

EUROMOD

COUNTRY REPORT



SLOVENIA (SI)

2014-2017

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

EUROMOD has been enlarged to cover 28 Member States and is updated to recent policy systems using data from the European Union Statistics on Income and Living Conditions (EU-SILC) as the input database, supported by DG-EMPL of the European Commission.

This report documents the work done in one annual update for Slovenia. This work was carried out by the EUROMOD core developer team, based mainly in ISER at the University of Essex, in collaboration with a national team.

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The results presented in this report are derived using EUROMOD version H1.0. EUROMOD is continually being improved and the results presented here may not match those that would be obtained with later versions of EUROMOD.

For more information, see: <https://www.euromod.ac.uk>

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<http://ec.europa.eu/social/easi>

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1. BASIC INFORMATION

1.1 Basic information about the tax-benefit system

- The tax-benefit system is a unified, national system.
- The "fiscal year" runs from January 1 to December 31. Benefit levels are mostly adjusted once a year in January in line with the consumer price index.
- The last pension reform was implemented in January 2013. Full pensionable age is set at 65 for both men and women. Due to transition period full pensionable age is set at 65 for men and 63.5 for women in 2017. This means that insured persons retiring prior to the full pensionable age receive "penalties". There are numerous exemptions to the penalty rule. It has to be stated that the retirement prior to full pensionable age is also conditional on the accumulation of a sufficient number of qualifying years.
- Minimum school leaving age is 15. The definition of dependent children differs for tax and for benefit purposes. For tax purposes, dependent children are defined as: (a) children aged less than 18; (b) children in full-time education aged less than 26 and (c) unemployed children at age 18 or above without own income or with own income less than family allowance for dependent child. The definition of dependent children for benefit purposes is more rigorous; the dependent children are defined as children aged less than 18 or aged less than 26 if the child continues with full-time education. Irrespective of above definition, children should not be employed or married, should not have children and must cohabit with parents in order to be considered dependent children.
- Since 2012, when Exercise of Rights to Public Funds Act has been enacted, the lone parent or single-parent family definition has been much stricter. It is a union of one parent and children, whereas the other parent had died and the child does not receive any support after the deceased parent, or if the other parent is unknown, or if the child does not receive any income support from the other parent. This means that a union of a child and one parent, receiving maintenance payment from the other parent, is not treated as a single-parent family. Large family is a family with three or more children.
- The income tax system is an individual system, with the spouses being assessed independently.
- Flat tax rate for capital incomes (dividends, capital gains and interests) and income from rents (since 2013) is 25%.
- Tax Administration sends an informative calculation of PIT to taxpayers according to administrative records. If taxpayers do not lodge an appeal, this informative calculation is considered to be a final tax provision. In tax return, information on all types of income subject to tax, amounts of advance PIT paid during the year, employee social security contributions and tax allowances are provided. Withholdings usually do not match the exact amount due in financial year because of some incomes on irregular basis and some additional allowances that are not taken into account during the year.
- There is no unique indexing regime for taxes and benefits, although there are indexing rules for particular benefits. Family benefits, social assistance and housing benefit are up-rated once a year in January in line with consumer price index. Pension up-rating is established in pension legislation and pensions are up-rated every year in February according to the following formula: 60% of average gross wage growth in previous year compared to the average wage in year before plus 40% of the average consumer price

index growth in previous year compared to the year before. Income tax thresholds, income tax allowances and tax credits are up-rated in December each year according to consumer price index in November. Since 2010, the indexation regime has been temporarily changed through intervention acts due to economic crises. Pensions have been uprated twice; once in 2013, once in 2016 and in January 2017. The 2016 and 2017 pensions up-rating was not carried out according to the pension legislation but it was enacted by Implementation of the Republic of Slovenia Budget for 2016 and 2017 Act and Implementation of the Republic of Slovenia's Budget for 2017 and 2018 Act. Social benefits have been uprated in 2013 and once in 2014. The minimum income was uprated more frequently; three times in 2013, twice in 2014 and 2015, once in 2016 and once in 2017.

- Most benefits depend on annual income. Exceptions are social assistance, income support (since 2012) and housing benefit where three-month income prior to the submission of the claim is taken into account. Social contributions and benefits are delivered on a monthly basis. Exceptions are large family supplement which is delivered once a year and birth grant which is delivered only at the birth of child. Income tax liability is based on annual income and allowances and thresholds are referred to in annual terms.
- The Exercise of Rights to Public Funds Act (2010) regulates cash benefits (child allowance, cash social assistance, pension support and national educational grant), subsidies and payments from public sources, introducing many novelties in order to increase justice, simplify the system, make it more transparent and efficient, and alleviate abuse. The order in which to apply for cash benefits is defined, as is the definition of the family, and income and property to be taken into account in means testing. The Social Benefits Act (2010) regulates social assistance and income support.
- The most important cash benefits can be exercised by the applicant according to the following set order: 1) child benefit, 2) social assistance, 3) income support and 4) state scholarship. This order is very important as family income, a subject of income test, includes also previous social benefits.
- In May 2012, Public Finance Balance Act was adopted in order to lower public expenses and high deficit which tends to increase. This act, which has come into force on June 1, 2012, tightened the eligibility conditions and reduced benefits amounts. Some measures have been permanent while others have been temporary; the measures which regulate family benefits (parental payment, child benefit, birth grant, large family allowance, parental allowance and national scholarships) have been in force until the year when GDP growth reaches 2.5%. The basic minimum income was much more frequently increased. According to the Implementation of the Republic of Slovenia Budget for 2014 and 2015 Act there was no indexation of benefits and pensions until the end of 2015 (with the exception of minimum income). The pension uprating in 2016 and 2017 was set in the Implementation of the Republic of Slovenia Budget for 2016 and 2017 and in the Implementation of the Republic of Slovenia's Budget for 2017 and 2018 Act.

1.2 Social Benefits

Sick leave payment (*bolniško nadomestilo*): contributory; it is paid by compulsory health insurance from the 31st day of absence from work (prior is paid by employer) and depends on the physicians' (or, where applies, the National Health Insurance Institute's medical board) assessment of the state of sickness. There are no waiting days for this benefit. If absence from work is longer than one year or if there is no prospect of recuperation, the insured person can be

referred to the invalidity board at the Institute for Pension and Disability Insurance. The amount of *wage compensation* depends on the insured person's average monthly salary in calendar year prior to sick-leave, the cause of absence and valorisation method. It amounts from 70% to 100% of the average monthly. It is subject to income tax.

Funeral costs refund (*pogrebna*): contributory; it was payable to the person who paid for the funeral, provided that the deceased was employed (or insured); amounted to 80% of the average inevitable funeral costs in Slovenia. Since 2014 its nature has been changed. The benefit is considered as a form of extraordinary financial social assistance and the relatives of the deceased who are recipients of social assistance or income support are eligible. Besides, relatives of the deceased with family income below the income threshold (606 EUR for single person and 909 EUR for family) are eligible. Since 2014 the benefit amounts to twice the basic amount of the minimum income (585.12 EUR in 2017).

Death benefit (*posmrtnina*): contributory; it was payable to family members supported by the deceased (who was employed or insured). It ranged from 100% to 150% of the guaranteed gross wage. The exact amount was established by National Health Insurance Institute in past. Since 2014 its nature has been changed. The benefit is considered as a form of extraordinary financial social assistance and the relatives of the deceased who are recipients of social assistance or income support are eligible. Besides, relatives of the deceased with family income below the income threshold (single person: 1.63*minimum income, two adults: 2.33*minimum income, two adults and one child: 2.96*minimum income, two adults and two children: 3.62*minimum income), are eligible. The benefit amounts to the basic amount of the minimum income (292.56 EUR in 2017).

Parental (maternity) payment (*starševsko nadomestilo*): contributory. The total leave associated with childbirth consists of maternity leave (3 months) and parental leave (9 months) and amounts to 365 days. In some cases parental leave is prolonged. Eligibility to wage compensation during parental leave is held by persons who were insured for at least 12 months in the last three years before the start of the individual part of parental leave. Wage compensation during the maternity leave and the child care and protection leave amounts to 100% of the average monthly gross wage of the entitled person during the 12 months prior to the leave. Before Public Finance Balance Act was enacted, the minimum wage compensation amounted to 55% of the minimum wage and the maximum compensation was 2.5 times the average wage in Slovenia. Since June 2012, Public Finance Balance Act has lowered wage compensation during the child care and protection leave to 90% of the base (average monthly gross wage during the 12 months prior to the leave) and sets its maximum to 2 times average wage in Slovenia. In cases when the base is equal or below the amount of minimum wage, the wage compensation during the child care and protection leave still amounts to 100% of the base. In August 2013 another intervention act (Intervention Measures for the Labour Market and Parental Protection Act) set maximum of wage compensation also to the first three months of the maternity leave to 2 times average wage in Slovenia.

Paternal leave (*očetovsko nadomestilo*): contributory. The benefit was slightly changed in September 2014. It lasts 90 days. Before September 2014 fathers were obliged to use at least 15 days during the maternal leave, while the rest of the 75 days could be used until a child's age of eight. After the change fathers were obliged to use at least 15 days in 6 months after the birth (or 12 in some special cases), while the rest of the 75 days could be used until a child's age of three. During the first 15 days of the paternal leave, the father was entitled to 100% wage compensation, while for the rest of the 75 days only the social security contributions based on the minimum wage were paid. Since 2016 the fathers were entitled to 70 days of paternal leave; fathers were obliged to use at least 15 days during the maternal leave and 5 days after the parental leave is finished while the rest of the 50 days could be used until a child's age of three. During the first 20 days of the paternal leave, the father was entitled to 100% wage

compensation, while for the rest of the 50 days only the social security contributions based on the minimum wage were paid. Since January 2017, fathers have been entitled to 25 days of fully compensated paternal leave (15 days should be used in six months after the birth and 10 days until the end of the child's first grade of primary school) and 25 days of unpaid leave which can be used until a child's age of three. The benefit is subject to income tax.

Old age pension (*starostna pokojnina*): contributory. The pension is calculated as a percentage of the pension base, which is simply the best consecutive 23-years average of net. This period is gradually increasing to 24 years in 2018. The pension is then computed using this pension base, accrual rates and the pension qualifying period. Net pension is subject to income tax, but due pensioners tax credit and seniors tax allowance most of pensions remain untaxed.

Survivor pension (*družinska pokojnina*): contributory. Pensions are granted to family members of the deceased. Except for the spouse, which does not have to fulfil this condition, it is required for the other members that they were dependent on the income of the deceased. The spouse can receive a widow's pension, provided an age criterion is met (55.5 in 2017 and a half of year more every year up to 58 years in 2022); if the spouse was not an insured person, he/she could obtain a widow's pension 5 years before the above mentioned age (from 48 in 2007-2017 up to 53 years in 2022). Children can receive a survivor's pension up to the age of 26, provided they annually submit an attestation of school attendance. As a general rule, the amount of survivors' pension is dependent on the invalidity pension the deceased would have received or the pension if the deceased had been retired, potential beneficiaries and their sources of income. Survivor pension is subject to income tax. Same rules are in force as for old age pensions, except considering the number of beneficiaries.

War and farmers pension (*vojaške in kmečke pokojnine*): contributory. War veterans and farmers retire under special conditions. War and farmers pensions are subject to tax.

Disability - invalidity pension (*invalidska pokojnina*): contributory. The granting of disability pensions depends on the cause of disability. In case of an occupational disease or employment injury, the insured person can obtain a pension regardless of his insurance period. If the cause of disability is illness or off-the-job injury, a sufficient insurance period is required. As a general rule, the insurance period must cover at least one third of the period from age 20 to the date of the occurrence of disability. The computed disability pension is still somewhat higher than the old-age pension for two reasons: first, there are no penalties for pensioning prior to full pensionable age, and, second, the minimum disability pension is more generous. Part-time invalidity pension is also possible. Disability-invalidity pensions are subject to tax.

Wage compensation for disabled workers (*nadomestila za delovne invalide*): contributory. There are few benefits: disbursements for disabled insured persons who are reassigned to new jobs, for persons who are involved in occupational rehabilitation, for persons who have temporarily withdrawn from active labour force and are temporarily unemployed. Wage compensation is subject to tax.

Attendance supplement (*dodatek za pomoč in postrežbo*): contributory; for old-age, survivor and disability pensioners whom the assistance and care by another person is indispensable; not subject to tax. Recipients of social assistance whom the assistance and care by another person is indispensable are also eligible to attendance supplement.

Income support (*varstveni dodatek*): Income support is a social protection benefit, enacted from January 2012, and intended for persons, who cannot ensure their financial security due to circumstances beyond their control. It replaces pension support for pensioners and state pension which have been abolished. Persons, who are permanently unemployable or permanently incapable for work or women older than 63 years or men older than 65 years, whose family income (defined in the same way as for social assistance) does not exceed the minimum income

amount, are eligible for income support. Income support is also means tested in the same way as social assistance (social assistance included into family income).

Disability supplement for disabled (*invalidnina za telesno okvaro*): contributory; for all insured disabled persons; not subject to tax.

Yearly bonus for pensioners (*letni dodatek*): contributory. Persons who qualify for old-age pension, survivor pension or invalidity benefits (who not receive wage) are eligible to yearly bonus for pensioners. The amount of this benefit depends on the level of pension and type of pension (or benefit). It is paid once a year and is subject to tax.

Unemployment wage compensation (*denarno nadomestilo med brezposelnostjo*): Unemployment wage compensation is a benefit for unemployed who were employed for at least 9 (6 for persons aged less than 30) months in the last 24 months prior to the termination of employment (not by their own fault or will) and are covered by unemployment insurance. Duration of unemployment wage compensation varies from 3 (2 for persons aged less than 30 and employed less than 9 months) to 25 months depending on the length of insurance period. The benefit level amounted to 80% of the basis in the first three months, 60% thereafter in the first year and 50% after the year of receiving. The minimum benefit level is equal to the 350 EUR while the maximum level was three times the minimum. In June 2012, Public Finance Balance Act has lowered the amount of benefit to 50% of the basis after one year and set maximum amount to 892.50 EUR. The beneficiaries are paid health-, pension- and disability insurance. Unemployment compensation is subject to personal income tax.

Social contributions up to full working time for parents of children under three (*pravica do plačila prispevkov iz naslova krajšega delovnega časa*): contributory. One of the parents, with a child up to three years and working at least half-time, has the right to have social security contributions up to full working time (based on minimum wage) paid from the state budget. This benefit is subject to tax. Since January 2007 this right had been extended to parents with at least two children until the sixth year of the youngest child. The latest change was enacted in 2014, since when the right to work part time ends when the younger child finishes the first grade of primary school, but the right to work part-time for one-year is non-transferable for each parent.

Credited social contributions for parents of four or more children who exit the labour market (*pravica do plačila prispevkov zaradi zapustitve trga dela*): contributory. Up to 2014 one of the parents who exited the labour market due to nursing and caring for four or more children, until the youngest child reached the age of ten, was entitled to credited social security contributions on the basis of a minimum wage. Since 2014, this right is shortened to the end of the first grade of primary school of the youngest child. This benefit is subject to tax.

Compensation for lost income due to care of child who need special care (*delno plačilo za izgubljen dohodek*): contributory. One of the parents will be entitled to a partial compensation for lost income if he/she stops working or reduces working hours due to care of a child who need special care. This benefit is subject to tax.

Parental allowance (*starševski dodatek*): non-contributory; granted to persons who are not eligible for the insurance-based wage compensation during the parental leave. Qualified is a mother who is a national of Slovenia and has a permanent residence in Slovenia and is not receiving any wage compensation. A child must be a national of Slovenia and the father must not receive any parental leave wage compensation. The father is qualified if the mother dies, abandons a child, is not able to live and work independently, or if she, during the period of entitlement, enters into employment or self-employment. It is not means-tested. Parental allowance is not subject to income tax.

Birth grant (*pomoč ob rojstvu otroka*): non-contributory; universal non means-tested benefit for a child born in Slovenia, if the mother or the father has permanent residence in Slovenia. This benefit is granted either in-kind or in cash. It is one-time benefit and not subject to income tax. Public Finance Balance Act has introduced income test for this benefit and since June 2012 only families with net family income per family member below 64% of average net wage have been eligible.

Child benefit (*otroški dodatek*): non-contributory means-tested benefit held by one of the parents for a child residing in Slovenia. Child benefit is paid only in case if income per family member, in the calendar year prior to the submission of a claim, was below the average wage in Slovenia. The level of child benefit depends on the average monthly income per family member in a calendar year prior to the submission of a claim and the birth order of a child. Up to 2012, the right to a child benefit was held until the child reaches 18 years of age, as well as for the period in which the child continues with full-time education, provided the child was less than 26 years of age. Since January 2012, the child benefit has been held only until the child reaches 18 years of age, regardless further enrolment in regular education. Child benefit is not subject to income tax.

Large-family supplement (*dodatek za veliko družino*): a non-contributory universal non means-tested transfer to families with three or more children. Eligible are families with three or more children below age 18 or older, if fulfilling the age and status conditions for the entitlement to a child benefit. The level of benefit is paid once a year and is not subject to income tax. Public Finance Balance Act has introduced income test for this benefit and since June 2012 only families with net family income per family member below 64% of average net wage have been eligible.

Childcare supplement (*dodatek za nego otroka*): non-contributory; it is non means-tested benefit, paid for seriously ill children and physically or mentally handicapped children. Childcare supplement is not subject to income tax.

National scholarship (*državna štipendija*): non-contributory. Amount of scholarship depends on student's family income per capita, students' grades and commuting or accommodation. In 2008, a new law was adopted and the income threshold per capita was set at 60% - 65% of minimum wage. In 2009, income threshold per capita was increased to 65% - 68% of minimum wage. In January 2012, pupils and students younger than 18 years lost the right to national scholarship and income threshold per family member has been set to 64% of net average wage. Public Finance Balance Act has decreased this threshold to 53% of net average wage in June 2012. Since January 2014 pupils below the age 18 have been again eligible for national scholarship. Since January 2015 threshold was increased to 56% per family member.

Housing benefit (*subvencija najemnine*): is non-contributory, means-tested and covers part of rent for a person whose family income does not exceed certain threshold. Share of covered rent depends on the size of apartment and beneficiary's income, and must not exceed 80% of respective non-profit rent. It is not subject to tax.

Social assistance (*socialna pomoč*): non-contributory; the benefit level is the difference between the minimum income for a single person or a family and their own income net of taxes and compulsory social security contributions. The basic amount of minimum income is set by the law and adjusted once a year in January according to the change in the costs of living in the last year. Social assistance is not subject to income tax or social security contributions. The minimum income was increased by new Social Benefits Act in January 2012 and work incentives have been introduced within social assistance. Minimum income has been regularly increased since then.

- *Not strictly benefits*

Sick leave payments paid by employers (*bolniško nadomestilo*): is payable to employees by employer for the first 30 days of sickness. It amounts to 100% of the average monthly salary in previous month in case of soldiers and civil invalids from wartime, occupational disease, employment injury, transplantation of tissues or organs for the benefit of others, donation of blood and quarantine. It drops to 80% if the insured person is absent from work due to illness, or 70% in case of non-employment related injuries, nursing of a close family member, escort of others, or during the period of qualifying for rehabilitation of a handicapped child at home.

Entitlement payments from the Guarantee Fund (*pravica v primeru insolventnosti delodajalca*): are granted to those workers who lost their jobs due to the initiation of bankruptcy proceedings, forced settlement or liquidation of a commercial company from the court register under the provisions of the Act on Financial Operations of Companies. Guarantee Fund provides unpaid wages, wage compensations (up to the ceiling amounting to half of minimum wage) and compensation for dismissal (up to the ceiling amounting to half of minimum wage).

Maintenance replacement (*nadomestilo preživnine*) is provided by the Maintenance Fund and is intended for beneficiaries – children – who have been allocated maintenance under a final court ruling, a temporary injunction or an agreement with the Social Security Department, but which the person liable is not paying. It is deemed that a person liable to pay maintenance is defaulting on payment if maintenance has not been paid for three consecutive months or is being paid irregularly. The level of maintenance replacement depends on the age of the child.

Childcare subsidy for pre-school childcare (*znižano plačilo vrtca*) amounts to 23%-100% of the price of services; the percentage depends on family income per member, and to certain extent also on family assets. The difference between the prices and fees collected from parents is covered from the municipal budgets.

Subsidized school meals (*subvencije šolske prehrane*) are intended for children in primary and secondary schools. Children from families with net family income per family member below 53% of average net wage are eligible for snacks and children from families with net family income per family member below 36% of average net wage are eligible for lunch. This benefit is means-tested.

Subsidized meals for high-school students (*subvencionirana študentska prehrana*): Each high-school student is entitled to one subsidized meal for every working day (with exception in period of July 15th to August 15th). Subsidy amounts to 2.63 EUR per day.

Subsidized commuting for children in primary schools as well as secondary and high school students (*subvencija šolskih prevozov*) who daily travel to school. The subsidy for children in primary school is 100%. The subsidy for children in secondary school depends on the distance.

Textbook funds (*učbeniški sklad*) provided to all children in primary schools who can borrow textbooks from school for free. Children in secondary schools can borrow textbook from school for fee which can not be higher than 1/3 of textbook price.

Foster allowances (*dohodki, ki jih prejema oseba za oskrbo otroka v rejniški družini*) are paid to families looking after children in foster care.

1.3 Social contributions

There are four types of compulsory social security contributions, which are paid both by employer and employee: (1) for pension and disability insurance (they are paid to the Pension

Insurance Fund), (2) for health insurance (they are paid to the Institute of Health Insurance), (3) for unemployment insurance (they are paid to the central government), (4) for maternity leave insurance (they are paid to the central government). Within the system there are many varieties with regard to these contributions, which depend on the socio-economic status of the insured person. The most important are as follows.

Employee and employer social security contributions (*prispevki za socialno varnost za zaposlene*): If a person is an employee (in a dependent job), the base for contributions is the amount of the gross wage, which also includes gross leave pay, fringe benefits and remuneration of expenses related to work above a certain threshold. The total rate of contribution for employees amounts to 22.10% and 16.10% for employers. There is no upper ceiling but there is a lower ceiling in amount of minimum wage. The contributions for employees are paid as a withholding tax by employers, who deduct them from wages.

Self-employed social security contributions (*prispevki za socialno varnost za samozaposlene*): The self-employed are supposed to pay both employee and employer social security contributions at the same rates (22.10% and 16.10%). Social security contributions were calculated on the basis of schedule presented in the **Error! Reference source not found.** until the end of 2013. Since 2014 the social security contributions have been calculated on the bases of exact amount of self-employed profit (revenue minus expenses) from pre-previous year (i.e. profit reported in last tax return). There is minimum and maximum threshold for the social security contribution base.

Social security contributions for people receiving social security benefits (*prispevki za socialno varnost za prejemnike socialnih transferjev*): The social security contributions for pensions and pension benefits are paid at the rate of 5.96% on a (artificially) grossed pension, for maternity payment, paternal payment and wage compensation for disabled workers at the rate of 38.2%, for unemployment wage compensation at the rate of 36.67% on a gross amount of unemployment wage compensation, for compensation for lost income due to care of child who need special care at the rate of 30.71% and at the rate of 24.35% for parental allowance. In the case of parental wage compensations, unemployment benefit and wage compensation for disabled workers the “employee” part of social security contributions is withheld from the gross benefit amount, i.e. effectively paid by the recipient.

Credited social security contributions: There are credited social security contributions for parents at the rate of 30.71%: (a) up to full working time for part-time-working parents with children under 3 or 6 years; (b) paternal payment after 25th day and (c) for a parent who exits the labour market due to the care for four or more children. Besides, health insurance contributions on pensions (paid by Pension Fund to the Health Insurance Company) and health insurance contributions on unemployment assistance (paid by Employment Service to the Health Insurance Company) are also considered credited social security contributions. The “employer” part of social security contributions on parental wage compensations (9.01%), and wage compensation for disabled workers (16.10%) and on unemployment benefit (14.97%) and total social security contributions (24.35%) from unemployment assistance could be considered as credited contributions. However, in the external statistics these contributions are treated as transfers between public funds.

1.4 Taxes

Personal income tax (*dohodnina*): it is taxed at the individual level and is levied on six categories of income: income from employment, business income, income from basic agriculture and forestry, royalties, and other income accruing to persons liable to tax in the Republic of Slovenia. Most social benefits, which are not wage compensation, are not subject to

personal income tax. Revised personal income tax regulation was adopted in 2006, when flat tax rate for capital income was enacted. However, there have been numerous amendments to this law since then. One important change was introduced in 2013. Since 2013 income from rents has been moved out of PIT tax base and has been taxed with flat tax rate of 25% with standard costs of only 10% instead of 40% as with previous rules.

Derivative instruments gains tax (*davek od dobička od odsvojitve izvedenih finančnih instrumentov*): was introduced in July 2008. The tax is payable by resident individuals and is levied on the difference between the value of the derivative instrument upon disposal and its acquisition value. It is levied at degressive rates depending on the period of holding (from 20% to 0% (tax exemption) when the period of holding is longer than 20 years). Gains realized from short-term contracts are taxed at 40%.

Tax on contractual work (*poseben davek na določene prejemke*): is applied to contractual temporary work. The tax is levied at the flat rate of 25% on gross payments and it is paid by employer.

Taxation of winnings from conventional games of chance (*davek na dobitke od iger na srečo*): Winnings from lotteries, raffles, scratch lotteries, bingo, betting and similar games of chance organized in Slovenia are subject to a 15% tax if the prize exceeds EUR 300. In the taxation of winnings the gross principle is used. No deductions are allowed. The tax is withheld by the gaming operator.

Tax on gambling and concession fee (*davek od iger na srečo*): are levied on the gross gaming revenue (GGR) of an operator of games of chance. Two tax rates on gambling of 5% and 18% apply, depending on the type of game. Additionally, operators of games of chance are subject to a 5% to 45% concession fee on GGR.

Inheritance and gift tax (*davek na dediščine in darila*): applies to transfers of property. The tax is paid by an individual who is the testamentary heir or the heir at law for inheritance tax purposes and the recipient for gift tax purposes. Taxpayers are divided into four categories according to their relationship with the deceased or donor. Tax rate varies from 5% to 30%.

Property tax (*davek od premoženja*): there are two types of duties on possession of real property. One is a duty, called “charge for the use of building land” and other is property tax. Charge is levied on vacant and constructed building land in possession of legal persons and individuals. Charge is set by local communities for vacant building land based on the area of the building land planned for building, and for constructed building land based on the useful area of the residential house or business premises thereon. Property tax is a tax on buildings in possession of individuals. The tax is levied at different rates depending on the type and value of the premises.

Water vessel tax (*davek na vodna plovila*): is levied on vessels longer than five metres registered in Slovenia or registered in other countries but owned by Slovenian residents. The taxpayers are the owners. The tax is levied for the calendar year, based on the length of the vessel and its engine power.

Motor vehicle tax (*davek na motorna vozila*): For passenger motor vehicles which are put into circulation in Slovenia for the first time (first registration in Slovenia) motor vehicle tax is paid. Import and acquisition of motor vehicles from other EU Member States are also taxed. Tax base is selling price excluding taxes. From the 1st of March 2010 the tax rates depend on the environmental criteria (CO₂ and Euro emission standards), and the rates are from 0.5% to 28% for petrol cars and from 1% to 31% for diesel cars. In the case of diesel motor vehicles particulate matter (PM) emissions are also considered. Tax rates for motorcycles and camper

vans are set upon engine capacity in the range from 1.5% to 5% for motorcycles and 6% to 18% for camper vans.

Circulation tax (*letni davek na motorna vozila*) is defined as an annual fee on the use of motor vehicles and is imposed on vehicles registered in Slovenia. The rates are set according to different categories of vehicles, and the outstanding amount is calculated in proportion to the duration of the registration period.

Value added tax (*davek na dodano vrednost*): is charged and paid on supplies of goods and performed services within the territory of Slovenia and the importation of goods into the EU. Before July 2013 The standard VAT rate was 20% and A reduced rate of 8.5% applied mostly to foodstuffs, public passenger transport, pharmaceuticals products, medical equipment, hotel accommodation, books, newspapers and periodicals. Since July 1st 2013, the VAT rates have been increased to 22% for standard rate and 9.5% for reduced rate The Value Added Tax Act specifies several categories of goods and services that are exempt from VAT, such as medical services, childcare, etc..

Excise duties (*trošarine*): are levied on tobacco products, alcohol and alcohol beverages, mineral oils, electricity and gas.

Tax on insurance premiums (*davek na promet zavarovalnih poslov*): is levied on insurance premiums and is payable by insurance companies and other legal providers of insurance services within the Slovenia. The tax rate is 6.5%.

Tax on transfer of immoveable property (*davek na promet nepremičnin*): is levied on transfer of immovable property, if VAT has not been charged on such transfer. It is applied to the market value of immovable property transferred. In general, the taxpayer is the seller of the immovable property. The tax rate is 2% of the market value of the transaction.

Customs duties (*carine*): are levied on goods upon importation into the Community customs territory from third countries not belonging to that territory. The rates of duties are laid down in the Common Customs Tariff of the Community and are applied in accordance with the common customs legislation of the EU.

2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD

2.1 Scope of simulation

Not all the taxes and benefits mentioned in the previous section are simulated by EUROMOD. Some are beyond its scope entirely and are neither included in the EUROMOD database nor in its output income variables. Others are not possible to simulate accurately with the available data. They are included in the database and may be chosen as components of output variables, but the rules governing them may not be changed by the model. Table 1 and Table 2 classify each of the main tax-benefit instruments (and some minor ones introduced above) into one of these three groups and provides a brief explanation as to why the instrument is not fully simulated if this is the case.

Table 1 Simulation of benefits in EUROMOD

	Variable name(s)	Treatment in EUROMOD				Why not fully simulated?
		2014	2015	2016	2017	
Wage compensation due to temporary incapacity for work	-	E	E	E	E	No data on contribution history and incapacity for work
Funeral costs refund	-	E	E	E	E	No data on event occurrence
Death benefit	-	E	E	E	E	No data on event occurrence
Parental (maternity) payment	bmact	I/PS	I/PS	I/PS	I/PS	No data on contribution history
Paternal payment	bcrbafh	I	I	I	I	No data on contribution history
Old age pension	poa	I	I	I	I	No data on contribution history.
Income support	bsapm	S	S	S	S	
Survivor pension	psu	I	I	I	I	No data on contribution history and eligibility.
War and farmers pension	Poa, psu, pdi	IA	IA	IA	IA	No data on contribution history and eligibility.
Disability - invalidity pension	pdi	I	I	I	I	No data on contribution history and disability occurrence.
Attendance supplement	bdica	I	I	I	I	No information on disability occurrence;
Disability supplement for disabled	bdi	I	I	I	I	No data on contribution history and disability occurrence; it is included in old-age, survivor and disability pension and wage compensation for disabled workers.
Yearly bonus for pensioners	poa, pdi, psu	IA	IA	IA	IA	
Wage compensation for disabled workers	bdirw	I	I	I	I	No data on contribution history and eligibility. Wage compensation for disabled workers includes also eventual disability supplement.
Unemployment wage compensation	Bunct	I/PS	I/PS	I/PS	I/PS	No data on contribution history and work readiness.
Compensation for lost income due to care of child who need special care	bcrsvcc	I	I	I	I	Data available is not sufficient to simulate eligibility.

Parental allowance	bmanc	S	S	S	S	
Birth grant	bchba	S	S	S	S	
Child benefit	bchmt	S	S	S	S	
Large-family supplement	bchlg	S	S	S	S	
Childcare supplement	bfa	I	I	I	I	Data available is not sufficient to simulate eligibility conditions.
National scholarship	bed	I	I	I	I	Data available is not sufficient to simulate eligibility cond. National scholarship is included among all scholarships.
Housing benefit	bho	S	S	S	S	
Social assistance	bsa	S	S	S	S	

Notes: “-”: policy did not exist in that year; “E”: *excluded* from the model as it is neither included in the micro-data nor simulated; “I”: *included* in the micro-data but not simulated; “IA”: included in the microdata in an aggregated 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 Simulation of taxes and social contributions in EUROMOD

	Variable name(s)	Treatment in EUROMOD				Why not fully simulated?
		2014	2015	2016	2017	
Employee social security contributions	tscee*	S	S	S	S	
Employer social security contributions	tscer*	S	S	S	S	
Self-employed social security contributions	tscse*	S	S	S	S	
Credited social contributions up to full working time for parents of children under three/six	tscctfa01, tscctfa02	S	S	S	S	
Credited social contributions for parents of four or more children who exit labour market	tscctfa03, tscctfa04	S	S	S	S	
Personal Income Tax	tin	S	S	S	S	
Tax on contractual work	taj	S	S	S	S	
Taxation of winnings from conventional games of chance	-	E	E	E	E	Information n/a
Derivative instruments gains tax	-	E	E	E	E	Information n/a
Tax on gambling	-	E	E	E	E	Information n/a
Inheritance and gift tax	-	E	E	E	E	Information n/a
Property tax	tpr	I	I	I	I	Information n/a
Water Vessel Tax	-	E	E	E	E	Information n/a
Motor vehicle tax	-	E	E	E	E	Information n/a
Circulation tax	-	E	E	E	E	Information n/a
Value added tax	-	E	E	E	E	Information n/a
Excise duties	-	E	E	E	E	Information n/a
Tax on insurance premiums	-	E	E	E	E	Information n/a
Tax on transfer of immoveable property	-	E	E	E	E	Information n/a
Tax on transfer of immoveable property	-	E	E	E	E	Information n/a
Customs Duties	-	E	E	E	E	Information n/a

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 microdata in an aggregated 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.

- ***Structural changes between 2014 and 2015***

Lower threshold for self-employed social contribution was increased to 54% of average gross wage in Slovenia. Minimum income increased twice, in January 2015 to 269.20 EUR and in August 2015 to 270.82 EUR.

- ***Structural changes between 2015 and 2016***

State scholarship has become available form more pupils and students due to the increase of income threshold up to 56% of average wage per family member (family of four in the census is 2,250 euros). Austerity measures considering social assistance and income support have been eliminated, which means that minimum income has increased to 280.81 EUR. Consequently death benefit has been increased too.

The child benefit's amount in the fifth and sixth income bracket has been increased by 10 per cent, i.e. to the level prior to the implementation of austerity measures. Since 2016 there are five added days of paternal leave which means that fathers have 20 days of paternity leave.

Tax schedule has changed as income threshold for the second income bracket has increased.

- ***Structural changes between 2016 and 2017***

There were not many policy changes between years 2016 and 2017. Since January 2017, fathers are entitled to 25 days of fully compensated paternal leave (15 days should be used in six months after the birth and 10 days until the end of the child's first grade of primary school) and 25 days of unpaid leave which can be used until a child's age of three.

Minimum income has been increased, while the amounts of other benefits haven't changed.

PIT rules have changed, as the income threshold for the highest general allowance has increased. Besides, the new PIT tax bracket has been introduced and tax rates for the middle income brackets are lowered.

2.2 Order of simulation

The following table shows the order in which the main elements of the Slovenian system in 2013-2016 are simulated, i.e. spine. Despite the fact, that Slovenian system experienced few structural changes within this period, we use one table to display policy simulations over the twelve years' span. The spine structure is identical for all analysed years, although some policies cover only few years within the twelve-year span.

The defined order shows the start of Slovenian policy simulations with the minimum wage, which is followed with the simulation of contributory unemployment wage compensation and contributory parental payment. Note that the simulation of minimum wage is not included in the baseline simulation; that is, for the baseline results employment income is read directly from the input data.

The next policy calculates tax on contractual work and payroll tax. The following four policies concern the simulation of the social insurance contributions: for employers, for employees, for self-employed and credited social security contributions for parents (contributions up to full

working time for parents of children under three and for parents of four or more children who exit labour market). Next, personal income tax after standard and family tax allowances is calculated.

Following the contributions and taxes, the benefits are simulated. New legislation in 2012 requires new order of benefits simulation. According to the Exercise of Rights to Public Funds Act, the beneficiary must apply for benefits in the following set order:

1. child benefit;
2. cash social assistance;
3. income support;
4. state scholarship.

This set order is very important as the income, which is the basis for income test, includes also benefits to which the applicant was or would be entitled, if this he/she enforced or would enforce this right in accordance with the order as stipulated above.

Parental allowance is followed by “new” child benefit for years 2012 - 2016, birth grant and large family allowance (the last two benefits are means tested from year 2012 on). The two means-tested benefits, social assistance and housing benefit depend on income after income tax and employee and self-employed contributions. They are therefore simulated after the simulation of income taxes and contributions. The housing benefit income test takes account of parental allowance and social assistance. Furthermore, the child benefit income test (before 2012) takes account of social assistance and housing benefit. Therefore “old” child benefit policy for year 2011 comes after social assistance and housing benefit (it is set off from 2012). Finally, other credited social insurance contributions are simulated: health insurance contributions on pensions and unemployment assistance and employer part of social insurance contributions on benefits. No changes to the order of simulation are made for year 2013 and after.

Table 3 EUROMOD Spine: order of simulation, 2014-2017

Policy	Grp/No	SI_2014	SI_2015	SI_2016	SI_2017	Comment
▶ ● SetDefault_si		on	on	on	on	DEF: DEFAULT VALUES FOR VARIABLES
▶ ● Uprate_SI		on	on	on	on	DEF: UPDATING FACTORS
▶ ● ConstDef_si		on	on	on	on	DEF: CONSTANTS
▶ ● prelim_si		on	on	on	on	DEF: Preliminary definitions
▶ ● IIsDef_SI		on	on	on	on	DEF: INCOME CONCEPTS
▶ ● IIdf_SI		on	on	on	on	DEF: INCOME CONCEPTS
▶ ● TUDef_SI		on	on	on	on	DEF: ASSESSMENT UNITS
▶ ● neg_si		on	on	on	on	Non-negative income
▶ ● yem_si		off	off	off	off	Minimum wage
▶ ● bunct_si		toggle	toggle	toggle	toggle	SWITCH: unemployment wage compensation
▶ ● bmact_si		on	on	on	on	BEN: parental (maternity) payment (PART SIMULATED)
▶ ● tpa_si		on	on	on	on	TAX: Payroll tax and tax on contractual work (employers)
▶ ● tscer_si		on	on	on	on	SIC: Social Insurance Contributions for Employers
▶ ● tscee_si		on	on	on	on	SIC: Social Insurance Contribution for Employees
▶ ● tscse_si		on	on	on	on	SIC: Social Insurance Contributions for Self-Employed
▶ ● tscctfa_si		on	on	on	on	SIC: Credited social contributions up to full working time for parents
▶ ● tinta01_si		on	on	on	on	TAX: standard allowances
▶ ● tinta02_si		on	on	on	on	TAX: family allowances
▶ ● tin_si		on	on	on	on	"TAX: Income tax; total allowance, schedule and tax credits"
▶ ● bmanc_si		on	on	on	on	BEN: Parental Allowance
▶ ● bchmt_si		on	on	on	on	BEN: Child benefit
▶ ● bchba_si		on	on	on	on	BEN: Birth Grant
▶ ● bchlg_si		on	on	on	on	BEN: Large family allowance
▶ ● bsa_si		on	on	on	on	BEN: Social assistance
▶ ● bsapm_si		on	on	on	on	BEN: Income support
▶ ● bho_si		on	on	on	on	BEN: Housing benefit
▶ ● bchmt_si		off	off	off	off	BEN: Child benefit (repetition of policy with order 18)
▶ ● tscct_si		on	on	on	on	SIC: Credited social insurance contributions
▶ ● output_std_si		on	on	on	on	DEF: STANDARD OUTPUT INDIVIDUAL LEVEL
▶ ● output_std_hh_si		off	off	off	off	DEF: STANDARD OUTPUT HOUSEHOLD LEVEL

2.3 Policy switches

There are two standard switches included into the spine (see above):

- **neg_si**: switched ON by default
 - recodes negative income to zero; currently this policy only recodes negative self-employment income to zero; the initial value is stored in *i_yse00*
- **yem_si**: switched OFF by default
 - if hourly wage is lower than hourly minimum wage, *yem* is recalculated according to the minimum wage, ignoring overtime hours of work; if ON, the switch overwrites *yem00* and also overwrites the taxable part of employment income *yemtx*.

2.4 Social benefits

The amount of some social benefits depends on the level of average, guaranteed and minimum wage. The 2014-2017 amounts are presented in the table below.

Table 4 Average gross wage, minimum wage and guaranteed wage amounts, 2014-2017

	Gross average wage (per month), in EUR	Net average wage (per month), in EUR	Gross minimum wage (per month), in EUR
2014	1,545.53	1,008.85	789.15
2015	1,555.89	1,013.23	790.73
2016	1,567.01	1,019.08	790.73
2017	1,584.66	1,030.16	804.96

Note: Data for 2016 refer to period January-February 2016.

2.4.1 Credited social contributions up to full working time for parents of children under three/six (tscctfa01_s, tscctfa02_s)

- **Definitions**

One of the parents, who nurses and cares for a child until the child's third year of age, has the right to part-time work. Part-time work includes at least a half of the normal obligation for weekly working hours. The employer ensures the worker the right to the salary on the basis of actual working hours, while the Republic of Slovenia ensures the payment of credited contributions for the difference up to full-time work on the basis of a proportional share of the minimum wage. Until September 2014 one of the parents, nursing and caring for two children, might extended this right until the younger child reached the age of six years. Since then this right ends when the younger child finishes the first grade of primary school, but the right to work par-time for one-year is non-transferable for each parent.

- **Eligibility conditions**

One of the parents who nurses and cares for a child until the child's third year of age and works part-time. In case of two children, this right might had been extended until the younger child reaches the age of six. Since 2014 this right ends when the younger child finishes the first grade of primary school, but the right to work par-time for one-year is non-transferable for each parent. Part-time work includes at least a half of the normal obligation for weekly working hours – at least 20 hours. The right is granted also to self-employed parents.

- **Income test**

Not applicable.

- **Benefit amount**

The Republic of Slovenia ensures the payment of social security contributions for the difference up to full-time work on the basis of a proportional share of the minimum wage. Credited social security contributions (employee part) are part of the gross income for assessing family income for means-tested benefits, but it is not taxed with personal income tax. For example, if an eligible employee works 60% part time, then the employee and employer social security contributions (or self-employed social security contributions in case of self-employment) are paid based on 40% of the minimum wage.

- **EUROMOD notes**

Although this policy is named a credited social contribution, it is treated as a benefit in the Slovenian legislation. Therefore, we describe the policy here and only mention it later in the chapter about social security contributions.

The time when the benefit expires (when the younger child finishes the first grade) is estimated by the age of the youngest child.

2.4.2 Credited social contributions for parents of four or more children who exit labour market (tscctfa03_s, tscctfa04_s)

- ***Definitions***

The payment of credited contributions for one parent of four or more children who exits labour market is ensured.

- ***Eligibility conditions***

Up to September 2014, one of the parents, who exited the labour market due to nursing and caring for four or more children until the youngest child reached the age of ten, was entitled to credited employee and employer or self-employed contributions on the basis of a minimum wage. Since September 2014, this right is shortened to the end of the first grade of primary school of the youngest child.

- ***Income test***

Not applicable.

- ***Benefit amount***

The Republic of Slovenia ensures the payment of social security contributions based on the minimum wage. Paid social security contributions are part of the gross income, but they are not taxed with personal income tax.

- ***EUROMOD notes***

Although this policy is named a credited social contribution, it is treated as a benefit in the Slovenian legislation. Therefore, we describe the policy here and only mention it later in the chapter about social security contributions.

The time when the benefit expires (when the younger child finishes the first grade) is estimated by the age of the youngest child.

2.4.3 Unemployment wage compensation (bunct_s)

- ***Definitions***

It is a contributory benefit for the unemployed who were previously employed.

- ***Eligibility conditions***

Unemployed who had been employed for at least 9 months in the last 24 months prior to the termination of employment (not by their own fault or will) and have been covered by unemployment insurance are eligible. Duration of unemployment wage compensation varies from 3 to 25 months depending on the length of insurance period:

Table 5 Duration of the entitlement to unemployment wage compensation

Insurance record	Duration of the entitlement
6 months if person is younger than 30 years	2 months
9 months-5 years	3 months
5-15 years	6 months
15-25 years	9 months
Over 25 years	12 months
Over 25 years and over age of 50	19 months
Over 25 years and over age of 55	25 months

In March 2013, an amendment to the Labour Market Regulation Act was adopted. Since then, unemployed persons younger than 30 years, who were employed for at least 6 months in the last 24 months prior to the termination of employment (not by their own fault or will) and were covered by unemployment insurance, have become also eligible. The duration of their entitlement is 2 months.

Unemployment wage compensation is conditioned on active search of employment, work readiness, readiness for attending interviews or training courses and accepting referrals to active labour market programmes.

According to the law also self-employed might be entitled to unemployment benefit, but stricter conditions are in force; their business must be closed for objective reasons, which must be proven (long-term illness, insolvency, bankruptcy, natural disaster, material damage to property of the insured person, loss of business premises, loss of business partner to which the business was predominantly linked or other comparable reasons).

- *Income test*

Not applicable.

- *Benefit amount*

The benefit level amounts to 80% of the basis in the first three months, 60% thereafter and 50% of the basis after the one year of receiving the benefit. The minimum benefit level is equal to the 350 EUR while the maximum level is set to 892.50 EUR.

The basis for determining the level of unemployment compensation is an eight months' average gross wage of the unemployed person prior to unemployment. Since March 2013, the basis for determining the basis for the level of unemployment compensation for persons younger than 30 years (who were employed between 6 and 9 months in the last 24 months prior to the termination of employment) is a five months' average gross wage of the unemployed person prior to unemployment.

The beneficiaries pay employee part of health-, pension- and disability insurance, while the employer part is paid by Employment service of Slovenia. Those unemployed, who are lacking up to two years until retirement, have their pension and disability insurance contributions paid by the employment service until they retire. In fact legislation in 2011 shortened the period from former three to one year before the retirement conditions are met, but amendment to the Labour market regulation act in 2013 prolonged the period to two years before the retirement conditions are met, until year 2018. So, currently beneficiaries are unemployed, who are lacking up to two years until retirement. Paid social security contributions are part of the gross income, but they are not taxed with personal income tax.

To sum up, characteristics of the unemployment benefit for the period of 2014-2017 are as following:

Table 6 Characteristics of the unemployment benefit

		2014-2017
Eligibility	Contribution period	9 in 24 months; 6 in 24 month if < 30
	Other conditions	Active job search, etc.
	Eligibility of self-employed	Eligible under stricter conditions
Payment	Contribution base	8 months' average gross wage prior to unemployment (5 months if < 30)
	Basic amount	80% of the base and reducing with time to 60% and 50%
	Additional amount	n/a
	Floor	350 EUR
	Ceiling	892.50 EUR
Duration	Standard (in months)	2-25 months depending on the insurance record
	Special cases (in month)	n/a
Subject to	Taxes (PIT)	Yes
	SIC	Yes

• **EUROMOD notes**

The simulation of unemployment wage compensation is switched to toggle in the model by default, since unemployment benefits are only partially simulated given data restrictions.

This benefit is only partly simulated using the information about actual benefits receipt. But rather than simply using the observed receipt as part of the eligibility criteria, all eligibility rules in full detail are used. However, as not all required information (e.g. work history) is available in the EU-SILC data, several assumptions are made. Further, some eligibility conditions are considered automatically fulfilled for those already receiving the benefit. This approach is chosen so that the benefit can be also 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 maximum of observed unemployment duration (lunmy) and observed benefit receipt (bunmy). In modelling unemployment benefit for those currently employed, unemployment duration is set equal to the reported number of months in employment in the current year (liwmy), once contribution history (see the next step) is modelled. It is 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 (ils_earn != 0 & lunmy_s = 0 & bunct = 0), this is used.
- For those currently unemployed (lunmy_s > 0) and in receipt (bunct > 0), this is set at least equal to the minimum qualifying period.
- For those currently unemployed (lunmy_s > 0) and not in receipt (bunct = 0), this is set to zero.

At this point, working age people who are unemployed (lunmy_s > 0), have sufficient contribution history, are not in education, do not receive old-age pension or self-employment

income are considered eligible for unemployment benefits. 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 calculated according to the rules above, using modelled contribution history, while also controlling for the unemployment duration (*lunmy_s*).

Benefit entitlement is calculated based on previous earnings and benefit duration, subject to the lower and upper thresholds. For those currently employed, current earnings are used. For those currently unemployed and in receipt, previous earnings are used which have been imputed by reversing unemployment insurance benefit rules. For those currently unemployed and not in receipt, imputed wage is used. There is no monthly information on earnings, so average annual figures are used. Finally, benefit amount is adjusted with the number of months in receipt (*bunmy_s*).

Paid pension and disability insurance contributions by the employment service for those unemployed, who are lacking up to three years until retirement, are not simulated.

2.4.4 Parental (maternity) payment (*bmact_s*)

- *Definitions*

It is a contributory benefit for mother/father on parental leave.

- *Eligibility conditions*

The total leave associated with childbirth consists of maternity leave (3 months) and parental leave (9 months) and amounts to 365 days. In some cases parental leave is prolonged. Eligibility to wage compensation during parental leave is held by persons who were insured for at least 12 months in the last three years before the start of the individual part of parental leave.

- *Income test*

Not applicable.

- *Benefit amount*

Before June 2012, wage compensation during maternity leave, and child care and protection leave amounted to 100% of the average monthly gross wage of the entitled person during the 12 months prior to the leave. The minimum wage compensation amounted to 55% of the minimum wage and the maximum compensation was 2.5 times the average wage in Slovenia. The upper limit was applied only to the benefit during child care and protection leave and was not applied during the first three months of the maternity leave. Since June 2012, the Public Finance Balance Act has temporarily lowered wage compensation during the parental leave to 90% of the base (average monthly gross wage during the 12 months prior to the leave) and set its maximum to 2 times average wage in Slovenia. In cases when the base is equal or below the amount of minimum wage, the wage compensation during the parental leave still amounts to 100% of the base. In August 2013 another intervention act (Intervention Measures for the Labour Market and Parental Protection Act) set maximum of wage compensation also to the first three months of the maternity leave to 2 times average wage in Slovenia. These rules are temporary and will be kept until the year when GDP growth reaches 2.5% and the annual increase in the employment rate in the age group 20-64 years exceeds 1.3 percentage points.

- ***EUROMOD notes***

The simulation of wage compensation during parental leave is switched off by default for year 2011 and switched on from year 2012 on. Since June 2012, replacement rate for the child care and protection leave has dropped to 90% and available data on the benefit amount from year 2011 are less suitable than simulated data.

This benefit is only partly simulated using the information about actual receipt. 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 in receipt.

Base for compensation during parental leave is estimated on previously predicted hourly wage, hours worked per week and average number of weeks per month. Hours worked per week are estimated as follows:

- For those in receipt and with $lhw = 0$, it is set to 40.
- For those in receipt and with $lhw > 0$, the actual lhw is used, but it is capped to 40.

The number of months in receipt of compensation during parental leave is estimated as the ratio of actual amount received per year and 100% of predicted base (as replacement rate was 100% in years before June 2012).

Benefit entitlement is then calculated based on the calculated base and benefit duration, subject to the lower and upper thresholds.

2.4.5 Parental allowance (bmanc_s)

- ***Definitions***

Parental allowance is granted to one of the parents who is not eligible for the insurance-based wage compensation during the parental leave. Qualified is a parent who is a national of Slovenia, has a permanent residence in Slovenia and is not receiving parental (maternity) payment. A child must be a national of Slovenia and the father must not receive any parental leave wage compensation. Most usually, mother is qualified for parental allowance; the father is qualified only in case if mother dies, abandons a child, is not able to live and work independently, or if she, during the period of entitlement, enters into employment or self-employment. There is no means test.

- ***Eligibility conditions***

Parental allowance is granted to parents who are not eligible for the insurance-based wage compensation during the parental leave. The benefit is paid only to parents with children aged less than one year, who receive no contributory parental payments and has no employment or self-employment income.

- ***Income test***

Not applicable.

- ***Benefit amount***

The 2014-2017 parental allowance benefit rates are indicated below. It lasts 365 day as parental leave. The amount does not change in case of twins, triplets, etc. Since September 2014 the parental allowance amount has changed and has no longer been set in line with minimum wage. Parental allowance is not subject to income tax.

Table 7 Parental allowance rates, EUR per month, 2014-2017

	2014	2015	2016	2017
Parental allowance	252.04	252.04	252.04	252.04

- ***EUROMOD notes***

In the implementation it is assumed that the mother receives parental allowance unless father is a lone parent.

2.4.6 Birth grant (bchba_s)

- ***Definitions***

Birth grant is a benefit for a child born in Slovenia, if the mother or the father has permanent residence in Slovenia. This benefit is granted either in-kind or in cash.

- ***Eligibility conditions***

Access to birth grant is limited to families with a dependent baby aged less than one year. Until the year 2012 it was a universal, non means-tested, while means test was introduced in June 2012 with Public Finance Balance Act. Since then, only parents whose net family income per family member is below the 64% of net average wage are eligible. Means tested nature of this benefit will be kept until the year when GDP growth reaches 2.5%.

- ***Income test***

Birth grant was not subject to income test before June 2012. Since then, only parents whose net family income per family member (family members are parents and dependent children according to the definition on pp. 2) is below the 64% of net average wage are eligible for birth grant. Income definition is the same as for child benefit income test. Means tested nature of this benefit will be kept until the year when GDP growth reaches 2.5%.

- ***Benefit amount***

The 2014-17 birth grant benefit rates are indicated below. It is one-time benefit, not subject to income tax.

Table 8 Birth grant rates, EUR, 2014-2017

	2014	2015	2016	2017
Birth grant	280.75	280.00	280.00	280.00

2.4.7 Large family allowance (bchlg_s)

- ***Definitions***

Large-family supplement is a transfer to families with three or more children.

- ***Eligibility conditions***

Access to large family allowance is limited to families with three or more dependent children residing in Slovenia under the condition that the child is a national of the Republic of Slovenia or the child is not a national of the Republic of Slovenia, on the condition of reciprocity (i.e.

bilateral convention between two countries). Eligible are families with three or more children below age 18 or older, if fulfilling the age and status conditions; i.e. aged less than 26 and involved in full time education.

- ***Income test***

Large family allowance was a universal non means-tested benefit before June 2012. Since then, only parents whose net family income per family member is below the 64% of net average wage are eligible. Means tested nature of this benefit will be kept until the year when GDP growth reaches 2.5%.

- ***Benefit amount***

The level of benefit is paid once a year and it differs according to the size of family. The benefit level is adjusted once a year in January in line with the consumer price index and is not subject to income tax. The 2014-17 large family allowance rates are indicated below.

Table 9 Large family allowance, EUR, 2014-2017

	2014	2015	2016	2017
Large family allowance: 3 dependent children	393.46	395.00	395.00	395.00
Large family allowance: 4 or more dependent children	479.83	480.00	480.00	480.00

2.4.8 Social assistance (bsa_s)

- ***Definitions***

The Social assistance benefit is means-tested and is intended to ensure the minimum income for residents of Slovenia. The benefit level is the difference between the minimum income of the household and household's income in previous three months which is the base for income test.

- ***Eligibility conditions***

In accordance with the Social Assistance Act, beneficiaries are citizens of the Republic of Slovenia permanently residing in Slovenia and aliens in possession of a permit for permanent residence in Slovenia. The right to financial social assistance can also be exercised by persons in respect of whom this right is recognised by international instruments binding on the Republic of Slovenia. Financial social assistance is available for beneficiaries who are unable to provide minimum income resources for themselves or their family members for reasons beyond their control and who have exercised their right to financial benefits pursuant to other regulations.

When assessing the eligibility, the account is taken of the ceiling as well as of the fact whether an individual or family has assets enabling subsistence, whether all other rights were exercised (social assistance is the last of the rights within the system, eligible when all other subsistence options are exhausted) and whether the person concerned is active in seeking solutions to his/her problem. The latter is of particular importance to all who can work and must be registered with the Employment Service of Slovenia, participate in offered programmes of active employment policy and actively seek employment.

Means test is taken into account for all social benefits. The person's assets include immovable property, vehicles, vessels, ownership shares in companies or cooperatives, securities, cash assets on transaction or other bank account (savings and other cash assets) and other movable

assets. The person's assets do not include the apartment, where the person resides, to the value of the appropriate apartment (the Social Assistance Act states what appropriate apartment is), personal vehicle or single-track vehicle to the value of 28-times of the basic minimum income amount, assets that provide income, higher than double the gross minimum salary, savings up to the certain amount and also assets in some other cases. Assets are considered in such way that the income of persons is increased by a fictively determined income, namely in the amount of annual interest calculated on the value of assets, which are considered. The average annual interest rate for households for time deposits from 1 to 2 years for the year prior to the year when the application is submitted according to the Bank of Slovenia's information is considered.

Social assistance might be awarded to the person/household owning an apartment with the value above the value of an appropriate apartment if:

- a) the cash social assistance has not been received or not more than twelve times in the past 18 months or
- b) the cash social assistance has been received more than twelve times in the past 18 months and the recipient agrees with the entry of the prohibition of alienation and burdening of real estate, the owner of which he or she is (hereinafter the "Owner"), in the land book to the benefit of the Republic of Slovenia and fulfils other conditions for the entitlement to the cash social assistance according to this Act.

In February 2017 the law has changed and became less strict. Social assistance might be awarded to the person/household owning an apartment (or house) in which he lives and has a registered permanent residence, whose value exceeds 120,000 EUR (if the value is below the house/apartment is not taken into account):

- a) the cash social assistance has not been received or not more than eighteen times in the past 24 months or
- b) the recipient is not able to use apartment or house to obtain the means of subsistence due to circumstances beyond his/her control (for example home violence) or
- c) the recipient agrees with the entry of the prohibition of alienation and burdening of all real estate, the owner of which he or she is (hereinafter the "Owner"), in the land book to the benefit of the Republic of Slovenia and fulfils other conditions for the entitlement to the cash social assistance according to this Act

- ***Income test***

The Act Amending and Supplementing the Social Protection Benefits Act was partially implemented in January 2014 and fully implemented in September 2014. This act: a) increased family-member weights due to crisis until the year when GDP growth reaches 2% (January 2014), b) abandoned differentiation of weights for children according to educational level of a child due to introduction of state scholarships for pupils below the age of 18 (January 2014) and, c) increased supplement for single parent family to 20% (September 2014). The basic amount of minimum income was increased twice in 2014 and twice in 2015 (January and August in both years).

At the end of 2015 a package of laws which partially eliminated the austerity measures in the field of social transfers was adopted. Therefore the basic amount of minimum income was finally increased to initial value of 288.81 EUR.

Table 10 Equivalence scales for social assistance, from 1 January 2014

Family member	Weight	
	2014-2015	2016-2017
The first adult	1	1
The first adult working 60-128 hours/month	1.28	1.28
The first adult working more than 128 hours/month	1.56	1.56
Single person aged 18-25, living with parents and registered as unemployed	0.7	0.7
Single person - permanently unemployable, or permanently incapable of work, or older than 63 (a woman) / 65 (a man) - living with persons who have sufficient means of subsistence for themselves and are not their family members (according to the definition in the Act)	0.8	0.76
An adult in full-day institutional care	1	-
Each further adult	0.6	0.57
Each further adult working 60-128 hours/month	0.74	0.71
Each further adult working more than 128 hours/month	0.88	0.85
The first child: the oldest child in the family	0.8	0.76
Each subsequent child in the family	0.7	0.66

Table 11 Minimum income rates, EUR per month, by 30st June

	2014	2015	2016	2017
Minimum income	265.22	269.20	288.81	292.56

Family income which is the base for income test is net of taxes and consists of: taxable employment and self-employment income (when self-employment income is lower than gross minimum wage, 75% of gross minimum wage is taken into account), contractual work incomes, student work incomes (since September 2014 only the amount above 50% of basic amount of minimum income has been taken into account), all pensions, unemployment wage compensation, wage compensation for disabled workers, unemployment assistance, parental and paternal payments, parental allowance, capital income, rents, compensation for lost income due to care for child with special needs, social contributions up to full working time for parents working part-time, national scholarship (without supplements), the difference between received and paid maintenance payments. Personal income tax and employee social security contributions are subtracted. Child benefits (since September 2014 the amount of child benefit taken into account has been reduced by 20% of the child benefit amount for the first child in the first income bracket and without the supplement for single-parent families and children not enrolled in pre-school education) are included in family income, while birth grant and large family allowance are not.

- **Benefit amount**

The benefit level is the difference between minimum income for the family and family's actual income net of taxes and compulsory social security contributions.

- ***EUROMOD notes***

We take into account total annual income instead of income in the previous three months. As we have only annual incomes we cannot simulate which incomes are received less than three times in three months and therefore we do not decrease income from student work for $0.5 * \text{minimum income}$.

The asset test is not simulated due to data constraints.

Weights for persons older than 63 (a woman) / 65 (a man) - living with persons who have sufficient means of subsistence for themselves and are not their family members are not simulated by the model due to data constraints.

2.4.9 Income support (bsapm_si)

- ***Definitions***

Income support is a social protection benefit, enacted from January 2012, and intended for persons who cannot ensure their financial security due to circumstances beyond their control. It replaces pension support for pensioners and state pension which have both been abolished.

- ***Eligibility conditions***

Persons, who are permanently unemployable or permanently incapable for work or women older than 63 years or men older than 65 years, whose family income (defined in the same way as for social assistance) does not exceed the minimum income amount, are eligible for income support. Income support is also means tested in the same way as social assistance (social assistance included into family income). In case of the ownership of real estate, the rules were stricter, as the entitled recipient is prohibited to alienate and to burden the real estate, owner of which he or she is, to the benefit of the Republic of Slovenia by the decision of the entitlement to the income support. Since February 2017, the same rules as for social assistance apply also for income support considering the ownership of real estate.

- ***Income test***

The Social Benefits Act (2010) introduces new equivalence scale for income support which was enforced in January 2012. The amount of minimum income for income support beneficiaries is increased in relation to the basic amount of the minimum income as evident from Table 12.

Table 12 Equivalence scales (supplements to basic amount of minimum income), 2013-2017

Family member	Weight supplements	
	2013-2015	2016-2017
The single person	0.73	0.63
The only adult person in the family	0.73	0.63
The first adult person in the family, in which its other adult family members also fulfil the conditions for income support	0.73	0.63
For other adult person in the family, in which other adult family members fulfil the conditions for income support (with higher weight) or have the status of an active person	0.36	0.34
Single person - permanently unemployable, or permanently incapable of work, or older than 63 (a woman) / 65 (a man) - living with persons who have sufficient means of subsistence for themselves and are not their family members (according to the definition in the Act)	-	0.69

Family income, which is the base for income test, is net of taxes and consists of: taxable employment and self-employment income, contractual work incomes, student work incomes, all pensions, unemployment wage compensation, wage compensation for disabled workers, unemployment assistance, parental and paternal payments, parental allowance, capital income, rents, compensation for lost income due to care for child with special needs, social contributions up to full working time for parents working part-time, national scholarship (without supplements), the difference between received and paid maintenance payments. Personal income tax and employee social security contributions are subtracted. Child benefits and social assistance are included in family income, while birth grant and large family allowance are not.

- ***Benefit amount***

The benefit level is the difference between minimum income for the family and family actual income net of taxes and compulsory social security contributions.

- ***EUROMOD notes***

We take into account total annual income and not income in three previous months.

Asset test is not simulated due to data constraints. The unexpectedly small number of recipients is assumingly the consequence of non-take up due to the constraints in case of real estate ownership. Therefore we simulate non-take up with the introduction of assumption that real estate owners do not apply for the income support.

Weights for persons older than 63 (a woman) / 65 (a man) - living with persons who have sufficient means of subsistence for themselves and are not their family members are not simulated by the model due to data constraints.

2.4.10 Housing benefit (bho_s)

- *Definitions*

Housing benefit is means-tested and covers part of rent for a person whose family income does not exceed certain threshold. The share of covered rent depends on the size of apartment and beneficiary's income, and must not exceed 80% of respective non-profit rent. There were no changes in eligibility conditions, income test and benefit amount for this benefit in 2012.

- *Eligibility conditions*

Access to housing benefit is limited only to households renting and paying profit or non-profit rent with income under certain threshold.

- *Income test*

Income threshold is the sum of (a) minimum income (the same as for social assistance according to previous / new legislation) for particular household, (b) 30% of net family income and (c) estimated non-profit rent. Households above threshold are not eligible at all.

The family income should be below family minimum income. Family income, which is the base for income test, is net of taxes and consists of: taxable employment and self-employment income, contractual work incomes, student work incomes, all pensions, unemployment wage compensation, wage compensation for disabled workers, unemployment assistance, parental and paternal payments, parental allowance, capital income, rents, compensation for lost income due to care for child with special needs, social contributions up to full working time for parents working part-time, national scholarship (without supplements), the difference between received and paid maintenance payments. Personal income tax and employee social security contributions are subtracted. Child benefits, social assistance, income support and national scholarship are included in family income, while birth grant and large family allowance are not.

Estimated annual non-profit rent depends on the flat size. The maximum flat size taken into account when estimating non-profit rent depends on the number of family members:

Table 13 Maximum flat size for housing benefit, 2014-2017

The number of family members	Maximum flat size
1 family member	30 m ²
2 family members	45 m ²
3 family members	55 m ²
4 family members	65 m ²
5 family members	75 m ²
6 family members	85 m ²
more than 6 family members	85 m ² +6 m ² for 7 th and each subsequent member

Estimated annual non-profit rent is calculated as follows (S = flat size in square meters):

- $(270 \cdot 2.63 \cdot S \cdot 1.057 \cdot \text{factor})$ if $S \leq 30$
- $(270 \cdot 2.63 \cdot S \cdot 1.024 \cdot \text{factor})$ if $S > 30$ & $S \leq 45$
- $(270 \cdot 2.63 \cdot S \cdot 1.000 \cdot \text{factor})$ if $S > 45$ & $S \leq 65$
- $(270 \cdot 2.63 \cdot S \cdot 0.966 \cdot \text{factor})$ if $S > 65$ & $S \leq 75$
- $(270 \cdot 2.63 \cdot S \cdot 0.950 \cdot \text{factor})$ if $S > 75$

In 2006 factor amounted to 0.0446 and in 2007 to 0.0468. It has not changed since then.

- ***Benefit amount***

The benefit level is the difference between income threshold for the household and household income which is the base for income test. The benefit cannot be higher than 80% of estimated non-profit rent (*MOD: Estimated non-profit rent*). Housing benefit is not subject to income tax.

- ***EUROMOD notes***

There is no information about the actual flat size in the data, so the family-size-dependent maximum flat size is assumed in the estimation of the non-profit rent.

Asset test is not simulated due to data constraints.

2.4.11 Child benefit (bchmt_s)

- ***Definitions***

The right to child benefit is granted to one of the parents or any other person, namely for a child that resides in the Republic of Slovenia and is younger than 18 years, and who also fulfils all other conditions.

- ***Eligibility conditions***

Access to child benefit is limited to families with dependent child residing in Slovenia under the condition that:

- a. the child is a national of the Republic of Slovenia;
- b. the child is not a national of the Republic of Slovenia, on the condition of reciprocity (i.e. bilateral convention between two countries).

- ***Income test***

Income threshold is set as income per family member compared to average net wage. The family income, which is the base for income test, is net of taxes and consists of: taxable employment and self-employment income, contractual work incomes, student work incomes, all pensions, unemployment wage compensation, wage compensation for disabled workers, unemployment assistance, parental and paternal payments, parental allowance, capital income, rents, compensation for lost income due to care for child with special needs, social contributions up to full working time for parents working part-time, national scholarship (without supplements), the difference between received and paid maintenance payments. Personal income tax and employee social security contributions are subtracted. Child benefit is the first benefit in series, which means no subsequent benefits (social assistance, income support and state scholarship) are included into family income.

Besides that, a new means test has been introduced. It should be noted that the same assets are taken into account for all social benefits (more details about means testing are described in chapter 2.4.8.).

Families above threshold are not eligible for child benefits.

- ***Benefit amount***

The amount of benefit depends on the family income per family member in comparison to average net wage and the number of eligible children. The number of income brackets is the same as in previous system, while the benefit amounts differ according to educational level of a child.

In June 2012, the Public Finance Balance Act abolished the right to child benefit for parents in 7th and 8th income bracket and lowered child benefit amount for parents in 5th and 6th income bracket by 10%. The same Act provided that the last two income brackets would be re-introduced and the amount for parents in 5th and 6th income bracket will be re-increased to the previous level when GDP growth reaches 2% again. Child benefit amounts are evident from the Table 14. Since January 2014, differentiation of child benefits according to educational level of a child has been abolished (only exception is the 6th income bracket) due to introduction of state scholarships for pupils below the age of 18. Due to economic growth the 5th and 6th income bracket amounts have been increased by 10% (to the previous amount) since January 2016. Besides, the 6th income bracket is split into two smaller income brackets and the child benefit in income bracket 6b is increased.

Table 14 Child benefit rates, EUR per month, 2014-2017

Net monthly income per person in % of net average wage	Child benefit for a child in elementary school or until 18 years of age (in euro)			Child benefit for a child in high school or until 18 years of age (in euro)		
	1st child	2nd child	3rd and every additional child	1st child	2nd child	3rd and every additional child
	2014-2015					
to 18%	114.31	125.73	137.18	114.31	125.73	137.18
more than 18 to 30%	97.73	108.04	118.28	97.73	108.04	118.28
more than 30 to 36%	74.48	83.25	91.98	74.48	83.25	91.98
more than 36 to 42%	58.75	67.03	75.47	58.75	67.03	75.47
more than 42 to 53%	43.24	50.45	57.63	43.24	50.45	57.63
more than 53 to 64%	27.40	34.29	41.14	39.10	45.99	64.05
	2016-2017					
to 18%	114.31	125.73	137.18	114.31	125.73	137.18
more than 18 to 30%	97.73	108.04	118.28	97.73	108.04	118.28
more than 30 to 36%	74.48	83.25	91.98	74.48	83.25	91.98
more than 36 to 42%	58.75	67.03	75.47	58.75	67.03	75.47
more than 42 to 53%	48.04	56.06	64.03	48.04	56.06	64.03
more than 53 to 56%	30.44	38.10	45.71	30.44	38.10	45.71
more than 56 to 64%	30.44	38.10	45.71	43.44	51.10	71.17

Lone parents (according to new stricter definition) are entitled to a 10% higher child benefit up to September 2014 and 30% higher child benefit since September 2014 (adopted new Parental Protection and Family Benefit Act). Additionally, pre-school child, who is not enrolled in pre-school education, is entitled to a 20% higher child benefit.

- **EUROMOD notes**

Asset test is not simulated due to data constraints. The increase of child benefits in single parent families is not simulated for years 2012 and later, due to new stricter definition of single-parent family and lack of needed data. 20% higher child benefits for pre-school children not enrolled in pre-school education are also not simulated due to data constraints.

2.5 Social contributions

There are four types of compulsory social security contributions, which are paid both by employer and employee: (1) for pension and disability insurance (they are paid to the Pension Insurance Fund), (2) for health insurance (they are paid to the Institute of Health Insurance), (3) for unemployment insurance (they are paid to the central government), (4) for maternity leave insurance (they are paid to the central government).

There are also some social security contributions for benefits. Employee part of these contributions (unemployment wage compensation, parental payments, wage compensation for disabled workers, compensation for lost income due to care for child with special needs) is included among employee social contributions, although they are paid from the institution which disburses the benefit.

The “employer” part of social security contributions on benefits (parental payments, wage compensation for disabled workers, unemployment wage compensation, compensation for lost income due to care for child with special needs, compensation for lost income due to care for child with special needs, unemployment assistance and pensions) could be considered as credited contributions. However, in external statistics these contributions are treated as transfers between public funds.

As already mentioned, there are also credited social security contributions for parents satisfying the following conditions:

- part time work of parents with children under 3/6 - up to full working time,
- paternal payment after 15th/20th/25th day, and
- parents who exit the labour market due to the care for four or more children.

Besides, there are also credited health insurance contributions on pensions (paid by Pension Fund to the Health Insurance Company) and health insurance contributions on unemployment assistance (paid by Employment Service to the Health Insurance Company).

Employee and employer contributions are paid by the employer. The minimum base for social contributions was in force at the level of minimum wage for taxable employment income and wage compensation for sick leave up to 2014. This means that the social contributions were paid from minimum wage if reference earnings (employment income and wage compensation for sick leave) were lower than minimum wage. The new Pension and Disability Insurance Act, enforced at the beginning of 2013, gradually increases minimum base for social contributions up to 60% of average wage in 2021; the minimum base was set at the level of minimum wage in 2013 and 2014 and increased to 52% of average wage in Slovenia in period 2015-2017.

The current pension legislation introduced reduced social security contributions for employing first-time job seekers and older workers, starting from July 2013. Employers can apply for 50% refund of employer social contributions paid for the first year of employment of the first-time job seeker, and for 30% refund for the second year. The additional condition is that the employment contract is permanent and signed for at least two years and that the employee is younger than 26 years (or is a mother with a child up to three years of age). By the same token, employer social contributions are 30% lower for employees who are older than 60 years and 50% lower for employees who have already fulfilled early retirement conditions.

Few temporary changes were adopted in 2016 with Intervention Measures for the Labour Market Act. Reduction of social security contributions for employees who are older than 60 years and employees who have already fulfilled early retirement conditions are abolished. On the other hand the employer who permanently employs unemployed person older than 55 years

(who has been unemployed for at least six months) is exempt from all employer contributions for 24 months. This change is in force until the end of 2017.

- ***EUROMOD notes***

The minimum base condition and reduced social security contributions (with the exception of the reduction for employees aged more than 60) are not modelled due to data constraints.

2.5.1 Employee social contributions (tscee_s), (tscbe_s)

Employee social contributions are paid at a flat rate 22.1% of reference earnings. Reference earnings are: taxable employment income and wage compensation for sick leave. Employee part of social contributions is paid also from some benefits: compensation for lost income due to care for child with special needs, maternity and paternal payments, unemployment wage compensation and wage compensation for disabled workers. Social contributions are levied on parental allowance for only pension and disability insurance. There is no upper earnings threshold. The base for contributions includes also some fringe benefits and remuneration of expenses related to work above certain threshold.

The rates of employee social contributions are the following:

- a. for pension and disability insurance: 15.5% - the base consists of all listed incomes plus parental allowance;
- b. for health insurance:
 - 6.36% - the base is taxable employment income and wage compensation for sick leave
 - 5.96% - the base is unemployment wage compensation, compensation for lost income due to care for child with special needs, maternity and paternal payments;
- c. for unemployment insurance: 0.14% - the base consists of all listed incomes
- d. for maternity leave insurance: 0.1% - the base consists of all listed incomes

In case the reference earnings are lower than minimum base the base is calculated as follows:

1. employee social security contributions are paid from reference earnings, and
2. from the difference between reference earnings and minimum base:
 - a. the social contributions for unemployment insurance: 0.14 % - and
 - b. social contributions for maternity leave insurance: 0.1%.

Health social insurance contributions are not paid.

- ***EUROMOD notes***

Due to data restrictions, the base consists (only) of: taxable employment income and wage compensation for sick leave. The employee part of social contributions for benefits consists of unemployment wage compensation, wage compensation for disabled, maternity and paternity payment. The employee's part of social contributions on benefits (tscbe_s) is added to employee's social contributions (ils_sicee) in the output and has to be subtracted to get contributions paid actually by employees. The minimum base condition is not modelled due to data constraints.

2.5.2 Employer social contributions (tscer_s)

Employer social contributions are always paid in line with employee social security contributions. In addition, there are also some incomes where only employer social contributions are paid. The rates of contributions are the following:

- a) for pension and disability insurance:
 - 8.85% - the base are all incomes which are the base for employee social contributions¹ plus parental allowance,
- b) for health insurance:
 - 6.56% - the base is taxable employment income and wage compensation for sick leave, maternity and paternity payments;
 - 5.96% - the base is unemployment wage compensation
- c) for occupational disease and employment injury insurance contributions:
 - 0.53% - the base is taxable employment income and wage compensation for sick leave;
- d) for unemployment insurance:
 - 0.06% - the base are all incomes which are the base for employee social contributions;
- e) for maternity leave insurance:
 - 0.1% - the base are all incomes which are the base for employee social contribution.

In case the reference earnings are lower than minimum wage the procedure is as follows:

1. employer social security contributions are paid from reference earnings and
2. from the difference between reference earnings and minimum wage:
 - a. social contributions for pension and disability insurance (employee and employer part): 24.35 %
 - b. the social contributions for unemployment insurance 0.06 %;
 - c. social contributions for maternity leave insurance: 0.1%.

Health social insurance contributions are not paid.

- **EUROMOD notes**

The minimum base condition is not modelled due to data constraints.

2.5.3 Self-employed social contributions (tscse_s)

Since 2014 the social contributions have been calculated individually. The annual base for social contributions is calculated as:

profit in last year + paid social security contributions in last year – share of the base reduction*(profit in last year + paid social security contributions in last year)

Share of base reduction amounts to 30% in 2014, 28% in 2015 and 25% from 2016 onwards. However, the minimum base and upper threshold still remain: the upper threshold has been increased to 3.5*average gross wage in 2014. The minimum base amounted to minimum wage in 2014; in 2015, the minimum base was increased to 54% of average gross wage in Slovenia, in 2016 to 56% of average gross wage and in 2017 to 58% of average gross wage. Self-

¹ All listed incomes are: taxable employment income, wage compensation for sick leave, unemployment wage compensation, wage compensation for disabled, maternity and paternity payment.

employment contribution rates correspond to the sum of employee and employer contributions rates, i.e. $22.1\% + 16.1\% = 38.2\%$.

- **EUROMOD notes**

Data on self-employment income in EU SILC include self-employment income (which is taxed with social contributions) and also other types of income (agriculture income, part of employment income to align with labour economic status) which are only partially included in the EU-SILC survey. Therefore, a proper identification of self-employed persons who are obliged to pay social insurance contributions is needed. In 2009 and onwards, we identify them by comparing gross and net self-employment income in EU-SILC (py050g and py050n). When net self-employment income is lower than gross self-employment income, we assume that social insurance contributions were paid and we consider them as self-employed who are obliged to pay social contributions. In the years before 2008, we identify this group of self-employed by setting the condition controlling also for their labour status ($les = 2$).

2.5.4 Social contributions for occasional incomes (tscee_s, tscer_s)

In 2014 and 2015, the new legislation concerning social contributions for “occasional” incomes, was adopted. Occasional incomes are incomes from contractual work, incomes from student work and royalties.

Social contributions for incomes from contractual work and royalties are levied differently depending on whether a recipient is already insured or not. Insured are persons who are full-time employed, pensioner and student work incomes recipients. Social contributions for incomes from contractual work and royalties are:

1. a recipient is already insured:
 - a. 8.85% employer contribution for pension and disability insurance,
 - b. 0.53% employer contribution for occupational disease and employment injury insurance
 - c. 6.36% of employee contributions for health insurance;
2. a recipient is not insured:
 - a. 15.5% of employee contribution for pension and disability insurance,
 - b. 6.36% of employee contributions for health insurance,
 - c. 8.85% employer contribution for pension and disability insurance,
 - d. 0.53% employer contribution for occupational disease and employment injury insurance contributions.

Since February 2015 social contributions are levied also to incomes from student work:

- a. 15.5% of employee contribution for pension and disability insurance,
- b. 8.85% employer contribution for pension and disability insurance,
- c. 6.36% of employer contributions for health insurance,
- d. 0.53% employer contribution for occupational disease and employment injury,

In addition to contributions, employer must also pay the concession fee in the amount of 16% (8.4% for the budgetary fund of the Ministry, 3.8% for Slovenian Student Union and 3.8% for intermediaries) and additional concession fee of 2%.

- **EUROMOD notes**

If the recipient receives income from contractual work and employment income ($yem > 0$) we assume, the person is already insured.

The social contributions levied on incomes from royalties are not modelled due to data constraints.

2.5.5 Credited social contributions (tscctfa*_s, tsccthl01_s, tscct*_s)

The base for credited social security contributions for parents is an appropriate percentage of minimum wage in case of part time work or the total amount of minimum wage. Social security contributions are paid at the following rates: 21.70 % for employee social security contributions (15.5 % for pension and disability insurance, 5.96 % for health insurance, 0.10 % for maternity leave insurance and 0.14 % for unemployment insurance) and 9.01 % for employer social security contributions (8.85 % for pension and disability insurance, 0.10 % for maternity leave insurance and 0.06 % for unemployment insurance). The base for credited health insurance contributions on pensions is the amount of pensions multiplied by a factor (1.573), while the contribution rate is 5.96%. The base for credited pension and disability insurance contributions on parental allowance is the benefit amount and the contribution rate is 24.35 % (employee side 15.50% and employer side 8.85%). Note that these contributions are treated as transfers between public funds in external statistics and not as credited contributions.

The employer part of social contributions on benefits is also treated as transfers between public funds and not as credited contributions. The following rates are applied: 16.10 % for wage compensation for disabled workers and parental payments, and 15.57% for unemployment wage compensation.

2.6 Personal income tax (tin_s)

The main tax simulated for Slovenia is personal income tax. All residents are required to file income tax returns if their annual income exceeds an exemption limit (i.e. general tax allowance and higher amount for pensioners).

2.6.1 Tax unit

Personal income tax in Slovenia is individual and each taxpayer must file its own tax return. Only in case of family allowances we consider family, but only to determine dependent children and other dependent family members.

2.6.2 Exemptions

There are few tax exemptions i.e. income components which do not have to be declared to the tax authorities, and thus are not included in the concept of taxable income: (a) family benefits (birth grant, large family supplement, child benefit, parental allowance), (b) social assistance, (c) housing benefit, (d) attendance supplement, (e) childcare supplement, (f) benefits from education (scholarship), (g) disability supplement and (h) employee social contributions.

2.6.3 Tax allowances

There are nine tax allowances: (a) general tax allowance, (b) disabled person's tax allowance, , (c) allowance for self-employed professionals, (d) special allowance for additional pension insurance, (e) allowance for students, , (f) family allowance for other dependant family member (partner or parent) and (i) family allowance for children. The first 5 allowances are named

standard allowances and the last 2 are named family allowances. All tax allowances are deducted from the intermediary tax base.²

- *Standard tax allowances (tinta_s)*

Taxpayers who are not dependent children / parents / partners (another taxpayer claims family or child allowance for them) or taxpayers with positive intermediary tax base are eligible for general allowance. General allowance differentiates according to the taxable income amount.

Disabled person's allowance is granted to all taxpayers who are heavily disabled. Self-employed professionals in the field of culture and self-employed journalist are entitled to the annual allowance equal to 15% of their income, but the allowance cannot be higher than €25,000 per year. Taxpayers can also claim allowance for insurance premium paid for additional voluntary pension insurance in the size up to 5.844% of the gross wage, but the allowance cannot be higher than the amount set by law.

There is also a special allowance for students who work on the basis of a student's referral note from an authorised organisation, which carries out an activity of providing work to secondary-school and university students in accordance with the regulations in the domain of employment. All students, regardless the income amount from student work, are entitled to this allowance.

- *EUROMOD notes*

Disabled person's allowance and self-employed professional's allowance are implemented but switched off because of lack of data on eligibility.

- *Family tax allowances (tinta_s)*

In case of family allowances, we consider family as a tax unit to determine dependent children and other family members. Despite considering family as a tax unit to determine dependent family members, it should be kept in mind that tax allowances are always assessed individually and not jointly.

We distinguish between tax allowances for dependent family members and tax allowances for dependent children.

Dependent family member is:

- dependent spouse or
- dependent parent

with intermediary tax base less than family allowances for other dependent family members.

Children below age 18 are considered dependent children, regardless of any other condition. Children aged 18 or more but less than 26 are considered dependent children only if a person is in full time education. If a child is unemployed and with income less than family allowances for dependent child, he/she can also be considered as dependent child.

Every person is considered as an individual in the Slovenian tax system. Therefore, parents can freely decide how to split entitlement to child allowances among them. In most cases it is optimal that parent with highest final tax base claims allowance for all children, as the

² Intermediary tax base is taxable income minus employee and self-employed social security contributions.

allowance is progressive.³ For this reason, it is assumed that parent with highest final tax base claims allowance for all children, or for the children his/her final tax base can absorb.

If the final tax base of parent with highest income is not sufficient to claim allowances for all dependent children in the family, the other parent should claim allowance for the rest of children. As allowance is progressive, it is important to keep in mind that the other parent can claim allowance only for the number of children reported in his/her own tax return, regardless of the number of children in family. For example, in a family with five dependent children, the father claims allowance for 3 children (for the first, the second and the third) and the mother claims allowance for the other two children (who are considered as first and the second dependent child for the mother and not as fourth and the fifth from a family perspective).

A rule also exists, that parents cannot share the allowance for the same child. The exception is that parents can share allowance for the same child only if the final tax base of one parent is too low and the allowance for the dependent child could not be claimed in its full amount. It should be noted that parents are allowed to “split” children but not the amount of the allowance. For example, in a family with 3 children, where the father is able to claim allowance for two children and 1/3 of allowance for the third child, the mother can claim the rest - 2/3 of allowance for the third child. In this case, the dependent child is considered as “first” for the mother and the allowance amounts to 2/3 of allowance for the first child.

The head of the household can claim allowance for as many children as his/her final tax base can absorb and also for residual children, i.e. the children for whom the allowance cannot be claimed in full amount. In the model implementation, the remaining part of the allowance is not transferred to the other parent but it is ignored.

Children left for the other parent – the partner of the head of tax unit - are defined as the difference between the number of all dependent children in the tax unit and the number of children the parent with highest final tax base claims allowance for.

Finally, total allowance for either parent is calculated. Family allowance is progressive and it rises for each subsequent child.

³ Note that this final tax base contains all standard tax allowances but no family tax allowances yet.

Table 15 Personal income tax allowances (EUR per year), effective on June 30, 2014-2017

Allowances	2014	2015	2016	2017
Standard allowances				
- General	<ul style="list-style-type: none"> • 6,519.82 if gross income is up to 10,866.37 • 4, 418.64 if gross income is between 10,866.37 and 12,570.89 • 3,302.70 if gross income is 12,570.89 or higher 	<ul style="list-style-type: none"> • 6,519.82 if gross income is up to 10,866.37 • 4, 418.64 if gross income is between 10,866.37 and 12,570.89 • 3,302.70 if gross income is 12,570.89 or higher 	<ul style="list-style-type: none"> • 6,519.82 if gross income is up to 10,866.37 • 4, 418.64 if gross income is between 10,866.37 and 12,570.89 • 3,302.70 if gross income is 12,570.89 or higher 	<ul style="list-style-type: none"> • 6,519.82 if gross income is up to 11,166.37 • 4, 418.64 if gross income is between 11,166.37 and 12,570.89 • 3,302.70 if gross income is 12,570.89 or higher
- For the disabled	17,658.84	17,658.84	17,658.84	17,658.84
- Seniority	-	-	-	-
- For self-employed professionals	15% of annual incomes up to 25,000	15% of annual incomes up to 25,000	15% of annual incomes up to 25,000	15% of annual incomes up to 25,000
- For additional pension insurance	max up to 2,819.09	max up to 2,819.09	max up to 2,819.09	max up to 2,819.09
- For students	2,477.03	2,477.03	2,477.03	2,477.03
- Family allowances				
- For dependent children				
• 1 st child	2,436.92	2,436.92	2,436.92	2,436.92
• 2 nd child	2,649.24	2,649.24	2,649.24	2,649.24
• 3 rd child	4,418.54	4,418.54	4,418.54	4,418.54
• 4 th child	6,187.85	6,187.85	6,187.85	6,187.85
• 5 th child	7,957.14	7,957.14	7,957.14	7,957.14
• each subsequent child	1769.29 (more than previous child)	1769.29 (more than previous child)	1769.29 (more than previous child)	1769.29 (more than previous child)
for disabled child	8,830.00	8,830.00	8,830.00	8,830.00
• - For dependent family members	2,436.92	2,436.92	2,436.92	2,436.92
- For cross-border migrants	-	-	-	-

- **EUROMOD notes:**

The possibility of splitting the allowance for one child between parents is neglected in the implementation due to the model complexity and likely negligible impact on aggregate results. However, the model determines the number of children the parent with highest final income claims allowance for, and the number of children left for the second parent. The model assumes that at most 10 dependent children live in one family, which meets the requirements of Slovenian data.

It was not possible to apply actual calculation of family allowances entirely in EUROMOD. Therefore, there are some differences between the policy implemented in EUROMOD and actual calculation of family allowances:

- upper income limit cannot be controlled for dependent partners in the tax unit definition and only partly for dependent parents,
- dependent child income limit depends on the family allowance for that child – current policy always compares income of dependent child to allowance for the first child,
- policy currently does not allow splitting of one child between parents,
- implementation does not check if child is less than a year old (in this case only a proportional child allowances are taken into account).

Parents of disabled children are entitled to higher tax allowance. This cannot be simulated.

2.6.4 Tax base

The final tax base is defined as taxable income minus social security contributions minus tax allowances. We get intermediary tax base if we subtract employee and self-employed social security contributions from taxable income.

Taxable income consists of: employment income, self-employment income, wage compensation for sick leave, pensions (with yearly bonus and pension support), wage compensation for disabled workers, income from contractual work (90% of income), income from student work (90% of income), imputed income from land, royalties (90% of income), income from rent up to 2013 (60% of income), maternity (parental) payments, unemployment insurance benefit, compensation for lost income due to care for child with special needs, credited social contributions up to full working time for parents of children under three and for parents of four children or more who exit labour market.

Intermediary tax base is taxable income minus employee social security contributions.

Final tax base is intermediary tax base minus tax allowances.

Note that the final tax base cannot be negative. Therefore, policy limits tax allowances to intermediary tax base.

2.6.5 Tax schedule

The tax schedule is progressive, and it is shown in the table below.

Interests, capital gains and dividends are taxed separately. The tax rate for dividends and interest income was 20% up to 2012 and was increased to 25% in 2013. The tax rate for capital gains depends on the holding period: 25% for a holding period of up to 5 years, 15% for a holding period from 5 to 10 years, 10% for a holding period from 10 to 15 years, 5% for a holding

period from 15 to 20 years and 0% for a holding period greater than 20 years. The tax is treated as a final tax for residents and non-residents alike.

Table 16 Tax schedule 2014-2017

Tax bracket	Tax base (annual)		Tax
	From (EUR)	To (EUR)	
Tax schedule, 2014			
1.		8,021.34	16%
2.	8,021.34	18,960.28	27%
3.	18,960.28	70,907.20	41%
4.	70,907.20		50%
Tax schedule, 2015			
1.		8,021.34	16%
2.	8,021.34	18,960.28	27%
3.	18,960.28	70,907.20	41%
4.	70,907.20		50%
Tax schedule, 2016			
1.		8,021.34	16%
2.	8,021.34	20,400.00	27%
3.	20,400.00	70,907.20	41%
4.	70,907.20		50%
Tax schedule, 2017			
1.		8,021.34	16%
2.	8,021.34	20,400.00	27%
3.	20,400.00	48,000.00	34%
4.	48,000.00	70,907.20	39%
5.	70,907.20		50%

- **EUROMOD notes**

Due to data limitations, investment income is taxed by 25%.

2.6.6 Tax credits

Tax credits are defined as deductions from tax due. In Slovenian tax system there is only one tax credit; pensioner allowance granted to all pension recipients, regardless of the type and amount of pension. This tax credit amounts to 13.5% of received pension.

2.7 Payroll taxes

There is only one payroll tax: tax on contractual work.

2.7.1 Tax on contractual work

The contractual work tax applies to all registered legal persons and individuals who perform private business or professional activity and employ other persons under contracts for temporary work. The taxable base also includes all refunds of expenses in connection with services performed. Tax is levied at the flat rate of 25% on gross payments.

3. DATA

3.1 General description

The Slovenian database consists of the Slovenian part of the European Union Statistics on Income and Living Conditions (EU-SILC). The observation units are households and persons aged 16 and over who live in these households and have been selected at random from the Central Population Register. These selected persons and their addresses determine the households that shall be interviewed.

The sample design for Slovenian EU-SILC was two-stage stratified design. In the first stage sampling units were selected, which are clusters of enumeration areas, approximately of the same size. In the second stage 7 persons were selected in the selected PSUs. Actually, the sampling frame of persons aged 16 years or more (on 31st December 2014) is divided into 6 strata, which are defined according to the size of the settlement and the proportion of agricultural households in the settlement. Since regional representativeness should be maintained, implicit stratification according to statistical region was applied.

The survey is in fact a panel; therefore, the selected persons and households participate in the survey for 4 consecutive years. The sample consists of 4 rotating sub-samples: every year a quarter of the respondents who have already participated in 4 consecutive surveys is eliminated and a new quarter of persons is introduced and interviewed for the first time. Every year the sample consists of approximately 12,500 persons or households, respectively, whereas the method of selection and weights enable to generalize the response data to the entire population and to all the households.

The EU-SILC survey consists of two parts or sources: the survey and the register/ administrative data. The data that refer to income and some other information are gathered from the existing registers and administrative records and are linked to the survey results. The use of registers and administrative sources not only facilitates the diminishing of the burden on the respondents, but it also helps cut down the survey expenses. Register and administrative sources from which important information is gathered:

- Pension and Disability Insurance Institute (pensions, supplements, compensations)
- - Ministry of Labour, Family and Social Affairs (parental allowances)
- - Health Insurance Institute (activity status of persons)
- - Employment Service of Slovenia (income from unemployment, status of unemployed persons)
- - Tax Authority (data from income tax register for taxable income like personal income, income of entrepreneurs, capital income, and income from property, data about income for social exclusion)
- - Central Population Register (e.g. marital status, country of birth, citizenship)
- - Ministry of Agriculture, Forestry and Food (subsidies for farmers).

Also some other statistical sources were used such as the Statistical Register of Employment, Demographic database and special Survey on Scholarships. In year 2015 SURS did not receive

data on individual level for variable HY070 from administrative source (Ministry of Labour, Family Social affairs and Equal Opportunities), and consequently they modelled the income.

More information on technical issues concerning the Slovenian EU-SILC 2015 can be found in Quality report (National Reference Metadata in ESS Standard for Quality Reports Structure (ESQRSSI), SILC_ESQRS_A_SI_2015_0000). The user database on which the EUROMOD database is based, is provided by Eurostat.

Table 17 EUROMOD database description

EUROMOD database	SI_2015_a2
Original name	UDB_c15D_ver 2015-2 from 01-03-17
Provider	Eurostat
Year of collection	2015
Period of collection	January - June
Income reference period	Year 2014
Sampling	Two stage random sampling
Unit of assessment	Household [1]
Coverage	Private households [2]
Sample size	8,685 households 26,150 individuals
Response rate	n/a [3]

[1] Households are composed of families or other communities of persons who live together and spend their income together (for dwelling, food, other), irrespective of whether all members have permanent residence in the place in which the household is located, or whether - due to work, schooling or other reasons - some of the members for a longer period of time (up to 6 months) live elsewhere in Slovenia or abroad.

[2] Households living at private residential addresses. Selected persons and their addresses determine the households that shall be interviewed.

[3] It refers to household response rate which is equal 1 minus household non-response rate.

3.2 Sample quality and weights

3.2.1 Non-response

Since there is the sample of persons, and the data are obtained both from the interview and from the registers, the household is considered respondent only if household questionnaire is completed and if also questionnaire for the selected person is completed. For other household members, data are obtained from registers.

Household non-response rate is computed as follows:

$$NR=(1-(Ra*Rh))*100,$$

Where Ra is address contact rate and Rh is the proportion of complete household interviews accepted for the database. Address contact rate amounted to 97.74% in 2015 and proportion of completed household interviews to 74.00%, meaning that household non-response rate was 27.68%.

Individual non-response rates (NRp) is computed as follows:

$$NRp=(1-(Rp))*100$$

Where Rp is the proportion of the complete personal interviews within the households accepted for the database. In 2014 Rp amounted to 100%, meaning that individual non-response rate was 0%. Overall non-response rate was 27.68 %.

Unit non response is extensively documented in the Slovenian SILC Quality Report (National Reference Metadata in ESS Standard for Quality Reports Structure (ESQRSSI), SILC_ESQRS_A_SI_2015_0000).

3.2.2 Weights

The EU-SILC weights were calculated in three consecutive steps. In the first step the sampling weight (design factor), in the second the non-response adjustment factor and in the third the calibration factor was calculated. The final weight was the product of all three factors. The weights were calculated for the selected households (selected person of the household) and for all the persons included in the survey.

The sampling weight for the sample person is inversely proportional to the probability of selection and the weight is calculated when the person is selected in the sample. The non-response factor was calculated for each stratum. The final step of the calculation of the weights was the calculation of the calibration factors. By the calibration procedures the weighted sums of some key variables are set to the known population values. The sum of weights is equal to the sum of the estimated number of households in Slovenia.

Slovenian EU-SILC sample statistics have been projected to a reference population of 2,006,985 individuals in 805,967 households. Table 18 presents more basic descriptive statistics for the grossing-up individual weight rb050.

Table 18 Descriptive Statistics of the Grossing-up weight

Number	26,150
Mean	76.75
Median	67.70
Maximum	878.36
Minimum	2.45
Max/Min	385.51
Decile 1	26.46
Decile 9	139.72
Dec 9 / Dec1	5.2804

3.2.3 Item non-response and under-reporting

Concerning item non-response, an overview is provided in the Slovenian SILC Quality Report (National Reference Metadata in ESS Standard for Quality Reports Structure (ESQRSSI), SILC_ESQRS_A_SI_2014_0000) where item non-response for each variable is assessed.

There is a large share of the households where some income is imputed. In the case of partial non-response some income variables were imputed (such as income from farming, reimbursement for travel to/from work, allowance for meal, non-cash employee income – components (value of the company car, months of use it), regular inter household transfers received, regular inter household transfer paid, contribution to private pensions plans, sickness benefits (numbers of days when person get sickness leave), tax on wealth, interests paid for mortgage (components to calculate interests), interests (received), consumption from own production (all components to calculate own production)).

Some non-income variables, in the case that data were missing, were imputed, such as number of rooms, total housing costs, child care, and activity status during the income reference period, etc.

Based on Statistical Office of the Republic of Slovenia (SORS), the average net monthly wage in 2014 was 1,008.85 EUR. The EU-SILC estimate of employee cash or near cash net monthly income is 886 EUR. The fact is that SILC monthly net income is somewhat lower than average net monthly wage from administrative sources. The reason might be the differences in income definition. Average wage reported by SORS refers only to taxable cash income received by worker, but it includes sickness benefits paid by employer (and not paid by National Health Insurance Institute). On the other hand, EU-SILC data refer to cash and near cash employment income (for example reimbursement for travel to/from work and meals) but exclude sickness benefits. Even if we include sickness benefits (both, paid by employer and paid by National Health Insurance Institute) into the wage, we find out that the average net monthly wage (including sickness benefit) in 2014 amounted to 907.6 EUR.

It should be mentioned that survey wages are lower on average in comparison to official statistics in Slovenia. The reason lies in methodological issues, as official average wage calculation covers persons in paid employment with employment contracts (those working under work contracts or royalty are not covered). Covered are all legal persons but not individual private entrepreneurs and persons in paid employment by them, own account workers and farmers (groups with usually lower wages).

The difference between EU-SILC data on employment income and data from administrative sources is relatively small, which is expected as income data are gathered from the existing registers and administrative records.

3.3 Data adjustment

Adjustments to variables are kept to a minimum. Some minor data cleaning was done to ensure that the relationships of individuals within households are coherent.

In order to guarantee consistency between demographic variables and income variables which refer to the year before data was collected (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.

3.4 Imputations and assumptions

3.4.1 Time period

All income information in EU-SILC 2015 refers to the fiscal year 2014 (January – December) and is expressed in annual totals. Generally, incomes and benefits in Slovenia are paid on a monthly basis, although there are few exceptions (birth grant, large family allowance). There is no information on the number of months a certain wage or benefit was received. In EUROMOD database there are all monetary amounts transformed to monthly averages by dividing amounts by 12; it means it is implicitly assumed that income is received at the same rate throughout the year.

The EU-SILC information on demographic variables mainly refers to the time of data collection (January – June 2015). The lag between the income reference period and current variables ranges from 1 to 6 months. However, some information also indicates the status at the end of the income reference period (year 2014). For example, there are two age variables: one of them indicating age at the time of the survey implementation and one at the end of 2014. Similar situation is observed for some socio-economic and labour variables. For example, variable pl031 (self-defined current economic status) refers to the data collection time, while variable rb170 refers to the main activity status during the income reference period. If possible, the

corresponding demographic, labour and socio-economic information in the EUROMOD dataset were based on the EU-SILC variables, otherwise they were imputed.

3.4.2 Gross incomes

Most of the data derived from registers are recorded gross at component level in EU-SILC. All income data are collected at the individual level (i.e. the person registered as the receiver of the income). This also concerns typically “household” related incomes such as housing benefits and social assistance.

Data file from the Tax authority enabled Statistical Office of the Republic of Slovenia that all income variables in EU-SILC were recorded gross and net. Some of variables have the same values for the gross and for the net, because from some kind of income the taxes were not paid. Only for PY021G and PY021N the gross amount was converted into the net amount taking into account 25% tax, which is usually paid in advance to tax authority.

Other notes can be found in the Slovenian SILC Quality Report (National Reference Metadata in ESS Standard for Quality Reports Structure (ESQRSSI), SILC_ESQRS_A_SI_2015_0000).

3.4.3 Other imputed variables

Some income / benefit variables are aggregated at very high level in EU-SILC survey which makes many problems in modelling procedures. On the other hand, national version of EU-SILC contains the majority of EU-SILC variables at disaggregated level. Statistical Office of the Republic of Slovenia provided us with the access to the national version. Even in national SILC database there are particular family benefits recorded into aggregated variables; birth grant and parental allowance are merged into one variable, while child benefit, large family allowance and childcare supplement are merged into another variable. We split this aggregated variables in 2015 national SILC database according to the assumed eligibility of the family members. Besides, national EU-SILC 2015 database differs from versions in previous years due to non-matching identifiers in national and UDB version. Therefore we sorted both databases by very unique variables (household members, weight, total disposable household income, year of birth, sex and the sum of all individual incomes) and merged data. Since the national EU-SILC data are not anonymised, we got the permission to calculate the shares of individual benefit / income in aggregated EU-SILC variables. We applied these shares to EU-SILC UDB variables and in this manner imputed the following variables:

- bfapt - Social contribution up to full working time for parents of children under three/six
- bchba - Birth grant
- bmact - Parental - maternity payment
- bmanc - Parental allowance
- bcrbafh - Paternal payment
- bchlg - Large family allowance
- bchmt - Child benefit
- bcham - Maintenance replacement
- bchcc - Childcare supplement
- bcrsvcc - Compensation for lost income due to care of child who need special care
- yemnt - Non-taxable part of employment income
- yemtx - Taxable part of employment income; excluding 90% of income from contractual and student work
- yem00 - Employment income; excluding 90% of income from contractual and student work
- yemaj – Income from contractual work which is part of yem

- yemst - Income from student work which is part of yem
- yse00 - Self-employment income; excluding 90% of income from contractual and student work
- yseaj – Income from contractual work which is part of yse
- ysest - Income from student work which is part of yse
- yaj - Income - Contractual work
- yst - Income - Student work
- bdica - Attendance supplement
- bdixp - Disability supplement for disabled
- bdirw - Compensation for disabled workers
- pdi00 - Disability pensions; excluding attendance supplement (bdica), disability supplement for disabled (bdixp) and compensation for disabled workers (bdirw)
- poa00 - Pension - Old Age –; excluding attendance supplement (bdica), disability supplement for disabled (bdixp) and compensation for disabled workers (bdirw)
- psu00 - Pension – Survivor; attendance supplement (bdica), disability supplement for disabled (bdixp) and compensation for disabled workers (bdirw)
- bsa00 - Cash social assistance (bsaen)
- bsacm – Charity which is cash or in-kind benefits received from charity (bsacm)
- bsapm – Income support
- bsaot - Other social assistance (i.e. other payments from Ministry of Labour, Family, Social Affairs and Equal Opportunities covered in variable hy050 - : social exclusion not elsewhere classified).

In Slovenian EU-SILC gross employment income (yem) consists of non-taxable employment income, taxable employment income, student work income and contractual work income. However, not the full amount of contractual work income and student work income goes into the yem variable, as costs (in the majority of cases standard costs in the amount of 10%⁴) are deducted. We followed this logic when preparing EUROMOD data. Therefore the sum of yemtx, yemnt, yemst and yemaj is higher than yem. The valid equation is the following: $yem = yemtx + yemnt + 0.9*yemaj + 0.9*yemst$. In the same way we can describe the relationship between yse00, ysest and yseaj. Other key variables that are fully imputed (not available in the EU-SILC UDB survey) are:

- yivwg - Predicted wage
- Self-employment income recipients who are taxed with self-employment social insurance contributions are persons where lse00 = 2. These persons have lower net self-employment income than gross employment income.
- Work history (where missing) – based on the average working period for pensioners, age and sex.
- Number of months in work (where missing) – it is imputed according to employment and self-employment income in relation to the average wage.
- Previous wage – based on unemployment wage compensation.
- Slovenia is treated as one region - drgn is not applicable.

3.5 Updating

The factors that are used to update monetary variables from 2014 to 2017 are shown in the table in Annex I. No other updating adjustments are used. Therefore, socio-demographic

⁴ Due to very small number of cases where claimed actual costs were higher than 10% we assume all recipients claim 10% standard costs.

characteristics (such as employment status, demographic variables and household composition), as well as the distribution of income sources that are not simulated, remain the same as in 2015

In 2015, the method of reporting of fiscal administrative data prepared by the Ministry of Finance changed. The informative calculation of personal income tax was received by all taxpayers, regardless the taxpayer had an obligation to fill in tax return. Therefore, the fiscal administrative data contain many small amounts of incomes which were not included in years before 2015. Consequently, the average amounts of some income types are lower and the uprating index was calculated by comparing aggregate amounts for yse00, yst and yaj in 2015 and 2014 instead of comparing average amounts.

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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 II. Both market incomes and non-simulated taxes and benefits in the input dataset as well as simulated taxes and benefits are validated against external official data. The main discrepancies between EUROMOD results and external benchmarks are discussed in the following subsections. Factors that may explain the observed differences are also discussed.

4.1.1 Components of disposable income

Disposable income in EUROMOD is slightly different from the original EU-SILC data as can be seen from Table 19. There are three reasons for that: a) inclusion of different income components in the definition of household disposable income, b) sample adjustments, and c) differences in the simulated vs. observed values of income components.

Table 19 Components of disposable income

	EUROMOD	EU-SILC 2015
Disposable income	ils_dispy	HY020
Employee cash or near cash income	yem (yemtx, yemnt, yemst, yemaj)	PY010G
Company car	-	PY021G
Cash benefits or losses from self-employment	Yse (yse00, yseaj, ysest	PY050G
Pension from individual private plans	ypp	-
Unemployment benefits	bunct	PY090G
Old-age benefits	poa	PY100G
Survivor' benefits	psu	PY110G
Sickness benefits	bhl	PY120G
Disability benefits	pdi	PY130G
Education-related allowances	bed	PY140G
Income from rental of a property or land	yprrt	HY040G
Family/children related allowances	bmact, bmanc_s, bchlg_s, bchba_s, bcrbafh, bchmt_s, bchcc, bcrsvcc, bcham, tscctfa0*_s	HY050G
Social exclusion not elsewhere classified	bsa_s, bsacm, bsapm_s, bsao	HY060G
Housing allowances	bho_s	HY070G
Regular inter-household cash transfer received	ypt	HY080G
Interests, dividends, etc.	yy	HY090G
Income received by people aged under 16	yot	HY110G
Regular taxes on wealth (-)	tpr	HY120G
Regular inter-household cash transfer paid (-)	xmp	HY130G
Tax on income and social contributions (-)	tinkt_s, tin00_s, ils_sicee, ils_sicse	HY140G

* Note: Credited employee and employer contributions: tscctfa01_s, tscctfa02_s, tscctfa03_s, tscctfa04_s

4.1.2 Validation of incomes inputted into the simulation

[See Annex II for tables]

In this section we compare statistics on earnings, benefits and taxes that are not simulated by EUROMOD with external sources (i.e. administrative figures). This provides an assessment of the quality of the database and also provides some useful background information for the validation of simulated components of income, which may depend on or be associated with the non-simulated components. We also calculate the ratio of EUROMOD earnings/expenditures and the numbers of recipients to estimate drawn from administrative statistics for some of the main social security benefits that are not simulated by the model. For these income components, the values in the EUROMOD database are mostly identical to those in the original database (here SILC 2015).

Next, we evaluate how well the 2014 income data is updated to match actual data up to 2017. The year 2014 was the first year with economic growth after 2008 as the period between years 2008 - 2013 was characterised by persisting economic recession or at best by economic stagnation. The unchanged socio-economic structure from 2014 in the model creates differences between simulated and actual data (at the aggregate level) due to improved economic conditions after the base year.

Table A1 (see Annex II) shows the number of employed and unemployed in EUROMOD and external (LFS) statistics. Although the definitions and the way of estimation of these figures are not strictly comparable between the two sources of information, the LFS indicates the dynamics which took place in the labour market within the period. Looking at the absolute values the number of employed seems to be slightly overestimated in EUROMOD (i.e. EU-SILC) and the number of unemployed - even more so. We should keep in mind that the number of employed and unemployed from input dataset is computed based on the number of months in employment/unemployment. Thus, definitions between the EUROMOD and LFS, especially one of the unemployed, do not match precisely. Since 2014, when the economy has shown the signs of recovery, the number of unemployed was continuously dropping and the simulated numbers of unemployed become more overestimated every year. On the other hand, in the period from 2014 to 2017 the actual number of employed has increased and consequently the simulated figures get closer to the actual numbers.

Table A2 and Table A3 show the number of recipients and aggregate amounts of market income. In 2014, the total taxable employment income is 6% higher in EUROMOD than in the external statistics, while the number of employment income recipients in EUROMOD exceeds external data by 8%. External data refer to fiscal administrative data prepared by the Ministry of Finance. One reason for overestimated data on employment income in EUROMOD might be the definition of employment income in EU-SILC (the basis for EUROMOD data). Employment income in EU-SILC also includes some non-taxable income (for example reimbursement for work related expenses: commuting and meals) which is not reported in PIT return and consequently not included into administrative data. Obviously, imputation of non-taxable part of employment income, based on national version of EU-SILC, is successful as discrepancies are rather small. The number of employed has increased in the period 2014-2017, leading to the increased employment income, in terms of total amount and the number of recipients, as well.

Self-employment income seems to be overestimated to a larger extent in EUROMOD, but EU-SILC based data on self-employment income include also some additional income in comparison to fiscal data: a) income from employment if the person spent some time in self-employment, b) some agriculture income and c) some non-taxable incomes collected from questionnaires. External statistics refer only to the “pure” self-employment income; until the year 2014 external statistics included only self-employment income reported by the taxpayers

who were obliged to fill in tax return. Since 2015 external data has included also self-employment income of persons whose income was below the income threshold and were not obliged to pay any PIT. Therefore the number of recipients of income from self-employment in 2015 much better matches the external numbers than a year before.

Income from contractual work and income from student work in EUROMOD are both imputed from EU-SILC employment and self-employment income, based on national EU-SILC data. The number of recipients is overestimated in the case of income from contractual work by 31% in 2014, while the amount of this income exceeds the fiscal data in 2014 by 11%. In 2015 the number of contractual work income recipients overestimates the actual numbers by “only” 20%. The main reason is different coverage of the number of recipients in external statistics which since 2015 includes all recipients regardless the obligation of filling in tax return.

The number of recipients and also the amount of income from student work are seriously overestimated in comparison to fiscal data for year 2014. However, there is plausible explanation for this. Fiscal data which are used for external data are based on decisions of personal income tax sent out by Tax Administration. Income from student work is often low and students are not obliged to fill in tax return. Besides, they have high tax allowance and majority of students are not tax-payers, meaning that they do not receive decision of personal income tax. Consequently, these students are not included in fiscal data and external data is underestimated. This explanation is confirmed by 2015 external (fiscal) data which include all student income recipients (regardless the obligation of filling in tax return) and is much closer to EUROMOD data. In case of student income total amount EUROMOD data reflect reality better, but it still overestimated.

Table A4 and Table A5 compare statistics on non-simulated benefits with external sources. Many differences between administrative figures and EUROMOD data arise from different coverage or reference period.

All pension benefits are aggregated in EU-SILC. This means that all benefits disbursed to old-age pensioners over the age of 64 by The Institute of Pension and Invalidity Insurance of Slovenia are treated as old-age pensions in EU-SILC. The same logic applies for survivor and disability pensions. Based on national version of EU-SILC, we calculated the shares of particular benefits within poa, pdi and psu and applied these shares on each pension benefit.

The number of old-age pensioners is underrepresented by 9% in EUROMOD, while on the other hand the aggregate amount of old-age pensions is overestimated by 16% (in 2014). As the number of old-age pensioners is increasing from year to year due to ageing population, the 2014 data underestimates the number of old-pensioners even more in the later years. For disability pensions, the difference between administrative figures and the observations in EUROMOD is wider. While the number of recipients is underestimated by 27% in 2014, the total expenditure on this component is underestimated by 5%. The difference between administrative figures and the observation in EUROMOD is even bigger when survivor pensions are concerned. The number of recipients in EUROMOD is underestimated by 34% and the total amount of survivor pensions by 9%. Similarly, both benefits disbursed by The Institute of Pension and Invalidity Insurance of Slovenia (attendance supplement and disability supplement) are underestimated in terms of recipients and aggregate amounts in EUROMOD data. The differences between EUROMOD data and aggregate statistics on pensions result from EU-SILC data (structure and amounts).

The aggregate amount of scholarships and the number of scholarship recipients are overestimated in EUROMOD in 2014.

The difference between administrative figures and the observations in SILC for unemployment wage compensation seems wider. It might be misleading, as external statistics refer to the

average monthly number of recipients, while the number in EUROMOD refers to the total number of recipients in one year. Since the length of receiving unemployment benefits depends on individual characteristics, it is impossible to assume from administrative sources, how many persons received unemployment benefit during the whole year. However, aggregate amounts refer to yearly totals in aggregate statistics and in EUROMOD. Comparison reveals that unemployment benefit is underrepresented in the data in 2014, when EUROMOD covers 89% of unemployment wage compensation amount. The number of unemployed and recipients of unemployment benefit was dropping in the following years which resulted in overestimated aggregate amount of unemployment benefit in years 2016 and 2017.

Wage compensation for disabled workers is relatively small benefit and it was imputed in EUROMOD from disability benefits, based on national version of EU-SILC. The number of recipients in EUROMOD is bigger by 9% in comparison to external data in 2014, while the aggregate amount is underestimated by 7% in the same year. Since the actual number of recipients gradually decreases in observed period, the overestimation comes close to 13% in 2017. Consequently, total amount of this benefit decreases too, which closes the gap between EUROMOD predictions and aggregate statistics.

The number of paternal payment recipients is underestimated by 12% in 2014 and by 10% in 2015. Compensation for lost income due to care of child who needs special care is benefit for the small number of recipients and it's overestimated in terms of the aggregate amount and the number of recipients as well. These differences between EUROMOD data and aggregate statistics result from EU-SILC data. Childcare supplement is another relatively small benefit which is underestimated in EUROMOD data. It should be kept in mind that childcare supplement is imputed from aggregated variable in national version of EU-SILC data containing child benefit, large family allowance and childcare supplement.

4.1.3 Validation of outputted (simulated) incomes

[See Annex II for tables]

Table A6 and Table A7 compare statistics on simulated benefits in EUROMOD with data from administrative sources. In terms of total expenditure, the most important simulated benefits are child benefit, parental payment and social assistance while other benefits contribute only marginally to the total household disposable income. Simulated unemployment wage compensation is also validated in this section, although by default the observed unemployment wage compensation is used in the model rather than the simulated variable.

The number of simulated unemployment wage compensation recipients is overestimated in all years, but the simulated results are much better in comparison to the UDB SILC-based EUROMOD data. However, the difference in the number of unemployment wage compensation recipients might be misleading as external statistics refer to average monthly number of recipients, while the number in EUROMOD refers to the total number of recipients in 2014. On the contrary, the total amount of this benefit is underestimated. The simulated unemployment wage compensation covers only 70% of this benefit from original data (EU-SILC) and only 62% of benefit in 2014 compared to aggregate statistics. After the year 2014, the simulated amount of unemployment wage compensation has come somewhat closer to the external statistics. Still we use non-simulated unemployment benefit records in the baseline EUROMOD model. The number of birth grant recipients and the aggregate amount of benefit is underestimated. The large family allowance is slightly overestimated, in terms of recipients and aggregate amount (3%) in 2014, while simulated number of recipients and the aggregate amount match external statistics in the subsequent years.

The numbers of child benefit recipients from administrative sources and from EUROMOD output refer to the number of eligible children. We find that in year 2014 the simulated number of children receiving child benefit is overestimated by 19% when compared to external statistics. This percentage drops to 15% in year 2016. However, the simulated number of children receiving the child benefit in 2014 exceeds the number of dependent children in families receiving this benefit in EU-SILC database by 5%. It might be assumed that the difference between simulation and administrative data is partly driven by EU-SILC sample. Besides, there are three possible reasons for overestimation. First, one of eligibility conditions for child benefits is that a student must have been enrolled in regular education with a maximum of one year break during the study. Available data do not contain information on educational history and we assume that all students fulfil this eligibility condition for child benefits. Second, there might be also a take-up issue, as child benefits for “high” income families are very low and there are chances that these families do not claim the benefit. However, there are no data on non-take up of child benefits. Third, family’s assets are taken into account when eligibility is assessed and many families were left out of this scheme or they received much lower benefit due to the value of their assets. The assets test, which might be the most important reason for the overestimation, was not modeled in EUROMOD due to data limitations in EU-SILC. The total expenditure on this benefit in 2014 and 2015 is less overestimated - by 6% in comparison to administrative data. In 2016 the simulation results of total expenditure on child benefits are less overestimated (by 5%).

The simulated number of parental payment recipients is overestimated, but the difference in the number of recipients might be misleading as external statistics refer to average monthly number of recipients, while the number in EUROMOD refers to the total number of recipients in 2014. On the contrary, the total amount of this benefit is much better simulated. The simulated parental payment covers 73% of total amount of this benefit in 2014 and 75% in 2016.

EUROMOD underestimates parental allowance; 84% of actual recipients in terms of the number of recipients and 87% in terms of the aggregate benefit amount in 2014. The number of parental allowance recipients in EU SILC is approximately four times higher than actual number which is the consequence of few aggregated variables in national SILC and imputations when preparing EUROMOD data.

Total expenditure of simulated social contributions up to full working time for parents is overestimated in year 2014 and the number of parents taking these rights as well. The number of parents taking the right to paid social contributions for parents leaving labour market are underestimated in 2014. The total expenditure on social contributions for parents leaving labour market is underestimated as well.

Social assistance is over-estimated in terms of recipients while in terms of expenditure simulated social assistance almost match aggregate amount from external statistics. As in the case of data on unemployment wage compensation recipients, the difference in the number of social assistance recipients might be misleading, since external statistics refer to average monthly number of recipients, while the number in EUROMOD refers to the total number of recipients in 2014. Despite excellent simulation results concerning the expenditure data, we should be aware of two facts which very probably influence the distribution of social assistance. First, the actual entitlement for social assistance depends on incomes in the three previous months. EU-SILC database contains data on annual income and it is implicitly assumed that income is received at the same rate throughout the year, as monthly incomes are simply annual incomes divided by 12. Actual income position of individuals might be drastically changed during one year and three-month average can differ from annual average. Second, when assessing eligibility for social assistance substantial asset test is applied, but it cannot be simulated in EUROMOD due to data limitations. Besides, some non-take up is expected, as social assistance recipients (if received the cash social assistance more than twelve times in the

past 18 months), who own real estate (the value of which is above the value of an appropriate apartment) must agree with the entry of the prohibition of alienation and burdening of real estate in the land book to the benefit of the Republic of Slovenia (it has changed in 2017). Unfortunately, there is no available administrative data on non-take up of benefits.

Simulated income support much better reflects administrative data in year 2017, while in years 2014 and 2015 the simulated number of recipients is overstimulated. It is publicly assumed that not-take-up rate was very high in case of income support due to the obligation of paying back the income support from the heritage when the deceased was a social assistance or income support recipient. This has changed in 2017 and consequently the number of recipients has increased. The simulated number of recipients almost matched the external statistics in 2007, while the aggregate amount is underestimated in 2017.

There are no numbers available for the recipients of the housing benefit, but simulated total housing benefit amount is severely over-estimated.

Table A6 and Table A7 also compare statistics on PIT simulated by EUROMOD with external sources - Statistical analysis of tax return data. The number of taxpayers from Statistical analysis of tax return data (external source) referred to all persons who filled a tax return, regardless of the amount of paid PIT until the year 2014. Since 2015, the number of taxpayers from Statistical analysis of tax return data refer to all persons who received taxable income regardless the amount of total income in a year and regardless the obligation of filling in the tax return. Therefore, the number of taxpayers in EUROMOD does not refer to taxpayers who actually paid some PIT but to the number of persons who were obliged to fill in tax return until the year 2014. Since 2015 the number of taxpayers refer to the number of persons with any type of taxable income.

Revenues from PIT simulated by EUROMOD prove that simulated policy and data suit actual situation, as simulated PIT is rather close to actually collected PIT. The number of taxpayers in EUROMOD exceeds the actual number of taxpayers by 4% in observed period. Similarly, the collected PIT is somewhat overestimated when simulated with EUROMOD, as aggregate amount of PIT is higher by 2% in comparison to collected PIT in 2014.

The sum of taxable employment income (of persons who have to fill in a tax return) amounts to 13,536 million EUR in EUROMOD in 2014, and is only six per cent higher than taxable income from aggregate statistics on PIT. But on the other hand, data on mean employment income in Table A3 show that employment income in EUROMOD is lower on average. This outcome is expected, as income data is anonymised and very high incomes are replaced by lower values. Due to progressive nature of PIT, the simulated PIT is obviously lower than actually collected PIT.

Table A6 and Table A7 also compare statistics on simulated social contributions in EUROMOD with external sources. There are no numbers available for the social security contributions payers. However, external information on total revenues from social contributions shows that EUROMOD simulations have good results.

Employee and employer social contributions are relatively well estimated in 2014 as simulated revenues exceed actually collected employee social contributions only by 12% and 10% respectively. This divergence can be explained by the fact that aggregate amounts of incomes which are the base for social contributions are overestimated in the SILC.

Over the years simulated employee and employer contributions match actual contributions better, as simulated employee (employer) contributions overestimate actual employee (employers) contributions by 6% (4%) in 2016. External statistics on other social contributions include “employee” part social contributions of benefits, which is true for EUROMOD results

as well. The EUROMOD data on the amount of other contributions is overestimated by 8% in 2014. On the contrary, from year 2015 onwards the simulated other contributions are underestimated (by 13% in 2015 and 12% in 2016). Categorization of “other” contributions in the official statistics is very detailed and Euromod simulations are only rough approximation for this category.

Revenues from self-employed social contributions are underestimated by 2% in 2014, despite the fact that self-employment income in EUROMOD is by 97% higher compared to the administrative sources in the same year. Self-employment income in EU-SILC and also in EUROMOD includes some additional income types which are not treated as the social contributions basis. Therefore, we introduce a variable *lse00* for persons who paid taxes on self-employment income, i.e. whose gross self-employment income is higher than net employment income. We assume that only eligible persons (who actually paid some tax on self-employment income) pay social security contributions. In following years from 2015 to 2017 social contributions on income from self-employment are slightly overestimated. Still, we have to keep in mind that the base for self-employed social contributions is profit in the previous one or even two years. Assumption in EUROMOD is that incomes and profits in previous years are identical to current income and profit, which might not be the case in real life.

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 taxes 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

Median disposable income in EUROMOD equals the median disposable income reported by Eurostat, which can be seen from Table A8. Simulated median disposable income is lower only by 2% for years 2015/16. The Gini coefficient and interquartile ratio are lower by 3% and 6% for years 2014/2015, which indicates that incomes at the bottom of income distribution are overestimated in EUROMOD and/or that incomes at the higher end of distribution are underestimated.

Detailed analysis of disposable income levels of different income deciles shows that we overestimate the share of equalised income in the lowest decile (by 11% in 2014). This might be due to anonymised incomes used in EU-SILC data, where very low incomes are replaced by higher values and very high incomes are replaced by lower values. Besides, the reason for overestimation of disposable income in the lowest decile is also over-estimation of means tested social benefits which are targeted to lower deciles. For all other deciles the deviation between EUROMOD estimates and EU-SILC based Eurostat statistics is not higher than 1% in year 2014/2015. Share of equalised income in the highest decile is underestimated only by one percent which indicates that the reason for underestimated simulated income inequality lies at the bottom of income distribution.

4.2.2 Risk-of-poverty rates

Table A9 compares EUROMOD monetary risk-of-poverty rates and the external source poverty figures (Eurostat).

The risk-of-poverty rate is quite underestimated when poverty line is set at 40% of median income. Underestimation of poverty at lower poverty thresholds is expected, as two benefits targeted to the bottom end of income distribution - social assistance and housing benefits - are overestimated due to missing asset set in EUROMOD. The table also shows that we overestimate the share of income received by the lowest decile for the same reasons. When poverty threshold is set at 50% of median, income the risk-of-poverty rate is closer to the external data for total population. Poverty rates reach around 80% of official poverty rates, even if we consider poverty rates separately for males and females. The underestimated poverty rates at 50% poverty line might be explained by the same reasons as above.

At-risk-of-poverty rate at 60% of median income is very well matched, as it underestimates the EUROSTAT poverty rates in 2014/2015 by 3%. Better simulation results are reached for 70% threshold risk-of-poverty rates as EUROMOD and EUROSTAT poverty rates are very close. Here and when interpreting previous results we should take account of our median being slightly higher compared to the EU-SILC based estimate.

The estimated discrepancy between the poverty figures from EUROMOD incomes and from SILC incomes is not evenly distributed across age groups. Child poverty and poverty rates among youth are underestimated in 2014/2015 by 14% and 9%. Poverty rate for the prime-age group of 25-49 years old matches EUROSTAT poverty rate for this group, while the poverty rates for the group 50-64 years old are by 9% higher in comparison to the external rates. Poverty rate among the elderly population (65+) is underestimated by 6% in 2014/2015 and 5% in 2015/2016, which can be explained by overestimated pensions in EU-SILC and EUROMOD database. We should keep in mind that poverty rates of age groups up to age 50 might be lower than external rates due to overestimated benefits which are targeted to these age groups.

4.2.3 Validation of minimum wage

In this section we give a brief overview what is the impact of minimum wage policy, if switched on. In our baseline scenario the minimum wage policy is switched off.

On average minimum wage effect increases total earnings of employees by 1.3% in the whole period 2014 - 2017 (see Table A10). Almost the same pattern can be found for social contributions (1.2%), while income tax increases slightly more. Disposable income is increased by 0.66% in 2014 and slightly less in the following years (0.65 in 2015, 0.64% in 2016 and 0.66% in 2017).

Social assistance expenditure is increased by 0.8% in 2014. Inequality (measured by the Gini coefficient) is increased by 0.6%, while poverty rate is increased by 1.9%. In the following years similar trends are observed. Social assistance amounts are increased from 1.7% in 2015 to 2.3% in 2017. Gini coefficient and poverty rates are decreased as well if minimum wage policy is taken into account.

4.3 Summary of “health warnings”

This final section summarises the main findings in terms of particular aspects of the Slovenian part of EUROMOD or its database that should be borne in mind when planning appropriate uses of the model and in interpreting results.

- The sample is relatively small. Care should be taken in interpreting results for small sub-groups.
- The definition of some income source (employment income, self-employment income) in EUROMOD differs from definitions in administrative data.

- Variables employment income and self-employment income in EU-SILC contain student income and income from contractual work without 10% standard costs. Original income (*ils_origy*) and earnings (*ils_earns*) in EUROMOD contain student income and income from contractual work with included 10% standard costs.
- The definition of some labour market activity status in EUROMOD differs from the definition of labour market activity status used for assessing eligibility for benefits.
- EUROMOD database contains information on annual income and it is implicitly assumed that income is received at the same rate throughout the year, as monthly incomes are simply annual incomes divided by 12. This especially affects social assistance simulation.

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ANNEX 1: UPRATING FACTORS

Variable name	Factor reference name	2014	2015	2016	2017	Source and explanation
Harmonised CPI	\$hicp	124.12	123.17	122.98	124.62	Source: Eurostat http://ec.europa.eu/eurostat/data/database
Average monthly salary	\$supr_wage	1540.25	1555.89	1584.66	1589.46	Source: SI-STAT Data Portal http://pxweb.stat.si/pxweb/Dialog/varval.asp?ma=0701011E&ti=&path=../Database/Demographics/07_labour_force/10_earnings_costs/01_07010_earnings/&lang=1
Parental allowance	\$supr_bmanc	252.04	252.04	252.04	252.04	Benefit amount
National scholarship	\$supr_bed	129.00	135.00	129.00	129.00	Average benefit amount, as there were so many policy changes in this period; Source: SI-STAT Data Portal http://pxweb.stat.si/pxweb/Database/Demographics/09_education/10_other_data/02_09543_Scholarship/02_09543_Scholarship.asp and Statistical Yearbooks, http://www.stat.si/StatWeb/en/mainnavigation/data/publications/statistical-yearbook?leto=2013 ; internal data from Ministry of labour for period 2015-2017
Parental payment	\$supr_bmact	984.76	979.26	956.54	959.43	Average benefit amount, as the wage compensation was lowered in June 2012 from 100% to 90% and the upper threshold was lowered too. Source: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavljjanje_pravic/statistika/druz_prejemki_zavarovanje_sv/)
Unemployment wage compensation	\$supr_bunct	708.68	703.76	707.61	709.75	Average benefit amount as the wage compensation has upper threshold and the rules changed in 2012
Unemployment assistance	\$supr_bunmt	0	0	0	0	Average benefit growth (2005 = 100)
Pension indexation	\$supr_pens	122.12	122.12	122.97	124.89	Pension indexation rule
Disability pensions	\$av_pdi	475.14	472.21	474.07	480.32	Average benefit amount; Source: Pension and Disability Insurance Institute of Slovenia, Annual Reports (http://www.zpiz.si/cms/?id=2&inf=69)
Old-age pension	\$av_poa	613.13	609.50	612.64	624.20	Average benefit amount; Source: Pension and Disability Insurance Institute of Slovenia, Annual Reports (http://www.zpiz.si/cms/?id=2&inf=69)
State pension	\$supr_poanc	0.00	0.00	0.00	0.00	Benefit amount
Survivor pension	\$av_psu	388.96	385.85	387.12	391.65	Average benefit amount; Source: Pension and Disability Insurance Institute of Slovenia, Annual Reports (http://www.zpiz.si/cms/?id=2&inf=69)
Income support	\$supr_bsapm	265.22	269.20	288.81	292.56	Minimum income amount
Income - contractual work	\$supr_yaj	85.48	81.25	82.75	83.00	Growth of average income from yaj for period 2005-2015, 2016-17 is 2015 + wage growth ; Source: Ministry of Finance: Basic Statistical data on PIT for years 2005-2015 (internal documentation)
Income - property	\$supr_ypr	108.74	167.50	162.96	163.45	Growth of average income from rent for period 2005-2013, for 2014 based on 2013 + salary growth, for 2015-2016 based on growth of amount of total PIT paid on capital gains AND rent; for 2017 based on wage growth; Source: Ministry of Finance: Basic Statistical data on PIT for years 2005-2013 (internal documentation), Tax Administration of the Republic of Slovenia, Indicators of effectiveness (http://www.fu.gov.si/o_financni_upravi/) .
Income - selfemployment	\$supr_yse	154.23	156.13	159.02	159.50	Growth of average income from yaj for period 2005-2015, 2016-17 is 2015 + wage growth; Source: Ministry of Finance: Basic Statistical data on PIT for years 2005-2015 (internal documentation);
Income - student work	\$supr_yst	173.85	222.78	226.90	227.59	Growth of average income from yaj for period 2005-2015, 2016-17 is 2015 + wage growth ; Source: Ministry of Finance: Basic Statistical data on PIT for years 2005-2015 (internal documentation)
Income - investment	\$supr_yiy	857.81	1321.39	1285.55	1289.44	For years 2006-2016 growth of amount of total PIT paid on capital gains, (no data for 2005 due to different taxation), for 2017: based on 2016 + salary growth; Source: Tax Administration of the Republic of Slovenia, Indicators of effectiveness (http://www.fu.gov.si/o_financni_upravi/)

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Variable name	Factor reference name	2014	2015	2016	2017	Source and explanation
Social assistance	\$supr_bsa	3107.00	3229.29	3367.65	3411.38	Average benefit amount as there were policy changes in 2012; Source: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavlanje_pravic/statistika/druz_prejemki_zavarovanje_sv/)
Large family allowance	\$supr_bchlg	409.04	406.00	407.50	407.50	Average benefit as the benefit became means tested in 2012; Source: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavlanje_pravic/statistika/druz_prejemki_zavarovanje_sv/)
Birth grant	\$supr_bchba	285.37	282.32	286.14	286.14	Average benefit as the benefit became means tested in 2012; Source: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavlanje_pravic/statistika/druz_prejemki_zavarovanje_sv/)
Paternal payment	\$supr_bchfh	399.76	403.82	411.29	412.53	Average benefit amount for period 2005-2010; 2011 - 2017 we use salary growth (no data available); Source: SORS, Statistical yearbooks (http://www.stat.si/StatWeb/en/mainnavigation/data/publications/statistical-yearbook?leto=2013)
Child benefit	\$supr_bchmt	127.51	127.51	132.61	132.61	Indexation rule + increase in 2008 and estimated increase in 2016
Childcare supplement	\$supr_bchcc	117.44	117.77	117.77	117.77	Average benefit amount; Source: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavlanje_pravic/statistika/druz_prejemki_zavarovanje_sv/)
Compensation for lost income due to care of child who need special care	\$supr_bcrsvcc	782.00	728.05	671.25	683.32	Average benefit amount; Source: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavlanje_pravic/statistika/druz_prejemki_zavarovanje_sv/)
Compensation for disabled workers	\$supr_bdirw	3432.48	3356.01	3289.93	3299.88	Average benefit amount; Source: Pension and Disability Insurance Institute of Slovenia, Annual Reports (http://www.zpiz.si/cms/?id=2&inf=69)
Disability supplement for disabled	\$supr_bdixp	41.46	41.46	41.46	41.46	The lowest benefit amount; Source: Pension and Disability Insurance Institute of Slovenia, Monthly Statistical Report, June each year (http://www.zpiz.si/cms/?id=2&inf=70)
Attendance supplement	\$supr_bdica	418.88	418.88	418.88	418.88	Benefit amount for the highest level of disability; Source: Pension and Disability Insurance Institute of Slovenia, Monthly Statistical Report, June each year (http://www.zpiz.si/cms/?id=2&inf=70)
Keep constant	\$supr_const	1	1	1	1	Keep constant
yempv	\$supr_yempv	136.42	137.95	139.35	141.93	Factor based on average wage lagged by 1-year
yivwg	\$supr_yivwg	1523.18	1540.25	1555.89	1584.66	Factor based on average wage lagged by 1-year (yivwg01 in 2009=2009)
Pension support for pensioners	\$supr_psact	0	0	0	0	Before 2010 psact was included in the pension amount, so it was not simulated, and it was not possible to disentangle it from pensions

Sources: Eurostat: <http://ec.europa.eu/eurostat/data/database>; employment income: SI-STAT/Average monthly wages (http://pxweb.stat.si/pxweb/Dialog/varval.asp?ma=0701011E&ti=&path=../Database/Demographics/07_labour_force/10_earnings_costs/01_07010_earnings/&lang=1); indices of income types (self-employment work, contractual work, student work, income from capital, rent): Basic Statistical data on PIT Ministry of Finance (internal documentation); indices of family benefits: Ministry of Labour, Family, Social Affairs and Equal Opportunities, Statistics (http://www.mddsz.gov.si/si/uvcljavlanje_pravic/statistika/druz_prejemki_zavarovanje_sv/); indices of unemployment benefits: Employment service of Slovenia, Annual reports (http://www.ess.gov.si/trg_dela/publicistika/letna_porocila) and Monthly reports (http://www.ess.gov.si/trg_dela/publicistika/mesecne_informacije); indices of pensions and disability benefits: Pension and Invalidity Insurance Institute of Slovenia, Annual reports 2013-2016 (<http://www.zpiz.si/wps/wcm/connect/zpiz+internet/zpiz/prvastran/publikacije/letnaporocila>) and Monthly reports (<http://www.zpiz.si/wps/wcm/connect/zpiz+internet/zpiz/prvastran/publikacije/mesecnistatistickipregledi>)

ANNEX 2: VALIDATION TABLES

Table A1 Number of employed and unemployed

	EUROMOD	External				Ratio			
	2014	2014	2015	2016	2017	2014	2015	2016	2017
Number of employed	808.7	746	785	758	804	1.08	1.03	1.07	1.01
Number of unemployed	154.3	99	91	80	79	1.56	1.70	1.93	1.95

Notes: Number of employed and unemployed computed based on months in employment/unemployment in EUROMOD. Numbers computed as averages of monthly data over the year.

External sources: SI-STAT, data portal of Statistical Office of the Republic of Slovenia (SI-STAT, data portal of Statistical Office of the Republic of Slovenia (http://pxweb.stat.si/pxweb/Database/Demographics/07_labour_force/02_07008_active_pop_ADS/01_07620_active_pop_ADS_quart/01_07620_active_pop_ADS_quart.asp))

Table A2 Market income in EUROMOD -Number of recipients (in thousands)

	EUROMOD	External				Ratio			
	2014	2014	2015	2016	2017	2014	2015	2016	2017
Taxable employment income	819	756	789	n.a.	n.a.	1.08	1.04	n.a.	n.a.
Self-employment income	233	167	199	n.a.	n.a.	1.40	1.17	n.a.	n.a.
Income from contractual work	165	126	138	n.a.	n.a.	1.31	1.20	n.a.	n.a.
Income from student work	110	43	100	n.a.	n.a.	2.58	1.10	n.a.	n.a.
Investment income	515	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Private pensions	19	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rent income	120	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: As ratios are calculated with precise figures, there might be some differences due to rounding.

Sources for earnings: Basic Statistical data on PIT for years 2014 and 2015; Ministry of Finance.

Table A3 Market income in EUROMOD -Annual amounts (in mil.)

	EUROMOD				External				Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Av. employment income	1,378	1,392	1,417	1,422	1,540	1,556	1,585	1,589	0.89	0.89	0.89	0.90
Taxable employment income	13,536	13,673	13,926	13,968	12,731	13,106	n.a.	n.a.	1.06	1.04	n.a.	n.a.
Self-employment income	1,073	1,086	1,106	1,110	546	552	n.a.	n.a.	1.97	1.97	n.a.	n.a.
Income from contractual work	247	234	239	239	222	211	n.a.	n.a.	1.11	1.11	n.a.	n.a.
Income from student work	242	310	316	317	187	240	n.a.	n.a.	1.29	1.29	n.a.	n.a.
Investment income	361	557	542	543	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Private pensions	13	13	13	13	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rent income	175	270	263	264	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: As ratios are calculated with precise figures, there might be some differences due to rounding.

Sources for earnings: Basic Statistical data on PIT for years 2014 and 2015; Ministry of Finance.

Table A4 Tax benefit instruments included but not simulated in EUROMOD -Number of recipients/ payers (in thousands)

	EUROMOD	External				Ratio			
	2014	2014	2015	2016	2017	2014	2015	2016	2017
Pensions									
Basic old-age pension	387	426	432	435	439	0.91	0.90	0.89	0.88
Basic disability pension	64	87	86	84	83	0.73	0.75	0.76	0.77
Basic survivor pension	63	95	94	93	92	0.66	0.67	0.68	0.68
Other benefits									
Attendance supplement	19	30	31	32	32	0.63	0.62	0.60	0.60
Disability supplement	45	53	51	48	47	0.85	0.89	0.93	0.96
Scholarship	72	57	n.a.	n.a.	n.a.	1.25	n.a.	n.a.	n.a.
Unemployment wage compensation	79	27	24	23	25	2.97	3.35	3.44	3.17
Wage compensation for disabled workers	50	46	45	45	44	1.09	1.11	1.12	1.13
Paternal payment	15	17	16	n.a.	n.a.	0.88	0.90	n.a.	n.a.
Childcare supplement	3	6	6	6	n.a.	0.50	0.50	0.48	n.a.
Compensation for lost income due to care of child who need special care	1	1	1	1	n.a.	1.69	1.65	1.63	n.a.

Sources: for earnings: Basic Statistical data on PIT for years 2014 and 2015; Ministry of Finance (internal documentation); for scholarship: Statistical Office of the Republic of Slovenia, SI-Stat Data Portal (http://pxweb.stat.si/pxweb/Database/Demographics/09_education/90_archive/02_09543_Scholarship/02_09543_Scholarship.asp); for parental and paternal payment: The Ministry of Labour, Family and Social Affairs, Statistics, Family allowances (http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/druz_prejemki_zavarovanje_sv/); for unemployment benefits: Employment service of Slovenia, Annual reports 2014-2016 (http://www.ess.gov.si/trg_dela/publicistika/letna_porocila) and Monthly data (http://www.ess.gov.si/trg_dela/publicistika/mesecne_informacije); for wage compensation for disabled workers and pensions: Pension and Invalidity Insurance Institute of Slovenia, Annual reports 2014-2016 (<http://www.zpiz.si/cms/?id=2&inf=69>) and Monthly data (<http://www.zpiz.si/cms/?id=2&inf=459>).

Table A5 Tax benefit instruments included but not simulated in EUROMOD -Annual amounts (in mil.)

	EUROMOD				External				Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Pensions												
Basic old-age pension	3,579	3,579	3,604	3,660	3,090	3,197	3,259	3,291	1.16	1.12	1.11	1.11
Basic disability pension	445	445	448	455	469	489	481	481	0.95	0.91	0.93	0.95
Basic survivor pension	395	395	398	404	435	482	479	486	0.91	0.82	0.83	0.83
Other benefits												
Attendance supplement	43	43	43	43	77	79	81	82	0.56	0.55	0.53	0.53
Disability supplement	28	28	28	28	33	32	30	29	0.86	0.89	0.93	0.97
Scholarship	96	100	96	96	87	n.a.	n.a.	n.a.	1.11	n.a.	n.a.	n.a.
Unemployment wage compensation	199	198	199	199	224	200	196	244	0.89	0.99	1.02	0.82
Wage compensation for disabled workers	147	144	141	141	158	152	147	146	0.93	0.95	0.96	0.97
Paternal payment	413	417	425	426	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Childcare supplement	7	7	7	7	9	9	9	n.a.	0.83	0.84	0.79	n.a.
Compensation for lost income due to care of child who need special care	9	8	8	8	7	6	6	n.a.	1.36	1.32	1.31	n.a.

Sources: for earnings: Basic Statistical data on PIT for years 2014 and 2015; Ministry of Finance (internal documentation); for scholarship: Statistical Office of the Republic of Slovenia, SI-Stat Data Portal (http://pxweb.stat.si/pxweb/Database/Demographics/09_education/90_archive/02_09543_Scholarship/02_09543_Scholarship.asp); for parental and paternal payment: The Ministry of Labour, Family and Social Affairs, Statistics, Family allowances (http://www.mddsz.gov.si/si/uvveljavljanje_pravic/statistika/druz_prejemki_zavarovanje_sv/); for unemployment benefits: Employment service of Slovenia, Annual reports 2014-2016 (http://www.ess.gov.si/trg_dela/publicistika/letna_porocila) and Monthly data (http://www.ess.gov.si/trg_dela/publicistika/mesecne_informacije); for wage compensation for disabled workers and pensions: Pension and Invalidity Insurance Institute of Slovenia, Annual reports 2014-2016 (<http://www.zpiz.si/cms/?id=2&inf=69>) and Monthly data (<http://www.zpiz.si/cms/?id=2&inf=459>).

Table A6 Tax benefit instruments simulated in EUROMOD -Number of recipients/ payers (in thousands)

	EUROMOD				SILC	Ratio	External				Ratio			
	2014	2015	2016	2017	2014	2014	2014	2015	2016	2017	2014	2015	2016	2017
Benefits														
Unemployment wage compensation	57	57	57	57	79	0.71	27	24	23	25	2.12	2.39	2.46	2.26
Birth grant	12	13	13	13	16	0.79	16	16	16	n.a.	0.80	0.81	0.80	n.a.
Large family supplement	26	26	26	26	25	1.05	25	26	26	n.a.	1.03	1.00	0.99	n.a.
Child benefit (means tested)	285	287	286	287	271	1.05	238	243	249	n.a.	1.19	1.18	1.15	n.a.
Parental payment	27	27	27	27	28	0.96	21	20	20	n.a.	1.32	1.37	1.35	n.a.
Parental allowance	3	3	3	3	11	0.25	3	4	4	n.a.	0.84	0.73	0.73	n.a.
Housing benefit	55	55	57	57	9	5.91	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Social assistance	63	65	72	73	98	0.65	56	60	60	61	1.13	1.09	1.19	1.20
Income support	13	13	14	13	9	1.36	9	10	11	14	1.37	1.31	1.28	0.99
Social contributions up to full working time for parents (part time work)	15	15	15	15	18	0.92	12	14	14	n.a.	1.22	1.12	1.05	n.a.
Social contributions up to full working time for parents (not working)	1	1	1	1			2	1	1	n.a.	0.87	0.93	0.99	n.a.
Taxes and Social Insurance contributions														
Personal income tax	1,027	1,515	1,020	1,021	n.a.	n.a.	987	1,517	n.a.	n.a.	1.04	1.00	n.a.	n.a.
Tax on investment income	515	515	515	515	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Employee contributions	888	888	888	888	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Self-employed contributions	71	71	71	71	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Employer contributions	888	888	888	888	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other contributions	176	176	176	176	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: The number of PIT taxpayers in EUROMOD is calculated to coincide with external statistics: a) in 2014 the number of PIT taxpayers does not refer to the taxpayers who actually paid some PIT but to persons who were obliged to fill in tax return. Other contributions include credited social contributions up to full working time for parents and for parents who exit labour market, and employee part of social contributions paid on benefits (unemployment wage compensation, contributory

parental payments), b) in 2015 the number of PIT taxpayer refer the number of persons with any kind of taxable income.

Sources: for family benefits: The Ministry of Labour, Family and Social Affairs, Statistics, Family allowances

(http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/druz_prejemki_zavarovanje_sv/); for unemployment benefits: Employment service of Slovenia, Annual reports 2014-2016 (http://www.ess.gov.si/trg_dela/publicistika/letna_porocila) and Monthly data (http://www.ess.gov.si/trg_dela/publicistika/mesecne_informacije); for

social assistance: The Ministry of Labour, Family and Social Affairs, Statistics, (http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/denarna_socialna_pomoc/)

and internal documents of The Ministry of Labour, Family and Social Affairs; for income support: internal documents of The Ministry of Labour, Family and Social Affairs and The Ministry of Labour, Family and Social Affairs, Statistics (http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/vd/); for taxes: Basic Statistical

data on PIT for years 2014 and 2016; Ministry of Finance (internal documentation); for social contributions: Ministry of Finance, Consolidated General government 1992-2017, http://www.mf.gov.si/fileadmin/mf.gov.si/pageuploads/tekzib/Bilten_javni_h_financ/Konsolidirana_bilanca_javnega_financiranja_1992-2017.xlsx

Table A7 Tax benefit instruments simulated in EUROMOD -Annual amounts (Mil.)

	EUROMOD				SILC (uprated)				Ratio				External				Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Benefits																				
Unemployment wage compensation	139	140	141	143	199	198	199	199	0.70	0.71	0.71	0.72	224	200	196	244	0.62	0.70	0.72	0.58
Birth grant	4	4	4	4	4	4	4	4	0.81	0.83	0.82	0.83	4	4	4	n.a.	0.80	0.81	0.80	n.a.
Large family supplement	11	11	11	11	10	10	10	10	1.05	1.06	1.05	1.06	10	11	11	n.a.	1.03	1.01	1.00	n.a.
Child benefit (means tested)	232	234	240	242	221	221	230	230	1.05	1.06	1.04	1.05	218	220	228	n.a.	1.06	1.06	1.05	n.a.
Parental payment	179	178	173	174	177	176	172	172	1.01	1.01	1.01	1.01	244	234	230	n.a.	0.73	0.76	0.75	n.a.
Parental allowance	8	8	8	8	9	9	9	9	0.94	0.94	0.94	0.94	9	11	11	n.a.	0.87	0.76	0.76	n.a.
Housing benefit	62	62	64	65	9	8	8	9	7.23	7.32	7.64	7.59	9	n.a.	n.a.	n.a.	7.15	n.a.	n.a.	n.a.
Social assistance	172	176	203	208	231	240	251	254	0.75	0.73	0.81	0.82	174	192	203	208	0.99	0.92	1.00	1.00
Income support	17	18	18	18	15	15	16	16	1.18	1.18	1.11	1.11	17	19	20	25	1.01	0.94	0.88	0.70
Social contributions up to full working time for parents (part time work)	17	17	17	17	15	18	19	19	1.14	0.92	0.90	0.90	15	17	17	n.a.	1.09	0.99	0.97	n.a.
Social contributions up to full working time for parents (not working)	4	4	4	4	2	2	3	3	1.97	1.58	1.55	1.55	4	4	4	n.a.	0.90	0.96	1.00	n.a.
Taxes and Social Insurance contributions																				
Personal income tax	1,761	1,793	1,837	1,788	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,730	1,773	n.a.	n.a.	1.02	1.01	n.a.	n.a.
Tax on investment income	90	139	135	136	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	105	162	158	n.a.	0.86	0.86	0.86	n.a.
Employee contributions	3,113	3,143	3,201	3,211	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,785	2,893	3,020	3,112	1.12	1.09	1.06	1.03
Self-employed contributions	304	321	337	349	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	310	299	313	319	0.98	1.08	1.08	1.09
Employer contributions	2,254	2,276	2,332	2,339	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,049	2,125	2,233	2,302	1.10	1.07	1.04	1.02
Other contributions	138	137	136	137	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	128	157	154	158	1.08	0.87	0.88	0.87

Sources: for family benefits: The Ministry of Labour, Family and Social Affairs, Statistics, Family allowances (http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/druz_prejemki_zavarovanje_sv/); for unemployment benefits: Employment service of Slovenia, Annual reports 2014-2016 (http://www.ess.gov.si/trg_dela/publicistika/letna_porocila) and Monthly data (http://www.ess.gov.si/trg_dela/publicistika/mesecne_informacije); for housing benefit Statistical Office of the Republic of Slovenia, SI-Stat Data Portal (http://pxweb.stat.si/pxweb/Dialog/varval.asp?ma=1262201E&ti=&path=../Database/Demographics/12_social_protection/01_12622_expen/&lang=1); for social assistance: The Ministry of Labour, Family and Social Affairs, Statistics, (http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/denarna_socialna_pomoc/) and internal documents of The Ministry of Labour, Family and Social Affairs; for income support: internal documents of The Ministry of Labour, Family and Social Affairs and The Ministry of Labour, Family and Social Affairs, Statistics (http://www.mddsz.gov.si/si/uveljavljanje_pravic/statistika/vd/); for taxes: Basic Statistical data on PIT for years 2014 and 2015; Ministry of Finance (internal documentation); for social contributions: Ministry of Finance, Consolidated General government 1992-2017, http://www.mf.gov.si/fileadmin/mf.gov.si/pageuploads/tekzib/Bilten_javnih_financ/Konsolidirana_bilanca_javnega_financiranja_1992-2017.xlsx

Table A8 Distribution of equivalised disposable income

	EUROMOD (I)				External (II)			Ratio (I/II)	
	2014	2015	2016	2017	2014	2015	2016	2014/2015	2015/2016
D1	4.12	4.08	4.14	4.15	3.80	3.70	3.80	1.11	1.07
D2	5.67	5.62	5.63	5.61	5.70	5.60	5.70	1.01	0.99
D3	6.90	6.83	6.80	6.80	6.90	6.90	6.90	1.00	0.99
D4	7.87	7.82	7.80	7.78	8.00	7.90	7.90	1.00	0.99
D5	8.81	8.75	8.74	8.72	8.90	8.80	8.90	1.00	0.98
D6	9.73	9.68	9.67	9.64	9.80	9.80	9.80	0.99	0.99
D7	10.74	10.73	10.69	10.67	10.80	10.80	10.80	0.99	0.99
D8	12.06	11.98	12.03	11.97	12.10	12.10	12.00	1.00	1.00
D9	14.04	13.99	14.01	13.97	14.10	14.20	14.00	0.99	1.00
D10	20.07	20.53	20.48	20.70	20.00	20.30	20.20	0.99	1.02
Median	11,947	12,133	12,286	12,364	11,852	11,909	12,332	1.00	0.98
Mean	12,870	13,160	13,333	13,448	12,881	13,021	13,459	0.99	0.98
Gini	24.23	24.73	24.66	24.81	24.40	25.00	24.50	0.97	1.01
S80/S20	3.49	3.56	3.53	3.56	3.6	3.70	3.60	0.94	0.99

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

Sources: Eurostat (2016): Statistics Database, <http://ec.europa.eu/eurostat/data/database>.

* Eurostat EU-SILC based estimates refer to the data collection period, while EUROMOD estimates refer to income reference period. In order to validate EUROMOD results, Eurostat statistics are lagged by one year to correspond to the EUROMOD estimates.

Table A9 Poverty rates by gender and age

	EUROMOD (I)				External (II)			Ratio (I/II)	
	2014	2015	2016	2017	2014	2015	2016	2014/2015	2015/2016
40% median HDI									
Total	2.53	2.54	2.34	2.32	3.70	4.10	3.90	0.62	0.65
Males	2.68	2.68	2.45	2.43	3.70	4.30	3.90	0.62	0.69
Females	2.38	2.39	2.23	2.20	3.60	3.90	3.80	0.61	0.63
50% median HDI									
Total	7.18	7.27	6.92	6.83	8.50	9.10	8.40	0.79	0.86
Males	7.10	7.24	6.79	6.72	8.00	8.80	7.90	0.81	0.92
Females	7.26	7.29	7.05	6.94	9.00	9.40	8.90	0.77	0.82
60% median HDI									
Total	14.12	14.43	14.33	14.28	14.50	14.50	14.30	0.97	1.01
Males	13.31	13.67	13.54	13.56	13.50	13.70	13.00	0.97	1.05
Females	14.92	15.17	15.10	15.00	15.40	15.20	15.60	0.98	0.97
70% median HDI									
Total	21.42	21.51	21.57	21.58	21.40	21.60	21.20	0.99	1.01
Males	20.45	20.56	20.57	20.63	20.10	20.30	19.80	1.01	1.04
Females	22.37	22.44	22.57	22.53	22.70	22.90	22.60	0.98	0.99
60% median HDI									
0-15 years	12.57	13.12	12.77	12.97	14.70	14.70	14.00	0.86	0.94
16-24 years	14.26	14.06	14.13	14.08	14.30	15.60	15.10	0.91	0.93
25-49 years	12.80	13.17	12.92	12.97	12.50	12.80	12.40	1.00	1.06
50-64 years	16.03	16.29	16.30	16.18	13.30	14.70	15.20	1.09	1.07
65+ years	16.04	16.31	16.56	16.16	20.50	17.10	17.20	0.94	0.95

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

Sources: Eurostat (2017): Statistics Database, http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database.

* Eurostat EU-SILC based estimates refer to the data collection period, while EUROMOD estimates refer to income reference period. In order to validate EUROMOD results, Eurostat statistics are lagged by one year to correspond to the EUROMOD estimates.

Table A10 Minimum wage validation

	Baseline				Min Wage Incl.				Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Total amount in mln. EURO:												
Disposable income	17,102	17,492	17,717	17,876	17,215	17,606	17,831	17,996	0.9934	0.9935	0.9936	0.9933
Taxable employment income	13,536	13,673	13,926	13,968	13,718	13,854	14,103	14,151	0.9867	0.9870	0.9875	0.9871
Non-taxable employment income	914	923	940	943	914	923	940	943	1.0000	1.0000	1.0000	1.0000
Personal income tax	1,743	1,773	1,817	1,768	1,789	1,820	1,864	1,815	0.9745	0.9743	0.9749	0.9741
Employee contributions	3,231	3,260	3,317	3,327	3,272	3,300	3,356	3,367	0.9878	0.9879	0.9884	0.9880
Social assistance	172.36	176.31	202.57	208.12	173.75	179.28	207.21	213.10	0.9920	0.9834	0.9776	0.9767
Gini (Eq HDI)	24.23	24.73	24.66	24.81	24.37	24.88	24.81	24.97	0.9939	0.9942	0.9941	0.9937
At poverty risk (60% median HDI)	14.12	14.43	14.33	14.28	14.39	14.63	14.65	14.72	0.9812	0.9859	0.9775	0.9703

ANNEX 3: POLICY EFFECTS IN 2016–2017

Table 1 and Figure 1 show the effects of policy changes in 2016-2017 on mean equivalised household disposable income by income component and income decile group in Slovenia. Disposable income for the total population increases by 0.09 percent, however the effects of tax/benefits changes are quite heterogeneous along the distribution of disposable income. In fact, the richest decile experiences the highest increase in disposable income by 1.19 percent, while the ninth decile experiences no net change. All other income groups experience a mild decrease in disposable income, between 0.18 and 0.39 percent, with the poorest deciles characterized by relatively larger decreases.

Direct taxes, mainly Personal Income Taxes, represent the factors driving the highest increase in disposable income between 2016 and 2017, with an annual growth of 0.22 percent for the total population and with very different experience by deciles. This results from an introduction of new fourth tax bracket and lower tax rate for the third tax bracket. Specifically, taxable incomes between 20,400 and 48,000 euro per year are subject to a marginal tax rate of 34% in 2017 and incomes between 48,000 and 70,907.20 euro per year are subject to a marginal tax rate of 39%. In 2016 taxable incomes between 20,400 and 70,907.20 euros were therefore subject to a higher marginal tax rate of 41%. This change favoured the two highest income deciles, which experienced a higher reduction in tax liabilities: for the top decile reduced direct taxes represent the main factor for the increase in disposable income of 1.19 percent and the ninth decile benefited only slightly (0.06%) from reduced tax liability. The other deciles with the exception of the second decile experienced slight decrease in disposable income due to direct taxes which is driven with non-updated income thresholds for tax brackets despite the increasing wages.

Public pensions represent another factor driving the increase in disposable income for all deciles between 2016 and 2017, with an annual growth of 0.02 percent points for the total population and with very slightly higher growth experience by the poorest deciles. These results can be explained mostly by indexation, which make public pensions increase in real terms, especially for the lowest deciles, where the share of pensions in disposable income is larger.

All deciles experienced very slight decrease of disposable income due to means-tested benefits. The overall effect of means-tested benefits (0.03 percent decrease in disposable income for the total population) can be explained by the fact that minimum income benefits increased at a lower rate than CPI during the 2016-2017 period, while means-tested benefits which do not rely to minimum income have not been updated at all.

Non means tested benefits had a negative although almost neglecting impact (0.08 percent for the total population) on disposable income across all income deciles. Such effect was plausibly caused by the indexation of imputed benefits which are not simulated in EUROMOD.

Self-employed social insurance contributions contribute negatively to disposable income growth, although to a small extent. This results from an increase between 2016 and 2017 in the minimum base on which self-employed SIC contributions are levied, from 56 to 58 percent of average gross wage.

Finally, the effect of employee's social insurance contributions on disposable income growth is almost negligible, across all income deciles. The overall effect is driven by indexation and not by policy changes, as wage increase was higher than CPI.

Table 1. Policy effects in 2016 – 2017, using CPI-indexation, % (alfa = 1.0148)

Decile	Original income	Public pensions	Means-tested benefits	Non means-tested benefits	Employee SIC	Self-employed SIC	Direct taxes	Disposable income
1	0.00	0.02	-0.08	-0.15	0.03	-0.20	-0.01	-0.39
2	0.00	0.02	-0.13	-0.12	0.02	-0.11	0.00	-0.31
3	0.00	0.02	-0.07	-0.11	0.02	-0.08	-0.02	-0.24
4	0.00	0.02	-0.06	-0.10	0.02	-0.06	-0.08	-0.27
5	0.00	0.02	-0.04	-0.08	0.01	-0.06	-0.07	-0.21
6	0.00	0.02	-0.03	-0.09	0.02	-0.04	-0.10	-0.22
7	0.00	0.01	-0.02	-0.09	0.02	-0.03	-0.11	-0.22
8	0.00	0.01	-0.03	-0.07	0.01	-0.02	-0.08	-0.18
9	0.00	0.01	0.00	-0.06	0.01	-0.03	0.06	0.00
10	0.00	0.01	0.00	-0.04	0.01	-0.02	1.23	1.19
Total	0.00	0.02	-0.03	-0.08	0.01	-0.05	0.22	0.09

Figure1. Policy effects in 2016 - 2017, using CPI-indexation, % (alfa = 1.0148)

