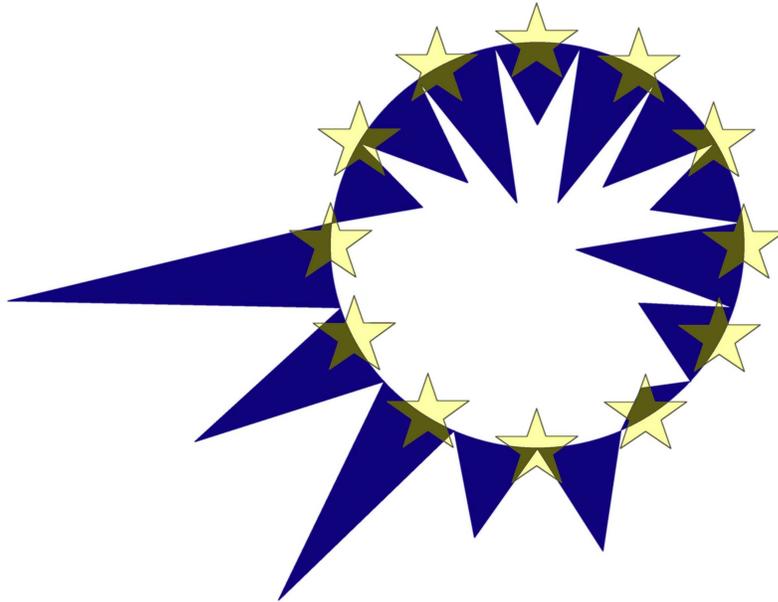# EUROMOD
COUNTRY REPORT

EUROMOD Country Report

LUXEMBOURG
2001 TAX-BENEFIT SYSTEM

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1. THE NATIONAL TAX BENEFIT SYSTEM

1.1 An overview

Next to, or, usually, instead of earned income (wages, profits, property income …) persons in Luxembourg may be entitled to earnings-replacing benefits, such as unemployment, maternity-cash, sickness-cash, invalidity, old-age, survivor, employment injuries and occupational diseases benefits. *These benefits are not simulated in EUROMOD.*

The family allowances, birth grants, special allowances for handicapped children, the allowance of the beginning of school, the education allowance and the maternity allowance compose the family benefits. *All theses allowances are simulated in EUROMOD.*

Next to the earnings-replacing benefits and the family benefits, social assistance benefits are granted to ensure a decent standard of living to the population and to protect individuals against poverty. *This is also simulated in EUROMOD.*

A special allowance for very heavy handicapped persons could be granted for seriously handicapped persons, who even after an appropriate medical treatment, training or other education measures and in spite of special equipment are not able to live without the assistance or permanent care of others. *These are also simulated in EUROMOD.*

Depending on the parent's or the student's taxable income, on the amount of the fees, on the number of dependent children, on the number of children at university, students receive student loans. *These are not simulated in EUROMOD.*

To partially finance these different benefits, taxes and social insurance contributions have to be paid. While sickness, invalidity, old-age, survivors benefits are financed by contributions plus State subsidy, a special tax finances unemployment benefits and the State finances maternity benefits. Contributions, taxes and State subsidy finance family allowances and State and other diverse financial resources finance social assistance benefits, special allowances for very heavy handicapped persons.

Employees and employers pay sickness (health insurance contribution) insurance contributions at an equal rate. The contribution rates differ depending on the occupation: white-collar workers, blue-collar workers, civil servants, pensioners, unemployed, persons receiving the social assistance benefits, self-employed. *These contributions are simulated in EUROMOD.*

Old-age, survivors, invalidity (pension insurance contribution) insurance contributions are paid at an equal rate by employees, employers and State (8 % for each of them: 24 % in total). Salaries, self-employed and unemployed people pay pensions insurance contributions. *While employee and employer pension contributions are simulated in EUROMOD, state contributions are not simulated.*

Accident insurance contributions are completely paid by the employer. *These are simulated in EUROMOD.*

Unemployment benefits is financed by taxation. The employment fund is financed by solidarity taxes from individuals (2,5 % of the tax on income) and legal persons and by a general annual contribution from the State. *The solidarity taxes from individuals are simulated.*

Family benefits contributions are paid by the State. *These are not simulated in EUROMOD.*

Since 1999, a long-term care contribution has been introduced to finance the dependency insurance. This contribution is paid by the earners of a professional income, by the beneficiaries of a replacement income and by the earners of income from the wealth. *While the contribution paid by the earners of a professional income and by the beneficiaries of a*

replacement income is simulated in EUROMOD, the contribution paid by the earners of income from the wealth is not simulated.

Taxable income is calculated taking into account the following gross incomes: business profits, income from farming and forestry, income from independent professions, income from dependent professions, pension income, income from capital, rental income, miscellaneous income. The different social contributions and other tax deductions are deducted from the gross income to calculate the taxable income. Some taxable incomes are exempted of tax. Taxpayers are divided into three classes depending on marital status and age. Income Tax is determined on the basis of a progressive rate, ranging from 14 % on taxable income in excess of 9 668 euros (390 000 LUF) up to 42 % on taxable income in excess of 33 614 euros (1 356 000 LUF) (16 income tax schedule). A tax credit of 892 euros/year (36 000 LUF/year) is accorded for dependent children. The number of dependent children multiplies this tax credit. An additional 2,5% of the tax payable is added as a contribution to the unemployment fund. *Most of the deductions and exemption could be simulated in EUROMOD, sometimes applying rough assumption but some deductions have not been simulated. The validation of aggregates (if statistics are available from the national contributions administration) will show us the robustness of this simulation.*

1.2 Specificity of the Luxembourg economy

As it was noted above, the validation of aggregates will certainly depend on the availability of some detailed statistics. Nevertheless, another problem will certainly appear taking the macroeconomics statistics, underlying the specificity of the national economy.
Around 35 % (in 2001) of workers in Luxembourg are not living in the country. We call them border workers (living in France, Belgium or Germany). All of them are taxed on their professional income and pay social contributions on the place they work, that means in Luxembourg. Next to the taxes they pay, they receive social and family benefits in accordance to the Luxembourgish system. They represent a certain weight in the tax-benefit system but are not represented in EUROMOD because the database is only composed by a representative sample of persons living in Luxembourg.
So, due to the fact that an important part of the public receipts and expenses are made up of money for non-residents, people who want to use the Luxembourgish part of EUROMOD have to be careful if they want to go to macro data.

2. DETAILED DESCRIPTION OF THE TAX-BENEFIT INSTRUMENTS THAT ARE MODELLED

2.1 Social Contributions

Contribution rate : health social contribution
reference date : 30 June 2001

	Rate			Part		Minimum basis of calculation	Maximum basis of calculation
				Employee – Self-employed	Employer – Pension aid fund		
In activity	1	2	3				
Wage-earner art.29.4a CAS (a)	5,2 %	0,24 %	5,44 %	2,72 %	2,72 %	SSM	5*SSM
Wage-earner art.29.4b CAS (b)	5,2 %	4,7 %	9,9 %	4,95 %	4,95 %	SSM	5*SSM
Other (c)	5,2 %	0 %	5,2 %	2,6 %	2,6 %	SSM	5*SSM
Self-employed	5,2 %	0,24 %	5,44 %	5,44 %	-	SSM	5*SSM
	Column 1 : contribution for benefits in kind Column 2 : contribution for cash-benefits Column 3 : total						
Retired	5,2 %			2,6 %	2,6 %	SSM+30%	5*SSM
Continued assurance	5,2 %			5,2 %	-	SSM	5*SSM
Unemployment	5,2 %			2,6 %	2,6 %	SSM	5*SSM

SSM : minimum social wage

(a) Wage-earner in the private sector continue to receive pay – imposed of the employer – for the month in which the disease occurs and for the following three months. After expiration of the following these period cash-benefits for illness are paid by the sickness-insurance –fund (white-collar).

(b) Cash-benefits pay by the sickness-insurance-fund from the first day of the disease (blue-collar).

(c) Civil servant continue to receive pay – imposed of the employer – during the length of the disease (civil-servant).

Contribution rate : pension social contribution, accident social contribution,
family social contribution, unemployment social contribution and long-term care social contribution
Reference date : 30 June 2001

	Rate	Part			Minimum basis of calculation	Maximum basis of calculation
		Insured	Employer	Authorities		
A. PENSION						
Wage-earner (except civil-servant)	24 %	8 %	8 %	8 %	SSM	5*SSM
Wage-earner (civil-servant)	24 %	8 %	8 %	8 %	SSM	5*SSM
Self-employed	24 %	16 %	-	8 %	SSM	5*SSM
Continued insurance	24 %	16 %	-	8 %	SSM	5*SSM
B. ACCIDENT						
Industrial section	Rate varies from 0,64 % to 6,00 %				SSM	5*SSM
Agricultural and forestry section	15,37 €/ha/year	Completely paid by the employer			-	-
C. FAMILY						
Wage-earner : public sector	1,7 %	-	1,7 %	-	SSM	5*SSM
Wage-earner : private sector	1,7 %	-	-	1,7 %	SSM	5*SSM
Self-employed	0,6 %	-	-	0,6 %	(a)	-
Farmer	0,6 %	-	-	0,6 %	(a)	5*SSM
D. UNEMPLOYMENT	Financed by tax					
E. LONG-TERM CARE	1,0%	1,0% on professional income, replacement income and wealth (b)				

(a) for income less than 8 260,65 €/year, no contribution isdue.

(b) the monthly contribution base is reduced by 25% of the minimum social wage for the persons who receive a salary or a replacement income from the Social Security.

2.1.1 Health Insurance Contribution

2.1.1.1 Employee, Pensioner and Unemployed Health Insurance Contribution (EESIChi_LU)

2.1.1.1.1. Civil Servant Employee Health Insurance Contribution (modules 1 and 2)

Health contribution rate for civil servant employee is equal to 2,6 % *(rate1 = 0.026)* based on the gross employment Income of the employee *(Base_IL=empY)*.
Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).
For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the health contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.
A civil servant employee *(IsCivSrv=1)* is defined as somebody who is employed by the state administration or the communal administration or the national railways company. The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.1.1.2. Blue Collar (non-Civil Servant) Employee Health Insurance Contribution (modules 3 and 4)

Health contribution rate for blue-collar employee is equal to 4,95 % *(rate1 = 0.0495)* based on the gross employment Income of the employee *(Base_IL=empY)*.
Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).
For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the health contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.
A blue collar (non civil servant) employee *(IsBlueColl=1 and IsCivSrv=-1)* is defined as an employee (coEMPST=3) who's a craft and trades worker, a plant and machine operator or someone who has got an elementary occupation (coOCC>6) and who is not a civil servant (coCIVSRV=0). The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.1.1.3. White Collar (non-Civil Servant) Employee Health Insurance Contribution (modules 5 and 6)

Health contribution rate for white-collar employee is equal to 2,72 % *(rate1 = 0.0272)* based on the gross employment Income *(Base_IL=empY)*.
Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).
For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month (up_base_limit = *6451.057 €/month*), up to this base the health contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.
A white collar employee (someone who receives employment income and who's not a civil servant or not a blue collar employee) is defined as an employee (coEMPST=3) who's in the armed forces or a senior official and manager or a professional or a technician and associate

professional or a clerk or a service and sales worker or a skilled agricultural (coOCC<=6) and who is not a civil servant (coCIVSRV=0).
The relevant tax unit is the individual *(TAX_UNIT=individual)* .

2.1.1.1.4. Pensioners' "Employee" (i.e., own) Health Insurance Contribution (modules 7)

Health contribution rate for pensioner "Employee" is equal to 2,6 % *(rate1 = 0.026)* based on the gross individual pension income *(Base_IL = penY)*.
Pension income *(penY)* is composed by individual gross disabled pension (luPENDIS) +early retirement pension (luPENERP) +private sector retirement pension (luPENPRV) + public sector retirement pension (luPENPUB) + private sector reversion pension (luPENWPR) + public sector reversion pension (luPENWPU). The EUROMOD model includes also the Gross Private pension benefit payments *(*coPRVPEN) in the pension income (penY) but it is not applicable for Luxembourg.
The maximum base is 5 times the minimum social wage per month (up_base_limit = *6451.057 €/month*).
A pensioner "Employee" is defined as somebody who receives one of the five pension incomes mentioned above. The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.1.5. Unemployed "Employee" (i.e., own) Health Insurance Contribution (modules 9)

Health contribution rate for Unemployed "Employee" is equal to 2,6 % *(rate1 = 0.026)* based on the individual gross unemployment allowances *(Base_IL = unempY)*.
Unemployed allowances *(unempY)* are only composed by Unemployment Benefit (luUNEMPY).
The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*.
An unemployed "employee" is defined as somebody who receives unemployment allowance. The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.2 Employer (also for Pensioners and Unemployed) Health Insurance Contribution (ERSIChi_LU)

2.1.1.2.1. Civil Servant Employer Health Insurance Contribution(modules 1 and 2)

Health contribution rate for civil servant employer is equal to 2,6 % *(rate1 = 0.026)* based on the gross employment Income of the employee *(Base_IL=empY)*.
Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).
For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the health contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.
A civil servant employee *(*IsCivSrv=1*)* is defined as somebody who is employed by the state administration or the communal administration or the national railways company. The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.2.2. Blue Collar (non-Civil Servant) Employer Health Insurance Contribution (modules 3 and 4)

Health contribution rate for blue-collar employee is equal to 4,95 % *(rate1 = 0.0495)* based on the gross employment Income of the employee *(Base_IL=empY)*.
Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).
For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month *(up_base_limit =6451.057 €/month)*, up to this base the health contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.
A blue collar (non civil servant) employee *(IsBlueColl=1 and IsCivSrv=-1)* is defined as an employee (coEMPST=3) who's a craft and trades worker, a plant and machine operator or someone who has got an elementary occupation (coOCC>6) and who is not a civil servant (coCIVSRV=0). The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.1.2.3. White Collar (non-Civil Servant) Employer Health Insurance Contribution (modules 5 and 6)

Health contribution rate for white-collar employer is equal to 2,72 % *(rate1 = 0.0272)* based on the gross employment Income *(Base_IL=empY)*.
Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).
For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month (up_base_limit = *6451.057 €/month*), up to this base the health contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.
A white collar employee (someone who receives employment income and who's not a civil servant or not a blue collar employee) is defined as an employee (coEMPST=3) who's in the armed forces or a senior official and manager or a professional or a technician and associate professional or a clerk or a service and sales worker or a skilled agricultural (coOCC<=6) and who is not a civil servant (coCIVSRV=0).
The relevant tax unit is the individual *(TAX_UNIT=individual)* .

2.1.1.2.4. Pensioners' "Employer" (i.e., own) Health Insurance Contribution (modules 7, 8 and 9)

Health contribution rate for pensioner "Employer" is equal to 2,6 % *(rate1 = 0.026)* based on the gross individual pension income *(Base_IL = penY)*.
Pension income *(penY)* is composed by individual gross disabled pension (luPENDIS) +early retirement pension (luPENERP) +private sector retirement pension (luPENPRV) + public sector retirement pension (luPENPUB) + private sector reversion pension (luPENWPR) + public sector reversion pension (luPENWPU). The EUROMOD model includes also the Gross Private pension benefit payments *(coPRVPEN)* in the pension income (penY) but it is not applicable for Luxembourg.
The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)* and the minimum base is 130 % of the minimum social wage *(lo_base_limit=1677.274 €/month)*. If the gross individual pension income is less than 1677.274 €/month, the "employer", that means the pension fund, must pay an 'added' health

contribution rate (2,6 %) based on the difference between 130 % of the minimum social wage and the pension income.

A pensioner "Employee" is defined as somebody who receives one of the five pension incomes mentioned above. The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.2.5. Unemployed "Employer" (i.e., own) Health Insurance Contribution (modules 10)

Health contribution rate for Unemployed "Employer" is equal to 2,6 % *(rate1 = 0.026)* based on the individual gross unemployment allowances *(Base_IL = unempY).*

Unemployed allowances *(unempY)* are only composed by Unemployment Benefit (luUNEMPY).

The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month).*

An unemployed "employee" is defined as somebody who receives unemployment allowance. The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.3 Self-Employed Health Insurance Contribution (SESIChi_LU)

Health contribution rate for Self-employed is equal to 5,44 % *(rate1 = 0.0544)* based on the self-employment income *(Base_IL = selfempY).*

If self-employment is the only activity or the main activity, the minimum base is the minimum social wage *(lo_base_lt = 1290.211 €/month).*

The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month).*

If self-employement is the secondary activity (to define the secondary activity the following assumption has been made : a self-employment activity is defined as a secondary activity if the income of an other activity is higher than the income of self-employment) and if the income of the self-employment activity is less than 430.07 €/month*(threshold = 430.07),* 1/3 of the minimum social wage, no health contribution has to be paid. The maximum base is 5 times the minimum social wage per month *(up_base_limit =6451.057 €/month).*

The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.4 "Employee" (i.e., own) Health Insurance Contribution on Social Assistance (EESIChi_SA_LU)

Health contribution rate for "employee" on social assistance is equal to 2,6 % *(rate1 = 0.026)* based on the social assistance benefits *(Base_IL = saY).*

Social assistance benefits *(saY)* are only composed by the Revenu Minimum Garanti (lu_sben_SA).

The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month).*

The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.1.5 "Employer" Health Insurance Contribution on Social Assistance (ERSIChi_SA_LU)

Health contribution rate for "employer" on social assistance is equal to 2,6 % *(rate1 = 0.026)* based on the social assistance benefits *(Base_IL = saY).*

Social assistance benefits *(saY)* are only composed by the Revenu Minimum Garanti (lu_sben_SA).

The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month).*

The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.2 Pension Contribution (co_pi_eesic)

2.1.2.1 Employee and Unemployed Pension Insurance Contribution (EESICpi_LU)

2.1.2.1.1. Non Civil Servant (modules 1 and 2)

Pension contribution for non civil servant employee is equal to 8 % *(rate1 = 0.08)* based on the gross employment Income *(Base_IL=empY).*

Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).

For a full time worker (FullTimeHrs = 40) the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the pension contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.

A non civil servant employee *(*NotCivSrv=1*)* is defined by the variable (coEMPST=1) who's not civil servant.

The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.2.1.2. Civil Servant (modules 3 and 4)

Pension contribution for civil servant is equal to 8 % *(rate1 = 0.08)* based on the gross employment Income *(Base_IL=empY).*

Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).

For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the pension contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.

A civil servant employee *(IsCivSrv=1)* is defined as somebody who is employed by the state administration or the communal administration or the national railways company.

The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.2.1.3. Unemployed "Employee" (i.e., own) Pension Insurance Contribution (module 5)

Pension contribution rate for Unemployed "Employee" is equal to 8 % *(rate1 = 0.08)* based on the individual gross unemployment allowances *(Base_IL = unempY).*

Unemployed allowances *(unempY)* are only composed by Unemployment Benefit (luUNEMPY).

The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*.

An unemployed "employee" is defined as somebody who receives unemployment allowance.
The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.2.2 EmployeR (also for Unemployed) Pension Insurance Contribution (ERSICpi_LU)

2.1.2.2.1. Non Civil Servant (modules 1 and 2)

Pension contribution for non civil servant employer is equal to <u>8 %</u> *(rate1 = 0.08)* based on the gross employment Income *(Base_IL=empY)*.

Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).

For a full time worker (FullTimeHrs = 40) the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the pension contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.

A non civil servant employee *(*`NotCivSrv=1`*)* is defined by the variable (coEMPST=1) who's not civil servant.

The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.2.2.2. Civil Servant (modules 3 and 4)

Pension contribution for civil servant employer is equal to <u>8 %</u> *(rate1 = 0.08)* based on the gross employment Income *(Base_IL=empY)*.

Employment income *(empy)* is composed by individual gross income from employment (coEMPY) plus individual gross maternity payments (coMATERY).

For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*, up to this base the pension contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.

A civil servant employee *(IsCivSrv=1)* is defined as somebody who is employed by the state administration or the communal administration or the national railways company.

The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.2.2.3. Unemployed "Employer" (i.e., own) Pension Insurance Contribution (modules 5)

Pension contribution rate for Unemployed "Employer" is equal to <u>8 %</u> *(rate1 = 0.08)* based on the individual gross unemployment allowances *(Base_IL = unempY)*.

Unemployed allowances *(unempY)* are only composed by Unemployment Benefit (luUNEMPY).

The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*.

An unemployed "employee" is defined as somebody who receives unemployment allowance.
The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.2.3 Self-Employed' Pension Insurance Contribution (SESICpi_LU)

Pension contribution rate for Self-employed is equal to <u>16 %</u> *(rate1 = 0.16)* based on the self-employment income *(Base_IL = selfempY).*
If self-employment is the only activity or the main activity, the minimum base is the minimum social wage (lo_base_lt = 1290.211 €/month).
The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month).*

If self-employment is the secondary activity (to define the secondary activity the following assumption has been made : a self-employment activity is defined as a secondary activity if the income of an other activity is higher than the income of self-employment) and if the income of the self-employment activity is less than 430.07 €/month*(threshold = 430.07),* 1/3 of the minimum social wage, no pension contribution has to be paid. The maximum base is 5 times the minimum social wage per month *(up_base_limit =6451.057 €/month).*
The relevant tax unit is individual *(TAX_UNIT=individual).*

2.1.3 Long term care insurance contribution (lu_eesic_ltc)

2.1.3.1 Employee, Pensioner and Unemployed Long Term Care Insurance Contributions (EESICltc_LU)

Long term care insurance contribution ("assurance dépendance" in French) has been implemented in 1999.
For employees, pensioners and unemployed persons, long term care contribution rate is equal to <u>1 %</u> *(rate1 = 0.01)* based on the professional and replacement income less a disregarded amount *(Base_IL = empY-disreg).* The maximum disregarded amount is equal 25% of the social minimum wage *(disregard_amt= 322.72 €/month).*

2.1.3.2 Social Assistance recipients Long Term Care Insurance Contributions (EESICltc_SA_LU)

For social assistance recipients, long term care contribution rate is equal to <u>1 %</u> *(rate1 = 0.01)* based on the social assistance income less a disregarded amount *(Base_IL = saY-disreg).* The maximum disregarded amount is equal 25% of the social minimum wage *(disregard_amt= 322.72 €/month).*

2.1.3.3 Self-employed and capital income Long Term Care Insurance Contributions (SESICltc_LU)

For self-employed, long term care contribution rate is equal to <u>1 %</u> *(rate1 = 0.01)* based on the self-employed income *(Base_IL = selfempY).* No disregarded amount.

For capital income, long term care contribution rate is equal to <u>1 %</u> *(rate1 = 0.01)* based on the capital income *(Base_IL = invY+propY).* If the capital income is less than 24.789 €/month, no contribution is due*(threshold = 24.789).*

2.1.4 Accident insurance contribution (co_di_ersic)

2.1.4.1 EmployeR Disability (Accident) Insurance Contribution (ERSICdi_LU)

Accident insurance contribution is exclusively payable by employers. The accident insurance rate varies from 0,64 % to 6 % and the rate is depending on the activity domain. In reality, 22 different rates exist.

Due to the fact that these 22 different rates could not be simulated exactly in EUROMOD, the choice was taken that a different rate will be calculate for each different NACE code. The following rates are an approximation of the reality.

NACE	Employer accident insurance contribution rate
NACE1_rt	0.0147
NACE2_rt	0.0143
NACE3_rt	0.0155
NACE4_rt	0.02405
NACE5_rt	0.015467
NACE6_rt	0.037229
NACE7_rt	0.0147
NACE8_rt	0.0133
NACE9_rt	0.0064
NACE10_rt	0.01105

The base of the caculation of the accident insurance contribution is the employment income (empY).

For a full time worker *(FullTimeHrs = 40)* the maximum base is 5 times the minimum social wage *(up_base_limit = 6451.057 €/month)*, up to this base the pension contribution rate is equal to 0 %. For a part time worker, the maximum base is proportional to the number of hours worked.

The relevant tax unit is individual *(TAX_UNIT=individual)*.

2.1.4.2 Self-employed Disability (Accident) Insurance Contribution (SESICdi_LU)

Non farmers :

Accident contribution rate for Self-employed (excluded farmers) rate varies from 0,64 % to 6 % and the rate is depending on the activity domain. In reality, 22 different rates exist.

Due to the fact that these 22 different rates could not be simulated exactly in EUROMOD, the choice was taken that a different rate will be calculate for each different NACE code. The following rates are an approximation of the reality.

NACE	Self-employed accident insurance contribution rate
NACE1_rt	0.0147
NACE2_rt	0.0143
NACE3_rt	0.0155
NACE4_rt	0.02405
NACE5_rt	0.015467
NACE6_rt	0.037229
NACE7_rt	0.0147
NACE8_rt	0.0133
NACE9_rt	0.0064
NACE10_rt	0.01105

The base of the caculation of the accident insurance contribution is the self-employed income *(selfempY)*.
The maximum base is 5 times the minimum social wage per month *(up_base_limit = 6451.057 €/month)*.

2.1.5 Family benefits

2.1.5.1 Maternity Allowance ("allocation de maternité") (lu_sben_MatB)

Eligibility :
This allowance is given to the mother of a newborn child *(ge_nOwnDepCh_inHH =2* and *IsFemale1 =2* with *ge_nOwnDepCh_inHH_lt=1)* who doesn't receive any other earnings (wage, maternity cash benefits) during the 8 weeks before the birth and the 8 weeks after the birth *(ge_inc=-1* with *ge_inc_lt=-1* and *ge_inc_IL=materY)*.
The relevant tax unit for eligibility is parent + newborn *(TAX_UNIT= parent+newborn)*.
It's also due during 8 weeks in case of adoption of a child who is less than 6 years old (not simulated).

Calculation of payment :
The amount of this allowance is 175.76 € per weekpayable over a period of 16 weeks *(SingPay = 2812.104)*.
This Benefit is only received once, regardless how many children *(es_htu=1)*.
The relevant tax unit is parent + newborn *(TAX_UNIT= parent+newborn)*.

2.1.5.2 Prenatal-; Postnatal-; and Child Birth Allowance ("allocation prenatale"; "allocation postnatale"; allocation de naissance") (lu_sben_cbb)

Eligibility :
This allowance is given to the mother of a newborn child.
(TAX_UNIT = CB_family and ge_nch_lt=1) is eligible for this allowance.

Calculation of payment :

The amount of this allowance is 1576.528 € paid in three times. Two third when the child was born (*es_ch_age1=0.33* and *es_ch_age1_min=0* and *es_ch_age1_max=0* ; *es_ch_age3=0.33* and *es_ch_age3_min=0* and *es_ch_age3_max=0*) and one third when he is 2 years old (es_ch_age2=0.33 and es_ch_age2_min=2 and es_ch_age2_max=0).

2.1.5.3 Education Allowance ("allocation d'éducation") (lu_sben_EduB)

Education allowance for the parent who educates a child under 2 years and either does not have a regular income or whose income, cumulated with that of the husband / wife does not exceed a certain amount. This amount is linked to the number of dependent child in the household. The allowance is paid from the first day of the month following the end of the maternity leave or from the first day of the month following the end of the maternity allowance rights until the first day of the month following the second birthday of the child. This allowance is maintained until the fourth birthday when three or more dependent children are educated in the household or until the fourth birthday of a handicapped child.
Half of the amount of this allowance can be asked if a person reduces the half time of his working time, independently from the high of the income.

For practical reasons, this benefit is simulated under 4 different policies.

2.1.5.3.1 Education Allowance. 1: not working ("allocation d'éducation"); (SBEN_EduB1_LU)

The first policy simulates the case of families in which the person who educates the child(ren) doesn't work.

- <u>For one child</u>

Eligibility :
- number of child must be one *(ge_nch1=1 ge_nch1_lt=1)* and only one *(ge_nch2=-1 and ge_nch2_lt=2)*
- not eligible if the child benefits unit*(TAX_UNIT=CB_family)* receives income *(ge_inc1=-1 and ge_inc1_lt=1 and ge_inc1_IL =seminet_empY)*. The targeted income is the semi-net employment income, without social contributions.

Calculation of payment :
The base amount is 439.391 €/month
The amount is only paid once (regardless how many children) *(SBEN_amt_max= 439.391 and SBEN_max=1)*.
At least one child must be less than 2 years old *(es_ch_age1=1 and es_ch_age1_min=0 and es_ch_age1_max=1)* or at least one handicapped child must be less than 4 years old *(es_DisCh_age1=1 and es_disch_age1_min=2 and es_disch_age1_max=3)*.

<u>For two children :</u>

Eligibility :
- number of child must be two *(ge_nch1=1 ge_nch1_lt=2)* and only two *(ge_nch2=-1 and ge_nch2_lt=3)*
- not eligible if the child benefits unit*(TAX_UNIT=CB_family)* receives income *(ge_inc1=-1 and ge_inc1_lt=1 and ge_inc1_IL =seminet_empY)*. The targeted income is the semi-net employment income, without social contributions.

Calculation of payment :
The base amount is 439.391 €/month
The amount is only paid once (regardless how many children) *(SBEN_amt_max= 439.391 and SBEN_max=1).*
At least one child must be less than 2 years old *(es_ch_age1=1 and es_ch_age1_min=0 and es_ch_age1_max=1)* or at least one handicapped child must be less than 4 years old *(es_DisCh_age1=1 and es_disch_age1_min=2 and es_disch_age1_max=3).*

At least three children :

Eligibility :
- number of child must be at least three *(ge_nch1=1 ge_nch1_lt=3)*
- not eligible if the child benefits unit*(TAX_UNIT=CB_family)* receives income *(ge_inc1=-1 and ge_inc1_lt=1 and ge_inc1_IL =seminet_empY).* The targeted income is the semi-net employment income, without social contributions.

Calculation of payment :
The base amount is 439.391 €/month
The amount is only paid once (regardless how many children) *(SBEN_amt_max= 439.391 and SBEN_max=1).*
At least one child must be less than 4 years old *(es_ch_age1=1 and es_ch_age1_min=0 and es_ch_age1_max=3).*

2.1.5.3.2 Education Allowance. 2: income dependent ("allocation d'éducation") (SBEN_EduB2_LU)

The second policy simulates the case of both parents receiving income, in this case the allowance is income dependent.

- For one child

Eligibility :
number of child must be one *(ge_nch1=1 ge_nch1_lt=1)* and only one *(ge_nch2=-1 and ge_nch2_lt=2)*

Calculation of payment :
The allocation is granted if the semi-net income (professional income or replacement income minus social contribution) of the family is less than 3870.634 €/month*(Singpay= 3870.634).* It's a differential amount *(Singpay- Means_inc_il)* but the maximum amount of this allowance is 439.391 €/month*(SBEN_amt_max= 439.391)* regardless the number of children. At least one child must be under 2 years *(es_ch_age1=1 and es_ch_age1_min=0 and es_ch_age1_max=1)* or at least one handicapped child must be under 4 *(es_DisCh_age1=1 and es_disch_age1_min=2 and es_disch_age1_max=3).*

- For two child

Eligibility :
number of child must be two *(ge_nch1=1 ge_nch1_lt=2)* and only two *(ge_nch2=-1 and ge_nch2_lt=3)*

Calculation of payment :
The allocation is granted if the semi-net income (professional income or replacement income minus social contribution) of the family is less than 5160.845 € /month*(Singpay= 5160.845)*. It's a differential amount *(Singpay- Means_inc_il)* but the maximum amount of this allowance is 439.391 €/month*(SBEN_amt_max=439.391)* regardless the number of children. At least one child must be under 2 years *(es_ch_age1=1 and es_ch_age1_min=0 and es_ch_age1_max=1)* or at least one handicapped child must be under 4 years *(es_DisCh_age1=1 and es_disch_age1_min=2 and es_disch_age1_max=3)*.

- <u>At least three children</u>

Eligibility :
number of child must be three or more *(ge_nch1=1 ge_nch1_lt=3)*.

Calculation of payment :
The allocation is granted if the semi-net income (professional income or replacement income minus social contribution) of the family is less than 6451.057 €/month*(Singpay=6451.057)*. It's a differential amount *(Singpay- Means_inc_il)* but the maximum amount of this allowance is 439.391 €/month*(SBEN_amt_max=439.391)* regardless the number of children. At least one child must be under 4 years *(es_ch_age1=1 and es_ch_age1_min=0 and es_ch_age1_max=3)*.

2.1.5.3.3 Working Hours Dependent Education Allowance ("allocation d'éducation"); < 3 children (SBEN_EduB3_LU)

The following hypothesis is made : if a mother of a young child works part-time we suppose that she has reduced her working time for the education of her child.

Eligibility :
At least one child *(ge_nch1=1 and ge_nch1_lt=1)* but less than 3 years old (otherwise EduB4 applies) *(ge_nch2=-1 and ge_nch2_lt=3)*.
Not eligible if anyone in tax unit already receives any other EduB *(tubenelig=-1 and tubenelig_name= lu_sben_EduB)*

Calculation of payment :
The base amount is 219.70 €/month, half of the fullallowance *(SingPay=439.391)*.

At least one child must be under 2 years *(es_lu_EduB_maxage=1)* or one disabled child must be under 4 years *(es_lu_EduB_dismaxage=3)* and maximum working hours to still count as part-time is 20 hours *(es_lu_EduB_Ptmaxhrs=20)*

2.1.5.3.4 Working Hours Dependent Education Allowance ("allocation d'éducation"); >= 3 children (SBEN_EduB4_LU)

Eligibility :
At least three children *(ge_nch1=1 and ge_nch1_lt=3)*.
Not eligible if anyone in tax unit already receives any other EduB *(tubenelig=-1 and tubenelig_name= lu_sben_EduB)*

Calculation of payment :
The base amount is 219.70 €/month, half of the fullallowance *(SingPay=439.391)*.

At least one child must be under 4 years *(es_lu_EduB_maxage=3)* or one disabled child must be under 4 years *(es_lu_EduB_dismaxage=3)* and maximum working hours to still count as part-time is 20 hours *(es_lu_EduB_Ptmaxhrs=20)*.

2.1.5.4 Annual Beginning of School Allowance ("Allocation de Rentrée Scolaire") (lu_sben_SchoolB)

Allowance at the beginning of school (allocation de rentrée scolaire) is given for children over 6 years.
The amounts of the allowance are dependent on the age and the number of children in the tax-unit.

For practical reasons, this benefit is simulated under 3 different policies.

2.1.5.4.1 Annual Beginning of School Allowance ("Allocation de Rentrée Scolaire") - 1 child (SBEN_SchoolB1_LU)

Annual beginning of school allowance for a group of one child.

Eligibility :
Eligible if exactly one child *(ge_nch=le_nch=2 and ge_nch_lt=le_nch_lt=1)*.
At least one person in unit must be eligible for unit to be eligible *(SBEN_elig_type=2)* and the tax-unit is CB_family.

Calculation of payment :
The amount for a child between 6 and 11 years old is 102.503 €/year.
The amount for a child more than 11 years old is 146.45 €/year.

The "Base" amount which is multiplied with resulting equivalence scale is equal to 102.503 €/year*(SingPay=102.503)*.
For a child between 6 and 11 years old the equivalence scale is equal 1 *(es_ch_age1=1 and es_ch_age1_min=6 and es_ch_age1_max=11)*.
For a child more than 11 years old the equivalence scale is equal 1.4288 (146.45/102.503) *(es_ch_age2=1.4288 and es_ch_age2_min=12 and es_ch_age1_max=120)*.

2.1.5.4.2 Annual Beginning of School Allowance ("Allocation de Rentrée Scolaire") - 2 children (SBEN_SchoolB2_LU)

Annual beginning of school allowance for a group of two children.

Eligibility :
Eligible if exactly two children *(ge_nch=le_nch=2 and ge_nch_lt=le_nch_lt=2)*.
At least one person in unit must be eligible for unit to be eligible *(SBEN_elig_type=2)* and the tax-unit is CB_family.

Calculation of payment :
The amount for a child between 6 and 11 year old is 175.756 €/year.
The amount for a child more than 11 year old is 219.68 €/year.

The "Base" amount which is multiplied with resulting equivalence scale is equal to 175.756 €/year*(SingPay=175.756)*.
For a child between 6 and 11 years old the equivalence scale is equal 1 *(es_ch_age1=1 and es_ch_age1_min=6 and es_ch_age1_max=11)*.
For a child more than 11 years old the equivalence scale is equal 1.25 (219.68/175.756) *(es_ch_age2=1.25 and es_ch_age2_min=12 and es_ch_age1_max=120)*.

2.1.5.4.3 Annual Beginning of School Allowance ("Allocation de Rentrée Scolaire") - >2 children (SBEN_SchoolB3_LU)

Annual beginning of school allowance for a group of three or more children.

Eligibility :
Eligible if three or more children *(ge_nch=1 and ge_nch_lt=3)*.
At least one person in unit must be eligible for unit to be eligible *(SBEN_elig_type=2)* and the tax-unit is CB_family.

Calculation of payment :
The amount for a child between 6 and 11 year old is 248.984 €/year.
The amount for a child more than 11 year old is 292.91 €/year.

The "Base" amount which is multiplied with resulting equivalence scale is equal to 248.984 €/year*(SingPay=248.984)*.
For a child between 6 and 11 years old the equivalence scale is equal 1 *(es_ch_age1=1 and es_ch_age1_min=6 and es_ch_age1_max=11)*.
For a child more than 11 years old the equivalence scale is equal 1.176424 (292.91/248.984) *(es_ch_age2=1.176424 and es_ch_age2_min=12 and es_ch_age1_max=120)*.

2.1.5.5 Child benefit ("family benefit")(SBEN_CB_LU)

Child benefits are depending on the rank and on the age of the child.

Eligibility :
Eligible if number of children greater than 0 *(ge_nch=1 and ge_nch_lt=1)*.
At least one person in unit must be eligible for unit to be eligible *(SBEN_elig_type=2)*.
The tax unit is defined by CB_family.

Calculation of payment :
"Base" amount which is multiplied with resulting equivalence scale is equal 143.381 €/month *(SingPay=143.381)*.

- depending on the rank :
For the first child *(es_ch_parity1_lt=1)* the base amount is multiplied by 1 *(es_ch_parity1=1=143.381/143.381)*, so child benefit for a one child family is equal 143.381 €/month.
For the second child *(es_ch_parity2_lt=2)* the base amount is multiplied by 1.43914246196404 *(es_ch_parity2=1.43914246196404=(349.73-143.381)/ 143.381)*, so child benefit for a family of two children is equal 349.73 LUF/month.

For the third child *(es_ch_parity3_lt=3)* the base amount is multiplied by 2.11428 *(es_ch_parity3= 2.11428=(653.01-349.73)/143.38)*, so child benefit for a family of three children is equal 653.01 €/month.
For each subsequent child *(es_ch_parity4_lt=20)* the base amount is multiplied by 2.1139 *(es_ch_parity4= 2.1139=(955.96-653.01)/143.381)*, so child benefit for a family of four or more children is equal 955.96 €/month + (303.14 €/month multiplied by (number of children minus 4)).

- depending on the age :
For a child aged between 6 and 11 years *(es_ch_age1_min=6 and es_ch_age1_max=11)* a supplement of 14.65 €/month is given*(es_ch_age1= 0.1020=14.65/143.81)*.
For a child aged 12 or more *(es_ch_age2_min=12 and es_ch_age2_max=130)* a supplement of 43.96 €/month is given*(es_ch_age2= 0.3064=43.96/143.81)*.

The relevant tax unit is CB_family.

2.1.5.6 Handicapped Child Benefit ("allocation speciale supplementaire") (SBEN_hcB_LU)

A supplementary allowance of 143.381 €/month is duefor each child under 18 with an insufficient or permanent reduction of at least 50 % of physical or mental ability by comparison with that of a child of the same age. Maintenance without an age limit if the child is unable to care for itself unless in receipt of a benefit from the national solidarity fund or another social security body.

Eligibility :
Eligible if number of children greater than 0 *(ge_nch=1 and ge_nch_lt=1)*.
At least one person in unit must be eligible for unit to be eligible *(SBEN_elig_type=2)*.
The tax unit is defined by HCB_family.

Calculation of payment :
"Base" amount which is multiplied with resulting equivalence scale is equal 143.381 €/month *(SingPay=143.381)*.
This allowance is given for each handicapped dependent child (es_DisCh=1).
The relevant tax unit is HCB_family.

2.1.6. Seriously Disabled Persons ("Allocation Spéciale pour personnes handicapées")(SBEN_sdpB_LU)

For seriously handicapped persons who are unable to live without the assistance of a third party, a special allowance is available, which is not income dependent. The main conditions of eligibility are the residence in Luxembourg for a minimum period of 10 years. This allowance could be asked for handicapped children from three years, in this case the residence condition is asked for one of the two parents.
The amount of this allowance is equal 263.63 €/month to 18 years and 527.269 €/month over this age.

Be careful :
We must signal that this simulation is quite rough. The definition of an handicapped person we use in this simulation is the one issue from a response of the questionnaire from whom the

database is built. The handicapped is self-defined. To obtain this allocation a medical certificate must be established by a professional.

2.1.7 Social Assistance ("Revenu Minimum Garanti") (SBEN_SA_LU)

To ensure a decent standard of living to the population and to protect individuals against poverty the law of 26 July 1986, revised by the law of 29 April 1999 has established the Revenu Minimum Garanti (RMG). The general conditions to be eligible for the RMG are following :
- residence : persons resident on Luxembourg territory and having resided in the country at least five years during the last 20 years.
- Age : with effect from 25 years; exceptions for persons unable to work or looking after a child or an invalid.
- Be available on the labour market and accept an appropriate employment assigned by the labour authorities ; exception for sick persons, old persons, person who are looking after a child or an invalid.

The domestic unit for calculation of resources : de facto community of persons living under the same roof and obviously disposing of a common budget.

The resources taken into account : the entire gross revenue, possessions and replacement of supplementary social security benefits (excluding family allowances and maternity benefits). Revenues from employment, replacement benefits of social security and legally due alimony are exempted up to one fifth of the global guaranteed revenue.

The guaranteed amounts for a person living alone is equal 919.07 €/month

For the second adult it's equal 459.53 €/month

For each other adult 262.92 €/month

For each dependent child 83.64 €/month.

For the calculation, a difference is made between households who pay a rent and the other one.

That's why we have modules that concern only households who pay a rent and modules that concern the other one.

    - For households who pay no rent :

Eligibility : (co_SBEN_Elig module)
Eligible if 25 years or older *(ge_age1=1 and ge_Age1_Lt=25)*
Eligible if anyone in unit is disabled *(TUDisabled=1)*
Eligible if at least one child younger than 27 *(ge_nch_age1=1 and ge_nch_age1_lt=1 and ge_nch_age1_min=0 and ge_nch_age1_max=26)*
Not eligible if less than 5 years in Luxembourg *(lu_le_TIMELX=-1 and lu_le_TIMELX_lt=4)*
Eligible if no rent pay *(ge_var1=-1 and ge_var1_name=coRENT and ge_var1_lt=1)*
At least one person needs to be eligible in the tax unit *(SBEN_elig_type=2)* and the tax unit is the household *(TAX_UNIT = household)* .

Computation of the amount to be disregarded in computing means : (co_SBEN_Disregard module)
Income, such as professional income, replacement income, education allowance and maternity allowance are disregarded up to 20 % of the amount of the social assistance *(disregard_il=SA_DisregBase).*

But, this amount cannot be greater than 20% of the minimum income, depending on the composition of the family.
For the head of tax_unit : 183.813 €/month *(disregard_amt= 183.813 and es_htu = 1)*
For the second adult : 91.91 €/month*(es_ndepad_age1 = 0.5 and es_ndepad_age1_minnum= 2 and es_ndepad_age1_maxnum=2 and es_ndepad_age1_min =30 and es_ndepad_age1_max =130).*
For each other adult : 52.58 €/month*(es_ndepad_age2= 0.2861 and es_ndepad_age2_minnum=3 and es_ndepad_age2_maxnum =20 and es_ndepad_age2_min=30 and es_ndepad_age2_max = 130)*
For each dependent child : 16.73 €/month*(es_ch= 0.0910)*

Disregard Adjustment (lu_SBEN_DisregAdj module):
Maintenance income is disregarded too if children in unit *(MaintY_IL= MaintY)* and professional income from a child less than 25 years old is disregarded too *(ChildY_IL= earnings)* up to the maximum amount given to the first adult *(ssm = 919.065).*

Calculation of the maximum benefits that could be allowed to the household depending on its composition (co_SBEN_MaxCalc module)
For the head of tax_unit : 919.065€/month *(SingPay= 919.065 and es_htu = 1)*
For the second adult : 459.53 €/month*(es_ndepad_age1 = 0.5 and es_ndepad_age1_minnum= 2 and es_ndepad_age1_maxnum=2 and es_ndepad_age1_min =30 and es_ndepad_age1_max =130).*
For each other adult : 252.92 €/month*(es_ndepad_age2= 0.2861 and es_ndepad_age2_minnum=3 and es_ndepad_age2_maxnum =20 and es_ndepad_age2_min=30 and es_ndepad_age2_max = 130)*
For each dependent child : 83.64 €/month*(es_ch= 0.0910)*

One part of the wealth (immovable and movable capital) is disregarded too (lu_SBEN_capmeans module), depending on age and on civil status.
The wealth income is not defined in the simulation.

Computation of the means to be used in computing the social assistance : RMG (co_sben_means module) and calculation of the amount of the RMG (co_SBEN_Calc module)

    - For households who pay a rent :

The calculation of the benefit for households who pay a rent is different than for households who don't pay a rent, because the upper limit of the RMG is increased by the difference between the rent and 10% of the RMG without this increase exceeding 123,95 €.

Comparing to the modules that concern the households who do not pay a rent (see above), we can underline changes in the eligibility module and in the calculation module.

Eligibility : (co_SBEN_Elig module)
Eligible if 25 years or older *(ge_age1=1 and ge_Age1_Lt=25)*
Eligible if anyone in unit is disabled *(TUDisabled=1)*
Eligible if at least one child younger than 27 *(ge_nch_age1=1 and ge_nch_age1_lt=1 and ge_nch_age1_min=0 and ge_nch_age1_max=27)*
Not eligible if less than 5 years in Luxembourg *(lu_le_TIMELX=-1 and lu_le_TIMELX_lt=4)*

Eligible if rent pay *(ge_var1=-1 and ge_var1_name=coRENT and ge_var1_lt=0)*
At least one person needs to be eligible in the tax unit *(SBEN_elig_type=2)* and the tax unit is the household *(TAX_UNIT = household)* .
Computation of the minimum value between 123,95 €/month and the difference between the rent and 10% of the RMG (co_MinMax module)
(*il1 = sa_lmt_incr*) with *sa_lmt_incr* includes coRENT and (-0.1)*co_sben_MaxCalc
number1 = 123.95
The minimum value between *il1* and *number1* is written to(*output_var=co_temp1)*

Calculation of the amount of social assistance : RMG (co_SBEN_Calc module)
For the calculation of the benefit, an income list is added to base benefit amount
(*rep_prev_inc_il = sa_hb_incr* with *co_temp1* composed this income list).

2.2 Income Taxation

2.2.1 Income components subject to income tax (taxableY)

Businessprofits
Income from farming and forestry
Income from independent professions
Income from dependent professions
Pension income
Income from capital
Rental income
Miscellaneous income.

2.2.2 Income tax deductions

2.2.2.1 Deduction for wage-earners (co_it_WageEarnrs_ded)

For wage earners, a deduction of 521 € (21000 LUF)+ 595 € (24000 LUF) + travel costs is allowed per year. The minimum deduction for travel costs is 387 € (15 600 LUF) and the maximum deduction for travel costs is 2900 € (117 000 LUF) dependent on the distance between living place and working place. Because no information is available to calculate this distance, we have imputed 387 € (15 600 LUF) (minimum) plus 1487 € (60 000 LUF) for travel costs for each wage earner. *(WageEarnrs_ded = 2989.595 = 521+595+387+1487)* These deductions are made on the basis of individual employment *income (empY_IL=empY and TAX_UNIT=individual)*. Employment income includes also maternity income.

The deduction of 521€ (21 000 LUF) is a flat rate deduction. If the real expenses are higher than this flat rate deduction, the wage-earner could choose to deduce the real expenses. No information are available for these real expenses. The decision was taken to choose the flat rate deduction.

2.2.2.2. Deduction for pensioners (lu_it_pen_ded)

For pensioner a deduction of 892 =297+595 €/year (36 000=12 000 + 24 000 LUF/year) *(ded_amt = 892.416)* is made on the pension at the individual level *(penY_IL = penY and TAX_UNIT =indivual)*. Pension means retirement pension, early retirement pension, survivor pension and invalidity pension.

The deduction of 297 € (12 000 LUF) is a flat rate deduction. If the real expenses are higher than this flat rate deduction, the pensioner could choose to deduce the real expenses. No information are available for these real expenses. The decision was taken to choose the flat rate deduction.

2.2.2.3 Deduction for disabled employees (lu_it_dis_ded)

For disabled employees a deduction, dependent on the degree of the handicap is allowed. Because no information concerning the degree of handicap exist, an average deduction has been chosen *(ded_amt= 979.533 €/year (39514.29 LUF/year))*. This deduction is made on the basis on the individual employment income *(empY_IL=empY and TAX_UNIT=individual)*.

2.2.2.4 Deduction for agricultural salaried workers (lu_it_agrw_ded)

For agricultural salaried workers, a deduction of 30 % *(ded_rate = 0.3)* on the semi-net wage *(seminetY_IL = seminet_empY)*, wage after deduction of social contribution, is allowed.

2.2.2.5 Deduction for farmers (lu_it_farmer_ded)

A deduction of 2231 €/year (90 000 LUF/year)*(ded_amt = 2231.041)* is granted to farmers. This deduction is granted at the individual level *(TAX_UNIT =individual)*. In the case of joint taxation, this deduction is multiplied by two (4462 €/year).
This surcharge is not granted if the couple get the extra-professional deduction (see Deduction for "professional" (i.e., working) couples *(lu_it_profcouple_ded))*. (not simulated)

2.2.2.6 Exemption for accessory income (lu_it_accY_ded)

The first 248 € (10 000 LUF) for accessory income are not taxable *(exempt_lt = 247.893)*. The exemption is granted at the married couple level *(TAX_UNIT=marrcouple)*.

2.2.2.7 Expenditure deduction (lu_it_exp_ded)

Special expenses that are not related to income of a particular source may be deductible from the taxpayer's total net income from all sources by express permission of the law e.g..

A flat minimum allowance of 446 € (18000 LUF/year)is granted, which is doubled if both spouses earn salaried income *(Std_ded_amt = 446.208)*. Instead the flat minimum allowance, the taxpayer can deduct other expenses. The expenses that are simulated in EUROMOD do not cover all the expenses that could be deducted.

 EURMOD simulates the following expenses :

- Supplementary social security contributions for pension contribution (avantage fiscal pour primes d'assurance pension complémentaire). The deduction limit is 1190 €/year (48 000 LUF/year) and is doubled for married couples if both subscribe a pension-contribution contract *(pencon_lt = 1189.888 and PenCon_IL = pencon)*.
  - Interest payments on loans contracted for the acquisition of assets unrelated to a professional activity (intérêts débiteurs sur crédits à la consommation). The deduction limit for interest expenses is 669.312 €/year (27 000 LUF/year) and this amount is multiplied by the number of persons in the fiscal household *(int_lt= 669.312 and int_ch_lt= 669.312 and int_il= interest_exp)*.

- maintenance payments (rentes et charges permanentes payées au conjoint divorcé par consentement mutuel). The deduction limit is 19038 €/year (768 000 LUF/year) and conditions like the date of the divorce must be considered for this deduction. In Euromod, these conditions are not taking in account. *(MaintPaymnt_IL = maint_exp)*.

EUROMOD does not simulate the following expenses (example) :

- Certain premiums paid for life, sickness, accident, and civil liability insurance and contributions to certain recognised medical or social organisations

- Contributions to approved building societies

2.2.2.8 Expenditure deduction for handicapped people (lu_it_disexp_ded)

Handicapped people are granted a special deduction dependent on the degree of the handicap. Due to the impossibility to know the degree of handicap, an average deduction has been calculated for this deduction. The amount of this deduction is 674 €/year (27171.43 LUF/year) *(ded_amt = 673.562)*.

2.2.2.9 Deduction for child care expenditures (lu_it_chexp_ded)

A flat amount of 3570 €/year (144 000 LUF/year) isgranted for childcare expenditures. This flat amount could not exceed the real cost of the child care expenditures.

2.2.2.10 Deductions for family care expenditures (lu_it_famcare_ded)

For families care expenditures a deduction is granted if someone has the complete charge of a parent in the household (needy parents). This deduction is dependent on the age and the number of person in charge. The flat amount deduction for the first parent aged of 21 years or more is 4760 €/year (192 000 LUF/year)*(ded_amt_ad1 = 4759.555)* and 2677 €/year (108 000 LUF)*(ded_amt_ad2=2677.25)* for each other parent aged 21 year or more. The flat amount of each parent aged less than 21 years is 1785 €/year (72 000 LUF/year) *(ded_amt_ch = 1784.833)*.

As long as no information is available to determine the dependence of a person, the decision was taken to define a dependent person as someone who earns less than 496 €/month (20 000 LUF/month).

2.2.2.11 Deduction for lone parents (lu_it_lp_ded)

A deduction for lone parent is granted if the taxpayer is alone to support the child and if the child receives no maintenance payments . The flat amount of this deduction is 1919 €/year (77 400 LUF/year)*(ded_amt= 1918.695)*. If maintenance payments is less than 1919 €/year the deduction is the difference between1919 and the yearly maintenance payment *(maintY_IL= maintY)*.

2.2.2.12 Deduction for "professional" (i.e., working) couples (lu_it_profcouple_ded)

The extra-professional deduction is accorded for couples who are jointly taxed and when both are working. The amount of this deduction is 4462 €/year (180 000 LUF) *(ded_amt=180000)*.

2.2.2.13 Exemption for LUX investment plus deduction for costs related to investment income (lu_it_invY_ded)

An exemption of 1487 €/year (60 000 LUF)*(ded_limit = 1487.361)* on interest from Luxembourg savings accounts and public or semi-public bonds is allowed. The deduction could not be greater than interest. In EUROMOD it will be assume that all investment income *(invY_IL=invY)* is from Luxembourg investment and the deduction could not be greater than investment income.

This previous amount is doubled for joint taxation .

Near the exemption of 1487 €/year (60 000 LUF/year) a deduction for costs related to investment income is granted. The amount of this deduction is 25 €/year (1 000 LUF/year).

2.2.2.14 Proportional deduction of certain income (property income) (co_it_prop_ded)

The deductions related to the property income could be a proportion of the rent income. If the taxpayer choose this option, the deduction is equivalent to 35 % of the rent income *(proportion=0.35)* and could not be greater than 2603 €/year (105 000LUF/year) *(ded_limit= 2602.882)*. This is the easiest way to simulate the deduction related to the rental income in EUROMOD. Normally this option is only possible for building aged more than 14 years.

The other option to calculate the deductions related to the rental income is the calculation of the real expenses related to the building. No information is available for this calculation in EUROMOD.

The debt interest related to the building or the part of the building that is rented could also be deducted but no information is available in EUROMOD.

Also the debt interest of the building occupied by the owner could be deduct from the rental income (here a fictive rent) but not simulated in EUROMOD.

2.2.3 Calculation of the tax

2.2.3.1 Three different taxes class.

Taxpayers are separated into three different classes : (class1, class1a and class2)
-   class 1 includes non-married single without dependent children and less than 65 year old at the 1st January of the taxable year, separated and divorced since more than three years without children and less than 65 year old at the 1st January of the taxable year.
-   Class 1a includes non-married single with dependent children, separated and divorced since more than three years with dependent children, non-married single more than 64 years old at the 1st January of the taxable year, separated and divorced since more than three years without dependent children and more than 64 years old, widows since more than three years with or without dependent children.
-   class 2 includes married people, separated, divorced and widows less than three years.

2.2.3.2 What are the applicable rates?

Income Tax is determined on the basis of a progressive rate, ranging from 14 % on taxable income *(TaxableY_il= taxableY)* in excess of 9667.847 €/year (390 000 LUF) up to42 % on taxable income in excess of 33614.361 €/year (1 356000 LUF). An additional 2,5% of the tax payable is added as a contribution to the unemployment fund.
First the annual taxable income is adjusted to bring it to the nearest 25 € (1000 LUF).

Tax band	Lower limit	Upper limit	Tax rate (in %)
1	0	9667.847	0
2	9667.847	11378.31	14
3	11378.31	13088.78	16
4	13088.78	14799.24	18
5	14799.24	16509.71	20
6	16509.71	18220.17	22
7	18220.17	19930.64	24
8	19930.64	21641.1	26
9	21641.1	23351.57	28
10	23351.57	25062.04	30
11	25062.04	26772.5	32
12	26772.5	28482.97	34
13	28482.97	30193.43	36
14	30193.43	31903.9	38
15	31903.9	33614.36	40
16	33614.36		42

The normal rate is applied to class 1 taxpayers.

Class 2 taxpayers benefit from the so-called splitting, i.e., the income of both spouses is aggregated, then divided by two. To this figure the tax rate is applied and the tax thus calculated is multiplied by two in order to determine the final tax burden.

Class 1a taxpayers have an intermediate regime, less favourable than class 2, but more favourable than class 1 taxpayers.

For class 1a taxpayers having a taxable income equal or less than 27317.866 €/year (1 102 000 LUF), the tax is calculated on a different amount than the taxable income. This amount is equal taxable income minus a deduction. This deduction is equal (38671.389 – taxable income)/2. The normal rate is applied to this amount.

For class 1a taxpayers having a taxable income equal or higher than 27317.866 €/year (1 102 000LUF), the tax is equal 2394.651 (tax for a class 1a taxpayer with an income tax equal 27317.868 €/year) plus ((taxable income – 27317.866))*0.42.

For lower income families, an adjustment on tax is made. Class 1 taxpayers do not pay income tax if the adjusted taxable income is less than 9667.847 €/year (390 000 LUF). Class 1a and Class 2 taxpayers do not pay income tax if the adjusted income is less than 19335.694 €/year (780 000 LUF).

If tax less than 7.44 € (300 LUF) then no tax payable.

2.2.3.3 Tax credit for dependent children (lu_it_ch_tcred)

A tax credit of 892.416 €/year (36 000 LUF) is accorded for dependent children. This tax credit is multiplied by the number of dependent children.

2.2.3.4 Additional tax to cover "Unemployment Insurance" (lu_it_unemp_tax)

An additional 2,5% of the tax payable is added as a contribution to the unemployment fund.

3. DATA (MORE DETAILED IN ANNEX B : EUROMOD DATABASE ROBUSTNESS ASSESSMENT EXERCISE (DRAE))

3.1 General description

The data used are from the 2001 wave (data collected for the calendar year 2000) of the Panel Socio Economique Liewen zu Lëtzebuerg (PSELL 2) collected by CEPS/Instead.

PSELL 2 provides a picture of the living conditions of individuals and private households in Luxembourg. The data collected cover the main aspects of the life of the country's population, i.e. income, precariousness, debts, housing conditions, household appliances and composition, main expenditure, children's schooling, socio-professional status of adults, etc.

All household members aged 16 or over and out from the education fill out an : "adult questionnaire".
All household members aged 15 or less or aged 16 or over but in education fill out a basic questionnaire different from the 'adult' questionnaire : "child questionnaire".
PSELL also serves the Luxemburg part of the European Community Household Panel Survey.

3.2 Sample selection, weighting

The initial sample for PSELL 2 (1995, data collected for 1994) was selected from an exhaustive population of "main income earners" as shown by the file held by the Inspection Générale de la Sécurité Sociale [Social security general inspectorate] and yields 154 534 main earners. These include individuals at work, pensioners and children receiving an orphan's pension.
The "main income earners" are merely selection units that lead to observation units, i.e. households and household members.

For the first year (1995, data collected for 1994), the sample comprises 5 713 randomly selected "main income earners" (each unit has equal probability of being selected, probability being greater than 0 and with no bias).
Each income earner leads us to an address. Each address corresponds to a household. The 5 713 income earners thus give us 5 713 households.
These 5 713 households form a sample that is distributed as follows:
- 2 978 surveys conducted (52.1 %)
- 269   "outside field" (deceased, left the country, collective households) (4.7 %)
- 2 466 "unsuccessful" (refused to co-operate, never at home, wrong addresses) (43.2 %).

Because of the high rate of immigrants in Luxembourg, each two year a sample of 'new immigrants' is added to the original sample. This persons, like the persons who joint a household after the first wave, are not longitudinal but cross-sectional members.

The sample size in 2001 (data collected from 2000) is :
- 2431 households
- 6 226 persons.

The weights are household weight. These weights have been calculated as the average of person weights within each household. The person weights aim at correct for selective non-response and panel attrition. The weight sample should be representative in the dimensions : age, sex, activity status.

3.3 Net to gross conversion

The income variables available in PSELL are gross income. So, no conversion has to be done.

3.4 Updating factors

Due to the fact that the Luxemburg data corresponds to the year 2000 and the policies that are simulated correspond to the year 2001, updating factors are necessary (see table below).

Updating factors from 2000 (income reference year) to 2001 (simulation year)

Income source/index type	name	2000	2001	00-01	notes
Price index	P_ind	106.6	109.5	1.027	
Earned income:	E_ind	3059	3227	1.055	
Self employed: non-farm	E_ind_1	3059	3227	1.055	$= E\_ind$
Self employed: farm	E_ind_2	3059	3227	1.055	$= E\_ind$
Employed: manual					
male	E_ind_3	3059	3227	1.055	$= E\_ind$
female	E_ind_4	3059	3227	1.055	$= E\_ind$
Employed: non-manual					
male	E_ind_5	3059	3227	1.055	$= E\_ind$
female	E_ind_6	3059	3227	1.055	$= E\_ind$
Investment income	I_ind	106.6	109.5	1.027	$= P\_ind$
Rent	R_ind	112.2	114.1	1.017	
Mortgage interest	M_ind	106.6	109.5	1.027	$= P\_ind$
Benefits that are not simulated	B_ind1	1220.88	1290.21	1.057	*Most benefits*
	B_ind2	514.41	527.27	1.025	*Care benefits and Benefits for heavy handicapped person*

Sources: *P-ind : indice des prix à la consommation (IPCN) annual average. Note de conjuncture 4-2003, annexe statistique, mise à jour 21 janvier 2004, STATEC, Tableau 2a.*
E_ind : coût salarial par mois et par personne, emploi salarié total, monthly average . Note de conjuncture 4-2003, annexe statistique, mise à jour 21 janvier 2004, STATEC, Tableau 2e.
R_ind : indice des prix à la consommation (IPCN) annual average. . Note de conjuncture 4-2003, annexe statistique, mise à jour 21 janvier 2004, STATEC, Tableau 2a.
B_ind1 : salaire social minimum (minimum wage). Annuaire statistique du STATEC, tableau L.100.
http://db.statec.lu/STATEC/statec.retreive_doc_data?no=L100&idouv=1&mimetype=xls
B_ind2 : allocation de soins June 1998 to June 2003, Aperçu sur la législation de la sécurité sociale en 1999, ministère de la Sécurité sociale et www.etat.lu/MSS/paramsoc.htm

4. VALIDATION OF AGGREGATES

In this section we compare the results from EUROMOD baseline run with national statistics, in order to validate the aggregates produced by EUROMOD.

First, we must remind the reader to the specificity of Luxembourg, which were underlined in the introduction of this report . Around 35 % (in 2001) of workers in Luxembourg are not living in the country. We call them border workers (living in France, Belgium or Germany). They are taxed on their professional income and pay social contributions in Luxembourg. Next to the taxes they pay, they receive child benefits, new school year allowance and education allowance if they are eligible. So they represent a certain weight in the tax-benefit system but are not represented in EUROMOD because the database is only composed by a representative sample of persons living in Luxembourg.

Usually the statistics produced by the different administrations do not distinguish the residents and the non-residents. Some extrapolations have been made to calculate the part of the different taxes and benefits allowed to the residents.

4.1 Income taxes

- Statistics on income tax are very rare in Luxembourg. After an estimation of the income tax paid by the residents (rough estimation due to the fact that statistics on income tax do not distinguish income tax paid by the resident and income tax paid by the border workers), we could conclude that EUROMOD estimates quite good the income tax.

No information is available on the number of fiscal households which pay income tax.

Total amounts	EUROMOD	External Source (1)
Income tax		1 203 200 000 euros/year (witholding tax corresponding to the tax year 2001) + around 263 990 000 euros/year (income tax by assessment way collected in 2002 – correspond not exactly to the taxable year 2001) = 1 467 190 000 euros/year To add : solidarity tax 2.5 % of the income tax = 1 503 869 750 euros/year This amount includes the taxes paid by the border workers (essentially withholding tax). No information is available on the amount of the income tax paid by the border workers. We know that they represents 35 % of the workers in 2001, that their salaries are a bit lower than the salaries of the residents but no information (until now) is available on the family situation of these border workers. The family situation (married, single, number of children) is important to define the tax class, one of the element for the calculation of the income tax. Taking into account this lack of information, the estimation of the income tax paid by the border workers is rough. Our estimation of the income tax paid by the border workers is around : 300 000 000 euros/ year. So the amount found by EUROMOD could be carefully compared with this amount :
	1 214 530 218 euros/year	**1 203 869 750 euros/year**

(1) Source : Table page 106, page 107 in Ministère des Finances du Grand-Duché de Luxembourg Rapport d'activité 2002

Concerning the number of taxable households no comparisons could be made. No external source is available.

4.2 Social contributions

4.2.1 Health social contributions

EUROMOD simulated quite good the *health social contributions* (93 % of the external source). The external source includes health insurance from voluntaries, not simulated in EUROMOD. One other thing : the number of health social contributions from self-employed are underestimated in EUROMOD.

Total amounts	EUROMOD	External Source (1)
Health social contribution (employees)	**242 651 780 euros/year**	752 400 000 euros/year (border workers included)
Health social contribution (self –employed)	**23 705 845 euros/year**	Estimation without border workers :
Health social contribution (employer)	**250 462 291 euros/year**	**556 776 000 euros/year**

(1) Source : Table 4.1.1 page 138 in Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

Number of affiliated	EUROMOD	Unit	External source (1)
Health social contribution (employees)	**244 869**	individuals	**248 250** (including 4 000 voluntaries)
Health social contribution (self – employed)	**10 455**	Individuals	**16 573**
Health social contribution (employer)	**244 869**	individuals	**244 250**

(1) Source : Table 1.1.2 page 95, Table 1.1.4 page 96, Table 1.2.5 page 100 in Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

4.2.2 Pension social contributions

Concerning the *pension social contributions,* EUROMOD simulated quite good the pension social contributions, the revenue as well as the affiliated.

Total amounts	EUROMOD	External source(1)
Pension social contribution (employees)	**497 925 511 euros/year**	1 383 096 401 (general system)+ 184 620 000 (statutory system) = 1 567 717 201 euros/year (borders worker included)
Pension social contribution (self –employed)	**69 722 623 euros/year**	Estimation without border workers :
Pension social contribution (employer)	**497 925 511 euros/year**	**1 160 000 000 euros/year**

(1) Source : Table 3.2a page 251 and Table 1.13 page 199 in Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

Number of affiliated	EUROMOD	Unit	External source (1)
Pension social contribution (employees)	**176 625**	Individuals	162 149(general system included self-employed) +22 277 (statutory system)
Pension social contribution (self –employed)	**10 455**	Individuals	= **184 426**
Pension social contribution (employer)	**176 625**	Individuals	**168 241**

(1) Source : Table 1.1 page 183, Table 1.1a page 184 and Table 1.8 page 195 in Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

4.2.3 Accident social contributions

EUROMOD overestimates the accident social contributions. In fact, the simulation of this social contribution is quite rough. The diversity of the rates to apply couldn't be done with exactitude in EUROMOD.

Total amounts	EUROMOD	External source(1)
Accident social contribution (self –employed)	**8 854 238 euros/year**	132 160 000 euros/year (border workers included)
Accident social contribution (employer)	**92 895 156 euros/year**	Estimation without border workers **92 500 000 euros/year**

(1) Source : Tableau 13 page 282 in Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

4.2.4 Long-term care contributions

EUROMOD estimates quite good the long-term care contributions.

Total amounts	EUROMOD	External source(1)
Family social contribution (self-employed)	82 962 912 euros/year	110 500 000 euros/year Estimation without border workers 84 000 000 euros/year

(1) Source : Tableau page 344 in Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

4.3 Benefits and benefits recipients

- Maternity allowance
EUROMOD overestimates the costs of the *maternity allowance* as well as the number of recipients. This overestimation is probably due to the fact that this benefit depends on the income received or not by the mother when the child is born. This precisions are not available in the database, the yearly average income is only available in EUROMOD.

- Prenatal-; Postnatal-; and Child Birth Allowance
EUROMOD underestimates the costs and the recipients of this allowance. This underestimation is explained by the underestimation of newborn children in the database.

 - Handicapped child benefit
 EUROMOD underestimates the costs and the recipients of this benefit. This underestimation could be explained by the fact of an important proportion of recipients live in Institution, so they are not included in the database used for EUROMOD.

 - Education allowance
EUROMOD estimates quite well the cots while the number of recipients is overestimated.

- New school year allowance
EUROMOD underestimates the costs of the benefits, while EUROMOD overestimates the number of recipients.

- Child benefits
EURMOD simulates well the costs and the number of recipients.

Total amounts	EUROMOD (LUF/year)	External source (euros/year)	Source
Maternity allowance	6 464 222	4 592 930	Table 5.3a page 383
Prenatal-; postnatal-; and child birth allowance	7 402 036	8 038 088	Table 4.3 page 301
Handicapped child benefit	604 065	3 241 046 (border workers included) Estimation without border workers : 2 110 000	Table 5.3a page 383
Education allowance	45 109 435	66 793 204 (border workers included) Estimation without border workers : 41 044 704	Table 5.3a page 383 Table 4.7 page 375
New school year allowance	16 010 621	26 740 608 (border workers included) Estimation without border workers : 18 720 000	Table 5.3a page 383
Child benefit	269 440 151	422 942 827 (border workers included) Estimation without border workers : 274 910 000	Table 5.3a page 383 Table 4.5 page 374

Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

Number of recipients	EUROMOD	Unit	External source	Source
Maternity allowance	2 299	Families Households	1 688	Table 1.11 page 367
Prenatal-; postnatal-; and Child birth allowance	8 651	Families Households	10 228	Table 1.11 page 367
Handicapped child benefit	351	Families Households	1 109	Table 1.6 page 364
Education allowance	9 298	Families Households	9 894 (border workers included) Estimation without border workers : 6 035	Table 1.9 page 366 Table 4.7 page 375
New school year allowance	47 297	Families Households	60 000 (border workers included) Estimation without border workers :	Table 1.7 page 365

			42 000	
Child benefit	61 843	Families Households	62 408	Table 4.4 page 374

Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

- Seriously dependent persons benefit (allocations de soins et allocation spéciale pour personnes gravement handicapées)

EUROMOD underestimates seriously this benefit. Different reasons could be presented to explain this underestimation. The application for this benefit is examined case by case by the administration and a medical certificate must be jointed to the application. The information available in the EUROMOD database is relatively poor to simulate correctly this benefit. A lot of beneficiaries of these benefit live in collective houses for old persons or for handicapped persons (collective households are out of scope in the survey).

Total amounts	EUROMOD (euros/year)	External source (LUF/year)	*Source*
Seriously dependent persons benefit	3 681 075	10 260 765 + 2 821 746 = 13 082 512	(1)page 345

Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

Number of recipients	EUROMOD	Unit	External source	Source
Seriously dependent persons benefit	582	Families Households	1837 + 563 = 2300 individuals	(1) Table 14 page 408 and table 15 page 408

(1)Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

- Social assistance

EUROMOD overestimates the costs of social assistance and the number of recipients. The overestimation of the costs of social assistance could be explained by the non-take up of the social assistance and also by the simplification of the rules in EUROMOD. The overestimation of the number of recipients could also be explained by the non take-up of the social assistance (the average amount of the social assistance in EUROMOD is twice less than in the official statistics, a lot of recipients receive a very low amount in EUROMOD).

Total amounts	EUROMOD (LUF/year)	External source (LUF/year)	Source
Social assistance (RMG)	54 924 100	46 900 000	(1) Tableau 19a page 413

(1)Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

Number of recipients	EUROMOD	Unit	External source	Source
Social assistance (RMG)	8 527	Families Households	5 413	(1) Tableau 1 page 400

(1)Rapport Général de la Sécurité Sociale, 2001, Ministère de la Sécurité sociale, Inspection Générale de la Sécurité Sociale

4.4 Poverty incidence

The only national source to compare the poverty incidence of the EUROMOD baseline run for 2001 is the PSELL (Panel Socio-Economique Liewen zu Lëtzebuerg), the panel from whom the Luxembourg part of EUROMOD is built. For EUROMOD we have used the 7th wave from PSELL (data collected in 2001 related to the income of 2000). For the comparison of the results, we will use the 8th wave of the panel as external source (data collected in 2002 related to the income of 2001).

Monetary poverty indicators	EUROMOD	Unit	External source
GINI coefficient	0.2404	Individuals	0.263 [0.255;0.270]
Value of the poverty line (60 % of the median equivalised household income)	1 181	Individuals	1 248
Poverty rate (below 60 % of the median equivalised household income)	10,2 %	individuals	12,1 % [11,0;12,8]
Value of the poverty line (50 % of the median equivalised household income)	984	individuals	1 040
Poverty rate (below 50 % of the median equivalised household income)	3,6 %	individuals	5,3 % [4,7;6,0]
Quantile point of the monthly equivalised household income (in LUF)	Quantile point 1: 1 176 Quantile point 2: 1 416 Quantile point 3: 1 606 Quantile point 4: 1 777 Quantile point 5: 1 969 Quantile point 6: 2 223 Quantile point 7: 2 510 Quantile point 8: 2 879 Quantile point 9: 3 470	Individuals	Quantile point 1: 1 185 Quantile point 2: 1 453 Quantile point 3: 1 661 Quantile point 4: 1 866 Quantile point 5: 2 078 Quantile point 6: 2 334 Quantile point 7: 2 641 Quantile point 8: 3 067 Quantile point 9: 3 814

Note : the values in the brackets indicate the confidence interval (95%). Bootstrap method.

Regarding the Gini coefficient, the poverty rates and the quantile points, EUROMOD baseline run shows a bit more concentrated distribution of the equivalised income that the one of the PSELL.

5. MAIN CHANGES BETWEEN 1998 BASELINE (SEE EUROMOD COUNTRY REPORT : LUXEMBOURG 1998 BASELINE) AND 2001 BASELINE

5.1 Main changes in the social contributions

- Change in the rate and in the upper base limit for Health Insurance Contributions (for "employee" and "employer") :

        upper base limit increases from 5735.636 €/month (231 375 LUF/month) to 6451.057€/month (260 235 LUF/month),

        for civil servants, pensioners, unemployed and person who receives the social assistance rate increases from 2,55 % to 2,6 %,

        for blue-collar employees rate decreases from 5,05 % to 4,95 %

        for white-collar employees rate increases from 2,7 % to 2,72 %

        for self-employed rate increases from 5,4 % to 5,44 %

- Change in the upper base limit for pension Insurance Contribution ("employee" and "employer") :

        upper base limit increases from 5735.636 €/month(231 375 LUF/month) to 6451.057€/month (260 235 LUF/month),

- Change in the rate for civil-servant "employee" pension insurance contribution : increase from 7 % to 8 %

- Change in the rate for EmployeR and self-employed Disability (Accident) Insurance Contribution :

param_name	Period	first_system	LU_1998	LU_2001	end_system
first_module					
lu_sic_di_er		**EmployeR Disability (Accident) Insurance Contribution**			
threshold	m		0	0	nothing paid if base < threshold
NACE1_rt			0,0135	0,0147	NACE code assumed equivalent to category CI.1 in Annexe
NACE2_rt			0,0119	0,0143	CI.16
NACE3_rt			0,0131	0,0155	CI.3
NACE4_rt			0,02395	0,02405	CI.4; CI.5
NACE5_rt			0,0149	0,015467	CI.3; CI.18; CI.19
NACE6_rt			0,035657	0,037229	CI.6; CI.7; CI.8; CI.9;CI.10;CI.20; CI.21
NACE7_rt			0,0135	0,0147	CI.1
NACE8_rt			0,012467	0,0133	CI.14; CI.15; CI.17
NACE9_rt			0,006	0,0064	CI.2
NACE10_rt			0,0105	0,01105	CI.11; CI.12; CI.13; CI.17
up_base_limit	m		5735.636	6451.057	if base is above up_base_limit then base is up_base_limit
PartTimeProRata			1	1	If working part-time then limits apply pro-rata
FullTimeHrs			40	40	number of hours considered full time
empY_IL		empY	empY		
selfempY_IL		selfempY	selfempY		
TAX_UNIT		individual	individual		
SWITCH			1	1	
end_module					

- Introduction of a 'long-term care contribution', 1% of the professional and replacement income and of the investment and property income (long term care is usually a non-cash

benefit). For the employees, pensioners, unemployed, persons who receive social assistance the calculation of this contribution is 1 % of (professional and replacement income less 25 % of the social minimum wage).

- No self-employed family contributions in 2001. The State covers these contributions now.

5.2 Main changes in the income tax

Change in the number of tax bands (from 18 to 16) and decrease of the maximum marginal tax rate from 46% in 1998 to 42% in 2001.
2001 represents the first step of the tax reform. The second step will start in 2002 with a decrease of the maximum marginal tax rate from 42% in 2001 to 38% in 2002.

5.3 Main changes in the benefits

- Change in the amount for maternity allowance : from 2611.409 €/year (105 344 LUF/year) to 2812.104 €/year (113 440 LUF/year)

- Change in the amount for prenatal, birth and postnatal allowance : from 1464.009 €/year (59 058 LUF/year) to 1576.528 €/year (63 597 LUF/year)

-Change in the amount for the education allowance : from 408.032 €/month (16 460 LUF/month) to 439.391 €/month (17 725 LUF/month)

- Change in the amount for the child benefit : from 108.379 €/month (4 372 LUF/month) for a child of a one child family less than 6 years old to 143.381 €/month (5 784 LUF/month) as an example. This important change is due to the fact that the child benefits have been seriously increased on the 1st January 1999 (+ 25 euros/month/child). At the same time, the child credit (moderation d'impôt pour enfant) has been decreased from the same amount. This measure has been taken to make the system more "fair". Only the families who have to pay income tax could receive the child credit while all families receive the child benefit.

- Change in the amount for handicapped child benefit allocation : : from 108.379 €/month (4 372 LUF/month) to 143.381 €/month (5 784 LUF/month)

- Change in the amount for seriously disabled person allocation : from 359.619 €/month (14 507 LUF/month) to 527.269 €/month (21 270 LUF/month)

- Change in the amount for new school year allocation : example : from 95.191 €/year (3 840 LUF/ year) to102.503 €/month (4 135 LUF/year) for achild of a one child family less than 12 years old

- Change in the amount of the social assistance (RMG) : from 817.156 €/month (32 964 LUF/month) to 919.065 €/month (37 075 LUF/month) for a one person family
Change in the RMG, social assistance eligibility conditions : minimum age is now 25 instead 30, residence condition decrease form 10 to 5

Change in the calculation of the rent subsidies related to the social assistance. In 1998, the rent subsidies was calculated separately from the social assistance. In 2001, this rent subsidies is included in the calculation of the social assistance.

5.4 Main changes that are not simulated in EUROMOD

Since the 1st January 1999, the Government has introduced the 'congé parental' or "parental leave". A 6 month parental leave (or 12 month if half-time) is granted when a person leaves her/his professional activity to educate a child aged less than 5. Guarantee of re-employment. Compensation of € 1,611.10 monthly during 6 month or € 805,55 monthly during 12 months.