6: transport & communication	7.5%
8: real-estate & business activities	6.8%
9: public administration	24.2%
10: education	76.9%
11: health & social work	3.5%
12: other	30.2%

EUROMOD modelling: The one-off abatement for self-employed is simulated as part of the EUROMOD 2020 baseline, whereas COVID-19 compensation schemes, including the self-employment grant, can be only triggered by using the LMA add-on.

2.6.4 Health insurance contributions (*tschl_sk*)

- ***Liability to contributions***

Everyone is obliged to be insured. Employees, employers and the self-employed pay a fixed rate from a defined assessment base. Government pays health insurance contributions for students, unemployed, etc. (the exact conditions are described in the next section). Others, who are not entitled to receive credited health insurance contributions and are not either employees or self-employed are also obliged to pay and are registered under the category of “voluntary payers”.

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

The assessment base for employees and employers consists of the assessment base for social contributions and income from occasional activities and other payments made by the employer. The maximum assessment base has been abolished (5 times the average wage two years prior before 2017 and 3 times before 2013).

Since 2011, health insurance contributions are also paid from income from dividends with the rate of 10%. In 2013, the rate was increased to 14%. The maximum assessment base is set at 10 times the average wage two years prior. Before 2013, the maximum was fixed at 3 times the average wage two years prior. Receivers of income from dividends were entitled to HIC allowance before 2013, which could be deducted from income from dividends, in the amount of 44.2% of the average wage two years prior. Since 2017 health insurance contributions from dividend have been abolished.

Since 2013, health insurance contributions are paid from income from agreements if a person is not entitled to receive credited health insurance contributions (see 2.6.5). The rate is the same as for the employee and employer.

Since 2023, employees' health insurance contributions are subject to minimum payments (which is a different concept than minimum assessment base). The sum of employee and employer health contributions has to be equal to at least 14% of the MSL. If the sum of standard contributions is lower, the employee has to pay the difference on top of their standard contributions. The self-employed, disabled and those receiving the credited health insurance contributions on any given day (see 2.6.5) do not have to pay the equivalent amount of the minimum contributions for that day.

The self-employed assessment base is the same as in the case of the social insurance contributions. However, the contributions paid based on the previous year income are then assessed against income in the given year and cleared after filing of a tax return. All self-employed are required to pay health insurance contributions at least from the minimum assessment base, which is 50% (44.2% before 2013) of the average wage two years prior. This is true regardless of earnings in the previous year. Since 2017 the maximum assessment base has been abolished (5 times the average wage two years prior before 2017 and 3 times before 2013).

Everyone in the Slovak Republic has to be insured. So people, who are not employees or self-employed and who are not entitled to credited health insurance contributions (see below), must pay a fixed rate of 14% of 50% of the average wage two years prior. Before 2011, the fixed rate was paid on the minimum wage adjusted by a given coefficient.

- **Contribution allowances**

In 2015, the HIC allowance for low income employees was introduced. The allowance, in amount of EUR 380 (minimum wage in 2015) per month, reduces the assessment base for both employees and employers. The allowance decreases by €2 with every €1 increase in wage and is equal to zero with income at EUR 570 per month. Since 2018, the HIC allowance for employers has been abolished. Currently only employees are eligible for the HIC allowances.

Since 2023, the minimum employee contributions are calculated after the HIC allowance is taken into account for the calculation of the standard contributions.

EUROMOD modelling: The minimum employee contributions are simulated only for those that would be liable during the whole year. For example, if a person receives both a pension and employment income in a single year, we do not know how this varies on a daily basis and cannot distinguish working pensioners from those that just retired in the given year.

- **Contribution rates**

The health insurance contribution rates are presented in the following table for different categories of payers. People with disabilities pay only half of the standard rate.

Table 2.24 Health insurance contribution rates

	Employee	Employer	Self-employed	Voluntary
Standard rate	4%	10%	14%	14%
Disabled	2%	5%	7%	7%

2.6.5 Credited insurance contributions (*tsccthl_sk*)

- **Eligibility**

The Government pays health insurance contributions for persons, who fulfil at least one of the following conditions:

They are dependent children (student up to 30 years old, only until master degree claim), pensioners, disabled, receivers of parental allowance, maternity benefit, sickness or care benefits, or entitled to the material need benefit or registered unemployed.

The second condition is to have the annual income below a given threshold, which is calculated as 15 times the minimum subsistence for a single person. Before 2011, the threshold was calculated on a monthly basis as 44.2% of the average wage two years prior multiplied by a fixed coefficient. This policy was not in force in 2011 and 2012. During these years, the government paid the HIC for everyone, who fulfilled one of the first conditions listed above, no matter how high their income.

- **Contribution base**

Assessment base is equal to the average wage two years prior.

- **Contributed rates/ amounts**

The Government pays a rate of approximately 4% of the assessment base. The rate slightly differs each year. The rates of the credited health insurance contributions are presented in the following table.

Table 2.25 Contribution rates for credited health insurance contributions

2020	2021	2022	2023
<i>implied</i>	<i>implied</i>	<i>implied</i>	<i>implied</i>
3.19%	3.28%	3.18%	4.09%

Since 2020, the government no longer pays credited health insurance contributions in the form of a percentage of the assessment base. Instead, the contributions are paid as 12 equal monthly instalments. The sum is based on the difference between the total amount of resources allocated to the healthcare system in the state budget and the forecast revenue from the economically active population.

EUROMOD modelling: The change in the system since 2020 is modelled based on the same principle of *rate*assessment base*. The implied rate is calculated based on the total HIC payments by the state in the given year, the average monthly number of eligible recipients and the average wage two years prior.

2.6.6 Compulsory private pension (2nd pillar) insurance contributions (*tscpci_sk*)

A mandatory, private, funded pension pillar was introduced in January 2005. Within that system, 9 percentage points of the pension contributions paid by the employer flow directly to private pension funds and not to the Social Insurance Agency as in the previous years. The employer’s contributions to the first public PAYG pillar are correspondingly reduced, from 14% to 5% of the employee’s gross income. Similarly, 9 percentage points of the pension insurance contributions of the self-employed may be directed to the second pillar. In that case, 9% of the social insurance contributions assessment base is directed to the public PAYG system, and 9% to the private, funded pillar. Since 2013, the part of the contributions paid to private pension funds has been reduced from 9% to 4%. Contrary, the part contributed to the first public PAYG pillar increased by 5 percentage points. Since social insurance contributions on income from agreements were introduced, also part of old-age insurance contribution on this type of income can be directed to the second pillar. Since 2017, employer contributions to the privately-managed pension pillar (II. pillar) increase by 0.25 pp. each year while contributions to I. pillar decrease by 0.25 pp. each year. In year 2023, the increases were postponed and the rates will reach 6% and 8% respectively only in 2027 (as presented in the following table).

- *Contribution rates to II. Pillar*

Table 2.26 Contribution rates for compulsory private pension (2nd pillar)

	2020	2021	2022	2023	2024	2025	2026	2027
II. pillar	5.00%	5.25%	5.50%	5.50%	5.50%	5.75%	5.75%	6.00%
I. pillar	9.00%	8.75%	8.50%	8.50%	8.50%	8.25%	8.25%	8.00%

EUROMOD modelling: Information on the participation to the second pillar is only available since the 2019 wave of SILC. Therefore, the policy is set to on by default when using 2019 (or more recent) data. For the remaining systems and datasets combinations the policy is switched off due to lack of information on the participation to the second pillar. Nevertheless, the policy can be also switched on in those cases and the participation will be modelled randomly based on probabilities derived from external data in 2006. For the purpose of switching on/off the policy the country-specific extension “2PC – 2nd Pillar Pension Insurance Contributions” can be used.

2.6.7 Social Fund contributions (*tscerc_sk*)

- *Liability to contributions*

All employers have to create and manage their own Social Fund and are obliged to pay contributions to the fund. The money then has to be spent on given social policies within the given firm. It is therefore not part of the government tax revenue but increases the total labour cost of employees.

- *Income base used to calculate contributions*

The base is the sum of all gross wages paid in the given month and there is no maximum assessment base.

- *Contribution rates*

The minimum contribution rate is 0.6% for all employers. Firms that earned a profit in the previous calendar year and paid up all their tax and contribution liabilities can contribute up to 1%. Further contribution rate of up to 0.5% can be paid based on a collective bargaining agreement.

EUROMOD modelling: The minimum contribution rate of 0.6% is assumed for all employees. Since this contribution is not part of the government tax revenue, it is not added to the standard income list for employers social contributions (*ils_tscerc*). Nevertheless, a country-specific income list (*il_sicer_ext*) is created for the purpose of storing this contribution along with the other payments made by the employer.

2.7 Direct taxes

2.7.1 Personal income tax (*tin_sk*)

The main tax simulated for Slovakia is the personal income tax. All residents are required to file income tax returns (or ask their employer to do the tax clearing on their behalf) if their annual taxable income exceeds 50% of the basic tax allowance.

- *Tax unit*

The tax unit is the individual.

- *Exemptions*

There are several tax exemptions i.e. income components that are part of pre-tax income, but do not have to be declared to the tax authorities, and thus are not included in the concept of taxable income:

- (a) all health-care and social insurance benefits,
- (b) social assistance benefits (material need benefits),
- (c) state social support benefits (child birth grant, child benefit, multiple birth benefit, parental allowance, social assistance benefits for severely disabled people, foster care allowances, funeral benefit, nursing allowance),
- (d) scholarships except graduate scholarship,
- (e) income from transferred, gifted or inherited immovable property,
- (f) alimonies,
- (g) luncheon vouchers (including contribution to meals consumed at canteen),
- (h) winnings in lotteries and other similar games operated under a license.

- *Tax allowances*

The basic tax allowance can be deducted from positive tax base of each taxpayer. It is applied on a monthly basis. In case of receipt of old-age pension, early old-age pension and service pension, the basic tax allowance is reduced by the amount of the pension received. If the pensions mentioned above exceed the basic tax allowance, there is no entitlement to the basic tax allowance.

The formula to calculate annual basic tax allowance is the following:

Table 2.27 Annual basic tax allowance calculation

Formula	Years in force
$21.0 * \text{MSL} - \text{poa00} - [\max(\text{Tax base before allowances} - 92.8 * \text{MSL}; 0) * 0.25]$	2020-2023
$19.2 * \text{MSL} - \text{poa00} - [\max(\text{Tax base before allowances} - 100 * \text{MSL}; 0) * 0.25]$	2007-2008; 2011-2019
$22.5 * \text{MSL} - \text{poa00} - [\max(\text{Tax base before allowances} - 86 * \text{MSL}; 0) * 0.25]$	2009 – 2010

Note: MSL = minimum subsistence level

The spouse tax allowance can be deducted from the positive tax base of each taxpayer living with his/her spouse if he/she satisfies one of following conditions: Takes care of child up to 3 years old or receives caring benefit or is disabled or is registered unemployed at Labour office. Before 2013, no income, or income below the basic tax allowance, of spouse was the only condition. When computing the income of the spouse, the following types of income are taken into account: gross market income (employment, self-employment, investment and property income, private pensions, alimonies etc.), health and social insurance benefits. The tax credit, state social support benefits and scholarships are not assessed as part of the spouse's income. The spouse tax allowance is applied on a monthly basis. Since 2011, not active earnings are not used in computation the allowances. Not active earnings include income from property and investment income. The formula for deriving spouse tax allowance is:

Table 2.28 Spouse tax allowance calculation

Formula	Years in force
$19.2 * \text{MSL} - [\max(\text{Tax base before allowances} - 176.8 * \text{MSL}; 0) * 0.25] - \text{income of the spouse}$	2007-2008; 2011-2023
$22.5 * \text{MSL} - [\max(\text{Tax base before allowances} - 176 * \text{MSL}; 0) * 0.25] - \text{income of the spouse}$	2009 – 2010

Note: MSL = minimum subsistence level

The supplementary pension saving allowance was in force during years 2006 – 2010. Each taxpayer could lower his tax base by deducting the amount of supplementary pension savings, special purpose savings and life insurance during the tax year. The three types together couldn't exceed € 398.33 (SKK 12 000) yearly. The supplementary pension saving allowance was applied only on annual basis, i.e. during tax clearing. Since January 2011, the allowance is not valid. The supplementary pension saving allowance in the yearly amount of €180 has been reintroduced as of 2014. However the saver has to fulfil certain conditions. The allowance is not simulated. As of 2013 voluntary contributions to the privately managed fully funded pillar up to 2 % of gross earnings net of employee social security contributions are tax-deductible. Maximum yearly limit for this tax relief is calculated as: $2 \% \times 60 \times \text{AW}(t-2)$, where $\text{AW}(t-2)$ is the average wage two years ago. It is legislated that this relief will be automatically abolished as of 2017.

- **Tax base**

Income liable to personal income tax includes wages, salaries, income from business activities, fringe benefits, capital incomes less dividends, interests and rental income. The tax base for employees is computed as taxable income less social insurance contributions (also applies to compulsory contributions to the second pillar). For the self-employed, the tax base is computed as taxable income minus social insurance contributions and minus tax-deductible expenses. The self-employed are allowed to deduct previous losses (going back up to seven years) from their taxable income. For the other taxpayers, the tax base is formed by deducting tax deductible expenses from taxable income.

If a taxpayer who is not a VAT taxable person (i.e. has an annual turnover^[1] that is less than 49 790 Euro) and does not deduct documented expenses, he/she shall be free to deduct flat-rate expenses equal to 60% (40% before 2017) of the aggregate income from self-employment. The ceiling for the flat-rate expenses amounts to €20 000 per year (€420 per month before 2017). The flat-rate deduction covers all expenses except social security contributions. The taxpayer who applies flat-rate expenses shall in addition be free to deduct documented social security contributions.

Since 2016, capital income is excluded from the main tax base and taxed separately at a flat rate of 19%. No allowances or deductions are applicable to the tax base except for the compulsory social security contributions levied on this income.

Since 2020, self-employment income is also treated as a separate tax base. The tax allowances are first used to reduce the employee tax base. The self-employed tax base is then reduced only by the sum of the allowances exceeding the employment income.

EUROMOD modelling: Capital income is all assumed to be cleared through the withholding tax (see below for details), and is thus treated separately from all other calculations even before 2016.

- **Tax schedule**

Before 2013, a flat rate of 19% was applied.

In 2013, two rates were introduced, with threshold defined on annual basis:

Table 2.29 Tax schedule

Bracket number	Lower limit	Upper limit	Rate
1	0	176.8*MSL	19%
2	176.8*MSL	-	25%

Note: MSL = minimum subsistence level

In 2020, two alternative tax schedules were introduced for self-employment income depending on the annual turnover:

Table 2.30 Self-employment tax schedule

Annual turnover		Bracket number	Lower limit	Upper limit	Rate
2020	2021-2023				
<= €100 000	<= €49 790	1	0	-	15%
> €100 000	> €49 790	1	0	176.8*MSL	19%
		2	176.8*MSL	-	25%

Note: MSL = minimum subsistence level

^[1] The turnover for twelve consecutive months is considered

EUROMOD modelling: Input data do not include information on turnover. The condition is therefore approximated by profit (*yse*) and self-employment contributions (*ils_sicse*), assuming everyone applies the 60% flat-rate deductions, by the formula $turnover = (yse + ils_sicse)/(1-0.6)$

2.7.2 Tax credits

There are three types of tax credits, which are a form of negative tax. The amount of the tax credit is deducted from the tax liability. If the tax liability is lower than the tax credit, the difference is received by the tax payer.

- 1) **Tax credit on dependent child** can be claimed by only one parent of a dependent child. Until June 2022, the parent had to fulfil one of the following conditions:
 - a. was employed and earned annually at least 6 times the minimum wage
 - b. was self-employed and had an annual gross revenue from self-employment at least 6 times the minimum wages and positive tax base

The tax credit is applied on a monthly basis (therefore the eligible person must earn at least half of the minimum wage during the month to be eligible to claim the tax credit for the respective month). If she or he fails to fulfil the condition on a monthly basis but does fulfil it on an annual basis, the taxpayer is able to apply for under-payments of the tax credit through the annual tax clearing or by filing a tax return. In contrast, if the taxpayer fulfils the condition only in certain months but does not fulfil it on the annual basis (for example due to losing a job in the middle of the year), the tax credit claimed throughout the year does not have to be paid back.

The monthly amounts of the tax credit per child are:

Table 2.31 Dependent child tax credit amounts (€ per month)

Child age	2020	2021		2022		2023
		Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	
0-18 years	-	-	-	-	-	€140.00
0-6 years	€45.44	€46.44	€46.44	€47.14	€70.00	-
6-15 years	€22.72	€23.22	€39.47	€43.60	€70.00	-
Above 15 years	€22.72	€23.22	€23.22	€23.57	€40.00	-
Above 18 years	-	-	-	-	-	€50.00

Since July 2022, the condition of minimum income was replaced by an upper limit on the tax credit that can be claimed by an individual taxpayer. The limit is a percentage of the partial tax base from employment and self-employment before allowances (*temp_tintb_s*) depending on the number of children as in the following table:

Table 2.32 Upper limit on the child tax credit (% of the partial tax base)

Number of children	1	2	3	4	5	6+
	20%	27%	34%	41%	48%	55%

If the number of children changes throughout the year, the average percentage limit (weighted by the number of months in which it is valid) is used for the whole year.

- **Policy changes**

Changes in 2020

No changes

Changes in 2021

Since July 2021, 1.7-times the basic amount is provided for children 6 to 15 years old.

Changes in 2022

The multiple for children 6 to 15 years old is increased to 1.85 in January 2022.

Since July 2022, the credit amounts were increased to €70 for children younger than 15 years and to €40 for children older than 15 years, the annual indexation in line with the growth of the MSL was abolished, and the condition of minimum income was replaced by an upper limit on the tax credit.

Because the change affected only the second half of the year in 2022, 50% of the annual tax base before allowances is taken into account unless the taxpayer started their (self-) employment in July 2022 or later.

If any taxpayer received a lower amount of the tax credit because of these changes in the second half of 2022, the original amount would be provided instead.

Changes in 2023

The amount for younger children increased to €140 and the amount for older children increased to €50. At the same time, the age threshold increased from 15 to 18 years.

The upper limit on the tax credit (on the annual but not the monthly basis) is calculated based on the sum of the tax bases of both parents.

EUROMOD modelling: All individuals with self-employment income are eligible to the tax credit on dependent child in the simulation. In the system valid from July 2022, the percentage upper limit on the child tax credit is not recalculated on a monthly basis, but the total number of dependent children is taken for the whole year. The upper limit on the tax credit is calculated based on the higher tax base of the two parents but is then assigned to the family head regardless. 50% of the tax base is used in 2022 for all taxpayers. Policy changes over the year are simulated using the FYA extension which is turned on for the baseline by default.

- 2) **Employee tax credit** can be claimed by employees, who have worked at least 6 months during the year and their annual earnings are at least 6 times the minimum wage. The formula for deriving the employee tax credit depends on annual income. If the income is below 12 times the minimum wage, the tax credit is computed as 19% of the difference between the basic tax allowance and the minimum wage less social insurance contributions. If the annual income exceeds 12 times the minimum wage, the tax credit amount is calculated as 19% of the difference between the individual basic tax allowance and taxable income. The tax credit becomes zero when taxable income is equal to the basic tax allowance. The employee tax credit is in force since 2009. Due to the introduction of the HIC allowance and high amount of minimal wage the effective employee tax credit is now equal to 0.
- 3) **Tax credit on mortgage interest.** Since 2018, the taxpayer will be allowed to deduct mortgage interest from their own tax liability (maximum amount is EUR 400 per year for maximum 5 years in row). Only taxpayers younger than 35 years old and with average income below 1.3 times the average wage two year prior are eligible.

2.7.3 Withholding tax

Withholding tax is part of the PIT, although it is recorded as a separate tax. It is levied on income

originating from sources in the territory of the Slovak Republic:

- interests, winnings and other income from deposits
- interests, bonuses and other forms of yield from bonds and similar securities
- prizes in cash won in lotteries and other similar games without license
- incomes earned under a supplementary pension savings scheme
- paid under an insurance policy for the attainment of a certain age
- incomes of authors for their articles for newspapers, magazines, radio, or television, unless they are treated as artistic performances

These incomes are taxed at a 19% flat rate. The tax base for the incomes mentioned above (except incomes of authors) shall correspond to the income alone, with no deductions possible. The tax base in the case of incomes of authors shall correspond to the income, less 40%. Once withheld, the tax is considered cleared and does not enter the tax returns. However, the tax withheld can also be treated as a tax advance and the taxpayer can deduct such tax advances from the tax in their tax return. If the tax which was withheld exceeds the tax calculated by the taxpayer in their tax return, the taxpayer shall be entitled to a refund of the tax overpayment. In practice, more than 90% of all capital income is processed through the withholding tax and does not further figure in the tax returns.

EUROMOD modelling: All capital income is assumed to be subject to the withholding tax and does not enter other PIT calculations.

2.7.4 Tax on dividend income

In 2017 the tax on dividend income was introduced. The tax rate on dividend income is 7 %.

EUROMOD modelling: Tax on dividend income is simulated as part of the personal income.

2.8 Other COVID-19 related temporary compensation measures

2.8.1 Pandemic nursing benefit (*bccmc_sk*)

- **Definitions**

There is a special unit of analysis (*tu_bccmc_sk*) for the nursing benefit, which contains parents and their children up to 11 years old.

- **Eligibility conditions**

Only one parent can receive the benefit per eligible child during school closures. The parent must have been contributing to the sickness insurance in the past. It cannot be combined with the Kurzarbeit benefit.

EUROMOD modelling: It is assumed that the parent with lower income applies for the benefit. 3 month duration of the benefit is assumed. The nursing benefit is simulated before Kurzarbeit because it is assumed to be the preferred option. 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 the scheme are defined in the TransLMA_sk policy, which is switched on

automatically by the add-on. For more information about the modelling of labour market transitions, please consult the “Simulating labour market transitions in EUROMOD” document.

- **Benefit amount**

The amount equals 55 % of the Daily Assessment Base (Denní vymeriavací základ) for sickness insurance. The maximum amount of the DAB is calculated from $2 * \text{average wage two years before}$. No employment income is received during the receipt of the benefit. In April 2021 the wage replacement rate increased to 75 % of the DAB.

EUROMOD modelling: Policy changes over the year are not implemented due to lack of information on when individuals started to receive the scheme. Therefore, the policy rules implemented in EUROMOD correspond to those in place on June 30 of each year. The increase in the replacement rate to 75 % is not implemented in the model because most of the take-up in 2021 took place before the legislative change.

- **Subject to taxes/SIC**

Exempt.

- **Take up**

In 2020, 35% of eligible families are assumed to take up the benefit based on random assignment. In 2021 the take-up is assumed to be 10% and in 2022 3.5%. In 2023, the policy is still in place, but there is essentially no take-up.

2.8.2 Kurzarbeit - percentage (*yemcomp_sk*)

- **Definitions**

The unit of analysis is the individual. Only the percentage compensation of the gross income of employees in closed business is simulated. The second alternative of a lump-sum subsidy is not simulated because it is meant to compensate income losses of the firms rather than the employees themselves.

- **Eligibility conditions**

The individual is currently an employee working in a private business that closed during the pandemic, and he/she is not already in receipt of the pandemic nursing benefit.

EUROMOD modelling: The nursing benefit is simulated before *Kurzarbeit* because it is assumed to be the preferred option. 7 month duration of the support is assumed in both 2020 and 2021. Closed businesses are distinguished between compulsorily and voluntarily closed. Eligibility is simulated as a random share of workers in different sectors (*lindi*) based on the following table:

Table 2.33 Share of workers in different industries (*lindi*) receiving percentage Kurzarbeit

<i>lindi</i>	Share (2020)	Share (2021)
Compulsory closure		
4: wholesale & retail	38%	51%
5: hotels & restaurants	26%	18%
8: real-estate & business activities	2%	2%
12: other	4%	5%
Voluntary closure		
1: agriculture & fishing	1%	1%
2: mining, manufacturing, utilities	53%	38%
6: transport & communication	9%	10%
8: real-estate & business activities	1%	1%

EUROMOD modelling: 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_sk policy, which is switched on automatically by the add-on. For more information about the modelling of labour market transitions, please consult the “Simulating labour market transitions in EUROMOD” document.

- **Benefit amount**

Employees in closed businesses receive 80% of their initial gross wages from the employer. The benefit amount then equals 80% of the initial gross wages (i.e. 100% of the new reduced salary) and, in practice, works as a reimbursement to the firm. Employers continue to pay the employer contributions levied on this reduced salary. The benefit was increased to 80% of total labour cost (gross wages + employer contributions) calculated from the reduced wages in October 2020 and to 100% of labour cost in February 2021. The monthly cap is €1100 for compulsorily closed and €880 for voluntarily closed businesses (unified at €1100 since October 2020). The employer continues to pay any wages and employer SIC in excess of this limit. Since July 2021, the conditions have returned to the initial setup valid until September 2020.

EUROMOD modelling: Policy changes over the year are not implemented due to lack of information on when individuals started to receive the scheme. Therefore, the policy rules implemented in EUROMOD correspond to those in place on June 30 of each year. The compensation paid by the government is stored in `bwkmcee_s` and is limited to the compensation cap. The part of the reduced wage exceeding the compensation cap is still paid by the firm and is stored in `yemmc_s`. In 2021, the employer contributions are assumed to be credited if the compensation paid by the government is below the compensation cap. Therefore, the total benefit equals the sum of `bwkmcee_s` and the credited contributions, up to the compensation cap. Otherwise, `bwkmcee_s` already includes the maximum reimbursement possible of €1100. The credited contributions do not take into account certain exemptions and reduced rates of the employer contributions and assume the full rate of 35.2% (social + health contributions) for all workers.

- **Subject to taxes/SIC**

Yes – treated as standard wages.

- **Take up**

Once eligibility is determined by the random assignment, full take-up is assumed.

2.8.3 Self-employment grant (*ysecomp_sk*)

- **Definitions**

The unit of analysis is the individual.

- **Eligibility conditions**

The individual is currently self-employed, has been paying social insurance contributions, is not an employee at the same time, and has suffered revenue loss during the pandemic. Since October 2020, the self-employed can also receive employment income which will then be subtracted from the grant amount. Since March 2022, the duration of past social insurance has to be at least 24 months.

EUROMOD modelling: There is no distinction in the data between the self-employed and sole owner-managers of incorporated corporations. At the same time, Euromod assumes that all self-employed pay at least the minimum social insurance. Therefore, only the grant based on revenue loss is simulated and not the second alternative of a lump-sum transfer for other individuals who lost all their income. Duration of the policy is assumed to be 7 months in 2020, 6 months in 2021, and 2 months in 2022. Take-up is simulated as a random share of eligible self-employed in different sectors (*lindi*) based on the following table. No actual take-up is simulated for 2022.

Table 2.34 Share of self-employed in different industries (*lindi*) receiving the grant

<i>lindi</i>	Share (2020)	Share (2021)	Share (2022)
1: agriculture & fishing	2%	1%	0%
2: mining, manufacturing, utilities	14%	7%	0%
3: construction	20%	11%	0%
4: wholesale & retail	17%	8%	0%
5: hotels & restaurants	5%	3%	0%
6: transport & communication	6%	3%	0%
7: financial intermediation	2%	1%	0%
8: real-estate & business activities	1%	0%	0%
10: education	2%	1%	0%
12: other	11%	6%	0%

EUROMOD modelling: 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_sk policy, which is switched on automatically by the add-on. For more information about the modelling of labour market transitions, please consult the “Simulating labour market transitions in EUROMOD” document.

- **Benefit amount**

The size of the grant depends on the percentage fall in revenue in that month. The decrease is estimated either relative to the average for the last year, the same month in the last year, or to February 2020. The monthly amounts are:

Table 2.35 Monthly self-employment grant based on revenue loss

Revenue loss	Amount		
	Apr-Sept 2020, Jul-Dec 2021	Oct 2020 – Jan 2021, Jan-Feb 2022	Feb-Jun 2021
< 20%	€0	€0	€0
20% - 29,99%	-	-	€330
30% - 39,99%	-	-	€420
20% - 39,99%	€180	€ 270	-
40% - 49,99%	-	-	€510
50% - 59,99%	-	-	€600
40% - 59,99%	€300	€ 450	-
60% - 69,99%	-	-	€690
70% - 79,99%	-	-	€780
60% - 79,99%	€420	€ 630	-
80% - 100%	€540	€ 810	€870

For March 2022, the lump-sum amount is replaced by 60% of the SIC assessment base, at most 810€ per month, if the self-employed experienced at least 40% loss of revenue. No support is provided since April 2022.

EUROMOD modelling

The size of the revenue loss is simulated as the mid-point loss in the given brackets based on the share of recipients falling into those brackets as shown in the following table. Euromod simulates the loss directly to profits (*yse*) because of the lack of data on revenue. This should be a fairly accurate approximation given that the majority of the self-employed use the flat-rate expense deductions.

Policy changes over the year are not implemented due to lack of information on when individuals started to receive the scheme. Therefore, the policy rules implemented in EUROMOD correspond to those in place on June 30 of each year. For the year 2022, the policy is no longer in effect since April because essentially all restrictions have been lifted. Therefore, no take-up is simulated for the year.

Table 2.36 Share of eligible self-employed with simulated loss of income (*yse*)

Income loss	Share (2020)	Share (2021)	Share (2022)
10%	1%	0%	0%
20%	17%	3%	0%
30%	2%	2%	0%
40%	33%	5%	0%
50%	0%	3%	0%
60%	18%	6%	0%
70%	0%	3%	0%
80%	29%	79%	0%

- ***Subject to taxes/SIC***

Exempt.

- ***Take up***

Once eligibility is determined by the random assignment, full take-up is assumed.

3. DATA

3.1 EUROMOD SILC Database (EMSD)

From 2021 onwards, a new database prepared by Eurostat - EUROMOD SILC database (EMSD) is used to derive the EUROMOD input datasets. The EMSD includes:

- all UDB (User Database) variables;
- national SILC data supplied by the National Statistical Institute (NSI);
- EUROMOD variables created and imputed by Eurostat because of restricted data access or knowledge in-house.

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.

3.2 General description

The input database for the Slovak Republic is based on the EMSD. This is derived by Eurostat from a national version of the EU-SILC and it includes the full list of national SILC variables as transmitted by the NSI. No new input dataset was produced for this year's version of Euromod due to issues with the underlying SILC data and input data from last year were used instead. The official name of the product is "EU SILC 2020 - UDB (C20_release_21_09 rev.1) ", but it will be referred to as SK-SILC in this document. EU-SILC is an annual household income and living conditions survey based on a random sample and collected throughout the year by national statistical offices in a number of European countries. In the Slovak Republic the survey has been carried out since 2005.

The survey collects information on household income, housing conditions, living conditions, employment, health status, access to health care, financial problems, housing problems and possibility to meet certain needs. SK-SILC contains more detailed information compared to the UDB version of the EU-SILC which is an advantage for micro simulation modelling. This chapter is in large portion based on the intermediate quality report of the EU-SILC by the Statistical Office of the Slovak Republic.

The observation units are private households. The 2020 sample design is two-stage stratified sampling with 48 strata. Proportional number of households was selected from each stratum using simple random sampling based on two stratification criteria. The first is geographical stratification based on 8 self-governing regions corresponding to the NUTS 3 level. The second refers to the degree of urbanization and is based on 7 categories of a municipality's population size.

The survey has a four year rotational panel survey design. In the first year of the survey (EU SILC 2005) the sample was divided into four rotational groups. There were approximately 1500 households in each sub-group. In the year 2006 households of the 1st rotational group from the year 2005 were excluded and replaced by new households and in the year 2007 households of the 2nd rotational group from the year 2006 were excluded and replaced by a new one. In 2014 households from 4th rotational group were excluded and replaced by new households. In 2015 households from 3rd rotational group were excluded and replaced by new one. 2016 represent the beginning of the new 4 year panel with last four group replaced by new households.

The SK-SILC data is provided with weights attempting to correct for differential non response while scaling up sample numbers to the overall population. The correction was done in relation to the response rate, i.e. multiplying the weights by inverse value of response rate. Households were divided into strata (regional and rotational group) and it was assumed that each household in a stratum has the same probability of response. The empirical value of the response rate within the stratum yields the estimate of the probability of response for each household in the stratum.

Table 3.1 EUROMOD database description

EUROMOD database	SK_2020_b1
Original name	EU SILC 2020 - UDB (C20_release_21_09 rev.1)
Provider	The Statistical Office of the Slovak Republic
Year of collection	2020
Period of collection	03/02 to 28/08
Income reference period	2019
Sample size	5 542 households / 13 800 individuals

3.3 Data adjustment

Adjustments to variables are kept to a minimum. Some minor data cleaning has been 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 date of interview have been dropped from the sample (33 individuals). The resulting sample includes 5,542 households and 13,767 individuals.

3.4 Imputations and assumptions

3.4.1 Time period

The SK-SILC information on demographic variables refers to the time of data collection (February-August). All income information refers to the previous fiscal year (January-December) and is expressed in annual sums. In EUROMOD database, all monetary variables are transformed into monthly averages by dividing amounts by 12. We assume that income is received at the same rate throughout the year. Some of income variables have additional information about number of months per year, during which particular income was received. Thus we can refine the simulations.

3.4.2 Gross incomes

The SK-SILC contains information about gross monetary incomes. The net income is available only at the household level, and is calculated as the difference between household gross income (sum of gross incomes of members of households) and the amount of taxes and social insurance contributions paid on employment and self-employment income and property tax. The information about taxes and social contributions is available only at the household level.

3.4.3 Disaggregation of harmonized variables

- In the national SK-SILC dataset, information about different types of employment income is available, namely employment income (py010g) consists of separate variables for gross wage from main and second job, employment income from abroad, income from agreements, other payments from employer and profit shares.
- Investment income has two subcategories: interest and profits and investment income from dividends.
- Fringe benefits are expressed in kind in six variables: meal vouchers, contributions for gas, electricity and water, contribution for phone, accommodation provision, benefit from company car, and other fringe benefits.
- Old age pension is divided into main, military and other.
- There is also available information about different types of survivor's pensions. In the national version of SILC, there are separate variables for widows, widowers and orphans pension.

3.5 Updating

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

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

4. VALIDATION

4.1 Aggregate Validation

EUROMOD results are validated against external benchmarks. Detailed comparisons of the number of people receiving a given income component and total yearly amounts are shown in Annex 3. Both market incomes and non-simulated taxes and benefits in the input dataset as well as simulated taxes and benefits are validated against external official data. The main discrepancies between EUROMOD results and external benchmarks are discussed in the following subsections. Factors that may explain the observed differences are also discussed. Note that the current version of the model (16.0+) uses the same input data from SILC 2020 as the last year's version (15.0+). As a result, most of the validation results remain unchanged and only a new year of external data is added to the comparison.

4.1.1 Components of disposable income

Comparison of the composition of disposable income used in EUROMOD and in SK-SILC is shown in the following table. The main difference in definitions is the exclusion in EUROMOD of non-monetary income from using a company car. In addition, the components of disposable income which are predominantly simulated in EUROMOD are shown in *italics*.

Table 4.1 Components of disposable income

	EUROMOD [2020-2023]	SK-SILC [2021]
	ils_dispy	HY020
Employee cash or near cash income	+	+
Employer's social security contributions	0	0
Company car	0	+
Other in-kind & fringe benefits	0	0
Contributions to individual private pension plans	0	0
Cash benefits or losses from self-employment*	+	+
Pension from individual private plans	+	+
<i>Unemployment benefits</i>	+	+
Old-age benefits	+	+
Early retirement pension	+	+
Military, police pension	+	+
Survivor' benefits	+	+
Sickness benefits	+	+
Disability benefits	+	+
Education-related allowances	+	+
Income from rental of a property or land	+	+
<i>Family/children related allowances</i>	+	+
<i>Social assistance</i>	+	+
Housing allowances	+	+
Regular inter-household cash transfer received	+	+
Interests, dividends, etc.	+	+
Income received by people aged under 16	+	+
Regular taxes on wealth	-	-
Regular inter-household cash transfer paid	-	-
<i>Tax on income and social contributions</i>	-	-
<i>Repayments/receipts for tax adjustment</i>	+	+

Note: *Self-employment income only takes values greater or equal to 0, i.e. it ignores losses from self-employment in both SK-SILC and EUROMOD

4.1.2 Validation of market incomes

The first table in Annex 3 (A3.1) compares the number of recipients of either employment or self-employment income in EUROMOD's input database to the corresponding information obtained from the Social Insurance Agency and personal income tax returns. No adjustment is made to reflect employment/ self-employment trends in subsequent years. The number of people receiving gross wages from standard employment in SILC is relatively in line with external statistics. The small overrepresentation could be caused by the growing unemployment levels after the Covid-19 pandemic which cannot be captured in the input database. The same is true for the number of people receiving self-employment income even though the gap is slightly larger in this case. The gap can be explained by the fact that a small fraction of people with low income are not required to file a tax return, which serve as the external statistic. On the other hand, the number of people receiving income from agreements is significantly underrepresented. This discrepancy can be explained by the fact that the variable in SILC contains information only on agreements on the performance of work (*dohoda o vykonaní práce*) but not on agreements on work activities (*dohoda o pracovnej činnosti*), which was included in the external statistics. Finally, the number of people reporting income from renting of property is substantially higher than the number reported in the tax returns. This is further highlighted by the fact that tax returns are filed individually, while SILC reports property income at the household level. This is somewhat

counter-intuitive because while tax evasion is likely in this case, the discrepancy in the aggregate income reported does not indicate this.

Table A3.2 shows the aggregate amounts of income received as reported in SILC and external statistics. Gross wages are represented very accurately, but given that the number of recipients is slightly higher in SILC, this indicates a slightly lower average wage than shown in the external data. The income from agreements in SILC is even more underrepresented than the number of recipients, which leads to a lower reported average wage as well. On the other hand, the aggregate amount of self-employment income remains highly overestimated in EUROMOD's input dataset compared to external data from the tax returns. One reason is that for the self-employed, SK-SILC reports only non-negative profit from self-employment whereas the external statistics takes into account all self-employed filers. Aggregate profits from the tax returns are calculated as the difference between aggregate revenue and aggregate expenses, so it also includes those who make a loss. In the compared years, there were over 30,000 individuals or about 8-10% reporting a loss. Another reason is a high degree of tax evasion suspected among the self-employed. However, this is in stark contrast with the amount of property income reported in SILC, which is significantly lower than the amount reported in the tax returns, despite the fact that the number of recipients in SILC is higher overall. This suggests significant underreporting by the survey participants themselves.

4.1.3 Validation of taxes and social insurance contributions

The number of payers of taxes and social security contributions is compared with external benchmarks in Table A3.3. The number of people paying income taxes is substantially over-simulated in EUROMOD. This is most likely caused by the significant overrepresentation of self-employment income in the input data. As a result, more self-employed are simulated as having income higher than the basic tax allowance and thus having a positive tax liability. This is true despite the fact that the number of recipients of the child tax credit, which reduces the final tax liability, is overestimated by up to 15% as well. This is caused by a higher number of children of working parents in the input data as well as the simplified simulation, where all self-employed are eligible for the tax credit because we lack information on their revenue to accurately simulate the minimum income condition.

The lack of information on the self-employment revenue is also the reason for the simplified simulation of their social security contributions. EUROMOD assumes every self-employed person pays social insurance, which leads to overestimation of the number of payers of some contributions by over 80%. In reality, the self-employed are obliged to pay social insurance only starting in the second year of their self-employment and only if their previous year's revenue exceeds 50% of the annual average wage two years prior. In contrast, payment of health insurance is compulsory for all self-employed and these are well simulated in EUROMOD. Similarly, the inclusion of the II. pillar pension contributions in the baseline based on the participation derived directly from the SK-SILC data proves very accurate for the self-employed.

In contrast, the number of payers of both the employer and the employee contributions is simulated very accurately in EUROMOD. The gap with external data does not exceed 10% in most of the cases. The small discrepancies are likely only the result of uprating inaccuracies or inaccurate survey sampling of certain groups of people with various exceptions in the system of social insurance. The only exception is the II. pillar contributions, where the number of payers is somewhat underrepresented probably due to under-sampling in the input data.

The following Table A3.4. shows simulated aggregate revenue from taxes and social security contributions. First, EUROMOD simulation underestimates the personal income tax revenue compared to the external statistics in all years, which is somewhat surprising. On the one hand, aggregate employment income is represented very accurately in the input data. On the other hand,

given the progressivity of the Slovak PIT system, the underrepresentation of high-income earners usually present in survey data can contribute to the under-simulation of the PIT revenue. In addition, the amount of property income, which is also subject to the PIT, is substantially underrepresented in the input data. However, the aggregate self-employment income is substantially overrepresented, and this more than outweighs the lack of property income in the input dataset. On top of that, the revenue from the withholding tax on capital income and dividends, which is recorded separately in the external data, is included in the final PIT revenue in EUROMOD.

Next, the aggregate amount of the tax credit on dependent children is also substantially over-simulated in EUROMOD. The higher number of simulated recipients relative to the external statistics plays a major role. In addition, SILC data contain relatively more children of younger age compared to the administrative databases. Because younger children are eligible for a higher amount of the tax credit, this also contributes to the over-simulation. As a result of the 2022 reform of the child tax credit, which significantly increased the amounts (especially for younger children) the discrepancy between simulated and external statistics grows to 28%.⁶

Finally, EUROMOD simulates the aggregate amounts of employee and employer social security contributions very well. The discrepancies are usually in line with the discrepancies in the number of payers. Alternatively, the average revenue is slightly higher for a few types of contributions, which can be attributed to inaccurate simulation of some of the exceptions and reduced rates in EUROMOD. This more than outweighs the lower average wages in the input dataset relative to the external statistics. The only exception is the revenue from the employer health insurance, which is slightly under-simulated despite the higher simulated number of payers. In contrast, the self-employment contributions remain significantly overestimated. This is a combination of high overestimation of aggregate self-employment income and the assumption that every self-employed person pays at least the minimum contribution. According to administrative microdata, many self-employed do not pay social insurance contributions at all and many end up closing their business in the first year in order to avoid paying the contributions from the second year onwards. The only exception here is the II. pillar pension contributions, which are only slightly overestimated for the self-employed because eligibility is determined directly from the input dataset.

4.1.4 Validation of benefits

The numbers of recipients of benefits, whether simulated or taken directly from SILC data, are compared to external benchmarks in Table A3.5. The number of people receiving pension income is relatively well represented in the input data even though there is slight under-sampling of people receiving survivor's (widow, widower, orphan) or early retirement pensions. Similarly, recipients of the material need benefits are simulated quite accurately once random non-take-up is assumed in the model. The small discrepancies are caused by the fact that the take-up parameter is calibrated based on the amount of expenditure and not the number of recipients. In contrast, recipients of the special allowance are under-sampled in SILC because it inaccurately represents the poorest households in general.

Next, the number of recipients of other non-simulated benefits is also poorly represented in the input data. Recipients of the nursing and accidents benefits are substantially under-represented, most likely due to their short-term nature. On the other hand, the sickness benefit is very accurately represented in the income reference year of 2019. However, the static nature of the input dataset cannot accurately capture the increase in the number of recipients after 2020 due to the Covid-19 pandemic. A similar change of pattern can be observed for the child care allowance, which is under-represented in the income reference year but significantly over-represented

⁶ See also [this presentation](#) for the 2023 EUROMOD Annual Meeting.

thereafter. This is explained by the legislative increase in the sum of the parental allowance in 2020, which means that the alternative child care allowance became an even less preferred option. Moreover, recipients of the benefit for caring for a disabled are under-represented while recipients of the maternity benefit are over-represented in the data, which can only be explained by sampling inaccuracies.

Finally, recipients of simulated benefits are simulated relatively accurately. The most accurate simulation is for the child benefit, where the gap is around 7%. In contrast, the recipients of the child birth allowance are under-simulated while they are over-simulated for the parental allowance. This overall pattern can be explained by the different age structure of dependent children in the input data relative to the actual population. While the total number of children is captured well in the data, there are not enough children born in the given year, and the number of children younger than 3 years old is over-represented. Last, the number of recipients of the unemployment benefit is over-simulated for the income reference year. However, the model cannot account for the rising unemployment rate in 2020-2021 following the Covid-19 pandemic, and thus the number of simulated recipients matches external statistics quite well by chance. Following the post-pandemic economic recovery in 2022, the number of recipients is again over-simulated

The next Table A3.6. evaluates the aggregate expenditure on benefits in EUROMOD relative to the external data. First, the expenditure on pensions is relatively well captured in the input data. The differences from administrative statistics mostly follow the differences in the number of recipients, with only the early retirement pension as an exception due to somewhat lower average amount captured in the input data relative to the external statistics. Similarly, the expenditure on the material need benefits is simulated very accurately due to the calibration of random non-take-up based on the actual expenditure. In contrast, the expenditure on the special allowance is even more under-represented in SILC than the number of recipients.

Next, the expenditure on other non-simulated benefits is also very poorly represented in the input data. Expenditure on most of the benefits is substantially under-represented with the gap exceeding the differences observed in the number of recipients. The survey respondents most likely do not realize the amounts they receive throughout the year due their short-term nature. For example, the reported expenditure on the maternity benefit is substantially lower than the actual expenditure despite a higher number of reported recipients. Also due to the static nature of the input dataset, the expenditure on the nursing benefit is especially very poorly captured in 2020 and 2021, but this might be partially offset by turning on the LMA add-on simulation of the pandemic nursing benefit. Similarly, the expenditure on the child care allowance is largely over-represented in 2020-2022 because it cannot account for the legislative change to the parental allowance in 2020.

On the other hand, the aggregate expenditure on simulated benefits is simulated quite accurately. The gap in simulated expenditure on the child birth grant is in line with the discrepancies in the number of recipients. However, the accuracy of the simulation of the parental allowance decreases from 2020. The higher sum provided to parents who were previously receiving the maternity benefit is simulated only based on the receipt of the benefit in the current year, which cannot accurately capture the actual situation for parents of older children. As a result, the expenditure is substantially under-simulated since 2020. Finally, the simulated expenditure on the unemployment benefit is much lower than the external data despite a relatively accurate simulation of the number of recipients. Using imputed previous wages for the benefit simulation is not a very reliable alternative to the information on a longer work history.

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 is 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

Measures of income distribution are present in Table A3.7. For the income reference period 2019, decile shares of total disposable income in EUROMOD are very similar to those produced by Eurostat. Only the share of income going to the first decile is 3% lower in EUROMOD. The other inequality measures presented in the table, namely the Gini coefficient and the S80/S20 ratio confirm that the overall income distribution is simulated quite accurately. Finally, while the figures for the median household disposable income is very close with the external source of information, the mean is slightly lower in EUROMOD probably because of the absence of the top earners as well as underreporting of some other types of income. These patterns are somewhat distorted for years 2020 and 2021 due to the inability to reflect labour market changes and simplified uprating of certain income components. Decile shares are still simulated quite accurately and the gap with external values does not exceed 5%. Income inequality closely reflects Eurostat data for 2021, but EUROMOD disposable income appears more equal in 2020 due to a higher share of income going to the bottom decile. The median and mean income are overstimulated by around 7-9%.

4.2.2 Poverty rates

Poverty rates by gender and age derived using EUROMOD simulations and those published in Eurostat statistics are shown in Table A3.8. In general, the simulated figures match the external statistics very well in 2019, with the gap usually not exceeding 5%. The largest gap of 9% is observed for females at the 40% median HDI threshold. In 2020 and 2021, however, the overall simulation worsens somewhat and the estimated poverty rates usually differ by around 10%. There are some notable exceptions where the poverty rates in EUROMOD are underestimated by 15-30%. However, these patterns are inconsistent across the years and affect different groups at different poverty thresholds. In general, the model cannot account for the dynamic changes caused by the Covid-19 pandemic, so this might one possible explanation.

4.3 Summary of “health warnings”

The final section summarizes particular aspects of the input dataset and of the way the Slovak tax-benefit system is implemented in EUROMOD which should be kept in mind when using the Slovak section of EUROMOD for doing analysis.

- 1) Self-employment income is highly overestimated in the dataset. This, together with the assumption that every self-employed person pays social insurance results in a significant over-simulation of self-employed social insurance contributions.
- 2) Short-term sickness benefits, maternity benefits, and unemployment benefits are strongly underestimated in the input dataset.
- 3) No adjustment is made for demographic and labour market changes taking place between the reference year of the dataset and simulated policy years. This undermines the accuracy of the simulation, especially given the fact that the dataset used in the latest version of

EUROMOD is one year older than usual. The years 2020-2023 were significantly affected by a series of major shocks that cannot be reflected in the simulation.

4) Simulated unemployment benefits are significantly underestimated.

5) Simulated poverty rates are lower than the figures reported by Eurostat in some cases in 2020 and 2021.

6) The maternity benefit (*bmact_s*) is only simulated from 2015 in EUROMOD. The pregnancy benefit (*bprct_s*) is simulated only from 2021. Both benefits are defined in an extension (Parental Benefits Extension) that is switched off in the baselines, i.e. the non-simulated component (*bma*) is being used⁷. When the extension is switched on, the non-simulated component is replaced by the simulated ones (*bmact_s*, *bprct_s*). The simulated numbers might differ significantly from external statistics as some policy rules cannot be simulated accurately due to lack of information in the underlying data.

7) The simulation of monetary compensation schemes (*yemcomp_sk* & *ysecomp_sk*) and of the pandemic nursing benefit (*bccmc_sk*) are triggered by the simulation of labour market transitions defined in policies *TransLMA_sk* and *bccmctime_sk*, respectively. Both policies become operational if the model is run in conjunction with the LMA add-on. The nature of these simulations is still experimental and only partially validated. Users are encouraged to refer to the “*Simulating labour market transitions in EUROMOD*” document prior to their use.

8) 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 and 2021 to be higher than disposable income in previous years.

5. REFERENCES

Eurostat online Database

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

⁷ The pregnancy benefit is not available even in the input dataset.

ANNEX 1. UPDATING FACTORS

Table 3.2 – Updating factors used for dataset, based on SK-SILC 2020

Index	Reference	2020	2021	2022	2023	Source	Income components updated
Harmonized consumer price index (index 2015=100)	\$HICP	108.47	111.53	125.05	138.71	EUROSTAT; AMECO Spring forecast for 2023 values	Used by the Policy Effects Tool (PET)
Consumer price index	\$f_cpi	135.5	139.78	157.59	174.38	https://www.finance.gov.sk/en/finance/institute-financial-policy/economic-forecasts/macroeconomic-forecasts/	afc, bcrdi, bdiot, bed, bfaot, bho, bsu, bunot, kfb, kfbcc, kivho, tad, tis, tpr, xhc, xhcmomi, xhcr, xhcot, xmp, xpp, yfb00, yls, ypp, ypt, yot
HICP - actual rentals for housing (index 2005=100)	\$f_house	102.96	103.86	108.15	119.96	Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_hicp_aind&lang=en); 2015 - IMF forecasts (WEO April 2014, http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx)	ypr
Average nominal wage, EUR	\$f_yem	1133	1211	1304	1437	http://www.finance.gov.sk/en/Default.aspx?CatID=340	yem, yemwg, yemot, yemcs, yemaj, yemab, yemtj, yem_a, yse, yse00, yse01, yiwg, ysv
Average 1 year-lagged nominal wage, EUR	\$f_yemla_g1	1092	1133	1211	1304	http://finance.gov.sk/Default.aspx?CatID=10725	bhl, bma, bunct, yempv
Average 2 year-lagged nominal wage, EUR	\$f_yemla_g2	1013	1092	1133	1211	http://finance.gov.sk/Default.aspx?CatID=10725	
Interest rate for household deposit	\$f_yiy	0.13	0.1	0.12	0.63	http://www.finance.gov.sk/en/Default.aspx?CatID=340	yiy, yiy00, yiydv
Average monthly old age pension, EUR	\$f_poa	487.37	505.68	518.76	643.70	https://www.socpoist.sk/646/1614s	poa00, poaml, poaot, pyr
Average monthly disability pension, EUR	\$f_pdi	284.53	293.06	299.28	373.96	https://www.socpoist.sk/646/1614s	pdi00

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Index	Reference	2020	2021	2022	2023	Source	Income components updated
Average monthly survivors pension, EUR	\$f_psu	272.46	282.76	288.06	359.65	https://www.socpoist.sk/646/1614s	psu00, psuor, psuwd
Minimum Subsistence level1, EUR	\$f_bsa	210.2	214.83	218.06	234.42	Statutory parameter	bsa, bsa00, bsaut, bsarw
Parental allowance, EUR	\$f_bcc	270	275.9	280	301	Statutory parameter	bcc00, bcc
Child benefit, EUR	\$f_bch	24.95	25.5	27.94	60	Statutory parameter	bch
Average sickness benefit, EUR	\$f_bhl	316	322	349.41	395.58	http://www.socpoist.sk/priemerne-vysky-nemocenskych-davok-1pripad/1622s	
Led index of employment income	\$f_yemLead	1211	1304	1437	1563	Calculated based on \$f_yem led by 1 year	ymwdt
Unit index	\$f_unit	1	1	1	1		
Average hourly wage, Agriculture and Fishing (lindi = 1), units of national currency	\$f_hourly_wage_lindi_1	6.1338	6.5568	6.9535	7.6259	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Mining, Manufact. and Utilities (lindi = 2), units of national currency	\$f_hourly_wage_lindi_2	9.9602	10.6472	11.2912	12.3832	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Construction (lindi = 3), units of national currency	\$f_hourly_wage_lindi_3	8.4591	9.0426	9.5895	10.5169	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Wholesale and retail (lindi = 4), units of national currency	\$f_hourly_wage_lindi_4	8.6907	9.2902	9.8521	10.8049	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Hotels and restaurants (lindi = 5), units of national currency	\$f_hourly_wage_lindi_5	4.7664	5.0952	5.4034	5.926	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Transport and communication (lindi = 6), units of national currency	\$f_hourly_wage_lindi_6	10.3465	11.0602	11.7292	12.8635	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	

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Index	Reference	2020	2021	2022	2023	Source	Income components updated
Average hourly wage, Financial intermediation (lindi = 7), units of national currency	\$f_hourly_wage_lindi_7	16.0601	17.1679	18.2064	19.9671	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Real estate and business (lindi = 8), units of national currency	\$f_hourly_wage_lindi_8	8.0564	8.6121	9.133	10.0163	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Public administ. and defence (lindi = 9), units of national currency	\$f_hourly_wage_lindi_9	12.7018	13.578	14.3993	15.7918	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Education (lindi = 10), units of national currency	\$f_hourly_wage_lindi_10	8.8244	9.433	10.0036	10.9711	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Health and social work (lindi = 11), units of national currency	\$f_hourly_wage_lindi_11	9.4387	10.0898	10.7001	11.7349	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average hourly wage, Other (lindi = 12), units of national currency	\$f_hourly_wage_lindi_12	7.5441	8.0644	8.5522	9.3793	Computed from ESTAT tables nama_10_a64 (wages) and nama_10_a64_e (hours worked) up to 2019. The values for 2020-2022 are computed by multiplying the value of the previous year by the yearly increase of nominal compensation per employee, total economy, from AMECO.	
Average monthly wage (lindi = 1) - from national sources	\$f_monthly_wage_lindi_1	872	933	1009	1107	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 2) - from national sources	\$f_monthly_wage_lindi_2	1188	1289	1372	1506	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 3) - from national sources	\$f_monthly_wage_lindi_3	760	818	914	1003	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj

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Index	Reference	2020	2021	2022	2023	Source	Income components updated
Average monthly wage (lindi = 4) - from national sources	\$f_monthly_wage_lindi_4	1029	1119	1233	1353	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 5) - from national sources	\$f_monthly_wage_lindi_5	613	688	764	839	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 6) - from national sources	\$f_monthly_wage_lindi_6	1375	1474	1605	1762	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 7) - from national sources	\$f_monthly_wage_lindi_7	1969	2066	2247	2466	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 8) - from national sources	\$f_monthly_wage_lindi_8	1087	1130	1247	1368	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 9) - from national sources	\$f_monthly_wage_lindi_9	1653	1715	1800	2007	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 10) - from national sources	\$f_monthly_wage_lindi_10	1119	1159	1213	1352	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 11) - from national sources	\$f_monthly_wage_lindi_11	1226	1395	1430	1594	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj
Average monthly wage (lindi = 12) - from national sources	\$f_monthly_wage_lindi_12	814	880	982	1077	https://datacube.statistics.sk/#/view/sk/VBD_INTERN/pr0205qs/v_pr0205qs_00_00_00_sk (wages) https://datacube.statistics.sk/#/view/sk/VBD_SLOVSTAT/pr2051qs/v_pr2051qs_00_00_00_sk (employment)	yemwg, yemaj

ANNEX 2. POLICY EFFECTS IN 2022-2023*Preliminary: Indexation based on projected HICP for 2023*

Table A2.1 and Figure A2.1 show the effect of 2023 policies on mean equivalised household disposable income by income component and income decile group. The effect is estimated as a difference between simulated household net income under the 2023 tax-benefit policies (deflating monetary parameters by projected Harmonized Index of Consumer Prices, HICP) and net incomes simulated under 2022 policies, as a percentage of mean equivalised household disposable income in 2022.

In comparison to 2022 policies, (deflated) 2023 policies increased mean household disposable income by almost 5.3% in total. The change in household disposable income by deciles shows a strongly progressive pattern, i.e., lower income groups earn substantially more in relative terms. Households located in the second income decile experiment the highest increase in disposable income across the income distribution at over 9.5%. These patterns are mainly explained by changes public pensions and benefits which are more prominent in lower income deciles. Their indexation based on the previous year's inflation in times of falling inflation together with a series of policy changes contributes to significant growth in disposable income.

First, changes in non-means-tested benefits accounted for an increase in household disposable income of 0.71% while means-tested benefits accounted for an increase of 1.21%. In addition to the effect of indexation, the increase in the child benefit and tax credit played the key role. The latter contributed both to falling direct taxes, especially for the middle of the income distribution, as well huge increase in tax refunds falling under the means-tested benefits category.

Second, changes in the public pensions were the biggest contributor to the increase in disposable income as the average pensions increased by approximately 25% in 2023.⁸The main reason was that the indexation that would normally take place only in January 2024 was brought forward to mid-2023. The distribution of gains across income deciles reflects where the recipients of the public pensions are located.

Changes in social insurance contributions (SICs) caused negligible changes in disposable income. The most notable change is the slight increase in disposable income at the bottom of the income distribution due to lower self-employment SICs. This is caused by the fact that the increase in their minimal contributions, linked to the average wage two years prior, was lower than the measured inflation rate. Finally, lower direct taxes thanks to the higher child tax credit increased disposable income by 0.76% on average. There are no gains at the bottom of the income distribution where eligibility to the child tax credit is negligible. Similarly, the top deciles receive smaller gains due to a lower number of children in these households on average.

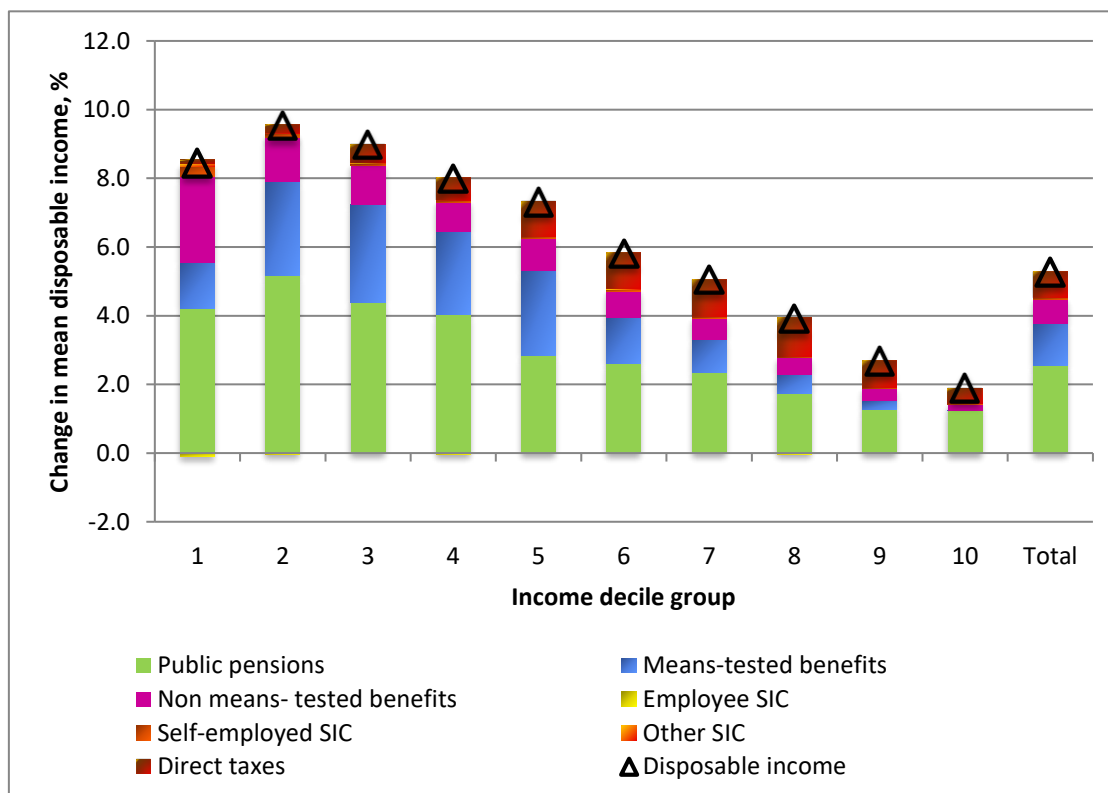
⁸ Pensions in the model are indexed based on year-over-year change in the average monthly pension.

Table A2.1: Policy effects in 2022-2023, using the CPI-indexation (CPI = 1.109), %

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	4.22	1.31	2.51	-0.10	0.30	0.09	0.10	8.44
2	0.00	5.17	2.74	1.27	-0.04	0.11	0.02	0.25	9.53
3	0.00	4.40	2.83	1.13	-0.02	0.07	0.01	0.55	8.97
4	0.00	4.03	2.42	0.84	-0.03	0.07	0.01	0.65	7.99
5	0.00	2.85	2.44	0.95	-0.02	0.06	0.01	1.03	7.31
6	0.00	2.60	1.35	0.76	-0.02	0.06	0.01	1.05	5.81
7	0.00	2.34	0.97	0.62	-0.01	0.03	0.01	1.08	5.04
8	0.00	1.73	0.55	0.49	-0.03	0.03	0.01	1.13	3.91
9	0.00	1.26	0.25	0.36	-0.01	0.03	0.00	0.78	2.68
10	0.00	1.24	0.01	0.18	0.00	0.01	0.00	0.45	1.89
Total	0.00	2.54	1.21	0.71	-0.02	0.05	0.01	0.76	5.27

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), i.e. 1.109.

Figure A2.1: Policy effects in 2022-2023, using the CPI-indexation (CPI = 1.109), %



ANNEX 3. VALIDATION TABLES

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

	Simulated (Y / N)	EUROMOD				External				Ratio			
		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Earnings (ils_earn)													
Gross wages (yemwg)	N	2,246	2,246	2,246	2,246	2,021	1,993	2,017	NaN	1.11	1.13	1.11	NaN
income : employment : temporary job (yemtj)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Income from agreements (yemaj)	N	297	297	297	297	545	535	547	NaN	0.55	0.56	0.54	NaN
Other payments made by employers (yemot)	N	446	446	446	446	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employment income (yse)	N	416	416	416	416	330	355	376	NaN	1.26	1.17	1.11	NaN
employment income from abroad (only disaggregated since 2010 SILC data) (yemab)	N	1	1	1	1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
[Covid-19] Compensation paid by firm (yemmc_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other original income (ils_origy - ils_earn)													
private transfers (ypt)	N	101	101	101	101	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income of children (yot)	N	4	4	4	4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Termination pay (yls)	N	6	6	6	6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Maintenance payments (xmp)	N	65	65	65	65	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Private pensions (ypp)	N	13	13	13	13	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Investment income- interests and profits (yiy)	N	659	659	659	659	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
property income (ypr)	N	87	87	87	87	58	60	63	NaN	1.49	1.44	1.39	NaN

Continued...

	Source	Comments
Earnings (ils_earn)		
Gross wages (yemwg)	SIA	-
income : employment : temporary job (yemtj)	-	-
Income from agreements (yemaj)	SIA	-
Other payments made by employers (yemot)	-	-
self-employment income (yse)	SIA, tax returns	-

Continued...

	Source	Comments
employment income from abroad (only disaggregated since 2010 SILC data) (yemab)	-	-
[Covid-19] Compensation paid by firm (yemmc_s)	-	-
Other original income (ils_origy - ils_earn)		
private transfers (ypt)	-	-
income of children (yot)	-	-
Termination pay (yls)	-	-
Maintenance payments (xmp)	-	-
Private pensions (ypp)	-	-
Investment income- interests and profits (yiy)	-	-
property income (ypr)	tax returns	-

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

	Simulated (Y / N)	EUROMOD				External				Ratio			
		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Earnings (ils_earns)													
Gross wages (yemwg)	N	25,890	27,835	29,909	32,960	25,363	27,088	29,289	NaN	1.02	1.03	1.02	NaN
income : employment : temporary job (yemtj)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Income from agreements (yemaj)	N	223	239	264	291	554	680	737	NaN	0.40	0.35	0.36	NaN
Other payments made by employers (yemot)	N	105	113	121	134	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
self-employment income (yse)	N	4,482	4,791	5,159	5,685	2,471	2,935	3,548	NaN	1.81	1.63	1.45	NaN
employment income from abroad (only disaggregated since 2010 SILC data) (yemab)	N	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
[Covid-19] Compensation paid by firm (yemmc_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other original income (ils_origy - ils_earns)													
private transfers (ypt)	N	160	171	184	203	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
income of children (yot)	N	1	1	1	1	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Termination pay (yls)	N	11	11	12	13	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Maintenance payments (xmp)	N	84	87	98	108	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Private pensions (ypp)	N	12	12	12	12	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Investment income- interests and profits (yiy)	N	13	10	12	65	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
property income (ypr)	N	36	36	37	41	212	225	250	NaN	0.17	0.16	0.15	NaN

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

	Simulated (Y / N)	EUROMOD				SILC				Ratio				External				Ratio			
		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 (tin_s)	Y	2,401	2,445	2,416	2,198	0	0	0	0	0.00	0.00	0.00	0.00	1,753	1,718	1,644	NaN	1.37	1.42	1.47	NaN
property tax (tpr)	N	1,824	1,824	1,824	1,824	1,824	1,824	1,824	1,824	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employee Social Insurance Contributions (ils_sicee)																					
employee sickness SIC (tsceesi_s)	Y	2,246	2,246	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	2,092	2,061	2,089	NaN	1.07	1.09	1.08	NaN
employee pension SIC (tscepi_s)	Y	2,246	2,246	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	2,230	2,200	2,236	NaN	1.01	1.02	1.00	NaN
employee disability SIC (tsceedi_s)	Y	2,207	2,207	2,207	2,207	0	0	0	0	0.00	0.00	0.00	0.00	2,230	2,200	2,236	NaN	0.99	1.00	0.99	NaN
employee unemployment SIC (tsceeu_i_s)	Y	2,153	2,153	2,153	2,153	0	0	0	0	0.00	0.00	0.00	0.00	1,998	1,972	1,996	NaN	1.08	1.09	1.08	NaN
employee health SICs (tsceeh_l_s)	Y	2,138	2,155	2,173	2,186	0	0	0	0	0.00	0.00	0.00	0.00	1,964	1,950	1,987	NaN	1.09	1.11	1.09	NaN
employee SICs from agreements (tsceej_s)	Y	166	167	171	173	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee minimum HICs (tsceehmm_s)	Y	NaN	NaN	NaN	17	NaN	NaN	NaN	0	NaN	NaN	NaN	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Self-employed Social Insurance Contributions (ils_sicse)																					
self-employed sickness SIC (tscsesi_s)	Y	416	416	416	416	0	0	0	0	0.00	0.00	0.00	0.00	227	249	248	NaN	1.83	1.67	1.68	NaN
self-employed old-age SIC (1st pillar) (tscsepi_s)	Y	416	416	416	416	0	0	0	0	0.00	0.00	0.00	0.00	227	249	248	NaN	1.83	1.67	1.68	NaN
self-employed disability SIC (tscsedi_s)	Y	403	403	403	403	0	0	0	0	0.00	0.00	0.00	0.00	227	249	248	NaN	1.78	1.62	1.63	NaN
Social contributions to the solidarity fund (tscseot_s)	Y	416	416	416	416	0	0	0	0	0.00	0.00	0.00	0.00	227	249	248	NaN	1.83	1.67	1.68	NaN
self-employed health SIC (tscsehl_s)	Y	413	413	413	413	0	0	0	0	0.00	0.00	0.00	0.00	384	404	425	NaN	1.08	1.02	0.97	NaN
2nd pillar pension contribution of the self-employed (tscpcpitv_s)	Y	121	121	121	121	0	0	0	0	0.00	0.00	0.00	0.00	112	133	134	NaN	1.08	0.91	0.90	NaN
Employer Social Insurance Contributions (ils_sicer)																					
2nd pension pillar component (tscpcpi_s)	Y	778	778	778	778	0	0	0	0	0.00	0.00	0.00	0.00	1,152	1,218	1,268	NaN	0.68	0.64	0.61	NaN
employer SICs from agreements (tsceraj_s)	Y	297	297	297	297	0	0	0	0	0.00	0.00	0.00	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer sickness SIC (tscersi_s)	Y	2,244	2,246	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	2,092	2,061	2,089	NaN	1.07	1.09	1.08	NaN
employer old-age SIC (1st pillar) (tscerpi_s)	Y	2,244	2,246	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	2,230	2,200	2,236	NaN	1.01	1.02	1.00	NaN
employer disability SIC (tscerdi_s)	Y	2,205	2,207	2,207	2,207	0	0	0	0	0.00	0.00	0.00	0.00	2,230	2,200	2,236	NaN	0.99	1.00	0.99	NaN

	Simulated (Y / N)	EUROMOD				SILC				Ratio				External				Ratio			
		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
employer unemployment SIC (tscerui_s)	Y	2,151	2,153	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	1,998	1,972	1,996	NaN	1.08	1.09	1.13	NaN
employer health SIC (tscerhl_s)	Y	2,087	2,089	2,089	2,089	0	0	0	0	0.00	0.00	0.00	0.00	1,964	1,950	1,987	NaN	1.06	1.07	1.05	NaN
employer guarantee SIC (tscersf_s)	Y	2,008	2,010	2,010	2,010	0	0	0	0	0.00	0.00	0.00	0.00	1,895	1,871	1,902	NaN	1.06	1.07	1.06	NaN
employer accident SIC (tscerac_s)	Y	2,244	2,246	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	2,287	2,263	2,297	NaN	0.98	0.99	0.98	NaN
employer reserve solidarity fund (tscerot_s)	Y	2,244	2,246	2,246	2,246	0	0	0	0	0.00	0.00	0.00	0.00	2,230	2,200	2,236	NaN	1.01	1.02	1.00	NaN
Credited Contributions (ils_sicct)																					
Credited health insurance contributions (tsccthl_s)	Y	2,784	2,777	2,773	2,768	0	0	0	0	0.00	0.00	0.00	0.00	3,011	3,010	2,981	NaN	0.92	0.92	0.93	NaN
[Covid-19] Credited SICer contribution ("Kurzarbeit") (tscct_s)	Y	NaN	0	NaN	NaN	NaN	0	NaN	NaN	NaN	0.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other Contributions (ils_sicot)																					
Health insurance contributions for the inactive (tschlfx_s)	Y	153	158	153	153	0	0	0	0	0.00	0.00	0.00	0.00	112	100	86	NaN	1.37	1.58	1.78	NaN

Continued...

	Source	Comments
Taxes (ils_tax)		
Personal Income Tax (tin_s)	MoF	accrual revenue - tax credits
property tax (tpr)	-	-
Employee Social Insurance Contributions (ils_sicee)		
employee sickness SIC (tsceesi_s)	MoF	including from agreements
employee pension SIC (tsceepi_s)	MoF	including from agreements
employee disability SIC (tsceedi_s)	MoF	including from agreements
employee unemployment SIC (tsceeu_i_s)	MoF	including from agreements
employee health SICs (tsceehl_s)	MoF	including from agreements
employee SICs from agreements (tsceeaj_s)	-	-
employee minimum HICs (tsceehlmm_s)	-	-
Self-employed Social Insurance Contributions (ils_sicse)		
self-employed sickness SIC (tscsesi_s)	MoF	-
self-employed old-age SIC (1st pillar) (tscsepi_s)	MoF	-
self-employed disability SIC (tscsedi_s)	MoF	-

Continued...

	Source	Comments
Social contributions to the solidarity fund (tscseot_s)	MoF	-
self-employed health SIC (tscsehl_s)	MoF	-
2nd pillar pension contribution of the self-employed (tscpcpitv_s)	MoF	Feb(t) to Jan(t+1) forwarded contributions
Employer Social Insurance Contributions (ils_sicer)		
2nd pension pillar component (tscpcpi_s)	MoF	including from agreements, Feb(t) to Jan(t+1) forwarded contributions
employer SICs from agreements (tsceraj_s)	-	-
employer sickness SIC (tscersi_s)	MoF	including from agreements
employer old-age SIC (1st pillar) (tscerpi_s)	MoF	including from agreements
employer disability SIC (tscerdi_s)	MoF	including from agreements
employer unemployment SIC (tscerui_s)	MoF	including from agreements
employer health SIC (tscerhl_s)	MoF	including from agreements
employer guarantee SIC (tscersf_s)	MoF	including from agreements
employer accident SIC (tscerac_s)	MoF	including from agreements
employer reserve solidarity fund (tscerot_s)	MoF	including from agreements
Credited Contributions (ils_sicct)		
Credited health insurance contributions (tsccthl_s)	MoF	-
[Covid-19] Credited SICer contribution ("Kurzarbeit") (tscct_s)	-	-
Other Contributions (ils_sicot)		
Health insurance contributions for the inactive (tschlfx_s)	MoF	-

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

	Simulated (Y / N)	EUROMOD				SILC				Ratio				External				Ratio			
		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 (tin_s)	Y	2,306	2,666	2,866	2,881	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	3,131	3,401	3,596	NaN	0.74	0.78	0.80	NaN
property tax (tpr)	N	63	63	66	73	63	63	63	63	1.00	1.01	1.05	1.17	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Employee Social Insurance Contributions (ils_sicee)																					
employee sickness SIC (tsceesi_s)	Y	363	390	419	462	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	338	364	393	NaN	1.07	1.07	1.07	NaN
employee pension SIC (tsceepi_s)	Y	1,036	1,114	1,197	1,319	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	970	1,050	1,133	NaN	1.07	1.06	1.06	NaN
employee disability SIC (tsceedi_s)	Y	766	823	885	975	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	702	759	817	NaN	1.09	1.09	1.08	NaN
employee unemployment SIC (tsceeu_i_s)	Y	251	270	290	319	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	230	248	215	NaN	1.09	1.09	1.35	NaN
employee health SICs (tsceeh_l_s)	Y	1,139	1,230	1,330	1,471	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1,068	1,141	1,227	NaN	1.07	1.08	1.08	NaN
employee SICs from agreements (tsceej_s)	Y	17	18	20	22	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employee minimum HICs (tsceehlmm_s)	Y	NaN	NaN	NaN	2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Self-employed Social Insurance Contributions (ils_sicse)																					
self-employed sickness SIC (tscesesi_s)	Y	232	252	269	295	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	52	59	62	NaN	4.51	4.28	4.37	NaN
self-employed old-age SIC (1st pillar) (tscepi_s)	Y	908	982	1,048	1,149	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	181	197	206	NaN	5.02	4.97	5.08	NaN
self-employed disability SIC (tscedi_s)	Y	310	336	360	394	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	64	73	77	NaN	4.86	4.59	4.69	NaN
Social contributions to the solidarity fund (tsceot_s)	Y	251	272	291	319	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	56	63	67	NaN	4.51	4.28	4.37	NaN
self-employed health SIC (tscehl_s)	Y	534	572	609	666	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	235	271	290	NaN	2.27	2.11	2.10	NaN
2nd pillar pension contribution of the self-employed (tsccpiv_s)	Y	43	48	54	59	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	30	43	45	NaN	1.44	1.13	1.18	NaN
Employer Social Insurance Contributions (ils_sicer)																					
2nd pension pillar component (tsccpi_s)	Y	495	558	627	691	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	703	906	996	NaN	0.70	0.62	0.63	NaN
employer SICs from agreements (tsceaj_s)	Y	43	47	52	58	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
employer sickness SIC (tscersi_s)	Y	358	390	419	462	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	338	364	393	NaN	1.06	1.07	1.07	NaN
employer old-age SIC (1st pillar) (tscerpi_s)	Y	3,080	3,340	3,562	3,925	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2,681	2,758	2,957	NaN	1.15	1.21	1.20	NaN
employer disability SIC (tscerdi_s)	Y	755	823	885	975	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	702	759	817	NaN	1.07	1.09	1.08	NaN

	Simulated (Y / N)	EUROMOD				SILC				Ratio				External				Ratio			
		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
employer unemployment SIC (tscerui_s)	Y	247	270	294	325	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	230	248	325	NaN	1.07	1.09	0.91	NaN
employer health SIC (tscerhl_s)	Y	2,465	2,650	2,848	3,138	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	2,671	2,853	3,067	NaN	0.92	0.93	0.93	NaN
employer guarantee SIC (tscersf_s)	Y	56	62	66	73	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	48	52	56	NaN	1.17	1.19	1.17	NaN
employer accident SIC (tscerac_s)	Y	204	223	239	264	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	198	215	232	NaN	1.03	1.04	1.03	NaN
employer reserve solidarity fund (tscerot_s)	Y	1,213	1,323	1,421	1,566	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1,148	1,245	1,345	NaN	1.06	1.06	1.06	NaN
Credited Contributions (ils_sicct)																					
Credited health insurance contributions (tsccthl_s)	Y	1,066	1,179	1,185	1,627	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	1,164	1,263	1,332	NaN	0.92	0.93	0.89	NaN
[Covid-19] Credited SICer contribution ("Kurzarbeit") (tscct_s)	Y	NaN	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Other Contributions (ils_sicot)																					
Health insurance contributions for the inactive (tschlfx_s)	Y	99	110	110	117	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	81	85	86	NaN	1.22	1.30	1.27	NaN

	Simulated (Y / N)	EUROMOD				SILC				Ratio				External				Ratio			
		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
contributory unemployment benefit (bunct_s)	Y	47	47	47	47	52	52	52	52	0.91	0.91	0.91	0.91	53	49	35	NaN	0.89	0.96	1.33	NaN
Sickness and nursing benefits (bhl)	N	126	126	126	126	126	126	126	126	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Unemployment benefits residual (bunot)	N	6	6	6	6	6	6	6	6	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Parental Allowance (bcc00_s)	Y	186	184	184	184	159	159	159	159	1.16	1.16	1.15	1.15	146	156	141	NaN	1.27	1.19	1.30	NaN
Child benefit (incl surcharge) (bch_s)	Y	701	701	701	701	704	704	704	704	0.99	0.99	0.99	0.99	655	658	660	NaN	1.07	1.06	1.06	NaN
Child birth allowance (bchba_s)	Y	46	46	46	46	44	44	44	44	1.05	1.05	1.05	1.05	54	53	55	NaN	0.87	0.87	0.85	NaN
Maternity benefit (bma)	N	51	51	51	51	51	51	51	51	1.00	1.00	1.00	1.00	33	32	32	NaN	1.55	1.60	1.60	NaN
PARBEN: maternity benefit (bmact_s)	Y	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	33	32	32	NaN	0.00	0.00	0.00	NaN
Pregnancy benefit (bprct_s)	Y	NaN	0	0	0	NaN	0	0	0	NaN	0.00	0.00	0.00	NaN	20	19	NaN	NaN	0.00	0.00	NaN

Continued...

	Source	Comments
Pensions (ils_pen)		
Main disability benefit (pdi00)	SIA	-
Old-age benefits (except termination pay) (poa00)	SIA	-
Widow's, widower's and orphan's pension (psu00)	-	-
Other old-age pension (poaot)	-	-
Early retirement pension (pyr)	SIA	-
Military, police pension (poaml)	-	-
Means-tested benefits (ils_benmt)		
Material needs benefit (bsa00_s)	MoLSAF	-
Tax refunds (when credits > liability) (tinrf_s)	-	-
Means-tested scholarships (bsaot)	-	-
Scholarships (bed)	-	-
Special allowance - only available since 2019 dataset (presumably aggregated within bsaot in old datasets) (bsarw)	MoLSAF	-
Non-means-tested benefits (ils_bennt)		
Family benefits residual (bfaot)	-	-
Disability benefits residual (bdiot)	-	-
Benefit for caring for a disabled (bcrdi)	MoLSAF	-
Other survivor benefits (bsu)	-	-

Continued...

	Source	Comments
Housing benefit (bho)	-	-
severance payments (ysv)	-	-
[Covid-19] wage compensation paid by the state ("Kurzarbeit") (bwkmcee_s)	-	-
[Covid-19] self-employment lump-sum compensation paid by the state ("Príspevok pre SZČO") (bwkmcse_s)	-	-
[Covid-19] nursing benefit ("Pandemické ošetrovné") (bccmc_s)	-	-
contributory unemployment benefit (bunct_s)	SIA	-
Sickness and nursing benefits (bhl)	-	-
Unemployment benefits residual (bunot)	-	-
Parental Allowance (bcc00_s)	MoLSAF	-
Child benefit (incl surcharge) (bch_s)	MoLSAF	-
Child birth allowance (bchba_s)	MoLSAF	-
Maternity benefit (bma)	SIA	-
PARBEN: maternity benefit (bmact_s)	SIA	-
Pregnancy benefit (bprct_s)	SIA	-

	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
Unemployment benefits residual (bunot)	N	4	4	4	4	4	4	4	4	1.00	1.00	1.00	1.00	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Parental Allowance (bcc00_s)	Y	478	487	490	526	406	406	406	406	1.18	1.20	1.21	1.30	578	645	601	NaN	0.83	0.75	0.81	NaN
Child benefit (incl surcharge) (bch_s)	Y	346	425	472	826	339	339	339	339	1.02	1.25	1.39	2.44	338	419	465	NaN	1.02	1.01	1.02	NaN
Child birth allowance (bchba_s)	Y	37	37	37	38	36	36	36	36	1.05	1.05	1.05	1.05	43	43	44	NaN	0.87	0.88	0.85	NaN
Maternity benefit (bma)	N	165	171	183	197	165	165	165	165	1.00	1.04	1.11	1.19	309	316	336	NaN	0.54	0.54	0.55	NaN
PARBEN: maternity benefit (bmact_s)	Y	0	0	0	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	309	316	336	NaN	0.00	0.00	0.00	NaN
Pregnancy benefit (bprct_s)	Y	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	32	47	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	3.98	3.87	3.93	4.09	3.80	3.90	NaN	NaN	1.05	0.99	NaN	NaN
Decile 2	6.30	6.31	6.30	6.47	6.10	6.10	NaN	NaN	1.03	1.04	NaN	NaN
Decile 3	7.46	7.44	7.42	7.71	7.30	7.50	NaN	NaN	1.02	0.99	NaN	NaN
Decile 4	8.46	8.40	8.38	8.56	8.40	8.50	NaN	NaN	1.01	0.99	NaN	NaN
Decile 5	9.27	9.27	9.25	9.46	9.10	9.30	NaN	NaN	1.02	1.00	NaN	NaN
Decile 6	10.17	10.25	10.17	10.20	10.20	10.20	NaN	NaN	1.00	1.00	NaN	NaN
Decile 7	11.04	10.97	11.05	11.05	11.20	11.00	NaN	NaN	0.99	1.00	NaN	NaN
Decile 8	12.21	12.26	12.27	12.06	12.30	12.30	NaN	NaN	0.99	1.00	NaN	NaN
Decile 9	13.68	13.74	13.74	13.44	13.70	13.40	NaN	NaN	1.00	1.03	NaN	NaN
Decile 10	17.42	17.49	17.48	16.96	18.00	17.90	NaN	NaN	0.97	0.98	NaN	NaN
Median	9,076	9,615	10,224	12,050	8,473	8,819	NaN	NaN	1.07	1.09	NaN	NaN
Mean	9,284	9,798	10,393	12,093	8,796	9,117	NaN	NaN	1.06	1.07	NaN	NaN
Gini	20.90	21.14	21.10	19.84	21.80	21.20	NaN	NaN	0.96	1.00	NaN	NaN
S80/20	3.02	3.07	3.05	2.88	3.20	3.12	NaN	NaN	0.95	0.98	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	3.87	3.87	3.89	3.90	3.40	3.70	NaN	NaN	1.14	1.04	NaN	NaN
Males	4.20	4.23	4.21	4.15	3.50	4.00	NaN	NaN	1.20	1.06	NaN	NaN
Females	3.56	3.52	3.58	3.67	3.40	3.40	NaN	NaN	1.05	1.03	NaN	NaN
50% median HDI by gender												
Total	7.13	7.13	7.04	6.54	9.70	7.20	NaN	NaN	0.73	0.99	NaN	NaN
Males	7.39	7.40	7.29	6.69	9.40	7.30	NaN	NaN	0.79	1.01	NaN	NaN
Females	6.88	6.87	6.80	6.40	10.00	7.20	NaN	NaN	0.69	0.95	NaN	NaN
60% median HDI by gender												
Total	11.18	11.88	11.84	10.91	12.30	13.70	NaN	NaN	0.91	0.87	NaN	NaN
Males	11.15	11.74	11.57	10.68	11.70	13.50	NaN	NaN	0.95	0.87	NaN	NaN
Females	11.21	12.01	12.11	11.13	12.80	13.90	NaN	NaN	0.88	0.86	NaN	NaN
70% median HDI by gender												
Total	18.00	18.69	18.80	17.62	19.90	18.20	NaN	NaN	0.90	1.03	NaN	NaN
Males	17.12	17.72	17.69	16.79	19.10	17.90	NaN	NaN	0.90	0.99	NaN	NaN
Females	18.85	19.62	19.85	18.41	20.80	18.50	NaN	NaN	0.91	1.06	NaN	NaN
60% median HDI by age group												
0-15 years	16.22	16.48	15.81	13.78	17.70	21.20	NaN	NaN	0.92	0.78	NaN	NaN
16-24 years	15.57	15.47	14.94	14.24	15.20	22.30	NaN	NaN	1.02	0.69	NaN	NaN
25-49 years	10.35	10.94	10.65	10.05	11.30	12.20	NaN	NaN	0.92	0.90	NaN	NaN
50-64 years	9.75	10.60	10.71	10.92	9.70	11.30	NaN	NaN	1.01	0.94	NaN	NaN
65+ years	7.88	9.41	10.57	8.55	10.30	8.10	NaN	NaN	0.76	1.16	NaN	NaN