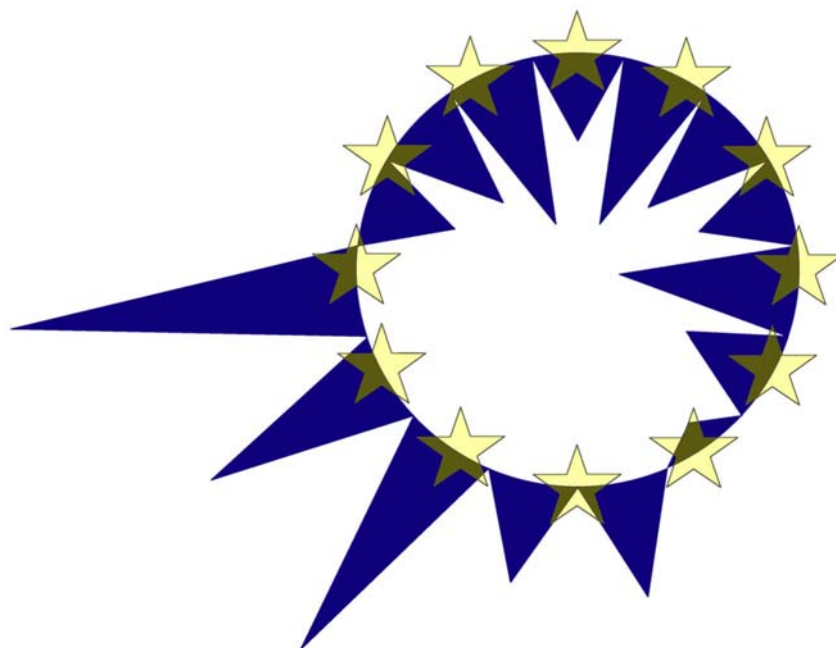


EUROMOD

COUNTRY REPORT



EUROMOD Country Report

FINLAND

(1988, 2001 AND 2003 TAX-BENEFIT SYSTEMS)

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1. The national tax-benefit system in 1998, 2001 and 2003 - outline

This report is a description of the Finnish tax-benefit system in June 1998, 2001 and 2003. All significant taxes and benefits are included, whether they are simulated in EUROMOD (chapter 2) or not (chapter 3). Public services are not included with an exception of the municipal child care payment. Due to the integrated child care system also private child care subsidy is described. All monetary figures are presented in euro, i.e. the 1998 and 2001 figures are converted from Finnish markka to euro.

For simulated taxes and benefits the policy (see *pol_FI*) and parameter sheets (see Annex A) are referred after each description. In case the modelling technique is “unusual” the main programming principles are described.

The data available in the Finnish part of EUROMOD is Income Distribution Surveys and waves are from 1996, 1997, 1998 and 2001. All incomes in the data are before taxes and contributions and no net-to-gross conversion has been done. A short data description is presented (chapter 4) as well as aggregate validation results and poverty estimates (chapter 5).

The taxation terminology used in this report follows Lambert (1993). E.g. tax allowance is a lump sum amount deducted from gross taxable income (i.e. tax-free income) and a tax deduction is an income-related amount deducted from gross taxable income. Tax credit is an amount subtracted from tax. If it is refundable, it is possible to repay the tax to an individual. For benefits somewhat analogical interpretation is used. An allowance is a lump sum which is received by a person or a household. Other type of benefits are income-related. So in this report “benefit” is a general expression which includes allowances.

1.1. Taxes and social security contributions

Since 1993 the Finnish personal income taxation is based on dual tax system where all incomes are divided into capital and earned income. Both income types are taxed separately with different rates. Typical capital incomes are yields on deposit, property or investment and gains on sale of property. Income from investment as well as income based on private entrepreneurship is often divided into earned and capital income. The private entrepreneurship may be “business partnership” (self-employment, joint partnership) or “property partnership” (farming, jointly owned property). When calculating the profit of these types of partnerships either corporate or farmer’s tax rules are applied. The profit is then shared to each partner in personal taxation as earned or capital income or both of them.

Earned and capital income are not totally without links to each other. If a person has negative capital income (expenses exceed income) he or she may be entitled to

subtract a certain share of this deficit from earned income tax. This share (deficit credit) is the deficit times capital income tax rate. A limit depending on the family relations is applied. The capital income tax rate is the same as the corporate tax rate.

There are four kinds of personal income taxes:

- state tax on earned personal income (progressive schedule)
- municipal tax on earned personal income (flat rate)
- church tax on earned personal income (flat rate)
- state tax on capital personal income (flat rate)

Tax bases for earned income are different in state and local taxation. The local tax base is applied in municipal and church taxation as well as calculating the personal sickness contribution. Actually the church tax is not “a tax” because it is paid by a person who have voluntarily chosen to be a member in church.

There are three kinds of employee social security contributions:

- employee occupational pension contribution
- employee unemployment contribution
- sickness contribution

The first two of these contributions are based on gross wage (including employer–provided goods in kind, such as food tickets, company cars and dwellings etc.). The amounts of these contributions are a fixed percentage times gross wage or salary. To sickness contribution a specific progressive schedule was applied in 1998. In 1999 this schedule was abolished and a flat contribution rate was applied. However, until 2003 the rate was different for pension income and other type of earned income. Since then only one contribution rate for all income has been applied.

Some of the employer social contributions differs depending on the number of employees, the institutional sector, the wage sum of the company etc. However, in all cases the contribution of each employer is a certain percentage of the gross wage. Self-employed persons may have their contributions as an expenditure in their business activity and deduct them from the profit or they can pay the contributions by themselves. The former case is usual and it is taken as default in EUROMOD calculations. It means that these contributions are not anymore deductible in personal taxation.

In practise taxes and wage based contributions are subtracted from gross wage by employer and credited to state, municipals, churches and social security funds. The personal sickness contribution is calculated annually by tax authorities.

The Finnish income tax system is individual, with the incomes of married people being taxed independently. But, as said, in some cases it is possible to transfer tax credits between spouses. If spouses run business or farm together, profits are usually shared equally to spouses if no other evidence is presented.

The tax year is a calendar year.

In taxation persons married before the end of the year are regarded as spouses. Individuals living together are also considered as spouses if they have been married to each other before or if they have had or have a child together. If spouses have lived the whole year apart or have moved permanently to separate dwellings during the calendar year, they are not taxed as spouses.

All individuals who are resident in Finland are liable to pay tax on their entire income, whether from Finland or abroad (unlimited tax liability). Non resident individuals are liable to pay tax on their income from Finland (limited tax liability). However, i.e. interest from bonds, loans and deposits on non-resident individuals are exempt from income tax.

1.2. Benefits

In most cases there are two kinds of earnings-replaced benefits: the basic flat rate benefit and the earnings-related insurance based benefit. The basic (minimum) benefit is usually financed by the state. The insurance-based benefit is generally mandatory and financed by both employees and employers. An exception is the earnings-related unemployment benefit, which is voluntary and administrated by unemployment funds.

Earnings-related benefits are not means tested against person's or household's income with two exceptions: the widow's pension and the national pension. Both of these are means-tested against person's own occupational pension. All insurance-based benefit are "strictly" earning-related in the sense that there is no ceiling in these benefits.

All earnings-related benefits, in fact most benefits, are subject to tax. The most important non taxable benefits are housing benefits, child allowance and social assistance.

When calculating the amounts of earnings-related benefits both annual and monthly income are used as a base. These benefits are usually paid on daily basis, except pensions which are on monthly basis. For non taxable housing benefits and social assistance both incomes and payments are on monthly basis.

The benefits are usually paid to individuals. Only general and pensioner's housing benefits are paid to households. The social assistance is received by "a family" and means that there may be several families in a household (adult children, grandparents etc.).

1.3. Changes in tax-benefit systems from 1998 to 2003

Changes of rules

Only two of the tax deductions are automatically adjusted by index, a pension deduction in state and in local taxation. All other changes on tax rules (deductions, schedules, marginal rates etc.) are decided annually and usually in the end of the

year. Sometimes tax rules have been changed during the year but have always applied (afterwards) to the entire calendar year. Employer contributions, as well as some benefits, have changed and been applied also in the middle of the year.

Automatic annual index adjustment is done to the following benefits: housing benefit for pensioners (income limits are adjusted), national pension, some national pension supplements, child disability benefit, widow's pension, sickness benefit (income limits are adjusted), basic unemployment benefit, earning-related unemployment benefit, labour market support, the basic amount of social assistance and the minimum work injury pension. For changes of other benefits decisions must be done separately.

The following tax-benefit rules have been changed from June 1998 to June 2003:

Taxes

- corporate tax rate, capital income tax rate and tax rate for bank deposits and some bond profits increased from 28 % to 29 % in 2000
- due to the change in capital income tax rate the amount of dividend subject to tax also increased in 2000 (corporate tax is added to paid dividend in personal taxation)
- due to the change in capital income tax rate, the rate used for imputation credit also changed
- additional tax credit percentage applied to interests from mortgage loan of first house decreased from 2 % to 1 % in 2000. The total percentage though remained in 30 %
- additional interest tax credit (applied for transition period) was abolished in 2000
- tax deduction of joined partnership (applied for transition period) was abolished in 2000
- farmer's adaptation deduction (applied for transition period) was abolished in 2000
- the structure of standard tax deduction for work-related expenses changed in 2001. In 1998 the deduction was 3 % of wage income up to an annual limit of 302.74 euro but changed in 2001 to 100 % from wage income up to a limit of 454.11 euro (590 euro in 2003)
- maximum annual deduction for travel expenses raised from 3,363.76 euro in 1998 to 4,709.26 euro in 2001 and 4,700 euro in 2003.
- pension income deductions in state and local taxation raised annually by index
- own risk of the home work tax deduction constructed in 2001. The service work at home must be carried out by an outsider
- the maximum of low earned income tax deduction increased from 925.03 euro in 1998 to 1,648.24 euro in 2001 and 2,550 euro in 2003. In 2002 a structural change to the deduction was made
- municipal tax rates raised (in average) from 17.55 % in 1998 to 17.68 % in 2001 and 18.03 % in 2003
- income limits of progressive tax schedule raised approximately by price index from 1998 to 2000 and from 2002 to 2003. A large increase to the income limits were made in 2001 and at the same time one band from the seven was dropped

- several reductions in marginal tax rates was done during the period 1998-2001.

Employee contributions

- contribution to employee occupational pension insurance reduced from 4.7 % in 1998 to 4.5 % in 2001 and to 4.6 % in 2003
- contribution to employee unemployment insurance reduced from 1.4 % in 1998 to 0.7 % in 2001 and to 0.02 % in 2003
- additional personal sickness contribution on pension income reduced from 2.7 % in 1998 to 1.2 % in 2001 and was abolished in 2003
- additional rate of personal sickness contribution for high income was abolished in 1999.

Employer's contributions

The employer contributions did not changed significantly from 1998 to 2003. The total (average) employer contribution in private sector reduced from 26 % in 1998 to 24.9 % in 2001 and to 23.7 % in 2003.

Benefits

- the percentage used to decrease the income based on earning-related benefits changed from 4.7 % in 1998 to 4.5 % in 2003
- the income level which doesn't affect the student payment changed slightly in 2000
- entitlement rules and the amount of student's housing benefit changed in 2000
- maximum monthly municipal day care payment raised from 168.9 euro to 185.01 euro in 2000. In 2003 an other payment was created for second child in day care.

1.4. Treatment of taxes and benefits in EUROMOD

The list of taxes, social contributions, benefits and service charges modelled in EUROMOD is shown in table 1. Each of these tax-benefit components are described in chapters 2.1-2.4. The policies in the table are in the same order as they are calculated in the model. The sections are referred where various policies are described.

Table 1. The list of policy sheets in "*pol_fi.xls*" and references to the chapter where they are described.

<u>Section</u>	<u>Policy</u>	<u>Description</u>
2.2.1	eestic_fi	Employee Social Insurance Contributions
2.2.4	sesic_fi	Self-employed Social Insurance Contributions
2.2.3	ersic_fi	Employer Social Insurance Contributions
2.4.1	sben_ch_day_care_fi	Child Day Care Fee
2.3.2	sben_ch_home_care_fi	Child Home Care Subsidy
2.1.3	it_deposit_interest_fi	Deposit Interest Income Tax
2.1.4.5	it_fi	State Income Tax (1. round)
2.1.4.6	it_local_fi	Municipal Income Tax (1. round)

2.2.2	eestic_sickness1_fi	Personal Sickness Social Insurance Contributions (1. round)
2.1.4.7	it_church_fi	Church Income Tax (1. round)
2.1.2.2	it_capital_fi	Capital Income Tax
2.1.4.5-7	it_cap_deficit_fi	Imputation credit
2.1.4.5	it2_fi	State Income Tax (2. round)
2.2.2	eestic_sickness2_fi	Personal Sickness Social Insurance Contributions (2. round)
2.1.4.6	it_local2_fi	Municipal Income Tax (2. round)
2.1.4.7	it_church2_fi	Church Income Tax (2. round)
2.1.4.5	it3_fi	Income Tax (3. round)
2.2.2	eestic_sickness3_fi	Personal Sickness Social Insurance Contributions (3. round)
2.1.4.6	it_local3_fi	Municipal Income Tax (3. round)
2.1.4.7	it_church3_fi	Church Income Tax 3. round)
2.3.1	sbench_fi	Child Allowance
2.3.1	sbenlp_fi	Lone Parent Child Allowance
2.3.3	sben_hb_fi	General Housing Benefits
2.3.4	sben_sab1_fi	Social Assistance for first municipal group
2.3.4	sben_sab2_fi	Social Assistance for second municipal group

Taxes and benefits which are not simulated in EUROMOD have been described in chapter 3. Most of them are possible to model but are not included in the present EUROMOD version. The benefits which are not possible to model due to the lack of information in data are quite few and of less importance in fiscal sense - with an exception of occupational pensions.

2. Taxes and benefits simulated in EUROMOD

2.1. Taxes

2.1.1. Income subject to tax

Capital income

The main capital incomes are interest on deposits, rental incomes, capital gains and dividends. Since 2002 a final tax is withheld at source on deposit interests received by individuals from domestic bank and public bonds. Interests not paid by banks or bond issuers are not withheld at source.

The same capital tax rate (29 % in 2003) is applied to all capital income: on interests from deposit, rental income, capital gains and dividends if they are capital income to. For capital gains a default (minimum) deduction of 20 % of the sale price is always applied, but if the asset have been owned for at least 10 years the deduction is at least 50 %. Capital losses are deductible from the same type of capital income during the following three years.

Income shared to capital and earned income

All incomes are divided into capital and earned income. Even income from one

source, such as income from self-employment, business partnership and property partnership are shared.

Profit from self-employment, business partnership and agricultural income are first calculated according to tax laws applied to corporations and farms. The profits are then shared to owners as capital or earned income or both of them. First the capital income is calculated on the base of net assets of business or agriculture at the end of the preceding tax year.

Income from forests may also be earned or capital income. If a person have chosen (before 1995) an "old" tax system, he or she is liable to pay earned income tax, which is based on estimated average annual growth of forest. In the "new" tax system a person is liable to pay tax on actual sales of forest and it is regarded as capital income.

All dividends from companies listed on The Stock Exchange are capital income. Dividends from other companies are (in principal) shared into capital and earned income.

Earned income

Earned income is defined as any other income except capital income. The main components are wages and salaries, taxable benefits, earned income from self-employed, joint partnership and agriculture as well as earned income from dividends (distributed by non-listed companies). In addition to these there are several earned income components.

Imputation tax system

To the Finnish corporate taxation an imputation tax system ("avoir fiscal") is applied. The taxation of companies and shareholders is integrated regarding to the profit distributed by the company (dividends).

The imputation tax system is applied to all corporations. E. g. a company listed on the Stock Exchange's has to pay full corporate income tax in respect of distributed profits (or taxable income). A double taxation of distributed profits is eliminated by crediting to shareholders the tax paid by the company (imputation credit). This imputation credit is treated in shareholder's taxation as a prepayment of income tax. On the other hand the imputation credit is treated as shareholder's taxable income.

The imputation credit was 28/72 (389/1000) of the cash dividend in 1998. While the corporate income tax rate (and personal capital income tax rate) increased from 28 % to 29 % in 2000, the size of imputation credit changed to 408/1000 which corresponds the tax rate divided by net dividend (29/71). Otherwise the structure of imputation tax system has not changed. The system operates in the following way when the dividend is capital income:

Example (2003):

Company:

Profit before tax	100
Corporate income tax	<u>29</u>
Distributed profit (all distributed)	71

Shareholder:

Cash dividend	71
imputation credit $29/71 \times 71$	<u>29</u>
Taxable income	100
Capital income tax (29 % of taxable income)	29
imputation credit (prepayment)	<u>29</u>
Tax from cash dividend paid by individual	0

As we can see cash dividend is in practise not "taxed" if it is capital income. In case it is earned income, the tax rate is not the same as the capital income tax rate but usually more and tax is actually paid from cash dividend as earned income. The imputation credit is refundable, that's for low earned income (the tax rate less than 29 %), the tax credit (or part of it) will be repaid in cash to the person.

2.1.2. Capital income taxes

2.1.2.1. Tax base

The main principle in personal taxation is that expenses for acquiring or maintaining income are always deductible from that specific income. Such expenses, so called natural deductions, are deductible both from capital and earned income.

Interest on mortgage loan, study loan and loan for investment targets are deductible from capital income without any limits. Previous year's losses of capital income are deductible from capital income during the next ten years. Losses from self-employment, joint partnership and agriculture are also deductible from capital income.

If the amount of natural deductions, deductible interests and losses exceeds the amount of capital income, the excess is the deficit "in the capital income category". A person is entitled to deduct a share of this deficit (deficit credit) from income tax on earned income. However, there is a limit for the credit. That share of the deficit which is not entitled to credit is converted into a loss and is deductible from capital income over the next ten years.

The tax base of personal capital income is thus the gross capital income minus natural deductions, deductible interests and losses.

2.1.2.2. State tax from capital income

To the capital income tax base a flat rate is applied. The rate (29 % in 2003) is the same as the corporate income tax rate. The tax on capital income is paid to the state.

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Policy sheet: *it_capital_fi*
it_cap_deficit_fi
Parameter sheet: *fi_inctax_param (rows 2-9)*

2.1.3. Tax from deposit interest

A final tax is applied for interest paid to individuals from domestic bank deposits or bonds offered to public. The tax rate is the same as for other capital income. Interests from any loans, however, are not deductible from this income.

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The information in the data is based on interview and is clearly underestimated. Imputations have been made to achieve the appropriate aggregate and household level. The tax from deposit interests is the interest income times capital income tax rate.

Policy sheet: *it_deposit_interest_fi*
Parameter sheet: *fi_inctax_param (row 1)*

2.1.4. Earned income taxes

2.1.4.1. Tax deductions in state and local taxation

Standard deduction for work-related expenses

All persons are entitled to the standard deduction for work-related expenses. In 1998 the deduction was 3 % of employment income, up to the maximum of 302.74 euro. Since 2001 the deduction is 100 % of employment income with a limit (590 euro in 2003).

Other natural deductions

In the Finnish as tax legislation are regarded the following expenses:

- standard deduction for work-related expenses
- membership fees paid to labour unions
- payments to unemployment funds
- travel expenses from residence to employment (using the cheapest means of transport)
- deduction for forest workers (costs from certain equipment, tractors or animals) and
- other (unspecified) deductions (expenses from professional literature, research equipment etc.).

Other natural expenses (except travel expenses and labour union membership fees) are deductible only if these expenses exceed the maximum standard deduction. Natural deductions are subtracted from gross income to get “net income”.

Employee pension and unemployment contributions

An employee can deduct mandatory occupational pension and unemployment

contributions 4.6 % and 0.02 % of gross wage (2003).

Employee voluntary pension contributions

Premiums paid for voluntary pension insurance are deductible from earned income up to a limit of 8,409.40 euro (2003).

Adaptability deduction for farmers

An adaptability deduction was allowed to individuals, co-farming spouses and persons in partnerships who at the end of 1993 had long-term loans (at least 47,092,6 euro) relating to agriculture and who had been actively engaged in agriculture. The deduction was allowed in years 1995-1999.

Discretionary allowance for inability to pay tax

A discretionary allowance based on inability to pay tax is allowed up to a limit of 1,400 euro (2003). On the basis of expenses from sickness, the inability to pay tax is accepted only if person's or his family's expenses from sickness are at least 700 euro and at the same time at least 10 per cent of the overall net taxable income.

EUROMOD

Of all natural deductions only the standard deduction for work-related expenses as well as the employee mandatory pension and unemployment contributions are simulated in EUROMOD.

<i>Policy sheet:</i>	<i>eesic_ _fi</i>
<i>Parameter sheets:</i>	
-standard deduction	<i>fi_inctax_param (rows 23-24)</i>
-pension and unempl. contributions	<i>fi_inctax_param (rows 65-66)</i>

2.1.4.2. Tax deductions in state taxation

Sailor's deduction

The sailor's deduction in state taxation is 18 % of the total income earned on board up to 6,650 euro (2003).

Pension income deduction

The maximum pension income deduction in state taxation is 1,550 euro (2003). If person's net earned income exceeds the maximum deduction, the deduction is reduced by 70 % of the exceeding amount.

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<i>Policy sheet:</i>	<i>it_fi</i>
<i>Parameter sheets:</i>	
-sailor's deduction	<i>fi_inctax_param (rows 28-29)</i>
-pension income deduction	<i>fi_inctax_param (rows 30-32)</i>

2.1.4.3. Tax deductions in local taxation

Low earned income deduction

The low earned income tax deduction is subtracted from employment income (before 1997 also from benefit and pension income). In 1998 the deduction was 20 % of income exceeding 2,522.82 euro, up to 925.03 euro. If net earned income exceeded 7,232.08 euro the deduction reduced by 2 % of the exceeding amount.

In 2001 the deduction was 35 % of the income exceeding 2,522.82 euro, up to 1,648.24 euro. If earned income (after natural deductions) exceeded 12,614.09 euro the amount of the deduction reduced by 3.5 % of the excess.

In 2003 the structure of the deduction changed slightly. It is 40 % of income exceeding 2,500 euro up to a limit of 7,230 euro and thereafter 14 %. The maximum deduction is 2,550 euro. If earned income (after natural deductions) exceeds 1,400 euro the deduction is reduced by 3.5 % of the exceeding amount.

Sailor's deduction

The deduction of 30 % from sailor's income on board is subtracted in local taxation with a limit of 11,350 euro (2003). The deduction is increased by 170 euro for every full month a person has worked on board and the ship has been outside Finnish territorial waters ("the cross-trade increase").

Pension income deduction

The maximum pension income deduction for a single person is 6,640 euro (2003) and for spouses 5,660 euro. If net earned income exceeds this maximum amount, the deduction is reduced by 70 % of the excess.

Disability allowance

The allowance for a disabled person is 440 euro (2003) if the degree of disability is 100 %. In other cases, the deduction is calculated in relation to the degree of the disability, which must be at least 30 %. The deduction can not exceed the amount of earned income (after natural deductions) minus pension income. This condition, however, is not applied to persons who already received disability pension in 1982.

Student payment deduction

The maximum student payment deduction is 2,200 euro (2003). The deduction is reduced by 50 % of the amount exceeding the maximum deduction. Thus if earned income in 2003 was at least 4,400 euro the deduction was no longer allowed.

Basic deduction

The full basic tax deduction is 1,480 euro (2003) when earned income after all other tax deductions in local taxation don't exceed 1,480 euro. If exceeding this, the deduction is reduced by 20 % of the excess. For the full deduction it is provided that a person has lived in Finland the whole year.

Thus the basic tax deduction differs from other tax deductions in local taxation in the sense that it is subtracted from the income after all other tax deductions has been done.

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<i>Policy sheet:</i>	<i>it_local_fi</i>
<i>Parameter sheets:</i>	
-low earned income deduction	<i>fi_inctax_param</i> (rows 48-54)
-sailor's deduction	<i>fi_inctax_param</i> (rows 36-38)
-pension income deduction	<i>fi_inctax_param</i> (rows 40-43)
-disability allowance	<i>fi_inctax_param</i> (row 39)
-student payment deduction	<i>fi_inctax_param</i> (rows 44-45)
-basic deduction	<i>fi_inctax_param</i> (rows 46-47)

2.1.4.4. Tax bases for earned income

The tax base for personal earned income in state taxation is calculated as the gross earned income minus natural deductions minus state tax deductions. Respectively in local taxation the tax base is the gross earned income minus natural deductions minus local tax deductions. The tax deduction can't be bigger than the respective income. To the state tax base a progressive tax schedule is applied and to the local tax base flat municipal and church tax rates are applied. The local tax base is also the basis for the personal sickness contribution.

2.1.4.5. State tax from earned income

The following progressive tax schedules were applied to state tax bases in 1998, 2001 and 2003:

Table 2. Tax schedule for earned income 1998 (euro/year).

Taxable income	Tax on limit	Rate above limit, %
7,736.64 - 10,427.65	8.41	6
10,427.65 - 13,118.66	169.87	16
13,118.66 - 18,500.67	600.43	20
18,500.67 - 29,095.51	1,676.83	26
29,095.51 - 51,465.51	4,431.75	32
51,465.51 -	11,589.83	38

A major adjustment to the income limits was made in 2001. At the same time one band from the seven was dropped. In 2003 marginal tax rates were decreased in all income levels by two percentage points.

Table 3. Tax schedule for earned income 2001 (euro/year).

Taxable income	Tax on limit	Rate above limit, %
11,100.40 - 14,295.97	8.41	14
14,295.97 - 19,677.99	455.79	18
19,677.99 - 30,946.58	1,424.55	24
30,946.58 - 54,661.08	4,129.01	30
54,661.08 -	11,243.36	37

Table 4. Tax schedule for earned income 2001 (euro/year).

Taxable income	Tax on limit	Rate above limit,%
11,600 - 14,400	8	12
14,400 - 20,000	344	16
20,000 - 31,200	1,240	22
31,200 - 55,200	3,704	28
55,200 -	10,424	35

EUROMOD

The state tax is calculated in three stages. In the first stage the schedule is applied to tax base (policy *it_fi*) and disability tax credit and child maintenance tax credit are subtracted from the tax. In the second stage (policy *it2_fi*) 75 % of the deficit credit is subtracted from state tax. In the third stage (policy *it3_fi*) the rest of the credit is subtracted proportionally from all personal taxes and sickness contribution. Three policy sheets are then required. The same procedure with three stages is done for municipal and church taxes as well as for sickness contribution (see chapters 2.1.4.6-7).

Policy sheet: *it_fi*
it2_fi
it3_fi
Parameter sheet: *fi_inctax_param* (rows 67-84)

2.1.4.6. Municipal tax from earned income

The municipal tax is the local tax base times the municipal tax rate. The (flat) tax rates are decided annually by each municipality for the following calendar year. The average (weighted) rate was 18.03 % in 2003. In the data there are information of tax rates in each municipality. After the base year the tax rates are adjusted in the model in accordance with the change of the average rate.

EUROMOD

Policy sheet: *it_local_fi*
it_local2_fi
it_local3_fi
Parameter sheet: *fi_inctax_param* (row 59)

2.1.4.7. Church tax from earned income

An individual who is a member of church must pay church tax. Each church (e.g. Evangelical Lutheran Church or Orthodox Church) decides annually the tax rate. The average (weighted) rate was 1.3 % in 2003.

EUROMOD

Policy sheet: *it_church_fi*
it_church 2_fi

Parameter sheet: *it_church 3_fi*
fi_inctax_param (row 64)

2.1.4.8. Tax credits from earned income tax

Disability tax credit

The amount of the disability tax credit is 440 euro (2003) for disabled person if the disability rate is 100 %. If the disability rate is less, the credit is this share of the full rate. In all cases the disability rate must be at least 30 %.

Child maintenance tax credit

Child maintenance tax credit is allowed to a person due to maintenance payments for dependent child. The tax credit is 1/8 of the maintenance payment during a calendar year, but no more than 76 euro for each child (2003).

Deficit credit

The most important tax credit is the deficit credit. If the sum of natural deductions and deductible interests (and in some cases the losses) exceed the gross capital income, there is deficit in the capital income category. If deductible interests are from mortgage loan, student loan or investment loan a share of the deficit is possible to deduct from tax of earned income. This share, deficit credit, is the capital tax rate times the deficit up to the limit of 1,400 euro (2003). For one dependent child in the household the limit is increased by 350 euro and for at least two children the limit is increased by 700 euro.

In 1998 the rate of the deficit credit was increased by two percentage points (from 28 % to 30 %) on that part of the deficit, which is because of the mortgage loan interests for the first dwelling. Since 2001 the respectively increase is one percentage point (from 29 % to 30 %).

The deficit credit is deducted from state tax after the disability tax credit and the child maintenance tax credit. In the first stage 75 % of the overall credit is deducted from state tax and in the next stage the remaining part of the credit is deducted proportionally from state tax, municipal tax, church tax and sickness contribution.

If taxes (incl. sickness contribution) from earned income are less than the deficit credit, the exceeding part is possible to transfer to the spouse.

Additional interest tax credit for transition period

The additional interest credit based on interests from mortgage or study loan was allowed if a person had such a loan at the end of 1992. The credit was allowed for a transition period and was deducted from the tax on earned income in 1993-1999. The full amount of the credit was 5 % of the interest in 1992. The additional interest credit was deducted before the deficit credit.

There was some additional tax credits created for a transition period (due to the tax reform in 1993) which have been applied until 1998. The importance of these tax credits usually decreased during the transition period. These credits are not (fiscally) significant and are not modelled in EUROMOD.

EUROMOD

<i>Policy sheet:</i>	<i>it_fi</i>
<i>Parameter sheet:</i>	
-disability tax credit	<i>fi_inctax_param</i> (row 33)
-child maintenance tax credit	<i>fi_inctax_param</i> (rows 34-35)
-deficit credit	<i>fi_inctax_param</i> (rows 2, 5-9)

2.2. Social insurance contributions

2.2.1. Employee contributions to pension and unemployment insurance

Wage based contributions

There are three kinds of social security contributions paid by individuals. Two of them, employee occupational pension contribution and unemployment contribution, are based on gross wage (incl. employer-provided benefits-in-kind). The third one, sickness contribution, is based on local tax base. It is not restricted to employees but all persons who have taxable income in local taxation (including self-employed, pensioners, unemployed, students etc.) must pay it.

Employee social security contributions are mandatory and the same in private and public sectors. In spite of the fact that unemployment contribution is mandatory there is – inconsistently - no connection to the earnings related or basic unemployment benefit. To be entitled to these benefits at least the working condition must be fulfilled.

The wage based employee contributions are deductible from earned income in state and local taxation.

EUROMOD

The amounts of employee occupational pension and unemployment contributions are a fixed percentage of gross employment income (*coempy*).

<i>Policy sheet:</i>	<i>eestic_fi</i>
<i>Parameter sheet:</i>	<i>fi_inctax_param</i> (rows 65-66)

2.2.2. Personal contribution to sickness insurance

The size and type of income

The sickness contribution depended earlier on the size and type of income. In 1998 the basic rate was 1.5 % of local tax base. If a person had pension income there was an additional contribution of 2.7 % of pension income. There was also an additional rate of 0.45 % of taxable income which exceeded 13,455,03 euro. Thus, e.g. for low wage and benefit income the sickness contribution was 1.5 per cent, for low pension income 4.2 per cent (1.5+2.7), for high wage and benefit income 1.95 per cent (1.5+0.45) and for high pension income 4.65 per cent (1.5+0.45+2.7) from local tax base. As said, the high rate was only applied to the income exceeding the

limit.

In 2001 the additional rate for high income was abolished and an additional contribution for pension income decreased from 2.7 per cent to 1.2 per cent. In 2003 also the additional contribution for pension income was abolished.

EUROMOD

As for personal income taxes the calculation of sickness contribution is done in three stages due to the deficit credit which is subtracted also from sickness contribution.

<i>Policy sheet:</i>	<i>eetic_sickness1_fi</i> <i>eetic_sickness2_fi</i> <i>eetic_sickness3_fi</i>
<i>Parameter sheet:</i>	<i>fi_inctax_param (60-63)</i>

2.2.3. Employer contributions to social insurance

Introduction

The base for all employer insurance contributions is the gross wage including employer-provided taxable benefits-in-kind. The contributions of each employer may differ depending on the number of employees, the age of employees, employer responsibilities to pay disability and unemployment pensions, the institutional sector, the wage sum paid by employer etc. In other words, many of the contributions are often different for different employers. Only sickness and life insurance contributions are the same for all employers.

There are five mandatory employer contributions and one (life insurance contribution) which is based on trade union agreement:

- contribution to occupational pension insurance
- contribution to national pension insurance
- contribution to sickness insurance
- contribution to unemployment insurance
- contribution to work injury insurance
- contribution to life insurance

All employer contributions are deductible from employers income.

EUROMOD

When modelling employer social insurance contributions the average rates has been used because there is no information in database for the actual rates. However, different institutional sectors (state, municipals and private sector) have been taken into account and the average contribution of each of these is used. With average rates the output is "reasonable good" for most employer contributions.

<i>Policy sheet:</i>	<i>ersic_fi</i>
<i>Parameter sheet</i>	<i>fi_ersic_param (rows 1-16)</i>

2.2.4. Self-employed and farmer contributions

Introduction

Self-employed and farmers can deduct their contributions either in business and farming activity or pay them personally. The first case is usual and it is also how they are treated in EUROMOD. This means that it is assumed that from self-employment and agriculture income the contributions have already been paid (and deducted in taxation). Only sickness contribution will be paid and the same rules are applied as to all persons.

2.3. Benefits

2.3.1. Child allowance

Eligibility

Child allowance is paid for every child under 17 years of age and resident in Finland. The allowance is always paid regardless of any other benefits (or any other reasons). Spouses may choose to which one of them receives the benefit.

Amount of allowance

The amount of child allowance depends only on the number of children and the number of parents in family. The allowance for each child is the following:

	Child allowance (euro/month, 2003)
1st child	90.00
2nd child	110.50
3th child	131.00
4th child	151.50
5th and so on	172.00

Single parents are entitled to an child allowance supplement which is paid if the parent is not married or lives separated from the spouse. Persons who are not married but live together (cohabiting) are not entitled to single parent supplement. The amount of the supplement is 33.60 euro per month (2003) for each child under 17 year.

Example:

Single parent with 2 children (euro/month, 2003).

1st child	90.00
2nd child	110.50
Single parent increase	<u>67.20</u>
Total	267.70

No nominal changes to the amount of child allowance or the eligibility has been done from 1998 to 2003.

Means testing and other benefits

Child allowance is not means tested. It is neither usually taken into account when calculating means tested family benefits. The only exception is social assistance.

Taxation

Child allowance is non taxable.

EUROMOD

The household is entitled to the child allowance if at least one child is younger than 17 years. In EUROMOD the allowance is calculated for one month. The children under one year (*coage=0*) and children of 17 years (*coage=17*) are not taken into account in the present model version. This is, however, possible with the variable describing the age in months (*fiagemon*). The child allowance is given to the spouse with lower earned gross income.

The variables needed to calculate the child allowance are of good quality which makes the simulated output reliable.

<i>Policy sheet:</i>	<i>sbencb_fi</i>
	<i>sbenlp_fi</i>
<i>Parameter sheet</i>	<i>fi_ben_param</i> (rows 48-54)

2.3.2. Child home care subsidy

Childcare subsidies are "integrated" with the day care system in the sense that parents can choose whether to place their children to municipal day care centre or arrange them a private care. The private care of children may be at private day care centre or at private childminder accepted by the municipal. For small children the child home care subsidy is paid. The family may choose separately for each child which type of subsidy it wants. The purpose of the system is to give parents the possibility to arrange the childcare as they want without economical incentives.

Eligibility

Parents are entitled to the child home care subsidy if at least one child is less than 3 years. The subsidy is paid for any other children under age of 7 years who is not in any subsidised day care. Child home care subsidy is not available if the child is in municipal or private day care centre or at private childminder.

The subsidy is paid immediately after maternity (or parenthood) benefit. It is paid until the youngest child reaches the age of 3 years or moves into any subsidised day care. The child home care subsidy is paid if a parent or any other person (e.g. private baby-sitter) is taken care of the child. The supplement can only be paid if the family is entitled to the basic part.

Parents may choose which one of them is receiving the subsidy. However, it is usually paid to the parent who is staying home with the children.

Amount of subsidy

The child home care subsidy consists of basic amount which is a lump sum benefit and a supplement which is different for first child under 3 years and other children

under 3 or 7 years. The basic amount is paid only for one child.

Basic amount (euro/month, 2003)	
first child under 3 year	252.28
each other children under 3 year	84.09
each other children between 4-6 years	50.46
Full rate of supplement	168.19

Mean testing and other benefits

The amount of the supplement depends on family monthly income and the size of the family. "The family" is in this case parents and children under 7 years, but not more than two of them. Thus, the minimum family size is two and the maximum four.

The maximum supplement is paid if family's monthly income is below an income limit, which varies with family size. When income exceeds the limit the supplement is reduced by a certain percentage. The limits and percentages are shown below (euro/month, 2003):

Family size	Income limit	Reduced by, %
2	1,160	11.5
3	1,430	9.4
4	1,700	7.9

The family income is the gross monthly income subject to tax (earned plus capital income) as well as non-taxable incomes without some exceptions (e.g. child benefit and housing benefit). The percentages (but not limits) are the same as used when calculating the municipal child care payment.

Example (euro/month, 2003):

2 parents and 2 children (1 and 3 years), family monthly income 2,000 euro.		
a) basic amount	(252.28 + 50.46)	302.74
b) supplement		
	7.9 % of (2,000-1.700)=23.7 and 168.19 – 23.7	<u>144.49</u>
total benefit		447.23

The child home care subsidy is subtracted from unemployment benefit regardless of which parent is receiving the subsidy. However, if the spouse is not registered as a job seeker, the child home care subsidy is not subtracted from other spouse's unemployment benefit.

Parents receiving student payment can also receive child home care subsidy. Then it is regarded as income when determining the eligibility for student's financial support.

Some municipalities pay additional child home care subsidies. They decide independently the type and size of this subsidy.

Taxation

Child home care subsidy is taxable income.

EUROMOD

The child home care subsidy is first calculated at family level. In the end it is given to the same persons as in the original data base. The reason for this is that "right persons" will be taxed and e.g. spouse's high marginal tax rate is not used for the subsidy – and thus decreasing household's disposable income. The benefit months are taken into account by using information of age months (*fiagemon*). The benefit is first calculated for one month and then multiplied by "entitlement months" and then divided by 12.

Municipal day care payments are calculated in the same module as child home care subsidy. This is due to in both cases same information and parameters are used and there is an individual choice of subsidies for each child which must be taken into account.

Policy sheet: *sben_ch_home_care_fi*
Parameter sheet: *fi_ben_param (rows 24-33).*

2.3.3. General housing benefit

Eligibility

Households with low-income and living in rented or own dwellings are entitled to the general housing benefit. If the dwelling is shared permanently by several persons it is considered as household and the benefit is paid collectively to the entire household. If a person has a separate part of the dwelling in use he or she is considered as an own household. However, family relationships override these criteria and cohabiting or married persons, children, grandparents and under-age siblings are considered to make one household regardless of any other conditions.

Eligibility to the housing benefit is reviewed once in a year.

Housing costs

In rented dwellings housing costs include the rent and separate heating and water charges. Heating costs are covered up to a fixed limit per each square metre and water charges up to a limit linked to the number of persons in the household. Any other charges included in the rent (e.g. electricity, sauna, washing machine, parking) are deducted before calculating the benefit.

In owner-occupied apartments (where inhabitants actually own the shares of "the housing company") housing costs include the maintenance charge and additional heating and water charges (up to a limit). In these apartments housing costs are defined as fixed monthly amounts per square metre.

The annual interest on mortgage loan can be included in the housing costs. In owner-occupied dwellings 55 % of this interest is added to the housing costs. In case of state-subsidised loans 80 % of the annual repayment or fixed interest is added.

Only reasonable housing costs are taken into account when calculating the housing

benefit. The household must pay itself that part of costs which exceeds the reasonable costs. To establish what is qualified as "reasonable" the monthly reference costs are defined. These costs are defined on per-square-metre basis and are linked to the dwelling's location, age, size and standard of equipment. There are four municipal groups (three in 1998 and 2001) where the rates are different, reflecting the fact that housing costs are different in different parts of the country.

Amount of benefit

Housing benefit is 80 % of the reasonable (accepted) housing costs which exceeds the own basic share of the costs.

In 2002 the number of municipal groups increased from three to four and the year classification of house construction decreased from six to three. This changed e.g. the accepted housing costs. Significant changes for the amounts of own responsibility and eligibility has not been made from 1998 to 2003.

Means testing and other benefits

Own basic share depends on household's size and monthly income and the location of the dwelling. Different income limits in each municipal group are decided annually. If household's income is very low the own basic share is zero. The household income used in this connection is the sum of regular gross monthly income of all household members. If it varies the average income over longer period is used.

If household's property (as defined by tax authorities) exceeds a certain limit depending on the number of persons in the household, 15 % of the exceeding amount is added to household's gross income. The household's liabilities are deducted from the property. The dwelling used by the household is not taken into account when calculating the housing benefit.

Taxation

The general housing benefit is non taxable.

EUROMOD

The main parts when modelling the housing benefit are:

- to sum up all housing cost variables
- to calculate reasonable (or acceptable) housing costs using variables of dwelling's age and location and the maximum cost in parameter sheet "fi_hb_param",
- to pick up the own basic share using family income and parameter sheet "fi_hb2_param"

The benefit is calculated at household level for 12 months excluding the months when student's housing benefit is paid.

Policy sheet:

sben_hb_fi

Parameter sheet:

fi_hb_param

fi_hb2_param

2.3.4. Social assistance

In social assistance the benefit unit is not individual or household but “family”. In one household there may be one or more families e.g. due to adult children, grandparents and other relatives. Each of these make an own family. The entitlement of social assistance is considered separately for each such family.

The need for social assistance is regarded as net income minus accepted expenditures. Income consists of earned and capital income after taxes and contributions as well as of non taxable income (with some exceptions). The most usual non taxable incomes, that’s housing benefits, child benefit and child maintenance benefit, are regarded as income when calculating the social assistance.

Expenditures consists of a basic amount, reasonable housing costs and possibly additional specific costs. The basic amount is designed to cover the costs of food, cloths, transport and minor health care costs. A share (7 %) of housing costs the families have to pay by themselves. Additional costs may consists e.g. of extra housing costs or child day care fee. To accept these additional costs a separate judgement on family economical situation is always done.

Amount of benefit

The full basic amount of social assistance in municipals which belong to the first group is 374.92 euro respectively 358.79 euro the second group (2003). The full basic amount is only paid to single persons and to single parents. For other persons the basic amount is calculated as a share of the full rate.

	Full rate, %
Single or single parent	100
Other person over 18 (e.g. spouse)	85
Child over 18	73
10-17 year child	70
child under 10	63

If there is more than one child in the household the basic amount for the second child is 5 percentage units less and for the third child (and more) 10 percentage units less than in the figures above.

Example (euro/month, 2003): 2 parents, 2 children (14 and 8 years), municipal group 1, rent 500 euro, net unemployment benefit 800 euro, housing benefit 300 euro, child benefit 200.50 euro.

Expenditures:

a) basic amount	
for spouses (2 * 318.68)	637.36
1st child (14 year)	262.44
2nd child (8 year)	217.45
total basic amount	1,117.25
b) housing costs (93 % of 300)	<u>279.00</u>
Total expenditures	1,396.25

Incomes:	
net benefit income	800.00
housing benefit	300.00
child benefit	<u>200.50</u>
Total income	1,300.50

Social assistance is paid if expenditures exceeds incomes. In the case above the monthly social assistance is $1,396.25 - 1,300.5 = 95.75$ euro.

Taxation

Social assistance is non taxable.

EUROMOD

While there is no family definition in the original data the family classification have been done separately by using the variable which describes the relations of household members to the reference person. There is neither information on household's monthly income when social assistance is paid or the benefit months. The benefit months and the corresponding family monthly income are imputed using the information of "status months" for different annual income components. An other problem when modelling the social assistance is that family relations may have changes during the calendar year (get married, divorced etc.) while categorical variables describe the family relations in the end of the year.

Policy sheet: *sben_sab1_fi*
sben_sab2_fi
Parameter sheet : *fi_ben_param* (rows 113-127).

2.4. Public service charges

2.4.1. Municipal day care fee

Eligibility

All parents are entitled to have their children in municipal day care if they are less than 7 years.

Amount of day care fee

The municipal day care fee depends on the family income and the size of the family. The definition of "the family size" is the same as in the child home care subsidy and the private care supplement (see chapters 2.3.2 and 3.3.1).

The day care fee is a certain percentage times the family monthly income which exceeds an income limit. The percentages and the income limits vary with family size:

Family size	Limit (euro/month, 2003)	Rate, %
2	918	11.5
3	1,132	9.4
4	1,344	7.9

There is a maximum monthly fee of 200 euro for the first child, but municipalities may charge less (which is not usually the case). For the second child the same monthly fee may be charged but since 2002 no more than 180 euro. For the third child the fee is 20 per cent of the first child's fee.

Example (euro/month, 2003):

2 parents and 2 children, family income is 2,000 euro
 municipal day care fee:
 7.9 % of (2,000 – 1,344) 51.82

The total fee for two children is in this case 103.64 euro/month.

EUROMOD

Municipal day care fee is calculated in the same module as child home care subsidy. This is because in both cases same information and parameters are used.

Policy sheet: *ch_day_care_fee_fi*
Parameter sheet: *fi_ben_param (91-101).*

3. Taxes and benefits not simulated in EUROMOD

3.1. Taxes

3.1.1. Property tax

Tax liability

Individuals who are resident in Finland have to pay property tax on their worldwide assets. Non resident individuals are liable to pay tax on assets in Finland (with certain exceptions).

The owner of assets is liable to pay the tax. However, if a person is entitled to the yield on property owned by another person, he or she is also liable to pay the tax.

Tax unit

The tax unit is individual. Dependent children are taxed jointly with that parent who has higher value of taxable assets. However, the tax must be paid by the child.

Valuation of property

Property tax is assessed annually on the basis of net wealth in the end of the year. The assets are valued at current prices. Debts are deducted from assets when calculating the taxable net wealth.

Tax deductions

Individuals resident in Finland are allowed for deduction of 2,000 euro (2003) for every dependent child. A deduction of 10,000 euro is allowed for owner occupied dwellings. Both of these deductions are allowed only to the parent who has higher value of net wealth.

Property tax schedule

The property tax schedule has two thresholds. No tax is paid from property less than 185,000 euro (2003). On property equal to 185,000 euro, the tax is 80 euro.

Taxable net property	Tax on limit	Rate above the limit,%
185,000	80	0.9

The property tax is paid to the state.

3.1.2. Real estate tax

Tax liability

The real estate tax is levied (in principle) on all real property. The most important exemptions are forests and agricultural land. Owners of the property must pay the tax.

Tax base and tax rates

The amount of the tax is based on taxable value of property, which usually is the same as in property taxation.

Tax rates are set annually by municipalities within certain limits. Each municipality decide at least two tax rates, a general rate and a rate for dwellings used as permanent residences. The general tax rate may vary between 0.2 and 1.0 per cent and the rate for permanent residences may vary between 0.1 and 0.5 per cent. Moreover, a municipality can decide on a special tax rate applied to buildings used as second residence (summer residence). In this case the tax rate can't be more than 0.6 percentage units higher than the rate for permanent residences. A municipality can also decide which tax rates are applied to some specific targets (power stations etc.)

The tax is paid to that municipality where the property is located.

3.1.3. Value-added tax

Overview

Value-added tax (VAT) is levied at each stage in production and distribution of goods and services. The accumulation of the tax is prevented by deduction system. When an individual or company purchases taxable goods or services, the supplying corporation charges the VAT. The tax paid on purchases (input tax) is deductible from the tax charged for the taxable supplies (output tax). The difference between the output and input tax, the VAT, is paid to the state. In the end the consumer pays the final tax. The usual tax period is one month.

Tax liability

Any individual or company who sells goods or services in business activity is liable to tax. The tax must be paid at every stage in the exchange. Thus e.g. manufacturers, wholesalers and retailers are liable to pay the tax. However, it is

required that the purpose of activity is to gain profit. In addition, the tax is paid only if annual turnover in euro exceeds a fixed limit.

Tax rate

The standard rate of VAT is 22 % from the total price (price incl. tax). A reduced tax rate of 17 % is applied to food, excluding restaurant services, live animals, drinking water, alcoholic beverages and tobacco products. A rate of 8 % is applied to books, medicines, passenger transport services accommodation services, services enabling sport activities, admissions to commercial sporting cultural and entertainment performances. A zero rate (or exempt from tax) is applied to hospital and medical care undertaken by public hospitals and other similar institutes, social welfare services, educational services provided in legislation, financial services and transactions, insurance services, lotteries and money games, services of artistes and transfer of copyrights. A zero rate is also applied on real property.

3.1.4. Excise taxes

Other consumption taxes are e.g. excise duties on tobacco, alcohol, liquid fuels, electricity and certain energy sources. The most important excise duties for households are those on tobacco products, alcohol products and fuels.

Excise duty on manufactured tobacco is levied on cigarettes, cigars and on other products containing tobacco or cigarette paper. Excise duty on alcohol or alcoholic beverages is levied on beer, wine, intermediate products (aperitifs) and ethyl alcohol. The tax rate varies according to its alcohol content. Excise duty on liquid fuels consists of three parts: basic duty, additional duty and strategic stockpile fee. On certain energy sources excise duty is levied on coal, electricity, milled peat, natural gas and pine oil.

3.2. Benefits

3.2.1. Maternity benefit

Eligibility

Mothers are entitled to a maternity benefit if they have lived in Finland at least 180 days before the estimated day of birth (and insured in the national health insurance scheme). Maternity benefit is paid for 105 workdays (excl. Sundays).

Fathers are entitled to a separate paternity payment for six workdays. They also can receive the benefit for 6-12 days at the same time when mother receives maternity benefit.

Entitlement to parenthood benefit begins immediately after payment of maternity benefit ends. In case of mutual agreement the parenthood benefit can be paid to the father, but not to both parents at the same time. The parenthood benefit is normally paid for 158 workdays.

The periods:

maternity benefit	105 days
parenthood benefit	158 days
paternity benefit	12-18 days

While the parenthood benefit is usually paid to the mother, her maternity period is approximately ten months.

Amount of benefit

Maternity, paternity and parenthood benefits are calculated on the basis of last taxable earnings. If earnings during the last six months are significantly increased, this higher income is taken into account. The amount of maternity, paternity and parenthood benefit is exactly the same as sickness benefit, however, with a minimum daily benefit of 11.45 euro (2003).

If both parents are working during the parenthood period the minimum benefit is paid to one of the parents.

Means testing and other benefits

Maternity, paternity and parenthood payments are not means tested.

Taxation

Maternity, paternity and parenthood benefit are taxable income.

3.2.2. Sickness benefit

Eligibility

Sickness benefit is a compensation for lost income due to temporary incapacity for work. It is paid to persons between 16 and 64 years of age. It is required that the employment have began at least three months before the disability. Also self-employed persons are entitled to the benefit. If the employer pays wage or salary to employee during the sickness period the benefit is paid to the employer.

Benefit period

The maximum benefit period is 300 days (after waiting period of 9 days). If disability continues after this period a person is entitled to an other kind of disability payment (e.g. disability pension).

Amount of benefit

The benefit depends on person's taxable earnings (adjusted by the employment index). From earnings 4.8 % is deducted (2003) which corresponds contributions to employee pension and unemployment insurance. Also the expenses for acquiring or maintaining income (natural deductions) are deducted. If earnings (after these deductions) are less than the minimum amount, no benefit was paid. However, if the work incapacity lasts at least 55 days without interruption, the person is entitled (since 2002) to the minimum benefit.

The calculation rule of daily sickness benefit is (euro, 2003):

Annual earnings (after deductions)	Daily benefit
- 1,003	None
1,004 - 26,124	0.7 x annual earnings/300
26,125 - 40,192	60.96 + 0.40 x (annual earnings - 26,124)/300
40,193 -	79.71 + 0.25 x (annual earnings - 40,192)/300

Monthly sickness benefit is daily benefit multiplied by 25.

Except the index adjustments on income limits and the change in minimum benefit rules no other changes has been done to the benefit rules from 1998 to 2003.

Means testing and other benefits

If earned income is below the income limit where sickness benefit is paid, the benefit is not allowed even if all other qualifying conditions would be satisfied. However, after 55 days (since 2002) the minimum sickness benefit is paid and is no longer means tested against person's own and spouse's earnings.

Taxation

The sickness benefit is taxable income.

3.2.3. Basic unemployment allowance

Eligibility

Entitled to the basic unemployment benefit is a person who is between ages of 17 and 64 years, available for work, registered at the employment office and seeks full-time employment and satisfy the working condition. Also it is required that no suitable job or training has been found. A person who don't satisfy the working condition or have received unemployment benefit for the maximum period is entitled to the labour market support.

Working condition

The working condition is satisfied when employment has lasted at least 43 weeks within the 24 months immediately preceding the unemployment and containing at least 18 hours of work per week. The period can be extended in some cases (illness, military service, studies etc.).

A self-employed person satisfies the working condition if he or she has been self-employed at least 24 months during the previous 48 months. He or she also must be actively involved in self-employment.

Benefit period

The maximum benefit period is 500 days. A person who fulfils the working conditions, who is at least 57 years old (2003) and the maximum benefit period of 500 days has not expired shall, however, receive unemployment benefit up to the age of 60. After that a person is entitled to unemployment pension until he or she reaches the official retirement age of 65 years.

Amount of benefit

The total basic unemployment benefit consists of a flat basic amount and a child supplement. The amount of daily benefit is (euro, 2003):

Basic benefit	23.02
Child supplement	
1 child	4.36
2 children	6.40
3 or more children	8.26

Means testing and other benefits

The basic unemployment benefit is not means tested.

Taxation

The basic unemployment benefit is taxable income.

3.2.4. Earnings-related unemployment benefit

Eligibility

The earnings-related unemployment benefit is paid to a member of unemployment fund who has been insured at least 10 months and satisfies the working condition (see above). A self-employed person is also entitled to earnings-related benefit providing that he or she is insured and fulfils the working conditions which is applied in the self-employment scheme.

Benefit period

The maximum benefit period and the rules for prolonged benefit are the same as for basic unemployment benefit.

Amount of benefit

The benefit consists of a basic part, an earnings-related part and a child supplement. The daily benefit is calculated on the basis of person's regular monthly wage during the 10 months immediately preceding the unemployment. Bonuses and holiday pays are not included. The amount of corresponding employee's pension and unemployment insurance contributions (4.8 % in 2003) are deducted from gross wage before calculation the benefit.

Child supplement is the same as for basic benefit. Totally the benefit (including child increase) can't be more than 90 per cent of previous daily earnings, but is always at least the basic unemployment benefit. Daily earnings are determined by dividing monthly earnings by 21.5.

The components of an earnings-related unemployment benefit are

- basic part, which is equal to the basic unemployment benefit
- first earnings-related part is equal to 42 % (2003) of the difference between daily earnings and the limit which is calculated as the basic part times 90 divided by 21.5.
- second earnings-related part is equal to 20 % of the difference between

daily earnings and the 90-limit above.

Example (euro/month, 2003): 2 children, previous wage 2,626.05 euro/month

First a deduction of 4.8 % is taken ($0.954 * 2,626.05 = 2,500$). The 90-limit is $90 * 23.02 = 2,071.80$ per month and $2,071.80/21.5 = 96.36$ per day.

Daily earnings	$2,500/21.5 = 116.28$	
Basic part		23.02
First earning-related part		
$0.45 * (96.36 - 23.02)$		33.00
Second earnings-related part		
$0.20 * (116.28 - 96.36)$		<u>3.98</u>
Total daily benefit, excl. child supplement		60.00
Child supplement		<u>6.40</u>
Total daily benefit		66.40

Monthly benefit is daily benefit multiplied by 21.5, in this case 1,427.60 euro.

A person who has become unemployed after 1.1.2003 is in some cases entitled to an additional earning-related benefit.

Means testing and other benefits

The earnings-related benefit is not means tested.

Taxation

The earning-related unemployment benefit is taxable income.

3.2.5. Labour market support

Eligibility

A person who has received unemployment benefit (basic or earnings related benefit) for the maximum period of 500 days or who don't satisfy the working condition is entitled to the labour market support. The recipient must be between 17 and 64 years of age, available for work, unemployed and registered at the employment office and looking for full-time employment.

There are some specific conditions for young people. A 17-year-old person can receive labour market support providing that he or she has completed the vocational training or is in labour market training or on-the-job training. A person aged 18-24 years who refuses to take a job or join a labour market policy measure or a training is ineligible for labour market support. Eligibility is renewed if the person shows that he or she has completed the vocational training. A six-week benefit suspension can be imposed if a person repeatedly refuses for job training or adult education.

In some cases the labour market support can be paid to an employer to subsidise the cost of employing a person.

Benefit period

The labour market support is paid for an unlimited period.

Amount of benefit

A full amount of labour market support is since 2003 equal to the basic unemployment benefit. Until 2002 the child increase was only 40 % of the corresponding amount in basic and earnings-related benefit.

Means testing and other benefits

The labour market support is means tested against person's own income and spouse's income above a certain income limit. If a person has own wage income a half of it is cut from the labour market subsidy. An amount of 236 euro of spouse's income is exempted from means testing (2003). The benefit is cut if the wage income of spouse (plus unemployed's own capital incomes) exceeds 848 euro in month. If there are dependent children in the family the income limit is increased by 106 euro for each child. The monthly rates used for the amounts exceeding the limit are (euro, 2003)

Family type	Income limit	Rate, %
- single person	253	75
- other families	848	50
- child increase per child	106	

Example (euro, 2003)

Unemployed person with 2 children and spouse's monthly income of 1,436 euro. After deduction of 236 euro, the income is 1,200 euro/month.

Spouse's income	1,200
Income limit: $848 + 2 * 106$	1,060
Income exceeding the limit	140
Full labour market support:	
- per day $23.02 + 6.40$	29.42
- per month $21.5 * 29.42$	632.53
Subtracted from benefit	
- $0.50 * 140$	<u>- 70</u>
Benefit per month	562.53
Benefit per day (divided by 21.5)	26.16

Reduced labour market support

An unemployed person who do not satisfy the employment condition and lives with parents receive only 60 % of the labour market support. However, the reduction is not applied if the person participates in job training or in rehabilitation organised by the labour market authorities.

Labour market support paid to employer

Labour market support can be paid to employer either separately or in combination with wage subsidy. A long period of unemployment is required for the unemployed

who is hired. The employer needs to sign a contract with the unemployed.

Taxation

The labour market support is taxable income.

3.2.6. Student payment

Eligibility

A full-time student is entitled to student payment if he or she succeeds with the studies and needs economical support. Student payment is not paid if a person receives e.g. child allowance, rehabilitation allowance or unemployment benefits.

Amount of benefit

The amount of student payment depends on the education level, age, marital status and if the student lives alone or with the parents. The student's overall financial situation is also taken into account. When the need for financial aid is considered, student's own income as well as (under certain circumstances) parents' or spouse's income are taken into account.

The monthly student payments (euro, 2003):

	Secondary school	University
Married (or have a child)	213,60	259,01
Single, age over 19	213,60	259,01
Single, age 18-19	213,60*	259,01
Single, under 18	84,09**	126,14***
Age at least 20; lives with parents	63,91***	105,96***
Aged under 20; lives with parents	21,86**	38,68***

* = parent's high income may decrease the amount

** = parent's income may increase or decrease the amount

*** = parent's low income may increase the amount

Means testing and other benefits

The amount of student payment is means tested against all student's annual income. The student has a personal income limit, "free income", which is based on months he or she is receiving the student payment. The limit is defined as 505 euro for every such month and as 1,515 euro for every "unsupported" month (2003). The student may earn the income whenever during the calendar year. Assuming that student has received student payment for nine months, annual earnings can be at most 9,090 euro ($9 \cdot 505 + 3 \cdot 1,515$) without having to repay the benefit.

Parent's income may affect on student's payment if he or she is single and under 20 years of age.

Maximum support period

The student payment is allowed for 70 months at maximum. The length of the period depends on the institute and the level of education.

Taxation

The student payment is taxable income.

3.2.7. Pensions

Overview

There are two complementary pension systems in Finland, a national pension based on the residence and an occupational pension based on the employment history. Both systems include a wide range of retirement benefits:

- old age pension/early old age pension
- disability pension/rehabilitation subsidy
- individual early retirement pension
- unemployment pension
- survivor's pension

In addition, partial disability and part-time pensions are included in the occupational pension system (but not in the national pension system). Occupational pensions may base on public or private sector employment or on self-employment, or in any combination of these. Both occupational and state pension schemes are based on national legislation.

All pensions are automatically converted to old-age pensions when the recipient reaches the official retirement age of 65 year.

Eligibility

All Finnish citizens are entitled (principally) to minimum national pension if they have lived in Finland at least 3 years after the age of 16 year. In some cases citizens from other countries are also entitled to the pension (or a part of it).

All employees and self-employed persons are included in the statutory occupational pension scheme and are entitled to an occupational pension based on each employment (wage earners in private or public sector, self-employed, farmers, freelancers etc.). Pensions based on each employment are calculated separately and the occupational pension is the sum of all these pensions. The total pension is the sum of occupational, national pension and national pension supplements.

Amount of national pension

The amount of national pension depends on person's occupational pension. If the occupational pension exceeds a specified income limit based on marital status and municipal group, no national pension is paid.

A full national pension is paid to a person who's other pensions (occupational pensions) don't exceed 555 euro in year (2003). If other pension income exceeds this limit, a half of the exceeding amount is deducted from the full national pension. Thus every euro exceeding the limit will decrease the national pension by 50 cent. The full monthly national pension and income limits are the following (euro, 2003):

	Municipal group	Full pension	Income limit
Single	I	493.45	46.25
	II	472.93	46.25
Married	I	434.17	46.25
	II	416.69	46.25

The formula to calculate the annual national pension is

$$\text{national pension} = \text{full national pension} - 0.5 * (\text{other pensions/year} - 555)$$

Thus if a single person lives in the first municipal group and the annual occupational pension exceeds 1,010.88 euro, no national pension is paid (the minimum national pension which will be paid is 11.15 euro/month).

Means testing

The national pension is means tested against person's other pensions.

Amount of the occupational pension

The amount of occupational pension depends on earnings and the length of employment period. There are various rules regarding to the calculation of "pension wage", which is basically the (average) wage level during employment period. The "pension wage" is calculated on the basis of the last 10 years in each employment. A accruing percentage is then applied to the "pension wage" to calculate the pension for each employment period. The system was introduced in 1996 and is taken in force during a transition period.

There is no ceiling on the occupational pension but the maximum amount of total pension (occupational plus state pension) is limited to 60 % of the "pension wage" (66 % in public sector).

To the state pension some additional supplements are paid.

Taxation

State and occupational pensions are taxable, but state pension supplements are free from tax. But due the tax deductions, no tax is paid if a person receives only national pension.

3.2.8. Pensioner's housing benefit

Eligibility

Persons who receive any kind of pension are entitled to pensioner's housing benefit. General housing benefit cannot be paid at the same time, but the comparison is made and the benefit which is more favourable is allowed. The benefit is paid both for rented or owner-occupied dwellings.

Housing costs

Housing costs include the rent and additional water charges. If heating and water charges are not included in the rent, they are taken into account. In owner-occupied dwellings housing costs includes maintenance and water charges. The heating,

water and maintenance charges are defined annually. Also interests on a mortgage loan is fully taken into account as housing costs, but cannot be used as tax deductions at the same time. There are limits for housing costs, which depend on the size of the family and the municipality group where the dwelling is located.

The maximum annual housing costs (euro, 2003):

	Municipal group 1	Municipal group 2	Municipal group 3
No children	5,329	4,869	4,383
1 ore 2 children	6,395	5,843	5,260
3 children or more	7,461	6,817	6,136

The limits are 20 % higher if there is one or two children in the household and 40 % higher if there are at least three children in the household.

Amount of benefit

Pensioner's housing benefit is 85 % of the (accepted) housing costs which exceed the own share which pensioners must pay themselves.

The own share consists of a flat basic part and a means-tested additional part. The means-tested part is 40 % of annual income exceeding a income limit, which depends on family relations. The annual limits for different family types are (euro, 2003):

Single	7,238
Spouses, other spouse not entitled to HB	10,610
Spouses, other spouse entitled to HB	11,636
Single, receiving widow's pension	6,222
Spouses, receiving widow's pension	9,592

The pensioner's housing benefit also depends on family assets. If the value of assets exceeds the income limits, 8 % of this exceeding amount is taken into account as income. This income limit is different for a single person and spouses, 13,682 euro and 21,891 euro (2003).

If both spouses are entitled to pensioner's housing benefit, the benefit is divided between them.

Means testing

Means testing against family income is taken place when calculating the additional own share of housing costs. Nearly all regular income is taken into account with exceptions of child benefit, social assistance and child home care benefit.

Taxation

The pensioner's housing benefit is non taxable.

3.2.9. Student's housing benefit

Eligibility

Single students living in rented house are eligible for the student's housing benefit. Also married students are in some cases entitled to the benefit.

Amount of benefit

The amount of student's housing benefit is 80 % of housing costs. The monthly housing costs (rent, maintenance charge, water charges and other regular charges) are limited to 214.44 euro (2003). If monthly housing costs are less than 33.63 euro, no benefit is paid.

The percentage applied to housing costs changed in 2000 from 67 % to 80 %.

Means testing

The housing benefit is means tested against student's own income basically in the same way as when calculating the student payment. Also spouse's income affect the size of the benefit.

Taxation

The student's housing benefit is non taxable.

3.2.10. Other benefits

Child disability allowance

To support the home care of disabled or chronically ill child a child disability allowance is paid for children under 16 years. It is paid at three rates depending on the level of disability of the child. The monthly rates are (euro, 2003):

Basic rate	76.87
Higher rate	179.37
Special rate	333.12

The child disability allowance is non taxable and not means testing.

Special child care allowance

A special child care allowance is paid to a parent who is joining the medical treatment of disabled child in the hospital or at home and who is not able to work during that time. The amount of allowance is the same as the maternity benefit. It is taxable income and not means tested.

Other benefits

There are some additional benefits which are not described in this report. Some of them are also included in the data base (maternity grant, maintenance allowance for child paid by a parent or municipal, scholarships etc.). The amounts of these benefits are very small and are not insignificant in this context.

3.3. Public service charges

3.3.1. Private child care subsidy

Eligibility

The private child care subsidy is paid directly to the private child care centre or to an other private childminder. As the child home care subsidy also the private care subsidy consists of two parts: the basic part and the supplement. The supplement is means tested and calculated in the same way as the supplement of child home care subsidy. However, the amounts of the basic part and the supplement differ. The other difference is that the private child care subsidy is paid from each child and with equally amounts. If the family receives child home care subsidy for one child, the private day care subsidy for any other children is not allowed.

The private child care provider and parents may decide the payment but it must be approved by the municipality.

Amount of benefit and means testing

The amount of basic part and the means tested supplement for each child are (euro /child/month, 2003):

The basic part	117.73
The maximum supplement	134.55

The supplement is paid at its maximum rate if the family's income does not exceed a limit which depends on the family size. If the income exceeds the limit the supplement is reduced in the same way as the child home care subsidy. Also the definition of the size of the family is the same (see chapter 2.3.2).

Taxation

The private day care subsidy is paid directly to the child care provider (an individual or a private day care centre) and it is taxable income for the care provider. It has no affect on parent's taxable income.

4. Data

4.1. General description

The basis of the Finnish EUROMOD data is the Income Distribution Survey (IDS) collected by Statistics Finland. The latest wave is from 2001. The data is based on both survey and register information. Most of the incomes are from administrative registers. Identification numbers of individuals are used to link data from different sources.

There is more than 700 variables in the data for each sample person including incomes, taxable assets and categorical variables. Practically all taxable personal incomes and tax deductions are included. About taxable benefits there is often

information both from tax register and registers from the Social Insurance Institute (which pays most of the benefits).

The data is on an annual basis. The employment status depends on the main income source, but persons may have different kinds of incomes during the calendar year (pension, unemployment benefit, student payment etc.). For the most important incomes the income period is given in months but this information is not always possible to use. In addition of annual incomes there is also some monthly information in the data.

Wage and benefit incomes are usually of good quality. However e.g. interests from deposits, inter-household transfers, some grants and non taxable private insurance compensations are not necessarily liable. Especially the interest income from deposits is clearly underestimated.

The IDS from 2001 contains 10,736 households and 28,303 individuals. The weights are the same for each household member.

A description of original database for 2001 is documented in *Data Robustness Assessment Report* (Annex D).

4.2. Sample selection in EUROMOD

The variables of IDS which are included in EUROMOD database are described in *Data Requirement Document* (Annex B). There is approximately one third of all original data base variables included covering all incomes, main assets and most important categorical variables. If a specific income variable is excluded from EUROMOD data it is still included in the sum variable. Some of the original data variables have been (partly) imputed in the same way as in the national model (e.g. underestimated interests from deposits). In some cases original data variables have also been modified to make them compatible with common variables. These modifications are documented in *Data adjustments for EUROMOD* (Annex C).

All annual level variables has been divided by 12. Simultaneously with the EUROMOD data set a new national data base was created. This contains exactly the same information as EUROMOD, but on annual level. This national data is "the counterpart" for EUROMOD data and makes is possible to compare the outputs with the similar national data.

4.3. Updating

While the latest EUROMOD data is from 2001 it is needed to uprate the data to year 2003 level. The basic principle is that all monetary variables (which are not simulated) are updated by using different indexes. The names of indexes for each component are in DRD (Annex B).

In the national model weights are adjusted (re-weighted) to represent the structural changes in the society. This means that that the updating process for year 2003 is

different than in EUROMOD.

5. Validation

5.1. Aggregate validation

The comparison of aggregate results between EUROMOD, national model (TUJA) and national statistics is shown in table 5. In the calculation the “usual” national model data is used and thus the income concept differs (slightly) from EUROMOD income concept. Also more benefits are simulated than in EUROMOD. The statistics is based mainly on registers of tax authorities, Social Insurance Institution and Social Welfare Board. Some small adjustments have been made to the statistics to have them comparable with the model income concepts.

Table 5. The aggregate taxes and benefits in EUROMOD and national model (TUJA) compared with statistics (milj. euro and 1000 receivers). Year 2001.

	EUROMOD milj. €	EUROMOD (1000)	TUJA milj. €	TUJA (1000)	Statistics milj. €	Statistics (1000)	EUROMOD/Statistics,% milj. €	(1000)
Taxable capital income 1)	522,2	1 007,1	526,6	1 251,5	526,9	1 012,6	-0,9	-0,6
Tax from capital income (state)	81,9	754,3	81,8	742,2	84,9	742,9	-3,7	1,5
Wage and salary income 2)	4 339,6	2 639,1	4 338,4	2 639,0	4 411,8	2 670,8	-1,7	-1,2
Earned income from agriculture 2)	77,4	147,4	77,3	147,4	70,7	130,6	8,6	11,4
Earned income from forest	14,2	144,6	14,2	144,6	15,9	166,8	-11,7	-15,3
Earned income from business	145,1	116,7	145,1	116,7	146,9	114,8	-1,2	1,6
Earned income from business partnership 2)	61,3	44,1	61,3	44,1	62,7	45,2	-2,3	-2,5
Pension income	1 175,9	1 229,5	1 166,8	1 226,6	1 222,6	1 311,0	-4,0	-6,6
Sickness benefit 3), 4)	23,8	126,6	23,9	126,6	23,8		0,2	
Labour market support 4)	67,2	265,4	62,7	258,7	69,8	271,4	-3,9	-2,3
Basic unemployment benefit 4)	6,8	40,7	6,1	40,7	7,2	43,7	-6,4	-7,3
Earning-related unemployment benefit 4)	108,7	315,4	94,9	270,6	99,3	276,6	8,6	12,3
Child home care subsidy	28,1	98,2	28,6	100,3	28,8	116,1	-2,6	-18,2
Maternity payment 4)	38,7	148,7	38,7	148,7	36,4	139,7	6,1	0,0
Student payment 4)	36,9	312,5	35,8	333,6	37,0	322,4	-0,4	-3,2
Private pension contributions	29,0	193,3	30,3	193,3	30,4	194,7	-5,1	-0,8
Employee unempl. + pension contribution	225,7	2 639,1	225,4	2 630,6	216,7	2 529,2	4,0	4,2
Taxable earned income (state taxation)	5 794,6	4 013,2	5 771,9	4 012,7	5 830,0	4 162,8	-0,6	-3,7
Taxable earned income (local taxation)	5 227,6	3 657,2	5 183,5	3 633,5	5 226,0	3 722,2	0,0	-1,8
State earned income tax	550,7	2 428,5	548,3	2 407,5	546,9	2 418,7	0,7	0,4
Municipal tax	912,2	3 645,1	903,0	3 619,1	911,3	3 705,4	0,1	-1,7
Sickness contribution	88,3	3 644,7	86,9	3 602,0	88,5	3 658,9	-0,1	-0,4
Church tax	56,1	3 101,7	55,9	3 086,9	56,3	3 150,4	-0,4	-1,6
Tax from deposits 3)	18,1	728,3	18,0	728,3	18,2		-0,2	
Child benefit	114,0	593,4	115,0	611,5	114,7	580,0	-0,6	2,3
Social assistance	41,4	284,1	44,0	311,8	35,8	0,0	13,6	0,0
Housing benefit for pensioners 4)	17,6	146,2	17,7	146,2	20,5	165,2	-16,2	-13,0
Housing benefit (general) 5)	34,8	234,0	35,6	226,1	33,4	158,5	4,2	32,3
Housing benefit for students 4)	17,4	201,6	20,0	198,4	17,4	175,0	0,0	13,2
Municipal day care payment	17,8	119,9	17,9	120,9	18,8		-5,1	
Employer social insurance contribution	1 141,8		1 139,2		1 073,0		6,0	
Disposable income 6)	5 239,8	4 209,1	5 279,8	4 205,7	5 252,4	2 380,0	-0,2	0,0

Sources:

Tax Statistics 2001 (tax register): Employment taxable incomes.

Statistical Yearbook of Social Insurance Institution 2001 (benefit registers): Benefit incomes.

Ministry of Finance: Tax from deposit interests.

Ministry of Social Affairs: Municipal day care payments.

Social Welfare Board: Social assistance.

1) The figures of *Tax Statistics 2001* has been done comparable by adding "the tax paid by companies"

2) The income concept in model calculation and *Tax Statistics 2001* differs.

3) The receivers of benefit are not comparable (or not available) in statistics.

4) The benefits are simulated in the national model (TUJA), but not in EUROMOD.

5) In Statistics the receivers are in the end of the year (or the time period differs otherwise).

6) In Statistics the disposable income is from *Income Distribution Statistics 2001* (Statistics Finland) and is on household level.

In TUJA "the imputed rent from own house" is subtracted (for comparability reason) from disposable income.

Most of the aggregate figures are quite close in the two models. The number of receivers of capital taxable income is clearly less in EUROMOD which is due to recent change made to the national model. Very small income for large number of people are now classified as capital income. This change is insignificant and is neither done in EUROMOD or in statistics. The earnings-related unemployment benefit is overestimated in the data, but not anymore in the simulated national model. Pensions are underestimated due to pensioners in institutes which are not included in the data. Comparing EUROMOD figures with the statistics the most significant difference is the level of social assistance which is overestimated in the data. The reason for other differences are mainly due to small income levels where the relative differences become easily large. The (general) housing benefit seems match quite well on the aggregate level, but the problems with it as well as with the simulated social assistance should be remembered.

5.2. Income distribution and poverty estimates

A new wave of Income Distribution Survey (IDS) is constructed every year. After this is done the Statistics Finland publishes income distribution estimates based on this new data (*Income Distribution Statistics*). The figures are regarded as “the official source” of these estimates. The income concepts of disposable income used by Statistics Finland and on the other hand by EUROMOD and the national model differs in some aspects. The imputed rent from own house is included in the income concept of Statistics Finland, but the real estate tax from “housing companies” is not included. These houses are formally owned by “the company” but in practise by individuals who in the end (indirectly) pay also the tax. In EUROMOD and in the national model the imputed rent and the total real estate tax are included in the disposable income concept.

The distribution estimates in 2001 are compared in table 6. The decile groups are formed by ranking the individuals according to the equivalised disposable income using the modified OECD equivalence scale. The deciles are thus based on individual equivalised disposable income, but otherwise the household disposable income is not equivalised¹. The figures are on monthly basis. Poverty rates are calculated using the equivalised disposable income below 60 % of median. In table 7 similar EUROMOD and national model figures are presented for 2003.

The means and income shares are very close in EUROMOD and in the national model, where nearly the same income concept is used. Differences in Gini coefficients and poverty rates are also quite small. This is consistent with the small differences in aggregate figures. The means of IDS data are a bit higher than in both models. An obvious explanation is the included imputed rent in IDS (higher income) and partly excluded real estate tax (lower taxes). The figures are, however, quite similar and consistent with model outputs.

The 2003 figures for EUROMOD and national model are also quite close though updating processes are different. In EUROMOD only the index adjustment is done while in TUJA also the sample weights have been adjusted.

¹ A calculation using this method was made by Statistics Finland for this purpose.

Table 6. Income distribution comparisons using EUROMOD, national model (TUJA) and *Income Distribution Statistics 2001*. Household level. Year 2001.

		EUROMOD 2001	TUJA 2001	IDS 2001
Gini coefficient		26,5	26,8	25,6
Decile group mean	1st	780	786	848
	2nd	1 121	1112	1 253
	3rd	1 432	1434	1 570
	4th	1 702	1700	1 866
	5th	1 940	1993	2 146
	6th	2 246	2225	2 386
	7th	2 457	2471	2 711
	8th	2 767	2809	3 026
	9th	3 175	3194	3 415
	10th	5 458	5544	5 627
		All	2 200	2 221
Share of income, %	1st	4,9	4,8	4,7
	2nd	6,1	6,1	6,1
	3rd	6,7	6,6	6,8
	4th	7,5	7,5	7,6
	5th	8,2	8,1	8,3
	6th	8,9	8,9	9,2
	7th	9,9	9,9	10,1
	8th	11,2	11,2	11,4
	9th	13,2	13,2	13,6
	10th	23,5	23,8	22,3
Poverty rate, %		11,1	11,4	10,8

Table 7. Income distribution comparisons using EUROMOD and national model (TUJA). Household level. Year 2003.

		EUROMOD 2003	TUJA 2003
Gini coefficient		26,9	27,2
Decile group mean	1st	810	819
	2nd	1 176	1 160
	3rd	1 520	1 559
	4th	1 819	1 814
	5th	2 103	2 133
	6th	2 374	2 391
	7th	2 677	2 659
	8th	2 974	3 040
	9th	3 445	3 452
	10th	5 805	5 949
		All	2 355
Share of income, %	1st	4,7	4,7
	2nd	6,0	6,0
	3rd	6,6	6,4
	4th	7,4	7,4
	5th	8,1	8,1
	6th	9,0	8,9
	7th	10,0	10,0
	8th	11,3	11,2
	9th	13,3	13,4
	10th	23,6	23,8
Poverty rate, %		12,2	12,9

According to the results in this chapter it seems reasonable to make the conclusion that the EUROMOD income levels, taxes, number of income receivers and taxpayers as well as the income distribution estimates are in most cases quite close with both statistics and national model outputs. This indicates that simulations on personal taxes and most of the benefits should give quite reliable results. However, the data restrictions with simulated housing benefit and social assistance must keep in mind.

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