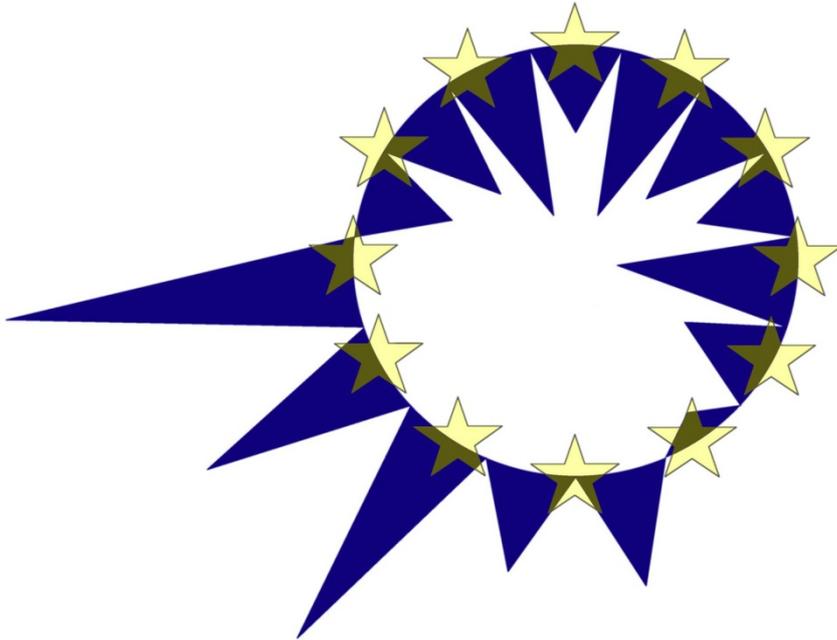


EUROMOD

COUNTRY REPORT



LITHUANIA (LT)

2009-2012

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10/09/2013



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.

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This report accompanies the release of EUROMOD G1.0. There may be minor differences between the results presented here and those obtained with G1.0 due to further improvements since the report was prepared.

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

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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

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



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1. BASIC INFORMATION

Table 1.1 Basic figures

	Pop. (m.) ^[a]	Pop. < 18 (%)	Pop. ≥ 65 (%)	Life expect. (years)	Fertility Rate ^[b]	Unemp. Rate % ^[c]	GDP per head (PPS) ^[d]	Currency 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	14,800	LTL	3.4528
2008	3.37	20.02	15.84	71.94	1.47	5.8	15,400	LTL	3.4528
2009	3.35	19.52	16.01	73.10	1.55	13.7	12,800	LTL	3.4528
2010	3.33	19.11	16.05	73.45	1.55	17.8	14,000	LTL	3.4528
2011	3.24	18.82	16.51	73.89	1.55	15.4	15,500	LTL	3.4528
2012	3.20	18.60	16.71	n.a.	n.a.	n.a.	n.a.	LTL	3.4528

Notes: ^[a] All population figures refer to the beginning of the year; ^[b] Total fertility rate: an average number of children born alive to a woman during the reproductive period of her life (15–49 years); ^[c] Unemployment rate represents unemployed people, aged 15 to 74, as % of labour force; ^[d] GDP per inhabitant in PPS. Source: EUROSTAT, 2011; ^[e] 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); ^[f] - Data for 2011 Q; ^[g] 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 ¹	Total tax Receipts % of GDP ²	Total general government expenditure % of GDP ³	Social protection % of GDP ⁴
2005	32.7	20.4	33.2	13.1
2006	33.0	21.0	33.5	13.2
2007	33.6	21.2	34.6	14.3
2008	33.9	21.3	37.2	16.2
2009	34.3	17.9	43.8	21.3
2010	33.7	16.6	40.9	19.2
2011	32.0	n/a	37.5	n.a.

Source: EUROSTAT (2012), Statistics Lithuania, Ministry of Finance of Lithuania

¹ 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>

² 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

³ Total general government expenditure – [tec00023], % of GDP. Source: <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tec00023&language=en>

⁴ 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
2011	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

Table 1.4 Taxation (as % of total tax receipts)

	Personal income tax	Corporate income tax	Social security contributions		Taxes on goods and services	Other taxes
			Employees* ^[a]	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
2011	n/a	n/a	n/a	n/a	n/a	n/a

* 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 programs⁵.

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

- 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).
- approve procedures on payments of state entitlements or average fuel prices (i.e. in case of social assistance).



- 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.
- Main benefit and tax changes often happen at different times of the fiscal year, i.e. such as 1st July. For example, basic pension amount and minimum monthly salary are usually changed as of 1st 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 30th 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. Since 1st January, 2012 the state pension age should gradually increase by 4 months yearly from 60 to 65 years for females and by 2 months yearly from 62.5 to 65 years for males. Effectively, the state pension age on 30th June, 2012 is 60 years and 4 months for women and 62 years and 8 months for men.
- The minimum school leaving age is 16 years old. Compulsory education is from age 7 to 16. The age of majority is 18⁶.
- *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 1st 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.

⁶ 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.



- 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 abandoned since 2009 (see Section 2.6).
- 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.
- 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 2008⁷, 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 30th June 2005-2012.

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 30th June 2005-2012.

Table 1.5 Monthly MSL and SSI levels effective on June 30, 2005-2012 LTL

	2005	2006	2007	2008	2009	2010	2011	2012
MSL (BSA)	125	125	130	130	130	130	130	130
SSI	135	165	205	285	350	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 1st August, 2008 and was kept constant in 2009-2012.

⁷ 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*



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 *list* 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.

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 insurance 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 1st 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.⁹ There were no major changes made to the insured income list in 2010 and 2012.

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 1st July 2009 AMRI was averaged over the 9 months and since 1st October 2009 – over 12 months one month before the right to maternity leave, paternity leave and maternity (paternity) leave benefits.¹⁰ 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 2010-2012.

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 30th June 2005-2012.

Table 1.6 Current year’s insured income (monthly), 30th June 2005-2012, LTL

⁸ *Insured income is defined by the “Lietuvos Respublikos Valstybinio socialinio draudimo įstatymas”.*

⁹ Further changes to the article defining insured income list were made in July and December 2009, and later in June 2010.

¹⁰ 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_l?p_id=334539



	2005	2006	2007	2008	2009	2010	2011	2012
Current year's insured income (CYI)	1,084	1,212	1,356	1,414	1,488	1,170	1,170*	1,488

Source: Based on the Government of Lithuanian Republic Resolution “Dėl 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.

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 old-age pension or vocational rehabilitation allowance.

Table 1.7 Basic monthly pension, 30th June 2005-2012, LTL

	2005	2006	2007	2008	2009	2010	2011	2012
Basic monthly pension, LTL	172	200	266	316	360	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 2005-2012 are indicated below:

Table 1.8 State pension base and minimum monthly salary, 30th June 2005-2012, LTT

	2005	2006	2007	2008	2009	2010	2011	2012
State pension base, LTL	138	138	172	200	200	200	200	200
Minimum monthly salary (MMS)	500	550	600	800	800	800	800	800

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.¹¹ No changes were made in 2010-2012.

¹¹ 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 skirsnų pavadinimų pakeitimo įstatymas”. 2008.07.01. Nr. X-1664: http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_l?p_id=324329



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 1st 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.¹² Starting from January 1, 2010 both eligibility criteria and the income test were tightened according to the Temporary Law on Recalculation and Payment of Social Benefits. Since the 1st January, 2012 entitlement to the benefit became means tested also for families that raise one or two children aged less than 3 years as well.

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 2005-2012. 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 30th 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,¹³ 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 1st 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.¹⁴ 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 2010-2012.

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 2010-2012.

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 2010-2012.

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

¹² 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/inter2/dokpaieska.showdoc_l?p_id=334470

¹³ The legal age of majority.

¹⁴ 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_l?p_id=334470



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. Since 1st January 2012 several changes were introduced: equivalence scales for benefit amount, reduction of benefit amount for long term dependants on Social benefit and payment of Social benefit for former long-term unemployed during the first 6 months of employment.

All municipalities pay social assistance benefits to residents from targeted subsidies allocated to them from the national budget. However since 1st January 2012 in 5 municipalities (Municipality of Akmene, Panevezys, Radviliskis, Raseiniai, Silale) Social benefit providing function is transferred to municipalities' discretion and this benefit is paid from their budgets. Thus, after the assessment of specific local conditions and circumstances these municipalities will have more power in granting social assistance benefit (for example, to pay additional social assistance benefit, to reduce the amount of social assistance benefit, etc.).

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).

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). It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

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). It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and it is hold on until 31 12 2012.

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. It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and it is hold on until 31 12 2012.



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). It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and it is hold on until 31 12 2012.

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. It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and it is hold on until 31 12 2012.

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 1st 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. No changes made in 2012.

Paternity leave benefit (*tėvystės pašalpa*): a lump sum benefit, which is effective since 1st 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 1st 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. No changes made in 2012.

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 1st July 2010, and was reduced thereafter. The required insurance record was extended and the maximum benefit amount decreased during 2010-2011. Since 1st January 2012 Maternity (paternity) leave benefit duration of payment and its amount became optional. It may be paid 1 or 2 years by decision of beneficiaries.

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 2nd 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. It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

Work incapacity pension (*netekto darbingumo pensija*)¹⁵: 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 *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). It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

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 1st 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. It was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

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 1st January 2010 the monthly benefit was capped at LTL 650 for the entire period of the benefit payment.. No changes in 2011-2012.

¹⁵ Until 1st July 1, 2005 defined as disability (*invalidumo*) pension



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, 2009¹⁶ and the upper limit set since January 1, 2010¹⁷. No changes in 2011-2012.

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 until December, 2011 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 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 1st January 1995. For those still in receipt, it was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

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. For those still in receipt, it was affected by

¹⁶ Based on the following law "Lietuvos Respublikos Ligos ir motinystės socialinio draudimo įstatymo 9, 10, 14, 211, 24 straipsnių pakeitimo ir papildymo įstatymas". 2009.04.28 Nr. XI-237

¹⁷ 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



the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

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. For those still in receipt, it was affected by the Provisional Law on Recalculation and Payment of Social Benefits of the Republic of Lithuania which came into effect on January 1, 2010 and was hold on until 31 12 2011.

- *Scope and scale*

Table 1.10 and Table 1.9 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 1.10 Social benefits: recipients (as % of population^[1])

	2005	2006	2007	2008	2009	2010	2011
Benefits for families raising children							
Birth grant	0.86	0.87	0.89	1.03	1.02	1.02	1.01
Child benefit	9.43	9.42	10.36	16.70	14.79	4.57	3.62
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	0.38
Grant for housing (settlement)	0.07	0.09	0.08	0.06	0.08	0.08	0.09
Pregnancy grant	0.24	0.22	0.20	0.17	0.20	0.25	0.26
Maternity leave benefit ^[2]	0.61	0.61	0.76	0.80	0.89	0.72	0.62
Paternity leave benefit	n.a.	0.09	0.27	0.37	0.39	0.37	0.37
Maternity (paternity) benefit ^[3]	0.46	0.48	0.50	1.11	1.38	1.43	0.62
Unemployment and social assistance benefits							
Social benefit	1.58	1.11	1.08	1.11	2.19	5.45	6.81
Compensation for utilities	0.90	0.89	0.99	1.36	2.36	5.00	6.81
Unemployment social insurance benefit ^[4]	0.45	0.45	0.53	0.68	2.10	5.77	n.a.
Municipal support	n.a.	n.a.	n.a.	0.87	0.59	0.85	0.79
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^[4]							
Old-age pension ¹⁸	17.55	17.60	17.70	17.89	18.04	18.0	18.50
Work incapacity and invalidity pensions ^[4]	6.17	6.23	6.20	6.34	6.72	7.0	6.90
Survivor and orphan pensions	6.91	7.00	7.46	7.80	7.9	8.02	8.22
State pensions of degree one or two	0.14	0.20	0.19	0.21	0.25	0.24	0.24
State pensions for victims	2.73	2.73	2.72	2.67	2.59	2.53	2.54
State pensions for officers and soldiers	0.34	0.35	0.37	0.39	0.41	0.43	0.47
State pensions for scientists	0.07	0.07	0.07	0.08	0.08	0.08	0.09
State pensions for judges	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compensations for special working conditions	0.26	0.26	0.27	0.27	0.26	0.25	0.24
State social assistance benefits/pensions*	2.41	2.88	3.99	5.21	5.60	5.60	1.35
Loss of breadwinner's pension	0.48	0.41	0.34	0.28	0.24	0.21	0.18
Early retirement pension	0.03	0.03	0.03	0.02	0.02	0.26	0.35
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	0.00
Occupational disease allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Work incapacity grant	0.01	0.01	0.01	0.01	0.01	0.01	n.a.
Work incapacity periodical compensation ^[3]	0.07	0.09	0.11	0.13	0.15	0.15	n.a.

^[1] 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.

¹⁸ Inclusive of working and early old-age pensioners



^[4] Average annual number of recipients

Source: Statistics Lithuania & State Social Insurance Fund Board;

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

Table 1.11 Social benefit: expenditure as % of total expenditure for these benefits^[1]

	2005	2006	2007	2008	2009	2010	2011
1. Benefits for families raising children							
Birth grant	0.51	0.47	0.39	0.34	0.38	0.45	0.42
Child benefit	4.65	4.03	3.60	4.51	3.84	1.17	0.82
Benefit to a conscript's child	0.00	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	0.61
Grant for housing (settlement)	0.13	0.14	0.12	0.08	0.12	0.13	0.11
Pregnancy grant	0.04	0.03	0.02	0.01	0.01	0.02	0.02
Maternity leave benefit ^[2]	1.34	1.57	1.77	2.03	2.11	1.81	1.42
Paternity leave benefit	n.a.	0.09	0.24	0.30	0.28	0.26	0.24
Maternity (paternity) benefit	2.42	2.60	3.50	7.22	9.80	10.69	8.08
Unemployment and social assistance benefits							
Social benefit	0.94	0.69	0.66	0.74	1.56	4.68	5.43
Compensation for utilities	0.55	0.48	0.42	0.43	0.65	1.07	1.23
Unemployment social insurance benefit	1.27	1.25	1.24	1.43	5.15	3.62	3.08
Municipal support	n.a.	n.a.	n.a.	n.a.	0.04	0.05	0.05
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							
Old-age pension ¹⁹	54.38	54.43	54.25	52.00	48.36	49.47	56.49
Work incapacity and invalidity pensions	17.10	17.17	16.72	15.67	14.80	15.81	12.36
Survivor and orphan pensions	3.70	3.43	4.05	3.35	3.02	3.24	3.13
All types of state pensions ^[2]	4.93	5.22	4.15	3.58	3.13	3.05	1.61
Compensations for special working conditions	0.56	0.57	0.56	0.52	0.47	0.41	0.37
State social assistance benefits/pensions	0.00	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	0.31
Early retirement pension	0.09	0.08	0.07	0.06	0.05	0.59	0.76
Sickness and occupational accidents social insurance							
Sickness benefit	5.05	5.58	6.34	6.22	5.15	2.28	0.00
Vocational rehabilitation allowance	0.00	0.00	0.00	0.00	0.00	0.00	3.12
Occupational disease allowance	0.16	0.18	0.16	0.16	0.14	0.00	0.00
Work incapacity grant	0.02	0.01	0.01	0.01	0.02	0.02	0.15
Work incapacity periodical compensation ^[3]	0.13	0.17	0.20	0.19	0.19	0.18	0.01
TOTAL, as % of total expenditures	100	100	100	100	100	100	100
TOTAL, in mln. LTL	5,611	6,316	7,943	10,687	12,222	10,908	11,268

¹⁹ Inclusive of working and early old-age pensioners



[1] If $r < 0.01$ (where r is expenditures/total expenditures), then 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.

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 1st August 2009 education grant could not be paid together with the *unemployment insurance benefit*.²⁰ No major changes were applied in the period of 2010-2012.

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 criteria 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 2010-2012.

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 1st January 2009, social stipends (3 MSL (BSA)²¹) 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. Since the July 1, 2011 the State Studies Foundation is responsible for Social stipends payment.²²

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. Since 1st January 2012 Compensations are paid also for those, who rent apartments (only owners of apartments were eligible before). The notional defined size of useful space applied for compensations calculation was increased since 1st January 2012.

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.

²⁰ Based on the following law “Lietuvos Respublikos Užimtumo rėmimo įstatymo pakeitimo Įstatymas”. 2009.07.14 Xi-334. http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=349316

²¹ 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. http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_l?p_id=329076

²² Based on the following resolution “Socialinių stipendijų aukštųjų mokyklų studentams skyrimo ir administravimo tvarkos aprašas”. Patvirtinta Lietuvos Respublikos Vyriausybės 2009 m. gruodžio 23 d. nutarimu Nr. 1801. http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=390234



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 1st 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.

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, 1st 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 2008-2012) 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 2005-2012.

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 2005-2012.

Severance pay/compensation (*Išėitinė 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 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. 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. From 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.²³

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.

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).²⁴ 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 įmokos*): 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 (*įmokos į garantinį fondą*): 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%.²⁵ Resources from the Guarantee Fund are allocated to current and past employees of bankrupted enterprises, which are indebted to employees.

²³ Based on the following law "Lietuvos Respublikos Valstybinio socialinio draudimo fondo biudžeto 2009 metų rodiklių patvirtinimo įstatymas". Žin., 2008, Nr.149-5998

²⁴ 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

²⁵ 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



1.4 Taxes

Personal Income Tax (*asmens pajamų mokestis*): flat rate tax applied on an individual basis. Effective on 30th 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.²⁶ Since 2010 income from individual activities, except of income from “free occupations”²⁷ and from securities, is taxed by 5% rate. The basic general allowance can be applied on employment-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 2011-2012.

Inheritance tax (*paveldimo turto mokestis*) is charged using a progressive tax schedule. Effective on 30th 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.²⁸ Generally, a land tax value is based on immovable property register data and

²⁶ 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: http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_l?p_id=334556

²⁷ “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).

²⁸ Based on the following resolution “LR Vyriausybės 1993 m. rugpjūčio 3 d. nutarimas Nr. 603 „Dėl žemės mokesčio“



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 (*pridėtinės vertės mokestis*): Effective on 30th June 2005, the main standard rate of VAT was 18%. Since the 1st January, 2009 to 1st September 2009 the main standard rate of VAT increased to 19%, and from 1st 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 1st 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.

Social Tax (*socialinis mokestis*) is a temporary tax, effective from 1st 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. New Immovable Property Tax on real estate was introduced since January 1, 2012. The tax base is market value of immovable property above 1 000 000 LTL. The tax rate is 1%. (Source: "Lietuvos Respublikos Nekilnojamojo turto mokesčio įstatymo 2, 4, 6, 7, 11, 12, 14 straipsnių pakeitimo ir papildymo Įstatymas", 2011 m. gruodžio 21 d. Nr.XI-1828. http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=415666

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 1.12 and Table 1.13 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 1.12 Taxes: taxpayers (as % of population)



	2005	2006	2007	2008	2009	2010	2011
Direct taxes							
1. Personal Income Tax on wages (<i>main tax rate*</i>)	42.0	43.7	45.1	44.1	37.8	36.8	n.a.
2. Personal Income Tax (from authorship contracts, royalties) (<i>reduced tax rate in 2005-2008</i>)**	1.8	2.1	2.2	2.5	1.6	0.8	n.a.
3. Personal Income Tax on rent (<i>reduced tax rate in 2005-2008</i>)**	1.6	1.9	2.1	2.2	1.8	n.a.	n.a.
4. Personal Income Tax on income from individual activity (<i>reduced tax rate in 2005-2008</i>)**	0.3	0.6	0.8	0.9	0.9	0.9	1.0
5. Personal Income Tax (acquisition of business certificate) ***	2.3	2.6	3.0	3.0	2.2	2.1	2.6

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

** 15% for 2005-2010

*** Acquisition price of business certificate varies for different economic activities and across municipalities.

Source: Tax Authorities²⁹

²⁹ 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 1.13 Taxes: revenue (mln. LTL)

	2005	2006	2007	2008	2009	2010	2011
Annual total (tax) revenue	12,899.2	15,065.4	18,630.9	21,787.2	16,463.2	15,722.1	17,395.7
Income and profit taxes	5,074	6,349.3	7,091.4	8,171.6	5,478.4	4,424.8	4,645.7
Personal Income Tax	3,566.3	4,059.2	4,555.8	5,106.3	3,789.0	3,470.9	3,772.6
Corporate Income Tax	1,507.7	1,924.5	2,053.6	2,910.2	1,707.6	953.9	873.1
Social Tax	n.a.	365.5	481.9	155.2	-18.2	0	0
Property Taxes	251.5	278.4	292.5	307.7	325.6	354.6	334.8
Land Tax	36.2	39.9	45.7	47.9	49.0	52.3	56.1
Inheritance Tax	2.3	4.2	6.3	6.1	6.1	3.8	3.5
Immovable Property Tax	213	234.4	240.5	253.6	270.5	298.5	275.3
Taxes on goods and services	7,415.3	8,794.8	11,038	13,057.3	10,482.0	10,761.1	12,210.4
VAT	4,841.7	6,152.2	7,824.2	9,242.5	6,798.8	7,294.0	8,502.5
Income Deductions according to Forest Law	16.6	17.1	23.2	21.4	25.9	36.9	73.6
Income Deductions according to Law on Road Maintenance and Development Programme Financing	296.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Excise	2,040.1	2,374.4	2,803.6	3,354	3,258.2	3,036.5	3,178.2
Sugar Sector taxes	5.7	2.2	45	24.8	3.1	4.2	7.7
Lottery and Gambling Tax	24.6	21.6	30.4	30.3	32.1	28.8	76.9
Vehicle Tax	48.6	78.5	139.3	144	100.9	118.7	134.1
Environment Pollution Taxes	59.2	58.2	63.5	71.7	62.6	25.4	56.3
Tolls	82.4	90.6	108.9	168.5	200.4	216.5	231.9
International Trade and Transaction Taxes	158.4	182.9	209	150.6	177.2	181.6	204.8

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

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



Benefit	Variable	Treatment in EUROMOD					
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	I	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 (old-age) 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	Treatment in EUROMOD					
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	I	I	No information on different benefit rules by municipalities; inclusive of NGO support.
Free meals to pupils	-	E	E	E	E	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	-	E	E	E	E	E	No rules for benefit distribution in 2005-2006. No information on families being at "social-risk or special conditions set by education institutions.
Compensation for drugs and medical devices	-	E	E	E	E	E	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	I	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 contributions	Variable name(s)	Treatment in Euromod					Main limitations
		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)	-	E	E	E	E	E	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	-	E	E	E	E	E	Outside the scope of the model
Inheritance tax	-	E	E	E	E	E	No information available
Immovable property tax	-	E	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	-	E	E	E	E	E	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	E	E	E	E	Outside the scope of the model
Vehicle Tax	-	E	E	E	E	E	Outside the scope of the model



Taxes and social	Variable	Treatment in Euromod					Main limitations
Environment	-	E	E	E	E	E	Outside the scope of the model
Pollution Taxes							
Tolls	-	n.a.	n.a.	n.a.	n.a.	n.a.	
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. Simulated since 2009. Before 2009 no information available on amounts to be credited
Credited contributions for health insurance	-	E	E	E	S	S	
Employers social insurance contributions:	ils_sicer	S	S	S	S	S	No data on income received from authorship contracts. No data on land size.
- pension social insurance	tscerpi_s	S	S	S	S	S	
- sickness and maternity social insurance	tscersi_s	S	S	S	S	S	
- unemployment social insurance	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	
- pension social insurance	tscepi_s	S	S	S	S	S	
- sickness and maternity social insurance	tsceesi_s	S	S	-	-	-	
- health insurance	tsceehl_s	-	-	S	S	S	
Self-employed social insurance contributions:	ils_sicse	S	S	S	S	S	No data on income received from authorship contracts. No data on land size.
- for pensions	tscsepi_s	S	S	S	S	S	
- for compulsory health insurance	tscsehl_s	S	S	S	S	S	
- sickness and maternity social insurance	tscsesi_s	-	-	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 1st 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 old-age 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.

- *Structural changes between 2011 and 2012*

Maternity (paternity) leave benefit duration and its amount became optional. It may be paid 1 or 2 years by decision of beneficiaries. Several changes were introduced for Social benefit: equivalence scales for benefit amount, reduction of benefit amount for long term dependants on Social benefit and payment of Social benefit for former long-term unemployed during the beginning of new employment. Contributory pensions were restored to their 2009 level since January 1, 2012. Non-contributory pensions will be restored since January 1, 2013.



New Immovable Property Tax on personal (natural persons') real estate above 1 000 000 LTL was introduced since January 1, 2012³⁰.

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.³¹

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 (switched off in the baseline for all years)	yem
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 (calculated since 2007)	bplct_s
bunct_lt	Unemployment insurance benefit	bunct_s
tscsepi_lt	Self-employed social insurance contributions – pensions	tscsepi_s

³⁰ Source: "Lietuvos Respublikos Nekilnojamojo turto mokesčio įstatymo 2, 4, 6, 7, 11, 12, 14 straipsnių pakeitimo ir papildymo Įstatymas", 2011 m. gruodžio 21 d. Nr.XI-1828. Vilnius. http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=415666

³¹ 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.



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
tsct_lt	Credited social insurance contributions: pensions and unemployment	tsct*_s

- **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):

- 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 (switched off in the baseline)	yem, yse
yem_lt	Minimum hourly wage (switched off in the baseline for all years)	yem
bmaprct_lt	Maternity leave benefit	bmaprct_s
bmaprnc_lt	Pregnancy grant	bmaprnc_s
bmact_lt	Maternity (paternity) leave benefit	bmact_s
bpact_lt	Paternity leave benefit	bpact_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
tsct_lt	Credited social insurance contributions: pensions and unemployment	tsct*_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 30th June) period. Since the 1st 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 1st January 2010 children living in the Type I families who are over 7 years are not eligible for child benefits.³²

³² According to “Lietuvos Respublikos socialinių išmokų perskaičiavimo ir mokėjimo laikinasis įstatymas. Žin., 2009, Nr. [152-6820](#)“



- **Income test**

No income test applied before 2009. From the 1st 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 1st 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 and still effective in 2012). Since January 1st, 2012 income test was introduced for all groups irrespective of age of child: monthly income per family member can't exceed threshold of 1.5 SSI.

- **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	2005-2006		2007		2008		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		2012					
	Type I	Type II	Type I	Type II				
Child aged below 2	0.75*	0.75*	0.75*	0.75*				
Child aged 2 to 6	0.4*	0.4*	0.4*	0.4*				
Child aged 7 to 8	-	0.4*	-	0.4*				
Child aged 9 to 17	-	0.4*	-	0.4*				
Child aged 18 to 23**	-	0.4*	-	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

* Means test applies since March 1, 2009 (temporary law valid since January 1, 2010 till December 31, 2011 and still effective in 2012).

** 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).

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 28th week of the pregnancy.



- **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 30th 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 30th 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 1st 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 1st 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 $B \geq \min B$ (minimum level)

S is a daily compensatory salary; $S \leq \max$ (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 1st July 2010 the upper limit was set to 4 times CYI for newly awarded benefits. Since 1st January 2012 the upper limit was set to 3.2 times CYI for newly awarded benefits and CYI was increased (Table 1.6). 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. Since the 1st January 2010 – the minimum and maximum benefit levels are recalculated on the approval of a new CYI level.

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 July 1, 2011 the maternity benefit is no longer multiplied by the number of born children.

Other rules did not change during the course of 2008-2012 (as of on June 30).

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 year³³ (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.

³³ 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 1st 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.³⁴

Starting from the 1st 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 1st 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 1st July 2010: 4 times CYI for newly awarded benefits. Since 1st January 2012 the upper limit was set to 3.2 times CYI for newly awarded benefits and CYI was increased (Table 1.6). The benefit cannot be lower than 1/3 of CYI per month. *Since the 1st 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 1st 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.

³⁴ 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_l?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***

Before 2008 the benefit was 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 1st 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 1st 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 1st July 2010: 4 times CYI for newly awarded benefits.
- Since the 1st January 2012: 3.2 times CYI for newly awarded benefits.

Since the 1st 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.

Since 1st January 2012 maximal Maternity (paternity) leave benefit duration and its amount became optional. It may be paid 1 or 2 years by decision of beneficiaries. Mother (father) can choose to take benefit only during the 1st year (compensation rate is 100%), or to take benefit during the two years period: compensation rate is 70% during the first year and compensation rate is 40% during the second year. It is allowed to work and to receive full amount of benefit during the second year.

The level and duration of benefit entitlement has changed during the period of 2005-2012 (See table 2.6).

Table 2.7 The rate of maternity (paternity) benefit, 2005-2011 (as of 30th June)

	2005	2006	2007	2008	2009	2010	2011	2012***
Compensation rate 1 st year, %	70	70	85/100	100	100	100	90**	100/70
Max. benefit duration the 1 st year, months*	12	12	12	12	12	12	12	12
Compensation rate 2 nd year, %	-	-	-	85	85	85	75**	0/40
Max. benefit duration the 2 nd year, months	-	-	-	12	12	12	12	0/12
Benefit size multiplied with # of births	No	No	No	Yes	Yes	Yes	Yes	Yes with ceilings****

* 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.

** For all the benefits (new and old) starting from the 1st July 2010.

*** Since the 1st July 2011 - the amount of the maternity (paternity) leave benefit depends on period of payment which can be chosen by mother (father):

if mother (father) chose to take leave for 12 months, compensation rate is 100%;

if mother (father) chose to take leave for 24 months, compensation rate for 1-12 months period is 70% and for 13-24 months period is 40%;

**** Benefit size multiplied with # of births but cannot exceed 100% of Compensation rate.

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

During the entire receipt period, 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:

- 30th 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.
- 30th June 2008:
 - maternity (paternity) benefit is paid until the child reaches the age of 2.
 - 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.)
 - 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 year³⁵ (as suggested by observed patterns in the underlying data).

- Simulations of opting for different options of maternity/paternity benefit is built in accordance with administrative statistics: 13% of eligible mothers choose to receive their maternity(paternity) benefit for one year and 87% for two years in 2012. Mothers opting for either choice are selected randomly. Mothers with several children are randomly assigned to a single choice for all children.

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).

- **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 during 2005-2012, 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;

³⁵ Note that being on maternity leave is considered as in work in the underlying data source, i.e. EU-SILC.



- be unemployed receiving unemployment social assistance benefit (effective until 01 01 2012);
 - be the persons who have registered with the state territorial labour exchange for at least six months (effective until 01 01 2012), be the persons who have registered with the state territorial labour exchange without term requirement (effective since 01 01 2012);
 - receive education grant during the period of studying or doing public works (effective until 01 01 2012);
 - *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:
 - if a family raises a child under three years old, who does not attend a pre-school educational establishment;
 - 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;
 - if a child under 8 years old does not attend a pre-school educational establishment due to medical recommendations or due to overcrowded schools;
- In 2007-2012 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:
- 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;
 - 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 (8 years old since 1 January, 2012) and works on a land plot, which is not smaller than 2 hectares (either owned or rented). (Note: this condition is not simulated)
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.
 4. In 2012 extra benefit payment was introduced for former long term unemployed, i.e. person has registered with the state territorial labour exchange during at least last 12 months. The benefit is granted during the six months if person has started to work and earn monthly no more as two minimal wages.

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: $AS \leq RP = RE + RM$, 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 from 30th June 2005-2012, 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.³⁶ 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:

RE =

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 details in Table 2.8).

+

Notional size of land plot per family or person x *average market price of the land* (see details in).

The state requires application of the following notional sizes of land per family:

- residential purpose land: in cities – 6 Ares,³⁷ in towns and villages – 25 Ares;
- agricultural purpose land (if the plot does not exceed 1 hectare³⁸): in cities – 6 Ares, in towns and villages – 25 Ares;

³⁶ Based on Methodology of Asset Evaluation (*Turto vertinimo metodika*),

³⁷ 1 Are = 100 square meters

³⁸ 1 Hectare = 10000 sq. meters or 100 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 2005-2012³⁹ unless otherwise specified (those in *italics* could not be simulated):

- work-related income and royalties (including non-cash payments) before the 1st July 2008. Since the 1st 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 1st 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.
- Child benefit (since 01 01 2012)
- 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;*

³⁹ Changes effective on the 30th 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: http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=323463



- *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 2.9 for rates).*

Table 2.8 Monthly income rate per hectare of agricultural land, LTL

Land quality grade/ Year (on June 30)	2005	2006	2007	2008	2009	2010	2011	2012
Up to 32	11	10	12	8	30	28	5	15
32-35	17	13	17	18	39	40	15	24
35-40	21	19	24	30	55	54	26	38
40-48	31	26	36	52	79	75	48	59
48 and more	39	32	42	65	97	93	66	78
Average (<i>own calculation</i>)	24	20	26	35	60	58	32	42,8

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 was calculated as: $90\% \times (\text{SSI} \times \text{number of people in family} - \text{IL})$, before 1st January 2012.

From 1st January 2012 equivalent scales for Social benefit were introduced. So, benefit amount now depends on number of people in family:

- for single person or first person in family Social benefit is calculated as the difference between income and $100\% \times \text{SSI}$;
- for second person in family - $80\% \times \text{SSI}$;
- for third and following person in family- $70\% \times \text{SSI}$.

Social benefit for former long term unemployed paid during the first six months of employment is calculated as 50% of social benefit paid before the employment (effective from 01 01 2012).

From 1st January 2012 benefit amount has to be reduced for single person able to work but not working or family of person able to work but not working and receiving benefit during the long period:

Benefit amount will be reduced:



- by 20% after 36 months of payment;
- by 30% after 48 months of payment;
- by 40% after 60 months of payment for families having children;
- after 60 months benefit payment has to be abolished for single person or family without children.

The calculated social benefit should be equal to at least 5 LTL in order to be paid.

- ***Social experiment in 5 municipalities since 01 01 2012***

All municipalities pay social assistance benefits to residents from targeted subsidies allocated to them from the national budget. However in 5 municipalities (Municipality of Akmene, Panevezys, Radviliskis, Raseiniai, Silale) Social benefit providing function is transferred to municipalities' discretion and this benefit is paid from their budgets. Thus, after the assessment of specific local conditions and circumstances these municipalities will have more power in granting social assistance benefit (for example, to pay additional social assistance benefit, to reduce the amount of social assistance benefit, etc.).

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 2.9).
- financial assets: based on the EU-SILC information on investment income and external information on the average yield of LT government bonds during the period of 2005.

Table 2.9 Average housing and land market prices

	2005	2006	2007	2008	2009**	2010	2011-2012
Flats (LTL/1 sq. m)							
Densely populated areas (cities: Vilnius, Kaunas, Klaipėda, Panevėžys, Šiauliai)	1,816.33	2,112.33	2,590.33	3,561.00	3,776.52	2,412.56	2,245.64
Thinly populated areas (other towns and villages)	546.56	612.25	703.04	1,087.98	1,249.55	814.31	639.56
Houses (LTL/1 sq. m)							
Densely populated areas (cities: Vilnius, Kaunas, Klaipėda, Panevėžys, Šiauliai)	350.33	1,623.67	1,759.33	2,014.67	2,119.08	1,690.95	1,619.81
Thinly populated areas (other towns and villages)	123.39	543.45	611.99	859.55	939.65	678.98	544.76
Residential purpose land (LTL/1 are)							
Densely populated areas (cities: Vilnius, Kaunas, Klaipėda, Panevėžys, Šiauliai)	8,072.5	15,400.00	24,062.5	29,720.0	42,015.3	29,176.7	24,722.3
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
Agricultural purpose land if up to 1 hectare (LTL/1 are)							
Densely populated areas (cities:	2,615.0	5,128.75	7,903.75	10,398.8	13,803.9	13,319.6	11,679.6



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
<i>Agricultural purpose land if more than 1 hectare (LTL/1 hectare)</i>							
Thinly populated areas (only villages)	8,633.26	25,483.43	33,976.4	41,217.4	44,936.9	13,553.9	10,376.9

* The rate is also applied if the land size is more than 1 hectare.

** 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.

Source: Based on the Law “[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](#)” 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.
- Social experiment in 5 municipalities since 01 01 2012 is not simulated in EUROMOD.
- Benefit reduction for those able to work but not working is not simulated due to data limitation and lag in time until this rule effectively will be implemented.
- Social benefit for the former long-time unemployed during the first six months of employment is not simulated due to data constraints.

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.
- **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: $U \leq 0.7 * CYI$. 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 1st 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: $V \leq (0.7 * CYI - 1 * SSI)$. This ceiling requirement has been effective 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_earn* != 0 & *lunmy_s* = 0 & *bunct* = 0), this is used.
- For those currently unemployed (*lunmy_s* > 0) and in receipt (*bunct* > 0), this is set at least equal to the minimum qualifying period.
- For those currently unemployed (*lunmy_s* > 0) and not in receipt (*bunct* = 0), this is set to zero.

At this point, working age people who are unemployed (*lunmy_s* > 0), have sufficient contribution history, are not in education 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 30th 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 2012):

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

2.4.2 Employer social insurance contributions (*ils_sicer*)

As of 30th June 2005-2012 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 2.10.

Additionally, 0.2% of gross salary is paid by employers to the Guarantee Fund (*įmokos į garantinį fondą*) until 2008.⁴¹ Since the 1st July 2008, the rate of payments to the Guarantee Fund is 0.1%. It remained unchanged in 2010 and 2011.

Table 2.10 Employers' social insurance contributions (% of gross salary)

	2005	2006	2007	2008	2009	2010	2011	2012
1. Pension social insurance	23.5	23.6	23.7	23.85	23.3	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	3.4
3. Unemployment social insurance	1.4	1.3	1.2	0.95	1.0	1.1	1.1	1.1
4. Health insurance*	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
5. Employment injuries and occupational diseases social insurance**	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Total	31.0	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	0.2

*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).

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

⁴⁰ Employee 6% contributions to the compulsory health insurance is also mentioned in the section 2.4.6.

⁴¹ Resources from the Guarantee Fund are allocated to current and past employees of bankrupted enterprises, which are indebted to employees.



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.

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.
- Since 1st January 2011 authors of arts not receiving income are insured for basic and supplementary pension parts and for the sickness and maternity benefits.

Contribution rates for credited unemployment and pension social insurance contributions in 2005-2012 are indicated in the

Table 2.11.

Table 2.11 Contributions for pension social insurance (employer's part) and unemployment insurance, 2005-2011 (%)

	2005	2006	2007	2008	2009	2010	2011	2012
Contributions for pension social insurance (employer's part)	23.5	23.6	23.7	23.85	23.3	23.3	23.3	23.3
Unemployment insurance	1.4	1.3	1.2	0.95	1	1.1	1.1	1.1

The contributions for credited health social insurance contributions are flat rate and approved annually. It is calculated as a percentage of the two-year previous average monthly wage for four quarters (32% in 2009, 33% in 2010, 34% in 2011, 35% in 2012, 36% in 2013, 37% in 2014)⁴². Annual amounts of health social insurance contributions per person were as follows: LTL 605.27 per annum (LTL 50.44 per month) in 2009; LTL 744.74 per annum (LTL 62.06 per

⁴² Source: "Lietuvos Respublikos sveikatos draudimo įstatymo 16 straipsnio pakeitimo įstatymas. 2011 12 08" http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=413636



month) in 2010; LTL733,23 per annum (LTL61,10 per month) in 2011; LTL 725,4 per annum (LTL 60.45 per month) in 2012⁴³.

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.
20. Since 1st January 2012 authors of arts not receiving 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.

⁴³ Source: "Lietuvos respublikos 2012 metų valstybės biudžeto ir savivaldybių biudžetų finansinių rodiklių patvirtinimo įstatymas" 2011 m. gruodžio 20 d. Nr. XI-1823).



2.4.4 Self-employed social contributions (*ils_sicse*)

a) Effective before the 1st 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)⁴⁴ 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.

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

Table 2.12 shows MMS and BP levels and state defined annual amounts of contributions for social insurance applicable to self-employed people, which were effective on 30th June 2005-2012. 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 2.12 Monthly MMS, MHW, PB levels and amounts of annual contributions effective on June 30, 2005-2012, LTL

	2005	2006	2007	2008	2009	2010	2011	2012
Minimum monthly salary (MMS)	500	550	600	800	800	800	800	800
Average MMS that year*	525	575	650	800	800	800	800	800
Lower tariff MMS**	430	430	600	800	800	800	800	800
Minimum hourly wage (MHW)	2.95	3.35	3.66	4.85	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	4.85
Basic monthly pension (PB)	172	200	266	316	360	360	360	360
Average monthly PB that year*	186	215	248	338	360	360	360	360
Annual contributions for basic pension	1116	1290	1578	2006	2160	2160	2160	2160
Minimum annual contributions for additional part of pension	945	1035	1170	1440	1440	1440	1440	1440

Notes:

*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 1st January).

** 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 1st January 2007.

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 Vyriausybės nutarimas Del minimaliojo darbo uzmokescio didinimo", 2005 April 4, No. 361, its relevant amendments and changes. Information available at: <http://www.socialiniszemelapis.lt/index.php?-1492246947> ("Baziniai socialiniai rodikliai")

⁴⁴ 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.



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 2.13).⁴⁵ 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 3.5% of minimal monthly salary MMS.
- 2) Personal farm users (having up to 3 ha of landed property) pay 1.5% 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.

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 1st January 2009:

From 2009 (and as of the 30th 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).⁴⁶ 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).⁴⁷ Rates for farmers and their partners were even lower, i.e. 8% in 2009 (16% rate applied in 2010, full rate in 2011).⁴⁸ 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).

⁴⁵ LR Sveikatos draudimo įstatymas, 2003

⁴⁶ Lietuvos Respublikos Valstybinio socialinio draudimo įstatymo 2, 4, 6, 7, 8, 9 straipsnių pakeitimo ir papildymo įstatymas. Žin., 2009, Nr. 25-972

⁴⁷ 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.

⁴⁸ Lietuvos Respublikos Valstybinio socialinio draudimo fondo biudžeto 2009 metų rodiklių patvirtinimo įstatymas. Žin., 2008, Nr.149-5998



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.

Since 2009 self-employed persons and farmers have to pay compulsory health contributions 9% of their taxable income⁴⁹. 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 2.13 Minimum annual contributions for the compulsory health insurance paid by self-employed, effective on June 30, 2005-2012, LTL

	2005	2006	2007	2008	2009	2010	2011	2012
Annual contributions	264.2	304.4	353.2	428.1	9%*12*MMS	9%*12*MMS	9%*12*MMS	9%*12*MMS

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:

⁴⁹ 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_l?p_id=338330



- 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.

2.5 Minimum wage

- *Brief description*

Minimum wage is 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 consists 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 pre-tax 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 30th June 2007 and 2008 it was 320 LTL per month. The allowance is higher for certain population groups.

Table 2.14 Personal income tax allowances (LTL per month), as of 30th 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) under the age of 18 or older, if in full-time secondary education;	430	430	475	475
• allowance increases for the fourth and each subsequent child by	46	46	50	50
For single parents (adoptive parents) having children under age 18 and older if in full-time secondary education;	335	335	370	370
• allowance increases for every subsequent child by	53	53	60	60
For employees of agricultural activity subjects, when the subject's income from actual agricultural production per year is not less than 50% of total revenue; For employees of farmers who have registered their farm	330	330	365	365
Additional allowance: for parents (adoptive parents) having one or 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 *	29	29	32	32

*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 1st 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).⁵⁰

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:

$$\text{The monthly general allowance} = 470 - 0.2 * (\text{monthly employment-related income} - 800)$$

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.

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:

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

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.

⁵⁰ For not permanent residents tax allowance can be applied, but only on the annual basis after the annual income is declared.



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 2.15 Personal income tax allowances (LTL per month), as of June 30, 2009-2012

Allowances	2009-2012
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 18 or older if in full-time secondary education in addition to the basic allowance, additional allowance is applied per eligible child (can be shared among the parents)**	100 LTL for the first child (adoptee), 200 LTL for the second and each subsequent child (adoptee)
For employees of agricultural activity subjects, when the subject's income from actual agricultural production per year is not less than 50% of total revenue; For employees of farmers who have registered their farm	Not applicable

* 470 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 = $5,640 - 0.2 * (\text{resident's annual income} - 9,600)$. If the resident's annual income is higher than 37,800 LTL, the basic general allowance is not applicable.

**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.

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,
- 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 30th 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 2.16).

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.⁵¹ Income from individual activities, except of income from “free occupations”,⁵² and from securities, received since the beginning of 2010 is taxed by 5% rate.

⁵¹ 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: http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_l?p_id=334556

⁵² “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,



Table 2.16 Personal income tax rates (%), as of June 30, 2005-2011

	2005	2006	2007	2008	2009	2010-2012
Main personal income tax rate	33	33	27	24	15 (20% for income from distributed profit (dividends))	15 (20% for income from distributed profit (dividends))
Reduced personal income tax rate	15	15	15	15	Not applicable	5*

* 5% 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 1st of January or the 1st 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 2009 applicable only to interests paid on loans taken before 2009, not applicable to new loans.
4. Payments for vocational training⁵³ 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

stylists, editors, translators, computer programmers, systems designers, project managers, as well as other people, individually providing intellectual service).

⁵³ This part was added in 2008.



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 30th 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 on 30th June 2006-2008.

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 deducting 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 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

An overview of the established combinations of EUROMOD LT datasets and policy years is given in Table 3.1. Our focus is on the EUROMOD LT- data 2010. The descriptions of the EUROMOD LT-data 2006 & 2008 could be found in the preceding EUROMOD Lithuania country reports.

Table 3.1 EUROMOD LT 2007-2012: data and policy years

	2005	2006	2007	2008	2009	2010	2011	2012
LT-data 2006	X	X	X	X	X			
LT-data 2008			X	X	X	X	X	
LT-data 2010					X	X	X	X

EUROMOD LT- data 2010 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*) is used to include a few other variables and inform imputations. We describe both datasets, as well as EUROMOD LT-data 2010, in more detail.

The EU-SILC UDB survey has a 4-year rotational panel survey design. The data is collected using a 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 National SILC survey is the underlying micro-dataset on Lithuania for the EU-SILC. It contains additional information, which is otherwise excluded in the UDB version (e.g. on national benefits). This information is highly useful for enlarging the scope of EUROMOD Lithuanian policy simulations⁵⁴. As a result, EUROMOD LT-data 2010 is constructed using both the EU-SILC UDB and the National Lithuanian SILC information. Table 3.2 provides a short description of the latter database.

Table 3.2 EUROMOD LT database 2010 short description

⁵⁴ The list of variables which are merged into the EUROMOD LT-data 2010 from the National SILC is provided in Table 3.5.



	Description
EUROMOD database	LT_2010_a2
Original name	<i>EU-SILC – Community Statistics on Income and Living Conditions (Anonymised User Database UDB) + merged variables from “Pajamų ir gyvenimo sąlygų tyrimas”</i>
Provider	EUROSTAT (EU-SILC); Statistics Lithuania (<i>Pajamų ir gyvenimo sąlygų tyrimas</i>)
Year of collection	2010
Period of collection	May-June
Income reference period	2009
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	13235 individuals, 5314 households
Response rate	Household response rate is 83.5% (5314 out of selected 6364)

Source: Statistics Lithuania (2011)

3.2 Sample quality and weights

The target population of the SILC data is private households (Statistikos Departamentas, 2011). Persons living in the institutional households are excluded. Households are selected from the *Residents' Register* using a stratified sampling design with a simple random sample in strata. For this, the entire Lithuanian territory is 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 (2011), 2193 households from the 5 biggest cities participated in the survey, in other towns – 1392, in rural areas – 1729. The highest non-response was in the 5 biggest cities (22%), the smallest – in other towns and in rural areas (10%). One of the most significant reasons of household non-response was the refusal to cooperate (12% of the households in the largest cities; and 5% - in rural areas).

3.2.2 Weights

The EU-SILC UDB dataset uses a few types of cross-sectional survey weights, such as:

- the household cross-sectional weight (variable db090) – the weight calibrated with the target population of private households and corrected for household non-response.
- the personal cross-sectional weight 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 are corrected for individual non-response.

Table 3.3 Descriptive statistics of the grossing-up weight rb050 (=db090)

	EU-SILC UDB Lithuanian data
Number	13235
Mean	250.8471
Median	150.2293
Maximum	3674.167
Minimum	2.94279
Max/Min	1248.5318
Decile 1	42.76193
Decile 9	538.4725
Dec 9 / Dec1	12.592334

Lithuanian EU-SILC sample statistics has been projected to a reference population of **3,319,961** individuals in 1,354,383 households. The used weights are calibrated on the demographic data at the beginning of the survey year (i.e. 2010). 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. Thus 2010 EU-SILC data does not take into account the latest Population Census conducted in 2011.

3.2.3 Item non-response and under-reporting

No households are treated as non-responding. Consequently, no major income components have an item non-response. As the EU-SILC does not contain country specific types of transfers, few income components could be compared with the external national administrative records. Here, we report on the representational validity of the EUROMOD variable on gross employment earnings (see Table 3.4). The changes in the earnings' total values during the years 2010-2012 are due to the application of the up-rating factors on the 2009 incomes (see Section 3.5).

EUROMOD information on gross earnings is under-reported by less than 10 percentage points in comparison to the administrative statistics in the base year of 2009. In 2010 – 2011 EUROMOD gross-earnings remain under-reported – at the ratio of 0.89. Administrative statistical data is not yet available for 2012, but forecasts using indications for the first three quarters of the year – show that most likely a comparable ratio will apply for 2012 earnings.

Table 3.4 Gross earnings in EUROMOD and external statistics, mln LTL

	2009	2010	2011	2012
EUROMOD LT-2010 gross earnings (yem)	29,701.4	27,692.0	29,533.8	30,488.6
Lithuanian Statistics: gross earnings	32,151.5	31,207.4	33,132.3	34,249.3*
Ratio: EUROMOD/LT Statistics	0.92	0.89	0.89	0.89

Note: Gross earnings are gross wages and salaries, and include both remuneration in cash and in kind, but exclude employers' social contributions. (*) the figure is partially forecasted and equals to: 25,687.0 mln LTL on observed earnings in the first three quarters of 2012 + the quarterly average as a forecast for the last quarter of the year.

Sources: Statistics Lithuania accessed on 26.11.2012 (Database: M2010269: "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 is done to ensure that the relationships of individuals within households are coherent. As we focus on the income reference year (2009), 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 - 19 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, 2010). Some included demographic information (e.g. age variables) also reflects the status quo at the end of the income reference period (2009). Similar situation is observed for socio-economic and labour variables. For example, variable rb210 (i.e. basic activity status) refers to the data collection time, while variable pl073 indicates a number of months in full time work during the income reference period (the calendar year of 2009). For the construction of EUROMOD LT data, the demographic, labour and socio-economic information is based – when possible - on the EU-SILC variables referring to the income reference period.

The EU-SILC UDB 2010 information on incomes refers to the calendar year of 2009. 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, based on a 12-month receipt period. 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 some 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. bunmy – number of month per year receiving an unemployment benefit). In cases, where the National SILC does not carry the relevant information on the frequency of income receipts, other types of imputations/assumptions have been applied. For example, if the concerned income variable is reported as an aggregate income type (e.g. old-age pensions), a corresponding EUROMOD variable on the “months of benefit receipt” is constructed by summing the number of different pensions’ receipts – to the extent that this information is available in National SILC. The maximum number of months is set to 12. Also, if the information on a number of months of receiving one or another benefit is missing in National SILC, the relevant EUROMOD variable is constructed based on the indication on how many months a person has spent in a certain socio-economic activity type (i.e. the EU-SILC UDB variables pl*).

3.4.2 Gross incomes

The EU-SILC UDB 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 Merged and imputed variables



Table 3.5 provides information on the variables that have been merged from the National SILC into the EUROMOD LT-data 2010. No other major modifications have been done for these variables.

Table 3.5 EUROMOD LT database: variables merged from the National SILC

LT-data 2010 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
bsa00	Social benefit
bma	Maternity and maternity (paternity) benefits
kfbmy	Fringe benefits – a number of months received
amrar	Useful floor space (m ²) of the main residence
aldar	Area of own or rented land (hectares)
aldagar	Area of own or rented agricultural use land (hectares)

A number of EUROMOD LT-2010 variables are constructed using (merged) information both from the National SILC and EU-SILC UDB surveys, plus – when needed – a number of other imputations. The main reason for such a construction of the variables is related to incomplete or missing information in both surveys. The concerned variables are:

- Severance pay (yunsv variable);
- Early retirement benefit (byr variable);
- Unemployment insurance benefit (bunct variable);
- Employment earnings – a number of months received (yemmy variable);
- Unemployment benefits – a number of months received (bunmy variable);
- Disability pensions – a number of months received (bdimy variable);
- Work history – a length of time in months (liwwh variable).

Information from the National SILC is also used in some other EUROMOD LT-2010 variables construction cases. For example, *les* variable on the economic status is mainly derived from the EU-SILC UDB reported income variables. However, information from the National SILC is used to form one of the *les* variable categories – a farmer status. The latter information is not available in the EU-SILC UDB survey. The National SILC, on the other hand, reports on the “income received from the agricultural activity”. This information - in comparison to the relative importance of the other income sources - is used to make an assumption on being engaged in the farmer economic activities. EUROMOD LT-2010 *lfs* variable on the firm size also utilises information from the National SILC to make a better informed assumptions. Here, we utilise the National SILC information on whether a self-employed person is working alone or has also some employees.

Some EUROMOD LT-2010 are constructed based on the external macro statistics and selected EU-SILC information. For example, a variable *afc* on the financial capital assets is constructed in relation to the EU-SILC variable on investment income and in relation to the external information of the arithmetic average between the central bank base interest rate⁵⁵ and a harmonised indice of consumer prices (HICP)⁵⁶. A variable *amrmv* on the market value of the main residence is constructed in relation to the EU-SILC variable on the imputed rent value for owner-occupiers and the gross rental multiplier (GRM) value. The latter value is selected based on some empirical data review and expert opinions. A number of other housing characteristics, as reported in the EU-SILC, are also taken into account to differentiate the final market value.

⁵⁵ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00096>

⁵⁶ <http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/data/database>



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. 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 2009

Variable	2010	2011	2012	Source:
f_default	1.0130	1.0545	1.083	Statistics Lithuania / Average annual change in prices of consumer goods and services. Forecasted value for 2012 (by Ministry of Finance)
ypp, yds, xhcot, xhcrt, xhcmomi, tpr, ypr	f_default	f_default	f_default	
f_yem	0.9670	0.9951	1.0134	Statistics Lithuania / Average monthly earnings by sector, statistical indicator and year. Forecast of Ministry of Finance for 2012 as for the whole economy
yem:				
if lindi = 1	0.9814	1.0167	1.0544	Same as f_yem (disaggregation by sector)
if lindi = 2	0.9882	1.0236	1.0621	Same as f_yem (disaggregation by sector)
if lindi = 3	0.928	0.9893	1.0177	Same as f_yem (disaggregation by sector)
if lindi = 4	0.9647	0.9916	1.0308	Same as f_yem (disaggregation by sector)
if lindi = 5	0.9628	0.9861	0.9851	Same as f_yem (disaggregation by sector)
if lindi = 6	1.006	1.0472	1.0647	Same as f_yem (disaggregation by sector)
if lindi = 7	0.9442	0.9735	1.0303	Same as f_yem (disaggregation by sector)
if lindi = 8	0.9463	0.9734	1	Same as f_yem (disaggregation by sector)
if lindi = 9	0.9413	0.9647	0.9992	Same as f_yem (disaggregation by sector)
if lindi = 10	0.9461	0.956	0.9721	Same as f_yem (disaggregation by sector)
if lindi = 11	0.9552	1.0148	1.0596	Same as f_yem (disaggregation by sector)



if lindi = 12	0.9674	1.0092	1.0165	Same as f_yem (disaggregation by sector)
yem00, yivwg, yunsv, yot, xmp, kfb, bhl	f_yem	f_yem	f_yem	
yempv	0.9555	0.9240	0.9508	The same as for yem, but with 1 year lag
f_ngdp	1.0344	1.1535	1.2031	Statistics Lithuania/ Nominal GDP growth. For 2012 forecasted value by the Ministry of Finance used
yse, yiy, afc, kivho, yprrt, amrmv	f_ngdp	f_ngdp	f_ngdp	
bed	1.0000	1.0000	1.0000	No statutory indexation, no information on average amounts: kept constant Ministry of Social Security and Labour/Statistics/Recipients and amounts of monetary social assistance/ Benefits for families with children (Ismokos seimoms auginancioms vaikus)
bfa	1.1432	1.1791	1.0434	Ministry of Social Security and Labour/Statistics/Recipients and amounts of monetary social assistance/ Compensation for utilities (sildymo islaidu ir islaidu vandeniui kompensacijos)
bho	1.1535	1.0620	1.0907	Ministry of Social Security and Labour/ Social Reports/ Average social insurance unemployment benefit
bunct	0.8038	0.7860	0.804	Ministry of Social Security and Labour/Statistics/Recipients and amounts of monetary social assistance/ Social assistance benefits (Socialine pasalpa)
bsa00	1.0858	1.1997	1.202	Statistics Lithuania / Lump sum benefits from municipal budgets for supported persons by administrative territory, statistical indicator and year (M3161301). Annual CPI applied for 2011.
bsals	0.7456	0.7987	0.8203	Ministry of Social Security and Labour/Statistics/Recipients and amounts of monetary social assistance/ Guardianship benefit (Globos (rupybos) ismoka). Approximated factor as close to 1 in all years.
bchor	1.0000	1.0000	1	Statistics Lithuania/ Social Protection in Lithuania (2007-2009 catalogues). Kept constant thereafter with structural changes applied for 2010-2011.
bdi	1.0000	1.0000	1	Statistics Lithuania/ Social Protection in Lithuania (2007-2009 catalogues). ; Kept constant thereafter with structural changes applied for 2010-2011.
boa	1.0000	1.0000	1	State Social Insurance Fund Board of the Republic of Lithuania/ Statistics/ Survivor and orphan pensions (2007-2009); Kept constant thereafter with structural changes applied for 2010-2011.
bsu	1.0000	1.0000	1.0029	State Social Insurance Fund Board of the Republic of Lithuania/ Statistics/ Early retirement pensions (2007-2009); Kept constant thereafter with structural changes applied for 2010-2011.
byr	1.0000	1.0000	1.0574	State Social Insurance Fund Board of the Republic of Lithuania/ Statistics/ Early retirement pensions (2007-2009); Kept constant thereafter with structural changes applied for 2010-2011.

Note: For sources and more detailed information refer to the model or the DRD. Not all the updated components are used for EUROMOD calculations. Simulated values used instead of updated once where relevant.



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 2010. 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 2010 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 2010.

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 2010	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	ypp	-	ypp is derived from py080g
Investment income	yyi	hy090g	yyi 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
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 2009-2011 is well aligned with external statistics with a ratio between the two values being 1.01 in 2009, 1.06 in 2010 and 1.04 in 2008. At the same time the number of unemployed persons was over-estimated in EUROMOD data in 2009 and 2011 (1.18 ratio in 2009 and 1.06 in 2011). In 2010 EUROMOD data shows an under-estimation in the number of unemployed (0.91 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 4.1.8.

There are numerous gaps in external statistics on the number of market income recipients. Therefore, the majority of market income sources are validated only for the total annual amounts (see Table 5.3).

Table 5.2 shows that the number of people receiving employment income in 2009 is over-estimated – ratio equal to 1.22. This ratio has worsened afterwards (i.e. 1.27 in 2010 and 1.36 in 2011), mainly due to changes in the labour market. The number of self-employment income recipients is highly over-estimated throughout all the years (with ratios ranging from 1.64 in 2009 till 2.04 in 2011).

While the differences in the reciprocity numbers may be for different reasons, 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 2009-2010, while in 2011 EUROMOD data under-estimates this type of income by about 11%. The aggregate amounts of severance payments are strongly under-estimated in EUROMOD compared to external statistics in 2009-2010 (ratio 0.61). This may be caused by changes in labour market situation and a decrease in earnings since 2009. The proper statistics for other types of market income are not available.



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 slightly underestimated in EUROMOD by 3-4 percent in 2009-2011. The number of recipients of disability benefits before pension age is well aligned with external statistics with a ratio between the two values being 0.97 in 2010 and 0.99 in 2011. At the same time the number of recipients of disability benefits was more under-estimated in EUROMOD data in 2009 (0.94 ratio in 2009). As for the number of early retirement pension recipients, only few cases are recorded in the EUROMOD data while the external statistics records 18 thousands of them. This may be due to benefit aggregation issues in the UDB-SILC or low representation of this group in the survey. 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 under-estimated throughout the years (see



Table 5.5). The aggregate amount of disability benefits before the retirement age is underestimated in EUROMOD in all years with the best ratio of 0.78 in 2011 and the worst of 0.70 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). As already mentioned above, EUROMOD highly underestimates the number and the total amount of the early retirement pensions.

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: the aggregate amounts are strongly over-estimated for 2010-2011 (ratios 1.94 and 1.87). The ratios of the aggregate amounts of the municipal and NGO support show that the decrease in such support during the crisis in 2009-2011 could not be captured by EUROMOD (as the number of recipients is kept constant). According to administrative statistics expenditure on compensations for utilities has increased in 2010 and 2011 and lowered a little in 2011. The expenditure on compensations is under-estimated in EUROMOD data for all years. Best ratio was in 2009 (0.82), while the worst ratio was in 2011 (only 0.50). 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 fit of the aggregate amounts of the guardianship benefits as calculated by the EUROMOD and external statistics (ratios 0.72 and 0.71). 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. However no reliable information 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 better aligned in 2011 (i.e. ratio 0.87) and is under-estimated in EUROMOD previously. This benefit 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 (non-contributory maternity benefit) is underestimated for 2009 and 2010 (ratios 0.57 and 0.55) and over-estimated in 2011 in EUROMOD (ratio 1.31). The number of social assistance recipients is strongly over-estimated in EUROMOD comparing with administrative data in 2009 (ratio 1.74), and under-estimated afterwards resulting in the ratios of 0.73 in 2010 and 0.58 in 2011. This was to a large extent due to financial crisis and labour market changes (see Section 4.1.8 for validation including employment adjustments).

Among the contributory benefits the ratio for maternity benefits increased from 0.57 in 2009 till 1.31 in 2011. The worst ratio is for maternity/paternity benefits (2.5 in 2009 and 3.68 in 2011) followed by paternity benefits (ratio equal to 1.85 in 2009 and 1.99 in 2011). 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 high over-estimation of maternity/paternity benefits' recipients may be connected with the changes in legislation. 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 4.1.8 for validation of unemployment benefits including employment adjustments).

The number of payers of the personal income tax is slightly over-estimated comparing with administrative statistics in 2009-2011 both with employment adjustments and in the baseline scenario. 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 improvement for the ratios of tax and contribution payers emerges when adjusting for labour market changes (see Section 4.1.8).

When validating simulated benefits on aggregated amounts it can be noticed that the closest match with the external data is for birth grant. Child benefits are well in line with external statistics in 2009-2010 but are over-estimated by 34% in 2011 (see



Table 5.7). Pregnancy grants are highly under-estimated 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 over-estimated by 3 times in 2009, however the ratios decrease afterwards. The ratio for social assistance is equal to 0.95 in 2011.

The ratios of simulated contributory benefits' amounts are rather in line with external statistics for maternity/paternity benefits (ratios ranging from 0.91 in 2010 to 1.06 in 2011). Maternity benefits are strongly under-estimated in 2009 (ratio is equal to 0.67), however ratios increase for the following years. Meanwhile paternity benefits are strongly over-estimated. The ratio increases from 1.55 in 2009 to 1.92 in 2011. This discrepancy may be due to 100% take-up rates assumption.

Taxes and employee/employer social insurance contributions are over-estimated throughout the analysed period by different extent. Employee/employer and personal income tax show the closest match, with a discrepancy of 11 to 20 percent in different years. Self employed contributions are over-estimated to a highest degree, especially in 2010-2011.

4.1.4 Income distribution

All income distribution results presented here are computed for individuals according to their household disposable income (HDI) equalised 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.

4.1.5 Income inequality

Note: Please see Annex I for tables.



Table 5.8 shows that the income decile shares in 2009-2010 in EUROMOD are well in line with the EUROSTAT statistics. Share ratio for the first decile is over-estimated by 30 percent in EUROMOD in 2009, while other deciles align well with external statistics. In 2010 EUROMOD data slightly under-estimates decile shares with the exception of the first (ratio 1.03) and the tenth decile (ratio 1.11). The major reason of the discrepancy in 2009-2010 lies in dramatic labour market changes during the financial crisis. The quintile ratio is under-estimated in EUROMOD for 2009 (ratio 0.84) and over-estimated in 2010 (ratio 1.09). Same holds for ratios of Gini Coefficients. In 2009-2010 we find a close match with the EUROSTAT data for mean disposable income (ratios are from 0.98 to 1.01). For median income it is well aligned in 2009, but under-estimated in 2010 (at around 6-7 percent). 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 4.1.8 for validation of employment adjustments in EUROMOD).

4.1.6 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 better in line with those reported by EUROSTAT for 2010. In 2009 ratios are more misaligned, especially when using lower at risk of poverty lines (40% and 50% of median household disposable income). Decomposition of at-risk of poverty level by age (using 60% of median household disposable income poverty line) shows stronger under-estimation within the age group of 18 to 24 years old (ratio 0.86 in 2010, while 1.05 in 2009) and for elderly people (ratio 0.71 in 2010 and 0.93 in 2009). Over-estimation is seen for the age group of 50-64 in 2010. All the discrepancies noticed are likely due to the labour market changes.

4.1.7 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 0.1% to 0.2% across the years (see Table 5.10). Minimum wage policy has a stronger effect on social assistance benefits of a magnitude of around -1.1% due to means testing. There is also a marginal negative impact on inequality of -0.1%, while the impact on at-risk of poverty rate (using the line of 60% median HDI) is slightly positive, ranging from 0.1 to 0.5% across the years.

4.1.8 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 slightly overestimated by 0.6% in 2010 and 0.4% in 2011. With employment adjustments the overestimation is further reduced to 0.1% in 2010 and 0.2% in 2011. Meanwhile employment adjustments do not help to reduce under-estimation of employment income. Gross employee earnings remains the same in 2011 while in 2010 adjustments result in increased under-estimation by extra 3 percent comparing to the baseline scenario.

What concerns unemployment benefits, their receipt ratio compared to administrative statistics was unsatisfactorily low in the baseline scenario (ranging from 0.3 in 2009 to 0.43 in 2010), while the ratio of aggregate amount with the employment adjustment increases from the same 0.3 in 2009 to 0.59 afterwards. Effects are similar for the total expenditure on unemployment benefits where the ratio much improves in 2010 (from 0.34 to 0.88) and in 2011 (from 0.56 to 0.93). In general average amount of unemployment benefits is under-estimated in EUROMOD for all years both with and without employment adjustments when compared to external statistics.

In terms of social assistance, the receipt ratio is highly over-estimated in 2009 (ratio equal to 1.74), but under-estimated afterwards. Employment adjustments slightly improve the receipt ratio in 2010 (ratio increases from 0.73 to 0.79), but the under-estimation remains the same as without adjustments for other years. Adjustments have a minor negative effect on total expenditure on social assistance benefits in 2010 (ratio worsens from 1.17 till 1.23) and no effect whatsoever for other years.

As it was mentioned before, employment adjustments improve poverty measures in 2010, but worsen a little a ratio for income inequality measured by Gini coefficient. Still the dynamics of the analysed inequality and poverty measures should be reviewed with additional care.

4.1.9 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 income-specific updating factors, whereas demographic and socio-economic status variables remain constant.
- In the baseline scenario the gross-earnings in EUROMOD are quite closely in line with external statistics in 2009-2010 (ratio 0.92) and under-estimated by around 11 percent in 2011. In case of personal income tax, is it over-estimated by around 15 percent, although over-estimation is higher in the final year (ratio equal to 1.20). 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 may be partially 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 by around 30 percent, while amounts of Self-employed contributions are highly over-reported (around 5 times for 2010-2011).
- 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 amounts in EUROMOD do not capture structural changes made to this type of benefits in 2010, thus resulting in over-estimation for 2010-2011.
- Birth grants are well in line with the external statistics while the recipients of child allowance are under-estimated and amounts are over-estimated.
- Social benefit, a means tested benefit, is largely over-simulated in 2009 and underestimated in the baseline scenario in 2011. It should be noted that the available UDB micro-data has a poor capacity to simulate assets' means testing.
- During the period 2009-2011, the employment situation has changed a lot: there was an increase in the unemployment in 2009 and further on in 2010 (due to the financial crisis). The unemployment rate has slightly lessened in 2011. 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 employment income. The impact on other benefits, social insurance contributions and personal income taxes is meagre.
- EUROMOD simulated disposable incomes in the baseline refer to less equitable income distribution than observed in the SILC reported disposable incomes in 2009 and more equitable income distribution in 2010.



5. ANNEX I

Table 5.1 Number of employed & unemployed, thousands

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Employed (n)	1,418.9	1,418.9	1,418.9	1,418.9	1,415.9	1,343.7	1,370.9	n/a	1.00	1.06	1.04
Unemployed (n)	264.8	264.8	264.8	264.8	225.1	291.1	248.8	n/a	1.18	0.91	1.06

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): <http://db1.stat.gov.lt/statbank/default.asp?w=1280>

Table 5.2 Market Income-Number of recipients, thousands (using 2010 data)

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Original income											
Employment	1,521.1	1,521.1	1,521.1	1,521.1	1,244.8	1,196.4	1,122.0	n/a	1.22	1.27	1.36
Self-employment	239	239	239	239	146	124	117	n/a	1.64	1.93	2.04
Investment	115	115	115	115	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Property	64	64	64	64	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Private pension	9	9	9	9	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Private transfers	50	50	50	50	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other	3	3	3	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Severance payments	17	17	17	17	n/a	n/a	n/a	n/a	n/a	n/a	n/a
In-kind income											
Fringe benefits	87	87	87	87	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Imputed housing	1,736.6	1,736.6	1,736.6	1,736.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Sources: Statistics Lithuania (LFS): <http://db1.stat.gov.lt/statbank/SelectVarVal/Define.asp?Maintable=M3031002&PLanguage=0>



Table 5.3 Market Income-Aggregate amounts, annual amounts in millions (if not stated otherwise)

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Original income											
Employment	29,701	28,611	29,585	30,547	32,152	31,207	33,132	n/a	0.92	0.92	0.89
Employment (average, LTL)	1,974.8	1,901.6	1,966.7	2,030.1	2,056.0	1,988.1	2,045.9	n/a	0.96	0.96	0.96
Self-employment	2,892	2,991	3,336	3,479	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Investment	554	573	639	667	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Property	135	140	156	163	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Private pension	11	11	12	12	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Private transfers	204	207	215	221	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other	1	1	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Severance payments	97	93	96	98	160	153	n/a	n/a	0.61	0.61	n/a
Paid private transfers											
In-kind income											
Fringe benefits	201	194	200	204	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Imputed housing	6,094	6,304	7,030	7,332	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Sources: Statistics Lithuania, (national accounts: employment income; LFS: average employment income (M3060801); severance payments)



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

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Pensions											
Old-age pension	661	661	661	661	681	685	691	n/a	0.97	0.96	0.96
Disability pension	170	170	170	170	182	176	172	n/a	0.94	0.97	0.99
Survivor's pension	53	53	53	53	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Early retirement	0	0	0	0	18	18	18	n/a	0.02	0.02	0.02
Not simulated benefits											
Guardianship benefit	6	6	6	6	12	13	12	13	0.51	0.51	0.51
Education allowances	40	40	40	40	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Compensation for utilities	93	93	93	93	130	167	221	199	0.71	0.56	0.42
Sickness benefit	387	387	387	387	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Municipal and NGO support	3	3	3	3	20	28	26	n/a	0.14	0.10	0.12
Not simulated taxes											
Property tax	257.4	257.4	257.4	257.4	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*)

<http://db1.stat.gov.lt/statbank/SelectVarVal/Define.asp?Maintable=M3161301&PLanguage=0>, SODRA (“Skaiciai 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

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Pensions											
Old-age pension	7,040	6,276	6,265	7,040	7,497	6,911	6,973	n/a	0.94	0.97	0.96
Disability pension	1,130	1,088	1,088	1,130	1,618	1,493	1,390	n/a	0.70	0.73	0.78
Survivor's pension	135	126	126	135	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Early retirement	4	4	4	4	47	65	86	n/a	0.08	0.06	0.04
Not simulated benefits											
Guardianship benefit	49	49	49	49	68	69	69	33	0.72	0.71	0.71
Education allowances	54	54	54	54	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Compensation for utilities	65	75	69	71	79	117	139	113	0.82	0.64	0.50
Sickness benefit	662	640	659	671	630	330	351	n/a	1.05	1.94	1.87
Municipal and NGO support	2	1	1	1	5	5	n/a	n/a	0.36	0.25	n/a
Not simulated taxes											
Property tax	52.3	53.0	55.2	56.6	55.1	56.1	n/a	n/a	0.95	0.94	n/a

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” [http://www.socmin.lt/index.php? -802624691](http://www.socmin.lt/index.php?-802624691)), Tax Inspectorate.



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

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Simulated benefits											
Child allowance	375	102	102	97	495	152	117	101	0.76	0.67	0.87
Birth allowance	31	31	31	31	34	34	33	n/a	0.90	0.91	0.94
Maternity/paternity	75	75	75	71	30	24	20	n/a	2.50	3.10	3.68
Maternity	26	26	26	26	46	48	20	n/a	0.57	0.55	1.31
Maternity (non-contributory)	5	5	5	5	7	8	9	n/a	0.71	0.57	0.54
Paternity	24	24	24	24	13	12	12	n/a	1.85	1.94	1.99
Social assistance	128	133	129	122	74	181	222	231	1.74	0.73	0.58
Unemployment benefit	59	59	59	59	199	188	136	n/a	0.30	0.31	0.43
Taxes and SIC											
Income tax	1,433	1,420	1,428	1,442	1,261	1,228	1,266	n/a	1.14	1.16	1.13
Employee contribution	1,521	1,521	1,521	1,521	1,195	1,130	1,176	n/a	1.27	1.35	1.29
Self-employed contributions	239	332	332	331	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Employer contributions	1,521	1,521	1,521	1,521	1,195	1,130	1,176	n/a	1.27	1.35	1.29
Credited contributions	1,570	1,570	1,570	1,571	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Property tax	257.4	257.4	257.4	257.4	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, Ministry of Finance:

http://www.finmin.lt/finmin.lt/failai/nacionalinio_biudzeto_surinkimas/ketv/Ataskaita_2011_metine_.pdf



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

	EUROMOD (I)				External Source (II)				Ratio (I/II)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011
Simulated benefits											
Child allowance	480	126	124	121	469	127	93	n/a	1.02	0.99	1.34
Birth allowance	44	44	44	44	47	49	47	n/a	0.94	0.91	0.94
Maternity/ paternity	1,102	1,057	967	655	1,198	1,166	910	n/a	0.92	0.91	1.06
Maternity	173	164	166	172	259	198	160	n/a	0.67	0.83	1.04
Maternity (non-contributory)	1	1	1	1	2	2	2	n/a	0.72	0.57	0.55
Paternity benefit	53	50	51	53	34	28	27	n/a	1.55	1.79	1.92
Social assistance	591	595	583	502	191	511	612	n/a	3.10	1.17	0.95
Unemployment benefit	149	134	133	134	539	395	241	n/a	0.28	0.34	0.56
Taxes and SIC											
Income tax	4,328	4,154	4,356	4,485	3,789	3,471	3,773	n/a	1.14	1.20	1.15
Employee contribution	2,673	2,575	2,663	2,749	2,367	2,213	2,349	n/a	1.13	1.16	1.13
Self-employed contributions	457	796	917	972	364	161	172	n/a	1.26	4.93	5.34
Employer contributions	9,237	8,898	9,201	9,531	8,345	7,609	8,118	n/a	1.11	1.17	1.13
Credited contributions	1,000	1,219	1,201	1,191	1,166	1,600	n/a	n/a	0.86	0.76	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.

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, Ministry of Finance: http://www.finmin.lt/finmin.lt/failai/nacionalinio_biudzeto_surinkimas/ketv/2011_12_men_LT.pdf; http://www.finmin.lt/web/finmin//auktualus_duomenys/biudzeto_pajamos/nacionalinis_biudzetas



Table 5.8 Income distribution

	EUROMOD (I)				External Source (II)*				Ratio (I/II)	
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010
Decile shares, %										
1	2.5	2.4	2.3	2.3	1.9	2.3	n/a	n/a	1.30	1.03
2	4.4	4.4	4.4	4.2	4.1	4.5	n/a	n/a	1.08	0.98
3	5.4	5.4	5.3	5.2	5.4	5.7	n/a	n/a	1.00	0.95
4	6.4	6.4	6.3	6.3	6.4	6.8	n/a	n/a	1.00	0.95
5	7.5	7.4	7.5	7.4	7.6	8.0	n/a	n/a	0.99	0.93
6	8.7	8.7	8.6	8.6	8.6	9.3	n/a	n/a	1.01	0.93
7	10.3	10.1	10.1	10.1	10.1	10.8	n/a	n/a	1.02	0.94
8	12.3	12.4	12.4	12.4	12.4	12.7	n/a	n/a	1.00	0.98
9	15.8	15.9	15.7	15.8	16.1	15.7	n/a	n/a	0.98	1.01
10	26.6	26.8	27.4	27.7	27.4	24.2	n/a	n/a	0.97	1.11
Mean income (equalised)										
total population	4,932	4,633	4,753	4,906	5,017	4,609	n/a	n/a	0.98	1.01
males	5,055	4,754	4,882	5,030	5,160	4,757	n/a	n/a	0.98	1.00
females	4,826	4,530	4,641	4,799	4,894	4,482	n/a	n/a	0.99	1.01
Median income (equalised)										
total population	4,001	3,755	3,814	3,940	4,059	4,005	n/a	n/a	0.99	0.94
males	4,147	3,889	3,956	4,079	4,178	4,179	n/a	n/a	0.99	0.93
females	3,879	3,626	3,682	3,808	3,906	3,854	n/a	n/a	0.99	0.94
Income quintile ratio (S80/S20)	6.15	6.30	6.43	6.66	7.30	5.80	n/a	n/a	0.84	1.09
Gini Coefficient	35.3	35.7	36.1	36.6	36.9	32.9	n/a	n/a	0.96	1.08

Notes: Based on household disposable income (HDI) equalised 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.

* EUROSTAT data lagged by one year to refer to the income data reference year. EUROMOD data refers to income data reference period.

Sources: EUROSTAT



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

	EUROMOD (I)				External Source (II)*				Ratio (I/II)	
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010
40% median HDI										
Total	7.4	7.8	7.9	8.1	9.8	8.6	n/a	n/a	0.76	0.90
Males	8.5	8.6	8.9	9.0	11.2	8.7	n/a	n/a	0.76	0.99
Females	6.6	7.0	7.2	7.3	8.6	8.6	n/a	n/a	0.76	0.82
50% median HDI										
Total	12.1	11.8	12.1	13.3	14.5	14.1	n/a	n/a	0.83	0.84
Males	13.0	12.7	13.0	14.2	15.5	14.1	n/a	n/a	0.84	0.90
Females	11.3	11.1	11.4	12.7	13.7	14.1	n/a	n/a	0.82	0.78
60% median HDI										
Total	19.6	19.3	19.0	21.4	20.2	20.0	n/a	n/a	0.97	0.97
Males	19.7	19.5	19.1	21.9	20.7	19.8	n/a	n/a	0.95	0.98
Females	19.5	19.2	19.0	20.9	19.8	20.1	n/a	n/a	0.98	0.96
70% median HDI										
Total	27.8	27.6	27.3	28.6	27.2	28.3	n/a	n/a	1.02	0.98
Males	26.9	27.1	26.5	28.2	26.3	26.7	n/a	n/a	1.02	1.02
Females	28.5	28.0	28.0	28.9	27.9	29.8	n/a	n/a	1.02	0.94
60% median HDI										
0-17 years	21.5	22.2	21.4	28.2	23.3	24.3	n/a	n/a	0.92	0.91
18-24 years	23.9	22.4	21.6	23.2	22.7	26.2	n/a	n/a	1.05	0.86
25-49 years	19.9	19.9	19.4	22.0	20.9	19.8	n/a	n/a	0.95	1.00
50-64 years	23.0	22.7	22.8	22.4	22.8	19.4	n/a	n/a	1.01	1.17
65+ years	9.5	8.6	9.4	9.3	10.2	12.1	n/a	n/a	0.93	0.71

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.

* EUROSTAT data lagged by one year to refer to the income data reference year. EUROMOD data refers to income data reference period.

Sources: EUROSTAT

Sources: EUROSTAT



Table 5.10 Impact of minimum wage

	EUROMOD (with minimum wage)				EUROMOD (baseline)				Ratio (I/II)			
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012
Disposable income (total)	37,956.4	35,696.8	36,568.5	37,871.3	37,609.4	35,330.6	36,225.3	37,549.8	1.01	1.01	1.01	1.01
Gross employee earnings (total)	30,185.2	29,130.8	30,072.7	31,011.3	29,701.4	28,610.8	29,585.5	30,546.9	1.02	1.02	1.02	1.02
Income tax (total)	4,383.8	4,215.3	4,412.9	4,537.2	4,327.7	4,154.4	4,356.2	4,485.3	1.01	1.01	1.01	1.01
Employee SICs (total)	2,716.7	2,621.8	2,706.5	2,791.0	2,673.1	2,575.0	2,662.7	2,749.2	1.02	1.02	1.02	1.02
Social assistance (total)	526.7	526.4	521.2	449.0	591.0	594.9	583.4	502.4	0.89	0.88	0.89	0.89
Gini (Eq HDI)	35.1	35.4	35.8	36.3	35.3	35.7	36.1	36.6	0.99	0.99	0.99	0.99
At poverty risk (60% median HDI)	19.7	19.5	20.0	21.8	19.6	19.3	19.0	21.4	1.00	1.01	1.05	1.02

Sources: EUROMOD data

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

	Employment adjustments (I)				Baseline (II)				Ratio (I/External)			Ratio (II/External)		
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2009	2010	2011
Number of employees, thous.	1,418.9	1,363.2	1,403.7	1,403.7	1,418.9	1,418.9	1,418.9	1,418.9	1.00	1.01	1.02	1.00	1.06	1.04
Unemployment benefits recipients, thous.	59.2	110.4	80.1	80.1	59.2	59.2	59.2	59.2	0.30	0.59	0.59	0.30	0.31	0.43
Social assistance recipients, thous.	127.9	143.5	129.6	122.8	127.9	132.6	128.7	121.9	1.74	0.79	0.58	1.74	0.73	0.58
Disposable income (total)	37,609.4	34,741.1	36,219.7	37,532.5	37,609.4	35,330.6	36,225.3	37,549.8	n/a	n/a	n/a	n/a	n/a	n/a
Gross employee earnings (total)	29,701.4	27,692.0	29,533.7	30,488.6	29,701.4	28,610.8	29,585.5	30,546.9	0.92	0.89	0.89	0.92	0.92	0.89
Income tax (total)	4,327.7	4,032.2	4,357.3	4,485.3	4,327.7	4,154.4	4,356.2	4,485.3	1.14	1.16	1.15	1.14	1.20	1.15
Employee SICs (total)	2,673.1	2,492.3	2,658.0	2,744.0	2,673.1	2,575.0	2,662.7	2,749.2	1.13	1.13	1.13	1.13	1.16	1.13
Unemployment benefits (total)	148.6	347.1	225.3	225.6	148.6	134.0	133.3	133.9	0.28	0.88	0.93	0.28	0.34	0.56
Social assistance (total)	591.0	626.1	580.5	500.3	591.0	594.9	583.4	502.4	3.10	1.23	0.95	3.10	1.17	0.95
Gini (Eq HDI)*	35.3	36.1	36.0	36.5	35.3	35.7	36.1	36.6	0.96	1.10	n/a	0.96	1.08	n/a
At poverty risk (60% median)*	19.6	17.9	19.5	21.3	19.6	19.3	19.0	21.4	0.97	0.90	n/a	0.97	0.97	n/a

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, among others, the procedure for 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, not depending on its amount.

Cuts on state pensions are not discussed here in detail as those were not explicitly simulated in Euromod, although most of them were implicitly recalculated.⁵⁷ 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: <http://www.sodra.lt/index.php?cid=1945>.

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:

⁵⁷ Recalculated state pensions as indicated in the Temporary Law include the following major groups: *State pensions of degree one or two of the Republic of Lithuania, State pensions for victims, State pensions for judges, State Pensions for officers and soldiers, State pensions for scientists, State loss of breadwinner's pensions.* According to the Temporary Law state pensions were recalculated in most cases in accordance to rules and marginal amounts also applicable for state social insurance pensions. Therefore and due to the fact that state pensions are aggregated together with social insurance pensions in the EUROMOD input database, they were recalculated implicitly, structural cuts being equally applied on all types of pensions within the same aggregated category of benefits/pensions if not indicated otherwise.



- 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.

Since 2012 recalculation of state insurance pensions was cancelled, although recalculation rules still applied on state pensions. State pensions are not identified in Euromod and therefore not recalculated.

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: <http://www.vlk.lt/>
4. OECD (2008). *International Migration Outlook 2008*. Paris, OECD.
5. State Social Insurance Fund of the Republic of Lithuania (2011). *Statistical Data*: <http://www.sodra.lt/index.php?cid=280>
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: <http://www.stat.gov.lt>
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