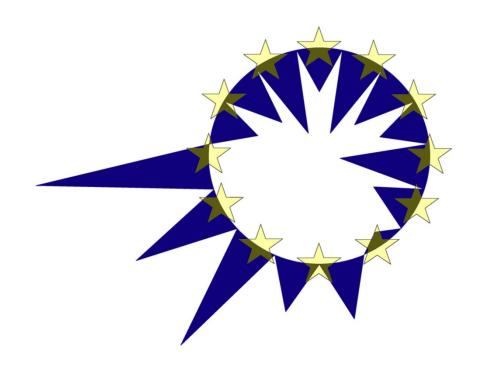
# EUROMOD COUNTRY REPORT



# LITHUANIA (LT) 2007-2011

Romas Lazutka, Jekaterina Navickė, Lina Salanauskaite 30/05/2012









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

EUROMOD has been enlarged to cover 27 Member States and is updated to recent policy systems using data from the European Union Statistics on Income and Living Conditions (EU-SILC) as the input database, supported by DG-EMPL of the European Commission.

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

EUROMOD coordinator: Holly Sutherland EUROMOD coordinator assistant: Lucy Brown

EUROMOD developer responsible for Lithuania: Alari Paulus

National team for Lithuania: Romas Lazutka, Jekaterina Navicke, Lina Salanauskaite

The results presented in this report are derived using EUROMOD version F6.0 EUROMOD is continually being improved and the results presented here may not match those that would be obtained with later versions of EUROMOD.

For more information, see: http://www.iser.essex.ac.uk/research/euromod

This document is supported by the European Union Programme for Employment and Social Solidarity – PROGRESS (2007-2013).

This programme is managed by the Directorate-General for Employment, social affairs and equal opportunities of the European Commission. It was established to finally support the implementation of the objectives of the European Union in the employment and social affairs area, as set out in the Social Agenda, and thereby contribute to the achievement of the Lisbon Strategy goals in these fields.

The seven-year Programme targets all stakeholders who can help shape the development of appropriate and effective employment and social legislation and policies, across the EU-27, EFTA-EEA and EU candidate and pre-candidate countries.

PROGRESS mission is to strengthen the EU contribution in support of Member States' commitment. PROGRESS is instrumental in providing analysis and policy advice on PROGRESS policy areas; monitoring and reporting on the implementation of EU legislation and policies in PROGRESS policy areas; promoting policy transfer, learning and support among Member States on EU objectives and priorities; and relaying the views of the stakeholders and society at large

For more information see: http://ec.europa.eu/progress

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



# **CONTENTS**

1.	BASI	C Information	5
	1.1	The tax-benefit system	5
	1.1.1	Basic information about the tax-benefit system	6
	1.1.2	Commonly used parameters and definitions	8
	1.2	Social Benefits	10
	1.3	Social contributions	19
	1.4	Taxes	21
2.	SIMU	ULATION OF TAXES AND BENEFITS IN EUROMOD	25
	2.1	Scope of simulation	
	2.2	Order of simulation and interdependencies	
	2.3	Social benefits	
	2.3.1	Birth grant (bchba_s)	
	2.3.2	Child benefit (bch00_s)	
	2.3.3	Pregnancy grant (bmaprnc_s)	
	2.3.4	Maternity leave benefit (bmaprct_s)	
	2.3.5	Paternity leave benefit (bplct_s)	37
	2.3.6	Maternity (paternity) leave benefit (bmact_s)	38
	2.3.7	Social benefit (bsa00_s)	39
	2.3.8	Unemployment social insurance benefit (bunct_s)	45
	2.4	Social contributions	47
	2.4.1	Employee social insurance contributions (ils_sicee)	48
	2.4.2	Employer social insurance contributions (ils_sicer)	48
	2.4.3	Credited social contributions (ils_sicct)	48
	2.4.4	Self-employed social contributions (ils_sicse)	50
	2.4.5	Compulsory health insurance contributions for those not otherwise insured (thl_s)	53
	2.5	Minimum wage	54
	2.6	Personal income tax (tin_s)	54
	2.6.1	Tax unit	54
	2.6.2	Exemptions	54
	2.6.3	Tax allowances	55
	2.6.4	Tax base	57
	2.6.5	Tax schedule	58
	2.6.6	Tax credits (deductible expenses)	59
	2.6.7	Withholding tax and final tax liability	60
3.	DAT	Α	62
	3.1	General description	62



3.2	Sample quality and weights	63
3.2.	.1 Non-response	63
3.2.	.2 Weights	64
3.2.	.3 Item non-response and under-reporting	64
3.3	Data adjustment	65
3.4	Imputations and assumptions	65
3.4.	.1 Time period	65
3.4.	.2 Gross incomes	66
3.4.	.3 Other imputed variables	66
3.5	Updating	67
4. VA	LIDATION	69
4.1	Aggregate Validation	69
4.1.	.1 Definition of disposable income	69
4.1.	.2 Validation of incomes inputted into the simulation	70
4.1.	.3 Validation of simulated incomes	72
4.2	Income distribution	73
4.2.	.1 Income inequality	73
4.2.	.2 Poverty rates	73
4.2.	.3 Validation of minimum wage	74
4.2.	.4 Validation of employment adjustments	74
4.3	Summary of "health warnings"	75
5. AN	NEX I	76
	NEX II	
7. RE	FERENCES	86



# 1. BASIC INFORMATION

Table 1.1 Basic figures

	Pop.	Pop.	Pop.	Life	Fertility	Unemp.	GDP	Cur	rency
	(m.) [a]	< 18 (%)	≥ 65 (%)	expect. (years)	Rate [b]	Rate %	per head (PPS) [d]	Name	Exch. rate [e]
2005	3.43	21.79	15.09	71.32	1.27	8.3	11,900	LTL	3.4528
2006	3.40	21.21	15.33	71.12	1.31	5.6	13,100	LTL	3.4528
2007	3.38	20.55	15.58	70.92	1.35	4.3	14,700	LTL	3.4528
2008	3.37	20.02	15.84	71.94	1.47	5.8	15,300	LTL	3.4528
2009	3.35	19.52	16.01	73.10	1.55	13.7	12,900	LTL	3.4528
2010	3.33	19.11	16.05	73.45	1.55	17.8	14,200	LTL	3.4528
2011	3.24	18.82	16.51	n.a.	n.a.	$17.2^{[f]}$	$14.600^{[g]}$	LTL	3.4528

Notes: <sup>[a]</sup> All population figures refer to the beginning of the year; <sup>[b]</sup> Total fertility rate: an average number of children born alive to a woman during the reproductive period of her life (15–49 years); <sup>[c]</sup> Unemployment rate represents unemployed people, aged 15 to 74, as % of labour force; <sup>[d]</sup> GDP per inhabitant in PPS. Source: EUROSTAT, 2011; <sup>[c]</sup> Lithuanian currency Litas (LTL) is pegged to the euro at a fixed exchange rate of 3.4528 LTL=1 EUR (Based Bank of Lithuania information on www.lb.lt); <sup>[f]</sup> - Data for 2011 Q; <sup>[g]</sup> forecast;

Sources: EUROSTAT (2011) and Statistics Lithuania (2011)

#### 1.1 The tax-benefit system

Table 1.2. Tax-benefit system and government budget

	Total general government revenue % of GDP <sup>1</sup>	Total tax Receipts % of GDP <sup>2</sup>	Total general government expenditure % of GDP <sup>3</sup>	Social protection % of GDP <sup>4</sup>
2005	32.8	20.4	33.3	13.1
2006	33.1	21.0	33.6	13.2
2007	33.8	21.2	34.8	14.3
2008	34.1	21.3	37.4	16.2
2009	34.5	17.9	44.0	21.3
2010	34.2	16.6	41.3	19.2

Source: EUROSTAT (2011), Statistics Lithuania, Ministry of Finance of Lithuania

<sup>&</sup>lt;sup>1</sup> Total general government revenue [tec00021] % of GDP. Source:

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tec00021&plugin=1

<sup>&</sup>lt;sup>2</sup> Total tax receipt [gov\_a\_tax\_ag] % of GDP: Source: EUROSTAT:

http://epp.eurostat.ec.europa.eu/portal/page/portal/government\_finance\_statistics/data/database

<sup>&</sup>lt;sup>3</sup> Total general government expenditure – [tec00023], % of GDP. Source:

http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tec00023&language=ender the properties of the proper

<sup>&</sup>lt;sup>4</sup> Total expenditure on social protection [tps00098] % of GDP. Source: EUROSTAT :

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00098&plugin=1.



Table 1.3 Social protection expenditure by function (as % of total social protection expenditure)

	Sickness/ health care	Disability	Old age	Survivors	Family/ children	Unemployment	Housing	Social exclusion
2005	29.89	10.32	42.13	3.86	9.15	2.91	0.01	1.73
2006	31.76	10.47	40.49	3.79	8.81	3.06	0.01	1.59
2007	30.43	10.30	42.82	3.81	8.60	2.76	0.01	1.27
2008	29.44	10.38	40.97	3.46	11.96	2.52	0.01	1.25
2009	26.2	10.1	43.9	3.26	13.7	4.3	0.01	1.85
2010p	25.69	10.0	40.70	3.18	12.17	4.36	0.01	3.89

Source: EUROSTAT (2011), p – preliminary: Statistics Lithuania

Table 1.4 Taxation (as % of total tax receipts)

	Personal Corporate income tax		Social security	contributions	Taxes on goods and	Other taxes
			Employees*[a]	oyees* <sup>[a]</sup> Employers		
2005	18.7	7.9	3.2	29.2	38.9	2.1
2006	18.0	8.5	3.3	30.0	39.0	1.3
2007	16.3	7.4	3.3	30.0	39.5	3.5
2008	15.5	8.9	3.4	30.3	39.7	2.2
2009	13.1	5.9	8.1	28.8	36.1	8.0
2010	13.5	3.7	9.2	29.6	41.9	2.1

<sup>\*</sup> Includes self-employed and voluntary insured

Source: Information on taxes from the Financial Ministry of Lithuania, information on social contributions from the Social Insurance Fund

#### 1.1.1 Basic information about the tax-benefit system

- The Lithuanian benefit system is organized mainly on the state level. Municipalities provide a few local benefits, such as a municipal support which is given to families in need (e.g. asocial or dysfunctional families). However, this benefit is mainly based on available local budget and does not have pre-defined eligibility rules. In other cases, municipal authorities set parameters which indicate local living standards, but are used by state defined benefits or tax programs<sup>5</sup>.
- Tax-benefit system is a unified national system in Lithuania. The one exception is business certificate (see more details on this type of taxation in chapter 1.6), which acquisition price varies across municipalities.
- The "fiscal year" runs from 1st January to 31st December.

<sup>5</sup> For example, in case of granting social assistance municipal authorities have a right to:

<sup>•</sup> grant social assistance benefit in the form of services (i.e. food) for longer than three months' period after (a standard period set by the law).

<sup>•</sup> approve procedures on payments of state entitlements or average fuel prices (i.e. in case of social assistance).



- Main benefit and tax changes often happen at different times of the fiscal year, i.e. such as 1<sup>st</sup> July. For example, basic pension amount and minimum monthly salary are usually changed as of 1<sup>st</sup> July.
- Retirement age: the *Law on State Social Insurance* pensions, which came into force in 1995, has foreseen that the state pension age should gradually increase from 55 to 60 years for females and from 60 to 62.5 years for males. Effectively, the state pension age on 30<sup>th</sup> June, 2005 was 59.5 for women and 62.5 for men. As of 2006, the final statutory retirement age both for men and women has been reached: 62.5 and 60 respectively. It did not change during the course of 2006-2011.
- The minimum school leaving age is 16 years old. Compulsory education is from age 7 to 16. The age of majority is 18<sup>6</sup>.
- Dependent child definition:
  - a. By default, the "dependent child" status is lost (unless recognized by the court otherwise) if a person has a partner (married or legally cohabitating) or becomes a parent herself.
  - b. Generally, *for tax and benefit purposes*, dependent children are own or adopted children (except fostered children) under 18 years of age.
  - c. For benefit purposes, persons between ages 18 (hereinafter referred to as inclusive) up to 24 years (hereinafter referred to as exclusive) old are often considered to be dependent children, if they are (a) unmarried and not living together with another person, (b) not parents themselves, and (c) full-time pupils and students of general education schools or other institutions of formal education, as well as persons from the day of finishing general education schools which they attended as full-time pupils until 1<sup>st</sup> September of the same year. The precise "dependent child" definition is usually a benefit specific definition, and could cover different conditions, as in the two examples below:
    - For social assistance, persons up to the age of 24, (unless married, living together with another person or parents themselves) if unemployed or studying full-time, can only be treated as dependent children, therefore, restricting their rights to claim the benefit as a "single person".
    - For child benefit purposes, enrolment in full-time secondary education is required for children at the age of 18 or older, who are raised in families with up to two children. Children up to the age of 24 are eligible, if raised in families with three or more children and enrolled in secondary, vocational, post-secondary or higher education.
  - d. For *tax purposes*, dependent children are defined as children under the age of 18 or older, if in full-time secondary education.
- Lone parent is defined as a parent of a dependent child, not legally married or officially cohabiting (cohabitation is approved by the official contract) to anyone.
- The income tax system is an individual system, with the spouses being assessed independently.
- Different income sources are taxed differently in 2005-2008 (e.g. salaries, income from authorship contracts). Reduced personal income tax rate was abolished since 2009 (see Section 2.6).

<sup>&</sup>lt;sup>6</sup> Majority is an age threshold, recognized by the law, as a moment when a child assumes control over his/her actions, thereby terminating the legal control and legal responsibilities of parents or guardians.



- Taxpayers can fill a tax return form in order to make deductions from income tax or to return unused annual tax allowance at the end of the financial year, although it is not obligatory, unless in cases of gaining non-work related income.
- Generally, no statutory indexing regimes are applied for Lithuanian benefits or taxes. For example, some laws foresee inflation indexation, such as in case of flat rate pensions. However, during 2005-2008 pensions' raise surpassed inflation level aiming at increased living standards of the pensioners.
- The means-tested benefit system assesses entitlement according to the average per capita monthly income of benefit unit according to the last three or twelve months' income history. The benefit unit is the nuclear family the married couple or single adult plus any dependent children.

#### 1.1.2 Commonly used parameters and definitions

Social benefits, pensions and compensations are often calculated in relation to reference amounts, as indicated below.

**MSL** refers to a "minimum standard of living (minimalus gyvenimo lygis)" and is estimated by the Government in accordance with the procedure established by the Law of Republic of Lithuania on Individual Income Security (1994). As of August 2008<sup>7</sup>, a term Basic Social Allowance (bazinė socialinė išmoka (BSA)) replaced the MSL term. For the reference purpose, we are going to use MSL rather than BSA when describing 2005-2008 policy systems. Table 1.5 shows MSL levels which were effective on 30<sup>th</sup> June 2005-2011.

**The State Supported Income** (valstybės remiamos pajamos) level (hereinafter referred to as "SSI") is the Government approved personal income level after taxes and contributions, but before transfers of cash social assistance. Table 1.5 shows SSI levels which were effective on 30<sup>th</sup> June 2005-2011.

Table 1.5 Monthly MSL and SSI levels effective on June 30, 2005-2011, LTL

	2005	2006	2007	2008	2009	2010	2011			
MSL (BSA)	125	125	130	130	130	130	130			
SSI	135	165	205	285	350	350	350			
				350						
	(since 2008.08.01)									

Source: Based on the relevant version of Government of Lithuanian Republic Resolution "Dėl bazinės socialinės išmokos dydžio patvirtinimo" and "Dėl valstybės remiamų pajamų dydžio patvirtinimo".

As Table 1.5 shows, the monthly MSL (BSA) level haven't changed since 2007, but monthly SSI level was increased from LTL285 to LTL350 since the 1<sup>st</sup> August, 2008 and was kept constant in 2009-2011.

A number of other commonly used definitions for benefit calculations, such as income lists, are presented here:

**Reimbursable Income** (*draudžiamosios pajamos*), hereinafter referred to as "**RI**", defines the <u>list</u> of the person's *insured income* on the basis of which a number of contributory benefits, such as maternity leave and paternity leave benefits, sickness benefit or unemployment benefit, are paid.

.

<sup>&</sup>lt;sup>7</sup> Lietuvos Respublikos Seimas (2008). Minimaliojo darbo užmokesčio dydžių, socialinės apsaugos išmokų ir bazinio bausmių ir nuobaudų dydžio indeksavimo įstatymas. Valstybės žinios: 2008-07-22 Nr.83-3294



*Insured income* includes all income of a person on which state social insurance contributions were (or had to be) paid:

- earnings;
- sickness benefit (including the first two days of sickness for which the employer pays), vocational rehabilitation, maternity leave, paternity leave, maternity (paternity) leave benefits set by *the Law on Sickness and Maternity Social Insurance*;
- sickness benefits due to occupational accidents or occupational disease allowances payable in accordance with *the Law on Social Insurance of Occupational Accidents and Occupational Diseases*;
- unemployment social insurane allowances payable in accordance with the Law on Unemployment Social Insurance. 8

Vocational rehabilitation income, as *insured income*, has been added to the list as of 2006. The rest of the **RI** income list did not change over the period of 2005-2008, although there were some important changes made to insured income list and valid starting from 1<sup>st</sup> January, 2009. The main changes were: inclusion of income from sports, performing or authorship agreements into the insured income list; inclusion of annual income of self-employed persons and some other groups (solicitors, bailiffs, individual business owners, farmers and partners, etc.) into the insured income list. There were no major changes made to the insured income list in 2010 and 2011.

The **average monthly reimbursable income** (**AMRI**) is the sum of the **RI** incomes averaged over the last three months before the right to the relevant benefit has been granted. Since 1<sup>st</sup> July 2009 AMRI was averaged over the 9 months and since 1<sup>st</sup> October 2009 – over 12 months one month before the right to maternity leave, paternity leave and maternity (paternity) leave benefits. <sup>10</sup> Changes didn't affect other benefits, such as vocational rehabilitation allowance and occupational disease allowance which are still based on income averaged over 3 months' period. No major changes were made in 2010-2011.

**Current year's insured income** (einamųjų metų draudžiamosios pajamos), is the state approved income threshold mainly used for the purpose of state social insurance benefit calculations and defined by the *Law on State Social Insurance Pensions*. Table 1.6 shows current year's insured income (hereinafter referred to as "**CYI**") levels which were effective on 30<sup>th</sup> June 2005-2011.

Table 1.6 Current year's insured income (monthly), 30<sup>th</sup> June 2005-2011, LTL

	2005	2006	2007	2008	2009	2010	2011
Current year's insured income	1,084	1,212	1,356	1,414	1,488	1,170	1,170*
(CYI)							

Source: Based on the Government of Lithuanian Republic Resolution "Dél Valstybinės Socialinio Draudimo Bazinės Pensijos Padidinimo ir Einamųjų 2005 Metų Draudžiamųjų Pajamų Naujo Dydžio Patvirtinimo" [25.05.2005] and relevant changes.

\* In 2010 the CYI of LTL 1,170 was applied for calculation of all applicable benefits, except of the state social insurance pensions, in which case the 2009 level of CYI should be taken into account.

 $<sup>^8</sup>$  Insured income is defined by the "Lietuvos Respublikos Valstybinio socialinio draudimo įstatymas".

<sup>&</sup>lt;sup>9</sup> Further changes to the article defining insured income list were made in July and December 2009, and later in June 2010.

Based on the following law "Lietuvos Respublikos Ligos ir motinystės socialinio draudimo įstatymo 3, 4, 5, 6, 8, 9, 16, 18, 19 straipsnių pakeitimo ir papildymo Įstatymas". 2008.12.18 Nr. XI-71. http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334539



**State social insurance basic pension** (*valstybinio socialinio draudimo bazinė pensija*) is the state approved amount, mainly used for the calculation of social insurance benefits, such as oldage pension or vocational rehabilitation allowance.

Table 1.7 Basic monthly pension, 30<sup>th</sup> June 2005-2011, LTL

	2005	2006	2007	2008	2009	2010	2011
Basic monthly pension, LTL	172	200	266	316	360	360	360

Source: Based on the Law of State Social Insurance Pensions LRG Decision "Dėl Valstybinės Socialinio Draudimo Bazinės Pensijos Didinimo ir Einamųjų Metų Draudžiamųjų Pajamų Patvirtinimo", 2004 March 24, No. 235, and its relevant amendments and changes

Most of the state pensions in Lithuania are calculated in relation to the **state pension base** (*valstybinių pensijų bazė*), the amounts of which during the period of 2005-2011 are indicated below:

Table 1.8 State pension base and minimum monthly salary, 30<sup>th</sup> June 2005-2011, LTT

	2005	2006	2007	2008	2009	2010	2011
State pension base, LTL	138	138	172	200	200	200	200
Minimum monthly salary	500	550	600	800	800	800	800
(MMS)							

Source: Based on the Government of Lithuanian Republic Resolution "Dėl Biudžetinių Įstaigų Ir Organizacijų Darbuotojų Darbo Užmokesčio, Valstybinės Socialinio Draudimo Bazinės Pensijos ir Minimalių Dydžių Didinimo" [01.04.1998] and its relevant changes.

Minimum monthly salary (*minimali mėnesinė alga*), which is listed in Table 1.8, is used for calculations of such social benefits, as educational stipends. This reference amount is also used for defining social contributions (see more details in section 2.4.3).

#### 1.2 Social Benefits

• Non-contributory benefits

All non-contributory benefits are non-taxable.

**Birth grant** (vienkartinė išmoka gimus vaikui): a lump-sum cash benefit paid upon the birth of a child; it amounted to 8 MSL per child during the entire 2005-2008 period. Since January 1, 2009 the birth grant has increased to 11 MSL per child. <sup>11</sup> No changes were made in 2010-2011.

**Child benefit** (*išmoka vaikui*): a monthly cash benefit paid to a family raising one or more dependent children. The benefit level is calculated in relation to MSL (BSA) and varies based on the number of children in the family and their age. Since the 1<sup>st</sup> March, 2009 entitlement to the benefit became means tested for families that raise one or two children aged 3-18 or 21 if in full-time education. <sup>12</sup> Starting from January 1, 2010 both eligibility criteria and the income test

Nr. X-1664: <a href="http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=324329">http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=324329</a>
<sup>12</sup> Based on the following law "Lietuvos Respublikos Išmoku vaikams istatymo

<sup>&</sup>lt;sup>11</sup> Based on the following law "Lietuvos Respublikos Išmokų vaikams įstatymo 1, 2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 18, 20, 22 straipsnių ir antrojo, trečiojo skirsnių pavadinimų pakeitimo įstatymas". 2008.07.01. Nr. X-1664: http://www3.lrs.lt/pls/inter2/dokpaieska showdoc. 12p. id=324329

<sup>&</sup>lt;sup>12</sup> Based on the following law "Lietuvos Respublikos Išmokų vaikams įstatymo 6, 8, 12, 13, 20 straipsnių pakeitimo ir papildymo ir 22 straipsnio pripažinimo netekusiu galios įstatymas". 2008.12.19 Nr. Xi-90: <a href="http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334470">http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334470</a>



were tightened according to the Temporary Law on Recalculation and Payment of Social Benefits.

**Benefit to a conscript's child** (*išmoka privalomosios tarnybos kario vaikui*): a monthly benefit paid for each child in the amount of 1.5 MSL during the military service of the father. The level of the benefit did not change during the course of 2005-2011. According to *Law on the Benefits to Children*, the benefit is paid to the mother of the child of a conscript, unless she is not a permanent resident of the Republic of Lithuania. In that case, the benefit is paid to the child's father. The recipient of this benefit is also entitled to a child benefit as described above.

**Guardianship benefit** (*globos* (*rūpybos*) *išmoka*): a monthly benefit to a child placed under guardianship in a family or non-governmental guardianship institution during the period of the guardianship (curatorship). Its amount equalled 4 MSL per month in 2005 and 2006 (as of 30<sup>th</sup> June). Since 2007, the guardianship benefit is paid as a difference between 4 MSL and the cumulative amount of an orphan's pension and (or) a child maintenance obligation. If upon the expiration of a child's guardianship (curatorship) due to turning 18 years old, <sup>13</sup> emancipation or entering marriage, a child continues in full-time secondary, vocational, post-secondary or higher education, he or she is paid an applicable guardianship benefit until the age of 24. Since the 1<sup>st</sup> January 2009 the amount of the guardianship benefit for a child who is under guardianship in a family-type guardianship institution (with more than 6 children) was set to 8 MSL (BSA), or the difference between 8 MSL (BSA) and cumulative amount of an orphan's pension and (or) a child maintenance obligation. <sup>14</sup> If the child under guardianship is on free boarding at a secondary or vocational school the amount of the guardianship benefit decreases to 2 MSL (BSA). No major changes were made in 2010-2011.

**Grant for housing (settlement)** (*vienkartinė išmoka įsikurti*): a lump sum 50 MSL benefit in 2005-2008 and a lump sum of 75 MSL (BSA) in 2009, given to a child upon the expiration of a guardianship due attaining the legal age of 18, emancipation, or contracting a marriage. The benefit is given to purchase a dwelling or to cover accommodation related expenses. The benefit cannot be paid in cash unless the unused part of the grant is less than 1 MSL (BSA). No changes were made in 2010-2011.

**Pregnancy grant** (*vienkartinė išmoka nėščiai moteriai*): a lump-sum benefit to a pregnant woman who is not eligible to receive a maternity leave benefit. The grant amounts to 2 MSL and is paid 70 days before the term of child birth. No changes were made in 2010-2011.

**Social benefit** (*socialinė pašalpa*): granted to families or single persons if they pass established eligibility, assets and income tests. The monthly per capita benefit is equal to 90% of the difference between 1\*SSI and per capita family income. Social assistance benefit is granted for three months. The application must be re-submitted upon benefit expiration, unless local authorities have granted the benefit for the period exceeding three months. There were no major changes to social benefits in 2010-2011.

**State social assistance benefits/pensions** (*valstybinės šalpos išmokos*): there are five types of social assistance pensions: social assistance pensions; orphan's social assistance pension; targeted compensations for nursing expenses; nursing allowances; relief compensations. Social assistance pensions are calculated in relation to a *basic monthly pension* (see Table 1.7).

<sup>&</sup>lt;sup>13</sup> The legal age of majority.

<sup>&</sup>lt;sup>14</sup> Based on the following law "Lietuvos Respublikos Išmokų vaikams įstatymo 6, 8, 12, 13, 20 straipsnių pakeitimo ir papildymo ir 22 straipsnio pripažinimo netekusiu galios įstatymas". 2008.12.19 Nr. Xi-90. http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\_1?p\_id=334470



Compensations for special working conditions (*kompensacijos už ypatingas darbo sąlygas*) are paid to people who have worked in hazardous jobs. The monthly compensation is equal to 150% of the basic monthly pension (see Table 1.7).

State pensions:

State pensions of degree one or two of the Republic of Lithuania (*Lietuvos Respublikos pirmojo ir antrojo laipsnių valstybinės pensijos*) are awarded to citizens for distinguished achievements or for individual or respective status (i.e. top-level state officials, prizemen of Olympic Games, etc), if these persons have attained an old-age retirement age or have partially or fully lost their capacity to work. The limit for assigning new state pensions is not more than 15 new degree one pensions and not more than 45 new degree-two pensions per year. A state pension of the first degree is equal to 4 *state pension bases*. A state pension of the second degree amounts to 2 *state pension bases* (see Table 1.8).

State pensions for victims (nukentėjusiųjų asmenų valstybinės pensijos) are given to the persons recognised as incapable or partially capable of work due to a number of state recognized aggressions (i.e. 11-13 January 1991 events), political imprisonment, deportations, participation in the resistance to the occupation, for participants in elimination of the consequences of the accident at the Chernobyl Nuclear Power Plant, or persons who became disabled due to military service in the Soviet Army. These pensions are paid if persons have attained an old-age retirement age or have partially or fully lost their capacity to work. The pension amount is calculated in relation to the state pension base (see Table 1.8) and varies for different victim groups.

**State Pensions for officers and soldiers** (*pareigūnų ir karių valstybinės pensijos*) are awarded to officers and soldiers or their family members. There are three types of these pensions: for the service; for lost capacity for work; for widows and orphans. The assigned pension amount is calculated based on the service record and former wage.

**State pensions for scientists** (mokslininkų valstybinės pensijos) are awarded to scientists on the basis of the temporary Law on State Pensions for Scientists. These pensions are given to individuals with an academic degree or title and at least a 10 year career of a doctor or habilitated doctor at the age of old-age pension or having lost 60–100% of their capacity for work. The size of the pension depends on the insurance record and is calculated in relation to the state pension base (see Table 1.8).

State pensions for judges (teisėjų valstybinės pensijos) are awarded to the retiring persons, who worked as judges of the Constitutional Court, the Supreme Court of Lithuania, the Court of Appeal of Lithuania, the Supreme Administrative Court of Lithuania and other Lithuanian general jurisdiction and specialized courts as well as judges of any international court elected or delegated by Lithuania, if they have at least five years of judicial service. The pension amount depends on the service record and is calculated as a percentage of the average salary over the last five years of the judicial work.

Persons entitled to receive state pension also have a right to receive state social insurance pension, unless otherwise provided by the law.



#### • Contributory benefits

Taxable contributory benefits:

**Maternity leave benefit** (*motinystės pašalpa*): a lump sum benefit paid to a pregnant woman who has a right to the *Sickness and Maternity Social Insurance*. The benefit is paid for a total of 126 calendar days, covering the period before and after the child birth. Before 1<sup>st</sup> July 2009 the maternity benefit was equal to 100% of the recipient's average monthly reimbursable income AMRI (see section 1.4.1 for more details) with minimum and maximum amounts specified. The level of the benefit didn't change in 2010-2011, although the required insurance record was extended and the maximum benefit amount decreased during this period.

**Paternity leave benefit** (*tèvystès pašalpa*): a lump sum benefit, which is effective since 1<sup>st</sup> July 2006 and is granted on the basis of *the Law on Sickness and Maternity Social Insurance*. This benefit could be claimed by a father for the first month of child care (from the child birth until the child reaches the age of one month). The benefit is granted on the basis of *the Law on Sickness and Maternity Social Insurance* if a person before the first day of paternity leave had no less than 7 months over the last 24 months of sickness and maternity social insurance record. Before 1<sup>st</sup> July 2009 the amount of paternity benefit was 100% of the benefit recipient's AMRI (see chapter 1.4.1 for more details) with minimum and maximum thresholds specified. The level of the benefit didn't change in 2010-2011, although the required insurance record was extended and the maximum benefit amount decreased during this period. Since 2011 amount of the benefit is reduced if additional income (eligible for sickness and maternity social insurance contributions) is received.

**Maternity** (paternity) leave benefit (*motinystės* (*tėvystės*) pašalpa): a monthly payment granted on the basis of the Law on Sickness and Maternity Social Insurance if a person before the first day of childcare leave had no less than 7 months over the last 24 months of sickness and maternity social insurance record. The benefit is paid to one of the parents (adoptive parents) or a guardian until the child reaches the age of 1 year (or 2 years as of 2008). The benefit was calculated in relation to AMRI until July 2009 (see more details in section 1.4.1) with minimum and maximum levels specified. The level of the benefit didn't change until the 1<sup>st</sup> July 2010, and was reduced thereafter. The required insurance record was extended and the maximum benefit amount decreased during 2010-2011.

Non-taxable contributory benefits:

**Old-age** *pension* (*senatvės pensija*): monthly pension paid for persons who attain the old-age retirement age as specified by the *Pensions*' law and have the minimum insurance period specified for the old-age pension. A state social insurance pension consists of two parts: the basic part and the supplementary part. The basic pension cannot be less than 110% of MSL (BSA). Since 2004 every person insured for full pension insurance (basic and supplementary parts of pension) may voluntarily choose either to stay only in the social insurance system or switch to the 2<sup>nd</sup> pension pillar by directing a part of social insurance contributions to a personal account in a chosen privately managed pension fund. This cumulative part of the pension adds to the supplementary part of the old age pension. Early old-age pension (išankstinė senatvės pensija) can be claimed up to five years before the regular retirement age with 30 years of insurance and after one year of unemployment.

Work incapacity pension (*netekto darbingumo pensija*)<sup>15</sup>: assigned to a person for whom a certain level of incapacity for work is established. The pension varies according to the assessed degree of disability, as well as a person's attained period of insurance. The *minimum* and

<sup>&</sup>lt;sup>15</sup> Until 1<sup>st</sup> July 1, 2005 defined as disability (*invalidumo*) pension



obligatory insurance periods are defined based on a person's age. The work incapacity pension is calculated in analogy to the old age pension, its basic part is calculated in relation to the basic pension amount (see Table 1.7).

Survivor's or orphan's pension (našlių ir našlaičių pensija): pension paid monthly to the spouse and children of a deceased person if the deceased person had been entitled or received the state disability (work incapacity) pension or old-age pension (see above). The pension level has been linked to the insured person's pension during the period 2005-2006. Later on, the survivor pension has been changed to a lump-sum monthly amount, equal to 70 LTL (since January 1<sup>st</sup> 2010 a coefficient of 0.95 is applied according to a Temporary Law on Recalculation and Payment of Social Benefits). The orphan's pension is linked to the deceased person's pension.

Unemployment social insurance benefit (nedarbo draudimo išmoka) is a monthly benefit paid to the unemployed people if they have a sufficient unemployment social insurance record. The required service record is at least 18 months during the last three years and a person must be actively looking for a job. The duration of benefit payment depends on the unemployment insurance history. The benefit amount is comprised of fixed and variable components, which relate to the SSI, CYI and the averaged insured income levels. With the adoption of the Temporary Law on Recalculation and Payment of Social Benefits starting from the 1<sup>st</sup> January 2010 the monthly benefit was capped at LTL 650 for the entire period of the benefit payment.

Sickness benefit (ligos pašalpa): granted on the basis of the Law on Sickness and Maternity Social Insurance and is given to people who have required social insurance coverage. The benefit is calculated on the basis of reimbursable income (RI) with maximum and minimum thresholds applied. There were reductions in the sickness benefits valid from June 1, 2009<sup>16</sup> and the upper limit set since January 1, 2010<sup>17</sup>.

Vocational rehabilitation allowance (profesinės reabilitacijos pašalpa): granted on the basis of the Law on Sickness and Maternity Social Insurance. The allowance is paid monthly for the entire period of the rehabilitation programme, but not for longer than 180 calendar days. The allowance is equal to 85% of AMRI, and it cannot be lower than 2 times basic monthly pensions (see Table 1.7), valid before the start of rehabilitation. The benefit has been introduced since 1st July 2005. The rules did not change during the course of 2006-2009. The upper limit for this type of allowance was set since January 1, 2010 with the introduction of the Temporary Law on Recalculation and Payment of Social Benefits.

Occupational disease allowance (profesinės ligos pašalpa): monthly allowance paid to people, covered by social insurance, at the moment when the right to this benefit has occurred. The benefit is paid until the person's return to work or until the assignment of other benefit, i.e. work incapacity pension. The benefit is calculated on the basis of reimbursable income (RI) and is equal to 100% of the AMRI.

Work incapacity grant (netekto darbingumo vienkartinė kompensacija): a lump-sum amount paid in the amount of 10% of the sum of RI, averaged over the last 12 salary months, times 24 (months) if up to 20% of work capacity is (temporarily) lost; or 20% of the sum of RI, averaged over the last 12 salary months, times 24 (months) if less than 30%, but more than 20% of work

<sup>&</sup>lt;sup>16</sup> Based on the following law "Lietuvos Respublikos Ligos ir motinystės socialinio draudimo istatymo 9, 10, 14, 211, 24 straipsnių pakeitimo ir papildymo įstatymas". 2009.04.28 Nr. Xi-237

<sup>&</sup>lt;sup>17</sup> Based on the following law "Lietuvos Respublikos socialinių išmokų perskaičiavimo ir mokėjimo laikinasis įstatymas". 2009.12.09 Nr. XI-537. Žin., 2009, Nr. 152-6820



incapacity is (temporarily) lost. If the lost work incapacity is permanent, then the grant is three times higher than the relevant grant amount, indicated under different degrees of lost (temporary) work incapacity.

Work incapacity periodical compensation (*netekto darbingumo periodinė kompensacija*) is a monthly compensation for insured persons who lost 30% or more of his/her work capacity because of an accident at work or professional disease.

### • Abolished benefits

**State and state social insurance loss of breadwinner's pensions** (valstybinės maitintojo netekimo pensijos ar valstybinės socialinio draudimo maitintojo netekimo pensijos) are awarded for the persons deceased before January 1, 1995. The persons who are entitled to receive or who receive these pensions also have a right to simultaneously receive one of the following (if entitled) pensions: the state social insurance old-age, work incapacity, invalidity, retirement, survivor's or orphan's pension. The exception is the orphan's pension which should be paid together with the loss of breadwinner's pension if the other parent was deceased before 1<sup>st</sup> January 1995.

**Retirement pensions** (*ištarnauto laiko pensijos*) are paid if the entitlement to these pensions has been granted before January 1, 1995. A person could choose to opt for old-age or work incapacity pensions instead of the retirement pension.

**Invalidity pensions** (*invalidumo pensijos*) are pensions for the disability reasons and awarded before July 1, 2005. Invalidity pensions are paid until the expiration of their entitlement or until other pensions types, such as old-age or work-incapacity pensions have been assigned. Paid invalidity pensions are updates with major parameter changes (i.e. change in social pension base). If people at the same time are entitled to receive the old-age pension, they are entitled to choose a larger pension or one of these pensions at their own choice.

# • Scope and scale

Table 1.9 and

Table 1.10 provide an indication of the relative scale and coverage of each benefit by showing the number of recipients and the expenditure on each benefit.



Table 1.9 Social benefits: recipients (as % of population[1])

	2005	2006	2007	2008	2009	2010	2011 (I) <sup>18</sup>
Benefits for families raising children							_ = = (=)
Birth grant	0.86	0.87	0.89	1.03	1.02	1.02	0.49
Child benefit	9.43	9.42	10.36	16.70	14.79	4.57	3.52
Benefit to a conscript's child	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Guardianship benefit	0.33	0.34	0.37	0.37	0.37	0.38	0.39
Grant for housing (settlement)	0.07	0.09	0.08	0.06	0.08	0.08	0.08
Pregnancy grant	0.24	0.22	0.20	0.17	0.20	0.25	0.13
Maternity leave benefit <sup>[2]</sup>	0.61	0.61	0.76	0.80	0.89	0.72	n.a.
Paternity leave benefit	n.a.	0.09	0.27	0.37	0.39	0.37	n.a.
Maternity (paternity) benefit <sup>[3]</sup>	0.46	0.48	0.50	1.11	1.38	1.43	n.a.
Unemployment and social assistance							
benefits							
Social benefit	1.58	1.11	1.08	1.11	2.19	5.45	7.34
Compensation for utilities	0.90	0.89	0.99	1.36	2.36	5.00	6.79
Unemployment social insurance benefit <sup>[4]</sup>	0.45	0.45	0.53	0.68	2.10	5.77	2.84
Municipal support	n.a.	n.a.	n.a.	0.87	0.59	0.85	n.a.
Educational stipends and other financial							
support for unemployed	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Social stipends	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Promotional education stipends	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pension social insurance <sup>[4]</sup>							
Old-age pension <sup>19</sup>	17.55	17.60	17.70	17.89	18.04	18.0	n.a.
Work incapacity and invalidity pensions <sup>[4]</sup>	6.17	6.23	6.20	6.34	6.72	7.0	n.a.
Survivor and orphan pensions	6.91	7.00	7.46	7.80	7.9	8.02	n.a.
State pensions of degree one or two	0.14	0.20	0.19	0.21	0.25	0.24	n.a.
State pensions for victims	2.73	2.73	2.72	2.67	2.59	2.53	n.a.
State pensions for officers and soldiers	0.34	0.35	0.37	0.39	n.a.	n.a.	n.a.
State pensions for scientists	0.07	0.07	0.07	0.08	0.08	0.08	n.a.
State pensions for judges	0.00	0.00	0.00	0.00	0.00	0.00	n.a.
Compensations for special working	0.26	0.26	0.27	0.27	0.26	0.25	n.a.
conditions							
State social assistance benefits/pensions*	2.41	2.88	3.99	5.21	5.60	5.60	n.a.
Loss of breadwinner's pension	0.48	0.41	0.34	0.28	0.24	0.21	n.a.
Early retirement pension	0.03	0.03	0.03	0.02	0.02	0.26	n.a.
Sickness and occupational accidents							
social insurance							
Sickness benefit	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vocational rehabilitation allowance	0.00	0.00	0.00	0.00	0.00	0.00	n.a.
Occupational disease allowance	0.00	0.00	0.00	0.00	0.00	0.00	n.a.
Work incapacity grant	0.01	0.01	0.01	0.01	0.01	0.01	n.a.
Work incapacity periodical	0.07	0.09	0.11	0.13	0.15	0.15	n.a.
compensation <sup>[3]</sup>				1 6'		C*	

<sup>[1]</sup> Used population figure refers to the beginning of the years; presented figures cover benefits if n<0.01 (where n is recipients, as % of population); otherwise n is reported as 0.00. Reported figures are based on annual number of individual recipients, unless otherwise stated. N.a. is reported if a benefit was unavailable.

[2] Number of cases.

[3] Average monthly number of recipients.

Source: Statistics Lithuania & State Social Insurance Fund Board;

<sup>[4]</sup> Average annual number of recipients

<sup>&</sup>lt;sup>18</sup> Data for the 1st half of the year.

<sup>&</sup>lt;sup>19</sup> Inclusive of working and early old-age pensioners



\* Updated data on state social assistance benefits/pensions based on the Activity reports of the Ministry of Social Protection and Labour, 2005-2009. Source: <a href="http://www.socmin.lt/index.php?-1191824460">http://www.socmin.lt/index.php?-1191824460</a>

Table 1.10 Social benefit: expenditure as % of total expenditure for these benefits<sup>[1]</sup>

	2005	2006	2007	2008	2009	2010
1. Benefits for families raising children	2000	2000	2007	2000	2002	2010
Birth grant	0.51	0.47	0.39	0.34	0.38	0.45
Child benefit	4.65	4.03	3.60	4.51	3.84	1.17
Benefit to a conscript's child	0.00	0.00	0.00	0.00	0.00	0.00
Guardianship benefit	1.11	1.00	0.88	0.64	0.57	0.63
Grant for housing (settlement)	0.13	0.14	0.12	0.08	0.12	0.13
Pregnancy grant	0.04	0.03	0.02	0.01	0.01	0.02
Maternity leave benefit <sup>[2]</sup>	1.34	1.57	1.77	2.03	2.11	1.81
Paternity leave benefit	n.a.	0.09	0.24	0.30	0.28	0.26
Maternity (paternity) benefit	2.42	2.60	3.50	7.22	9.80	10.69
2. Unemployment and social assistance						
benefits						
Social benefit	0.94	0.69	0.66	0.74	1.56	4.68
Compensation for utilities	0.55	0.48	0.42	0.43	0.65	1.07
Unemployment social insurance benefit	1.27	1.25	1.24	1.43	5.15	3.62
Municipal support	n.a.	n.a.	n.a.	n.a.	0.04	0.05
Educational stipends and other financial						
support for unemployed	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Social stipends	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Promotional education stipends	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. Pension social insurance						
Old-age pension <sup>20</sup>	54.38	54.43	54.25	52.00	48.36	49.47
Work incapacity and invalidity pensions	17.10	17.17	16.72	15.67	14.80	15.81
Survivor and orphan pensions	3.70	3.43	4.05	3.35	3.02	3.24
All types of state pensions <sup>[2]</sup>	4.93	5.22	4.15	3.58	3.13	3.05
Compensations for special working						
conditions	0.56	0.57	0.56	0.52	0.47	0.41
State social assistance benefits/pensions	0.00	0.00	0.00	0.00	0.00	0.00
Loss of breadwinner's pension	0.91	0.80	0.64	0.51	0.41	0.39
Early retirement pension	0.09	0.08	0.07	0.06	0.05	0.59
4. Sickness and occupational accidents						
social insurance						
Sickness benefit	5.05	5.58	6.34	6.22	5.15	2.28
Vocational rehabilitation allowance	0.00	0.00	0.00	0.00	0.00	0.00
Occupational disease allowance	0.16	0.18	0.16	0.16	0.14	0.00
Work incapacity grant	0.02	0.01	0.01	0.01	0.02	0.02
Work incapacity periodical compensation <sup>[3]</sup>	0.13	0.17	0.20	0.19	0.19	0.18
TOTAL, as % of total expenditures	100	100	100	100	100	100
TOTAL, in mln. LTL	5,611	6,316	7,943	10,687	12,222	10,908

 $<sup>^{[1]}</sup>$  If r<0.01 (where r is expenditures/total expenditures), than r is reported as 0.00. Reported figures are based on annual expenditures, unless otherwise stated. N.a. is reported if a benefit was unavailable.  $^{[2]}$  Estimates for 2005 and 2008 have been taken from secondary sources, based on Statistics Lithuania figures. Missing 2006-2007 expenditures have been estimated as average of 2005 and 2008 values, missing 2009 value was estimated taking into account 2008 values.

<sup>&</sup>lt;sup>20</sup> Inclusive of working and early old-age pensioners



# • Not strictly benefits

**Educational stipends** (*mokymosi stipendija*) and other financial support for unemployed: are given to unemployed people and to the employees who have been given a notice of dismissal, if they enrol into state certified *vocational training* and *non-formal education* programs. Starting from the 1<sup>st</sup> August 2009 education grant could not be paid together with the *unemployment insurance benefit*. <sup>21</sup> No major changes were applied in the period of 2010-2011.

**Promotional education stipends** (*skatinamosios stipendijos*): educational stipends given to students from all type of higher public educational institutions. The stipends are paid from the institutional scholarship funds based on specific institutional educational performance criteria, while the government defines overarching maximum stipend levels. Maximum levels also depend on the educational institution type. Since 2009 the rate and criterions for receiving promotional education stipends are determined by the schools themselves according to the regulations on the provisions of stipends. No major changes applied during 2010-2011.

**Social stipends** (*socialinės stipendijos*): is a type of educational stipend given to students from low income families if they study at public educational institutions. Social stipends are assigned to educational establishment, as part of their institutional scholarship fund. Since the 1<sup>st</sup> January 2009, social stipends (3 MSL (BSA)<sup>22</sup>) are paid only for the students in higher education, students have a right to get social stipends and promotional stipends at the same time; students from vocational training institutions can get lump sum payments from the school budget on decision of appropriate administrative body. No major changes applied during 2010-2011.

Compensations for heating of a dwelling, cold and hot water expenses, and sewage (kompensacijos už būsto komunalines paslaugas) (hereinafter referred to as "compensations"): granted to families and single persons if the value of family's or person's assets does not exceed the established ratio of property value and if all family members (single persons) meet the same eligibility criteria as described for the receipt of the social benefit. Compensations are only paid for the specified ratios of expenses, based on the notional defined sizes of useful space and ratios for certain types of utilities. There were no major changes to social benefits in 2010-2011.

**Municipal support** (vienkartinės pašalpos iš savivaldybių biudžetų): municipalities have a right to grant a one-time social support benefit for the families or single persons if they do not pass the income test or the eligibility criteria imposed on the family members. The rules of granting a one-time municipal social support are set at the local authorities' level.

Social assistance to pupils (socialinė parama mokiniams): means-tested non-cash benefit that consists of free meals to pupils and free school's supplies prior to the beginning of a new school year.

Compensation for drugs and medical devices (vaistų ir medicinos pagalbos priemonių įsigijimo išlaidų kompensavimas): awarded to insured people based on the Law of Health Insurance. Children until age of 18 and 1<sup>st</sup> degree disabled people have a right to 100% compensation for approved drugs and medical devices. Pensioners, other disabled people, or people ill with certain disease have a right to partial compensation of approved drugs and medical devices. People get immediate discounts at pharmacies.

\_

<sup>&</sup>lt;sup>21</sup> Based on the following law "Lietuvos Respublikos Užimtumo rėmimo įstatymo pakeitimo Įstatymas". 2009.07.14 Xi-334. <a href="http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc">http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc</a> 1?p. id=349316

<sup>&</sup>lt;sup>22</sup> Based on the following resolution "Nutarimas dėl Lietuvos Respublikos Vyriausybės 1995 m. kovo 31 d. nutarimo Nr. 473 "Dėl valstybinių aukštųjų mokyklų dieninės studijų formos pagrindinių, vientisųjų ir antrosios studijų pakopos studentų stipendijų" pakeitimo". 2008.10.14 Nr. 1033. <a href="http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_l?p\_id=329076">http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_l?p\_id=329076</a>



**Medical rehabilitation and compensation for sanatorium expenses** (*medicininės reabilitacijos ir sanatorinio gydymo išlaidų kompensavimas*): awarded to insured people based on *the Law of Health Insurance*. 100% of medical rehabilitation expenses are compensated for children until the age of 18, 1<sup>st</sup> degree disabled people and people ill with certain diseases. 90% of basic sanatorium expenses are compensated for children until age 7, and disabled people until age 18. Basic sanatorium prices are defined by the Health Ministry.

**Funeral Benefit** (*laidojimo pašalpa*): non-contributory lump-sum benefit (equal to 6 MSL in 2005-2007 and 8 MSL in 2008-2011) for the family member of the deceased or for another individual who arranges a burial.

**Periodical compensation in case of death of insured** (*Periodinė draudimo išmoka apdraustajam mirus*): is paid monthly to family members and the amount is equal to work incapacity periodical compensation divided by the number of persons qualifying for the compensation. This compensation is paid as an entitlement due to occupational accidents or occupational disease insurance social insurance. The benefit calculation rules did not change over the period of 2005-2011.

Grant in case of death of insured (Vienkartinė draudimo išmoka apdraustajam mirus): a lump-sum amount paid for the family members of the deceased in the amount of 100\* applicable CYI (see Table 1.6). The grant is equally divided for each family member. This grant is paid as an entitlement due to occupational accidents or occupational disease insurance social insurance. The benefit calculation rules did not change over the period of 2005-2011.

**Severance pay/compensation** (*Išeitinė kompensacija*): paid if the labour contract is terminated at the employer's initiative and no fault of employee is identified. The severance pay/compensation is paid by the employer in relation to the employment duration at the company. This benefit is subject to personal income tax.

#### 1.3 Social contributions

**Social insurance contributions** (*socialinio draudimo įmokos*) to the State Social Insurance Fund (*Socialinio darudimo fondas*, *SoDra*) are compulsorily paid by all employers and employees of private and public sectors as well as main categories of self-employed people. Contributions are flat rates without ceilings, but they differ for employees and self-employed. Furthermore, contribution rates vary considerably among different categories of self-employed people. Social insurance contributions are paid for pension, health care, sickness and maternity, employment injuries, occupational diseases and unemployment insurances.

*Employee's contributions*: In 2005-2008 all employees of private and public sector paid 3% of gross wages and salaries as social insurance contributions to pension social insurance and to sickness and maternity social insurance. Since 2009 all employees of private and public sector pay 3% of gross wages and salaries as social insurance contributions to pension social insurance and 6% to health social insurance.<sup>23</sup>

*Employer's contributions:* All employers of private and public sector pay on behalf of their employees 31% of gross wages and salaries to pension social insurance, sickness and maternity social insurance, unemployment social insurance, health insurance, employment injuries and occupational diseases social insurance.

<sup>&</sup>lt;sup>23</sup> Based on the following law "Lietuvos Respublikos Valstybinio socialinio draudimo fondo biudžeto 2009 metų rodiklių patvirtinimo įstatymas". Žin., 2008, Nr.149-5998



Contributions for self-employed: Self-employed persons, with the exception of the persons engaged in individual activities under business certificates, paid social insurance contributions for basic and additional pension part, the amount of which depends on their income in 2008. Since 2009 self-employed persons, with the exception of the persons engaged in individual activities under business certificates, pay social insurance contributions for the basic and additional pension part as well as sickness and maternity social insurance (insured only to receive maternity leave benefit, paternity leave benefit and maternity (paternity) benefit).<sup>24</sup> In 2011 the owners of the individual enterprises and 'real members' of agricultural communities are not subject to sickness and maternity social insurance contributions.

Since 2009 social insurance contributions have to be paid on income from sports, performing or authorship/copyright agreements (previously only taxed by PIT). Lower social insurance contribution rates were set for the transitional period (the year 2009, see Section 2 for details). On behalf of certain individual groups government pays contributions (so called credited contributions) for all kinds of social insurance.

Self-employed persons engaged in individual activities under business certificates didn't pay social insurance contributions in 2008. Since 2009 self-employed persons engaged in individual activities under business certificates compulsory pay social insurance contributions for the basic pension part. The contribution is equal to 50% of the state basic pension.

Compulsory health insurance contributions (privalomojo sveikatos draudimo imokos): Since 2009 the compulsory health insurance contributions were universalized and set to 9% rate of the taxable income, gross wage or the MMS corresponding to the group the insured person belongs to. The annual compulsory contribution cannot be less than 9% of the 12 MMS valid on the last day of the each month of the year. Until 2009 employees did not have to pay health insurance contributions as they were included in employer paid social insurance contributions (3%) on behalf of the employees. On behalf of certain individual groups government pays contributions (see Section 2.4.3 for details).

Payments to the Guarantee Fund (*imokos i garantini fonda*): Enterprises pay contributions to the Guarantee Fund. The rate was 0.2% of the employees' gross salary (which is the basis for calculating social insurance contributions) in the first half of the year 2008. Since 1st July 2008 the rate of payments to the Guarantee Fund is 0.1%. <sup>25</sup> Resources from the Guarantee Fund are allocated to current and past employees of bankrupted enterprises, which are indebted to employees.

#### Scope and scale

Table 1.11 and Table 1.12 provide an indication of the relative scale and coverage of the discussed social insurance contributions by showing the number of contributors (as a share of population) and the total revenues from contributions and contributions as a share of total Social Insurance Fund's revenue.

<sup>&</sup>lt;sup>24</sup> Based on the following law "Lietuvos Respublikos Valstybinio socialinio draudimo įstatymo 2, 4, 6, 7, 8, 9 straipsnių pakeitimo ir papildymo įstatymas". Žin.., 2009, Nr. 25-972
<sup>25</sup> Based on the following law "LR Garantinio fondo įstatymo 1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 13 straipsnių

pakeitimo ir papildymo įstatymas". Žin., 2008, Nr.79-3100



Table 1.11 Social contributions: contributors (as % of population)

	2005	2006	2007	2008	2009	2010 <sup>p</sup>
Insured by State Social Insurance	40.0	41.8	43.3	43.5	39.0	37.6
Insured by compulsory social insurance	39.9	41.7	43.3	43.4	39.0	37.6
of them insured by all types of social insurance	35.7	37.3	39.0	39.5	35.7	33.9
Voluntary insured for pensions	0.08	0.07	0.07	0.07	0.04	0.03
Voluntary insured for benefits (except of pensions)	0.00	0.00	0.00	0.00	0.00	0.00

Source: Information from Social Insurance Fund (Valstybinis socialinis draudimas: statistiniai duomenys 2009)

p – preliminary data

Table 1.12 Social contributions: revenue

	2005	2006	2007	2008	2009	2010
Social Insurance Fund's revenue (mln.LTL)	6,287.7	7,683.2	9,597.1	11,128.8	11,263.2	10,381.8
Social contributions as % of total Social In	surance F	und's rev	enue:			
Pension social insurance	73.4	73.0	72.6	76.4	63.8	62.4
Sickness and maternity insurance	8.4	8.8	8.8	9.4	7.7	7.6
Unemployment insurance	4.0	3.6	3.3	2.7	2.4	2.6
Employment injuries and occupational	0.8	0.8	0.8	0.8	0.7	0.4
diseases social insurance						
Health insurance*	8.1	8.0	8.0	8.3	19.8	21.9
Contributions of self-employed	1.2	1.2	1.2	1.2	0.8	1.5
Voluntary social contributions	0.0	0.0	0.0	0.0	0.0	0.0
Other revenues (fines, subsidies from State						
Budget, income from stock, etc.) as % of						
total Social Insurance Fund's revenue:	4.2	4.5	5.2	1.2	4.8	3.6

Notes: \* Before 2009 only minor part of Health Insurance Fund revenue, as in 2005-2008 major part of Health Insurance Fund revenues came from personal income tax.

Source: Information from the Social Insurance Fund<sup>26</sup>

#### 1.4 Taxes

**Personal Income Tax** (asmens pajamų mokestis): flat rate tax applied on an individual basis. Effective on 30<sup>th</sup> June 2005, incomes were taxed by 15% or 33% rate according to the source of income. There were changes in the main personal income tax rate (decrease from 33 to 24%) during the course of 2005-2008. Since 2009 all incomes, except incomes from distributed profit, were taxed by 15% rate. Incomes from distributed profit were taxed by 20% rate. <sup>27</sup> Since 2010 income from individual activities, except of income from "free occupations" and from securities, is taxed by 5% rate. The basic general allowance can be applied on employment-

\_

<sup>&</sup>lt;sup>26</sup> Lithuanian Social Insurance Fund (Lietuvos Respublikos valstybinio socialinio draudimo fondo biudžeto vykdymo ataskaitos: http://www.sodra.lt/lt/veikla/biudzetas)

<sup>&</sup>lt;sup>27</sup> Based on the following law "Lietuvos Respublikos Gyventojų pajamų mokesčio įstatymo 2, 3, 5, 6, 7, 8, 9, 10, 12, 131, 16, 17, 18, 19, 20, 21, 22, 23, 27, 29, 30 straipsnių pakeitimo ir papildymo ir įstatymo papildymo 181 straipsniu įstatymas". 2008.12.23 Nr. Xi-111: <a href="http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334556">http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334556</a>

<sup>&</sup>lt;sup>28</sup> "Independent occupation" is defined as an individual independent intellectual services provided by people who have required qualifications to clients and the public. Engaged in independent occupation activities are those independently providing services in the following fields: legal, economic, medical and health protection, education and training, other (lobbyists, architects, engineers, designers, journalists, reporters, stylists, editors, translators, computer programmers, systems designers, project managers, as well as other people, individually providing intellectual service).



related income. On almost all income sources (except self-employed, farmers and income from property sale and so called "other" incomes) income tax is already withheld at the time of payment. Self-employment income and farmers' income are subject to final tax, which is calculated with the yearly tax declaration. The list of tax-exempt incomes includes more than 50 categories, most importantly, all state social assistance or social insurance benefits, paid from state and municipal budgets or *Social Insurance Fund* (except sickness, maternity leave, paternity leave and maternity (paternity) leave benefits).

Corporate Income Tax (*pelno mokestis*) is paid by Lithuanian and foreign entities. For the purpose of calculating taxable profits of a Lithuanian entity non-taxable income and allowable deductions can be deducted. Since the beginning of 2010 the tax rate on the taxable profits of Lithuanian entities and permanent establishments was 15%. A 10% tax rate without any deductions remained unchanged in 2010 (with some exceptions when 15% rate applied) on the income of a foreign entity, sourced in the Republic of Lithuania, received otherwise than through its permanent establishments situated in Lithuania. Income from redistributed profits is taxed by 15% since 2010 (20% for income from redistributed profits in 2009). Received financial support, used not in accordance to The Law on Charity and Financial Support, and financial support exceeding a total amount of 250 BSA (MSL) is taxed without any deductions by 15% (20% for the 2009 period). Different rates (0%, 5%, 15%) may apply according to the size (number and status of employees) and type of the entity and the profit amount. No major changes applied in 2011.

**Inheritance tax** (*paveldimo turto mokestis*) is charged using a progressive tax schedule. Effective on 30<sup>th</sup> June 2005, a 5% rate applies if a value of inherited property is up to 0.5 mln LTL, if the value is higher, 10%. No tax is applied to property that is inherited by spouses, close kin and for property with value is up to 10,000 LTL. Some allowances or deductions may be made by municipalities.

**Land taxes** (*žemės mokestis*) are based on the assessed value of the land and paid by the land owner. The rate of land tax is 1.5% of the assessed value of land. The land tax calculation is based on land value, which is estimated according to land assessment methodology proven by the Government. <sup>29</sup> Generally, a land tax value is based on immovable property register data and it is calculated by the local State Tax Inspectorate. Some people are exempt from land tax liability, e.g. disabled, pensioners, and children. Some allowances or deductions may be made by municipalities.

**Value Added Tax** (*pridetinės vertės mokestis*): Effective on 30<sup>th</sup> June 2005, the main standard rate of VAT was 18%. Since the 1<sup>st</sup> January, 2009 to 1<sup>st</sup> September 2009 the main standard rate of VAT increased to 19%, and from 1<sup>st</sup> September 2009 to 21%. From the beginning of 2010 the standard VAT rate remained 21%. 9% VAT rate applied to heating energy used for heating of the living dwellings, hot water and cold water used for preparing hot water, including heating energy used for the heating of water, for the living dwellings. 9% VAT rate also applied to printings (books and non-periodical publications). 5% VAT rate applied to state-compensated medicine and medical assistance tools. 0% rate applied to export and transit of goods and related services. Starting from the 1<sup>st</sup> January 2011 the 9% VAT rate also applied to hotel-type and other accommodation services foreseen by laws on tourism activities.

Excise Duties (*akcizai*) are charged on alcohol and alcoholic beverages, beer, tobacco, fuel and electric power and electrical production.

 $<sup>^{29}</sup>$  Based on the following resolution "LR Vyriausybės 1993 m. rugpjūčio 3 d. nutarimas  $\underline{\text{Nr. }603}$  "Dėl žemės mokesčio"



**Social Tax** (*socialinis mokestis*) is a temporary tax, effective from 1<sup>st</sup> January 2006 and applied only for the years 2006 and 2007. This social tax was paid by the legal entities which were obliged to pay corporate income tax. The tax base was the same as for corporate income tax. The social tax rate for 2006 was 4%, while for 2007 it was 3%.

Immovable Property Tax (*nekilnojamo turto mokestis*): This tax is paid by natural and legal persons. 'Immovable property' means the premises, engineering and other structures registered in the Real Property Register. This tax is imposed on 1) the immovable property (or part) belonging to natural persons by the right of ownership and located in Lithuania, with the exception of the structures (premises) intended for dwelling purposes, gardens, garages, homesteads, greenhouses, farms, subsidiary farms, science, religion, and recreation, fish-farming structures as well as engineering structures, where they are not the immovable property used for economic or individual activities or have not been transferred, for an indefinite period or for a period exceeding one month, for use to legal persons; 2) the immovable property belonging to legal persons by the right of ownership and located in Lithuania. Since 2007 the tax rate is 0.3-1% of average market value of the immovable property, depending on the municipality. No major changes were made in 2010-2011.

#### Other taxes

Other indirect taxes include Income Deductions according to Forest Law, Income Deductions according to Law on Road Maintenance and Development Programme Financing (until 2006), Sugar Sector Taxes, Lottery and Gambling Tax, Vehicle Tax, Environment Pollution Taxes, Tolls and International Trade and Transaction Taxes.

#### • Scope and scale

Table 1.13 and Table 1.14 provide an indication of the relative scale and coverage of the taxes by showing the number of taxpayers and the total revenues from different taxes.

Table 1.13 Taxes: taxpayers (as % of population)

	2005	2006	2007	2008	2009	2010
Direct taxes						
1. Personal Income Tax on wages	42.0	43.7	45.1	44.1	37.8	36.8
(main tax rate*)						
2. Personal Income Tax (from	1.8	2.1	2.2	2.5	1.6	0.8
authorship contracts, royalties)						
(reduced tax rate in 2005-2008)**						
3. Personal Income Tax on rent	1.6	1.9	2.1	2.2	1.8	n.a.
(reduced tax rate in 2005-2008)**						
4. Personal Income Tax on income	0.3	0.6	0.8	0.9	0.9	0.9
from individual activity (reduced tax						
rate in 2005-2008)**						
5. Personal Income Tax (acquisition of	2.3	2.6	3.0	3.0	2.2	2.1
business certificate) ***						

Notes: \* 33% in 2005; 33% and 27% in 2006; 27% in 2007, 24% 2008; 15% in 2009; 15% in 2010.

Source: Tax Authorities<sup>30</sup>

<sup>\*\* 15%</sup> for 2005-2010

<sup>\*\*\*</sup> Acquisition price of business certificate varies for different economic activities and across municipalities.

<sup>&</sup>lt;sup>30</sup> Information on taxpayers under categories 1-3 provided on request by the State Tax Inspectorate; information on categories 4-5 available in the report by the State Tax Inspectorate (Administruojamų nacionalinio biudžeto pajamų surinkimo apžvalga).



Table 1.14 Taxes: revenue (mln. LTL)

	2005	2006	2007	2008	2009	2010
Annual total (tax) revenue	12,899.2	15,065.4	18,630.9	21,787.2	16,463.2	15,722.1
Income and profit taxes	5,074	6,349.3	7,091.4	8,171.6	5,478.4	4,424.8
Personal Income Tax	3,566.3	4,059.2	4,555.8	5,106.3	3,789.0	3,470.9
Corporate Income Tax	1,507.7	1,924.5	2,053.6	2,910.2	1,707.6	953.9
Social Tax	n.a.	365.5	481.9	155.2	-18.2	0
Property Taxes	251.5	278.4	292.5	307.7	325.6	354.6
Land Tax	36.2	39.9	45.7	47.9	49.0	52.3
Inheritance Tax	2.3	4.2	6.3	6.1	6.1	3.8
Immovable Property Tax	213	234.4	240.5	253.6	270.5	298.5
Taxes on goods and services	7,415.3	8,794.8	11,038	13,057.3	10,482.0	10,761.1
VAT	4,841.7	6,152.2	7,824.2	9,242.5	6,798.8	7,294.0
Income Deductions according to Forest Law	16.6	17.1	23.2	21.4	25.9	36.9
Income Deductions according to Law on Road Maintenance and	296.6	n.a.	n.a.	n.a.	n.a.	n.a.
Development Programme Financing						
Excise	2,040.1	2,374.4	2,803.6	3,354	3,258.2	3,036.5
Sugar Sector taxes	5.7	2.2	45	24.8	3.1	4.2
Lottery and Gambling Tax	24.6	21.6	30.4	30.3	32.1	28.8
Vehicle Tax	48.6	78.5	139.3	144	100.9	118.7
<b>Environment Pollution Taxes</b>	59.2	58.2	63.5	71.7	62.6	25.4
Tolls	82.4	90.6	108.9	168.5	200.4	216.5
International Trade and Transaction Taxes	158.4	182.9	209	150.6	177.2	181.6

Notes: Social Tax was introduced in 2006.

Source: Information from Financial Ministry of Lithuania (Nacionalinio biudžeto pajamų surinkimo

duomenys)



#### 2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD

#### 2.1 Scope of simulation

Not all the taxes and benefits mentioned in the previous section are simulated in EUROMOD. Some of the taxes or benefits are beyond the scope of EUROMOD (i.e. indirect or business taxation) and are therefore excluded from further simulations or imputations into the EUROMOD underlying database. Their descriptions serve primarily as a tool for a better understanding of the overall tax-benefit structure in Lithuania. Some of the direct taxes and benefits are also not possible to simulate based on the available data. If feasible, though, they are included (as observed in the original data source) in the EUROMOD database either as individual or/and aggregate income sources.

Table 2.1 and Table 2.2 list the main Lithuanian tax-benefit instruments, as discussed in Section 1, and provide a brief explanation as to why the instrument is not (fully) simulated or in which format it is included in the EUROMOD database. Most of the benefits that are simulated in EUROMOD are family benefits that depend on the number of children and their age. Furthermore, simulations are possible for a number of contributory (social insurance based) benefits, such as maternity leave or benefits assigned to low income households. A number of benefits with entitlement rights dependent on contribution history (i.e. pensions, sickness benefit, disability benefits, etc) are not simulated due to the lack of data on previous employment history and salaries received, some event occurrence (i.e. disability or accident at work), or lack of information on previous partner entitlements (i.e. survival pensions).

Most of the direct income taxes and social insurance contributions are simulated (except some minor ones), as they are calculated as percentages of gross labour earnings, which are available in the EU-SILC database. Nevertheless, application of some income tax allowances (or estimation of some income taxation is not possible) or not accurate enough due to the lack of more detailed information on a person's disability degree, economic activity type or other specific socio-economic information that is not collected in the EU-SILC database. In such cases, basic tax allowance levels or other general income taxation rules are applied.

Table 2.1 Simulation of benefits in EUROMOD

	Variable	Tı	Main limitations/other				
Benefit	name(s)	2007	2008	2009	2010	2011	remarks
Birth grant	bchba_s	S	S	S	S	S	
Child benefit	bch00_s	S	S	S	S	S	
Benefit to a conscript's child	-	Е	E	E	E	Е	No recipients could be observed due to the very limited scope of the benefit.
Guardianship benefit	bchor	Ι	I	I	I	I	No data on guardianship (curatorship); also included in the variable bfa.
Grant for housing (settlement)	-	Е	E	Е	E	E	Not identified in the UDB
Pregnancy grant	bmaprnc_s	S	S	S	S	S	No data on contribution history



Benefit	Variable			nt in EU			
Maternity leave benefit	bmaprct_s	S	S	S	S	S	No data on contribution history
Paternity leave benefit	bplct_s	S	S	S	S	S	No data on contribution history
Maternity (paternity) leave benefit	bmact_s	S	S	S	S	S	No data on contribution history
Social benefit	bsa00_s	PS	PS	PS	PS	PS	No data on assets
Compensations for heating of a dwelling, cold and hot water expenses, and sewage	bho	I	I	I	Ι	I	No data on expenditures available
Unemployment social insurance benefit	bunct_s	PS	PS	PS	PS	PS	No data on contribution history
Old-age pension	boa	IA	IA	IA	IA	IA	No data on contribution & wage history;
Early retirement (oldage) pension	byr	I	I	I	I	I	No data on contribution & wage history or application for early-retirement; also included within aggregate variable bun
Work incapacity pension	bdi/boa	IA	IA	IA	IA	IA	No data on disability occurrence; information included in variables bdi or boa (hereinafter referred to as bdi/boa), splitting by retirement age.
Invalidity pension	bdi/boa	-	-	-	-	-	No data on disability occurrence;
Survivor's or orphan's pension	boa/bsu	IA	IA	IA	IA	IA	No data on the loss of family members; included in variables boa or bsu, based on recipient's retirement age.
Sickness benefit	bhl	IA	IA	IA	IA	IA	No data on sickness duration
Vocational rehabilitation allowance	bdi	IA	IA	IA	IA	IA	No data on event occurrence
Occupational disease allowance	bdi	IA	IA	IA	IA	IA	No data on event occurrence
Work incapacity grant	bdi/boa	IA	IA	IA	IA	IA	No data on incapacity occurrence
Work incapacity periodical compensation	bdi/boa	IA	IA	IA	IA	IA	No data on incapacity occurrence
State pensions of degree one or two	boa	IA	IA	IA	IA	IA	No data on occupational achievements
State pensions for victims	bdi	IA	IA	IA	IA	IA	No data on participation in recognized aggressions, political imprisonment, deportations, etc.



Benefit	Variable	T	'reatme	nt in EU	JROM	OD	
State pensions for officers and soldiers	boa	IA	IA	IA	IA	IA	No data on occupation history
State pensions for scientists	boa	IA	IA	IA	IA	IA	No data on academic career length
State pensions for judges	boa	IA	IA	IA	IA	IA	No data on detailed occupational segregation and history
Compensations for special working conditions	boa	IA	IA	IA	IA	IA	No data on hazardous jobs worked
State social assistance benefits/pensions	boa/bdi	IA	IA	IA	IA	IA	No information on relevant conditions, as disability occurrence, nursing at home, etc.
Loss of breadwinner's pension	bsu	IA	IA	IA	IA	IA	No data on previous rights to the benefit;
Retirement pension	boa	IA	IA	IA	IA	IA	No data on previous rights to the benefit
Educational stipends and other financial support for unemployed	bed	IA	IA	IA	IA	IA	No data on participation in non-formal education programmes;
Social stipends	bed	IA	IA	IA	IA	IA	No data on affiliation to different type of educational establishments
Promotional education stipends	bed	IA	IA	IA	IA	IA	No information on grades
Municipal support	bsals	I	I	I	Ι	Ι	No information on different benefit rules by municipalities; inclusive of NGO support.
Free meals to pupils	-	Е	E	Е	Е	E	Value of the meal could only be based on the maximum subsidy amounts to food providers.
Free school's supplies prior to the beginning of a new school year	-	Е	E	E	Е	E	No rules for benefit distribution in 2005-2006. No information on families being at "socialrisk or special conditions set by education institutions.
Compensation for drugs and medical devices	-	E	E	Е	Е	Е	No information on consumption of drugs
Funeral Benefit	bsu	IA	IA	IA	IA	IA	No information on the loss of family members or benefit split among the relatives
Severance pay	yunsv	I	I	I	I	Ι	No information on circumstances upon termination of the job contract.



[a] Variable extension " $\_s$ " indicates variable that has been simulated. Other variables are taken/ imputed from the used micro-data.

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

Table 2.2 Simulation of taxes and social contributions in EUROMOD

Taxes and social	Variable		Treatm	ent in l	Euromo	d	Main limitations
contributions	name(s)	2007	2008	2009	2010	2011	
Personal Income Tax on wages	tin_s	S	S	S	S	S	Comment for 2009: main tax rate applied to more categories of income
Personal Income Tax (from authorship contracts, royalties)	tin_s	S	S	S	S	S	Comment for 2009: main tax rate apply on authorship, contracts, royalties
Personal Income Tax on rent	tin_s	S	S	S	S	S	Rent is a component of the other property related income Comment for 2009: main tax rate apply on rent
Personal Income Tax on income from individual activity	tin_s	S	S	S	S	S	Comment: for 2009 main tax rate apply on income from individual activity
Personal Income Tax (acquisition of business certificate)	-	Е	E	E	E	Е	No information on income gained from activities with business certificate
Corporate Income Tax	-	n.a.	n.a.	n.a.	n.a.	n.a.	Outside the scope of the model
Social Tax	-	n.a.	n.a.	n.a.	n.a.	n.a.	Outside the scope of the model
Land Tax	-	Е	E	E	E	E	Outside the scope of the model
Inheritance tax	-	E	E	E	E	E	No information available
Immovable property tax	-	Е	E	E	E	E	Outside the scope of the model
VAT	-	n.a.	n.a.	n.a.	n.a.	n.a.	Outside the scope of the model
Income Deductions according to Forest Law	-	Е	Е	Е	Е	Е	Outside the scope of the model
Income Deductions according to Law on Road Maintenance and Development Programme Financing	-	-	-	-	-	-	Outside the scope of the model
Excise	-	n.a.	n.a.	n.a.	n.a.	n.a.	Outside the scope of the model
Sugar Sector taxes	-	E	E	E	E	E	Outside the scope of the model
Lottery and Gambling tax	-	E	Е	Е	E	Е	Outside the scope of the model
Vehicle Tax	-	E	E	E	E	E	Outside the scope of the model



						_	
Taxes and social	Variable	_			Eurom		Main limitations
Environment Pollution Taxes	-	Е	Е	E	Е	Е	Outside the scope of the model
Tolls	-	n.a.	n.a.	n.a.	n.a.	n.a.	Outside the scope of the model
International trade and transaction taxes	-	n.a.	n.a.	n.a.	n.a.	n.a.	Outside the scope of the model
Credited social contributions	ils_sicct	PS	PS	PS	PS	PS	Only some of the eligible groups identified.
Credited contributions for health insurance	-	E	Е	E	S	S	Simulated since 2009. Before 2009 no information available on amounts to be credited
Employers social insurance contributions:	ils_sicer	S	S	S	S	S	
- pension social insurance	tscerpi_s	S	S	S	S	S	
- sickness and maternity social insurance	tscersi_s	S	S	S	S	S	
<ul> <li>unemployment social insurance</li> </ul>	tscerui_s	S	S	S	S	S	
- health insurance	tscerhl_s	S	S	S	S	S	
- employment injuries and occupational diseases social insurance	tscerac_s	S	S	S	S	S	
-payments to the guarantee fund	tscersf_s	S	S	S	S	S	
Employees social insurance contribution:	ils_sicee	S	S	S	S	S	
<ul> <li>pension social insurance</li> </ul>	tsceepi_s	S	S	S	S	S	
<ul> <li>sickness and maternity social insurance</li> </ul>	tsceesi_s	S	S	-	-	-	
- health insurance	tsceehl_s	-	-	S	S	S	
Self-employed social insurance contributions:	ils_sicse	S	S	S	S	S	
- for pensions	tscsepi_s	S	S	S	S	S	
- for compulsory health insurance	tscehl_s	S	S	S	S	S	No data on income received from authorship contracts. No data on land size.
- sickness and maternity social insurance	tscsesi_s	-	- 1	S	S	S	

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



In addition to changes in the level of taxes and benefits, as well as their related calculation parameters or income lists, the following are the main structural changes in the LT system (simulated policies) since 2005:

# • Structural changes between 2005 and 2006

None

# • Structural changes between 2006 and 2007

Paternity benefit introduced from 1<sup>st</sup> July 2006. As of 2007, maternity (paternity) leave benefit was increased (different rules in 2007 and 2008) with the number of children per birth.

# • Structural changes between 2007 and 2008

As of 2008, maternity (paternity) leave benefit has been extended from one to two years of maximum paid period of leave, with the compensation rate varying between the first and the second year.

#### • Structural changes between 2008 and 2009

A means-test introduced to child benefit for children of 3 years old and older raised in families with one or two children. Reduced income tax rate was abolished and the main tax rate reduced down to 15% (20% tax rate applies only for income from distributed profit). Social insurance contributions were changed and introduced for additional groups of self-employed and on income from sports, performing and copyright agreements. Since 2009 the compulsory health insurance contributions were universalized and set to 9% rate of the taxable income, gross wage or the MMS corresponding to the group the insured person belongs to. The annual compulsory contribution cannot be less than 9% of 12 times of MMS. Rules for calculating tax allowances changed.

# • Structural changes between 2009 and 2010

Reduction of the personal income tax rate from 15% to 5% for specific groups of people who carry out individual activities. Transition period finished for increased social insurance contributions for the self-employed. Social contribution base for self-employed persons engaged in individual activities and also for those who receive income from sports or authorship agreements reduced to 50% of the taxable income from individual activities (before social contributions). Low ceilings for unemployment social insurance benefit and other social benefits set. There were also structural cuts of some important non-simulated benefits (especially oldage pensions and sickness benefits). The former structural cuts are simulated in EUROMOD for 2010 and 2011 (see Annex II for details), while the latter are not adjusted for, besides of the basic updating.

# • Structural changes between 2010 and 2011

Generosity of the maternity (paternity) leave benefit was reduced.

# 2.2 Order of simulation and interdependencies

# • Order of simulation in 2005-2008

Table 2.3 shows the order in which the main elements of the Lithuanian system in 2005-2008 are simulated. As the Lithuanian system has few structural changes within this period, we use one table to display policy simulations over the four years' span. The defined order shows the start of Lithuanian policy simulations with the minimum wage. This choice is made in order to check



minimum wage policy implementation for observed salaries first, as employment income is used in all other following policies either explicitly (e.g. the second simulated policy in the spine is maternity leave benefit, which entitlement depends on a person's employment income) or implicitly (through assessment unit formulation).

We simulate maternity/paternity benefits before the income tax, as most of these benefits are taxable benefits (i.e. see section 1.4.2.2 for more details). We also simulate pregnancy grant (a non-contributory and non-taxable benefit) following maternity leave benefit in order to keep coherency in policy rules: pregnancy grant is given if women are not eligible for maternity leave benefit. This rule and data availability also implies that pregnancy grant is simulated dependent on a person's eligibility to maternity leave benefit. The last simulated contributory benefit is the unemployment insurance benefit.<sup>31</sup>

After the contributory benefits, we simulate employee social insurance contributions and self-employed pension contributions. These parameters are on the list of deductibles for the personal income taxation, and therefore need to be simulated before the personal income tax. Compulsory health insurance contributions for self-employed are simulated subsequently, as their level is calculated in relation to the paid personal income tax.

The last elements in the spine are untaxed family benefits and social benefit. As social benefit is a means-tested social assistance payment, it includes a rather long list of preceding incomes, such as employment income and social benefits, and therefore must be simulated as the last parameter in the spine.

Table 2.3 EUROMOD Spine: order of simulation, 2005-2008

Policy	Description	Main output
yem_lt	Minimum hourly wage	yem
	(switched off in the baseline for all years)	
bmaprct_lt	Maternity leave benefit	bmaprct_s
bmaprnc_lt	Pregnancy grant	bmaprnc_s
bmact_lt	Maternity (paternity) leave benefit	bmact_s
bplct_lt	Paternity leave benefit	bplct_s
•	(calculated since 2007)	•
bunct_lt	Unemployment insurance benefit	bunct_s
tscsepi_lt	Self-employed social insurance contributions – pensions	tscsepi_s
tin_lt	Personal income tax	tin_s
tscsehl_lt	Self-employed social insurance contributions – health	tscehl_s
tscer_lt	Employer social insurance contributions	tscer*_s
tscee_lt	Employee social insurance contributions	tscee*_s
bch00_lt	Child benefit	bch00_s
bchba_lt	Birth grant	bchba_s
bsa00_lt	Social benefit	bsa00_s
tscct_lt	Credited social insurance contributions: pensions and unemployment	

#### • Order of simulation in 2009-2011

In 2009-2011 the order of simulation remains the same as in 2005-2009 besides of the following changes (see Table 2.4):

-

<sup>&</sup>lt;sup>31</sup> Note that the head of the assessment unit is basically the richest person. For simulating contributory benefits, the underlying income concept used is the sum of original (i.e. market) incomes. Once all contributory benefits are simulated, these are used together with original incomes for constructing assessment units, which is another reason for these policies to be among the first ones.



- Since 2009 self-employed social insurance contributions for pensions, sickness/maternity, health insurance (tscse\_lt) are calculated after the personal income tax.
- Since 2009, child benefit has become means-tested and is no longer included in the incomes' list when defining eligibility to the social benefit. Hence, the child benefit policy is calculated after the social benefit since 2009.
- Employment adjustments' module (empl\_lt) was introduced for 2009-2011 in order to account for labour market changes during the financial crisis in Lithuania. This policy is switched off in the baseline.
- Structural cuts in public pensions in 2010-2011 are simulated in EUROMOD (boa\_lt policy). The cuts were implemented due to financial crisis, they were of progressive nature and had different impact on different groups of pensioners (see Annex II for details).

Table 2.4 EUROMOD Spine: order of simulation, 2009-2011

Policy	Description	Main output
empl_lt	Employment adjustments in 2009-2011	yem, yse
	(switched off in the baseline)	
yem_lt	Minimum hourly wage	yem
	(switched off in the baseline for all years)	
bmaprct_lt	Maternity leave benefit	bmaprct_s
bmaprnc_lt	Pregnancy grant	bmaprnc_s
bmact_lt	Maternity (paternity) leave benefit	bmact_s
bplct_lt	Paternity leave benefit	bplct_s
bunct_lt	Unemployment insurance benefit	bunct_s
boa_lt	Recalculation of public pensions in 2010-2011	boa, byr, bdi, bsu
tin_lt	Personal income tax	tin_s
tscer_lt	Employer social insurance contributions	tscer*_s
tscee_lt	Employee social insurance contributions	tscee*_s
bchba_lt	Birth grant	bchba_s
bsa00_lt	Social benefit	bsa00_s
bch00_lt	Child benefit	bch00_s
tscct_lt	Credited social insurance contributions: pensions and unemployment	tscct*_s
tscse_lt	Self-employed social insurance contributions – pensions, sickness/maternity, health	tscse*_s



#### 2.3 Social benefits

# **2.3.1** Birth grant (bchba\_s)

#### • Brief description

This benefit is a lump-sum cash benefit paid upon the birth of a child to one of the parents or a guardian.

#### • Definitions

The primary unit of analysis is family, which consists of partners and their own dependent children. Dependent children are persons aged under 18 or under 24 if in full-time education; they cannot be married, cohabiting with a partner nor parents themselves.

#### • Eligibility conditions

Based on the benefit rules, the benefit is paid to one of the parents or a guardian of a child born that year.

#### Income test

No income test applied.

# • Benefit amount

The benefit amounted to 8 MSL per eligible dependent child during the entire 2005-2008 (applicable on 30<sup>th</sup> June) period. Since the 1<sup>st</sup> January 2009 the benefit is equal to 11 MSL.

#### 2.3.2 Child benefit (bch00 s)

#### • Brief description

It is a monthly cash benefit paid to a family raising one or more children up to the age of 18 or older if in full-time educational system.

#### • Definitions

The unit of analysis is the family as defined in section 2.3.1.

# • Eligibility conditions

Children from large families (i.e. Type II) are eligible if aged up to 18 or until the age of 24 if enrolled in secondary, vocational, post-secondary or higher education – which is the same condition as used to define dependent children in the assessment unit. Enrolment in full-time secondary education is required for dependent children from the age of 18 or older (until the age of 21 in 2009) if raised in small families (one or two children), i.e. Type I.

Starting from the 1<sup>st</sup> January 2010 children living in the Type I families who are over 7 years are not eligible for child benefits.<sup>32</sup>

<sup>&</sup>lt;sup>32</sup> According to "Lietuvos Respublikos socialinių išmokų perskaičiavimo ir mokėjimo laikinasis įstatymas. Žin., 2009, Nr. <u>152-6820</u>"



#### • Income test

No income test applied before 2009. From the 1<sup>st</sup> March 2009 income test is applied for families which raise one or two children (Type I). Average monthly income per family member must be less than 3 times the level of SSI (where the income concept used is the same as for social benefits income test).

Starting from the 1<sup>st</sup> January 2010 income test was tightened: children below 2 years are eligible only if their parents or foster parents don't receive maternity or maternity (paternity) leave benefit or this benefit is below 1.5 SSI. For both Type I and Type II families with children aged 2 to 7 years and for Type II families with children aged 7 and over, monthly income per family member can't exceed threshold of 1.5 SSI (temporary law valid since January 1, 2010 till December 31, 2011).

#### • Benefit amount

The benefit level is calculated in relation to MSL (BSA) and varies based on the number of children in the family and their age as presented in Table 2.5.

Table 2.5 Child benefit entitlements (x applicable MSL/BSA) on June 30, 2005 – 2011

Year/Family type	2005-	2005-2006		007	20	08	2009		
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	
Child until age 2	0.75	1,1	0.75	1.1	0.75	1.1	0.75	1.1	
Child aged 3 to 6	0.4	0.4	0.4	0.4	0.4	0.4	0.4*	0.75	
Child aged 7 to 8	-	0.4	0.4	0.4	0.4	0.4	0.4*	0.75	
Child aged 9 to 17	-	0.4	-	0.4	0.4	0.4	0.4*	0.75	
Child aged 18 to 23**	-	0.4	-	0.4	0.4	0.4	0.4**	0.75	

Year/Family type	2010-2011	
	Type I	Type II
Child aged below 2	0.75*	0.75*
Child aged 2 to 6	0.4*	0.4*
Child aged 7 to 8	-	0.4*
Child aged 9 to 17	-	0.4*
Child aged 18 to 23**	-	0.4*

Notes: (a) Type I refers to children, raised in families with one or two children, Type II refers to children raised in families with three or more children; (b) Age boundaries are inclusive

Source: Based on Law of Benefits to Children and its relevant amendments & Temporary Law on Recalculation and Payment of Social Benefits.

# **2.3.3** Pregnancy grant (*bmaprnc\_s*)

# • Brief description

This benefit is a lump-sum cash benefit paid to a pregnant woman upon the 28<sup>th</sup> week of the pregnancy.

<sup>\*</sup> Means test applies since March 1, 2009 (temporary law valid since January 1, 2010 till December 31, 2011).

<sup>\*\*</sup> For children raised in Type I family: in 2009 only if in full-time education until the age of 20 (inclusive); in 2010-2011 if enrolled in secondary, vocational, post-secondary or higher education up to the age of 23 (inclusive).



# • Definitions

In principle, the primary unit of analysis would be family as defined in section 2.3.1. However, for technical reasons we define a separate family unit, which consists of partners and their own dependent children who are less than 3 years old.

# • Eligibility conditions

The benefit is paid to pregnant women who are not eligible to receive the maternity leave benefit. See more benefit details in Section 2.3.4.

#### • Income test

No income test applied.

# • Benefit amount

The benefit is equal to 2 MSL. This level did not change since 2005 (applicable on 30<sup>th</sup> June).

#### **EUROMOD** notes

Instead of pregnant women, mothers with an own child aged 0 are considered.

# 2.3.4 Maternity leave benefit (bmaprct\_s)

#### • Brief description

This benefit is a cash benefit paid to a pregnant woman on the basis of *the Law on Sickness and Maternity Social Insurance*. The maternity leave benefit is paid as a lump sum amount for the number of working days in the *applicable period* (*see below*). If the applicable period stretches into a different calendar year, the benefit could be paid in two lump-sum amounts.

# Applicable period:

The benefit is paid to women for a total of 126 calendar days, which covers the period before the child birth (70 days) and after delivery (56 days). In the case of complicated confinement or if more than one child was born, an additional 14 days are added to the total period.

#### • Definitions

The unit of analysis is the family as defined in section 2.3.3.

# • Eligibility conditions

The benefit is paid if women before the first day of maternity leave, had sickness and maternity social insurance record for no less than three months over the last 12 months or for no less than six months over the last 24 months. As of 30<sup>th</sup> June 2008, the benefit is also paid to a woman who is under 26 years and has no sufficient sickness and maternity social insurance record because she was engaged in full-time education (and a break after the studies and before becoming insured is less than three months). No changes effective on June 30, 2009.

Starting from the 1<sup>st</sup> July 2009 sickness and maternity social insurance record was extended to no less than 9 months over the last 24 months and starting from the 1<sup>st</sup> October 2009 – to no less than 12 months over the last 24 months, except of those who previously were in full-time secondary, professional or higher education (up to the age of 26) or in civil or military service and the start of the gap between the change of the status and the beginning of the insurance record was not more than 3 months.



#### • Income test

No income test applied.

#### • Benefit amount

The maternity benefit is equal to 100% of the recipient's average monthly reimbursable income AMRI (see chapter 1.4.1 for more details), and is calculated as:

B = S\*100% \* D, where:

B is maternity benefit; and B>= min B (minimum level)

S is a daily compensatory salary; S<= max (levels specified)

D is the number of working days in the applicable period;

The daily compensatory salary (S) is calculated by dividing the beneficiary's monthly income (using the month, when the beneficiary has been granted a right to this entitlement) by the number of working days in that month.

S has maximum compensatory amounts specified, which are calculated in relation to the CYI. In 2005, S could not exceed 3.5 of applicable CYI. In 2006-2009 this level has been increased to 5 times CYI. Since the 1<sup>st</sup> July 2010 the upper limit was set to 4 times CYI for newly awarded benefits. The used CYI level refers to different reference dates during the discussed period:

- in 2005-2007 the maximum level is defined in relation to the latest state approved CYI level.
- *since* 2008 the maximum level is defined in relation to the CYI that was applicable in the month of the entitlement right occurrence.

In 2005-2007, the minimum benefit B was equal to 25% of the current year's insured income CYI (see Table 1.6). In 2008 the threshold was lifted to 1/3 of the CYI. Furthermore, as of 2008, the benefit B is multiplied by the number of born children. Previously, the number of born children did not influence the benefit size. *Since the 1<sup>st</sup> January 2010* – the minimum and maximum benefit levels are recalculated on the approval of a new CYI level. Other rules did not change during the course of 2008-2011 (as of on June 30). Since July 1, 2011 the maternity benefit is no longer multiplied by the number of born children.

#### **EUROMOD** notes

The payment for additional 14 days is currently not simulated (due to data constraints).

As social insurance contribution information is not available, all mothers with an own child aged 0 in EUROMOD are considered eligible if they have been in work for more than six months in the current year<sup>33</sup> (as suggested by observed patterns in the underlying data).

The AMRI is approximated in EUROMOD (thereby, also for other relevant family benefits) using either estimated hourly wage rate multiplied by work hours per month (i.e. 168 hours on average) or observed monthly earnings.

<sup>&</sup>lt;sup>33</sup> Note that being on maternity leave is considered as in work in the underlying data source, i.e. EU-SILC.



#### 2.3.5 Paternity leave benefit (*bplct\_s*)

# • Brief description

The benefit was introduced from 1<sup>st</sup> July 2006, and is granted on the basis of *the Law on Sickness and Maternity Social Insurance*. It could be claimed by a father who has a newborn child. The benefit is paid up to one month (from the child birth until the child reaches the age of one month).

### • Definitions

The unit of analysis is the family as defined in section 2.3.3. Insured income definition is presented in section 1.4.1.

## • Eligibility conditions

Before the first day of paternity leave, a father must have no less than seven months of sickness and maternity social insurance record over the last 24 months.

Since January 1, 2008 benefit is also paid to a father who is under 26 years and has no sufficient sickness and maternity social insurance record because of his engagement in full-time education (and a break after the studies and before becoming insured is less than three months).

Since the introduction of the law on July 1, 2006 the requirement of the father being married to a mother of the child has been in place. Since January 1, 2008 the marriage requirement has been dropped and replaced by a requirement to have a legal acknowledgement of the fatherhood of the child.<sup>34</sup>

Starting from the 1<sup>st</sup> July 2009 sickness and maternity social insurance record was extended to no less than 9 months over the last 24 months and starting from the 1<sup>st</sup> October 2009 – to no less than 12 months over the last 24 months, except of those who previously were in full-time secondary, professional or higher education (up to the age of 26) or in civil or military service and the start of the gap between the change of the status and the beginning of the insurance record was not more than 3 months.

#### Income test

No income test applied.

#### • Benefit amount

The amount of paternity benefit is 100% of the benefit recipient's AMRI (see chapter 1.4.1 for more details). The used AMRI cannot be higher than 5 times of CYI and since the 1<sup>st</sup> July 2010: 4 times CYI for newly awarded benefits. The benefit cannot be lower than 1/3 of CYI per month. *Since the 1<sup>st</sup> January 2010* – the minimum and maximum benefit levels are recalculated on the approval of a new CYI level. The rules did not change during the course of 2008-2009 (as of on June 30).

Starting from the 1<sup>st</sup> January 2011, the paternity benefit is reduced proportionally to the amount of the income eligible for sickness and maternity social insurance contributions received during the paternity leave, except of the payments for copyright agreements if the job was performed before the start of the paternity leave.

\_

According to the following law: Lietuvos Respublikos Ligos ir motinystės socialinio draudimo įstatymo 3, 5, 6, 8, 10, 15, 16, 17, 18, 181, 183, 19, 20, 21 straipsnių pakeitimo ir papildymo įstatymas. 2007 m. Gruodžio 4 d. Nr. X-1338: http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\_1?p\_id=310952



#### **EUROMOD** notes

As information on social insurance record is not available in EUROMOD, all fathers with an own child aged 0 are considered eligible. The requirement of having a legal acknowledgement of fatherhood (since 2008), cannot be simulated in the model.

## 2.3.6 Maternity (paternity) leave benefit (bmact\_s)

# • Brief description

This benefit is a monthly benefit granted on the basis of *the Law on Sickness and Maternity Social Insurance* in order to support early child care at home. The benefit is paid to one of the parents (adoptive parents) or a guardian on the childcare leave after the end of maternity leave or paternity leave payment until the child reaches the age of 1 year (or 2 years as of 2008). If the mother did not receive maternity leave benefit, this benefit would be calculated as of the child birth day.

#### • Definitions

The unit of analysis is the family as defined in section 2.3.3. Insured income definition is presented in section 1.4.1.

# • Eligibility conditions

The benefit is granted if a person, before the first day of childcare leave, had no less than 7 months over the last 24 months of sickness and maternity social insurance record.

As of 2008, the benefit is also paid to a woman who is under 26 years and has no sufficient sickness and maternity social insurance record, because she was engaged in full-time education (and a break after the studies and before becoming insured is less than three months).

Starting from the 1<sup>st</sup> July 2009 sickness and maternity social insurance record was extended to no less than 9 months over the last 24 months and starting from the 1<sup>st</sup> October 2009 – to no less than 12 months over the last 24 months, except of those who previously were in full-time secondary, professional or higher education (up to the age of 26) or in civil or military service and the gap between the change of the status and the beginning of the insurance record was not more than 3 months.

#### • Income test

No income test applied.

# • Benefit amount

The amount of the child care benefit is paid as a percentage of the recipient's AMRI (see more details in chapter 1.4.1). The used AMRI cannot be higher than:

- In 2005: 3.5 times CYI (of the month in which the right to the benefit occurred)
- In 2006-2009: 5 times CYI.
- Since the 1<sup>st</sup> July 2010: 4 times CYI for newly awarded benefits.

Since the  $1^{st}$  January 2010 – the minimum and maximum benefit levels are recalculated on the approval of a new CYI level.

As of 2008, the requirement with respect to other income receipt during the time when maternity (paternity) leave benefit is paid changed. If a person has any type of *insured income*,



the originally calculated maternity (paternity) leave benefit is reduced by the amount of this income.

The level and duration of benefit entitlement has also changed during the period of 2005-2011.

Table 2.6 The rate of maternity (paternity) benefit, 2005-2011 (as of 30<sup>th</sup> June)

	2005	2006	2007	2008	2009	2010	2011
Compensation rate 1 <sup>st</sup> year, %	70	70	85/100	100	100	100	90**
Max. benefit duration the 1 <sup>st</sup> year, months*	12	12	12	12	12	12	12
Compensation rate 2 <sup>nd</sup> year, %	-	-	-	85	85	85	75**
Max. benefit duration the 2 <sup>nd</sup> year, months	-	-	-	12	12	12	12
Benefit size multiplied with # of births	No	No	No	Yes	Yes	Yes	Yes

<sup>\*</sup> If a mother/father has received a maternity leave or paternity leave benefit, the payment duration is reduced by the time (56 days and 1 month respectively) for which the relevant benefit has been paid.

Source: Based on the Law on Sickness and Maternity Social Insurance

During the entire time, this benefit also has a minimum amount specified: it cannot be less than one third of CYI per month. Some of the other relevant changes:

- 30<sup>th</sup> June 2007: if more than one child is born, the maternity (paternity) benefit increases from 85% to 100% of the benefit recipient's compensatory salary.
- 30<sup>th</sup> June 2008:
  - o maternity (paternity) benefit is paid until the child reaches the age of 2.
  - o if more than one child is born the maternity (paternity) benefit is increased according to number of children born (in case of twins the benefit is increased 2 times; triplets 3 times, etc.)
  - o if a woman already receives maternity (paternity) benefit and is entitled to a maternity leave benefit, she has a right to receive both benefits.

#### **EUROMOD** notes

The recipient is always assumed to be the mother.

As social insurance contribution information is not available, all mothers with an own child aged 1 or below (from 2008, aged 2 or below) are considered eligible if they have been in work for more than six months in the current year<sup>35</sup> (as suggested by observed patterns in the underlying data).

#### 2.3.7 Social benefit $(bsa00\_s)$

#### • Brief description

This monthly benefit is granted to families or single persons in case of income maintenance need. Social assistance benefit is granted for three months. The application must be re-submitted upon benefit expiration, unless local authorities have granted the benefit for the period exceeding three months (i.e. if the composition and income of the family has not changed).

<sup>\*\*</sup> For all the benefits (new and old) starting from the 1<sup>st</sup> July 2010.

<sup>&</sup>lt;sup>35</sup> Note that being on maternity leave is considered as in work in the underlying data source, i.e. EU-SILC.



#### • Definitions

The unit of analysis is family, which consists of partners and their own dependent children. Dependent children are persons aged under 18 or under 24 if in full-time education or unemployed; they cannot be married, cohabiting with a partner nor parents themselves.

Single persons are persons aged 18 and above:

- who are not married and reside alone:
- who are married childless persons, but residing alone by the court's judgement;
- who are married persons residing alone, as their children are staying with their spouse by the court's judgement.

Family definition for the purpose of granting social assistance includes the following persons:

- spouses or cohabitating couples;
- their children and adopted children under 18 years of age;
- single persons (children) between the ages of 18 and 24 who are unemployed, unmarried and not cohabitating: if they are full-time pupils and students of general education schools and other institutions of formal education.

# • Eligibility conditions

All family members or single persons during the income calculation period must comply with at least one of the following major conditions (applicable unless specified otherwise).

During the income calculation period, persons over 18 years of age should (those in italic could not be simulated):

- be full-time pupils and students of general education schools and other institutions of formal education if under 24 years of age;
- be employed for at least two thirds of the duration of working time or working part-time
- be of the old-age retirement age (see section 1.4.4. on old-age pensions);
- receive pensions (except the state social insurance disability pension granted to a person with Group III disability) or social assistance benefits;
- be unemployed receiving unemployment social assistance benefit;
- be the persons who have registered with the state territorial labour exchange for at least six months;
- receive education grant during the period of studying or doing public works;
- be a person nursing (assistance, care) another family member in the manner prescribed by legal acts;
- be a person undergoing treatment in a in-patient health care institution for at least a month:
- be a woman who is pregnant and less than 70 calendar days are left before a baby is due (28 or more weeks of pregnancy);
- be a mother or a father (a guardian or a curator) who raises at home a child under certain age and care conditions as prescribed in the same law:
  - o if a family raises a child under three years old, who does not attend a pre-school educational establishment;
  - o if a family raises three or more children under age of 14 and at least one of the children is under age 8 and does not attend a pre-school educational establishment or a school;
  - o if a child under 8 years old does not attend a pre-school educational establishment due to medical recommendations or due to overcrowded schools;



Since 2007-2008 two more qualifying conditions for a mother or a father (a guardian or a curator) who raises at home a child under certain age and care conditions have been added:

- o if a family raises three or more children under age of 14 and at least one of the children is under age 8 and does not attend a pre-school educational establishment due to the family's countryside residence, which is farther than 3 km away from the closest pre-educational establishment;
- o a mother or a father, if their spouse is not able to take care of the children due to disability or other acknowledges reasons, raises a child under 14 years old and works on a land plot, which is not smaller than 2 hectares (either owned or rented).
- 2. Persons from 16 and up to 18 years of age should attend institutions of formal education; be disabled, registered with the state territorial labour exchange (i.e. unemployed) or *pregnant women*.
- 3. Persons under 16: included unconditionally.

The benefit is granted to families or single persons if they pass the following assets and income tests: 1) the value of *family's* or person's assets does not exceed the *ratio of state established property value* (RP) and if 2) the *average* family or person's *income* (IL) is lower than 1 SSI per each family member.

#### • Income test

Assets' and incomes' test is applied

## Assets' test:

Family's or person's actual assets (AS) must be lower than the *ratio of state established property value* (RP), which is calculated in the following way: AS <= RP = RE+RM, where

**AS** is the actual value of a family's or person's assets. AS is established by calculating the value of the following family's or person's assets (effective unless specified otherwise):

- construction works, including construction works under construction;
- vehicles subject to registration;
- agricultural machinery subject to registration;
- land (including that occupied with forests and water bodies);
- livestock, poultry, animals, hives, if their total value exceeds LTL 4,000;
- stocks, bonds, bills of exchange, and other securities, shares, if their total value exceeds LTL 2,000;
- works of art, gems, jewellery; precious metals, when the value of a unit exceeds LTL 2.000:
- cash resources if their total value exceeds LTL 2,000;
- received (unpaid) loans, if their total value exceeds LTL 2,000 as of 2007 onwards exception condition added: except of state loans for the students studying at the higher education institutions.
- money lent to other individuals (and unpaid), if their total value exceeds LTL 2,000;
- any other property, which has been acquired into the ownership during the last 12 months preceding the month from which cash social assistance begins to be granted, provided that the value of a unit (set) of such property exceeds LTL 2,000: this condition was abolished from 2007 onwards.
- As of 2007 onwards one more asset was added to the list: state compensations for real property purchased by the State, restored savings and other restored resources.



In order to evaluate AS, applicants for social assistance must declare their assets. Then the declared number of property is checked with the registry data.<sup>36</sup> If the value of the declared property is extraordinarily low, officials have a right to establish property value using *average market value*, as approved by the Commission for the Assessment of Property Subject to Registration.

**RE** is the "ratio of real estate value" and is calculated as:

RF -

Notional size of residence (60m2 for the 1st person + 15m2 for each additional family member) x average market price of the residence (which is approved by the Commission for the Assessment of Property Subject to Registration on 1st February, 1st May, 1st August and 1st November of each year – see Table 2.7).

+

Notional size of land plot per family or person x average market price of the land (see Table 2.7). The state requires application of the following notional sizes of land per family:

- residential purpose land: in cities 6 Ares, <sup>37</sup> in towns and villages 25 Ares;
- agricultural purpose land (if the plot does not exceed 1 hectare<sup>38</sup>): in cities 6 Ares, in towns and villages 25 Ares;
- agricultural purpose land (if the plot exceeds 1 hectare): in cities -6 Ares, in towns and villages -3.5 hectares;
- other non-industrial purpose land: in cities 6 Ares, in towns and villages 3.5 hectares
- if a person does not have a land the value of the notional size of the land plot is based on 1 hectare of agricultural purpose land.

RM is the "ratio of value of movables", which is calculated per family member:

- 45 SSI for the first person aged 18 or above;
- 30 SSI for each additional person aged 18 or above;
- 15 SSI for each person (child) under 18 years old.

#### • Income test:

For the purpose of means testing, the average family or person's income (IL) is calculated as: the average income of all family members during the period of three months prior to the month when the family (single resident) acquired the right to social benefit. All income should be taken after the deduction of withholding income tax and employee social insurance contributions. Incomes defined by the same social assistance law, namely compensations for housing utilities and social benefit itself, are not taken into account for means testing.

The following incomes are included in the means-test for the period of 2005-2011<sup>39</sup> unless otherwise specified (those in italic could not be simulated):

\_

<sup>&</sup>lt;sup>36</sup> Based on Methodology of Asset Evaluation (*Turto vertinimo metodika*),

 $<sup>^{37}</sup>$  1 Are = 100 square meters

 $<sup>^{38}</sup>$  1 Hectare = 10000 sq. meters or 100 Ares

Changes effective on the 30<sup>th</sup> June, 2009 indicated according to the following law: "Lietuvos Respublikos Piniginės socialinės paramos nepasiturinčioms šeimoms ir vieniems gyvenantiems asmenims įstatymo 15 ir 22 straipsnių pakeitimo įstatymas". 2008.06.17 Nr. X-1611: <a href="http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\_1?p\_id=323463">http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\_1?p\_id=323463</a>



- work-related income and royalties (including non-cash payments) before the 1<sup>st</sup> July 2008. Since the 1<sup>st</sup> July 2008 work related incomes of those who study full-time (at secondary or vocational school) is not included into IL;
- all types of pension benefits (except of nursing allowances);
- dividends and interests;
- income of an owner of an individual company, received from the taxable profit of such company;
- alimony;
- education grants excluded from the list as of 2007 onwards;
- all income of a social nature, such a family benefits and other state transfers, with the exception of compensations of transport costs for the handicapped and the disabled and compensations to diabetics and donors. As of 2007 onwards, the exception condition is narrowed down to 'the exception of compensations of transport costs for the handicapped and compensations for donors'. As of 1<sup>st</sup> July 2008, child benefits, social stipends and assistance money are not included into IL;
- unemployment social insurance benefit, severance pay or compensation paid upon the termination of an employment contract or upon the dismissal of public servants;
- sickness, maternity, and maternity/paternity benefit and from 2007 onwards occupational rehabilitation.
- compensation for property and non-pecuniary damage (including one time compensation for lost working capacity);
- cash donations if their total amount exceeds the amount of 4\*SSI.
- *cash resources received as a gift;*
- inherited cash resources;
- *cash resources received abroad or from a foreign state;*
- state compensation for the property appropriated for public needs excluded from this list as of 2007 onwards.
- income from property rent and from 2007 onwards income from property sale (unless it is included into assets).
- lottery and other cash winnings, prizes;
- income from individual activities, including the income received from engaging in the activities with a business certificate;
- income from agricultural activities (except of income from gardens of members of gardeners' societies, the area of land plots of which does not exceed 6 Ares); as of 2007 onwards, the exception condition is granted for land plots which do not exceed 1 hectare:
  - a) in the absence of accounting documents, average monthly income should be calculated by applying the ratios of income from agricultural activities evaluated according to the state approved notional costs;
  - b) if there is no possibility for determining income according to these ratios, average monthly agricultural income should be calculated by applying a state approved income rate per hectare of agricultural land (see Table 2.8 for rates).



Table 2.7 Monthly income rate per hectare of agricultural land, LTL

Land quality grade/ Year (on June 30)	2005	2006	2007	2008	2009	2010	2011
Up to 32	11	10	12	8	30	28	5
32-35	17	13	17	18	39	40	15
35-40	21	19	24	30	55	54	26
40-48	31	26	36	52	79	75	48
48 and more	39	32	42	65	97	93	66
Average (own calculation)	24	20	26	35	60	58	32

Source: LR Agricultural Minister Order *Dėl Žemės Ūkio Veiklos Pajamų Normatyvų ir Pajamų Normos Hektarui Žemės Ūkio Naudmenų Patvirtinimo*, 2004 m. liepos 2 d. Nr. 3D-391, Vilnius, and its relevant amendments.

### • Benefit amount

Social benefit per family or single person is calculated as: 90% x (SSI x number of people in family – IL). The calculated social benefit should be equal to at least 5 LTL in order to be paid.

#### **EUROMOD** notes

The EU-SILC database does not contain information on assets. Therefore, most of the information on the assets listed above is not available in EUROMOD. However, the following imputations have been made:

- residential property value: based on the EU-SILC variables on housing characteristics, imputed useful floor space and external real estate market information for those who own the residence (either on mortgage or outright).
- land property value: based on the size of residential and agricultural land holding (note that this is, however, not available in the EU-SILC UDB version) and average market price (see Table 2.8).
- financial assets: based on the EU-SILC information on investment income and external information on the average yield of LT government bonds.

Table 2.8 Average housing and land market prices

	2005	2006	2007	2008	2009**	2010	2011
	Flats (LT	L/1 sq. m)					
Densely populated areas (cities:							
Vilnius, Kaunas, Klaipėda,	1,816.33	2,112.33	2,590.33	3,561.00	3,776.52	2,412.56	2,245.64
Panevėžys, Šiauliai)							
Thinly populated areas (other	546.56	612.25	703.04	1,087.98	1 249 55	814.31	639.56
towns and villages)	3 10.50	012.23	703.01	1,007.50	1,217.33	011.51	037.30
			1/1  sq. m				
Densely populated areas (cities:							
Vilnius, Kaunas, Klaipėda,	350.33	1,623.67	1,759.33	2,014.67	2,119.08	1,690.95	1,619.81
Panevėžys, Šiauliai)							
Thinly populated areas (other	123.39	543,45	611.99	859.55	939.65	678.98	544.76
towns and villages)				1 1/7			
D 1 1 1 1 (2)		Residei	ntial purpo	ose land (L	TL/I are)		
Densely populated areas (cities:	0.070.5	15 400 00	24.062.5	20.720.0	10.015.0	20.1767	0.4.700.0
Vilnius, Kaunas, Klaipėda,	8,072.5	15,400.00	24,062.5	29,720.0	42,015.3	29,1/6./	24,722.3
Panevėžys, Šiauliai)							
Thinly populated areas (other towns and villages)	989.06	1,758.00	2,318.63	3,386.65	3,906.53	3,631.54	2,018.77
towns and vinages)		4•	1,1	1 1	·C 1	1 4	TT /1
D 1 1 1 1 (2)	2 (15 0	0	-	pose land	-	,	<i>'</i>
Densely populated areas (cities:	2,615.0	5,128.75	7,903.75	10,398.75	13,803.9	13,319.6	11,6/9.6



	2005	2006	2007	2008	2009**	2010	2011
Vilnius, Kaunas, Klaipėda,							
Panevėžys, Šiauliai)*							
Thinly populated areas (other towns and villages)	325.44	634.55	864.19	1,274.92	1,737.76	1,800.37	1,173.48
-	Agricu	iltural pu	rpose land	if more th	an 1 hect	are (LTL/	1 hectare)
Thinly populated areas (only villages)	8,633.26 2	25,483.43	33,976.4	41,217.39	44,936.9	13,553.9	10,376.9

<sup>\*</sup> The rate is also applied if the land size is more than 1 hectare.

Source: Based on the Law "<u>Dėl vidutinių rinkos kainų nustatymo būstui ir žemės sklypams 2005 m. rugpjūčio 1 d. valstybės garantuojamai teisinei pagalbai ir piniginei socialinei paramai mažas pajamas gaunančioms šeimoms gauti"</u> No..91-3422 (Valstybės žinios: 2005-07-28) and its relevant changes.

The notional and actual value of the land could not be established in EUROMOD, as the EU-SILC UDB version does not contain owned land size information.

## **2.3.8** Unemployment social insurance benefit (*bunct\_s*)

# • Brief description

This monthly benefit is organized via compulsory insurance system and covers individuals receiving remuneration for work.

## • Definitions

The unit of analysis is the individual. *Unemployed person* – unemployed, *working age* person:

- who does not study full-time,
- is registered with the local Labour Exchange Authority,
- does not receive an early retirement benefit and
- is ready to start working

## • Eligibility conditions

Eligible people are the working age persons, who are defined as aged 16 up to the old age retirement limit. The required service record is at least 18 months during the last three years and a person must be actively looking for a job. The duration of benefit payment depends on the unemployment insurance history. The benefit is paid for:

- 6 months if insurance record is less than 25 years;
- 7 months if insurance record is 25-29 years;
- 8 months if insurance record is 30-34 years;
- 9 months if insurance record is 35 years or more.

The duration of the payment is extended:

- By two months if on the last unemployment payment day, a person has no more than 5
  years until the old-age retirement age, and if a person does not receive an early
  retirement pension.
- By actual number of sickness days (max one month) if a person gets sick during the time of unemployment benefit payment.
- By the maternity leave period (based on the rules of maternity benefit) if a woman gets entitlement right to maternity benefit when the unemployment benefit is paid.

<sup>\*\*</sup> Since 2009 the average prices for land and housing is set by the Register Center, therefore there were some changes in aggregation on the local level.



#### • Income test

No income test applied.

#### • Benefit amount

The benefit amount comprises fixed and variable components:

U=F+V, where

U – monthly unemployment benefit. As of 2008, the ceiling for the full unemployment benefit is introduced: U<=0.7\*CYI. This ceiling requirement was not in place on June 30, 2005-2007. The ceiling is applicable during the entire period of benefit payment. With the adoption of the Temporary Law on Recalculation and Payment of Social Benefits starting from the 1<sup>st</sup> January 2010 the monthly benefits was capped at LTL 650 for the entire period of benefit payment.

F – fixed benefit component, which is equal to 1 SSI (see Table 1.5);

V – variable benefit component, which is equal to 40% of the former insured income. The insured income is calculated as the average CYI (see Table 1.6) indexed wage of the previous 36 months before registering as unemployed. The indexation is done in the following way:

$$\frac{\sum_{i=1}^{36} CYI_i}{36 \times CYI_u}$$

where: i - indicates the applicable CYI of each month during the 36 months period before registering as unemployed; u - indicates the CYI amount applicable in a month, when the unemployment benefit is to be paid.

The variable component cannot be larger than: V<=(0.7\*CYI-1\* SSI). This ceiling requirement has been affective on June 30, 2005-2007, but abolished as of 2008.

The calculated unemployment benefit is paid proportionally to benefit payment duration:

- During the first three months U is paid (full benefit);
- The remaining unemployment duration period F+0.5\*V (fixed component plus 50% of the variable component) is paid.

The unemployment benefit cannot be paid together with the old-age pension (as well as an early retirement pension). The unemployment benefit is reduced by the amount of other pensions, in case a person has a right to receive a few other social insurance benefits at the same time: state social insurance pensions (except survivor and orphan pension), compensation for special working conditions (this income was accounted for during 2005-2007, and excluded as of 2008), and work incapacity pensions due to occupational injuries.

No changes effective on June 30, 2009 applied. With the adoption of the Temporary Law on Recalculation and Payment of Social Benefits starting from January 1, 2010 the monthly benefits was capped at LTL 650 for the entire period of the benefit payment.

#### **EUROMOD** notes

Effectively, this benefit is only partly simulated using the information about actual receipt. But rather than simply using the observed receipt as part of the eligibility criteria, all eligibility rules in full detail are covered. However, as not all required information (e.g. work history) is available several assumptions are made, among else considering some rules automatically fulfilled for those in receipt. This approach is chosen so that the benefit can be also modelled for



those currently employed if needed (e.g. to simulate their entitlement if they become unemployed, for replacement rates calculations).

Unemployment duration (lunmy\_s) is set equal to the maximum of observed unemployment duration (lunmy) and observed benefit receipt (bunmy). If modelling unemployment benefit for those currently employed, unemployment duration is set equal to the reported number of months in employment in the current year (liwmy), once contribution history (see the next step) is modelled. It is effectively also assumed that unemployment spells start in the reference year.

Among eligibility conditions, the requirement to actively looking for a job is not applied in EUROMOD as it is enforced very loosely in practice.

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

- For those currently employed (ils earns != 0 & lunmy = 0 & bunct = 0), this is used.
- For those currently unemployed (lunmy\_s > 0) and in receipt (bunct > 0), this is set at least equal to the minimum qualifying period.
- For those currently unemployed (lunmy\_s > 0) and not in receipt (bunct = 0), this is set to zero.

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

Benefit duration (bunmy\_s) is calculated according to the rules above, using modelled contribution history, while also controlling for the unemployment duration (lunmy\_s). Extended duration due to sickness or maternity leave is ignored. For currently employed, a further cap is imposed corresponding roughly to the average duration observed in administrative sources (and national SILC data).

Benefit entitlement is calculated based on previous earnings and benefit duration, subject to the lower and upper thresholds. For those currently employed, current earnings are used. For those currently unemployed and in receipt, previous earnings are used which have been imputed by reversing unemployment insurance benefit rules. For those currently unemployed and not in receipt, imputed wage is used. Finally, benefit amount is adjusted with the number of months in receipt (bunmy\_s).

#### 2.4 Social contributions

**Social insurance contributions** (*socialinio draudimo įmokos*) to State Social Insurance Fund (*Socialinio draudimo fondas*, *SoDra*) are compulsorily paid by all employers and employees of private and public sectors as well as main categories of self-employed people.

Contributions are flat rates without ceilings, but they differ for employees and self-employed. Furthermore, contribution rates vary considerably among different categories of self-employed people (see below for more details). Social insurance contributions are paid for pension, health care, sickness and maternity, employment injuries, occupational diseases and unemployment insurances. Conditions regarding contributions made in the past determine eligibility and amount of contributory benefits.



All social contributions are calculated on the individual tax unit basis.

# **2.4.1** Employee social insurance contributions (*ils\_sicee*)

As of 30<sup>th</sup> June 2005-2008, all *employees* of private and public sector paid 3% of gross wages and salaries as social insurance contributions. Out of 3% paid goes to:

- 2.5% to pension social insurance
- 0.5% to sickness and maternity social insurance

As of 30 June 2009, all *employees* of private and public sector paid a total of 9% of gross wages and salaries as social insurance contributions (these rates remained unchanged for 2010 and 2011):

- 3% to pension social insurance
- 6% to compulsory health insurance. 40

#### **2.4.2** Employer social insurance contributions (*ils\_sicer*)

As of 30<sup>th</sup> June 2005-2011 all *employers* of private and public sector pay on behalf of their employees 31% of gross wages and salaries. 31% is split into five components, as indicated in Table 2.9.

Additionally, 0.2% of gross salary is paid by employers to the Guarantee Fund (*imokos į garantinį fondą*) until 2008. <sup>41</sup> Since the 1<sup>st</sup> July 2008, the rate of payments to the Guarantee Fund is 0.1%. It remained unchanged in 2010 and 2011.

Table 2.9 Employers' social insurance contributions (% of gross salary)

	2005	2006	2007	2008	2009	2010	2011
1. Pension social insurance	23.5	23.6	23.7	23.85	23.3	23.3	23.3
2. Sickness and maternity social insurance	2.8	2.8	2.8	2.9	3.4	3.4	3.4
3. Unemployment social insurance	1.4	1.3	1.2	0.95	1.0	1.1	1.1
4. Health insurance*	3.0	3.0	3.0	3.0	3.0	3.0	3.0
5. Employment injuries and occupational	0.3	0.3	0.3	0.3	0.3	0.2	0.2
diseases social insurance**							
Total	31.0	31.0	31.0	31.0	31.0	31.0	31.0
6. Contributions to the guarantee fund	0.2	0.2	0.2	0.2	0.1	0.1	0.1

<sup>\*</sup>It was only minor part of Health Insurance Fund revenue in 2005-2008. Major part of Health Insurance Fund revenues came from personal income tax until 2009, when compulsory health insurance contributions were introduced and increased to 9% (3% employer's/ insurer's part and 6% employee's/ insured person's part).

#### 2.4.3 Credited social contributions (*ils\_sicct*)

*Credited social contributions* – social insurance contributions paid by the government on behalf of certain individual groups (for all or particular types of insurance). Credited social insurance contributions include unemployment, pension and/or health social insurance contributions.

<sup>\*\*</sup> Main rate. Other rates may apply ranging from 0.18% to 1% according to the group to which the insurer belongs.

<sup>&</sup>lt;sup>40</sup> Employee 6% contributions to the compulsory health insurance is also mentioned in the section 2.4.6.

<sup>&</sup>lt;sup>41</sup> Resources from the Guarantee Fund are allocated to current and past employees of bankrupted enterprises, which are indebted to employees.



The contribution base for credited unemployment and pension social insurance contributions is 1 MMS. The government pays contribution at the same rates as they are set for employers. Most importantly, such contributions are paid monthly for the following persons:

- If a mother or father (stepmother, stepfather) or guardian (curator) taking care of a child under age 3 has no taxable income, he/she is insured for basic and supplementary parts of pension and for unemployment social insurance. Only one of the parents can be insured.
- Priests of accepted confessions and monks working in monasteries are compulsorily insured for basic social insurance pension.
- One of the pre-pension age parents (stepparents) or guardian (curator) taking care after disabled has no taxable income, he/she is insured for basic and supplementary pension parts and for the unemployment social insurance.
- Conscripts are insured for all types of social insurance.
- Vocational, tertiary school students and individuals who are directed by territorial job center for vocational training are insured for employment injuries and occupational diseases social insurance for training period.
- Individuals in social or psychological rehabilitation institutions who get a salary are insured for employment injuries and occupational diseases social insurance during labour hours.
- Prisoners who get salary are insured for employment injuries and occupational diseases social insurance during labour hours.

Contribution rates for credited unemployment and pension social insurance contributions in 2005-2011 are indicated in the

Table 2.10.

Table 2.10 Contributions for pension social insurance (employer's part) and unemployment insurance, 2005-2011 (%)

	2005	2006	2007	2008	2009	2010	2011
Contributions for pension social	23.5	23.6	23.7	23.85	23.3	23.3	23.3
insurance (employer's part)							
Unemployment insurance	1.4	1.3	1.2	0.95	1	1.1	1.1

The contributions for credited health social insurance contributions are flat rate and approved annually with no strict indexation rules. Annual amounts of health social insurance contributions for 2009-2011 are as follows: LTL 605.272 per annum (LTL 50.44 per month) in 2009; LTL 744.73575 per annum (LTL 62.0613 per month) in 2010; LTL733,227 per annum (LTL61,10225 per month) in 2011.

Groups of persons who are insured for compulsory health insurance by the state:

- 1. Persons who receive any kind of pensions or assistance benefits/ compensations;
- 2. Officially unemployed persons (those unemployed who are registered with the local Labour Exchange and are willing and able to work);
- 3. Unemployed persons of the working age who have compulsory contributions history for the state social old-age pension;
- 4. Women on maternity leave and unemployed pregnant women 70 days before childbirth and 56 days after childbirth;
- 5. One of (foster) parents looking for a child up to 8 years old and one of (foster) parents looking for two or more children;
- 6. Persons up to 18 years old;



- 7. Full-time students and pupils of Lithuanian secondary, vocational schools, colleges, universities and those who permanently live in Lithuania and study full-time in the EU high schools;
- 8. Persons who receive social benefits:
- 9. One of (foster) parents or guardians who nurse at home a person with disability up to 24 years old (with some exceptions up to 26 years old) or a person who requires permanent nursing;
- 10. Persons who have disability of any level;
- 11. Persons infected with communicable diseases that are dangerous for society and included into a special list;
- 12. Participants of the resistance struggles;
- 13. Persons who helped to liquidate the outcomes of the Chernobyl accident;
- 14. Ex-prisoners of the ghetto and fascist's prisons;
- 15. Priests and monks of the traditional religious communities and students of the priests' academy;
- 16. Persons who participated in the Afghanistan war;
- 17. Unaccompanied underage foreign citizens;
- 18. Foreign citizens who are provided with additional and temporary shelter in Lithuania;
- 19. Unemployed spouse of an acting President of Lithuania who has no insured income.

#### **EUROMOD** notes

Pension and unemployment social insurance contributions are simulated in EUROMOD only for mothers or fathers (stepmothers, stepfathers) or guardians (curators) with no taxable income taking care of a child under age 3 with the following assumptions:

- The recipient of this contribution is the parent, who does not have taxable income. If neither parent has, then the recipient is the mother.
- A person should have no taxable income and should live in a family tax unit with a child under age 3.

Credited health social insurance contributions are simulated in EUROMOD for groups 1, 2, 4-8 and 10, which make up the majority of eligible persons. Compulsory health insurance contributions are not simulated for other groups due to lack of information on their status.

#### 2.4.4 Self-employed social contributions (*ils\_sicse*)

a) Effective before the 1<sup>st</sup> January 2009:

*Self-employed* persons, with the exception of the persons engaged in individual activities under business certificates, paid social insurance contributions for basic and additional pension part. The contribution level depends on income:

- If their gross annual self-employment income was less than 12 minimum monthly salary (MMS), they contributed 50% of the state defined basic monthly pension (PB)<sup>42</sup> for basic pension social insurance for each month in self-employment:
- If their gross annual self-employment income was equal to or exceeds the amount of 12 MMS, they contributed 50% of PB plus 15% of their declared gross (self-employment) income for additional pension part. Declared income cannot be lower than 1 MMS for each month in self-employment.

<sup>&</sup>lt;sup>42</sup> This amount has already been defined in Table 8, and used for calculation of social benefits, however, we include this information again for the reader's convenience.



Self-employed persons engaged in individual activities under business certificates didn't pay social insurance contributions for pensions.

Table 2.11 shows MMS and BP levels and state defined annual amounts of contributions for social insurance applicable to self-employed people, which were effective on 30<sup>th</sup> June 2005-2011. State defined annual contribution amounts were often used in practice in order to reduce ambiguities due to accrued changes in applicable MMS or PB amounts.

Table 2.11 Monhtly MMS, MHW, PB levels and amounts of annual contributions effective on June 30, 2005-2011, LTL

	2005	2006	2007	2008	2009	2010	2011
Minimum monthly salary (MMS)	500	550	600	800	800	800	800
Average MMS that year*	525	575	650	800	800	800	800
Lower tariff MMS**	430	430	600	800	800	800	800
Minimum hourly wage (MHW)	2.95	3.35	3.66	4.85	4.85	4.85	4.85
Lower tariff MHS**	2.55	2.62	3.66	4.85	4.85	4.85	4.85
Basic monthly pension (PB)	172	200	266	316	360	360	360
Average monthly PB that year*	186	215	248	338	360	360	360
Annual contributions for basic pension	1116	1290	1578	2006	2160	2160	2160
Minimum annual contributions for additional	945	1035	1170	1440	1440	1440	1440
part of pension							

#### Notes:

Sources: Based on the Law of State Social Insurance Pensions LRG Decision "Dėl Valstybinės Socialinio Draudimo Bazinės Pensijos Didinimo ir Einamųjų Metų Draudžiamųjų Pajamų Patvirtinimo", 2004 March 24, No. 235, and its relevant amendments and changes; and "Lietuvos Respublikos Vyriausybes nutarimas Del minimaliojo darbo uzmokescio didinimo", 2005 April 4, No. 361, its relevant amendments and changes. Information available at: <a href="http://www.socialiniszemelapis.lt/index.php?-1492246947">http://www.socialiniszemelapis.lt/index.php?-1492246947</a> ("Baziniai socialiniai rodikliai")

### Compulsory health insurance contributions for the self-employed before 2009:

Self-employed persons, including those receiving income from authorship contracts, but excluding farmers and personal farm users had to pay contributions equal to 30% of income tax due on self-employment income. Annual health insurance contributions cannot be smaller than certain amount (see Table 2.12). Every month farmers and other users of personal farms pay health insurance contributions of different values:

- 1) Farmers and land users (having 3 or more hectare of landed property) pay <u>3.5%</u> of minimal monthly salary MMS.
- 2) Personal farm users (having up to 3 ha of landed property) pay <u>1.5%</u> of MMS for themselves and other adult family members working in a farm.

Employees did not have to pay health insurance contributions as they were included in employer paid social insurance contributions on behalf of the employees.

\_

<sup>\*</sup>Almost all changes in minimum monthly salary and basic monthly pension were taking place in the middle of the year, that is, 1st July (except of the latest increase, which was made on 1<sup>st</sup> January).

<sup>\*\*</sup> During the course of 2005-2006 MMS and MHW had a double tariff applied for different workforce categories. Lower tariff was applied for the calculation of the salaries of the civil servants, judges, politicians, military servants and some other state employee categories. The other (higher) MMS and MHW level has been applied for the rest of the working force. The differentiation in between these two workforce groups has been abandoned since 1<sup>st</sup> January 2007.

<sup>&</sup>lt;sup>43</sup> LR Sveikatos draudimo įstatymas, 2003



Other people not mentioned before (e.g. housewives) could voluntary pay 2% of the national average monthly salary as a monthly contribution.

# b) Effective after the 1<sup>st</sup> January 2009:

From 2009 (and as of the 30<sup>th</sup> June of 2010) *self-employed* persons, with the exception of the persons engaged in individual activities under business certificates, have to pay social insurance contributions for the basic and additional pension part (26.3%) as well as sickness and maternity social insurance (2.2% insured only to receive maternity leave benefit, paternity leave benefit and maternity (paternity) benefit). <sup>44</sup> Since 2010 the owners of individual enterprises and the real members of agricultural communities were not subject to sickness and maternity social insurance contributions, contribution for pension insurance remained unchanged (26.3%). The contribution base for these groups of self-employed is taxable income of the self-employed persons after deduction of income taxes.

A reduced contribution's rate of 10% in total applied for *self-employed* persons with exception of persons engaged in individual activities under business certificates during the transitional year 2009 (full rate applies in 2010 and 2011). At Rates for farmers and their partners were even lower, i.e. 8% in 2009 (16% rate applied in 2010, full rate in 2011). No minimum liability applies (as of June 30, 2010 minimum liability for farmers and their partners applies – the minimum social contribution base being 12 MMS per year). Maximum annual base for contributions was capped at 4\*CYI per month or 48\*CYI per year in 2009-2011 (12\*CYI per year in 2010-2011 for some groups of farmers and their partners).

Since 2009 social insurance contributions also have to be paid on income from sports, performing or authorship/copyright agreements with lower social insurance contribution rates set for the transitional period (the year 2009).

As of June 30, 2010 social contribution base for self-employed persons engaged in individual activities and also for those who receive income from sports or authorship agreements is equal to 50% of the taxable income from individual activities (before personal income tax).

Self-employed persons engaged in individual activities under business certificates compulsory pay social insurance contributions for the basic pension part. The contribution is equal to 50% of the state basic pension (BP equalled to 360 LTL in 2009-2011).

#### Compulsory health insurance contributions for the self-employed since 2009:

Since 2009 the compulsory health insurance contributions were set to 9% rate of the taxable income, gross wage or the MMS corresponding to the group the insured person belongs to. The annual compulsory contribution cannot be less than 9% of 12 times of MMS.

Reduces rate of contributions is split proportionally between pensions and sickness and maternity social insurance, e.g. 10% of contributions for the self-employed are split to 9,23 % to pensions and 0,77 % to sickness and maternity social insurance.

<sup>&</sup>lt;sup>44</sup> Lietuvos Respublikos Valstybinio socialinio draudimo įstatymo 2, 4, 6, 7, 8, 9 straipsnių pakeitimo ir papildymo įstatymas. Žin.., 2009, Nr. 25-972

<sup>&</sup>lt;sup>46</sup> Lietuvos Respublikos Valstybinio socialinio draudimo fondo biudžeto 2009 metų rodiklių patvirtinimo įstatymas. Žin., 2008, Nr.149-5998



Since 2009 self-employed persons and farmers have to pay compulsory health contributions 9% of their taxable income <sup>47</sup>. The members of the farmer's cooperatives and individual business owners have to contribute 9% of the received taxable profit. As of June 30, 2010 contribution base for self-employed persons engaged in individual activities and also for those who receive income from sports or authorship agreements is equal to 50% of the taxable income from individual activities (before personal income tax). The maximum annual base for compulsory health insurance contribution paid by the self-employed working in the agricultural sphere is capped at 12 times of CYI, in other spheres – 48 CYI. Those working with business certificates have to contribute at the rate of 9% of the MMS per month.

Table 2.12 Minimum annual contributions for the compulsory health insurance paid by self-employed, effective on June 30, 2005-2011, LTL

	2005	2006	2007	2008	2009	2010	2011
Annual	264.2	304.4	353.2	428.1	9%*12*MMS	9%*12*MMS	9%*12*MMS
contributions							

Source: "LR 2005 (2006, 2007, 2008) metų valstybės biudžeto ir savivaldybių biudžetų finansinių rodiklių patvirtinimo įstatymas"

#### **EUROMOD** notes

Self-employment in the model is determined by the person having self-employment income.

#### Before 2009:

- For pension contributions, it is assumed that the proportion of those declaring income is relatively small, and that most of the self-employed would opt only for compulsory contribution part (50% \* PB).
- For health contributions, it is assumed that all farmers have more than 3 ha of land and, thereby, pay 3.5% of MMS for every month in self-employment, as land size information is not available in the underlying input dataset. This assumption is based on the "Farm Structure Survey" research (Statistics Lithuania, 2008), which states that the proportion of farm users having up to 3 ha of landed property is around 30 % compared to those 70 % having more the 3 ha.
- The 2% payment is excluded from the model as it was voluntary insurance. Since 2009:
  - Social insurance contributions paid on income from sports, performing or authorship/copyright agreements are too specific to be simulated in EUROMOD.

# 2.4.5 Compulsory health insurance contributions for those not otherwise insured (thl\_s)

Since 2009 the compulsory health insurance contributions were set to 9% rate of the taxable income, gross wage or the MMS depending on the group the insured person belongs to. Persons who are not otherwise insured for health social insurance (see Section 2.4.3 for details on credited health insurance contributions), including those who do not receive any taxable income, pay a compulsory health insurance contribution of 9% of the MMS per month since 2009.

\_

<sup>&</sup>lt;sup>47</sup> According to the following law: "Lietuvos respublikos sveikatos draudimo įstatymo 6, 8, 17, 18 ir 19 straipsnių pakeitimo įstatymas". 2009.02.19 Nr. Xi-183: http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\_1?p\_id=338330



#### 2.5 Minimum wage

#### • Brief description

Minimum wage is changed usually changed as of 1st July.

## • Definitions and eligibility conditions

The unit of analysis is individual. If the actual wage is less than minimum wage then wage is replaced with minimum hourly wage times actual working hours.

#### • Amount

It is either defined in monthly or hourly terms.

#### **EUROMOD** notes

Monthly income from employment (taking into account the number of months in work) is set equal to minimum wage (proportional to hours worked) if the income from employment is less than minimum wage, but positive, and if working hours are less than or equal to 40 hours per week. We do not apply the minimum wage correction when a person earns more than a monthly minimum wage, but its hourly wage is still less than a minimum wage.

By default the simulation of minimum wage is set off, i.e. not part of the baseline.

### 2.6 Personal income tax (tin\_s)

The main tax simulated for Lithuanian tax-benefit system is personal income tax.

#### **2.6.1** Tax unit

**Personal Income Tax** (*asmens pajamų mokestis*): Personal income tax (PIT) system in Lithuania is an individual system. Generally, tax unit is an individual who has received income. Tax allowances for parents (see section 2.6.3) are divided equally into two parts. In case of a single mother or father, the applicable tax allowance is applied fully for the parent receiving income and living with children.

Some additional tax allowances are based on a family tax unit. This tax unit consist of parents and own dependent children, who are under age 18 or if older, in secondary education. The dependent child definition also covers marital status and parenthood conditions, as discussed for social benefits too.

#### 2.6.2 Exemptions

Following Verbist (2004), we define exemptions as "income components (that) are part of pretax income, but do not have to be declared to the tax authorities, and thus are not included in the concept of taxable income (e.g. child benefits in most countries)".

The list of tax-exempt incomes includes more than 50 categories, most importantly, all state social assistance or social insurance benefits, paid from state and municipal budgets or *Social Insurance Fund*, except sickness, maternity leave, paternity leave and maternity (paternity) leave benefits, are not subject to personal income taxation.

A number of other non-taxable income types exist. These include charity, scholarships, interest from deposits, loans, compensations, lottery winnings, prizes of sports competitions, pension



annuities received from life insurance companies, inherited income, alimonies, proceeds from the sale of agricultural produce, which is produced, as well as produced and processed on the land owned and some other types of incomes.

#### 2.6.3 Tax allowances

We define tax allowances as any amount subtracted from pre-tax income (including social insurance contributions). Differently from Verbist (2004) there is no distinction between those that are fixed amounts (tax allowances) and those whose level is a function of pre-tax income (deductions).

# Applicable before 1st January 2009:

The basic general allowance was 290 LTL per month in 2005 and 2006. Effective from 30<sup>th</sup> June 2007 and 2008 it was 320 LTL per month. The allowance is higher for certain population groups.

Table 2.13 Personal income tax allowances (LTL per month), as of 30<sup>th</sup> June 2005-2008

Allowances	2005	2006	2007	2008
Basic allowance (highest applicable)				
General	290	290	320	320
For the disabled of group I	430	430	475	475
For the disabled of group II	380	380	420	420
For parents raising three or more children (adopted children)	430	430	475	475
under the age of 18 or older, if in full-time secondary education;				
<ul> <li>allowance increases for the fourth and each subsequent</li> </ul>	46	46	50	50
child by				
For single parents (adoptive parents) having children under age	335	335	370	370
18 and older if in full-time secondary education;				
<ul> <li>allowance increases for every subsequent child by</li> </ul>	53	53	60	60
For employees of agricultural activity subjects, when the	330	330	365	365
subject's income from actual agricultural production per year is				
not less then 50% of total revenue; For employees of farmers				
who have registered their farm				
Additional allowance: for parents (adoptive parents) having one or	29	29	32	32
two children under age 18 or older if in full-time secondary				
education in addition to the basic allowance, additional allowance is				
applied per eligible child *				

<sup>\*</sup>Additional allowance is applied by dividing the amount equally between parents (adoptive parents) if both of them have taxable income.

Note: All allowances are defined on the individual level. If a person meets more than one of the criteria as indicated in the table, the highest amount is applied.

Basic and additional allowances are applied monthly and are taken into account for withholding tax. However, there are some cases when basic or/and additional allowances are not taken into account for the withholding tax, but apply for final tax liability (final tax liability is based on the tax report after the tax year has ended):

- 1. if a person receives only those incomes which are subject to reduced 15% income tax, or is self-employed (except those working under business certificate) or farmer, the basic and additional allowances are returned only after filling the annual tax return form:
- 2. if a person has worked less than 12 months;



3. if a person wants to return unused spouse's additional allowance (it may happen if a spouse has received other than work income; has not received income; has received only non-taxable incomes and/or income under business certificate; has received not enough work income).

In those cases annual amount of allowance is established by summing up the amounts of the allowances in respective months of the tax period applicable to that individual. The annual amounts of additional allowances are established by the same pattern, summing up the amounts in respective months of the tax period applicable to the parents (adoptive parents) and are equally split and deducted from the total income of the parents (adoptive parents) for the taxable period.

Both withholding and final taxes are part of personal income tax simulation, and depends on the applied tax rates.

**Since the 1**<sup>st</sup> **January 2009** the basic and additional personal income tax allowances are applied only to the employment-related income or to income which conforms to the essence of employment relations (further referred as "employment-related income", see below for explanations). 48

When estimating the amount of the monthly general personal income tax allowance (applied at the source), only employment-related income is taken into account, which includes:

- salary, bonuses and premiums (monthly, quarterly, annual),
- sickness allowance for the first two days of the illness (paid by the employer),
- compensation for unused vacation,
- payments for overtime work, working on holidays and weekends, at night, or for the idle time,
- holiday payments,
- per diem if exceeds the statutory rate,
- other additional earnings paid directly by an employer to an employee for work performed.

Sickness, maternity, paternity and maternity (paternity) leave benefits are also included into the employment-related income.

The applicable monthly general allowance is calculated in accordance with the following formula:

## The monthly general allowance= 470 – 0.2\*(monthly employment-related income – 800)

If in accordance with this formula calculated general allowance is negative, it is considered to be equal to 0.

When estimating the amount of the annual income tax allowance, *resident's annual income* is taken into account, which includes all income taxed by the income tax received by the person during the taxing period, excluding income received from life insurance or private pension contract (if contract expired or was cancelled and payouts not exceed the amount of paid contributions). Non-taxable income is not included into the resident's annual income. Since 2010 income taxed by 5% income tax rate are also excluded from the resident's annual income, as well as income for which income tax was paid when acquiring business certificate.

<sup>&</sup>lt;sup>48</sup> For not permanent residents tax allowance can be applied, but only on the annual basis after the annual income is declared.



The annual basic general allowance is 5,640 LTL (470 LTL per month) if the resident's annual income does not exceed 9,600 LTL (800 LTL per month before health insurance contributions, social insurance contributions, income tax). If the resident's income is higher, the basic general allowance is calculated using the following formula:

#### The annual general allowance = 5,640 - 0.2\* (resident's annual income -9,600)

If the resident's annual income is higher than 37,800 LTL the basic general allowance is not applicable.

For the residents (for parents or adoptive parents), raising children (adopted children) under 18 years old or older, if enrolled in full-time secondary education and not emancipated, an additional personal income tax allowance (for each child) is applied. The additional monthly basic additional allowance is equal to 100 LTL for the first child (adoptee), 200 LTL for the second and each subsequent child (adoptee) which can be equally shared among the parents.

For the residents with 0-25% of working ability level, those who have reached retirement age and have a high level of special needs, or for the residents who have a heavy level of disability, the basic allowance of 800 LTL is applied.

For the residents with 30-55% of working ability level, for those who have reached retirement age and have a medium or small level of special needs, or for the residents, who have a medium or light level of disability, the basic allowance of 600 LTL is applied.

Table 2.14 Personal income tax allowances (LTL per month), as of June 30, 2009-2011

Allowances	2009-2011
Basic allowance (highest applicable)	
- General	470*
- For the disabled of group I	800
- For the disabled of group II	600
Additional allowance: for parents (adoptive parents) raising children under age	100 LTL for the first
18 or older if in full-time secondary education in addition to the basic	child (adoptee),
allowance, additional allowance is applied per eligible child (can be shared	200 LTL for the second
among the parents)**	and each subsequent
	child (adoptee)
For employees of agricultural activity subjects, when the subject's income	Not applicable
from actual agricultural production per year is not less than 50% of total	
revenue; For employees of farmers who have registered their farm	

<sup>\* 470</sup> LTL applies only if the resident's annual income does not exceed 9,600 LTL (800 LTL per month before health insurance contributions, social insurance contributions, income tax). If the resident's income is higher, the general allowance is calculated using the following formula: The annual basic general allowance = 5,640 - 0.2 \* (resident's annual income -9,600). If the resident's annual income is higher than 37,800 LTL, the basic general allowance is not applicable.

Note: All allowances are defined on the individual level. If a person meets more than one of the criteria as indicated in the table, the highest amount is applied.

#### **2.6.4** Tax base

Tax base is derived from gross income by deducting the following components:

- non-taxable income (all state social assistance and some social insurance benefits (e.g., pensions, disability benefits), etc.),
- income received from activities conducted under a business certificate,

<sup>\*\*</sup>Additional allowance is applied by dividing the amount equally between parents (adoptive parents) if both of them have taxable income.



- allowable deductions related to income from individual activities,
- the acquisition price of property and expenses related to it,
- basic and additional tax allowances (for families with children, disabled, farmers, etc)
- particular expenses incurred by a resident (when calculating taxable income of fiscal year).

Since 2009 no deductions can be made to the income from distributed profit (dividends). The expenses incurred by residents can be deducted only from the income that is taxed by 15% rate of PIT.

For 2005-2008, taxable incomes s.t. the standard tax rate (in EUROMOD) include (applying both for withholding and final tax liability): employment income, severance pay, maternity leave benefit, maternity (paternity) leave benefit, sickness benefit. Taxable incomes s.t. the reduced tax rate include investment income, rental income and private pensions in case of withholding tax. For final tax liability, self-employment income (net of self-employed pension SIC) is included as well except for those operating under the business certificate.

With respect to the income derived from activities conducted under a business certificate, a fixed amount set by municipal councils is paid.

#### 2.6.5 Tax schedule

#### **Before 2009:**

Lithuania applies a flat tax rate system to personal income. Effective from 30<sup>th</sup> June 2005, incomes were taxed by 15% (reduced) or 33% (standard) rate according to the nature of income.

The 15% rate applied to the following income (those in italic cannot be accounted for in the model):

- from distributed profit;
- income derived by sportsmen from sports activities;
- income derived by performing artists from performing activities;
- royalties;
- income derived from the rent of property;
- income derived from creative activities under commission contracts;
- income from other individual activities;
- proceeds from the sale or other transfer into ownership of property other than that related to individual activities;
- part of supplementary private pensions received;
- pensions from voluntary second pillar insurance, retrieval from contributions to voluntary pension or life insurance;
- reimbursed pension contributions paid by an individual to a pension fund where a person withdraws from a pension scheme and does not join another scheme;
- part of benefits paid under a life insurance contract;
- reimbursed life insurance premiums under a terminated life insurance contract.

The personal income tax rate of 15% remained stable during the course of 2005-2008. The rate of 33% was applied to all other taxable incomes (salaries; sickness, maternity leave, paternity leave and maternity (paternity) benefits; severance and termination payment) in 2005. There were changes in the main personal income tax rate during the course of 2005-2008 (Table 2.15).



#### Changes effective since 2009:

In 2009 all incomes, except incomes from distributed profit, were taxed by 15% rate. Incomes from distributed profit (dividends) were taxed by 20% rate. <sup>49</sup> Income from individual activities, except of income from "free occupations" and from securities, received since the beginning of 2010 is taxed by 5% rate.

Table 2.15 Personal income tax rates (%), as of June 30, 2005-2011

						-
	2005	2006	2007	2008	2009	2010-2011
Main personal					15 (20% for income from	15 (20% for income from
income tax rate	33	33	27	24	distributed profit	distributed profit
					(dividends))	(dividends))
Reduced personal income tax rate	15	15	15	15	Not applicable	5*
income tax rate					- · · · · · · · · · · · · · · · · · · ·	

<sup>\* 5%</sup> income tax rate applies for income received since the beginning of 2010 from individual activities, except of income from "free occupations" and from securities.

Personal income tax changes usually take place on the 1<sup>st</sup> of January or the 1<sup>st</sup> of July. The decrease in the main income tax rate from 33 to 27 happened on July 1, 2006. Subsequent reduction to 24% took place on January 1, 2008, and to 15% was effective since January 1, 2009.

#### **2.6.6** Tax credits (deductible expenses)

The following expenses incurred by a resident of Lithuania during the tax period may be deducted from his/her income:

- 1. Life insurance contributions paid for his/her own benefit or for the benefit of his/her spouse or minor children (adopted children) or for disabled children (adopted children) under 18 and older who are rated as totally disabled under life insurance contracts which provide for an insurance benefit not only upon the occurrence of an insurance event, but also upon the expiry of the term of the insurance contract.
- 2. Voluntary pension contributions paid for own benefit or for the benefit of a spouse or disabled children (adopted children) under 18 and older who are rated as totally disabled to pension funds.
- 3. Interest paid on the loan taken out for the construction or acquisition of housing to banking and other credit institutions, or funds and state financial institutions of foreign countries entered into the list by the Minister of Finance, where over 50% of shares (interests, member shares) are held by governments of foreign countries, as well as interest paid to a financial institution on the financial lease (leasing) of housing. Since

\_

<sup>&</sup>lt;sup>49</sup> According to the following law "Lietuvos Respublikos Gyventojų pajamų mokesčio įstatymo 2, 3, 5, 6, 7, 8, 9, 10, 12, 131, 16, 17, 18, 19, 20, 21, 22, 23, 27, 29, 30 straipsnių pakeitimo ir papildymo ir įstatymo papildymo 181 straipsniu įstatymas". 2008.12.23 Nr. Xi-111: <a href="http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334556">http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc\_1?p\_id=334556</a>

<sup>&</sup>lt;sup>50</sup> "Free occupation" is defined as an individual independent intellectual services provided by people who have required qualifications to clients and the public. Engaged in independent occupation activities are those independently providing services in the following fields: legal, economic, medical and health protection, education and training, other (lobbyists, architects, engineers, designers, journalists, reporters, stylists, editors, translators, computer programmers, systems designers, project managers, as well as other people, individually providing intellectual service).



2009 applicable only to interests paid on loans taken before 2009, not applicable to new loans

- 4. Payments for vocational training<sup>51</sup> and all other studies (when higher education and/or qualification is obtained upon graduation, as well as doctoral studies and art post-graduate studies). If payments for studies are made with borrowed funds (a loan is taken out from a credit institution for that purpose), the repaid amount of the loan during the tax period may be deducted from income.
- 5. Payments for a single personal computer unit with software, acquired once per period from 2004 to 2008, and/or for the installation of Internet access together with the acquisition costs of access equipment, which do not exceed LTL 4,000. Where the computer unit with software is acquired under a contract providing for the transfer of ownership rights to the buyer only after the payment of the total price specified in the contract, the actually paid-up part of the price (except for interest) may be deducted from income. However, the total amount of deductions may not exceed LTL 4,000 (including the acquisition costs of installing internet access and acquiring access equipment) during the term of validity of the contract. Since 2009 applicable only to payments on computers bought before 2009, not applicable to new payments.

Effective on 30<sup>th</sup> June 2005: If a student is under 26 years and he or she is not a payer of income tax or has no possibility to deduct payments for studies, those expenses may be deducted from the incomes of one of his/her parents (adoptive parents) or guardians, brother, sister, and (or) from incomes of spouse (cohabitant).

No age requirement for students is anymore specified in the law effective since 30<sup>th</sup> June 2006.

The total amount of deducted expenses cannot exceed 25% of the total tax base after deducting tax allowances.

The amount of the tax refund is equal to deductible expenses (s.t. the upper limit) multiplied with the relevant tax rate (main vs reduced rate). The proportion of expenses on which the main (reduced) tax rate is applied is equal to the ratio of incomes, s.t. the main (reduced) tax rate, to total tax base before deducing tax allowances.

Expenses are deducted from income when calculating final income tax liability for the tax period and filing an annual income tax return.

#### 2.6.7 Withholding tax and final tax liability

Almost on all income sources (except self-employed, farmers' and income from property sale and so called "other" incomes) income tax is already withheld at the time of payment. Self-employment income and farmers' income are subject to final tax, which is calculated with the yearly tax declaration.

Generally, compared to withheld income tax, final income tax takes into account several additional aspects:

- 1. Income from self-employment;
- 2. Income received by farmers and their partners;
- 3. Income from property sale or other movable asset (worth more than 3,000 LTL);
- 4. Other received incomes (from agricultural production worth more than 10,000 LTL per year; work incomes from other countries; profit from individual enterprise, dividends

<sup>&</sup>lt;sup>51</sup> This part was added in 2008.



- received from other countries; more than 2,000 LTL of interest received from EEA countries, incomes from gambling, etc.)
- 5. Annual (basic and additional) allowances if a person used not all annual amount (i.e. if a person worked not 12, but less months; if individual receives only incomes from authorship contracts; if a person haven't used additional allowance). Since 2009 annual basic allowance is recalculated, taking into account received taxable income (see part 2.6.3 for details)
- 6. and deductible expenditures.

#### **EUROMOD** notes

It is not possible to distinguish between different disability groups and hence all (self-reported) disabled people are assumed to belong to Group I.

Among deductible expenses only voluntary pension contributions and mortgage interest payments could be simulated given the data availability.

The fee for business certificate is not simulated due to data constraints.



## 3. DATA

### 3.1 General description

Detailed description of the EUROMOD Lithuanian database 2006 (LT-data 2006) is provided in EUROMOD Lithuanian Country Report 2005-2009. This section provides information on the latest dataset (i.e. EUROMOD LT-data 2008). Overview of the established combinations of EUROMOD LT datasets and policy years is given in Table 3.1.

Table 3.1 EUROMOD LT 2005-2011: data and policy years

	2005	2006	2007	2008	2009	2010	2011
LT-data 2006	X	X	X	X	X		
LT-data 2008			X	X	X	X	X

EUROMOD LT-data 2008 is mainly derived from the EU-SILC UDB (thereafter also referred to as UDB or EU-SILC data). In addition, the Lithuanian (or National) SILC survey (i.e. *Pajamų ir gyvenimo sąlygų tyrimas*) was used to include a few other variables and inform imputations. We describe both datasets in more detail.

The EU-SILC survey has a 4-year rotational panel survey design. The data is collected using face-to-face interviewing of all respondents aged 16 and over. In the Lithuanian part of the EU-SILC survey, additional information on income and taxes paid is obtained from a few administrative sources, such as the State Tax Inspectorate and the State Social Insurance Fund Board. The administrative information is used directly in producing LT part of the EU-SILC data and is not reported in the Lithuanian SILC survey.

National SILC survey is the underlying micro-dataset on Lithuania for the EU-SILC. It contains some information, which is excluded in the UDB version, however this information is highly useful for enlarging the scope of EUROMOD simulations or making them more precise. The list of variables which are merged into the EUROMOD LT-data 2008 from the National SILC (and without any other significant transformations) is provided in Table 3.2.

Table 3.2 EUROMOD LT database: variables merged from the National SILC

LT-data 2008 variables	Description
lbl	Business certificate activity
lseor	Owners of individual enterprise
lsepf	People engaged in individual activities (i.e. type of self-employment)
bchor	Guardianship benefit
amrar	Useful floor space (m2) of the main residence
aldar	Area of own or rented land (hectares)
aldagar	Area of own or rented Agricultural use land (hectares)

Relying only on National SILC information is not sufficient for some income variables, given that UDB data also uses information from administrative records. The use of administrative data, on the other hand, is not fully documented. A few observations from the data cleaning and analysis emerge:

1. National SILC survey data is cross-checked with administrative data, and in case of large biases, administrative data prevails. For example, we observe quite a few cases where reported National SILC values do not correspond to the UDB provided values.



2. Some income information is only included in the UDB data (i.e. incomes from maternity, maternity/paternity and paternity leave benefits).

Due to lack of information on how administrative records' values complement or substitute National SILC collected observations, the decision was made to rely primarily on the UDB information when constructing the EUROMOD LT 2008 data. Information from the National SILC is used with great care and validation against the macro statistics.

Table 3.3 EUROMOD LT database short description

	Description
EUROMOD database	LT_2008_a1
Original name	EU-SILC – Community Statistics on Income and Living Conditions (Anonymised User Database UDB) + merged variables from "Pajamų ir gyvenimo sąlygų tyrimas"
Provider	EUROSTAT (EU-SILC); Statistics Lithuania ( <i>Pajamų ir gyvenimo sąlygų tyrimas</i> )
Year of collection	2008
Period of collection	May-June
Income reference period	2007
Sampling	Households are selected from the Residents' Register using a random sampling method. The entire Lithuanian territory was divided into 7 non-overlapping groups – strata. From every stratum, a one-stage simple random sample is selected. The 5 largest cities of Lithuania, towns and rural areas are divided into separate strata. Sample size of households in every stratum is proportional to the number of population aged 16 and over in them.
Unit of assessment	Household and individual
Coverage	Private households. Persons living in the institutional households (e.g. in care or imprisonment institutions etc.) are excluded.
Sample size	12150 individuals, 4823 households.
Response rate	Household response rate is 81% (4823 out of selected 5983)

Source: Statistics Lithuania (2009)

#### 3.2 Sample quality and weights

The target population of the National (EU) SILC are private households (Statistikos Departamentas, 2009). Persons living in institutional households are excluded. Households are selected from the Residents' Register using a stratified sampling design with a simple random sample in strata. The entire Lithuanian territory was divided into 7 non-overlapping groups – strata (the 5 biggest cities of Lithuania Vilnius, Kaunas, Klaipėda, Šiauliai and Panevėžys; other towns; rural areas). The sample size of households in every stratum is proportional to the number of population aged 16 and over in them.

#### 3.2.1 Non-response

Based on Statistics Lithuania (2009), 1986 households from the 5 biggest cities participated in the survey, in other towns -1268, in rural areas -1569. The highest non-response was in the 5 biggest cities (25%), the smallest - in other towns and in rural areas (respectively 15%). One of the most significant reasons of household non-response was the refusal to cooperate. In the biggest cities, 14.1% of all selected households refused to cooperate, in other towns -9.6%, in rural areas -7.4%.



#### 3.2.2 Weights

The dataset uses a few types of cross-sectional survey weights, such as (UDB description):

- the household cross-sectional weights (variable DB090) these weights have been calibrated with the target population of private households and corrected for household non-response.
- the personal cross-sectional weights for all household members of all ages (variable RB050) is used to draw inference on individual basic demographic variables for the population of all individuals living in private households. Because all the current members of any selected household are surveyed, the personal weights RB050 are equal to the corresponding household cross-sectional weight DB090.
- the personal cross-sectional weights for all household members aged 16 and over (target variable PB040) is used to draw inference on the variables included in the personal questionnaire. These weights had to be corrected for individual non-response.

Table 3.4 Descriptive Statistics of the Grossing-up weight rb050 (=db090)

	LT_2008_a1	
Number	12,150	
Mean	276.234	
Median	173.663	
Maximum	5,206.632	
Minimum	5.341	
Max/Min	974.864	
Decile 1	14.884	
Decile 9	606.641	
Dec 9 / Dec1	40.757	

Lithuanian EU-SILC sample statistics have been projected to a reference population of 3,356,238 individuals in 1,288,750 households. The used weights are calibrated on the demographic data at the beginning of the year. In addition to the major age groups (around 17 sub-groups) and gender, the survey is calibrated by the residence area: the major 5 cities, other towns and rural areas.

#### 3.2.3 Item non-response and under-reporting

No households are treated as non-responding. Consequently, no major components of income have item non-response. As the EU-SILC does not contain individual benefit information (i.e. family benefits) few weighted income components could be compared with external administrative records.

The imputed or simulated benefits are discussed in Section 4. Here, we report on the comparability of the EUROMOD variable for gross earnings to external statistics (see

Table 3.5). Changes from 2008 to 2011 in EUROMOD reported monetary amounts are due to applying up-rating factors (see Section 3.5).

EUROMOD information on gross earnings is slightly under-reported in 2007, with the very close match observed in 2008. As of 2009 – EUROMOD gross-earnings are over-reported - by less than 20 percentage points. This means that the EUROMOD LT-data 2008 is not able to adequately capture employment income changes in 2009-2010 without structural adjustments.



Table 3.5 Gross earnings in EUROMOD and external statistics

	2007	2008	2009	2010	2011
EUROMOD gross earnings	31,990.044	38,189.712	36,491.04	35,285.016	36,769.356
Lithuanian Statistics: gross earnings	33,367.5	38,636.7	31,630.4	30,363.5	n/a
Ratio: EUROMOD/LT Statistics	0.96	0.99	1.15	1.16	n/a

Note: Gross earnings are gross wages and salaries, and include both remuneration in cash and in kind, but exclude employers' social contributions.

Sources: Statistics Lithuania (Database: M2010227 "Kompensacija darbuotojams bei algos ir atlyginimai pajamų metodu. Požymiai: ekonominės veiklos rūšis")

#### 3.3 Data adjustment

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

As we focus on the income reference year (2007), children who are born in the year of the survey (until the survey time, which is May-June in Lithuania) are dropped from the final micro dataset - 20 observations.

### 3.4 Imputations and assumptions

#### 3.4.1 Time period

The EU-SILC information on demographic variables mainly refers to the time of data collection (May-June, 2008). Some information (e.g. age variables) also indicates the status quo at the end of the income reference period (2007). Similar situation is observed for some socio-economic and labour variables. For example, variable rb210 (basic activity status) refers to the data collection time, while variable pl070 indicates number of months in full time work during the income reference period (the calendar year of 2007). When possible, the corresponding demographic, labour and socio-economic information in the EUROMOD dataset was based on the EU-SILC variables referring to the income reference period.

The EU-SILC UDB information on incomes refers to the calendar year of 2007, based on a 12-month receipt period. Some additional information on the number of income payments per year and monthly amounts has been obtained and imputed from the National SILC information. This has been done for selected income sources only. All monetary incomes in the EUROMOD database are converted into monthly terms. In the EUROMOD calculations, it is implicitly assumed that income is received at the same rate throughout the year.

The EU-SILC does not contain information on how many times per year a certain type of income is actually received. National SILC, on the other hand, collects this information for the most income variables. This information is (partially) used to construct EUROMOD variables on how many times a particular income type was paid over the year (e.g. boamy – number of month per year receiving old-age pensions). Some assumptions regarding EUROMOD construction of "months of receipt" variables have been made.

First, some variables in the EU-SILC are reported as aggregates (e.g. old-age pensions). In such a case, a EUROMOD variable on "months of receipt" is constructed by summing the number of different pensions' receipts – information on which per each pension type is available in National SILC. The maximum number of months is 12. Second, if information on number of months is missing in National SILC (e.g. when administrative records are used in the EU-SILC), the EUROMOD variable on months is imputed based on person's socio-economic status.



#### 3.4.2 Gross incomes

The EU-SILC survey contains information on both gross and net monetary incomes, if applicable. The survey also contains flag variables, which indicate if the observation has been collected either in gross or net form, imputation method and imputation factor (collected/recorded).

#### 3.4.3 Other imputed variables

Table 3.2 provides information on the variables that have been merged from the National SILC into the EUROMOD LT-data 2008. Some other adjustments using National SILC or external information have been also made.

The following variables are constructed using 1) merged information from the National SILC and 2) macro level administrative records' information:

- Severance pay (yunsv variable);
- Early retirement benefit (byr variable);
- Unemployment insurance benefit (bunct variable);
- Social (assistance) benefit (bsa00 variable)
- One time municipal and NGO support (bsals variable)
- Guardianship benefit (bchor).

The following variables are constructed using partially merged information from National SILC and partially other EU-SILC information:

- Disability pensions number of months received (bdimy variable);
- Old-age pensions number of months received (boamy variable);
- Survivor pensions number of months received (bsumy variable);
- Employment income number of months received (yemmy variable);
- Fringe benefits number of months received (kfbmy variable);
- Self employment income number of months received (ysemy variable).

The following variables are constructed using National SILC to inform imputations of missing observational values:

- Economic status (les variable) and especially its observational value 1 (farmer).
- Firm size (lfs variable);
- Self employment status (lse variable)
- Months per year in work (liwmy variable)
- Months per year as pensioner (lpemy variable)
- Work history in months (liwwh variable)

The following variables are constructed based on external macro and EU-SILC information:

- Financial capital assets (afc variable) based on the EU-SILC variable on investment income and external information on the interest of government long-term bonds as of July 6, 2007 (http://www.ecb.int/stats/money/long/html/index.en.html).
- Market value of the main residence (amrmv variable) based on the micro-level housing characteristics (i.e. useful floor space, etc.) and real estate market information for 2007 on average square meter prices.

In order to account for labour market changes, there are also additional variables imputed marking new unemployed in 2009-2011 (with a separate dummy variable for each year). This has been done on the basis of Eurostat LFS information showing relative increase in



unemployment by age, gender and education since 2007 and the year in question. The new unemployed in EUROMOD dataset have been chosen randomly within a corresponding cell of employed people aged 15-74 so that the same relative increase in unemployment is reached. An employed person is defined as the one with either employment or self-employment income, ignoring those who also reported having an unemployment spell in the income reference period or in receipt of unemployment benefit as well as students (unless had been also working full year). All related variable adjustments for new unemployed are done in EUROMOD (in the 'policy' called empl\_lt).

#### 3.5 Updating

The factors used to update monetary variables in reference to 2005 and 2007 are shown in Table 3.6 and Table 3.7. If no specific uprating factor is assigned per income variable, the *default* uprating factor is used.

No other updating adjustments are employed; therefore the distribution of receipts of non-simulated incomes remains constant throughout the period, while the level of amounts received changes in line with the uprating factors. The variables included in EUROMOD on household and personal characteristics, such as housing type, employment status or demographic attributes, are constant in relation to the basis year (in the baseline scenario).

Structural cuts in pensions (*boa*, *bdi*, *bsu*, *byr*) were simulated in EUROMOD as a separate policy for 2009-2011 (see Annex II for details).

Table 3.6 Monetary updating factors in reference to 2005

Index	Income Source/index type	2006	2007	2008	2009	2010	2011
default	Annual average inflation	1.037	1.096	1.216	1.270	1.287	1.332
yem	INCOME: Employment	1.172	1.412	1.686	1.611	1.558	1.623
yempv	INCOME : Employment (=yem, lag	1.110	1.301	1.568	1.872	1.789	1.730
	of 1)						
yivwg	INCOME : Predicted wage (=yem)	1.172	1.412	1.686	1.611	1.558	1.623
yiy	INCOME : Investment	1.114	1.324	1.385	1.294	1.311	1.357
ypr	INCOME : Property	1.071	1.182	1.218	1.182	1.197	1.239
ypt	INCOME: Private Transfers	0.757	0.971	1.022	1.068	1.082	1.119
yse	INCOME : Self Employment	1.312	1.629	2.177	1.796	1.887	2.004
bed	BENEFIT/PENSION : Education	1.133	1.144	1.568	1.568	1.568	1.568
bfa	BENEFIT/PENSION : Family	1.023	1.050	0.932	1.157	1.322	1.720
bho	BENEFIT/PENSION : Housing	1.326	1.463	1.875	2.554	2.947	4.128
bsa	BENEFIT/PENSION : Social	1.186	1.459	2.169	2.659	2.887	2.894
	Assistance						
bun	BENEFIT/PENSION:	1.220	1.413	1.805	2.110	1.696	1.658
	Unemployment						
bunct	BENEFIT/PENSION:	1.220	1.413	1.805	2.110	1.696	1.658
	Contributory unemployment						
	insurance benefit						
byr	BENEFIT/PENSION : Early	1.115	1.342	1.675	1.774	1.774	1.774
	retirement						
yunsv	INCOME : Unemployment :	1.172	1.412	1.686	1.611	1.558	1.623
	Severance pay (= yem)						
bsa00	BENEFIT/PENSION : Social	1.186	1.459	2.169	2.659	2.887	2.894
	Assistance : Social benefit (=bsa)						
bsals	BENEFIT/PENSION : Social	1.290	1.933	1.902	1.823	1.359	1.407
	Assistance : Municipal and NGO						
	support						



Index	Income Source/index type	2006	2007	2008	2009	2010	2011
bchor	Guardianship benefit	1.000	1.000	1.000	1.000	1.000	1.000
bdi	BENEFIT/PENSION : Disability	1.170	1.426	1.792	1.873	1.873	1.873
bhl	BENEFIT/PENSION : Health	0.983	1.326	1.458	1.941	1.877	1.956
boa	BENEFIT/PENSION : Old Age	1.107	1.373	1.745	1.836	1.836	1.836
bsu	BENEFIT/PENSION : Survivors	1.043	1.357	1.520	1.566	1.566	1.566
kfb	BENEFIT/PENSION: In-kind	1.129	1.118	1.024	1.024	1.024	1.024
amrvm	ASSETS : Main Residence :	1.287	1.556	1.479	1.479	1.479	1.479
	Residence value						

Sources: *default, yem* and otherwise unspecified - Statistics Lithuania; *kfb, ypt, yse* –HBS for 2005-2008, further updated by inflation (ypt), kept constant (kfb) or by GDP per capita growth (yse); *yiy* - Statistics Lithuania, based on return on assets; *bed*- HBS for 2005-2008, kept constant thereafter; *bho, bfa, bsa, bun, bunct* - Ministry of Social Security and Labour; boa, bdi – Statistics Lithuania, ESSPROS data; *byr, bsu* – Lithuanian Social Protection Fund. Structural changes applied on *boa, bdi, bsu* and *byr* in 2010-2011 (factors kept constant after 2009).

Table 3.7 Monetary updating factors in reference to 2007

Index	Income Source/index type	2008	2009	2010	2011
default	Annual average inflation	1.109	1.159	1.174	1.215
yem	INCOME: Employment	1.194	1.141	1.103	1.149
yempv	INCOME: Employment (=yem, lag of 1)	1.205	1.439	1.375	1.329
yivwg	INCOME: Predicted wage (=yem)	1.194	1.141	1.103	1.149
yiy	INCOME: Investment	1.046	0.977	0.990	1.025
ypr	INCOME: Property	1.030	1.000	1.013	1.048
ypt	INCOME : Private Transfers	1.052	1.099	1.114	1.153
yse	INCOME : Self Employment	1.337	1.102	1.158	1.230
bed	BENEFIT/PENSION: Education	1.370	1.370	1.370	1.370
	BENEFIT/PENSION : Family	0.888	1.102	1.260	1.638
bho	BENEFIT/PENSION: Housing	1.282	1.746	2.014	2.822
bsa	BENEFIT/PENSION: Social Assistance	1.487	1.822	1.978	1.983
bun	BENEFIT/PENSION: Unemployment	1.277	1.493	1.200	1.173
bunct	BENEFIT/PENSION: Contributory unemployment				
	insurance benefit	1.277	1.493	1.200	1.173
byr	BENEFIT/PENSION : Early retirement	1.248	1.322	1.322	1.322
yunsv	INCOME: Unemployment: Severance pay (=				
	yem)	1.194	1.141	1.103	1.149
bsa00	BENEFIT/PENSION: Social Assistance: Social				
	benefit (=bsa)	1.487	1.822	1.978	1.983
bsals	BENEFIT/PENSION : Social Assistance :				
	Municiapl and NGO support	0.984	0.943	0.703	0.728
bchor	Guardianship benefit	1.000	1.000	1.000	1.000
bdi	BENEFIT/PENSION : Disability	1.257	1.313	1.313	1.313
bhl	BENEFIT/PENSION: Health	1.100	1.464	1.415	1.475
boa	BENEFIT/PENSION : Old Age	1.271	1.337	1.337	1.337
bsu	BENEFIT/PENSION: Survivors	1.120	1.154	1.154	1.154
kfb	BENEFIT/PENSION: In-kind	0.916	0.916	0.916	0.916
amrvm	ASSETS: Main Residence: Residence value	0.950	0.950	0.950	0.950

Sources: *default*, *yem* and otherwise unspecified - Statistics Lithuania; *kfb*, *ypt*, *yse* –HBS for 2005-2008, further updated by inflation (ypt), kept constant (kfb) or by GDP per capita growth (yse); *yiy* - Statistics Lithuania, based on return on equity; *ypr*- Statistics Lithuania, based on return on assets; *bed*- HBS for 2005-2008, kept constant thereafter; *bho*, *bfa*, *bsa*, *bun*, *bunct* - Ministry of Social Security and Labour; boa, bdi – Statistics Lithuania, ESSPROS data; *byr*, *bsu* – Lithuanian Social Protection Fund. Structural changes applied on *boa*, *bdi*, *bsu* and *byr* in 2010-2011 (factors kept constant after 2009).



# 4. VALIDATION

## 4.1 Aggregate Validation

#### 4.1.1 Definition of disposable income

Before commenting on how different income components in EUROMOD compare against their external aggregates, this subsection outlines the differences in the definition of disposable income in EUROMOD and EU-SILC 2008. The major components of disposable income are the same in both sources: original incomes (+); benefits (+), taxes (-), employee social insurance contributions (-); and self-employed social insurance contributions (-). However, at the level of individual components there are two differences as can be seen from Table 4.1:

- EU-SILC 2008 includes (imputed) annual value of (using) a company car, while EUROMOD definition of disposable income excludes this type of income;
- Pension from individual private plans is included in the disposable income concept in EUROMOD, while it is excluded in EU-SILC 2008.

Apart from differences in the definition, the *value* of disposable income from both sources can differ for a given household as simulated income components in EUROMOD can differ for a number of reasons from their observed counterparts in EU-SILC dataset.

Table 4.1 Components of disposable income

	EUROMOD	EU-SILC 2008	Notes
	ils_dispy	hy020	
Employee cash or near cash income	yem	py010g	yem is derived from py010g
Company car	-	py021g	
Cash benefits or losses from self- employment	yse	py050g	yse is derived from py050g
Pension from individual private plans	урр	-	ypp is derived from py080g
Învestment income	yiy	hy090g	yiy is derived from hy090g
Income from rental of a property or land	yprrt	hy040g	yprrt is derived from hy040g
Income received by people aged under 16	yot	hy110g	yot is derived from hy110g
Regular inter-household cash transfer received	ypt	hy080g	ypt is derived from hy080g
Regular inter-household cash transfer paid (-)	xmp	hy130g	xmp is derived from hy130g
Old-age benefits	boa	py100g	boa is derived from py100g
Survivor' benefits	bsu	py110g	bsu is derived from py110g
Disability benefits	bdi	py130g	bdi is derived from py130g
Unemployment benefits	yunsv, byr, bunct_s	py090g	3 comp. in EUROMOD: byr (early retirement), yunsv (severance pay) & bunct_s (unempl. ben.); byr & yunsv are derived using EU-SILC (py090), Nat. SILC & external admin. info; bunct_s is EUROMOD simulated.
Housing allowances	bho	hy070g	bho is derived from hy070g



	EUROMOD	EU-SILC 2008	Notes
Family/children related allowances	bchor, bch00_s, bchba_s, bplct_s bmaprnc_s, bmaprct_s, bmact_s	hy050g	all "_s" variables are EUROMOD simulated benefits; bchor is merged from Nat. SILC
Education related allowances	bed	py140g	bed is derived from py140g
Sickness benefits	bhl	py120g	bhl is derived from py120g
Social exclusion not elsewhere classified	bsa00_s, bsals	hy060g	bsa00_s is EUROMOD simulated benefit; bsals is derived using EU-SILC (hy060g), Nat. SILC & external admin. info
Tax on income and social contributions (-)	tin_s, ils_sicee, ils_sicse	hy140g	EUROMOD data includes 3 simulated components; tin_s refers to final tax liability (for 2007 incomes). hy140g also refers to final tax liability; among other components it includes any tax reimbursement received in 2007 (also for income received in previous years);
Regular taxes on wealth (-)	tpr	hy120g	tpr is derived from hy120g

#### **4.1.2** Validation of incomes inputted into the simulation

Note: Please see Annex I for tables.

Table 5.1 shows that the number of employed in 2007-2008 is well aligned with external statistics with a ratio between the two values being 1.01 in 2007 and 1.02 in 2008. At the same time the number of unemployed persons was over-estimated in EUROMOD data in 2007 and 2008. In 2009 and 2010 EUROMOD data shows a strong under-estimation in the number of unemployed (0.46 ratio in 2009, 0.36 ratio in 2010) and an over-estimation in the number of employed (1.09 ratio in 2009, 1.15 ratio in 2010), which shows the impact of the financial crisis on the Lithuanian labour market. In order to account for the labour market changes, optional employment adjustment module was introduced for the period of 2009-2011 (the module is switched off in the baseline). The impact of employment adjustments on the main EUROMOD indicators is briefly described in Section 4.2.4.

There are numerous gaps in external statistics on the number of market income recipients. Therefore, the majority of market income sources is validated only for the total annual amounts (see Table 5.3). Table 5.2 shows that the number of people receiving employment income in 2007 was over-estimated – ratio 1.11. This ratio has improved for 2008 (i.e. 1.09), but worsened again for 2009 and 2010 – mainly due to changes in the labour market.

The amounts and dynamics of employment income in EUROMOD are closely matched to the external statistics (see Table 5.3). The total employment income amount is better aligned in 2007-2008, while in 2009-2010 EUROMOD data over-estimates this type of income by about 15%. Self-employment income is compared to the Household Budget Survey (HBS) 2007 data and on this basis self-employment income is overestimated in EUROMOD by 9% (i.e. in 2007). The aggregate amounts of severance payments are slightly overestimated in EUROMOD



compared to external statistics in 2007 (ratio 1.07) and 2008 (ratio 1.05), while later on they are underestimated by about 10 percent (i.e. 0.89 in 2009 and 0.90 in 2010). This may be caused by changes in labour marker situation and a decrease in earnings since 2009. The proper statistics for other types of market income are not available. Nevertheless, employment and self-employment income together with severance payments constitute a major part of the total market income discussed in the Table 5.3.

Table 5.4 shows the number of recipients of the non-simulated benefits. The number of recipients of old-age and disability benefits is constructed by summing up non-overlapping types of benefits before and after retirement age (and as such may underestimate the true composite figure). The data shows that the number of recipients of old-age benefits is underestimated in EUROMOD by 6 percent in 2007 and the underestimation increases up to 9 percent by 2010. The number of recipients of disability benefits before pension age is well aligned with external statistics. The number of early retirement pension recipients was also over-estimated in 2007-2009, although in 2010 there was an increase in the number of recipients of this kind of pensions due to increased unemployment. The ratio shifted accordingly (i.e. to 1.06). The number of the recipients of guardianship benefits is underestimated in EUROMOD by almost a half. The ratio of the number of recipients of the municipal and NGO support is even lower (the numbers of administrative statistics refer to individual recipients). Sickness social insurance benefits are widespread, although there is no suitable administrative data on the number of recipients as the number of cases is normally registered. Talking about other major types of benefits and taxes, the number of property tax payers is also not available and is only validated against the total amount of taxes paid.

The aggregate amount of old-age benefits is slightly overestimated in 2007 and the ratio gets close to 1 in subsequent years (see Table 5.5), while as the external aggregated numbers do not include survivor pensions after retirement age, the old-age benefits should be well aligned in 2007 and 2008, and slightly over-estimated in 2009 and 2010. The aggregate amount of disability benefits before the retirement age is underestimated in EUROMOD in all years with the best ratio of 0.91 in 2010 and the worst of 0.86 in 2009. This shows that the average amounts of disability benefits before retirement age are underestimated in EUROMOD, since the number of recipients is well aligned (see Table 5.4). The dynamics of early retirement pensions' aggregate amount is in line with the dynamics of its recipients, although there is a bias in both. The highest deviation from administrative statistics within these ratios is observed in 2009. In general, the average amounts of early retirement pension per recipient are underestimated in EUROMOD for all years.

What concerns aggregate amounts of other benefits it should be noted that the structural changes in state social insurance sickness benefits in 2010 were not well captured in EUROMOD by the regular updating procedure: while the aggregate amounts were under-estimated for 2007-2009, they become over-estimated in 2010. The ratios of the aggregate amounts of the municipal and NGO support show that the decrease in such support during the crisis in 2009 could not be captured by EUROMOD (as the number of recipients is kept constant). Expenditure on compensations for utilities rocketed up since 2007 according to administrative statistics, showing the worst ratios with the EUROMOD data. The increase in expenditure was both due to the increase of recipients and the cost of the utility services, which are not simulated in EUROMOD. There is a stable and close fit of the aggregate amounts of the guardianship benefits as calculated by the EUROMOD and external statistics. Given the ratio of the number of recipients for this benefit (see Table 5.4), it could be concluded that its average annual receipts are over-estimated in EUROMOD. The aggregate variable for survival benefits' consists of a few major components: survivor and orphan pensions (before retirement age), funeral benefit and grant in case of death of an insured person. Among them, only information on funeral benefit is available to compare against EUROMOD variable. Unfortunately, this



component alone accounts only for about a quarter of total expenditure on survivor benefits included in EUROMOD. Therefore, the aggregate category cannot be validated. The same applies to education allowances, which are allocated on a local level. There are no proper statistics on the number of recipients and aggregated amounts spent on these benefits.

#### 4.1.3 Validation of simulated incomes

Note: Please see Annex I for tables.

Table 5.6 shows EUROMOD and external data on the number of (simulated) benefit recipients and tax/contribution payers. The number of children eligible for child benefits is well aligned in 2007 (i.e. ratio 1.04) and over-estimated in EUROMOD thereafter. The latter benefit type underwent a number of structural changes in 2008-2010, which are modelled in EUROMOD. The number of recipients of a birth grant is well simulated with a deviation of no more than 10 percent in all years, while the number of recipients of the pregnancy grant is underestimated for all years in EUROMOD (the best ratio in 2008 (0.71), worst ratio in 2010 (0.49)). The number of social assistance recipients was well in line with administrative data in 2007, but the ratio was unstable in the following years resulting in the ratio of 0.35 in 2010. This was to a large extent due to financial crisis and labour market changes (see Section 4.2.4 for validation including employment adjustments).

Among the contributory benefits the best initial recipients' ratio was for maternity benefits (1.13) and the worst for paternity benefits (3.37). The latter may be related to low take-up rates, changes in employment market and self-selection of actual recipients (i.e. only those with more flexible work conditions or in certain occupational sectors tend to use this right to the benefit). The ratio of maternity/paternity benefits' recipients is better aligned for 2008-2010 when the period of maternity/paternity leave was increased up to two years, which is modelled in EUROMOD. In 2007 the ratio was highly over-estimated. The recipients' ratio for unemployment benefits is highly under-estimated, especially in 2009 and 2010 due to financial crisis and labour market changes (see Section 4.2.4 for validation of unemployment benefits including employment adjustments).

The number of payers of the personal income tax was well in line with administrative statistics in the beginning of the period (2007-2008), while in the baseline scenario high overestimation in the number of payers is unavoidable with no employment adjustments for 2009-2010. The same applies to social insurance contributions. There is no proper administrative data on the number of self-employed persons who do not have business certificates, thus the number will be validated against statistics on aggregated amounts only. The same may be said about the credited contributions. The ratios of tax and contribution payers are improved considerably when adjusting for labour market changes (see Section 4.2.4).

When validating simulated benefits on aggregated amounts it can be noticed that the closest match with the external data is for child benefit and birth grant (see Table 5.7). Pregnancy grants are underestimated for all years, though their amount makes a minor part of the non-contributory benefits. Social assistance due to 100% take-up rates assumption and possibly some bias in calculation of benefits was overestimated in 2007-2009, although without adjusting for changes in the labour market the ratio dropped in 2010 (see validation with employment adjustments in Section 4.2.4).

The ratios of simulated contributory benefits are higher for maternity benefits. The initial ratios in 2007 are in line with recipients' ratios for the same year. The highest over-estimation is for paternity benefits. The ratio of unemployment benefits' amount dropped from 0.85 in 2007 to 0.23 in 2009 and 0.26 in 2010. This ratio is improved if employment changes are taken into account for 2009 and 2010 (see Section 4.2.4 for details).



Taxes and employee/employer social insurance contributions are over-estimated throughout the analysed period, although over-estimation increased in the baseline in 2009 and 2010. Self-employment contributions are underestimated in 2007 and 2008 possibly due to under-reporting and tax evasion. They are over-estimated in the years of 2009 and 2010, when in addition to financial and labour market changes, changes in self-employment contributions' rules may also have caused behavioural changes. Credited contributions include compulsory health insurance contributions since 2009. Extension of population group eligible for credited health contributions increased the ratio from around 62% in 2007-2008 to 83% in 2009-2010.

#### 4.2 Income distribution

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

#### 4.2.1 Income inequality

Note: Please see Annex I for tables.

Table 5.8 shows that the income decile shares in the beginning of the period (2007) in EUROMOD are well in line with the EUROSTAT statistics. Share ratios for the following years, especially for 2009 are overestimated in EUROMOD for the lower deciles and underestimated for higher deciles if compared to EUROSTAT. This could be partly influenced by the EUROMOD's assumptions of full take up of benefits and 100% tax/contributions' compliance rates. Still the major reasons are connected to dramatic labour market changes during the financial crisis. The quintile ratio is underestimated in EUROMOD for all years, with an initial deviation of about 4 percent in 2007 and increasing thereafter (i.e. the ratio in 2009 worsened to 0.70). Also EUROMOD doesn't show an increase in the Gini coefficient in 2009 and 2010 in the baseline scenario without employment adjustments. Mean and median disposable income is underestimated in 2007. In 2008 we find a close match with the EUROSTAT data (ratio 1.01 for median income and 0.98 for mean income), while it is overestimated for 2009. As the impact of the financial crisis on the main labour market indicators is strong, optional employment adjustments are available in EUROMOD for 2009-2011 (see Section 4.2.4 for validation of employment adjustments in EUROMOD).

#### 4.2.2 Poverty rates

Note: Please see Annex I for tables.

Table 5.9 shows that at-risk of poverty rates decomposed by age and gender are quite well in line with those reported by EUROSTAT for 2007-2008. The ratios dropped sharply in 2009, especially when using lower at risk of poverty lines (40% and 50% of median household disposable income). Decomposition of at-risk of poverty level (using 60% of median household disposable income poverty line) by age, shows under-estimation within the working age group of 16 to 49 years old and over-estimation for elderly people in 2009. Both are likely due to the labour market changes.



#### 4.2.3 Validation of minimum wage

Note: Please see Annex I for tables.

In this section we give a brief overview of the impact of the minimum wage policy on income, taxes, social contributions, social assistance benefits, inequality and poverty rates. It should be noted, that the minimum wage policy is switched off in the baseline scenario. Imposing minimum wage increases the aggregate amounts of disposable income, gross earnings of employees, income tax and employee social insurance contributions only marginally in a similar magnitude, from 0.3% to 0.5% across years (see Table 5.10). Minimum wage policy has a mixed effect on social assistance benefits of a magnitude of +0.2% to -0.9% due to means testing. There is also a minor positive impact on inequality of up to 0.6%, while the impact on at-risk of poverty rate (using the line of 60% median HDI) is of a mixed character as well.

## 4.2.4 Validation of employment adjustments

Note: Please see Annex I for tables.

Table 5.11 shows how employment adjustments compare to the baseline scenario. There is a major effect on the number of unemployment benefits recipients and expenditure, but also on social assistance receipt/expenditure and on numbers of employees and employee earnings, contributions and income tax receipt. Employment adjustments also increase inequality and poverty measures, taking them closer to the external estimates.

Without employment adjustments, the number of employees is overestimated by 18% in 2009 and 23% in 2010. With employment adjustments the overestimation is 9% in 2009 and 7% in 2010 which is in line with previous years. It also helps to reduce overestimation of employment income to 8 percent in 2009 and 4 percent in 2010 compared to corresponding numbers of 15 and 16 percent in the baseline scenario.

What concerns unemployment benefits, their receipt ratio compared to administrative statistics was unsatisfactorily low in the baseline scenario (dropping from 0.57 in 2007 to 0.19 in 2010), while the ratio of aggregate amount dropped from 0.85 in 2007 to 0.26 in 2010. Employment adjustments improve the receipt ratio in 2009 (ratio equal to 0.75), but result in 19 percent overestimation in 2010. Effects are similar for the total expenditure on unemployment benefits where the ratio much improves in 2009 (from 0.23 to 1.04) while it becomes over-estimated quite a lot in 2010 (from 0.26 to 1.67). In general average amount of unemployment benefits is over-estimated in EUROMOD for all years both with and without employment adjustments when compared to external statistics.

Employment adjustments have also an important effect on the social assistance receipts, improving the receipt ratio (from 0.35 in baseline scenario to 0.62) and the expenditure ratio (from 0.57 in baseline scenario to 1.06) in 2010.

As it was mentioned before, employment adjustments improve both inequality and poverty measures in 2009 and 2010. Still the dynamics of the analysed inequality and poverty measures should be reviewed with additional care.



### 4.3 Summary of "health warnings"

In conclusion, the following major "health warnings" should be taken into account when using Lithuanian EUROMOD module and the underlying micro-data:

- The EU-SILC (Lithuanian part) is calibrated on a limited number of dimensions: residence area (7 groups), age (17 groups) and gender. Therefore, analysis on the benefits/taxes/contributions to/by smaller population groups should be done with care.
- The default assumption in EUROMOD is full benefit take-up and full compliance with taxes and contributions.
- In the case of simulating a policy year more recent than the income reference period for the
  underlying input dataset, non-simulated monetary variables are up-rated using incomespecific updating factors, whereas demographic and socio-economic status variables remain
  constant.
- In the baseline scenario the gross-earnings in EUROMOD are closely in line with external statistics in 2007-2008 (ratios 0.96; 0.99) and overestimated by around 15 percent in 2009 and 2010. The same concerns personal income tax, although overestimation is higher in the final years (ratio equal to 1.27). Partially, over-reporting could be related to EUROMOD's inability to capture tax allowances of diverse population subgroups (i.e. based on disability degree), most of the tax deductibles cannot be captured within EUROMOD. Overestimation is also attributed to financial and labour market changes which can be adjusted for by using optional employment adjustment module.
- Social contributions of employees and employers are over-reported, with the smaller bias observed in 2007-2008. Self-employed contributions are under reported for 2007-2008 and over reported for 2009-2010.
- Major aggregate benefit categories are difficult to validate as they consist of diverse individual components and are often constructed in line with the legal retirement age.
- A number of non-simulated benefits are under-reported. Sickness benefits should be treated with extra caution as the aggregate numbers in EUROMOD do not capture structural changes made to this type of benefits in 2010.
- Benefits to children, such as birth grant and child benefit, are well in line with the external statistics.
- Social benefit, a means tested benefit, is largely over-simulated in 2007-2009 and underestimated in the baseline scenario in 2010 (this can be partially correcting using the employment adjustments' module). It should be noted that the available UDB micro-data has a poor capacity to simulate assets' means testing.
- During the period 2007-2010, the employment situation has changed a lot: there was an increase in the unemployment in 2008 and further on in 2009 and 2010 (due to the financial crisis). Thereby, social insurance benefits (with eligibility depending on employment status) must be reviewed with additional care depending on the year of analysis.
- Baseline scenario does not include any employment adjustments. Macrovalidation showed
  that employment adjustments improve simulation outcomes in terms of receipt and
  expenditure on unemployment and social assistance benefits, as well as employment
  income, social insurance contributions and personal income taxes.
- EUROMOD simulated disposable incomes in the baseline refer to more equitable income distribution than observed in the SILC reported disposable incomes, especially in 2010.



# 5. ANNEX I

Table 5.1 Number of employed & unemployed, thousands

	Input (I)		External So	ource (II)			Ratio (I	/II)	
	2007	2007	2008	2009	2010	2007	2008	2009	2010
Number of employed	1,545.72	1,534.2	1,520.0	1,415.9	1,343.7	1.01	1.02	1.09	1.15
Number of unemployed	104.21	69.0	94.3	225.1	291.1	1.51	1.11	0.46	0.36

Notes: Number of employed and unemployed is computed based on months in employment/unemployment. Numbers computed as averages of monthly data over the year. Sources: Statistics Lithuania (LFS)

Table 5.2 Market Income-Number of recipients, thousands

	Input (I)		External So	urce (II)			Ratio (I/II)	)	
	2007	2007	2008	2009	2010	2007	2008	2009	2010
Original income	•				·				
Employment income	1,472.55	1,324.4	1,345.0	1,244.8	1,196.4	1.11	1.09	1.18	1.23
Self-employment income	229.81	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Investment income	161.09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Property income	87.23	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Private transfers	54.66	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Private pension income	2.82	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Severance payments	28.64	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
In-kind income									
Fringe benefits	119.40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Sources: Statistics Lithuania (LFS).



Table 5.3 Market Income-Aggregate amounts, annual amounts in millions

	Input (I)	External	Ratio		Uprated	input (I)		Exte	ernal source	e (II)	R	atio(I/II)	)
		source (II)	(I/II)										
	2007	2007	2007	2008	2009	2010	2011	2008	2009	2010	2008	2009	2010
Original income													
Employment income -	1,810.35	1,802.4	1.00	2,161.20	2,065.07	1,996.82	2,080.82	2,151.7	2,056.0	1,988.1	1.00	1.00	1.00
mean													
Employment income -total	31,990.04	33,367.5	0.96	38,189.7	36,491.0	35,285.0	36,769.36	38,636.7	31,630.4	30,363.5	0.99	1.15	1.16
Self-employment income	3,206.30	2,930.23	1.09	4,285.54	3,533.99	3,714.18	3,944.39	n/a	n/a	n/a	n/a	n/a	n/a
Severance payments	124.15	116.4	1.07	148.21	141.62	136.94	142.70	140.9	159.6	152.9	1.05	0.89	0.90
Private pension income	2.51	n/a	n/a	2.79	2.91	2.95	3.05	n/a	n/a	n/a	n/a	n/a	n/a
Investment income	663.73	n/a	n/a	694.33	648.80	657.23	680.19	n/a	n/a	n/a	n/a	n/a	n/a
Property Income	148.38	n/a	n/a	152.86	148.38	150.30	155.57	n/a	n/a	n/a	n/a	n/a	n/a
Private transfers	242.67	n/a	n/a	255.29	266.79	270.26	279.70	n/a	n/a	n/a	n/a	n/a	n/a
In-kind income													
Fringe benefits	165.29	n/a	n/a	151.44	151.44	151.44	151.44	n/a	n/a	n/a	n/a	n/a	n/a
Imputed housing income	5,266.59	n/a	n/a	5,840.65	6103.45	6,182.98	6,399.44	n/a	n/a	n/a	n/a	n/a	n/a

Sources: Statistics Lithuania (employment income, severance payments), HBS (self-employment total).

Table 5.4 Non-simulated taxes and benefits-Number of recipients/payers, thousands

	Input (I)		Externa	l Source (II)			Ratio (I/I	II)	
	2007	2007	2008	2009	2010	2007	2008	2009	2010
Pensions									
Old-age benefits	621.90	663	672.1	679.1	684.8	0.94	0.93	0.92	0.91
Disability benefits	190.21	184.0	192.1	197.6	191.7	1.03	0.99	0.96	0.99
Early retirement pension	9.22	8.26	7.25	6.50	8.70	1.12	1.27	1.42	1.06
Survivor pension	64.71	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Benefits									
Guardianship benefit	6.96	12.47	12.42	12.43	12.50	0.56	0.56	0.56	0.56
Municipal and NGO support	9.19	33.74	29.22	19.64	28.24	0.27	0.31	0.47	0.33
Sickness benefit	229.09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Compensations for utilities	78.09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Education allowances	94.09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a



	Input (I)		Externa	l Source (II)			Ratio (I/	(I)	
	2007	2007	2008	2009	2010	2007	2008	2009	2010
Taxes & SIC (if not simulated)	·				·				
Property taxes	225.95	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes: Number of recipients for old-age and disability benefits is a sum of the number of recipients of non-overlapping types of pensions before and after retirement age: old age benefits include old-age social insurance, state assistance benefits and work incapacity/invalidity pensions (before retirement age); disability benefits include work incapacity/invalidity, state social assistance pension (before retirement age) and social assistance pensions for children with disability. Number on municipal and NGO support in external statistics refer to individual recipients.

Sources: Statistics Lithuania (*Rodiklių duomenų bazė*, *Gyventojai ir socialinė statistika*), SODRA ("Skaičiai ir faktai 2005-2009), SOCMIN ("Piniginės socialinės paramos gavėjai ir išlaidos 2000-2009 metais").

Table 5.5 Non-simulated taxes and benefits-Aggregate amounts, annual amounts in millions

	Input (I)	External	Ratio		Uprated i	nput (I)		Exte	rnal source	(II)	F	Ratio(I/II	)
		source	(I/II)										
		(II)											
	2007	2007	2007	2008	2009	2010	2011	2008	2009	2010	2008	2009	2010
Pensions													
Old-age benefits	5,384.97	5,123.75	1.05	6,845.91	7,201.86	6,557.98	6,557.98	6,748.90	7,281.77	6,735.33	1.01	0.99	0.97
Disability benefits	1,053.15	1,192.04	0.88	1,323.50	1,383.32	1,333.92	1,333.92	1,479.55	1,617.02	1,468.30	0.89	0.86	0.91
Early retirement pension	42.81	44.75	0.96	53.44	56.60	55.44	55.44	48.86	46.79	64.54	1.09	1.21	0.86
Survivor pension	112.00	n/a	n/a	125.45	129.29	121.90	121.90	n/a	n/a	n/a	n/a	n/a	n/a
Benefits													
Sickness benefit	363.33	503.32	0.72	399.49	531.85	514.30	535.88	664.94	630.10	330.46	0.60	0.84	1.56
Municipal and NGO	7.73	8.63	0.90	7.61	7.29	5.43	5.63	7.36	4.74	5.08	1.03	1.54	1.07
support													
Compensations for	8.64	33.66	0.26	11.07	15.08	17.40	24.37	45.77	79.06	116.51	0.24	0.19	0.15
utilities													
Guardianship benefit	64.18	70.00	0.92	64.18	64.18	64.18	64.18	68.03	68.20	69.01	0.94	0.94	0.93
Education allowances	162.25	n/a	n/a	222.33	222.33	222.33	222.33	n/a	n/a	n/a	n/a	n/a	n/a
Taxes & SIC (if not sim	ulated)												
Property taxes	18.89	52.00	0.36	20.94	21.89	22.17	22.95	54.00	55.10	56.10	0.39	0.40	0.40

Notes: Aggregate amounts of old-age benefits include state social insurance old-age and work incapacity/invalidity pensions, state social assistance pensions, state pensions and care allowances (all after retirement age), excludes survivor pensions after retirement age. Aggregate amounts of disability benefits include expenditure on state social insurance work incapacity/invalidity pensions and state social assistance benefits/pensions before retirement age, nursing and care compensations (care



allowance) for working age recipients, compensations for loss of work capacity, social assistance pension for disabled children. Information on "municipal & NGO support" from external sources refers to municipal support only. Property taxes include land tax for both natural persons and legal entities.

Sources: Statistics Lithuania (*Rodiklių duomenų bazė, Gyventojai ir socialinė statistika, Socialinė apsauga Lietuvoje*), SODRA ("Skaičiai ir faktai 2005-2009), SOCMIN ("Piniginės socialinės paramos gavėjai ir išlaidos 2000-2009 metais"), Tax Inspectorate.

Table 5.6 Simulated taxes and benefits-Number of recipients/ payers, thousands

		EURON	MOD (I)			Original	Ratio		External s	ource (III)	)		Ratio	(I/III)	
						data (II)	(I/II)								
	2007	2008	2009	2010	2011	2007	2007	2007	2008	2009	2010	2007	2008	2009	2010
<b>Benefits (non-contributory</b>	)														
Child benefit	363.73	702.80	554.9	182.23	179.75	n/a	n/a	350.66	624.20	495.30	152.00	1.04	1.13	1.12	1.20
Birth grant	33.21	33.21	33.21	33.21	33.21	31.9	1.04	30.13	34.70	34.20	34.04	1.10	0.96	0.97	0.98
Pregnancy grant	4.04	4.04	4.04	4.04	4.04	5.09	0.80	6.67	5.66	6.60	8.22	0.61	0.71	0.61	0.49
Social assistance	37.93	44.67	60.32	63.63	59.20	30.74	1.23	36.60	37.30	73.51	181.29	1.04	1.20	0.82	0.35
<b>Benefits</b> (contributory)															
Maternity benefit	29.10	29.10	29.10	29.10	29.10	32.84	0.89	25.70	27.03	29.89	24.07	1.13	1.08	0.97	1.21
Maternity/ paternity benefit	27.24	44.76	44.76	44.76	44.76	38.99	0.70	16.91	37.49	46.29	47.74	1.61	1.19	0.97	0.94
Paternity benefit	30.93	30.93	30.93	30.93	30.93	10.29	3.01	9.19	12.30	12.97	12.35	3.37	2.51	2.38	2.50
Unemployment benefit	37.16	36.84	36.91	36.70	36.70	29.45	1.26	65.6	94.3	198.5	188.3	0.57	0.39	0.19	0.19
Taxes	_														
Personal income tax	1,509.56	1,529.62	1,605.57	1,597.91	1,606.00	n/a	n/a	1,521.70	1,479.94	1,261.32	n/a	0.99	1.03	1.27	n/a
Social insurance contributi	ions														
Employee contributions	1,472.55	1,472.55	1,472.55	1,472.55	1,472.55	n/a	n/a	1,321.7	1,330.2	1,195.3	1,129.8	1.11	1.11	1.23	1.30
Employer contributions	1,472.55	1,472.55	1,472.55	1,472.55	1,472.55	n/a	n/a	1,321.7	1,330.2	1,195.3	1,129.8	1.11	1.11	1.23	1.30
Self-employed contributions	229.81	229.81	229.81	317.79	317.79	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Credited contributions	25.17	23.95	1610.50	1610.50	1,610.50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes: Figures reflect the final tax liability in both EUROMOD and external statistics data.

Sources: Ministry of Social Security and Labour (Piniginės socialinės paramos gavėjai ir išlaidos 2000-2009 m.), Statistics Lithuania



Table 5.7 Simulated taxes and benefits- Aggregate amounts, annual amounts in millions

		EURON	MOD (I)			Original	Ratio		External	source (III	)		Ratio	(I/III)	
			( )			(II)	(I/II)			`	,			` /	
	2007	2008	2009	2010	2011	2007	2007	2007	2008	2009	2010	2007	2008	2009	2010
<b>Benefits (non-contributor</b>	·y)														
Child benefit	281.30	492.88	468.87	131.43	129.88	334.5	0.84	286.10	481.90	469.23	127.29	0.98	1.02	1.00	1.03
Birth grant	34.54	34.54	47.49	47.49	47.49	33.81	1.02	31.11	36.08	47.09	48.71	1.11	0.96	1.01	0.97
Pregnancy grant	1.05	1.05	1.05	1.05	1.05	1.67	0.63	1.7	1.5	1.7	2.14	0.62	0.70	0.62	0.49
Social assistance	95.34	152.50	282.88	292.55	277.45	59.26	1.61	52.41	78.93	190.66	510.59	1.82	1.93	1.48	0.57
<b>Benefits</b> (contributory)						•	•								
Maternity benefit	160.23	191.29	182.79	176.74	180.33	145.74	1.10	140.20	217.10	258.70	197.82	1.14	0.88	0.71	0.89
Maternity/ paternity benefit	203.54	667.62	637.94	616.82	585.34	251.60	0.81	277.70	772.00	1,197.88	1,165.93	0.73	0.86	0.53	0.53
Paternity benefit	69.53	81.76	79.16	74.96	75.54	n/a	n/a	19.20	31.80	34.14	27.96	3.62	2.57	2.32	2.68
Unemployment benefit	83.88	105.95	125.04	102.57	102.18	55.3	1.52	98.60	153.11	539.33	394.8	0.85	0.69	0.23	0.26
Taxes						•	•	•							
Personal income tax	7,551.00	8,456.82	5,406.27	5,220.11	5,495.99	n/a	n/a	6,530.2	7,313.3	3,789.0	3,470.9	1.16	1.16	1.43	1.50
Social insurance contribu	tions					•	•								
Employee contributions	959.70	1,145.69	3,284.19	3,175.65	3,309.24	n/a	n/a	792.7	950.8	2,366.81	2,212.52	1.21	1.20	1.39	1.44
Employer contributions	9,980.9	11,915.2	11,348.7	10,973.6	11,435.3	n/a	n/a	8,249.4	9,912.5	8,345.26	7,609.14	1.21	1.20	1.36	1.44
Self-employed contributions*	640.29	816.84	533.32	273.28	288.77	n/a	n/a	899.5	1,057.3	364.06	161.40	0.71	0.77	1.46	1.70
Credited contributions**	45.1	57.0	1,029.8	1,254.5	1,236.0	n/a	n/a	67.8	98.7	1,166.28	1,600.29	0.67	0.58	0.88	0.78
Other contributions***	-	-	-	569.34	732.42	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes: \* Self-employment contributions in 2010 include contributions of people who perform individual activity (lsepf=1) and owners of individual enterprises (lseor=1) \*\* Credited compulsory health insurance contributions simulated in EUROMOD starting from 2009. Before 2009 aggregated amounts of credited contributions are indicated without credited compulsory health insurance contributions. \*\*\* Other contributions include contributions by those not eligible for credited contributions and not paying compulsory health insurance contributions, receiving other self-employment income and income from sports and authorship agreements. Sources: Ministry of Social Security and Labour (Piniginės socialinės paramos gavėjai ir išlaidos 2000-2009 m.), Statistics Lithuania, National Health Insurance Fund under the Ministry of Health



Table 5.8 Income distribution

Indicator		EURON	MOD (I)				External S	Source (II)			Ratio (I/II)	*
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2007/2008	2008/2009	2009/2010
Decile shares,	%											
1	2.7	2.8	3.0	2.8	2.8	2.5	2.6	2.4	1.9	1.04	1.17	1.58
2	4.5	4.5	4.8	4.8	4.6	4.5	4.4	4.3	4.1	1.02	1.05	1.17
3	5.7	5.7	5.8	5.7	5.7	5.6	5.6	5.5	5.3	1.02	1.04	1.09
4	6.7	6.7	6.8	6.7	6.6	6.7	6.7	6.4	6.5	1.00	1.05	1.05
5	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.5	7.6	1.01	1.04	1.04
6	9.1	9.1	9.2	9.0	9.1	9	9.1	8.9	8.6	1.00	1.02	1.07
7	10.5	10.5	10.4	10.5	10.4	10.4	10.4	10.3	10.1	1.01	1.02	1.03
8	12.4	12.4	12.2	12.2	12.3	12.3	12.3	12.3	12.4	1.01	1.01	0.98
9	15.0	15.2	14.8	14.9	15.0	15.5	15.1	15.3	16.1	0.99	0.99	0.92
10	25.6	25.4	25.2	25.6	25.7	25.7	26	27.1	27.4	0.98	0.94	0.92
Median	1,129.69	1,399.24	1,386.68	1,309.81	1,338.58	942.67	1,199.67	1,385.42	1,168.00	0.94	1.01	1.19
Mean	1,330.35	1,661.09	1,635.48	1,554.99	1,599.01	1,133.17	1,422.75	1,695.25	1,443.67	0.94	0.98	1.13
Gini	0.334	0.333	0.323	0.330	0.334	0.34	0.34	0.36	0.37	0.98	0.93	0.87
S80/S20	5.64	5.57	5.13	5.33	5.51	5.9	5.9	6.3	7.3	0.96	0.88	0.70

Notes: Based on household disposable income (HDI) equivalised by the "modified OECD" equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions; computed at the individual level.

<sup>\*</sup> Ratios are calculated between the time point in EUROMOD and the subsequent time point by EUROSTAT as the indicated time point in EUROMOD refers to income data reference period as the time point in EUROSTAT refers to income data collection year.

Sources: EUROSTAT



Table 5.9 At risk of poverty rates by gender and age, percent

Indicator		EU	ROMOD (I)				External So	urce (II)			Ratio (I/II)	*
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2007/2008	2008/2009	2009/2010
40% median HDI												
Total	7.8	7.1	5.5	6.0	6.1	7.1	7.0	6.8	9.8	1.11	1.04	0.56
Males	8.0	7.4	5.9	6.3	6.5	7.1	7.0	7.3	11.2	1.14	1.01	0.53
Females	7.6	6.9	5.2	5.7	5.9	7.1	7.0	6.3	8.6	1.09	1.10	0.60
50% median HDI					·							
Total	13.1	12.8	11.0	11.0	11.3	12.3	13.7	12.8	14.5	0.96	1.00	0.76
Males	12.5	12.2	10.8	11.0	11.1	11.4	12.5	12.7	15.5	1.00	0.96	0.70
Females	13.7	13.4	11.2	11.1	11.5	13.1	14.8	12.8	13.7	0.93	1.05	0.82
60% median HDI					·							
Total	19.6	19.1	17.2	17.8	18.1	19.1	20.0	20.6	20.2	0.98	0.93	0.85
Males	17.6	17.3	15.6	16.1	16.3	16.7	17.6	19.1	20.7	1.00	0.91	0.75
Females	21.3	20.7	18.6	19.2	19.7	21.2	22.0	21.9	19.8	0.97	0.95	0.94
70% median HDI					·							
Total	27.2	26.9	25.9	26.5	26.8	26.1	27.6	27.5	27.2	0.99	0.98	0.95
Males	24.9	24.7	23.6	24.4	24.5	22.9	25.2	25.8	26.3	0.99	0.96	0.90
Females	29.2	28.8	27.9	28.4	28.7	28.8	29.7	29.0	27.9	0.98	0.99	1.00
60% median HDI					•							
0-15 years	23.2	23.2	19.3	20.6	20.8	21.5	22.6	24.1	22.1	1.03	0.96	0.87
16-24 years	19.7	19.3	18.3	18.7	18.5	17,6	19.1	18.4	24.2	1.03	1.05	0.76
25-49 years	15.1	14.8	14.2	14.8	14.8	14,9	14.7	17.6	20.9	1.03	0.84	0.68
50-64 years	20.5	20.3	19.6	19.6	19.7	17,2	20.4	21.0	22.8	1.00	0.97	0.86
65+ years	25.1	23.1	18.3	18.9	20.9	29.8	29.5	25.2	10.2	0.85	0.92	1.79

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

<sup>\*</sup> Ratios are calculated between the time point in EUROMOD and the subsequent time point by EUROSTAT as the indicated time point in EUROMOD refers to income data reference period while the time point in EUROSTAT refers to income data collection year.

Sources: EUROSTAT



Table 5.10 Impact of minimum wage

·		Min	imum wage	e included (	(I)			Baseline (II)	)	·		Ratio	(I/II)		
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Disposable income (total)	35,190.9	43,933.7	43,321.0	41,208.0	42,331.5	35,119.8	43,810.4	43,177.8	41,053.9	42,197.5	1.002	1.003	1.003	1.004	1.003
Gross employee earnings (total)	32,068.89	38,325.55	36,646.18	35,460.78	36,920.67	31,990.04	38,189.71	36,491.04	35,285.02	36,769.36	1.002	1.004	1.004	1.005	1.004
Income tax (total)	7,573.30	8,493.89	5,432.21	5,248.88	5,521.07	7,551.00	8,456.82	5,406.27	5,220.11	5,495.99	1.003	1.004	1.005	1.006	1.005
Employee SICs (total)	962.07	1,149.77	3,298.16	3,191.47	3,322.86	959.70	1,145.69	3,284.19	3,175.65	3,309.24	1.002	1.004	1.004	1.005	1.004
Social assistance (total)	95.17	151.77	280.42	291.47	278.03	95.34	152.50	282.88	292.55	277.45	0.998	0.995	0.991	0.996	1.002
Gini (Eq HDI) At poverty risk	0.333	0.331	0.321	0.328	0.332	0.334	0.333	0.323	0.330	0.334	0.997	0.994	0.994	0.994	0.994
(60% median HDI)	19.6	19.2	17.3	17.7	18.6	19.6	19.1	17.2	17.8	18.1	1.000	1.005	1.006	0.994	1.028

Sources: EUROMOD data



Table 5.11 Impact of employment adjustments compared to baseline scenario, annual monetary amounts in millions if not stated otherwise

		Basel	ine (I)			Employ	ment adjust	ments (II)	F	Ratio (I/I	External	)	Ratio	
		• • • • •	• • • • •		-011		• • • • •		• • • •	•	•	• 0 4 0	`	
	2007	2008	2009	2010	2011	2009	2010	2011	2007	2008	2009	2010	2009	2010
Number of employees,	1,472.55	1,472.55	1,472.55	1,472.55	1,472.55	1,360.25	1,284.58	1,292.61	1.11	1.09	1.18	1.23	1.09	1.07
thous.														
Unemployment benefits	37.16	36.84	36.91	36.70	36.70	149.79	224.90	210.75	0.57	0.39	0.19	0.19	0.75	1.19
recipients, thous.														
Social assistance	37.93	44.67	60.32	63.63	59.20	79.73	113.09	103.48	1.04	1.20	0.82	0.35	1.08	0.62
recipients, thous.														
Disposable income (total)	35,119.8	43,810.4	43,177.8	41,053.9	42,197.5	41,602.0	41,602.0	39,615.3	n/a	n/a	n/a	n/a	n/a	n/a
Gross employee earnings	31,990.04	38,189.71	36,491.04	35,285.02	36,769.36	34,123.4	31,497.19	33,122.79	0.96	0.99	1.15	1.16	1.08	1.04
(total)														
Income tax (total)	7,551.00	8,456.82	5,406.27	5,220.11	5,495.99	5,070.6	4,681.02	4,975.91	1.16	1.16	1.43	1.50	1.34	1.35
Employee SICs (total)	959.70	1,145.69	3,284.19	3,175.65	3,309.24	3,071.1	2,834.75	2,981.05	1.21	1.20	1.39	1.44	1.30	1.28
Unemployment benefits	83.88	105.95	125.04	102.57	102.18	563.4	660.42	621.11	0.85	0.69	0.23	0.26	1.04	1.67
(total)														
Social assistance (total)	95.34	152.50	282.88	292.55	277.45	361.0	538.86	499.79	1.82	1.93	1.48	0.57	1.89	1.06
Gini (Eq HDI)*	0.334	0.333	0.323	0.330	0.334	0.334	0.353	0.354	0.98	0.93	0.87	n/a	0.90	n/a
At poverty risk (60%	19.6	19.1	17.2	17.8	18.1	18.1	19.9	19.3	0.98	0.93	0.85	n/a	0.90	n/a
median HDI)*														

Notes: Number of unemployment benefit recipients in external statistics refers to annual number of recipients (the number of recipients receiving benefits in the end of the year plus new appointed recipients). \* Ratios are calculated between the time point in EUROMOD and the subsequent time point by EUROSTAT as the indicated time point in EUROMOD refers to income data reference period while the time point in EUROSTAT refers to income data collection year.

Sources: EUROMOD data, see previous sections for external statistics



# 6. ANNEX II

## Recalculation and payment of state social insurance pensions after 01.01.2010

The Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania as of December 9, 2009 came into effect on January 1, 2010 (hereinafter – the Provisional Law; Official Gazette, 2009, No.152-6820). This law establishes the procedure for the recalculation of state social insurance pensions and payment of these pensions when a person has the insured income and/or works on a self-employment basis.

The following state social insurance pensions shall be recalculated:

- Old age pensions exceeding the marginal amount of the state social insurance pension, i.e. 650 LTL;
- Early old-age pensions, exceeding the marginal amount of the state social insurance pension, i.e. 650 LTL;
- Work incapacity pensions awarded to individuals who have lost 60-70 per cent of capacity for work (Group II disability pensions), exceeding the marginal amount of the state social insurance pension, i.e. 650 LTL;
- Work incapacity pensions awarded to individuals who have lost 45-55 per cent of capacity for work (Group III disability pensions), exceeding the marginal amount of the state social insurance pension, i.e. 325 LTL;
- Pensions for the time served exceeding the marginal amount of the state social insurance pension, i.e. 650 LTL;
- Orphan's (loss of breadwinner) pension which amount per each orphan exceeds half the marginal amount of the state social insurance pension, i.e. 325 LTL;
- Survivors' pension, <u>not depending on its amount.</u>

More details on the structural cuts are provided by the State Social Insurance Fund Board of the Republic of Lithuania and can be found in English at: <a href="http://www.sodra.lt/index.php?cid=1945">http://www.sodra.lt/index.php?cid=1945</a>.

The cuts are of progressive nature and have different effect on the different groups of pensioners. Therefore they are simulated in EUROMOD instead of the regular updating procedure for non-simulated benefits. The structural cuts for the following categories of pensions were simulated in EUROMOD for 2010-2011 and included into the baseline (policy sheet  $boa_lt$ ): old-age benefits (boa), early retirement pension (byr), disability benefits (bdi), orphan's (bsu). The above mentioned categories were updated up to 2009 using regular updating procedure and simulated thereafter.

The main health warnings for the implementation of the reform in EUROMOD are:

- Old age and state pensions are aggregated in *boa* (although these two types of pensions are recalculated according to different rules); invalidity pensions after the pension age are included into *boa*; the bonus for the length of the service can't be identified and is ignored this in our simulations.
- There is no information on a degree of work incapacity in the input database. Those
  were imputed by differentiating the marginal average sizes of the three types of work
  incapacity/disability pensions and by ratios of the three categories as indicated by
  external statistics.
- Survivor and orphan pensions are aggregated in the input database and were differentiated according to the age of recipients.



 All indicated categories of pensions in EUROMOD are aggregate categories. The structural cuts were equally applied on all types of benefits within the same category if not indicated otherwise.

# 7. REFERENCES

- 1. EUROSTAT (2011). Datasets: http://epp.eurostat.ec.europa.eu/
- 2. Ivaskaite-Tamosiune, Romas Lazutka and Lina Salanauskaite (2010). *Lithuania 2005-2008*, EUROMOD Country Report, University of Essex.
- 3. National Health Insurance Fund under the Ministry of Health. Annual Reports: <a href="http://www.vlk.lt/">http://www.vlk.lt/</a>
- 4. OECD (2008). International Migration Outlook 2008. Paris, OECD.
- 5. State Social Insurance Fund of the Republic of Lithuania (2011). *Statistical Data:* <a href="http://www.sodra.lt/index.php?cid=280">http://www.sodra.lt/index.php?cid=280</a>
- 6. Statistics Lithuania (2008). 2007 m. Žemės Ūkio Struktūros Tyrimo Rezultatai Results of The Farm Structure Survey 2007 in Lithuania. Vilnius, Statistics Lithuania.
- 7. Statistics Lithuania (2011). Datasets: <a href="http://www.stat.gov.lt">http://www.stat.gov.lt</a>
- 8. Statistics Lithuania (2011). *Gyventojų Pajamos ir Gyvenimo Sąlygos Income and Living Conditions*. Vilnius, Statistics Lithuania.
- 9. Statistics Lithuania (2011). *Lietuvos socialinė apsauga Lithuanian Social Insurance*. http://www.stat.gov.lt/lt/catalog/download\_release/
- 10. Verbist, G. (2004). Redistributive effect and progressivity of taxes. An International Comparison across the EU using EUROMOD. EUROMOD Working Paper No. EM5/04.
  - Sources for tax-benefit descriptions/rules

On-line legislation (in Lithuanian):

http://www3.lrs.lt/dokpaieska/forma\_e.htm

www.sodra.lt

www.ldb.lt

www.socmin.lt

http://ec.europa.eu/employment\_social/spsi/docs/social\_protection/2006/lithuania\_en.pdf