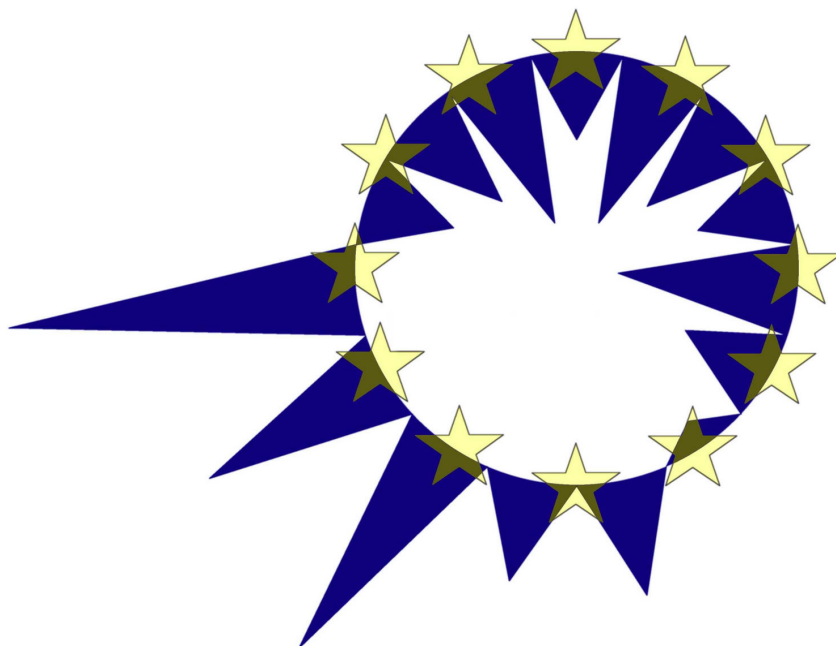


EUROMOD

COUNTRY REPORT



SLOVENIA (19)

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1. BASIC INFORMATION

1.1 Basic figures

Table 1. Basic figures

	Pop. (m.)	pop. < 18 (%)	pop. ≥ 65 (%)	Life expect. (years)	Fertility rate	Unemp rate	GDP per head (PPP)	Currency Name	exch. rate ^[1]
2004	2.0	18.4	15.0	77.25	1.25	6.3	17,900	SIT	239.13
2005	2.0	18.1	15.3	77.49	1.26	6.5	18,700	SIT	239.57

^[1] Euro exchange rate on 30th of June.
Source: Eurostat (2007).

1.2 The tax-benefit system

Table 2. Tax-benefit system and government budget

	Total general government revenue ^[1] % of GDP	Total tax receipts ^[1] % of GDP	Total general government expenditure ^[1] % of GDP	Social protection ^[2] % of GDP
2004	42.8	39.0	44.1	23.7
2005	43.4	39.4	44.4	23.4

Source: ^[1] Consolidated balance of public financing, internal data of Ministry of Finance (2007); ^[2] Eurostat (2007).

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

	Sickness/ health care	Disability	Old age	Survivors	Family/ children	Unemployment	Housing	Social exclusion
2004	31.5	8.0	42.4	1.6	8.5	3.1	-	2.8
2005	31.6	8.3	41.5	1.9	8.4	3.2	0.1	2.8

Source: Eurostat (2007).

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

	Personal income tax	Corporate income tax	Social security contributions		Taxes on goods and services	Other taxes
			Employees ¹	Employers		
2004	15.6	5.1	21.5	14.6	35.0	8.3
2005	15.1	5.5	21.4	14.5	36.0	7.4

Notes: ¹ Includes self-employed.

Source: Consolidated balance of public financing, internal data of Ministry of Finance (2007).



1.2.1 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.
- Full pensionable age is set at 63 for men and 61 for women. This means that insured persons retiring prior to the full pensionable age receive »penalties«. There are numerous exemptions to the penalty rule. It though 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. Definition of dependent children differs for tax and for benefit purposes. For tax purposes dependent children are defined as: (a) children aged under 18; (b) children in full-time education aged under 26 and (c) unemployed children at age 18 or above without own income or with own income less than family allowance for dependent child. Definition of dependent children for benefit purposes is more rigorous; the dependent children are defined as children aged under 18 or aged under 26 if the child continues with full-time education. Irrespective of above definition, children should not be employed or married and must cohabit with parents in order to be considered dependent children.
- For tax-benefit purposes lone parents are the parents of resident dependent children; they do not cohabit with a partner of the opposite sex (whether or not any partner is the parent of the child is irrelevant), except in cases when paternity is not regulated.
- The income tax system is an individual system, with the spouses being assessed independently.
- In tax year 2005 all income sources were taxed in the same manner. For year 2006, schedular taxation of dividends, capital gains and interest was introduced (with a 20% flat tax rate).
- The annual tax return for the calendar year, which is also the tax year, must be submitted to the Tax Administration by all taxpayers who have received any type of income subject to tax. In his tax return, a taxpayer provides information on all types of income subject to tax, amounts of advance PIT paid during the year, employee social security contributions and tax allowances. 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 not 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 inline with consumer price index. Unemployment benefits partly depend on guaranteed wage which is up-rated every 1st August with expecting growth of living expenses (consumer price index) in the following year set by Minister of Labour, Family and Social Affairs. Since 2001, pension up-rating is established in a special legal act and has been changed four times. Since September 2005 pensions have been up-rated twice a year regarding the growth of average gross wage in Slovenia (something less, as at least 0.5 percentage point is subtracted form the wage growth). However, the growth of pensions lags behind the wage growth because of this 0.5 percentage point and some other rather complicated details. Income tax thresholds, income tax allowances and tax credits are up-rated in December each year according to consumer price index in November.



- Income on most benefits is assessed on annual basis. Exceptions are social assistance and housing benefit where three months 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.

1.3 Social Benefits

Wage compensation due to temporary incapacity for work (*bolniško nadomestilo*): contributory; it is paid for 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 80% to 100% of the average monthly. It is subject to income tax.

Funeral costs refund (*pogrebna*): contributory; it is payable to the person who paid for the funeral, provided that the deceased was employed (or insured); amounts to 80% of the average inevitable funeral costs in Slovenia.

Death benefit (*posmrtnina*): contributory; it is payable to family members supported by the deceased (who was employed or insured), ranges from 100% to 150% of the guaranteed gross wage. The exact amount is established by National Health Insurance Institute.

Parental (maternity) payment (*starševsko nadomestilo*): contributory. The total leave associated with childbirth consists of maternity leave and child care and protection leave 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. The minimum wage compensation amounts to 55% of the minimum wage and the maximum compensation is 2.5 times the average wage in Slovenia. Paternal leave lasts 90 days. Fathers are obliged to use at least 15 days during the maternal leave, while the rest of the 75 days can be used until a child's age of eight. During the first 15 days of the paternal leave, the father is entitled to 100% wage compensation, while for the rest of the 75 days he will only be paid the social security contributions based on the minimum wage. It 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 18-year average of net wages. 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 fulfill 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 (53 years); if the spouse was not an insured person, he/she could obtain a widow's pension at the age of 48. Children can receive a survivors pension up to the age of 26, provided they annually submit an attestation of school attendance. The computation of survivors pension is extremely non-transparent, particularly with regard to the widows pension. As a general rule, the amount of survivors' pension is dependent on the potential beneficiaries and their sources of income. Survivors 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.

Reassignment allowance (*nadomestilo za invalidnost*): contributory. Disbursements for disabled insured persons who are reassigned to new jobs and for disabled insured persons, who have temporarily withdrawn from active labour force and are temporarily unemployed. Reassignment allowance is subject to tax.

Occupational rehabilitation allowance (*nadomestilo za čas poklicne rehabilitacije*): contributory. Disbursements for disabled insured persons who are involved in occupational rehabilitation, 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.

Pension support for pensioners (*varstveni dodatek*): contributory; old-age, survivor and disability pensioners with very low pensions and pension qualifying period less than 40/38 years; not subject to tax.

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

Holiday 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 holiday 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*): is a contributory benefit for the unemployed who were employed for at least 12 months in the last 18 months prior to the termination of employment and are covered by unemployment insurance. The basis for determining the level of unemployment compensation is a twelve months' average gross wage of the unemployed person prior to unemployment. The benefit level amounts to 70% of the basis in the first three months and 60% thereafter. The minimum benefit level is equal to



the guaranteed wage net of contributions and taxes while the maximum level is three times the lowest possible unemployment compensation. The beneficiaries are paid health-, pension- and disability insurance. Duration of unemployment wage compensation varies from 3 to 24 months depending on the length of insurance period. Those unemployed who are older than 55 and are lacking up to three years until retirement have their pension and disability insurance contributions paid by the employment service until they retire. Unemployment compensation is subject to personal income tax.

Unemployment assistance (*denarna pomoč med brezposelnostjo*): is a means-tested contributory benefit payable once the unemployment wage compensation has been exhausted. An eligibility criterion is income per family member in the last three months must not exceed 80% of the guaranteed wage and the family's social security must be endangered. It amounts to 80% of the net guaranteed wage. The beneficiaries have their health insurance contributions paid by the Employment Office. The length of provision is 15 months. In case of older unemployed lacking up to three years to the retirement (and having minimum chances of getting a job) it can be prolonged until the fulfillment of the retirement conditions. Unemployment assistance is not 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.

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. The compensation will be equal to the minimum wage (or its proportional part, depending on the working hours). 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. There is no means test. 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. The cash benefit amounts to 57,190 SIT (238.7 EUR) in 2005. The benefit level is adjusted once a year in January in line with the consumer price index. It is one-time benefit and not subject to income tax.

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. The right to a child benefit is 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 is less than 26 years of age. 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.

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. The level of benefit amounts to 20,590 SIT (85.9 EUR) per month (in for the period recommended by a medical expert commission, but not longer than his/her 18th birthday or until age 26 if in schooling. Childcare supplement is not subject to income tax.

National scholarship (*republiška štipendija*): non-contributory. Employment service of Slovenia provides national scholarship to apprentices, pupils and students from families, where income per capita does not exceed annual amount of 130% of guaranteed wage. Amount of scholarship depends on student's family income per capita, students' grades and commuting or accommodation. National scholarship is not subject to tax. Employment service of Slovenia provides also scholarship for specially talented (successful) pupils/students.

State pension (*državna pokojnina*): is a non-contributory means-tested benefit disbursed to persons who do not have a pension in their own right, are at least 65 years old and have resided in Slovenia for at least 30 years (between age 15 and 65). The amount of this benefit is 33.3% of the lowest pension base. Most recipients of this benefit are women. Net pension is subject to income tax, but due pensioners tax credit and senior tax allowance it effectively remains untaxed.

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.

- *Scope and scale*

The following tables provide an indication of the relative scale and coverage of each benefit by showing the number of recipients and the expenditure on each benefit.



Table 5. Social benefits: recipients (as % of population)

	2005
Wage compensation due to temporary incapacity for work	10.6%
Parental (maternity) payment	0.9%
Old age pension	15.7%
Survivor pension	4.7%
War and farmers pension	0.4%
Disability - invalidity pension	7.2%
Attendance supplement	1.4%
Pension support for pensioners	2.4%
Disability supplement for disabled	2.7%
Holiday bonus for pensioners	26.4%
Unemployment wage compensation	0.9%
Unemployment assistance	0.3%
Social contributions up to full working time for parents of children under three	0.1%
Compensation for lost income due to care of child who need special care	0.0%
Parental allowance	0.1%
Birth grant	0.9%
Child benefit	11.4%
Large-family supplement	1.2%
Childcare supplement	0.3%
National scholarship	2.6%
State pension	0.9%
Housing benefit	0.3%
Social assistance	3.0%

Notes: data for monthly received benefits refers to monthly averages, except for unemployment benefits and scholarships which refer to December 2005.

Data on disability/invalidity pensions include also wage compensations paid by Institute for Pension and Disability Insurance.

Source: Annual report of National Health Insurance Institute (2005); Annual report of Institute for Pension and Disability Insurance (2005); Annual report of National Employment Service of Slovenia (2005); Internal data of Ministry of Labour, Family and Social Affairs; Statistical Yearbook (2007).



Table 6. Social benefit: expenditure

	2005
Annual expenditure (EUR, millions)	4,179
as % of total expenditure	
Wage compensation due to temporary incapacity for work	4.1%
Funeral costs refund and death benefit	0.2%
Parental (maternity) payment	4.1%
Old age pension	45.7%
Survivor pension	9.1%
War and farmers pension	1.2%
Disability - invalidity pension	14.8%
Attendance supplement	1.5%
Pension support for pensioners	0.3%
Disability supplement for disabled	0.7%
Holiday bonus for pensioners	2.9%
Unemployment wage compensation	2.4%
Unemployment assistance	0.3%
Social contributions up to full working time for parents of children under three	0.0%
Compensation for lost income due to care of child who need special care	0.0%
Parental allowance	0.1%
Birth grant	0.1%
Child benefit	5.7%
Large-family supplement	0.2%
Childcare supplement	0.1%
National scholarship	2.2%
State pension	0.7%
Housing benefit	0.1%
Social assistance	3.4%

Notes: Data on disability/invalidity pensions include also wage compensations paid by Institute for Pension and Disability Insurance.

Source: Annual report of National Health Insurance Institute (2005); Annual report of Institute for Pension and Disability Insurance (2005); Annual report of National Employment Service of Slovenia (2005); Internal data of Ministry of Labour, Family and Social Affairs; Statistical Yearbook (2007).

- *Not strictly benefits*

Sick leave payments (*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 90% if the insured person is absent from work due to illness, or 80% 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 20%-80% 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 whose parents cannot pay for school meals. This benefit is partly means-tested.

Subsidized meals for high-school students (*subvencionirana študentska prehrana*): Each high-school student is entitled to one voucher for every working day. Coupons are used as payment means in particular restaurants and are subsidized from app. from 40 to 70%.

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 depends on the distance.

Textbook fund (*učbeniški sklad*) provided to all children in primary and secondary schools who can borrow textbooks from school for lending fee.

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

1.4 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. 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%). The base for contributions is their profit (revenue minus expenses) from pre-previous year (profit reported in last tax return), but it



can not be less than national minimum wage. Actually, social security contributions are not calculated on actual tax base, but on the basis of schedule in the next table.

	Tax base (profit)		Tax base for contributions
	From	From	
1.	0	minimum wage	minimum wage
2.	minimum wage	average gross wage	0.6* average gross wage
3.	average gross wage	1.5*average gross wage	0.9*average gross wage
4.	1.5*average gross wage	2.0*average gross wage	1.2*average gross wage
5.	2.0*average gross wage	2.5*average gross wage	1.5*average gross wage
6.	2.5*average gross wage	3.0*average gross wage	1.8*average gross wage
7.	3.0*average gross wage	3.5*average gross wage	2.1*average gross wage
8.	3.5*average gross wage		2.4*average gross wage

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 at the rate of 38.0%, for unemployment benefit at the rate of 37.47% on a gross amount of unemployment benefit and at the rate of 12.92% for unemployment assistance.

- *Scope and scale*

The following tables show the number of contributors and the composition of social contributions, as a percentage of overall revenue.

Table 7. Social contributions: contributors (as % of population)

	2005
Social contributions	
Employee social security contributions	-
Employer social security contributions	-
Self-employed social security contributions	-
-Other social security contributions	-

Notes: No officially published data on the number of social contributions contributors.

Table 8. Social contributions: revenue

	2005
Social contributions (€ millions)	3,988
as % of total revenue	
Employee social security contributions	53.51
Employer social security contributions	39.69
Self-employed social security contributions	5.03
Other social security contributions	1.78

Source: Consolidated balance of public financing, internal data of Ministry of Finance (2007).

1.5 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, income from rents and royalties, income from capital, 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. Personal income tax regulation was subject to many changes from 2004 to 2006 when tax reform was completed.

Payroll tax (*davek na izplačane plače*) is levied on employers who are obliged to pay social security contributions, usually those employing people on a permanent basis. The tax is applied to each gross wage or salary on a progressive basis (i.e. at progressive rates). The tax schedule contains four brackets and a progressive tax scale with 0%, 3.8%, 7.8%, and 14.8% tax rates. This tax is not applied to the self-employed. A new law on payroll tax from December 2005 gradually abolishes the tax in the next three years (till 2009).

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.

Tax on lottery winnings (*davek na dobitke od iger na srečo*): applies to the value of lottery prizes and it is paid by individuals who win lottery prizes. The tax rate is 15%.

Tax on gambling (*davek od iger na srečo*): is paid on the net value of prizes awarded by The organizer of the gambling activities. The two rates on gambling are 5% and 18% and are applied depending on the type of game.

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 proposes. 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*): is levied on urban premises such as buildings and parts of buildings including apartments, garages, second homes and boats that are not used for business purposes. The taxpayer is an individual who is the actual or beneficial owner, the taxable base is ascertainment value according to special criteria issued by the Government. The tax rate depends of the type of construction and their value. Exemptions to the property tax include: buildings of less than 160 square meters, buildings used for agricultural purposes, business premises used by the owner or user for business activity and cultural or historical monuments.

Charge for the use of a building ground (*nadomestilo za uporabo stavbnega zemljišča*): is levied on vacant and constructed building land, possessed by legal persons and individuals. Charge is set by local communities for vacant building land based on the area of building land planned for building and for constructed building land based on the useful area of the residential house or business premises thereon.

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. The standard VAT rate is 20%. A reduced rate of 8.5% applies mostly to foodstuffs, public passenger transport, pharmaceuticals products, medical equipment, hotel accommodation, books, newspapers and periodicals. The Value Added Tax Act specifies several categories of goods and services that are exempt from VAT, such as medical services, childcare, etc.

Motor vehicle tax (*davek na motorna vozila*): is paid at the purchase of a new vehicle, beside the VAT. VAT is payable upon the transfer (sale) of motor vehicles, but there are also the motor vehicle tax (MVT) and an environmental duty on used-up motor vehicles. The motor vehicle tax must be paid for passenger motor vehicles which are put into circulation in Slovenia for the first time. The tax rate is determined on a progressive scale at 1–13% of the selling price of the vehicle. The MVT is also chargeable on every transfer of used passenger cars, which must be



registered, if VAT has not been paid on this transfer, with MVT in this case amounting to 5% of the selling price of the used car.

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%.

Immovable property transfer tax (*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.

- *Scope and scale*

The following tables show the number of taxpayers and the composition of taxes, including social contributions, as a percentage of overall tax revenue.

Table 9. Taxes: taxpayers (as % of population)

	2005
Direct taxes	
Personal Income Tax	63.8%
Inheritance and gift tax	2.1%
Indirect taxes	
Value added tax ¹	2.1%
Immovable property transfer tax	2.4%
Motor vehicle tax	1.4%

Notes: ¹ only persons (not companies) are taken into account

Source: Consolidated balance of public financing, internal data of Ministry of Finance (2007).



Table 10. Taxes: revenue

	2005
Annual revenue (€ millions)	6,896
as % of total revenue	
Direct taxes	43.66
Personal Income Tax	23.89
Corporate Income Tax	8.62
Payroll tax	7.33
Tax on contractual work	0.30
Tax on gambling and tax on insurance premiums	1.67
Inheritance and gift tax	0.07
Property tax and charge for the use of a building ground	1.78
Indirect taxes	51.96
Value added tax	36.77
Motor vehicle tax	0.64
Excise duties	13.93
Immovable property transfer tax and financial property tax	0.62
Other taxes	4.38

Notes: ¹Tax on insurance premiums is in fact indirect tax but it is reported together with tax on gambling which is classified as direct tax. ²All data refers to calendar year 2005.

Source: Consolidated balance of public financing, internal data of Ministry of Finance (2007).

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 11 classifies 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 11. Simulation of benefits in EUROMOD

	Variable name(s)	Treatment in Euromod 2005	Why not fully simulated?
Wage compensation due to temporary incapacity for work	-	E	No data on contribution history and incapacity for work
Funeral costs refund	-	E	No information available
Death benefit	-	E	No information available
Parental (maternity) payment	coBMACT	I	No data on contribution history
Old age pension	coPOA	I	No data on contribution history
Survivor pension	-coPSU	I	No data on contribution history
War and farmers pension	-	E	No data on contribution history and eligibility
Disability - invalidity pension	coPID	I	No data on contribution history and disability
Reassignment allowance	-	E	No information available
Occupational rehabilitation allowance	-	E	No information available
Attendance supplement	coBDICA	I	No information on disability
Pension support for pensioners	coPOANC	I	Data available is not sufficient to simulate eligibility cond.
Disability supplement for disabled	siBDI	I	No data on contribution history and disability
Holiday bonus for pensioners	coPLS	I	Data available is not sufficient to simulate eligibility cond
Unemployment wage compensation	coUNCT	I	No data on contribution history
Unemployment assistance	coUNMT	I	Data available is not sufficient to simulate eligibility cond
Social contributions up to full working time for parents of children under three	-	E	No information available
Compensation for lost income due to care of child who need special care	coBCRSVCC	I	Data available is not sufficient to simulate eligibility cond
Parental allowance	co_bmanc	S	
Birth grant	co_bchba	S	
Child benefit	co_bchmt	S	
Large-family supplement	co_bchlg	S	
Childcare supplement	coBDICC	I	Data available is not sufficient to simulate eligibility cond
National scholarship	coBED	I	Data available is not sufficient to simulate eligibility cond
State pension	-	E	No information available
Housing benefit	co_bho	S	
Social assistance	co_bsa	S	

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



Table 12. Simulation of taxes and social contributions in EUROMOD

	Variable name(s)	Treatment in Euromod 2005	Why not fully simulated?
Employee social security contributions	co_tscee	S	
Employer social security contributions	co_tsceer	S	
Self-employed social security contributions	co_tscese	S	
Personal Income Tax	co_tin	S	
Payroll tax	co_tpa	S	
Tax on contractual work	co_tpa	S	
Tax on lottery winnings	-	E	No information available
Tax on gambling	-	E	No information available
Inheritance and gift tax	-	E	No information available
Property tax	-	E	No information available
Charge for the use of a building ground	-	E	No information available
Value added tax	-	E	No information available
Motor vehicle tax	-	E	No information available
Excise duties	-	E	No information available
Tax on insurance premiums	-	E	No information available
Immovable property transfer tax	-	E	No information available

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



2.2 Simulated policies and order of simulation

2.2.1 Simulated policies

Table 13. Simulated policies

Section	Policy	Description	2005
	ERSIC_SI	Social Insurance Contribution (employers) (includes pensioner's contribution for Health insurance)	X
	EESIC_SI	Social Insurance Contribution (employees)	X
	SESIK_SI	Social Insurance Contribution (self-employed)	X
	Payroll_SI	Payroll tax + tax on contractual work (employers)	X
	IT_AllowStd_SI	Income taxes: deductions from taxable income (standard allowances)	X
	IT_AllowFam_SI	Income taxes: deductions from taxable income (family allowances)	X
	IT_SI	Income taxes	X
	ParentAllow_SI	Parental Allowance (non contributory maternity benefit)	X
	BirthGrant_SI	Birth Grant	X
	LargeFamBen_SI	Large family allowance	X
	SA_SI	Social assistance	X
	HB_SI	Housing benefit	X
	CB_SI	Child benefit	X

2.2.2 Order of simulation

- *Order of simulation in 2005*

The following table shows the order in which the main elements of the Slovenian system are simulated. Table 14 is extracted from the EUROMOD parameter sheets *spine_SI_2005*.



Table 14. EUROMOD Spine: order of simulation, 2005

Policy	Description	Main output
ERSIC_SI	Social Insurance Contribution (employers) (includes pensioner's contribution for Health insurance)	co_tscer
EESIC_SI	Social Insurance Contribution (employees)	co_tscee
SESIK_SI	Social Insurance Contribution (self-employed)	co_tsese
Payroll_SI	Payroll tax + tax on contractual work (employers)	co_tpa
IT_AllowStd_SI	Income taxes: deductions from taxable income (standard allowances)	co_tinta
IT_AllowFam_SI	Income taxes: deductions from taxable income (family allowances)	co_tinta
IT_AllowFam_SI	Income taxes: tax credit (pensioner allowance)	Co_tintc
IT_SI	Income taxes	co_tin
ParentAllow_SI	Parental Allowance (non contributory maternity benefit)	co_bmanc
BirthGrant_SI	Birth Grant	co_bchba
LargeFamBen_SI	Large family allowance	co_bchlg
SA_SI	Social assistance	co_bsa
HB_SI	Housing benefit	co_bho
CB_SI	Child benefit	co_bch

The two means-tested benefits, Social assistance (*co_bsa*) and Housing benefit (*co_bho*) depend on income after income tax (*co_tin*) and employee and self-employed contributions (*co_tscee* and *co_tsese*) have been deducted. 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 takes account of social assistance and housing benefit. So, parental allowance must be simulated first, followed by policies in exact order: social assistance, housing benefit and child benefit as the last simulated policy.

2.3 Social benefits

2.3.1 Parental allowance (*co_bmanc*)

- **Brief description**

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 any wage compensation. 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.

- **Definitions**

The unit of analysis are parents with dependent child (*TU:maternity/own_child* or *TU:maternity/oth_child*) aged one or less. (*TU:maternity/cd_agelow*).



TU: maternity_SI

tax unit names	maternity_si
----------------	--------------

first_par

own_child	1
oth_child	1
cd_min_age	1

- **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 1 or less, who receive no contributory maternity payments and has no employment income.

MOD: co_BenCalc – Benefit calculation

comp1_Cond	{!sHeadofTu} & {nDepChInTu>= 1} & {coBMACT = 0} & {coYEM = 0}
comp1_perElig	m 40030
output_var	co_bmanc
TAX_UNIT	maternity_SI

- **Income test**

The benefit is paid only to parents with no maternity payments and no employment income. There is no other means test. In other words, all other income types (royalties, capital income, etc) do not matter for parental allowance.

- **Benefit amount**

Size of the benefit is 40,030 SIT (167.1 EUR) per month in 2005 and lasts 365 day as parental leave. The benefit level is adjusted once a year in January in line with the consumer price index. Parental allowance is not subject to income tax.

2.3.2 Birth grant (co_bchba)

- **Brief description**

Birth grant is a 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.

- **Definitions**

The unit of analysis are parents with dependent child (TU: maternity/own_child or TU: maternity/oth_child) aged 1 or less (cd_agelow).



TU: maternity_SI

tax unit names		maternity_si
<i>first_par</i>		
own_child		1
oth_child		1
cd_min_age		1

- **Eligibility conditions**

Access to birth grant is limited to families with a dependent baby aged 1 or less.

MOD: co_BenCalc – Benefit calculation

comp1_Cond		{IsDepChild}
comp1_perElig	y	57190
output_var		co_bchba
TAX_UNIT		maternity_SI

- **Income test**

It is non-means tested one-time benefit.

- **Benefit amount**

Birth grant amounts to 57,190 SIT (238.7 EUR) in 2005 and it is on-time benefit, not subject to income tax.

2.3.3 Large family allowance (*co_bchlg*)

- **Brief description**

Large-family supplement is a 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; i.e. aged less than 26 and involved in full time education.

- **Definitions**

The unit of analysis is a family with three or more dependent children. As the family must fulfill age and status conditions for the entitlement to a child benefit, the tax unit is the same as for child benefit:



TU: CB_family_si:

tax unit names	CB_family_si
<i>first_par</i>	
spouse	1
CohabPartner	1
own_child	1
oth_child	1
cd_agelow	17
cd_agehigh	25
cd_IfParent	1
cd_InFTed	1
cd_Married	-1
cd_Cohab	-1

Children below age 18 (*TU: CB_family_si/cd_agelow*) are considered dependent children regardless any other conditions. Children aged 18 or more but less than 26 (*TU: CB_family_si/cd_agehigh*) are considered dependent children only if person is in full time educations (*TU: CB_family_si/ cd_InFTed*). If child is married (*TU: CB_family_si/ cd_Married*) or has a cohabiting partner (*TU: CB_family_si/ cd_Cohab*) he/she is not considered dependent child regardless any other condition.

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

MOD: co_BenCalc – Benefit calculation

ncomp		1
comp1_Cond		{nDepChInTu >= 3}
comp1_perTu	y	80070
output_var		co_bchlg
TAX_UNIT		<u>CB_family_si</u>

The benefit is paid only for children who are below an age limit (18 years) or in full time education (but not more than 25), who are not married or cohabiting (*TU: CB_family_si*).

- **Income test**

There is no income test.

- **Benefit amount**

The level of benefit is paid once a year and amounts to 80,070 SIT (334.2 EUR) in 2005. The benefit level is adjusted once a year in January in line with the consumer price index and is not subject to income tax.



2.3.4 Social assistance (*co_bsa*)

- *Brief description*

Social assistance is means-tested benefit 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 income which is the base for income test.

- *Definitions*

The unit of analysis is the entire household (*TU: household_si*) irrespective of the age of household members.

TU: household_si

tax unit names	household_si
<i>first_par</i>	
household	1
own_child	1
oth_child	1
cd_agelow	17
cd_agehigh	25
cd_IfParent	1
cd_InFTed	1
LP_if_div	1
LP_if_sep	1

Income test is assessed on the difference between household income which is the base for income test (*IL: IL_Sameans*) and minimum income for the household which is set by the law.

Household income which is the base for income test is net of taxes and is calculated as follows:

$$IL: IL_Sameans = co_bmanc + cobcrsvcc + coPDI + coBMACT + cobunct + cobunmt + coYEM + copls + coPOA + coPSU + coYSE + coYaj + coyiydv + coyiyit + coyprld + coYPRRO + coyprrt + sibdi - co_tscee - co_tin - coXMP$$

Minimum income for the household depends on the number and age of household members. Equivalence scale is the following:

- the first adult in household – 1
- second and each subsequent adult – 0.7
- child below 18 – 0.3
- supplement for single parent – 0.3.



MOD: co_BenCalc - Sum of equivalence scales

ncomp		4
comp1_Cond	{IsHeadofTu}	
comp2_Cond	{coDAG >= 18}	
comp3_Cond	{coDAG < 18}	
comp4_Cond	{IsHeadofTu} & {IsLoneParentOfDepChild}	
comp1_perElig		0.3
comp2_perElig		0.7
comp3_perElig		0.3
comp4_perElig		0.3
output_var		co_stm01

The minimum income for household (*MOD: Minimum income for household*) is obtained by multiplying the sum of equivalence scales (*MOD: Sum of equivalence scales*) and the amount of minimum income set by law (563772 SIT or 2,352.6 EUR per equivalent person per year).

MOD: co_ArithOp - Minimum income for household

formula		amount#1 * co_stm01
#1_amount	y	563772
output_var		co_stm01

- **Eligibility conditions**

Access to social assistance is not limited.

- **Income test**

Income threshold is minimum income for particular household set by law (*MOD: Minimum income for household*) calculated by multiplying equivalent number of household members and (*MOD: Sum of equivalence scales*) and the amount of minimum income set by law (563772 SIT or 2,352.6 EUR per equivalent person per year). Households above the income threshold are not eligible at all.

- **Benefit amount**

The benefit level is the difference between minimum income for the household *MOD: (Minimum income for household)* and household income which is the base for income test (*IL: Il_Sameans*). Social assistance is not subject to income tax.

MOD: co_ArithOp - Social assistance benefit calculation

formula		co_stm01 - il_Sameans
lowlim_amount		0
output_var		co_bsa



2.3.5 Housing benefit (*co_bho*)

- *Brief description*

Housing benefit is 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.

- *Definitions*

The unit of analysis is the entire household (*TU: household_si*) irrespective of the age of household members.

TU: household_si

tax unit names	household_si
<i>first_par</i>	
household	1
own_child	1
oth_child	1
cd_agelow	17
cd_agehigh	25
cd_IfParent	1
cd_InFTed	1
LP_if_div	1
LP_if_sep	1

Respective non-profit rent (*MOD: Estimated non-profit rent*), which is the base for benefit calculation, is not the rent the household is actually paying, but it is set by law. Calculation of estimated non-profit rent is based on eligible size of residence for the household (*MOD: Eligible size of residence for the household*). Eligible size of residence for the household depends on the number of persons in household and it is upwards limited. For example, eligible size of residence for the household with 5 members is 75m².

MOD: *co_ArithOp* - Eligible size of residence for the household (m2)

ncomp	7
comp1_Cond	{nPersInUnit = 1}
comp2_Cond	{nPersInUnit = 2}
comp3_Cond	{nPersInUnit = 3}
comp4_Cond	{nPersInUnit = 4}
comp5_Cond	{nPersInUnit = 5}
comp6_Cond	{nPersInUnit = 6}
comp7_Cond	{nPersInUnit > 6}
comp1_perTU	co_stm02 <min> 30
comp2_perTU	co_stm02 <min> 45
comp3_perTU	co_stm02 <min> 55
comp4_perTU	co_stm02 <min> 65
comp5_perTU	co_stm02 <min> 75
comp6_perTU	co_stm02 <min> 85
comp7_perTU	co_stm02 <min> (85 + 6 * (nPersinUnit - 6))
output_var	co_stm02



Non-profit rent (*MOD: Estimated non-profit rent*) is calculated based on eligible size of residence for the household as follows:

MOD: co_ArithOp - Estimated non-profit rent

co_ArithOp		"Base amount" for estimated non-profit rent	
formula		270 * 630 * co_stm02 * amount#1	
#1_amount	y		0.0403
output_var			co_stm03
co_BenCalc		Estimated non-profit rent	
ncomp			5
comp1_Cond		{co_stm02 <= 30}	
comp2_Cond		{30 < co_stm02} & {co_stm02 <= 45}	
comp3_Cond		{45 < co_stm02} & {co_stm02 <= 65}	
comp4_Cond		{65 < co_stm02} & {co_stm02 <= 75}	
comp5_Cond		{co_stm02 > 75}	
comp1_perTU		co_stm03 * 1.057	
comp2_perTU		co_stm03 * 1.024	
comp3_perTU		co_stm03 * 1.000	
comp4_perTU		co_stm03 * 0.966	
comp5_perTU		co_stm03 * 0.950	
output_var			co_stm03

Income test is assessed on (a) household income which is the base for income test (*IL: IL_HBmeans*), (b) minimum income for the household, which is set by the law and is the same as for social assistance, and (c) estimated non-profit rent (*MOD: Estimated non-profit rent*).

Household income which is the base for income test is net of taxes and is calculated as follows:

$$IL: IL_HBmeans = co_bmanc + co_bsa + cobcrsvcc + coPDI + coBMACT + cobunct + cobunmt + coYEM + copls + coPOA + coPSU + coYSE + coYaj + coyiydv + coyiyit + coyprld + coYPRRO + coyprrt + sibdi - co_tscee - co_tin - coXMP$$

Minimum income for the household depends on the number and age of household members. Equivalence scale is the same as for social assistance and is the following:

- a. the first adult in household – 1
- b. second and each subsequent adult – 0.7
- c. child below 18 – 0.3
- d. supplement to single parent – 0.3.

MOD: co_BenCalc - Sum of equivalence scales

ncomp		4
comp1_Cond		{IsHeadofTu}
comp2_Cond		{coDAG >= 18}
comp3_Cond		{coDAG < 18}
comp4_Cond		{IsHeadofTu} & {IsLoneParentOfDepChild}
comp1_perElig		0.3
comp2_perElig		0.7
comp3_perElig		0.3
comp4_perElig		0.3
output_var		co_stm01



The minimum income for household (*MOD: Minimum income for household*) is obtained by multiplying the sum of equivalence scales (*MOD: Sum of equivalence scales*) and the amount of minimum income set by law (563772 SIT or 2,352.6 EUR per equivalent person per year).

MOD: co_ArithOp - Minimum income for household

formula		amount#1 * co_stm01
#1_amount	y	563772
output_var		co_stm01

- **Eligibility conditions**

Access to housing benefit is limited only to households renting and paying profit or non-profit rent.

- **Income test**

Income threshold is the sum of (a) minimum income for particular household (*MOD: Minimum income for household*), (b) 30% of household income which is the base for income test (*IL: IL_HBmeans*) and (c) estimated non-profit rent (*MOD: Estimated non-profit rent*). Households above threshold are not eligible at all.

MOD: co_ArithOp - Income threshold

formula	co_stm01 + 0.3 * il_HBmeans + co_stm03
output_var	co_stm04

- **Benefit amount**

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

MOD: co_ArithOp - Housing benefit calculation

who_must_be_elig	one_member
formula	(co_stm04 - il_HBmeans) <min> (0.8 * co_stm03)
lowlim_amount	0
output_var	co_bho

2.3.6 Child benefit (*co_bchmt*)

- **Brief description**

Child benefit is means-tested benefit, held by one of the parents for a child residing in Slovenia. The right to a child benefit is held until the child reaches 18 years of age, as well as for the period in which the child continues with full-time education, but only until the child reaches 26 years of age. 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.



• **Definitions**

The unit of analysis is the family. This comprises of the head, his spouse (TU: *CB_family_si/spouse*), and dependent children (TU: *CB_family_si/own_child*, TU: *CB_family_si/oth_child*).

Children below age 18 (TU: *CB_family_si/cd_agelow*) are considered dependent children regardless any other conditions. Children aged 18 or more but less than 26 (TU: *CB_family_si/cd_agehigh*) are considered dependent children only if person is in full time educations (TU: *CB_family_si/cd_InFTed*). If child is married (TU: *CB_family_si/cd_Married*) or has a cohabiting partner (TU: *CB_family_si/cd_Cohab*) is not considered dependent child regardless any other condition.

TU: *cb_family_si*

tax unit names	CB_family_si
<i>first_par</i>	
spouse	1
CohabPartner	1
own_child	1
oth_child	1
cd_min_age	0
cd_agelow	17
cd_agehigh	25
cd_IfParent	1
cd_InFTed	1
cd_Married	-1
cd_Cohab	-1
LP_if_div	1
LP_if_sep	1

Income test is assessed on family income which is the base for income test (IL: *IL_CBmeans*). The definition (IL: *IL_CBmeans*) includes gross incomes.

Household income which is the base for income test is net of taxes and is calculated as follows:

$$IL: IL_HBmeans = co_bmanc + co_bsa + co_hbo + cobersvcc + coPDI + coBMACT + cobunct + cobunmt + coYEM + copls + coPOA + coPSU + coYSE + coYaj + coyiydv + coyiyit + coyrld + coYPRRO + coyprrt + sibdi - coXMP - copoanc$$

• **Eligibility conditions**

Access to child benefit is limited to families with three or more dependent children 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).

MOD: *co_Elig* – Eligibility conditions

elig_cond	{nDepChInTu >= 1}
TAX_UNIT	<u>CB_family_si</u>

The benefit is paid only for dependent children as defined in tax unit TU: *CB_family*.



- **Income test**

Access to child benefit is restricted to those families below an income threshold. Income threshold is set as income per family member (*MOD: $il_Cbmeans / nPersInUnit$*) compared to average gross wage (*MOD: $il_Cbmeans / nPersInUnit / co_stm01$*). Families above threshold are not eligible at all.

MOD: co_ArithOp – Income per family member as a share of average gross wage calculation

formula	y	3327348
output_var		co_stm01
formula		$il_Cbmeans / nPersInUnit / co_stm01$
output_var		co_stm02

The benefit amount depends on family income and it is gradually withdrawn when income per family member (*MOD: $Income\ per\ family\ member\ as\ a\ share\ of\ average\ gross\ wage\ calculation$*) is above 99% of average gross wage.

- **Benefit amount**

The benefit is paid per month (12 times a year) per eligible child. The amount of benefit depends on the family income per family member in comparison to average gross wage (*MOD: $Income\ per\ family\ member\ as\ a\ share\ of\ average\ gross\ wage\ calculation$*) and the number of eligible children. There are 8 income brackets.

MOD: co_BenCalc – Child benefit calculation for the 1st child

elig_cond		{nDepChInTu >= 1}
who_must_be_elig		all_members
ncomp		8
comp1_Cond		{co_stm02 <= 0.15}
comp2_Cond		{0.15 < co_stm02} & {co_stm02 <= 0.25}
comp3_Cond		{0.25 < co_stm02} & {co_stm02 <= 0.30}
comp4_Cond		{0.30 < co_stm02} & {co_stm02 <= 0.35}
comp5_Cond		{0.35 < co_stm02} & {co_stm02 <= 0.45}
comp6_Cond		{0.45 < co_stm02} & {co_stm02 <= 0.55}
comp7_Cond		{0.55 < co_stm02} & {co_stm02 <= 0.75}
comp8_Cond		{0.75 < co_stm02} & {co_stm02 <= 0.99}
comp1_perTU	m	21580
comp2_perTU	m	18460
comp3_perTU	m	14070
comp4_perTU	m	11090
comp5_perTU	m	9070
comp6_perTU	m	5750
comp7_perTU	m	4310
comp8_perTU	m	3750
output_var		co_bchmt

The benefit amount for the second child is higher than in comparison with the amount for the first child.



MOD: co_BenCalc – Child benefit calculation for the 2nd child

elig_cond		{nDepChInTu >= 2}
who_must_be_elig		all_members
ncomp		8
comp1_Cond		{co_stm02 <= 0.15}
comp2_Cond		{0.15 < co_stm02} & {co_stm02 <= 0.25}
comp3_Cond		{0.25 < co_stm02} & {co_stm02 <= 0.30}
comp4_Cond		{0.30 < co_stm02} & {co_stm02 <= 0.35}
comp5_Cond		{0.35 < co_stm02} & {co_stm02 <= 0.45}
comp6_Cond		{0.45 < co_stm02} & {co_stm02 <= 0.55}
comp7_Cond		{0.55 < co_stm02} & {co_stm02 <= 0.75}
comp8_Cond		{0.75 < co_stm02} & {co_stm02 <= 0.99}
comp1_perTU	m	23740
comp2_perTU	m	20400
comp3_perTU	m	15720
comp4_perTU	m	12660
comp5_perTU	m	10590
comp6_perTU	m	7190
comp7_perTU	m	5750
comp8_perTU	m	5190
output_var_addto		1
output_var		co_bchmt

Benefit amount for the third and each subsequent child remains the same; however, it is higher in comparison with benefit amounts for the first and the second child.

MOD: co_BenCalc – Child benefit calculation for the 3rd and each subsequent child

elig_cond		{nDepChInTu >= 3}
who_must_be_elig		all_members
ncomp		8
comp1_Cond		{co_stm02 <= 0.15}
comp2_Cond		{0.15 < co_stm02} & {co_stm02 <= 0.25}
comp3_Cond		{0.25 < co_stm02} & {co_stm02 <= 0.30}
comp4_Cond		{0.30 < co_stm02} & {co_stm02 <= 0.35}
comp5_Cond		{0.35 < co_stm02} & {co_stm02 <= 0.45}
comp6_Cond		{0.45 < co_stm02} & {co_stm02 <= 0.55}
comp7_Cond		{0.55 < co_stm02} & {co_stm02 <= 0.75}
comp8_Cond		{0.75 < co_stm02} & {co_stm02 <= 0.99}
comp1_perTU	m	25900
comp2_perTU	m	22340
comp3_perTU	m	17370
comp4_perTU	m	14250
comp5_perTU	m	12090
comp6_perTU	m	8630
comp7_perTU	m	7190
comp8_perTU	m	6630
output_var_addto		1
output_var		co_stm03
co_ArithOp		.. times the number of children (less first two)
who_must_be_elig		all_members



formula	co_stm03 * (nDepChInTu - 2)
output_var_addto	1
output_var	co_bchmt

Lone parents are eligible to 10% higher child benefit. Lone parents are considered parents who are not married, who do not cohabit (TU: *CB_family_si/ LP_if_marr*; TU: *CB_family_si/ LP_if_cohab*), who are divorced or separated (TU: *CB_family_si/ LP_if_divr*; TU: *CB_family_si/ LP_if_sep*).

MOD: co_ArithOp – Child benefit increase for lone parents

elig_cond	{IsLoneParentOfDepChild}
formula	co_bchmt * 0.1
output_var_addto	1
output_var	co_bchmt

2.4 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 (pensions, unemployment benefit, and unemployment assistance) which are included among employer social contributions, although they are paid from the institution which disburses the benefit.

2.4.1 Employee social contributions

Employees in a dependent job pay all four types of social contributions at a flat rate 22.1% of reference earnings (*IL: il_EESICbase*). 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. Due to data limitations, only one such fringe benefit - holiday bonus (*coYEMHL*) - can be taken into account. Holiday bonus is included into the base for contributions only above threshold of 70% of average gross wage.

The rates of employee social contributions are the following:

- for pension and disability insurance: 15.5% (*MOD: Pension and disability insurance contributions*);
- for health insurance: 6.36% (*MOD: Health insurance contributions*);
- for unemployment insurance: 0.14% (*MOD: Unemployment insurance contributions*);
- for maternity leave insurance: 0.1% (*MOD: Maternity leave insurance contributions*).



MOD: co_ArithOp – Employee social contributions calculations

co_ArithOp	Part of holiday bonus which is below the threshold and therefore not taxable	
formula		0.7 * amount#1
#1_amount	y	277279
uplim_var		coYEMHL
co_ArithOp	Pension and disability insurance contributions	
formula		il_EESICbase * 15.5 / 100
result_var		co_tsceepi
output_var		co_tscee
co_ArithOp	Health insurance contributions	
formula		il_EESICbase * 6.36 / 100
result_var		co_tsceehl
output_var_addto		1
output_var		co_tscee
co_ArithOp	Unemployment insurance contributions	
formula		(il_EESICbase - coBUNCT) * 0.14 / 100
result_var		co_tsceui
output_var_addto		1
output_var		co_tscee
co_ArithOp	Maternity leave insurance contributions	
formula		(il_EESICbase - coBMACT) * 0.1 / 100
result_var		co_tsceeml
output_var_addto		1
output_var		co_tscee

2.4.2 Employer social contributions

Employer social contributions are always paid conjointly with employee social security contributions. In addition, there are also some incomes where only employer social contributions are paid. Social contributions for people receiving some benefits are also treated as employer social contributions in the model. The rates of contributions are the following:

- a) for pension and disability insurance (*MOD: Pension and disability insurance contributions*):
 - 8.85% - the base is the same as for employee social contributions (*IL: il_EESICbase*),
 - 6% - the base is income from contractual work (*coYAJ*);
- b) for health insurance: (*MOD: Health insurance contributions*):
 - 6.56% - the base is the same as for employee social contributions (*IL: il_EESICbase*),
 - 12.92% (6.36+6.56=12.92) - the base is unemployment assistance benefit (*coBUNMT*),
 - 5.96% - the base are grossed pensions - multiplied by 1.573- (*IL: il_Pensions*); these contributions are paid by Pension Fund to Health Insurance Company;
- c) for occupational disease and employment injury insurance contributions (*MOD: Occupational disease and employment injury insurance contributions*):
 - 0.53% - the base is the same as for employee social contributions less unemployment insurance benefit (*IL: il_EESICbase - coBUNCT*);



- d) for unemployment insurance: (*MOD: Unemployment insurance contributions*):
- 0.06% - the base is the same as for employee social contributions less unemployment insurance benefit (*IL: il_EESICbase - coBUNCT*);
- e) for maternity leave insurance (*MOD: Maternity leave insurance contributions*):
- 0.1% - the base is the same as for employee social contributions less maternity leave insurance contributions (*IL: il_EESICbase - coBMACT*).

MOD: co_ArithOp – Employer social contributions calculations

co_ArithOp	Part of holiday bonus which is below the threshold and therefore not taxable	
formula		0.7 * amount#1
#1_amount	y	277279
uplim_var		coYEMHL
output_var		co_stm01
co_ArithOp	Pension and disability insurance contributions	
formula		il_ERSICbase * 8.85 / 100 + coYAJ * 6 / 100
output_var		co_tscerpi
co_ArithOp	Health insurance contributions	
formula		il_ERSICbase * 6.56 / 100 + coBUNMT * 12.92 / 100
output_var		co_tscerhl
co_ArithOp	Health insurance contributions on il_Pensions (paid by Pension Fund to the Health Insurance company)	
formula		il_Pensions * 1.573 * 5.96 / 100
output_var_addto		1
output_var		co_tscerhl
co_ArithOp	Occupational disease and employment injury insurance contributions	
formula		(il_ERSICbase - coBUNCT) * 0.53 / 100
output_var_addto		1
output_var		co_tscerhl
co_ArithOp	Unemployment insurance contributions	
formula		(il_ERSICbase - coBUNCT) * 0.06 / 100
output_var		co_tscerui
co_ArithOp	Maternity (paternity) leave insurance contributions	
formula		(il_ERSICbase - coBMACT) * 0.1 / 100
output_var		co_tscerml
co_ArithOp	Total employer SIC (this includes also SIC paid on social benefits pay the central government)	
formula		co_tscerpi + co_tscerhl + co_tscerui + co_tscerml
output_var		co_tscer

2.4.3 Self-employed social contributions

Within the model, self-employed are defined as individuals who do not have any income from employment and who declare themselves self-employed or have positive self-employment income.

MOD: co_Elig – Definition of self-employed

elig_cond	{coLES = 2} {coYSE != 0} & {coYEMWG = 0}
TAX_UNIT	individual_si



The base for self-employed contributions is their profit (revenue minus expenses). However, social security contributions are not paid on actual base, but on the basis of the schedule. Minimum base is minimum wage (*MOD: co_stm01*) and upper earning threshold is 2.4*average gross wage (average gross wage is *MOD: co_stm02*). In the model minimum wage and profit of self-employed are expressed as a share of average wage (*MOD: co_stm04* and *MOD: co_stm04*).

MOD: co_ArithOp – Determination of contribution base

ncomp		7
comp1_Cond	{co_stm03 < co_stm04} & {co_stm04 <= 1.0}	
comp2_Cond	{1.0 < co_stm04} & {co_stm04 <= 1.5}	
comp3_Cond	{1.5 < co_stm04} & {co_stm04 <= 2.0}	
comp4_Cond	{2.0 < co_stm04} & {co_stm04 <= 2.5}	
comp5_Cond	{2.5 < co_stm04} & {co_stm04 <= 3.0}	
comp6_Cond	{3.0 < co_stm04} & {co_stm04 <= 3.5}	
comp7_Cond	{co_stm04 > 3.5}	
comp1_perTU		0.6
comp2_perTU		0.9
comp3_perTU		1.2
comp4_perTU		1.5
comp5_perTU		1.8
comp6_perTU		2.1
comp7_perTU		2.4
output_var		co_stm05
formula		co_stm05 * co_stm02
lowlim_var		co_stm01

The self-employed are supposed to pay both employee and employer social contributions at the rates which are sum of both employee and employer rates.

MOD: co_ArithOp – Self-employed social contributions calculations

co_ArithOp	Pension and disability insurance contributions
formula	co_stm05 * (15.5 + 8.85) / 100
output_var	co_tscsepi
co_ArithOp	Health insurance contributions
formula	co_stm05 * (6.36 + 6.56) / 100
output_var	co_tscsehl
co_ArithOp	Occupational disease and employment injury insurance contributions
formula	co_stm05 * 0.53 / 100
output_var_addto	1
output_var	co_tscsehl
co_ArithOp	Unemployment insurance contributions
formula	co_stm05 * (0.14 + 0.06) / 100
output_var	co_tscseui
co_ArithOp	Maternity leave insurance contributions
formula	co_stm05 * (0.1 + 0.1) / 100
output_var	co_tscseml



co_ArithOp	Total self-employed SIC (this includes also SIC paid on social benefits pay the central government)
formula	co_tscsepi + co_tscsehl + co_tscseui + co_tscsem1
output_var	co_tscse

2.5 Personal income tax

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

2.5.1 Tax unit

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

2.5.2 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) unemployment assistance, (g) benefits from education (scholarship), (h) old-age assistance, (i) disability supplement and (j) employee social contributions.

2.5.3 Tax allowances

Eight tax allowances are simulated: (a) general tax allowance, (b) disabled person's tax allowance, (c) seniority tax allowance, (d) allowance for self-employed professionals, (e) special allowance for additional pension insurance, (f) special allowance for selected expenses, (g) family allowance for other dependant family member (partner or parent) and (h) family allowance for children. The first 6 allowances are named standard allowances and the last 2 are named family allowances. All tax allowances are deducted from intermediary tax base (IL: IL_ITbase).

- **Standard tax allowances (PolIT_AllowStd_SI)**

Taxpayers who are not dependent children / parents / partners (another taxpayer claims family or child allowance for them) or taxpayers with positive intermediary tax base (IL: IL_ITbase1) are eligible for general allowance.

MOD: co_ArithOp –General allowance

elig_cond		(!{IsDepChild} & !{IsDependentParent} & !{IsPartnerOfHeadOfTu}) {il_ITbase1 > amount}#1
#1_level		individual_si
#1_amount	y	474900
TAX_UNIT		IT_family_si
formula	y	564400



Disabled person’s allowance is granted to all taxpayers who are heavily disabled. Eligibility for disabled person’s allowance is determined by a variable identifying disability *coDDI*, imputed on the basis of actual data on claimed allowances.

MOD: *co_ArithOp* –Disabled person's allowance

elig_cond		{coDDI = 1}
TAX_UNIT		individual si
formula	y	3441500

Seniority allowance is granted to all taxpayers aged 65 and over.

MOD: *co_ArithOp* –seniority allowance

elig_cond		{coDAG >= 65}
formula	y	275300
TAX_UNIT		individual si

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 can not higher than 585.000 SIT (2,441. EUR). Eligibility for self-employed professionals' allowance is determined by a variable *coSEPF*, imputed on the basis of actual data on claimed allowances; if taxpayer claimed self-employed professional allowance gets value 1, otherwise *coSEPF* is zero.

MOD: *co_ArithOp* – Allowance for self-employed professionals

elig_cond		{coLSEPF = 1} & {coYSE > 0}
TAX_UNIT		individual si
formula		coYSE * 0.15
uplim_amount	y	585000
output_var_addto		1

Taxpayers can also claim allowance for insurance premium paid for additional voluntary pension insurance in the size up to 5.844% of his gross wage, but the allowance can not be higher than the amount set by law 549,400 SIT (2,292.6 EUR). The variable identifying paid insurance premium for additional voluntary pension insurance is *coXPP* and it refers to actually paid insurance premium reported in tax return.

MOD: *co_ArithOp* –Special allowance for additional pension insurance

formula		(coXPP <min> (coYEMWG * 5.844 / 100))
uplim_amount	y	549400

Special allowance for selected expenses is defined as a sum of a taxpayer’s expenses for selected purchases such as the acquisition of books or government securities. The sum of these expenses can be deducted by up to 2% of the intermediary tax base (*IL: II_ITbaseI*). The variable identifying special expenses for allowance is *coTINAOX* and it refers to actually claimed special allowance for selected expenses in tax return.



MOD: co_ArithOp – Special allowance for selected expenses

formula	(coTINTAOX <min> (il_ITbase1 * 2 / 100))
---------	--

In 2005 special allowance for selected expenses could be increased by additional 2% for interest paid on housing loan or expenses related to purchasing of dwelling. Due to lack of data on dwelling purchasing or loan repayment, this additional 2% allowance was not simulated.

- **Family tax allowances (PolIT_AllowFam_SI)**

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

TU: IT_family_si

tax unit names	IT_family_si
<i>first_par</i>	
spouse	1
CohabPartner	1
DepParent	1
own_child	1
oth_child	1
cd_agelow	17
cd_agehigh	25
cd_lfParent	1
cd_InFTed	1
cd_Unemp	2
cd_le_Inc	2
cd_le_Inc_It	39575
cd_IL	Il_ITbase0
dp_le_OwnInc	2
dp_le_CoupleInc	2
dp_le_OwnInc_It	39575
dp_le_CoupleInc_It	79150
dp_IL	Il_ITbase0

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

Dependent family member is (MOD: Family allowance for other dependant family member):

- dependent spouse (TU: IT_family_si/spouse or TU: IT_family_si /CohabPartner) or
- dependent parent (TU: IT_family_si/DepParent)

with intermediary tax base (IL: Il_ITbase1) less than family allowances for other dependent family members (474,900 SIT per year). Allowance for each dependent family member amounts to 474,900 SITS.

MOD: co_BenCalc – Family allowance for other dependant family members

ncomp			1
comp1_Cond		{(IsDependentParent) {IsPartnerOfHeadOfTu}) & {il_ITbase1 <= amount}#1	
#1_level		individual_si	
#1_amount	y		474900



comp1_perElig

y

474900

TAX_UNIT

[IT_family_si](#)

Children below age 18 (*TU: IT_family_si/cd_agemlow*) are considered dependent children regardless any other conditions. Children aged 18 or more but less than 26 (*TU: IT_family_si/cd_agemhigh*) are considered dependent children only if person is in full time educations (*TU: IT_family_si/cd_InFTed*). If child is unemployed (*TU: IT_family_si/cd_unemp*) and with income less than family allowances for dependent child (*TU: IT_family_si/cd_le_Inc*; *TU: IT_family_si/cd_IL*; *TU: IT_family_si/cd_le_Inc_It*) can also be considered as dependent child.

Every person is considered as an individual in Slovenian tax system. Therefore parents can freely decide how to split entitlement to child allowances among them. In the model we assume that families look for their optimal solution. In most cases it is optimal that parent with highest final tax base (*IL: IL_ITbase2*) claims allowance for all children, as allowance is progressive¹. For this reason, it is assumed that parent with highest final tax base (*IL: IL_ITbase2*) claims allowance for all children or for the children his/her final tax base can absorb.

If 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, father claims allowance for 3 children (for first, second and third) and mother claim allowance for the rest two children (the first and second for mother and not fourth and fifth for the family).

There is also the rule, that only one parent should claim allowance for one dependent child. Parents can share allowance for the same child only in case if the final tax base (*IL: IL_ITbase2*) of one parent is to low and the allowance for dependent child could not be claimed in its full amount. It should be noted that parents are allowed to split children and not the amount of allowance. For example, in family with 3 children where father is able to claim allowance for two children and 1/3 of allowance for the third child, mother claims the rest - 2/3 of allowance for the third child, which is considered as first for mother and the allowance amounts to 2/3 of allowance for the first child.

The possibility of splitting the allowance for one child between parents is neglected in the model due to high construction pretentiousness of the model and insignificant impact on aggregate results. However, model determines the number of children the parent with highest final claims allowance for, and the number of children left for the second parent. The model assumes that at most 6 dependent children live in one family, which meets the requirements of Slovenian data.

The head of the household can claim allowance for so many children his/her final tax base can absorb and also for marginal child, i.e. the child for whose allowance cannot be claimed in full amount (*MOD: Family allowance for children: how many children do take into account for the first parent*). Note that the rest of allowance is not transferred to the other parent but it is neglected.

¹ Note that this final tax base (*IL_ITbase2*) contains all standard tax allowances but no family tax allowances yet.



MOD: co_BenCalc – Family allowance for children: how many children do take into account for the first parent

ncomp		6
comp1_Cond		{nDepChInTu >= 1} & {il_ITbase2 > amount}#1
comp2_Cond		{nDepChInTu >= 2} & {il_ITbase2 > amount}#2
comp3_Cond		{nDepChInTu >= 3} & {il_ITbase2 > amount}#3
comp4_Cond		{nDepChInTu >= 4} & {il_ITbase2 > amount}#4
comp5_Cond		{nDepChInTu >= 5} & {il_ITbase2 > amount}#5
comp6_Cond		{nDepChInTu >= 6} & {il_ITbase2 > amount}#6
#1_amount	y	0
#2_amount	y	474900
#3_amount	y	991100
#4_amount	y	1679400
#5_amount	y	2539800
#6_amount	y	3572300
output_var		co_stm01

Children left for the other parent – the partner of the head of tax unit (MOD: *{IsPartnerOfHeadOfTu}*) - are defined as the difference between the number of all dependent children in the tax unit (*TU: IT_family_si*) and the number of children the parent with highest final tax base claims allowance for.

MOD: co_ArithOp – Family allowance for children: children left for the second parent (partner of the head)

formula		nDepChInTU - co_stm01
output_var		co_stm02
elig_cond		{IsPartnerOfHeadOfTu}
TAX_UNIT		IT_family_si

Finally, total allowance for either parent is calculated. Family allowance is progressive and it rises for each subsequent child. The increase from second child on is equal to 172.100 SIT (718.2 EUR).

MOD: co_BenCalc – Family allowance for children: total allowance for either parent

ncomp		3
comp1_Cond		{co_stm01 = 1}
comp2_Cond		{co_stm01 = 2}
comp3_Cond		{co_stm01 >= 3}
comp1_perElig	y	474900
comp2_perElig	y	991100
comp3_perElig		amount#1 + amount#2 * (co_stm01 - 2) + (1 + co_stm01 - 2) / 2 * (co_stm01 - 2) * amount#3
#1_amount	y	991100
#2_amount	y	516200
#3_amount	y	172100
output_var_addto		1
output_var		co_tinta

However, it was not possible to apply actual calculation of family allowances entirely in EUROMOD. Therefore, there are some differences between the modeled policy 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
- policy does not check if child is less than a year old (in this case only a proportional child allowances are taken into account).

2.5.4 Tax base

The final tax base (*IL: Il_ITbase2*) is defined as taxable income (*IL: Il_ITbase0*) minus social security contributions (*co_tscee*) minus tax allowances (*co_tinta*). We get intermediary tax base (*IL: Il_ITbase1*) if we subtract social security contributions from taxable income.

Taxable income is:

$$Il_ITbase0 = cobcrsvcc + coPDI + coBMACT + cobunct + coYEM + copls + coPOA + coPSU + coYSE + 0.9 * coYaj + 0.65 * coiydv + coiyit + coyprld + 0.9 * coYPRRO + 0.6 * coyprrt$$

Intermediary tax base is:

$$Il_ITbase1 = cobcrsvcc + coPDI + coBMACT + cobunct + coYEM + copls + coPOA + coPSU + coYSE + 0.9 * coYaj + 0.65 * coiydv + coiyit + coyprld + 0.9 * coYPRRO + 0.6 * coyprrt - co_tscee$$

Final tax base is:

$$Il_ITbase2 = cobcrsvcc + coPDI + coBMACT + cobunct + coYEM + copls + coPOA + coPSU + coYSE + 0.9 * coYaj + 0.65 * coiydv + coiyit + coyprld + 0.9 * coYPRRO + 0.6 * coyprrt - co_tscee - co_tinta$$

Note that final tax base cannot be negative. Therefore policy limits tax allowances to intermediary tax base (*MOD: Final (applicable) income tax allowance*).

MOD: *co_ArithOp* – Final (applicable) income tax allowance

formula	<i>co_tinta</i> <min> <i>il_ITbase1</i>
output_var	<i>co_tinta</i>
TAX_UNIT	individual_si

2.5.5 Tax schedule

Income taxation is graduated, with progressively higher marginal tax rates applying to higher income brackets.

MOD: *co_SchedCalc* – Income tax (before tax credits)

<i>base_il</i>	<i>il_ITbase2</i>	
<i>nbands</i>		5
<i>band1_uplim</i>	y	1300000
<i>band2_uplim</i>	y	2540000
<i>band3_uplim</i>	y	5140000
<i>band4_uplim</i>	y	10330000
<i>band1_rate</i>		0.16



band2_rate	0.33
band3_rate	0.38
band4_rate	0.42
band5_rate	0.50
output_var	co_tin

2.5.6 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 (*IL: il_Pensions*), regardless of the type and amount of pension.

MOD: co_ArithOp – Pensioner Allowance (Tax Credit)

formula	il_Pensions * 0.145
output_var	co_tintc
TAX_UNIT	individual_si

Note that these tax credits are non-refundable. In other words, final tax is calculated as the amount of tax resulting from the tax schedule minus the sum of all tax credits, subject to a minimum of 0.

MOD: co_ArithOp – Final income tax

formula	co_tin - co_tintc
lowlim_amount	0
output_var	co_tin

2.6 Payroll taxes

We distinguish between two types of payroll tax: (a) payroll tax on wages and (b) tax on contractual work.

2.6.1 Payroll tax on wages

Payroll tax on wages is paid by all employees who receive wages. The tax schedule contains four brackets and a progressive tax scale with 0%, 3.8%, 7.8%, and 14.8% tax rates. This tax is not applied to the self-employed.

MOD: co_BenCalc – Payroll tax

ncomp		4
comp1_Cond	{ coYEMWG<=amount} #1	
comp2_Cond	{coYEMWG > amount}#1 & {coYEMWG <= amount}#2	
comp3_Cond	{coYEMWG > amount}#2 & {coYEMWG <= amount}#3	
comp4_Cond	{coYEMWG > amount}#3	
#1_amount	m	165000
#2_amount	m	400000
#3_amount	m	750000
comp1_perTU		0
comp2_perTU		0.038



comp3_perTU		0.078
comp4_perTU		0.148
output_var		co_stm01
TAX_UNIT	individual_si	
formula		coYEMWG * co_stm01
output_var		co_tpa

Note that marginal tax rate exceeds 100%.

2.6.2 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 (coYaj) also includes all refunds of expenses in connection with services performed. Tax is levied at the flat rate of 25% on gross payments.

MOD: co_ArithOp – Tax on contractual work

formula	coYAJ * 0.25
output_var_addto	1
output_var	co_tpa

3. DATA

3.1 General description

In Slovenia, there is individual taxation but some elements of the household are taken into account, through the tax allowances for dependent family members. The data for Slovenia include not only individual taxpayers but also households as units of observation. The *EUROMOD database* is drawn from special database prepared by Statistical Office (*SURS database*) for the purpose of building Slovenian microsimulation model.

SURS database is prepared by Statistical Office and it is merged from several sources. The framework is census from year 2002 which provides demographic data: age, gender, household composition, education, activity status, residence and data on housing. Other datasets, provided by other institutions, are merged to this framework:

- Personal income tax database (Ministry of Finance) for data on taxable income, social security contributions, tax allowances and PIT; data are provided from tax returns;
- Pension database (Pension and Disability Insurance Institute) for data on pensions and other incomes disbursed by Pension and Disability Insurance Institute ;
- Social transfers database (Ministry of work, family and social affairs) for data on all social transfers disbursed by Ministry of work, family and social affairs.

The income data from Ministry of Finance, Pension and Disability Insurance Institute and Ministry of work, family and social affairs refer to year 2004.



SURS dataset contains information on approximately 40,000 households with 115,000 individuals, which represents more than 5% of total population. The sample is systematic representative; therefore no weights for adjustment to actual population structure are needed.

EUROMOD dataset contains information on 4,777 households, where 13,798 individuals live. It is systematic representative sample drawn from *SURS database*, as we have already noted. *EUROMOD dataset* includes 0.7 % of total population.

It should be noted that *SURS dataset* and consequently *EUROMOD dataset* are not based on surveys but it are the sample based on administrative records. Moreover, it is one-time dataset and it will not be updated in near future.

Table 15. EUROMOD database description

	Year
	2005
EUROMOD database	W1_V5SI
Original name	SURS database
Provider	Statistical Office of Slovenia
Year of collection	2006
Period of collection	- ¹
Income reference period	2004
Sampling	Systematic representative sample
Unit of assessment	Household
Coverage	Total population covered by census
Sample size	Ind: 13,798 HH: 4,777
Response rate	- ¹

Notes: ¹ Dataset is not obtained by survey but it is sample based on administrative records.

3.2 Sample quality and weights

3.2.1 Non-response

EUROMOD dataset is not based on a survey but it is a sample derived from administrative records. Therefore we can not talk about non-response.

3.2.2 Weights

Due to systematic representative sample and no non-response problem, no re-weighting was needed. There is only one grossing-up weight, which is the same for each person, to gross-up the sample to total population.



Table 16. Descriptive Statistics of the Grossing-up weight

	W1_V5SI	...
Number	13,798	
Mean	143.4	
Median	143.4	
Maximum	143.4	
Minimum	143.4	
Max/Min	1.0	
Decile 1	143.4	
Decile 9	143.4	
Dec 9 / Dec1	1.0	

3.2.3 Item non-response and under-reporting

EUROMOD dataset is not based on a survey but it is a sample derived from administrative records. Therefore we can not talk about non-response and under-reporting due to survey.

3.3 Data adjustment

Adjustments to variables are kept to a minimum. There is some minor data cleaning that is done to make sure that: (a) the households and relationships of individuals within households are coherent and (b) the sum of individual income components from employment dose not exceed employment income.

3.4 Imputations and assumptions

3.4.1 Time period

Information on earnings refers to the whole year 2004. Similarly, information about pensions and benefits refers to the sum of all receipts in 2004. Actually, all monetary amounts in the SURS database are expressed in annual terms. These are converted into monthly terms (divided by 12) for the EUROMOD database. In the EUROMOD simulations it is implicitly assumed that income is received at the same rate throughout the year. However it should be remembered that this may not be the case as changes may happen during the year. It also should be noted that there is no information about how many times a particular income was paid over a year.

The main drawback of EUROMOD database is that demographic characteristics (personal and household) are not consistent with the current incomes that are observed, since they apply to different periods. Census data, which are the source of demographic data, refer to year 2002; meanwhile income data from all three sources refer to year 2004. However, we assumed that demographic data were the same in 2002 and 2004; consequently, some data adjustments were necessary.

Babes aged less than 1 are important category for judging about eligibility for some social benefits (parental allowance, birth grant). Age is derived variable from the year of birth; actually the year of birth is subtracted from 2002. As census took place on 31st March 2002, all demographic data refer to this day, and consequently babies aged less than one were considered only children born in first quarter of 2002. At the day of census also children born after March 2001 were aged less than 1, but we consider them as 1 year old (2002-2001), as we do not have exact information on the date of birth. Therefore eligibility for social benefits which are granted



to parents of babies aged less than one is extended to children aged one or less. Consequently, babies are with 1.02% of total population overrepresented in the sample in comparison to 0.86% from official census data.

Due to discrepancy between the year of demographic and income data, original data on social benefits related to maternity leave (maternity payment *coBMACT* and parental allowance *co_bmanc*) are not consistent with demographic data. Mothers/fathers who receive parental allowance in 2004 have children aged less than one in year 2004, but since demographic data refer to 2002, this babies are not included into *SURS database*. On the contrary, mothers/fathers with children aged less than one year in 2002 receive no benefits related to maternity leave in 2004, as children are actually aged 2. Therefore some imputations and assumptions were made to reach the consistency of personal and household characteristics with the current incomes. Employment income, self-employment income and unemployment benefits² of all mothers with children aged 1 or less (see previous paragraph why children aged 1 are included) were turned into maternity payment. If mother/father of child aged one year or less receives none of above mentioned incomes, it is assumed she/he is entitled to parental allowance. On the other hand, we converted maternity payment into employment income (*coYEM* and *coYEMWG*) in cases, where data indicate that mother/father has no children or has children aged more than one year. If data indicated positive parental allowance for mothers/fathers with no children or children aged more than one year, it was turned to zero.

Similarly, data on labour market activity refer to year 2002, while income data refer to year 2004. Therefore, there are cases, where person in 2002 declared themselves self-employed, but they were in regular employment in 2004 and therefore received employment income and had no self-employment income. Therefore we introduced the definition of self-employed: person is self-employed if she/he has no employment income (necessary condition) and fulfills one of the next conditions: (a) has declared him/herself self-employed or (b) has positive self-employment income. It should be noted that discrepancy between labour market status in case of self-employed and income types can be consequence of either (a) the change of labour market status between year 2002 and 2004, (b) the change of labour market status during one year, or (c) reporting zero self-employment income which is also possible.

Entitlement for child benefit depends on income in previous or even pre-previous year (on reported income in last tax-return). In the model we assume that income in previous or pre-previous year is the same as in current year. Similarly, social security contributions paid by self-employed depend on their reported income in previous tax return. Therefore we assume that income in previous or pre-previous year is the same as in current year. Entitlement for social assistance and housing benefit is established on the basis of net incomes in the three previous months. Again, in the model we assume that income is received at the same rate throughout the year and that average income per month based on annual data is the same as average monthly income based on incomes in last three months.

3.4.2 Gross incomes

EUROMOD database contains gross incomes. Only exception are social security contributions paid by self-employed as data contain self-employment income net of social security contributions.

² The reason for converting unemployment benefits into maternity payment is, that mothers eligible to unemployment benefits in most cases fulfill conditions to entitlement to maternity payment.



3.4.3 Other imputed variables

Other key variables that are imputed are:

- Relations in households; original SURS database contains data about household reference person (self-declared head of the household) and relations of other household members to the reference person; therefore parental and partner identification numbers were imputed afterwards;
- Self employed professionals are entitled to special tax allowance, but they have to be given special status of self-employed professionals in the field of culture and or employed journalist. We assumed that person who claimed self-employed professionals allowance actually has status of self-employed professionals;
- Persons who claimed disabled person's allowance are assumed to be heavily disabled.

3.5 Updating

The factors that are used to update monetary variables are obtained from official data on recorded incomes in tax return, collected PIT and disbursed benefits. The updating factor actually shows, for example, the increase in average employment income or an increase in average pension. There is no differentiation by gender, region, etc..

Table 17. Updating factors

Index	Income Source/index type	2004-2005	...
inc_uprate	coBDICC	1.0208	
inc_uprate	coBMANC	1.0209	
inc_uprate	coBDICA	1.0089	
inc_uprate	siBDI	1.0283	
inc_uprate	coBED	1.0358	
inc_uprate	coBFA	1.0210	
inc_uprate	coBMACT	1.0847	
inc_uprate	coBCRSVCC	1.0925	
inc_uprate	coBUNCT	1.0295	
inc_uprate	coBUNMT	1.0379	
inc_uprate	coPDI	1.0322	
inc_uprate	coPLS	1.1518	
inc_uprate	coPOA	1.0355	
inc_uprate	coPOACT	1.0355	
inc_uprate	coPOANC	1.0355	
inc_uprate	coPSU	1.0343	
inc_uprate	coTINTAOX	1.0000	
inc_uprate	coYAJ	1.0181	
inc_uprate	coYEMAB	1.0587	
inc_uprate	coYEMHL	1.0499	
inc_uprate	coYEMWG	1.0587	
inc_uprate	coYEMOT	0.9902	
inc_uprate	coYIYDV	0.8902	
inc_uprate	coYIYIT	0.9896	
inc_uprate	coYPRLD	0.8801	



inc_uprate	coYPRRT	1.0100
inc_uprate	coYPRRO	1.0181
inc_uprate	coYSE	1.1312

Sources: Ministry of Finance: Statistical Analysis of data from PIT tax return, 2004 and 2005; Consolidated balance of public financing, internal data of Ministry of Finance (2007); Pension and Disability Insurance Institute: Annual Reports 2004-2006; Internal data from Ministry of Labour, Family and Social Affairs.

4. VALIDATION

4.1 Aggregate Validation

4.1.1 Non simulated taxes and benefits

Table below compares statistics on benefits and taxes that are not simulated by EUROMOD with external sources. 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. It calculates the ratio of EUROMOD expenditures and numbers of recipients to estimates drawn from administrative statistics for some of the main social security benefits that are not simulated by the model.

Education related benefits - scholarships are severely underestimated in EUROMOD, considering both; the number of recipients and the expenditure. The reason is that, opposite to data from Employment Service of Slovenia, data in EUROMOD does not include supplements for: (a) commuting expenses, (b) student housing costs and (c) high grade supplement.

The number of recipients of *unemployment benefits* seems to be over-estimated in EUROMOD, but official data on the number of recipients of unemployment benefits refer to 31st of December 2005, while EUROMOD database refers to the whole year. Since the length of receiving unemployment benefits depends on individual characteristics, it is impossible to assume how many persons received unemployment benefit during the whole year 2005. On the contrary, the official data on expenditure on unemployment benefits refer to the whole year. Table 18 reveals that the expenditure on unemployment benefits is underestimated in EUROMOD.

The number of *old-age assistance* recipients is very under-estimated. The reason lies in official data, which refer to all pensioners (all types) and not only old-age pensioners. Namely, all pensioners with very low pensions are entitled to pension support. On the contrary, official data on old-age assistance expenditure differ three different types of pensioners.

Invalidity/disability pensions, survivor pensions and maternity payments are relatively well estimated. Data on number of recipients of other benefits and especially on other expenditure are under-estimated. Since sample numbers are small, we find these figures and ratios satisfactory.

Table 18. EUROMOD validation: benefits included but not simulated, 2005

	Recipients/Payers			Expenditure/Revenue, millions SIT		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
pensions : disability-	136,517	144,219	0.949	141,058	148,395	0.951



invalidity						
attendance supplement	27,246	27,155	1.003	13,494	14,691	0.919
childcare supplement	5,306	5,402	0.982	943	1,465	0.644
maternity payments	19,789	17,534	1.129	40,612	41,501	0.979
unemployment insurance benefit ²	39,722	17,684	2.246	18,142	23,966	0.757
unemployment assistance benefit ²	12,189	6,059	2.012	2,003	2,913	0.688
benefits : education	18,212	51,821	0.351	8,643	21,602	0.400
holiday bonus for pensioners	484,118	529,603	0.914	22,952	28,836	0.796
pensions : old age	458,309	457,935	1.001	326,378	455,089	0.717
old-age assistance ¹	12,763	47,702	0.268	2,403	2,846	0.844
pensions survivors	89,555	93,231	0.961	96,078	86,192	1.115
disability supplement	47,179	54,662	0.863	6,231	7,133	0.874

Notes: ¹ Data from external source on the number of recipients of old-age assistance include also recipients of invalidity/disability and survivor pensions who receive similar assistance, meanwhile data on expenditure on old-age assistance include only recipients of old-age assistance;

² Data from external source on the number of recipients of unemployment benefits refer to the 31th of December, while data from EUROMOD base refer to the number of recipients through the whole year.

Sources: Pension and Disability Insurance Institute (2006): Annual Report 2005

(http://www.zpiz.si/att/letno_porocilo2005.pdf); Statistical Office of the Republic of Slovenia (2007):

Statistical Yearbook 2007 (http://www.stat.si/eng/pub_letopis_prva.asp); Employment Service of Slovenia (2006): Annual Report 2005

(<http://www.ess.gov.si/slo/Predstavitev/LetnaPorocila/lp05/Slovenija/index-slo.htm>)

4.1.2 Simulated income tax

The table below compares 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) refers to all persons who filled a tax return in 2005, regardless of the amount of paid PIT. There is also a certain number of taxpayers who filled in their own tax return but paid no PIT due to claimed tax allowances. Number of taxpayers from EUROMOD database refers only to taxpayers who actually paid some PIT.

Revenues from PIT simulated by EUROMOD prove that simulated policy and data suit actual situation as simulated PIT is very close to actually collected PIT.

Table 19. EUROMOD validation: income tax, 2005

	Taxpayers			Revenue (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Income tax – all	818,240	1,277,526	0.640	385,506	394,860	0.976

Sources: Ministry of Finance: Statistical Analysis of tax return data, 2005; Consolidated balance of public financing, internal data of Ministry of Finance (2007).



4.1.3 Simulated social contributions

The table below compares statistics on simulated social contributions by EUROMOD with external sources - Consolidated balance of public financing, internal data of Ministry of Finance (2007).

There is no data on the annual number of social contributions payers. However, data on collected social contributions show that simulation by EUROMOD leads us to good results. Employee social contributions are well estimated, as simulated revenues exceed actually collected employee social contributions only by 5%.

Collected employer social contributions are over-estimated. The explanation for the expenditure over-estimate is, that simulated health insurance contributions on pensions are included in employer social contributions, but not in official data. Paid health insurance contributions on pensions are paid by *Pension Fund* to the *Health Insurance Company* and they do not result in the change of state budget.

Revenues from self-employed social contributions are under-estimated. This is for two reasons. First, the definition of self-employed in EUROMOD excludes some possible self-employed, which was necessary to overcome the mismatch between labour status and income data. Second, the base for self-employed social contributions is profit in previous or even in pre-previous year. 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.

Table 20. EUROMOD validation: social contributions, 2005

	Contributors			Revenue (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Employer social contribution	1,327,024	-	-	459,964	396,237	1.161
Employee social contribution	797,304	-	-	537,131	511,343	1.050
Self-employed social contribution	57,360	-	-	40,468	48,030	0.843

Sources: Consolidated balance of public financing, internal data of Ministry of Finance (2007).

4.1.4 Simulated social benefits

- *Parental allowance*

The table below compares statistics on simulated parental allowance by EUROMOD with official data. Expenditure on parental allowance is not well-simulated due to the main drawback of EUROMOD database; demographic characteristics (personal and household) are not consistent with the current incomes that are observed, since they apply to different periods. Mothers/fathers who receive parental allowance in 2004 have children aged less than one in year 2004, but since demographic data refer to 2002, these babies are not included into EUROMOD database. On the contrary, mothers/fathers with children aged less than one year in 2002 receive no benefits related to maternity leave in 2004, as their children are actually aged 2. Despite imputations to reach the consistency of personal and household characteristics with the current incomes, simulated parental allowance captures only 10% of actual recipients and expenditures in 2005.



Table 21. EUROMOD validation: parental allowance, 2005

	Recipients			Expenditure (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Parental allowance	287	2,833	0.101	138	1,327	0.104

Notes: average monthly number of recipients

Sources: Statistical Office of the Republic of Slovenia (2006): Statistical Yearbook 2006

- *Birth grant*

The table below compares statistics on simulated birth grant by EUROMOD with official data. Due to assumption that babies are all children aged born in 2001 and until the end of March 2002, the over-estimation of birth grant recipients is expected. This benefit is granted either in-kind or in cash, but the real value of in-kind benefit slightly exceeds the amount of granted money. Therefore, the over-estimation of expenditure is bigger in comparison to over-estimation of recipients.

Table 22. EUROMOD validation: birth grant, 2005

	Recipients			Expenditure (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Birth grant	19,933	17,980	1.109	1,148	913	1.257

Sources: Statistical Office of the Republic of Slovenia (2006): Statistical Yearbook 2006

- *Large family allowance*

The table below compares statistics on simulated large family allowance by EUROMOD with official data. Large family allowance is well-estimated as simulated benefit exceeds the official data on recipients and expenditure on large family allowance by 7%.

Table 23. EUROMOD validation: large family allowance, 2005

	Recipients			Expenditure (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Large family allowance	26,816	24,965	1.074	2,147	1,999	1.074

Sources: Statistical Office of the Republic of Slovenia (2006): Statistical Yearbook 2006

- *Social assistance*

The table below compares statistics on simulated social assistance by EUROMOD with official data. Data show that number of recipients and the expenditure on social assistance in EUROMOD is under-estimated as simulation results for approximately 80% of actual recipients and expenditure. The main reason for the difference is the fact that actual entitlement for social assistant depends on incomes in the three previous months. EUROMOD 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 can be drastically changed during one year and three months average can differ from annual average. Second possible reason for this under-estimation is that there are many extended households in database, i.e. households with two or more families (for example grandparents as one family and adult child with own family as second family). In many



cases extended households do not apply for social benefits as a single household/family but as two or more separate households/families. Consequently their income per family member is lower ("family" with lower income applies), as incomes of other household/family members are not taken into account.

Table 24. EUROMOD validation: social assistance, 2005

	Recipients			Expenditure (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Social assistance	47,752	60,977	0.783	26,727	34,045	0.785

Sources: Statistical Office of the Republic of Slovenia (2006): Statistical Yearbook 2006

- *Housing benefit*

The table below compares statistics on simulated housing benefit by EUROMOD with official data. Simulated housing benefit is seriously over-estimated, but this can be ascribed to high non take-up of this benefit.

Table 25. EUROMOD validation: housing benefit, 2005

	Recipients			Expenditure (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Housing benefit	18,929	5,414	3.496	3,272	930	3.518

Notes: average monthly number of recipients

Sources: Ministry of Environment and Spatial Planning; internal data.

- *Child benefit*

The table below compares statistics on simulated child benefit by EUROMOD with official data. Child benefit is relatively well-estimated. The bulk of the difference between simulated child benefit and official data comes from extended households which apply for child benefit as separate families. Consequently, families with children usually have higher income per family member as the entire household they live in. Other household members (for example retired grandparents) usually have lower incomes and this leads to lower average income per family member.

Table 26. EUROMOD validation: child benefit, 2005

	Recipients			Expenditure (millions SIT)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Child benefit	274,037	228,962	1.197	66,170	56,601	1.169

Notes: average monthly number of recipients

Sources: Statistical Office of the Republic of Slovenia (2006): Statistical Yearbook 2006



4.2 Income distribution

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

4.2.1 Poverty

SURS database was used as a benchmark database. It contains information on approximately 40,000 households with 115,000 individuals and represents more than 5% of total population. As we explained in chapter 3, EUROMOD database is derived as a systematic representative sample from SURS database.

The table below compares poverty rates calculated with EUROMOD database and SURS database. The larger the poverty line, as a percentage of the medium income, the larger is the difference between male-female poverty rates. If poverty line is set at 40% and 50% of the medium income, female poverty rate is lower in comparison to male poverty rates. If poverty line is set at 60% and 70% of the medium income, female poverty rate is higher. This reflects that men have higher earnings than women, overall, but among men there are more those with very low income.

The differences between poverty rates calculated from EUROMOD database and benchmark SURS database are bigger with poverty rates at lower levels (40% and 50% of median). This indicates that incomes at low income levels are somewhat over-estimated in EUROMOD database.

Table 27. EUROMOD validation: poverty rates at different poverty lines, 2005

percentage of individuals below:	EUROMOD	SURS database	Ratio
40% of median equivalent income	3.6	4.2	0.857
males	3.6	4.1	0.878
females	3.5	4.0	0.875
50% of median equivalent income	8.7	9.4	0.926
males	8.8	9.3	0.946
females	8.7	9.2	0.946
60% of median equivalent income	15.9	16.0	0.994
males	15.1	15.6	0.968
females	16.7	16.1	1.037
70% of median equivalent income	23.4	23.4	1.000
males	22.3	22.4	0.996
females	24.4	24.1	1.012

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: EUROMOD calculations and SURS database

Table 28 shows poverty rates by age groups. Risk of poverty for elderly is very high, as 25.3% of persons aged 65 or more have equivalent income less than 60% of median income in comparison to 15.9% of all persons. Poverty rates for total population obtained from EUROMOD and SURS database are almost the same. On the contrary there are noticeable differences between poverty rates for age groups 0-15, 16-29 and 65+. The differences show



that the share of poor children (0-15) and younger adults (16-29) are under-estimated in EUROMOD database, while the share of poor elderly persons is evidently over-estimated.

Table 28. EUROMOD validation: poverty rates (median 60%) by age groups, 2005

percentage of individuals below:	EUROMOD	SURS database	Ratio
Population	15.9	16.0	0.994
0-15	14.3	17.7	0.808
16-29	14.8	16.0	0.925
30-44	14.0	15.2	0.921
45-64	14.2	14.2	1.000
65-	25.3	18.8	1.346

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:

4.2.2 Income inequality

Inequality measured by Gini coefficient and income quintile ratio differs slightly if we consider EUROMOD and SURS database. Gini coefficient and income quintile ratio obtained from SURS database are slightly higher, which could be expected due to over-estimated incomes at low income levels in EUOROMOD database. The latter is also evident from average equivalised income from deciles calculated from EUROMOD and SURS database by decile. The difference between average equivalised income from different databases decreases as deciles increases.

Table 29. EUROMOD validation: income inequality, 2005

percentage of individuals below:	EUROMOD	SURS database	Ratio
Gini Coefficient	0.270	0.279	0.968
Income quintile ratio (S80/S20)	4.00	4.22	0.948
average income per decile			
1	67,670	60,574	1.117
2	94,268	90,176	1.045
3	115,979	110,881	1.046
4	134,869	128,624	1.049
5	151,554	145,540	1.041
6	169,179	163,565	1.034
7	189,464	183,711	1.031
8	213,659	208,802	1.023
9	253,047	249,887	1.013
10	394,985	386,296	1.022
Mean income (unequalised)	114,688	111,666	1.027
Mean income (equivalised)	178,421	172,802	1.033
Median income (equivalised)	160,283	154,277	1.039

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:



4.3 Summary of “healthy 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.
- Demographic data refer to 2002 and income data refer to 2004.
- Simulated parental allowance is very under-estimated due to demographic and income data mismatch.
- There is a shortfall in the number of self-employed due to different referral years of labour market status and income data.
- There is a shortfall in very poor people in first decile – average income of first decil is over-represented.
- The number of babies (children aged less than one) and the number of related social benefits recipients is over-estimated.
- Database contains some extended household where actually two or more families live.
- EUROMOD 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.

5. REFERENCES

Employment Service of Slovenia (2006): Annual Report 2005,
(<http://www.ess.gov.si/slo/Predstavitev/LetnaPorocila/lp05/Slovenija/index-slo.htm>).

Eurostat (2007)

The Health Insurance Institute of Slovenia (2006): Annual report 2005,
(<http://www.zzzs.si/ZZZS/info/egradiva.nsf/o/A1042239C318A6ECC1257177004C91E1?OpenDocument>).

Ministry of Labour, Family and Social Affairs: Internal data.

Ministry of Finance (2007): Consolidated balance of public financing, internal data of Ministry of Finance.

Pension and Disability Insurance Institute (2006): Annual Report 2005,
(http://www.zpiz.si/att/letno_porocilo2005.pdf).

Statistical Office of the Republic of Slovenia (2007): Statistical Yearbook 2007,
(http://www.stat.si/eng/pub_letopis_prva.asp).



- *Sources for tax-benefit descriptions/rules*

Taxation in Slovenia (2006):

http://www.mf.gov.si/angl/dav_car/Taxation_in_Slovenia_2006.pdf

Legal acts in English and terminology database:

<http://www.mf.gov.si/angl/zakon/azakon.htm>