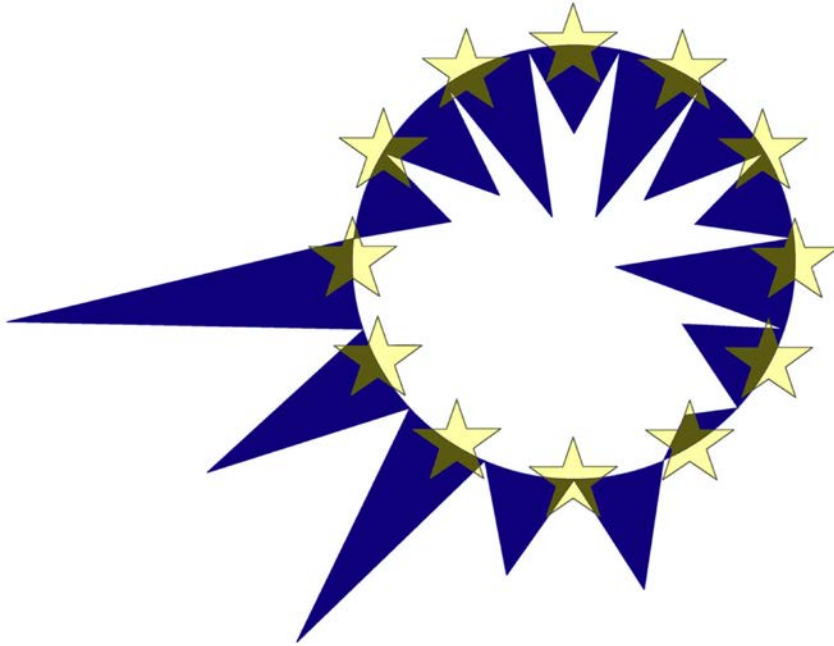


# **EUROMOD**

## **COUNTRY REPORT**



# **HUNGARY (2007-2010)**

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**with contributions from Tina Haux and Paola De Agostini**

**21/07/2012**



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

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

This report documents the work done in one annual update for Hungary. 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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The results presented in this report are derived using EUROMOD version F6.0 EUROMOD is continually being improved and the results presented here may not match those that would be obtained with later versions of EUROMOD.

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

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

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

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

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

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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

### 1.1 Basic figures

Table 1. Basic figures

	Pop.	pop. < 14 (%)	pop. ≥ 65 (%)	Life expect. (years)	Fertility Rate	Unemp rate <sup>[1]</sup>	GDP per head (PPS) <sup>[2]</sup>	Currency Name	exch. rate <sup>[3]</sup>
[2006]	10,076,581	15.4	15.8	73.19	1.35	7.5	14,900	HUF	281.93
[2007]	10,066,158	15.2	15.9	73.27	1.32	7.4	15,400	HUF	245.9
[2008]	10,045,401	15.0	16.2	73.78	1.35	7.8	16,000	HUF	237.03
[2009]	10,030,975	18.0	17.0	73.97	1.33	10.3	15,200	HUF	272.43
[2010]	10,014,324	14.7	16.6	74.31	1.26	11.2	15,800	HUF	286.46

<sup>[1]</sup> Unemployment rate of population aged 15–74

<sup>[2]</sup> Gross domestic product at market prices; at current prices; Purchasing Power Standard per inhabitant.

Source: Eurostat

<sup>[3]</sup> Euro exchange rate on 30<sup>th</sup> of June. Source: Hungarian Central Bank. These exchange rates are not equal to the SILC UDB rates.

Source: Hungarian Central Statistical Office (2006; 2007; 2008; 2009; 2010)

### 1.2 The tax-benefit system

Table 2. Tax-benefit system and government budget

	Total general government revenue <sup>[1]</sup> % of GDP	Total tax receipts <sup>[1]</sup> % of GDP*	Total general government expenditure <sup>[1]</sup> % of GDP	Social protection <sup>[1]</sup> % of GDP**
[2006]	42.6	9.4	52.0	15.2
[2007]	44.8	10.3	49.8	14.2
[2008]	45.5	10.6	49.2	14.0
[2009]	46.1	9.9	50.5	14.7
[2010]	45.2	8.0	49.5	14.8

Source: <sup>[1]</sup>Eurostat; 2012 - <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

Note: \* Total tax receipts % of GDP: Current taxes on income, wealth, etc. - Most current taxes on income, wealth, etc consist of taxes on the incomes of households or profits of corporations and taxes on wealth that are payable regularly every tax period (as distinct from capital taxes levied infrequently).

\*\*Social benefits (other than social transfers in kind) paid by government (ESA95 code D.62) are transfers to households, in cash or in kind, intended to relieve them from the financial burden of a number of risks or needs (by convention: sickness, invalidity, disability, occupational accident or disease, old age, survivors, maternity, family, promotion of employment, unemployment, housing, education and general neediness), made through collectively schemes, or outside such schemes by government units. Source: Eurostat - short description of the indicator



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

	Sickness/ health care	Disability	Old age	Survivors	Family/ children	Unemployment	Housing	Social exclusion
[2005]	29.9	9.9	41.2	1.3	11.8	2.9	2.4	0.7
[2006]	29.0	9.6	41.0	1.2	13.0	3.1	2.4	0.6
[2007]	25.5	9.6	37.8	6.1	12.8	3.4	4.1	0.7
[2008]	25.0	9.4	39.4	6.0	12.7	3.7	3.2	0.6
[2009]	24.7	9.1	39.6	5.9	13.2	4.2	2.7	0.6

Source: Yearbook of Welfare Statistics HCSO, 2006; 2007; 2008; 2009; 2010

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

	Personal income tax	Corporate income tax*	Social security contributions		Taxes on goods and services***	Other taxes
			Employees**	Employers		
[2005]	17.8	5.7	7.6	26.2	41.9	0.8
[2006]	18.6	5.5	6.7	26.2	42.3	0.7
[2007]	18.7	5.2	8.6	25.1	41.7	0.7
[2008]	19.0	6.5	9.9	24.2	39.6	0.8
[2009]	19.2	4.0	8.3	24.0	43.8	0.7
[2010]	17.0	3.2	9.5	22.8	45.1	0.7

\* Corporate income and dividend tax

\*\* Includes self-employed

\*\*\*Taxes on production and import

Source: National Accounts Hungary 1995-2007; 2007-2009; 2008-2010 HCSO 2007; 2009; 2011

### 1.2.1 Basic information about the tax-benefit system, 2006-2010

- The Hungarian tax-benefit system is a unified national system where there are no policy differences across regions.
- In Hungary, the “tax year” runs from January 1 to December 31. The tax system generally changes in January each year. Main benefits changes happen at the same time. However, in 2006 some fiscal changes took place in the middle of the year.
- In 2005 the retirement age is 62 years for men and 60 for women. Year by year an increase on the age limit is applied so that pension age raises to 65 years old in 2010 for both men and women.
- The minimum school leaving age is 16; dependent children are defined as age under 16 or under 25 if the child is in full-time education and not married. The regulations excluded the people with their own children or cohabiting partner being a dependent child. In the case of the regular child protection benefit dependent children are defined in the taxunit as aged 17 or younger or 23 or younger if they are in full-time secondary education, not married and not cohabiting or 25 or younger if they are in full-time tertiary education, not married and not cohabiting.
- For benefit purposes a lone parent is not legally married to anyone and is a parent of a dependent child (regardless of cohabitation, if he/she declares him/herself alone). If the



parent declare him/herself as not married, he/she has the right not to share child related tax credit with the other parents.

- The income tax system is an individual (personal) system.
- Income tax withholdings are collected on a cumulative basis, i.e., the system tries to ensure withholding the exact amount due in the financial year. Only individuals paying tax on trading income (e.g. self-employed people) or who pay tax at the higher rate must file a tax return for income tax.
- The means-tested benefit system assesses entitlement according to benefit unit income. The benefit unit is the household - the couple (cohabiting or married) and other adult person(s) or single adult plus any dependent children.
- The minimum wage in the four years is:

2006	2007	2008	2009	2010
62500 HUF	65500 HUF	69000 HUF	71500 HUF	73500 HUF

### 1.3 Social Benefits

#### Old age benefits

The pension system was reformed in 1997, to establish three main pillars:

- First Pillar: mandatory, state pension, which is publicly-managed and financed on a PAYG basis. Financed by employer and employee contributions.
- Second Pillar: mandatory, privately-run pension funds and fully funded. This compulsory pension scheme is administered by several independent pension funds, which are authorised and supervised by the state. Financed by employer and employee contributions.
- Third pillar: voluntary, privately-run pension funds.

Table 5. Retirement age in the past and after 01/01/2010

Year of birth	Retirement age		Retirement year	
	Men	Women	Men	Women
1945	62	60	2007	2005
1946	62	61	2008	2007
1947		62		2009
1948		62		2010
1949		62		2011
1950		62		2012
1951		62		2013
1952		62,5		2014-2015
1953		63		2016
1954		63,5		2017-2018
1955		64		2019
1956		64,5		2020-2021
1957		65		2022
1958		65		2023
1959		65		2024
1960		65		2025

Source: Central Administration of National Pension Insurance; 2011



**Old age benefit (*öregségi nyugdíj*):** The amount of pension depends on the average monthly income and the insurance period. 20 years of contribution payment is required for a full old age pension, and 15-19 years for a partial pension. Retirement age is 62 for men and 60 for women in 2005, whose retirement age will increase to 61 in 2007 and 62 in 2008. In 2009 a measure was taken for further increase of age limits of both sexes up to 65 years in a mid-term period (see Table 5 above). The monthly minimum pension amounts to 25,800 HUF in 2006; 27,130 HUF in 2007 and 28,500 HUF from 2008 to 2010. No minimum for the partial pension exists. The amount of the minimum pension is also the eligibility threshold for several social benefits (e.g. regular social support).

**Early Pensions (*előrehozott, korkedvezményes nyugdíjak*):** Early Retirement Pension (*korkedvezményes öregségi nyugdíj*) is available to those involved in jobs resulting in increased physical load or jobs implying hazardous (such as soldiers, policemen, firefighters, etc.) to health. Entitlement to pension starts 2 years earlier for those who have worked in such activities for at least 10 years (men) or 8 years (women), and retirement age is further reduced by 1 year for every additional working period of 5 years (men) or 4 years (women) in such conditions.

**Advanced Pension (*előrehozott öregségi nyugdíj*)** is paid no earlier than five years before the retirement age. Those who need no more than 5 years of service period are entitled to the Advanced pension at reduced rate (*csökkentett összegű előrehozott öregségi nyugdíj*).

### Survivors benefits

Survivors benefits is paid to the surviving partner even if the couple was not married (either widowed, divorced or cohabitant), the surviving dependent children and other surviving persons (i.e. parents, grandparents, and foster parents). This is a not means tested benefit. It corresponds to 60% of the deceased person pension and it is paid even though the surviving spouse has a pension by his own. Therefore, the surviving spouse can be entitled for a permanent or a temporary widow(er)s pension if his/her deceased spouse was a receiver of old age or invalidity pension or got the necessary service period.

**Temporary Widow(er)'s Pension (*ideiglenes özvegyi nyugdíj*)** is paid to the surviving spouse for 12 months, or until the common child reaches 18 years of age. After the termination of the temporary widow(er)'s pension the widow(er) is entitled to a Permanent Widow(er)'s Pension.

**Permanent Widow(er)'s Pension (*özvegyi nyugdíj*):** The surviving spouse/partner is entitled to a permanent widow pension if he/she is above retirement age, or invalid or has at least two minor children. The amount of the pension is 50% of the old age pension or 50% of the invalidity pension to which the deceased person would have been entitled to This is reduced to 30% if the widow(er) receives old age or invalidity pension on his/her own right.

**Parental Pension (*szülői nyugdíj*)** is paid to those (grand)parents, who are disabled or 65 years old or more, who were dependant upon their (grand)child throughout the preceding year, and whose deceased (grand)child was entitled to old age or invalidity pension at the time of death. The amount of the parental pension is equal to the amount of the permanent widow(er)'s Pension.

**Orphan's Allowance (*árvaellátás*):** Orphans having lost one parent are entitled to 30% of the deceased parent's pension as Orphan's Allowance. Those orphans having lost both parents are entitled to 60% of the higher pension of the two parents. Survivors of a person died in a work-related accident are entitled to Work Accident-related Survivors' Benefits. They can be entitled to Temporary and Permanent Widow(er)'s Pension, Parental Pension and Orphan's Allowance according to the above rules with the exception that in this case the length of the deceased person's service period is not a condition.





### Sickness benefits

Two kinds of sickness benefits are paid by social insurance.

**Absence Fee (*távolléti díj*)** is paid to the sick employee by the employer for up to 15 working days annually with the amount of 80% of the daily gross earnings.

**Sickness Benefit (*táppénz*)** is paid by the Health Insurance Fund for a maximum of one year during employment or for 90 days after the termination of employment. If the previous insurance period is at least two years, the amount of sickness benefit is 70% of the daily average gross earning over the previous calendar year, while if the previous insurance period is less than 2 years, the amount is 60% of the daily average earnings. (These rates was decreased to 60 and 50% on 01.08.2009)

Parents can be entitled for Sickness Benefit in order to nurse their children as follows:

- Until the child reaches 1 year of age,
- For 84 days per child if the child is between 1-3 years,
- For 42 days per child if the child is between 3-6 years and for 84 days for a lone parent,
- For 14 days per child if the child is between 6-12 years and for 28 days for a lone parent.

### Disability benefits

In Hungary disability benefits are heterogeneous, there are both insurance-based and noncontributory benefits among them.

**Invalidity Pension (*rokkantsági nyugdíj*)** is due to those persons whose working capacity has been reduced by at least 67% and no improvement is expected in his/her health for at least 1 year, therefore the recipient does not work regularly or his/her wage is substantially lower than before becoming invalid.

There are three classes of invalidity pension:

- Class III: at least 67% reduction in working capacity but not totally incapacitated for work;
- Class II: 100% reduction of working capacity but no need of permanent care by others;
- Class I: 100% reduction of working capacity and need of permanent care by others.

Eligibility for invalidity pension starts from the day on which a medical committee diagnoses the invalidity. The invalidity pension is not replaced by an old age pension, but covers also the period after the retirement age. Eligibility terminates if the pensioner is no longer invalid, or works on a regular basis.

Eligibility criteria for invalidity pension depend on the age and the length of the insurance period of the insured. The insurance period necessary for invalidity pension is:

- below 22 years of age: 2 years
- 22-24 years of age: 4 years
- 25-29 years of age: 6 years
- 30-34 years of age: 8 years
- 35-44 years of age: 10 years
- 45-54 years of age: 15 years
- 55 and above: 20 years.

Under 25 years of insurance period the amount of the pension is 37.5% to 63% of the average wage, while above 25 years of insurance period it is according to the old age pension formula. In case of Class II invalidity the pension is 5% higher than in Class III, while in Class I is 10% higher than Class III. The minimum invalidity pension for Class III is equal to the minimum old age pension.



The monthly amount of the minimum invalidity pensions in the three classes from 2006 to 2010 are:

	2006	2007	2008	2009	2010
Class III	25,800	27,130	28,500	28,500	28,500
Class II	26,960	28,340	29,800	29,800	29,800
Class I	27,950	29,370	30,850	30,850	30,850

**Other disability benefits** are non-contributory benefits and paid by the central budget:

**Invalidity Annuity (*rokkantsági járadék*)** is paid to individuals above 18 years old who lose 100% of their working capacity before reaching the age of 25. Its monthly amount is 28,630 HUF in 2006; 30,130 HUF in 2007, 32,610 HUF in 2008 and increased to 33,330 HUF in 2009. Those adult persons that are not eligible for invalidity annuity, but their working capacity has decreased by at least 67% and that get a Disability benefit or Annuity for the Blind, are eligible for Regular Social Support (*Rendszeres szociális segély*).

**Temporary Invalidity Annuity (*átmeneti járadék*)** and **Regular Social Annuity (*Rendszeres szociális járadék*)** are due to invalid persons, whose working capacity is reduced by 50%, who cannot find a rehabilitation workplace, and who are not entitled to old age, invalidity or work accident-related disability pension, nor to unemployment benefit, sickness benefit, work accident sick pay or maternity allowance.

The Temporary Invalidity Annuity can be paid also to those people who are five years from retirement age and have completed the necessary contribution payment period. The annuity amounts to 75% of the old age pension that he/she would be entitled to upon reaching retirement age. However, the annuity can be no less than the minimum amount of Regular Social Annuity.

The Regular Social Annuity is paid to those people who are eligible and have not yet reached retirement age, but have contributed for at least half of the contribution payment periods necessary for receiving an invalidity pension. The Regular Social Annuity is 23,060 HUF in 2006; 24,270 HUF in 2007; 26,420 HUF in 2008 and 27,000 HUF per month in 2009 and 2010.

**Disability Benefit (*fogyatékosági támogatás*)** is paid to those persons above the age of 18 whose severe disability (visual, hearing, mental, physical or multiple impairment or autism) is permanent and that are unable to live independently. It is a flat-rate benefit. It amounts to 80% of the minimum old age pension in case of multiple disadvantages or a severe disadvantage that makes any kind of self-help impossible; in any other cases it amounts to 65% of the minimum old age pension.

People with severe disabilities can also apply for specific transport allowances:

- Transportation support (*közlekedési támogatás*) for transportation costs of disabled people;
- Support for car purchase (*személygépkocsi szerzési támogatás*);
- And Support to make a car barrier-free (*személygépkocsi átalakítási támogatás*).



## Employment injuries and occupational diseases

Contributory benefits for employed people in case of work-related injuries or occupational diseases.

**Work Accident Sickness Benefit (*baleseti táppénz*)** is payable for a maximum of one year with the possibility of an extension for a further year. Its amount is 100 per cent of the previous average income.

**Work Accident Annuity (*baleseti járadék*)** is payable to a person who lost his/her working capacity by 15-67% as a consequence of an employment injury. Its amount depends on the degree of invalidity. Its amount is expressed as a percentage of monthly average earnings as follows:

- Level 1: 16-25% reduced capacity: 8% of the monthly earnings;
- Level 2: 26-35% reduced capacity: 10% of the monthly earnings;
- Level 3: 36-49% reduced capacity: 15% of the monthly earnings;
- Level 4: 50-66% reduced capacity: 30% of the monthly earnings.

If the reduction of the working capacity does not exceed 25 per cent the annuity is payable for a maximum of two years, while if it exceeds 25 per cent then there is no time limit.

**Work Accident-related Disability Pension (*baleseti rokkantsági nyugdíj*)** is paid if the capacity for work is more than 67% reduced as a consequence of a work accident, or at least 50% reduced due to silicosis. It is paid according to the similar three classes used in the determination of Invalidity Pension. The Class I is the 70%; the Class II is the 65% and the Class III is the 60% of the monthly average earnings, and the minimum benefit amount is changed year by year.

The monthly amount of the minimum work accident-related disability pension in the three classes from 2006 to 2009 are:

	2006	2007	2008	2009	2010
Class III	25,870	26,900	28,600	28,600	28,600
Class II	27,170	28,260	30,000	30,000	30,000
Class I	25,870	29,230	31,000	31,000	31,000

## Unemployment benefits

**Unemployment Benefit<sup>1</sup> (*munkanélküli járadék*):** Employees and self-employed persons having lost their job are entitled to Unemployment Benefit if they have been employed for at least 200 days during the previous 4 years, if they became involuntarily unemployed, have no entitlement for pension, get no sickness benefit and seek a job and co-operate with the labour centre. The amount of the unemployment benefit is 65% of the gross average salary of the previous 4 calendar quarters. Its minimum amount is 90% of the minimum old age pension and its maximum is 1.8 times of the minimum old age pension (HUF 44,460) per month in 2005. It is paid from employee and employer contributions paid to the Labour Market Fund. One day of benefit payment is derived from five days of employment, the maximum payment period is 270 days.

<sup>1</sup> After 1<sup>st</sup> of November 2005 the official name of unemployment benefit was changed to 'job-seekers benefit'



From 1st of November 2005 the benefit duration has two part. The first term is maximum 91days, the second term is max 179 days. In the first term the amount of the benefit is the 60% of the previous wage (the lower limit in this term is the 60% of the minimum wage, the upper limit is 120% of the minimum wage) and in the second term it is a fix amount: the 60% of the minimum wage:

Minimum and maximum of the unemployment benefit after 2005 in the first term of the job-seekers benefit:

	2006	2007	2008	2009	2010
Minimum	37,500 HUF	39,300 HUF	41,400 HUF	42,900 HUF	44,100 HUF
Maximum	75,000 HUF	78,600 HUF	82,800 HUF	85,800 HUF	88,200 HUF

**Pre-retirement Unemployment Assistance (*nyugdíj előtti munkanélküli segély*):**

Unemployed persons may apply if they are within five years of reaching retirement age, received unemployment benefit for at least 140 days and have exhausted the entitlement for unemployment benefit, have a sufficient contribution period for retirement (normally 20 years), have no prospect of finding a suitable job, and co-operate with the Labour Centre. Its amount is 80% of the minimum old age pension (HUF 19,760 per month). The pre-retirement unemployment assistance and the incentive benefit for job-seekers were replaced by the job-seekers allowance since November 2005.

**Incentive Benefit for Job-seekers (*álláskeresést ösztönző juttatás*):** Unemployed persons can be entitled if they were entitled to unemployment benefit for at least 180 days but it was terminated because they received a job or accepted a training opportunity, get no invalidity pension and co-operate with the Labour Centre. Its amount is 85% of the minimum old age pension. The duration of the benefit differs depending on individual age: it can be paid for 180 days if the person is under 45 or for 270 days if the person is over 45 years of age. This benefit was introduced in 2003 and it was paid to 15,825 people in 2004. The pre-retirement unemployment assistance and the incentive benefit for job-seekers were replaced by the job-seekers allowance since November 2005.

**Job-seekers Allowance (*álláskeresői segély*):** Received by job seekers who have used up all their entitlement period (180 days) of job-seeking benefit, but have not found a job. The duration time of the allowance is 90 days or 180 days depending on the job-seeker age being, respectively, lower or greater than 50.

The second type of jobseeker's allowance benefits those job-seekers that are not entitled to job-seekers benefit, but they had spent 200 days in employment in the last four years.

The third type of job-seekers allowance is entitled to job-seekers who are within maximum 5 years from reaching the retirement age.

The amount of this allowance for all three types of Job-seeker allowance is the 40% of the minimum wage: 25.000 HUF in 2006; 26.200 HUF in 2007; 27.600 HUF in 2008, 28.600 HUF in 2009 and 29.400 HUF in 2010. If the job-seekers average wage is lower than this amount, the amount of the job-seekers allowance is the average wage.

## Maternity benefits

**Maternity Allowance (*terhességi-gyermekágyi segély*):** Mothers giving birth to a child are entitled to two types of benefits depending on their previous employment situation. If they are insured for at least 180 days during the last two years before delivery they are entitled to



maternity allowance. It is paid for 24 weeks (4 weeks before and 20 weeks after the planned date of birth, or 24 weeks after the date of birth, depending on the mothers' choice) and its amount is 70% of the daily average gross earnings of the previous year.

**Maternity Grant (*anyasági támogatás*):** Resident women who give birth, had previously participated in prenatal care at least 4 times, and have no insurance are entitled to a one-off lump-sum payment of 225% of the minimum old age pension or 300% in case of twins:

	2006	2007	2008	2009	2010
One child	58,050 HUF	61,042 HUF	64,125 HUF	64,125 HUF	64,125 HUF
Twins	77,400 HUF	81,390 HUF	85,500 HUF	85,500 HUF	85,500 HUF

**Child Care Allowance (*gyermekgondozási segély*):** This is a universal entitlement financed by the state budget that provides a flat-rate benefit to parents who stay away from work to care for their children under the age of 3 (under age of 10 in case of permanently ill or severely disabled children) or for grandparents who care for their grandchildren aged between 1-3 years in the household of the parent. In case of twins the allowance is paid until the children reach the compulsory schooling age (usually 6 years). The monthly amount is equal to the minimum old age pension of 25 800 HUF in 2006; 26,830 HUF in 2007; from 2008 to 2010. In case of twins the amount is doubled. From 2006 to 2010 the mothers may have gainful activity after the 1st year of age of the child (She may have full time job as well) In 2009 period of CCA was reduced to 2 years, effective from mid-2010. (New government terminated this measures at spring of 2010.)

**Child Care Fee (*gyermekgondozási díj*):** is a contributory benefit, which is paid after the expiry of Maternity Allowance until the child reaches 2 years of age if the parent(s) does not work. The eligibility criterion is at least 180 days of insurance during the last two years before delivery of the parent who wants to take care of the child at home.

Its amount is 70% of the daily average gross earnings of the previous year with a maximum of the 70% of the twice of the minimum wage (87,000 HUF in 2006; 91,700 HUF in 2007; 96,600 HUF in 2008; 100,100 HUF in 2009 and 102,900 HUF in 2010).

**Child Raising Support (*Gyermeknevelési támogatás*):** It is a universal benefit financed by the state budget for parents who raise three or more children in their own home, if the youngest child is between 3 and 7 years old. The monthly amount is equal to the minimum old age pension, irrespective of the number of children.

### Child benefits

In Hungary a well-developed child benefit system is in operation consisting of universal and means-tested benefits.

**Family Allowance (*családi pótlék*)** is a universal benefit financed by the state budget. It is paid to the parent from the birth of the child to the termination of studies in the compulsory education system (usually 0-16 years), and then during secondary school education or vocational training of the child (up to 20 years of age). Its amount depends on the number of children in the family, whether a single-parent family or not and whether the child is disabled. In the month of July double amounts are paid in order to support schooling.



The monthly amounts of the family allowance differ by years, number of children and family composition as shown below:

2006:

1 child in the family: HUF 11,000,  
1 child, single parent: HUF 12,000,  
2 children in the family: HUF 12,000 per child,  
2 children, single parent: HUF 13,000 per child,  
3 or more children in the family: HUF 14,000 per child,  
3 or more children, single parent: HUF 15,000 per child,  
permanently ill or severely disabled child in the family: HUF 21,000,  
permanently ill or severely disabled child, single parent: HUF 23,000,  
child in foster home/at foster parent: HUF 13,000.

2007:

1 child in the family: HUF 11,700,  
1 child, single parent: HUF 12,700,  
2 children in the family: HUF 12,700 per child,  
2 children, single parent: HUF 13,800 per child,  
3 or more children in the family: HUF 14,900 per child,  
3 or more children, single parent: HUF 15,900 per child,  
permanently ill or severely disabled child in the family: HUF 22,300,  
permanently ill or severely disabled child, single parent: HUF 24,400,  
child in foster home/at foster parent: HUF 13,800.

2008-2010:

1 child in the family: HUF 12,200,  
1 child, single parent: HUF 13,700,  
2 children in the family: HUF 13,300 per child,  
2 children, single parent: HUF 14,800 per child,  
3 or more children in the family: HUF 16,000 per child,  
3 or more children, single parent: HUF 17,000 per child,  
permanently ill or severely disabled child in the family: HUF 23,300,  
permanently ill or severely disabled child, single parent: HUF 25,900,  
child in foster home/at foster parent: HUF 14,800.

**Regular child protection allowance (*rendszeres gyermekvédelmi kedvezmény*):** From 2006 the local government provides regular benefit for the child if the per capita income of the family caring for him or her is less than the current minimum old age pension (this limit is 120%; 125% and 130% of the minimum old age pension in 2007; 2008 and 2009) and remaining in the family is not against the interests of the child. From 2006 the regular child protection benefit was infiltrated to the family allowance. The entitlement for benefit in kind, related to the previous regular child protection benefit, has remained (free dining, free school-books) but the name of support has changed to **regular child protection allowance**. For those who are entitled to this allowance it is granted a 5 000 HUF support in cash for two times a year in 2007 (5 500 HUF in 2008 and 5 800 HUF in 2009 and 2010).



## Social assistance

The specific forms of social allowances are means-tested. They are provided by local governments, which have some competence in specifying the eligibility criteria. The financing of these benefits comes from the central budget by 90%, while local authorities pay the rest.

**Regular social benefit (rendszeres szociális segély):** This is a social assistance scheme to ensure a minimum standard of living. The amount of the benefit is determined by the per capita income of the applicant's household.

People can be eligible to this benefit, if they are

- Of working age (18 years or more) and
- lost at least 67% of their working capacity or are entitled to a blind person's allowance or disability benefit, or
- non-employed<sup>2</sup>, and
- their personal income or the per capita income of the household is not more than 80% of the minimum old age pension.

The amount payable varies in such a way that it supplements the actual income of the beneficiary to reach 80% of the minimum old age pension.

From the 1 July 2006 the conditions of the provision and the way of calculation of the amount of regular social benefit changed. By the new terms for the support is entitled only one person in a family. The assessing of the entitlement and the amount of the assistance are based on the income projected to the consumer unit instead of the previous income per capita. Each member of the consumer unit is weighted by a rate which shows the structure and consumption of a family: the first adult member of the family and the disabled child's rate is 1,0, the ratio of the spouse and other adults is 0.9 while each child is given a weight equal to 0.7. The amount of support is variable and supplements the family's effective total income to the limit of the entitlement (this limit is the 90% of the minimum pension).

**Stand-by allowance (rendelkezésre állási támogatás):** Mainly replacing regular social benefit new benefit was introduced on 1 January 2009 called "stand-by allowance" (rendelkezésre állási támogatás) for persons aged 55-year or less who has no child or day-care of the child/ren is sufficient. Local government authorities re-classify persons/cases by 1 April 2009, the scheme was fully effective since that time. The benefit amount was higher than former regular social benefit (equal to minimum pension) and it is given to eligible persons (not household as before). Persons can be ready to accept public employment offer on a mandatory basis.

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<sup>2</sup> According to the Act III. 1993 on Social administration and benefits a person is qualified as non-employed, if

- a, the paying period of his/her unemployment benefit or income supplement was terminated and he/she does not get an incentive benefit for job-seekers, or
- b, the paying of the unemployment benefit was terminated before the end of the paying period because of employment and after the end of employment he/she didn't obtain a right to the unemployment benefit again, or
- c, within the last two years before claiming for the regular social support he/she had cooperated with the job centre or the body designated by the local authority for at least one year, or
- d, the paying of nursing fee, child care allowance, child raising support, regular social annuity, temporary invalidity annuity, invalidity pension or work accident-related disability pension was terminated, and the claimant had cooperated with the job centre or another body designated for cooperation for at least three months right before application.

And he/she does not have an earning activity, except employment organised by the local authority or employment with a book for occasional employment.



From January 2009 more than one member is eligible for the stand-by allowance, but after 15th of November 2009 this can be paid only one member in the family. After this date, two persons in one family were eligible for the support of these two types of benefit at the same time, if someone is entitled to the regular benefit while the other member of the family is entitled to the stand by allowance.

**Nursing Fee (ápolási díj):** Paid to people who provide permanent care to a disabled relative:

- to a severely disabled or a permanently ill person under the age of 18;
- to a severely disabled person in need of increased care;
- to a permanently ill person above 18.

The amount of the benefit is determined by the independent local governments in a local government decree and may be no less than 80% of the minimum amount of old age pension. In case of nursing a permanently ill person above 18 years of age, the nursing fee is provided by the local government on a discretionary basis, in this case, the amount is fully financed by the local government's budget.

Amount of payment:

- at least the minimum amount of old age pension if the claim is based on the own right of the claimant: HUF 25,800 per month in 2006; 26,830 in 2007; 28,500 from 2008 to 2010.
- at least 80% of the minimum amount of old age pension if the claim is based on the discretionary decision of the local authority. In this case, the local government can regulate the entitlement conditions, but the household income per person taken into account during the judgement of the claim cannot be lower than the old age pension minimum, or 150 per cent of it in case of a one-person household.
- From September 2005 those who nurses disabled persons needed increased nursing are provided by a higher amount of nursing allowance, its amount is higher by 30 per cent than the normal nursing allowance.

There is no comprehensive information available on how local authorities specify the rules of the nursing fee on their discretionary right. But according to the information available it can be supposed that most of the settlements (at least the bigger ones) provide nursing fees for nursing of permanently ill family members above the age of 18 as well. In most cases the eligibility criteria of this benefit are the same as the conditions specified in the Social Act.

**Old age Allowance (*időskorúak járadéka*):** This is a social assistance scheme to ensure a minimum income during old age in the absence of an old age pension. The amount of the benefit is determined by the income of the person (and his/her partner or spouse).

Conditions of eligibility:

- Reaching retirement age for both men and women, and
- income combined with his/her spouse or partner is below 80% of the minimum old age pension, or in case of a single person, below 95% of the minimum old age pension.

The amount payable varies in such a way that it supplements the actual income to reach 80% of the minimum old age pension per person for a couple or 95% for a single person.

Until 31 December 2005 the old age allowance is payable by local government to a person who is over the applicable retirement age and neither his own monthly income nor the monthly per capita income - calculated by taking his own together with that of his spouse - exceed 80 per





cent of the current minimum old age pension or 95 per cent in the case of a person living alone. From 1 January 2006 the amount of this allowance is differentiated by the law according to the marital status and age. Higher amount of old age allowance is provided for persons 75 years of age and more and living alone if the person's total income is lower than 130% of the minimum old age pension.

**Home Maintenance Support (*lakásfenntartási támogatás*):** This is a means-tested benefit provided by the local government for a family or individual who lives in a home not exceeding a specified size, provided that there is no income from the use of that home. People can be eligible to this benefit by three rights:

- a) Normative home maintenance support according to the rules of the Act on Social benefits;
- b) If they participate in a debt-management procedure;
- c) Local home maintenance support according to the conditions specified by the local authority in a local decree.

A normative home maintenance support is provided if:

- the monthly income per person in a household does not exceed 150% the minimum amount of the old age pension; and
- the acknowledged costs of home maintenance are equal to 20% or more of the total monthly income of the household.

The acknowledged size of the flat is maximum

- 35 m<sup>2</sup> in case of one-person households,
- 45 m<sup>2</sup> in two-person households,
- 55 m<sup>2</sup> in three-person households,
- 65 m<sup>2</sup> in four-person households,
- if more than four people are living in the household then 65 m<sup>2</sup> plus 5 m<sup>2</sup> for each additional person but maximum the real size of the flat.

The minimum amount of the benefit is HUF 2,500 per month. The local authority can depart from these minimum rules and can specify more favourable conditions.

- *Scope and scale*

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



Table 6. Social benefits: recipients (as % of population)

	2006	2007	2008	2009	2009
Old age benefit	16.46%	16.65%	17.09%	17.25%	17.09%
Widow(er)'s Pension	1.56%	1.47%	1.40%	1.34%	1.30%
Parental Pension	0.00%	0.00%	0.00%	0.00%	0.00%
Orphan's Allowance	1.06%	1.04%	1.01%	1.00%	0.96%
Invalidity Pension	7.96%	7.93%	7.76%	7.49%	7.34%
Invalidity Annuity	0.30%	0.30%	0.31%	0.32%	0.32%
Temporary Invalidity Annuity	0.18%	0.21%	0.23%	0.22%	0.20%
Disability Benefit	1.06%	1.08%	1.10%	1.12%	1.14%
Unemployment Benefit	0.91%	0.95%	1.05%	1.62%	1.16%
Job-seekers allowance	0.34%	0.36%	0.31%	0.53%	0.62%
Maternity Allowance	0.30%	0.29%	0.29%	0.29%	0.27%
Maternity Grant	0.94%	0.90%	0.95%	0.95%	0.87%
Child Care Allowance	1.66%	1.64%	1.60%	1.74%	1.78%
Child Care Fee	0.91%	0.93%	0.94%	0.95%	0.95%
Child Raising Support	0.45%	0.42%	0.41%	0.40%	0.39%
Family Allowance	12.59%	12.16%	12.41%	12.44%	12.22%
Regular Child Protection Allowance	4.41%	4.87%	5.10%	5.53%	5.98%
Family tax credit	n.a.	n.a.	n.a.	11.39%	n.a.
Regular social benefit	1.59%	2.08%	2.21%	0.72%	0.42%
Nursing Fee	0.47%	0.52%	0.53%	0.55%	0.57%
Home Maintenance Support	2.56%	2.52%	2.29%	2.49%	2.50%

Source: Yearbook of Welfare Statistics HCSO, 2006; 2007; 2008; 2009; 2010



Table 7. Social benefit: expenditure\*

	2006	2007	2008	2009	2010
<b>Annual expenditure (million HUF)</b>	3,696,172,	4,111,158	4,407,235	4,449,989	4,114,192
as % of total expenditure					
Pension above retirement age	48.05%	48.44%	50.62%	49.14%	54.68%
Pensions below retirement age	7.92%	7.52%	7.39%	7.06%	7.22%
Allowances for survivors	7.80%	7.62%	7.50%	7.53%	8.39%
Maternity allowance	0.82%	0.81%	0.97%	0.88%	0.93%
Child-care fee	2.19%	2.27%	1.90%	2.50%	2.78%
Sickness benefit	2.70%	2.37%	2.33%	2.43%	1.93%
Benefit related to sickness	0.27%	0.24%	n.a.	0.23%	0.26%
Unemployment benefit	2.50%	2.42%	2.60%	3.48%	3.79%
Other benefits related to pension	1.04%	0.92%	n.a.	0.81%	0.83%
Benefits of persons with reduced working ability	2.93%	2.77%	1.66%	2.57%	2.67%
Family allowances	8.61%	8.48%	8.29%	8.25%	8.86%
Child-care allowances, child-care-assistance benefits	2.18%	2.08%	1.80%	2.15%	2.36%
Other benefits related to maternity	0.41%	0.28%	n.a.	0.45%	0.47%
Regular and non-regular assistance benefits	2.82%	2.94%	2.90%	3.19%	3.56%
Scholarship and other grants	0.89%	1.24%	0.91%	1.17%	1.27%

Notes: \*Social benefits at current prices; in this table we use the National Accounts classifications

Source: National Accounts Hungary 1995-2007, HCSO 2009; National Accounts Hungary 2007-2009, HCSO 2009; National Accounts Hungary 2008-2010, HCSO 2011.

- *Further benefits (not simulated)*

**Advance on maintenance payments (*tartásdíj megelőlézése*):** This benefit is paid to the parent who takes care of the child if the child maintenance is temporarily irrecoverable by/from the other parent obliged to maintain the child. If the person who takes care of the child cannot maintain the child and the income per person in the applicant's family does not exceed three times the current minimum amount of old age pension the caring parent is entitled to advance maintenance payment. Its amount is equal to the amount of child maintenance decided by the court.

**Irregular Child Protection Benefit (*rendkívüli gyermekvédelmi támogatás*)** is paid to families with temporarily cash flow problems or facing emergency situations that seriously threaten their standard of living. The amount is designated by decree of the respective local government.

**Debt-management Benefit (*adósságcsökkentési támogatás*):** beside the home maintenance support, people with overdue debts can receive a cash benefit, transferred by local governments to the creditor. The amount of debt-management benefit is the result of an agreement between the local authority, the creditor and the beneficiary. The other pillar is debt management counselling, which is mandatory for beneficiaries.

**Public Health Benefit (*közgyógyellátás*):** Socially disadvantaged people may receive a Public Health Card by which he/she can obtain specific medicine and therapies free of charge.



**Temporary Benefit (*átmeneti segély*):** This is a means-tested benefit provided by the local government and regulated by a local government decree. It can be provided to persons whose subsistence is occasionally or long-lastingly endangered. It can be provided occasionally or monthly. The local government can regulate the entitlement conditions, but the household income per person taken into account during the judgement of the claim cannot be lower than the old age pension minimum, or 150% of it in case of a one-person household

**Funeral Support (*temetési segély*):** This is a means-tested benefit provided by the local government and regulated by a local government decree. Somebody may receive a funeral support if he/she provided for the funeral of somebody although it was not his/her duty, or if it was his/her duty but bearing the funeral costs would endanger his/her existence. The local government can regulate the entitlement conditions, but the household income per person taken into account during the judgement of the claim cannot be lower than the old age pension minimum, or 150 per cent of it in case of a one-person household. The amount of the funeral benefit cannot be lower than 10 per cent of the locally usual cheapest funeral. The local authority, in its local decree, can complete the benefits defined in the Act on Social benefits or can define other kinds of cash benefits as well. The local authority, in its local decree, can complete the benefits defined in the Act on Social benefits or can define other kinds of cash benefits as well.

Examples of other social benefits provided by local governments:

- Home renting support (lakbértámogatás),
- Interest-free social loan (kamatmentes szociális kölcsön),
- Meals support (étkezési támogatás),
- Local transportation support (helyi utazási támogatás).

#### 1.4 Social contributions

In Hungary, social insurance can be divided into the two large categories of pension scheme and health insurance.

Since 1 January 1998, the Hungarian pension scheme has been financed jointly by the compulsory pension scheme of social insurance and, in addition, by private pension insurance. It is also possible to complete a social insurance pension through voluntary pension funds. In this sense, health insurance is not financed jointly, but through voluntary health funds, beside the compulsory social insurance, there is still an opportunity to obtain additional health provision.

Participation in the system of social insurance is compulsory, if legal relations provided by the law are established, the compulsory contractual insurance relations come into being. Both employers and employees, and also joint and private companies, and entrepreneurs have to make contributions both to the pension insurance and to the health insurance funds. The amount of contribution payable by both parties is calculated on the basis of the gross – before taxation – wages, income.



### **Employee social insurance contribution**

The rate of contribution payable by employees, if they are members of the compulsory pension scheme of social insurance only, is 8.5%; if they are also members of one of the private pension funds, then 0.5%. Members of private pension funds are obliged to pay 8% member fee to the private pension fund, above the 0.5% compulsory pension contribution. For members of the private pension scheme, member fee can be integrated up to 10% either by the employee or by the employer,. There is an upper limit of pension contribution paid by employees, which equals the contribution payable after the gross average income threefold, in 2006 17,330 HUF/day. In the case of voluntary pension funds, payment is unsolicited, there are no provisions of the law concerning the minimum or maximum amount, the minimum amount is defined by the statutes of the funds. Membership fees can be assumed by the employers.

In 2006 the pensioners who has employee income at the same time did not pay pension insurance contribution, but this regulation was changed at the beginning of 2007. From that year these pensioners have to pay pension insurance contribution too.

In the case of health insurance employees pay 4% health insurance contribution in 2006. From 2006 the health insurance contribution was separated to 'in-kind' and 'monetary' part. For example the monetary part of the employees health insurance contribution is 2% and the in-kind part is 4 % in 2007.

The pensioners who were working and had old-age pensions too, didn't pay health insurance contribution until 2007. From that year they had to pay the in-kind part of the health insurance contributions. In 2009 the rate of contribution was 2% up to 143,000 HUF/month and 6% above this amount in the case of employees in 2009.

Pensioners employed in their own right, pay neither pension nor health contribution. If a pensioner, apart from the pension, receives income subject to contribution payment (as an employee or an entrepreneur), contributions payable by employees (0.5%+8% and 4% (or 6% from 2006) do not need to be paid, but he/she is still obliged to fulfil obligations of employers (18% and 11%). (Reasonably, as an employee the employer and as a partner or private entrepreneur, the entrepreneur.)

### **Employer social insurance contribution**

In 2006 the rate of pension insurance contribution payable by employers is 18%. In the case of health insurance employers pay 11% health insurance contribution in 2006. From 2006 the health insurance contribution was separated to 'in-kind' and 'monetary' part. For example the monetary part of the employers health insurance contribution is 4% and the in-kind part is 7% in 2007.

In 2009 the rate of contribution was 2% up to 143,000 HUF/month and 5% above this amount in the case of employers in 2009. Joint and private entrepreneurs are obliged to pay both the 2 or 5 % payable by employers and the 6% payable by employees in 2009.



### Self-employed social insurance contribution

Joint and private entrepreneurs are obliged to pay both the 18% pension contribution payable by employers and the 0.5%+8% pension contribution payable by employees. Joint and private entrepreneurs are obliged to pay both the employers and the employees part of the health insurance contribution too.

In the case of joint businesses and entrepreneurs, health insurance contribution is calculated on the basis of the income paid to the entrepreneur as personal agency, but at least the amount of the minimum wage. In the case of private entrepreneurs, contribution is calculated on the basis of the entrepreneurial withdrawal, in the case of presumptive taxpayers, the income presumptive tax is based on at least the amount of the minimum wage.

For those who pay simplified business tax (EVA) contribution payable is calculated on the basis of the minimum wage, but they can choose to declare higher income. If apart from having a partnership or a private enterprise, someone has another legal relation providing social insurance (employee, full-time student etc.), social contribution is calculated on the basis of income actually received. In the case of EVA, contributions do not need to be paid. Joint and private entrepreneurs are exempt from paying contributions if they receive sick-pay, maternity allowance, child-care allowance, child rising support, child-care fee, nursing fee, except if they personally continue their activities during this time. Contributions are not to be paid for tax-exempt payment in kind.

The following table shows the changes of the pension and the health insurance contribution year by year.

#### Pension insurance contribution from 2006 to 2010

		2006	2007	2008	2009	2010
Pension insurance contribution ( <i>nyugdíjjárulék</i> )	Employees	8.5%	8.5%	9.5%	9.5%	9.5%
	Employers	18%	21%	24%	24%	24%
	Upper limit	17,330 HUF	18,490 HUF	19,500 HUF	20,400 HUF	20,420 HUF
	Self employment	26.5%	29.5%	33.5%	33.5%	33.5%



### Health insurance contribution from 2006 to 2010

			2006	2007	2008	2009	2010
Health insurance contribution (egészségbiztosítási járulék)	Employees	In-kind	4%	4%	4%	4%	4%
		Monetary	2%	3%	2%	2%	2%
	Employers	In-kind	7%	5%	4.5%	1.5% / 4.5%	1.5%
		Monetary	4%	3%	0.5%	0.5% / 0.5%	0.5%
	Self employment		15%	15%	11%	8% / 11%	8%

**Flat rate health contribution (tételes egészségügyi hozzájárulás):** Fixed health contributions are payable by employers. The private entrepreneurs, those subject to EVA also included, by those having a legal relation of member, elected functionaries, outworkers, agents, assisting family members and by those receiving income substituting benefit for the unemployed, but only on the basis of one legal relation at a time. It is not payable during the time one receives sick pay, maternity allowance, child-care fee, child-care allowance, child raising support, during the time of unpaid holiday and detention and in the case of private entrepreneurs who receive widows' pension or a pension in their own right.

It amounted to 1 950 HUF/month (from 2006 to 2009 this amount had not changed). In the case of part-time employment, the amount of contribution to be paid has to be made proportionate, but is at least 50%. In 2010 the flat rate health contribution was abolished.

### Other income related contributions

**Employee contribution** is calculated on the basis of gross wages received from the employer. Exempted are those who receive or become entitled to receive old age pension, disability pension or pension for work accident related disability, while being in employment. Employees are obliged to pay the contribution. Its rate is 1% in 2005, and 1,5% after 1<sup>st</sup> of September 2006. The pensioners who are employees at the same time do not have to pay this employee contribution.

**Employer contribution** is calculated on the basis of the gross wage – before taxation – accounted and paid to the employee with regard to his/her employment, including severance pay, jubilee reward, fees paid during the time of sick-leave, taxable payment in kind, meal contribution, holiday contribution and 25% of the tax payable for a company car provided with regard to employment. The employer contribution is payable by the employer. The rate of contribution was 3% until 2008. In 2009 the rate of contribution was 1% up to 143,000 HUF/month and 3% above this amount.

**Entrepreneurial contribution** is paid by joint business on the basis of the income paid to the entrepreneur with regard to his/her personal assistance, by private entrepreneurs on the basis of the entrepreneurial withdrawal and by private entrepreneurs subject to presumptive taxation on the basis of the minimum wage. The minimum of the contribution base is always the amount of



the minimum wage provided by the law. Exempted are those who receive or become entitled to receive old age pension, disability pension or pension for work accident related disability and those who are employed at the same time and work at least 36 hours a week. The rate of contribution is 4% until 2008. In 2009 the contribution rate is 2,5% (0-143000 HUF) and 4% (above 143 000 HUF) of contribution base. If in receipt of old age pension this contribution does not have to be paid.

From 2010 these separate contributions (the employee, the employer and the entrepreneurial) was left off, in place of these the employer pay 1%, the employee pay 1,5% and the self-employment pay 2,5% of the contribution base and this has been called '**labour market contribution**' (munkaerő-piaci járulék).

**Vocational training contribution** is payable by every economic society and private entrepreneur, except for those paying EVA or flat-rate tax. Contribution is calculated on the basis of expenditure on wages, its rate is 1.5%. This rate did not change until 2008.

The number of contributors (in the case of the pension insurance contribution and the health insurance contribution) is approximately the 40% of the population.

## 1.5 Taxes

### Direct taxes

**Personal income tax (*személyi jövedelemadó*):** The system of personal income tax was introduced in 1988. The system in itself has basically remained unchanged but several simplifications were carried out over the years (out of the eleven originally introduced tax rates, by 2005 there remained only two). However, it is still typical of the system that types of incomes are differentiated in detail; there are tax credits of several kinds and members of certain sectors, primarily those working in the field of agriculture (primary producers, small-scale producers, assisting family members) enjoy differential treatment.

The personal income tax is the second most important source of revenue for the budget. Every citizen is obliged to file a tax return at the end of the tax year, which can be done in two different ways: either by self-assessment or, if one has a workplace and has other income only from very few and well defined sources, one can ask the workplace to fill in and file a tax return for him/her. With reference to the year 2003, about half of the citizens filed a tax return on their own, while the other half asked the employer to do so. Other forms of filing a tax return concern only a very small group. As it will turn out below, the Hungarian tax regulations are rather complex, so there is an option of filling in a detailed data sheet and asking the tax authorities to calculate the amount of tax to be paid. Small-scale producers who work in the field of agriculture and whose yearly revenue is between 600,000 and 3,000,000 HUF can also make a simplified declaration of tax return, which substitutes for the filing of the personal tax return.

Incomes to be consolidated are taxed according to the tax table. Tax credits are only demandable on the basis of the amount of tax calculated this way. (Earlier, in certain cases, allowances were deductible from the taxable income, but this has disappeared from the prevailing regulations.) Incomes taxed separately can be divided into two groups. In the first group there are income sources of different kinds, in this case separate tax rates apply. In the second group, we talk about flatrate taxation. This is only a choice in the case of certain activities and even then there are further conditions to be fulfilled.

The simplified business tax (EVA), as a form of taxation was introduced on 1 January 2003 and started from 2004. EVA addresses small-scale enterprises, not only with the aim of reducing tax





burdens but also in order to simplify administration. This form of taxation provides an opportunity for the legal transformation of revenues into freely utilizable income, it is easy to calculate and there are relatively less rates and taxes to be paid.

The main characteristics of those belonging to EVA are made quite clear by the provisions of the law. EVA, as a form of taxation, can be chosen by private entrepreneurs, unlimited partnerships, deposit companies, limited liability companies, co-operatives, lawyers' offices etc. If the taxpayer carried out its activities in the previous tax year continuously, without transformation and its revenues in the two previous tax years and, as reasonably expectable, in the current tax year are not more than 25,000,000 HUF. The tax rate is 15% in 2006 and 25% in 2007-2009 and 30% in 2010.

#### **Income-types to be consolidated:**

- Wage income from employment
- Social security benefits with regard to employment, like sick pay, child-care fee, maternity allowance
- Income originating from casual work
- Income received in return for foreign service
- Unemployment benefit, incentive benefit for job seekers, complementary wages, wage substituting benefit, work accident allowance, compensation substituting wage income from employment
- Income originating from being an elected functionary, a member of Parliament or a Local Government, subsidies received in connection with these activities (meal, clothing, holiday, housing contributions), taxable insurance fees due to these activities, income originating from securities.
- Income originating from refund of expenses above the amount of certified expenses.
- Part of severance pay (for the tax year or earlier) concerning the year 2005.
- Withdrawal of a private entrepreneur
- Income gained by an assisting family member in a joint business.
- Income originating from activity of agricultural primary producers. This kind of income needs to be declared only if it is more than 600,000 HUF.
- Income originating from intellectual activities; that is income received for a composition that enjoys legal protection of copyright and that was earned outside of employment or enterprise.
- Other income originating from independent activities (not carried out as a private entrepreneur), not intellectual income.
- Non-taxable emoluments (Incomes of this kind are to be consolidated, which means that they are part of the tax base, but tax can be reduced by the amount of tax calculated for this kind of income.): child-care allowance; child raising support; foster parent fee; nursing fee as determined by the act on social provisions; social caretaker fee received outside of employment (maximum 48,000 HUF a year); allowance for students taking part in vocational training (maximum 15% of the minimum wage); scholarship that is the legal due of full-time students in higher education, schoolbook and lecture notes support, residence support substituting for accommodation in student hostels; etc. From 2007 the old age pension is part of the non-taxable emoluments too; the family allowance and the maternity grant was part of the non-taxable emoluments too in 2010.
- Income not qualifying as provision of service (not pension-like income) paid by a private pension insurance company to the beneficiary
- Income originating from the alienation of land received by way of compensation

The tax base is made up of the incomes to be consolidated (including non-taxable emoluments). Tax is calculated on the basis of the tax base, according to the tax table. From 2007 a 4% additional tax was inducted at the upper income bracket. This limit has increased to 7,446,000 at 2009. This additional tax was abolished in 2010.



In 2010 a new tax base was introduced, this is the 127% of the previous tax base, and the tax table was changed too.

Tax table from 2006 to 2010:

In 2006: 0 – 1,550,000 HUF 18 %; above 1,550,000 HUF 36 %;  
 in 2007: 0 – 1,700,000 HUF 18 %; above 1,700,000 HUF 36 %;  
 in 2008: 0 – 1,700,000 HUF 18 %; above 1,700,000 HUF 36 %.  
 in 2009: 0 – 1,900,000 HUF 18 %; above 1,900,000 HUF 36%  
 in 2010: 0 – 5,000,000 HUF 17 %; above 5,000,000 HUF 36%

### Tax credits:

Tax refund calculated on the bases of **income from wages**. Income from wages includes the following:

- income from wages due to employment
- social security provisions due to employment, like sick pay, child-care fee, maternity allowance
- income received for foreign service
- income originating from refund of expenses above the amount of certified expenses.
- unemployment benefit, incentive benefit for job seekers, complementary wages, wage substituting benefit, work accident allowance, compensation substituting wage-like income from employment
- wage-like income to be declared, raised abroad

Tax refund is due to a person whose total income, i.e. types of income to be consolidated, together with the income that is taxed separately, but without income originating from the selling of real-estate, is not more than 1,950,000 HUF. The tax refund is 18% of the income from wages but at maximum 9,000 HUF a month. In the case of income between 1,350,000 and 1,950,000 HUF, the maximal tax refund decreases linearly. The tax refund of the income from wages was decreased to 17 % in 2010.

Tax credit on income from wages <sup>3</sup>

	2006	2007	2008	2009	2010
Maximum monthly amount	9,000 HUF	9,000 HUF	11,340 HUF	11,340 HUF	15,100 HUF
The lower limit	1,500,000 HUF	1,500,000 HUF	1,250,000 HUF	1,250,000 HUF	3,188,000 HUF
The higher limit of the income	2,100,000 HUF	2,100,000 HUF	2,762,000 HUF	2,762,000 HUF	4,698,000 HUF

<sup>3</sup> From 2008 together with the additional tax credit on income from wages.



If the total income is not more than 1,302,400 HUF in a year, the taxpayer can expect an additional tax refund in 2006 and 2007. The additional tax refund is 18% of the difference between the actual monthly income from wages and 50,000 HUF, but maximum 2,340 HUF a month. In the case of gross income between 1,000 000 and 1,561,600 HUF, the maximal additional tax refund linearly decreases. From 1<sup>st</sup> of January 2008 the separate tax credit and the additional tax credit on income from wages ceased.

Persons with a disability level of at least 67% are eligible for tax credit for serious disability. The personal income tax amount to be deducted due to **serious disability** is 2,000 HUF a month.,

**Family tax credit (*családi adókedvezmény*):** From 2006 the families who are bringing up one or two children are no longer eligible for the family tax credit. From 2006 144 000 HUF yearly ( $3 \times 4000 \text{ HUF} \times 12$ ) may be brought into the tax calculation of a families with three children, where all three children are qualified as dependents. In the case of consorts and common-law wives and husbands, family allowances can be shared because, in this way, more allowance can be claimed. Family allowance can be claimed in full up to 8,000,000 HUF total income, whilst on the income exceeding the 8 000 000 HUF limit, only 20% can be claimed. Hence tax credit = tax credit – ((total income – 8 mln) \* 20%).

#### **Non-simulated tax credits:**

Although this detailed system of tax credits was considerably simplified at 2007, most of the items were terminated and income cap was introduced to define eligibility, we provide here a description of the genuine system.

- Tax credit received after the amount paid to a **voluntary health fund**. 30% of the amount credited in the tax year, but maximum 100,000 HUF per year, except if the taxpayer reaches retirement age before 1 January 2020, in that case 130,000 HUF per year. The amount of the two lines above, added up, cannot be more than 120,000 or 150,000 HUF.
- 10% of the amount tied up in a voluntary health fund, if it is at least for 24 months. Maximum 100,000 HUF or 130,000 HUF together with the amount of allowances claimed by right of payments made to the voluntary health fund.
- Allowance for **preventive service** provided by a voluntary health fund, 10% of the amount paid. Maximum 100,000 HUF or 130,000 HUF together with the amount of allowances claimed by right of having tied up amount.
- Allowance for **pension contribution paid** on the basis of agreement with the employer. 25% of the amount paid.
- 25% of the **membership fee** paid on the basis of agreement with the employer to a private pension fund.
- 30% of **complementary payment above the membership fee** paid to a private pension fund.
- 25% of income originating from **intellectual activities**, but maximum 50,000 HUF.
- Allowance for the amount spent on paying off a **loan for buying accommodation**. In the case of loan agreements made with a loan-office after 31 December 1993, the allowance is 40% or 30% of the capital, the interest and the additional costs to be paid off. It is 40% if the interest of the loan received was subsidised by the state; the amount of loans received was not more than 15,000,000,000 HUF and the loan was spent on buying newly built accommodation in Hungary. It is 30% if the amount of loans received was not more than 10,000,000 HUF but the conditions to claim 40% have not been fulfilled. The maximum of the allowance is 120,000 HUF. The allowance can be claimed either by the debtor or the fellow-debtor but it cannot be shared. The allowance can be claimed by those, whose taxable income (that is types of income to be consolidated, together with the income that is taxed separately, but without income originating from the selling of real-estate) is not more than 4,000,000 HUF. If the income is more than



3,400,000 HUF the amount of allowance is to be decreased by 20% of the amount of income above the 3,400,000 HUF level. If one's spouse or partner in life (who is partner in debt and owner of the real estate, too) is entitled to child-care allowance for more than six months in the tax year, the competence level is 5,000,000 HUF, but if the income is more than 4,400,000 HUF the amount of allowance is to be decreased by 20% of the amount of income above the 4,400,000 HUF level. Tax-allowance can be claimed in the tax year when the first payment was made and in another four tax years.

- Allowance for amounts paid towards **tuition fees** in higher education. 30% of the tuition fee paid in the tax year for the first basic training of a student, maximum 6,000 HUF a month and 60,000 HUF a year per student.
- 30% of **tuition fees in adult education**, but maximum of 60,000 HUF per year. It can be claimed if the total income is not more than 4,000,000 HUF. If the income is more than 3,400,000 HUF the maximum amount of allowance is to be decreased by 10% of the amount of income above the 3,400,000 HUF level.
- Allowance for the amount spent on **buying computer equipment** within the programme called Sulinet, is maximum 60,000 HUF, together with the tuition fee in adult education. It can be claimed if the total income is not more than 4,000,000 HUF. If the income is more than 3,400,000 HUF the maximum amount of allowance is to be decreased by 10% of the amount of income above the 3,400,000 HUF level.
- Allowance for **primary producers** in agriculture: this allowance is the amount of tax payable for the income raised by way of primary production or small-scale production, but maximum 100,000 HUF per year.
- Allowance for **life and retirement insurance fees**. In the case of insurance paid for a period of ten years or longer, it is 20% of the fee paid in the tax year. If the fee paid was higher than in the previous tax year, then an additional 10% of the difference can be claimed. The allowance can be maximum 100,000 HUF.
- Allowance for **payments made towards public interest organisations**, the Church, with the aim of assumption of obligations for purposes of public interest, 30% of the amount paid, in the case of prolonged donation an additional 5%, but maximum 50,000 HUF.
- Allowance for **payments made towards public interest organisations of high priority**, 30% of the amount paid, in the case of prolonged donation an additional 5%, but maximum 100,000 HUF.

#### Separately taxed income types are the following:

- Flat-rate taxation income of private entrepreneurs: In the case of flat-rate taxation, the accountable cost ratio is fixed, the ratio itself is defined by the law, depending on the type of activity and it varies between 40-87%. Tax is payable for the revenues remaining after the cost ratio was deducted. The amount of tax payable depends on the income: 200,000 HUF 12.5%; 200 000 – 600 000 HUF 25%; 600 000 – 800 000 HUF 30% above 800 000 HUF 35%
- Income of private entrepreneurs, liable to entrepreneurial personal income tax and entrepreneurial dividend tax. The personal income tax of entrepreneurs is 16% of the entrepreneurial tax base. The entrepreneurial tax base basically means the revenues remaining after costs were deducted but the exact system of rules is rather complex. The entrepreneurial dividend base is the entrepreneurial income remaining after taxation. Tax payable for the entrepreneurial dividend base is 20% up to 30% of entrepreneurial withdrawal; above that it is 35%.
- Flat-rate taxation income of small-scale agricultural producers. The accountable cost ratio is fixed, depending on the type of activity; it is between 80-94%. The amount of tax payable is the same as in the case of flat-rate tax of private entrepreneurs.
- Flat-rate taxation income of hosts receiving paying guests The tax amounts to 32,000 HUF a year, out of which 80% is payable in the form of personal income tax and 20% as flat-rate



health contribution. The amount of tax payable does not depend on whether guests were received throughout the year or only part of the year.

- Income originating from the sale of real-estate. Tax rate is 20% and it does not need to be declared, if the real-estate was obtained before 1988, or if there was no income originating from it. Allowance for getting an apartment is the duty of those who buy or build real-estate inland for themselves or for near relatives, either within 12 months before the sale or within 60 months afterwards. The amount spent for purchasing it can be deducted from the income originating from sale.
- Income originating from the sale of movable property. Tax rate is 20%., however, if the income originating from the sale of movable property is not more than 200 000 HUF, the sale is exempt from taxes. If it is more than 200 000 HUF, it needs to be declared but 40 000 HUF can be deducted from the tax.
- Income originating from life-annuity contract. Tax needs to be paid if the life-annuity contract was made after 1996 and life-annuity is received without compensation. The tax rate is 35%. It is tax-exempt: 1) if the contract ensuring support for life, the testamentary contract or the life-annuity contract was made with a private person; 2) if the contract ensuring support for life, the testamentary contract or the life-annuity contract was signed between a pensioner and an organisation financed by the state budget or a local government; 3) if life-annuity was received in return for real estate, right of property or movable property.
- Income originating from rate of exchange gain. Tax rate is 25%.
- Income originating from securities lending. Tax rate is 20%.
- Income raised by right of dividends Tax rate is 20% up to 30% of the financial deposit of the person entitled to receive the dividend. Above that it is 35%.
- Income raised by right dividend, taxable abroad. Tax rate is 20%. Tax justifiably paid abroad can be deducted, but if Hungary does not have a convention ruling out double taxation, at least 5% of the tax has to be paid in Hungary. etc.

Tax liability is the total of the amount of tax payable for incomes to be consolidated reduced by allowances and the amount of tax payable for incomes taxed separately. Tax return does not need to be filed by those who only have tax-exempt income. Tax-exempt incomes are the following:

- pensions
- severance pay received with regard to the cessation of the right for widow's pension
- supplementary income
- income substitution for the unemployed
- subsidy received prior to beginning independent activities, joining an economic society or founding an economic society, based on provisions of the law or international contracts
- maternity benefit given by the state, with regard to social considerations or within the system of social security
- social benefits
- temporary benefits
- funeral support given in accordance with the provisions of the social law by the local government, by an interest organisation or by the employer
- home maintenance support, subsidy for rental of accommodation
- orphans' allowance
- foster-parent fee, special provision due to foster parents
- after-care provision
- old age allowance
- personal allowance of the blind
- disability allowance, travelling support for seriously disabled private persons as provided by the law
- family aid for the relatives of conscripts and those carrying out civil service, monetary supply to disabled serviceman, national fee for care as provided by the law



- income of interest payment received from a private person or from a pay-office, if it is maximum 5% more than the base rate of the central bank interest
- debt management service

Among tax-exempt incomes, payment in kind supplementing wages also needs to be mentioned. One of the most frequently used forms is the provision of lunches on vouchers. These are tax- and contribution payments exempt both for the employer and for the employee up to 8,000 HUF if they ensure warm meals and up to 4,000 HUF if they ensure cold meals. Lunches on vouchers can also be received by students taking part in vocational training and ex-employees that are already pensioners. Season tickets for local travelling are also tax-exempt.

Another significant item is the provision of holiday contributions. These can be given for free, either in the form of holiday services or in the form of holiday checks and can also be used by close relatives, either together with or separately from the employee. Its limit is the amount of the minimum wage, in 2006 62 500 HUF. Schooling support can also be provided tax-exempt for the parents at the beginning of the school year, up to 17 000 HUF. Finally, so-called “presents of little value” can also be given to employees, up to 10% of the minimum wage.

**Simplified business tax (*egyszerűsített vállalkozói adó*):** The simplified business tax (EVA), as a form of taxation was introduced on 1 January 2003. EVA addresses small-scale enterprises, not only with the aim of reducing tax burdens but also in order to simplify administration. This form of taxation provides an opportunity for the legal transformation of revenues into freely utilizable income, it is easy to calculate and there are relatively fewer rates and taxes to be paid. In 2005, 118,800 million HUF was paid as EVA to the budget. In the previous year there were 82,848 private and joint businesses included in EVA, 54% of those are private entrepreneurs, 37% are joint businesses with no legal entity (deposit companies) and 10% are joint businesses with legal entity (limited liability companies).

The main characteristics of those belonging to EVA are made quite clear by the provisions of the law. EVA, as a form of taxation, can be chosen by private entrepreneurs, unlimited partnerships, deposit companies, limited liability companies, co-operatives, lawyers' offices etc., if the taxpayer carried out its activities in the previous tax year continuously, without transformation and its revenues in the two previous tax years and, as reasonably expectable, in the current tax year are not more than 25,000,000 HUF. EVA is in place since 2004. Economic societies can choose this form of taxation, if every member of the society is a private person and the economic society does not have a share in another economic society. There are some further restrictions ordained by the law, for example, it is only possible to become subject to EVA if tax authorities have not previously imposed a fine due to negligence on the company, if the company does not produce and does not circulate products imposed by excise tax, does not carry out any activities that require the permission of the Hungarian Financial Supervisory Authority or the Gaming Board.

Calculation of EVA is based on the amount of total revenues together with the VAT. The tax rate was 15% in 2005. Those paying EVA are exempted from paying the VAT, they do not have to pay entrepreneurial personal income tax and if they have no other revenues, they do not have to file a personal income tax return.

From the above, it emerges that the choice of EVA is reasonable for those enterprises that obtain revenues without much expense, or in the case of which the expenses cover partly entrepreneurial and partly household demands. It cannot be precluded, especially within a couple of years of the introduction of a new method of taxation, that certain people chose this opportunity by mistake. Still, we can assume that, in the case of the majority of the companies, the results remaining after taxation can predominantly be considered as incomes of households and EVA can be regarded as a tax payable by households. EVA rate was increased in 2007 to 25%



**Local taxes (*helyi adók*):** Problems of local taxes are the result of territorial division. There are more than 3 100 local governments in Hungary, all of which might have their own provisions concerning tax types below. They have a legal right to levy taxes and even though there is a maximum limit, the actual regulations are framed by the local governments.

### **Indirect taxes**

**Value Added Tax:** In Hungary, VAT was introduced in 1988. VAT is to be paid after each and every product and service sold inland and after the import of products. VAT is payable both by private persons and by legal entities, which means that there are only estimates available concerning the size of VAT paid by the population. In 2005, 1,785,316 million HUF VAT was collected by the central budget, out of which about 86% was paid by the population. VAT revenues form the major source of income for the budget. The general amount of VAT is 25%, with the exception of the products and services listed in the following table (more details in the Feasibility Study).

**Excise tax** was collected by the National Tax and Customs Administration, most of which can be considered as household payment. The tax on fuels certainly concerns the transport and delivery sector to a high degree and the burdens of the sector are cast on the population only in an indirect manner.

**Environmental protection fee** was collected by the budget. Environmental protection fee is payable by the circulator or the importer when the products (crude oil products, rubber tyre, refrigerator, coolant, wrapping, etc.) are imported or put on the market for the first time. The larger part of the sum, either directly or indirectly burdens the population but one part is divided between different economic organisations.

**Charge for environmental load** is payable by those, who, with an official permission, burden the environment by letting a certain substance to the air, to the surface of waters, to periodical watercourses, or to the ground. The tariffs, once again, are calculated with the help of complex formulas. Certain service providers, who meet the needs of the population, for example those providing district heating, are exempted from the charges. At the same time, in the case of the usage of sewers, it is the private consumer who bears these costs.

**Gambling tax:** According to the law, the following are considered as games of chances: games played drawing lots, the operation of slot machines and casinos, betting on horses or other things, out of which the organisation of lottery, football-pool, bingo and horse-race is state privilege. The tax is payable by the organiser of the game of chance.

**Registration tax:** The registration tax was introduced in February 2004. It implied the replacement and modification of the previously imposed excise tax concerning motor vehicles. The tax is payable by the new owner, either a natural person, or a legal entity, after every motorcar and caravan put into traffic. The amount of tax payable depends on the type of the engine, the cubic capacity of the cylinders and on the environmental category the car is included in.

**Energy tax:** Fees are to be paid according to the amount of electric power and natural gas. Energy tax is payable by public-utility companies selling energy to public-utility consumers, by energy traders selling energy to authorized consumers, by authorized consumers buying or importing energy from a producer and by energy producers generating energy for their own purposes.

- *Scope and scale*

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



Table 8. Taxes: taxpayers (as % of population)

	2006	2007	2008	2009	2010
<b>Direct taxes</b>					
Personal income tax	44.24%	45.56%	n.a.	n.a.	n.a.
Corporate tax	12.30%	12.63%	n.a.	n.a.	n.a.
Simplified business tax	1.15%	1.15%	n.a.	n.a.	n.a.

Source: Hungarian Tax and Financial Control Administration, 2010

Table 9. Taxes: revenue

	2006	2007	2008	2009	2010
<b>Annual revenue (million HUF)</b>	7,163,894	8,653,988	n.a.	n.a.	n.a.
<b>Direct taxes</b>					
Personal income tax	22.05%	20.80%	n.a.	n.a.	n.a.
Corporate tax	6.54%	7.13%	n.a.	n.a.	n.a.
Simplified business tax	2.00%	1.77%	n.a.	n.a.	n.a.
<b>Indirect taxes</b>					
Value Added Tax	25.57%	22.87%	n.a.	n.a.	n.a.
Environmental protection fee	0.33%	0.31%	n.a.	n.a.	n.a.
Gambling tax	1.00%	0.83%	n.a.	n.a.	n.a.

Source: Hungarian Tax and Financial Control Administration, 2010

## 2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD

### 2.1 Scope of simulation

Not all the taxes and benefits mentioned in the previous section are simulated by EUROMOD. Some are beyond its scope entirely and are neither included in the EUROMOD database nor in the output income variables (e.g. Value Added Tax). Others are not possible to simulate accurately with the available data (old age benefits and unemployment benefits). They are included in the database and may be chosen as components of output variables, but the rules governing them may not be changed in the model. Table 10 and Table 11 classifies each of the main tax-benefit instruments (and some minor ones introduced above) into one of these groups and provides a brief explanation as to why the instrument is not fully simulated if this is the case.





Table 10. Simulation of benefits in EUROMOD

	2006- 2010	2006- 2010	Why not fully simulated?
Old age benefit	POA	I	No data on contribution history
Early Retirement Pension	POA	I	No data on contribution history
Advanced Pension	POA	I	No data on contribution history
Temporary Widow(er)'s Pension	PSU	I	No data on contribution history
Permanent Widow(er)'s Pension	PSU	I	In the EU-SILC database if the survivor's benefits paid after the standard retirement age these benefits are included under the old age benefits.
Parental Pension	PSU	I	No data on contribution history
Orphan's Allowance	PSU	I	No information about the eligibility conditions
Absence Fee	BHL	I	Data available is not sufficient to simulate all eligibility conditions
Sickness Benefit	BHL	I	Data available is not sufficient to simulate all eligibility conditions
Invalidity Annuity	PDI	I	No information on disability
Temporary Invalidity Annuity	PDI	I	No information on disability
Disability Benefit	PDI	I	Data available is not sufficient to simulate all eligibility conditions
Work Accident Sickness Benefit	BHL	I	No information about the sickness
Work Accident Annuity	BHL	I	No information about the sickness
Work Accident-related Disability Pension	PDI	I	No information about the sickness
Unemployment Benefit	BUN	S	No data on contribution history (coded (PS) but currently switched off)
Pre-retirement Unemployment Assistance	BUN	I	No data on contribution history
Incentive Benefit for Job-seekers	BUN	I	No data on contribution history
Maternity Allowance	BMACT	I	No data on contribution history
Maternity Grant	BMANC <sub>c</sub>	S	
Child Care Allowance	BCCNC <sub>c</sub>	S	
Child Care Fee	BCCCT	I	No data on contribution history
Child Raising Support	BCCLT	S	
Family Allowance	BCHNM	S	
Regular Child Protection Allowance	BCHMT	S	
Old age allowance	POAMT	S	
Regular benefit	BSA00	S	
Home maintenance support	BSAHO	PS	No information about the size of flat
Nursing fee	-	I	No information about the eligibility conditions

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



Table 11. Simulation of taxes and social contributions in EUROMOD

	2006- 2010	2006- 2010	Why not fully simulated?
Personal income tax	tin	PS	No information about all of the tax credits
Corporate tax	-	E	No information available
Simplified business tax	tbs	S	No information about the type of the self-employment, but we estimate the number of the tax payers. Every eighth self-employment choosed this type of tax paying in 2006. (~100 000 person or firm)
Local taxes	-	E	No information available
Value Added Tax	-	E	No information available
Excise tax	-	E	No information available
Environmental protection fee	-	E	No information available
Charge for environmental load	-	E	No information available
Gambling tax	-	E	No information available
Registration tax	-	E	No information available
Energy tax	-	E	No information available
Employee Social Insurance Contributions	tscee	S	
Employer Social Insurance Contributions	tscer	S	
Self-employed Social Insurance Contributions	tscse	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.



## 2.2 Simulated policies and order of simulation

### 2.2.1 Simulated policies

The model allows simulating changes in the tax rates and contribution rates, changes in tax deductions and allowances, family benefits, and major rules for social assistance benefit. 2005 is the first simulated year of the Hungary's policies in EUROMOD. The order of simulation is reported below.

### 2.2.2 Order of simulation and interdependencies

The following table shows the order in which policies of the Hungarian fiscal system are simulated. This table is extracted from the EUROMOD parameter sheets *Spine\_HU*.

Table 12. EUROMOD Spine: order of simulation, 2006-2010

Policy	Description	Main output
Bun_hu	Unemployment benefit (munkanélküli járadék), currently switched off for all years	Bunct_s
Bmanc_hu	Maternity grant (anyasági támogatás)	Bmanc_s
Bccnc_hu	Child care allowance (gyermekgondozási segély)	Bccnc_s
Bcclt_hu	Child raising support (gyermeknevelési támogatás)	Bcclt_s
Bchnt_hu		
Tscee_hu	Employee social insurance contributions	Tscee_s
Tscer_hu	Employer social insurance contributions	Tscer_s
Tscse_hu	Self-employed social insurance contributions	Tscse_s
Tin_hu	Personal income tax (személyi jövedelemadó)	Tin_s
Tbs_hu	Simplified business tax (egyszerűsített vállalkozói adó)	Tbs_S
Bchmt_hu	Regular child protection allowance (rendszeres gyermekvédelmi kedvezmény)	Bchmt_s
Bsa_hu	Social assistance (szociális segélyek)	Bsa_s

In the Hungarian system there are four means-tested benefits that can be simulated. Their amounts are calculated within two policies: regular child protection allowance and social assistance (including old age allowance, regular benefit and home maintenance support). They all depend on income after income tax and employee and self-employed contributions have been deducted. They are therefore simulated after the simulation of income taxes and contributions.

The other four simulated benefits are non means-tested benefits. These are: maternity or child related benefits that depend on the age of the child or the number of the dependent children in the household. So these non-means-tested benefits must be simulated first.

## 2.3 Social benefits

### 2.3.1 Maternity grant (*Bmanc\_hu*)

Resident women who give birth, having previously participated in pre-natal care at least 4 times and having no insurance, are entitled to a one-off lump-sum payment of 225% of the minimum old age pension or 300% in case of twins in 2009. (In EUROMOD 2009 the twins regulation is not implemented because of the lack of data.)



- **Definitions**

The unit of analysis is the family (TU: `cbfam_hu`). This comprises the head, his spouse or partner (TU: `cbfam_hu/ Partner & OwnDepChild`) and their own children. Dependent children are defined in the taxunit as aged 16 or younger or 24 or younger if they are in full-time secondary education, not married and not cohabiting (TU: `cbfam_hu/ !{IsParent} & ({dag<=15} | ({dag<=24} & {dec>=3} & {dec<=4}) & !{IsWithPartner} & !{IsMarried}))`).

- **Eligibility conditions**

This benefit is paid if at least one one-year old child lives in the family. (Mod: `co_elig / {dag=0}`)

- **Income test**

This benefit does not depend on other incomes. Income test is not necessary.

- **Benefit amount**

The maternity grant is a lump-sum payment of 225% of the minimum old-age pension, i.e. in Euromod monthly output it is divided by 12) (`$MinPension_m/12 * 2.25`)

### 2.3.2 Child care allowance (*Bccnc\_hu*)

A flat-rate benefit to parents who stay away from work to care for their children under the age of 3 (under age of 10 in case of permanently ill or severely disabled children) or for grandparents who care for their grandchildren aged between 1-3 years in the household of the parent. The monthly amount is equal to the minimum old age pension.

- **Definitions**

The unit of analysis is the family (TU: `ccfam_hu`). This comprises the head, his spouse or partner, grandparents and their own children (TU: `ccfam_hu / TU: ccfam_hu`). Dependent children are defined in the taxunit as age<=2 or age<=9 if disabled (`!{IsParent} & ({dag<=2} | ({dag<=9} & {IsDisabled}))`), grandparents are defined as parents of the child's mother or father.

- **Eligibility conditions**

Eligible are units where at least one adult person is caring for a 0-2 years old child if the person is the parent, or a 1-2 year old child if the person is the grandparent (`!{IsParent} & ({dag<=2} | ({dag<=9} & {IsDisabled}))`).

Since 2008, the caring parent of children under 1 year of age cannot pursue a gainful activity, while above 1 year of age parent can be gainful without restriction.

- **Income test**

Income test is not applicable

- **Benefit amount**

The monthly amount is equal to the minimum old age pension (`$MinPension_m`).



### 2.3.3 Child raising support (*Bcclt\_hu*)

Benefit for parents who raise three or more children in their own home, if the youngest child is between 3 and 8 years old. The monthly amount is equal to the minimum old age pension, irrespective of the number of children.

- **Definitions**

The unit of analysis is the family (TU: `cbfam_hu`). This comprises the head, his spouse or partner (TU: `cbfam_hu/ Partner & OwnDepChild`) and their own children. Dependent children are defined in the taxunit as aged 16 or younger or 24 or younger if they are in full-time secondary education, not married and not cohabiting (TU: `cbfam_hu/ !{IsParent} & ({dag<=16} | ({dag<=24} & {dec>=3} & {dec<=4})) & !{IsWithPartner} & !{IsMarried}`)).

- **Eligibility conditions**

Eligible are families where parent(s) work maximum 4 hrs per week in order to take care of at least 3 dependent children where there is at least one child with age between 3 and 7 years-old (included) and no child age 0 to 2 (i.e. a 3-7 year old child is the youngest) (`{nDepChInTu>=3} & {nDepChInTu>0}#1 & {nDepChInTu=0}#2`).

- **Income test**

Income test is not applicable

- **Benefit amount**

The monthly amount is equal to the minimum old age pension (`{MinPension_m}`).

### 2.3.4 Family allowance (*BCHNM\_HU*)

It is paid to the parent from the birth of the child to the termination of studies in the compulsory education system (usually 0-16 years), and then during secondary school education or vocational training of the child (up to 20 years of age). Its amount depends on the number of children in the family, whether a single-parent family or not and whether the child is disabled. In the month of July double amounts are paid in order to support schooling (But the monthly simulation can't be implemented).

- **Definitions**

The unit of analysis is the family (TU: `cbfam_hu`). This comprises the head, his spouse or partner and their own children (TU: `cbfam_hu/ Partner & OwnDepChild`).

Dependent children are defined in the taxunit as aged younger than 16; or 24 if they are in full-time secondary education, not married and not cohabiting (`!{IsParent} & ({dag<=17} | ({dag<=25} & {dec=6})) | ({dag<=23} & {dec>=3} & {dec<=4})) & !{IsWithPartner} & !{IsMarried}`)).

- **Eligibility conditions**

Family Allowance is a universal benefit. This benefit is paid if at least one dependent child lives in the family.

- **Income test**

Income test is not necessary



- **Benefit amount**

The monthly amounts for lone parents (*IsLoneParentOfDepChild*) are :

- 1 child (*nDepChInTu=1*): HUF 13,700 in 2009,
- 2 children (*nDepChInTu=2*): HUF 14,800 per child (*IsDepChild*),
- 3 or more children (*nDepChInTu>2*): HUF 17,000 per child (*IsDepChild*),
- permanently ill or severely disabled child (*IsDisabled*): HUF 25,900.

The monthly amounts for other families (*co\_bchnm = 0*) are:

- 1 child (*nDepChInTu=1*): HUF 12,200,
- 2 children (*nDepChInTu=2*): HUF 13,300 per child (*IsDepChild*),
- 3 or more children (*nDepChInTu>2*): HUF 16,000 per child (*IsDepChild*),
- permanently ill or severely disabled child (*IsDisabled*): HUF 23,300 by 2009.

The amounts in these four years:

	2006	2007	2008	2009	2010
1 child in the family	11,000	11,700	12,200	12,200	12,200
1 child, single parent	12,000	12,700	13,700	13,700	13,700
2 children in the family	12,000	12,700	13,300	13,300	13,300
2 children, single parent	13,000	13,800	14,800	14,800	14,800
3 or more children in the family	14,000	14,900	16,000	16,000	16,000
3 or more children, single parent	15,000	15,900	17,000	17,000	17,000
permanently ill or severely disabled child in the family	21,000	22,300	23,300	23,300	23,300
permanently ill or severely disabled child, single parent	23,000	24,400	25,900	25,900	25,900

The special amount for foster children cannot be simulated.

### 2.3.5 Regular child protection allowance (*Bchmt\_hu*)

This benefit is paid to the family if the income per person in the family does not exceed the amount of the defined percentage of the minimum old age pension.

- **Definitions**

The unit of analysis is the family (*TU: cpfam\_hu*) This comprises the head, his spouse or partner and their own children (*TU: cbfam\_hu/ Partner & OwnDepChild*).



Dependent children are defined in the taxunit as aged 17 or younger, or under age 23 (included) if they are in full-time secondary education, not married and not cohabiting or 25 or younger if they are in full-time tertiary education, not married and not cohabiting (TU: cbfam\_hu/!  
 !{IsParent} & ({{dag<=17} | ({{dag<=25} & ({{dec=6} | ({{dag<=23} & ({{dec>=3} & ({{dec<=4}})) & !{IsWithPartner} & !{IsMarried}})).

- **Eligibility conditions**

Eligible are families where per capita monthly income (as defined in `il_meanstestY`) is below the amount of the 120% in 2006 and 2007, 125% in 2008 and 130% in 2009 and 2010 of the minimum old age pension (`{sin01_s < $MinPension_m*1.30}`)

- **Income test**

The `il_meanstestY` is defined as disposables income (`std_dispy`) with the exception of this benefit and social assistance (as they are not yet calculated)

- **Benefit amount**

While in 2005 the benefit was paid to families with children in proportion to the number of dependent children, from 2006 the benefit became a fixed amount paid per year to families with children. It amounts to 10 000 HUF per year (`10000#y`) in 2006 and 2007; 11 000 HUF in 2008 and 11 600 HUF in 2009.

## 2.3.6 Social assistance (BSA\_HU)

### 2.3.6.1 Old age allowance

This is a social assistance scheme to ensure a minimum income during old age in the absence of an old age pension. The amount of the benefit is determined by the income of the person (and his/her partner or spouse).

- **Definitions**

The unit of analysis is the ‘couple’ (TU: couple\_hu). This comprises the head, his spouse or partner (TU: cbfam\_hu/Partner). Taxunit comprises only head and his/her partner, i.e. income of other household members is not taken into account.

- **Eligibility conditions**

Eligible are people who have reach the pension age (respectively 60 for women and 62 for male in 2006) or those living in a couple (`nPersInUnit=2`) where at least one person is older than the pension age. `{IsWithPartner} & ( ({{dgn=1} & {dag>=$PenAge} & {GetPartnerInfo#1=0} & {GetPartnerInfo#2>=$PenAgeFem}} | ({{dgn=0} & {dag>=$PenAgeFem} & {GetPartnerInfo#1=1} & {GetPartnerInfo#2>=$PenAge}}) ) & {il_meanstestY1 < ($MinPension_m*0.80*2)}`

- **Income test**

(`il_meanstestY`) is defined as disposables income with the exception of regular child protection benefit (`bchmt_s`) and social assistance (`bsa_s`) (as they are not yet calculated).

- **Benefit amount**

For couples the maximum benefit amounts to 80% of the minimum old age pension (`$MinPension_m*0.8`) per person.



For singles the maximum benefit amounts to 95% of the minimum old age pension ( $\$MinPension_m * 0.8$ ) or 130% if the person is older than 75 years old ( $\$MinPension_m * 0.8$ ). Income of the couple/single (as defined in `il_meanstestY`) is withdrawn completely from maximum benefit (`withdraw_rate=1`); `comp2_cond: !{IsWithPartner} & (({dgn=1} & {dag>=$PenAge}) | ({dgn=0} & {dag>=$PenAgeFem})) & {dag<75} & {il_meanstestY1<($MinPension_m*0.95)}`.

### 2.3.6.2 Regular benefit

This is a social assistance scheme to ensure a minimum standard of living. From 2006 to 2010 the assessing of the entitlement and the amount of the assistance based on the income projected to the consumer unit instead of the previous income per capita. The consumer unit is the rate which shows the structure of consumption within a family. The first major member of the family and the disabled child's rate is 1,0 while the ratio of the companion (spouse) and a child is lower (0,9-0,7) ( $1 + ((nAdultsInTu - 1) * 0.9) + (nDepChInTU * 0.7)$ ).

- **Definitions**

The unit of analysis is the household (TU: `tu_asfam_hu`), i.e. all individuals in the household are members of the same unit. From 2006 by the new terms for the support is entitled only one person in a family (TU: `asfam_hu`).

Dependent children are defined in the taxunit: `{dag<16} | (({dag<=20} & ({yem<=0} | {yse<=0} )) | (({dag<=24} & {dec>=3} & ({yem<=0} | {yse<=0} )) & !{IsWithPartner} & !{IsMarried})`

- **Eligibility conditions**

Eligible are persons who are 18 years or older ( $DAG > = 18$ ) or have a disability degree of at least 67% ( $DDI = 1$ ) or are non-employed, i.e. unemployed ( $\{yem = 0\} \& \{yse < = 0\}$ ) and their income is smaller than the 90% of the minimum pension ( $\$MinPension_m * 0.9$ ).

In 2009 the regular benefit was replaced by the stand-by allowance. The eligibility conditions were changed: `(({dag>55} & {dag<$PenAge}) | ({dag>=18} & {dag<=55} & {nDepChInTU#1>0} )) & (({ddi=1} | {pdi>0}) | ({yem=0} & {yse<=0})) & {il_sareexclY#1<=0}`. Individuals are eligible if they are disable or older than 55 years old or has dependent children and they are not entitled to unemployment benefit and he/she has low income (as defined by `il_sareexclY` in the `incomelist`) and does not get the benefits.

- **Income test**

`il_meanstestY` is defined as disposable income with the exception of regular child protection benefit and social assistance.

- **Benefit amount**

From 2006 to 2009 the maximum benefit amounts to 90% of the minimum old age pension. The payable amount is the difference between the `meantest` income and the income calculated with the per compulsory unit (`output var: sell_s`). The lower and upper limit of the benefit is 0 and the minimum wage.





### 2.3.6.3 Stand-by allowance (in the year 2009 and 2010)

This is a social assistance scheme to ensure a minimum standard of living. The assessing of the entitlement and the amount of the assistance based on the income projected to the consumer unit instead of the previous income per capita. The consumer unit is the rate which shows the structure of consumption within a family. The first major member of the family and the disabled child's rate is 1,0 while the ratio of the companion (spouse) and a child is lower (0,9-0,7)

$$(1 + ((nAdultsInTu - 1) * 0.9) + (nDepChInTU * 0.7)).$$

- **Definitions**

The unit of analysis is the household (TU: `asfam_hu`), i.e. all individuals in the household are members of the same unit.

Dependent children are defined in the taxunit: `!{IsParent} & !{IsWithPartner} & !{IsMarried} & (({dag<16} | ({dag<=20} & {dec>0} & ({yem#1=0} | {yse#1=0}))) | ({dag<24} & {dec>=3} & ({yem#1=0} | {yse#1=0})))`.

- **Eligibility conditions**

Eligible are persons who are younger than 55 and older than 18 years old (`DAG<=55 & DAG>17`) and have a disability degree of at least 67% (`DDI=1`) or do not receive unemployment benefit (`cbun<=0`) and are non-employed, i.e. unemployed (`LES=5`) and do not have income as defined in `il_sareexclY (il_sareexclY<=0)` and do not received regular social benefit. `{bsa00_s#1=0}`

- **Income test**

`il_meanstestY` is defined as disposables income with the exception of regular child protection benefit and social assistance (as they are not yet calculated).

- **Benefit amount**

The maximum benefit amounts to the minimum old age pension.

### 2.3.6.4 Home maintenance support

This is a means-tested benefit provided by the local government for a family or individual who lives in a home not exceeding a specified size, provided that there is no income from the use of that home.

- **Definitions**

The unit of analysis is the household (TU: `household_hu`) i.e. all individuals in the household are members of the same unit.

- **Eligibility conditions**

Eligible are households where per capita income does not exceed 150% of the minimum old age pension and home maintenance costs are 20% of hh-income or above (`xHC>=sin03; sin03=il_meanstestY*0.2`). The condition that the size of the flat must not exceed an acknowledged size cannot be simulated as no variable for the size of flat is available.

- **Income test**

`il_meanstestY` is defined as disposables income with the exception of regular child protection benefit and social assistance (as they are not yet calculated).



- **Benefit amount**

The benefit amounts to monthly 2500 HUF. In EUROMOD we can use the average monthly amount calculate with the official statistic amount (if it is available) because of the closer results to the external statistics.

Sys_par-name	HU_2006	HU_2007	HU_2008	HU_2009	HU_2010
compl_perTU	5829#m	5914#m	5900#m	5900#m	5900#m
lowlim	2500#m	2500#m	2500#m	2500#m	2500#m

## 2.4 Social contributions

In Hungary, the social insurance system has two large parts: the pension scheme and health insurance.

### 2.4.1 Employee social contributions (TSCEE\_HU)

Pension insurance contributions amount to 8.5% in 2006 and 2007; 9.5% from 2008 to 2010 ( MOD:  $co\_ArithOp / formula$  ) of employment income ( MOD:  $co\_ArithOp / coYEM$  ) with a daily upper limit ( $co\_ArithOp / uplim\_amount$ )

Employees pay 4% in 2006, 7% in 2007, 6% (from 2008 to 2010) health insurance contribution ( MOD:  $co\_ArithOp / formula$  ) and general employee insurance contributions amounts to 1% in 2006 and 1,5% of employment income (MOD:  $co\_ArithOp / formula$  ) in the following years.

No employee social insurance contributions are payed if in receipt of old age pension. The assessment unit is the `individual_hu`.

### 2.4.2 Employer social contributions (TSCER\_HU)

Pension insurance contributions amount to 18% in 2006, 21% in 2007, 24% of employment income in 2008 ; 2009 and 2010. The health insurance contributions are 11% in 2006, 8% in 2007, 5% in 2008. In 2009 the health insurance contributions amount to 2% (0-143000 HUF) or 5% (143000 HUF -) of contribution base, has to be payed. In 2010 the amount of the health insurance contributions is 2% in all income categorie.

Fixed health contributions of a monthly amount of 1 950 HUF are paid by employers for their employees. Fixed health contributions are counted as employer social insurance contributions if the person is "mainly employee" (i.e. employment income > self-employment income) otherwise as self-employed social insurance contributions.

General insurance contributions amount to 3% from 2006 to 2008. From 2009 it amounts to 1% (0-143000 HUF) or 3% (for the part above 143000 HUF -) ( $(\$MinWage\_m*2*0.01) + ((yem - \$MinWage\_m*2)*0.03)$ ).

The assessment unit is the individual (`tu_indiviual_hu`).

### 2.4.3 Self-employed social contributions

Entrepreneurs `!{yse=0}` and EVA (simplified business tax) payers (`lse00 = 1`) pay self-employed contributions.

Contribution base for entrepreneurs is self-employment income (`yse>0`) but at least the amount of the minimum wage. In the case of EVA payers contribution base is the amount of the



minimum wage. EVA payers do not pay self-employed health insurance contributions if they are at the same time employees.

The `lse00` has been generated to identify the EVA payers `{lse00=1}`. This variable is created from the self employment income variable following this method: if self-employment income (`py050g`) < 25 000 000 HUF - `{lse00=1}`. Because of the low estimate of self-employment income this causes a very large number of individual in the sample to be classified as EVA payers. In order to avoid this, a correction has been adopted: one case every eight self-employed is categorized back to a 'normal' tax payers.

Pension insurance contributions amount to 18% + 8,5% in 2006, 21% + 8,5% in 2007, 24% + 9,5% of employment income in 2008 and 2009. In 2006 pensioners who are also working only pay the 18% of the income. The health insurance contributions are 11% + 4% in 2006, 8% + 7% in 2007, 5% + 5% in 2008. In 2009 the health insurance contributions amount to 2% + 6% (0-143000 HUF) or 5% + 6% (143000 HUF -) of contribution base, has to be payed  $((\$MinWage\_m*2*(0.06+0.02))+((yem-\$MinWage\_m*2)*(0.06+0.05))$ . If the recipient gets pension she/he pays smaller health insurance contribution.

General insurance contributions amount to 1% + 3% in 2006-2008 and it amounts to 1% (employee-part) + 1,5% (0-143000 HUF) or 3% (143000 HUF -) employer part of contribution base. If in receipt of old age pension or have employer income `{POA>0 | {TSCEE_s>0}}` the general insurance contribution is 0.

Fixed health contributions of a monthly amount of 1 950 HUF are counted as employer social insurance contributions if the person is "mainly self-employed" (i.e. self-employment income > employment income) otherwise as employer social insurance contributions.

## 2.5 Personal income tax (TIN\_HU)

The main tax simulated for Hungary is personal income tax (`tin_hu`). Every citizen is obliged to file a tax return at the end of the tax year if their annual income comprises taxable income.

### 2.5.1 Tax Unit

Personal income tax is individual (`TAX_UNIT=individual_hu`). However, there is a partial exception to this rule: family tax credit are jointly assessed (`TAX_UNIT=cb_fam_hu`). In this case the unit of analysis is the family (`TU: cbfam_hu`). This comprises the head, his/her spouse or partner and their own dependent children (`TU: cbfam_hu/Partner & OwnDepChild`). Dependent children are defined as aged 16 or younger or aged 24 or younger if they are in full-time secondary education. Children cannot be married or cohabiting (`!{IsParent} & ({dag<=16} | ({dag<=24} & {dec>=3} & {dec<=4}) & !{IsWithPartner} & !{IsMarried}))`).

### 2.5.2 Exemptions

Some income components do not have to be declared to the tax authorities, and thus are not included in the concept of taxable income (pensions, child and family benefits).

### 2.5.3 Tax base

The tax base is defined as taxable income (`IL: taxableY`) minus EVA payers' (`{lse00=1}`) self-employment income. Their self-employment income is stored in `yse` and used for calculating SIC, but not for tax calculation.



Taxable income includes all sources of income. More specifically, the definition of taxable income is as follows:

```
IL: taxableY
taxableY= child raising support (gyermeknevelési támogatás, bcclt) + child
care allowance (gyermekgondozási segély, bccnc) + child care fee
(gyermekgondozási díj, BCCCT) + sickness benefits (táppénz, távolléti díj,
BHL) + maternity allowance (terhességi-gyermekágyi segély, BMACT) +
unemployment benefits (munkanélküli ellátások, BUN) + employment income, YEM)
+ property income (YPR) + self-employment income (YSE)+ old-age income (poa)
```

#### 2.5.4 Tax schedule

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

In 2006 the upper limit of the first tax bracket (18%) is 1,550,000 HUF, this amount is 1,700,000 HUF in 2007 and 2008. An additional income tax applied from 2007 at the upper income bracket (4%). In 2009 the annual income up to 1,900,000 HUF is taxed with a rate of 18%, 1,900,000-7,446,000 HUF 36%, and income above of this amount is 40%, because of the separate income tax. In 2010 a new tax base was introduced, this is the 127% of the previous tax base, and the tax table was changed too: `band1_uplim - 5000000#y; band1_rate - 0,17; band2_rate - 0,32.`

#### 2.5.5 Tax credits

Tax credits are defined as deductions from tax due. These tax credits are non-refundable. In other words, final tax is calculated as the amount of tax resulting from the tax schedule minus the sum of all tax credits, subject to a minimum of 0.

A considerable number of tax credits cannot be simulated, because of the missing variables or missing relevant information in the database. The model contains most of these tax credits but these are switched off. In this chapter we listed only the simulated tax credits.

##### 2.5.6.1. Tax credit for non taxable emolument (progression proviso)

Tax on income as defined in `incomelist il_taxprogY` is deducted from tax (i.e. this income is not taxable, but moves actually taxable income up in the schedule). From 2007 the old age pension is also part of this income list.

##### 2.5.6.2. Tax credit on income from wages

The refund amounts to 18% of income from wages (as defined in `il_wageY`) with a maximum as described above.

In 2006 the maximum for the refund is 9,000 HUF/monthly but the maximum tapers off if total income (as defined in `il_totalY`) is between 1,500,000 HUF annual amount and 2,100,000 HUF annual amount  $(\text{formula}/9000\#m - (9000\#m / (2100000\#y - 1500000\#y)) * ((il\_totalY < \text{max} > 1500000\#y) - 1500000\#y))$ . The limits changes in the following years as shown below:



2006	2007	2008	2009	2010
				15100#m-
9000#m-	9000#m-	11340#m-	11340#m-	(15100#m/(4698000#y
(9000#m/(2100000#y-	9000#m/(2100000#y-	(11340#m/(2670000#y	(11340#m/(2670000#y-	-
1500000#y))*((il_to	1500000#y))*((il_to	1250000#y))*((il_to	1250000#y))*((il_to	3188000#y))*((il_t
totalY<max>1500000#y)	totalY<max>1500000#y)	totalY<max>1250000#y)	totalY<max>1250000#y)	totalY * 1.27
-1500000#y)	-1500000#y)	-1250000#y)	-1250000#y)	<max>3188000#y)-
				3188000#y)

### 2.5.6.3. Additional tax credit on income from wages

The refund is only available for those with positive wage income ( $il\_wageY > 0$ ). In 2006 and 2007 the refund amounts to 18% of income from wages (as defined in  $il\_wageY$ ) minus a monthly amount of 50,000 HUF ( $0.18 * (il\_wageY - amount\#1)$ ). Maximum for the refund is 2,340 HUF (monthly) but the maximum tapers off if total income (as defined in  $il\_totalY$ ) is between 1,000,000 HUF (annual) and 1,561,600 HUF (annual) in 2006.

The additional tax credit was eliminated from the tax system in 2008.

### 2.5.6.4. Tax credit for serious disability

Eligible are persons with a disability level of at least 67% ( $DDI=1$ ). The tax credit amounts to 2,000 HUF monthly amount

### 2.5.6.5. Family tax credit

The family tax credit amounts to 4,000 HUF monthly amount if there are three dependent children in the family ( $nDepChInTu=3$ )

Tax credit is granted fully if total household income is below 8,000,000 HUF annual amount, if total income is above, for each HUF above, 20% are deducted from tax credit  
(formula/sin02\_s(as temporary variable) - (( $il\_totalY - 8000000\#y$ )<max>0)\*0.2).

The tax credit is shared (proportionally to tax after deduction of other tax credits) among parents to make the maximum use of it ( $TU: couple\_hu$ ).

## 2.6 Simplified Business Tax (TBS\_HU)

Calculation of EVA ( $\{lse00=1\}$ ) (Egyszerűsített Vállalkozói Adó – Simplified Business Tax) is based on the amount of total revenues together with the VAT. The tax rate is 15% in 2006 and 2007, this increased to 25% in 2008 and 2009, and 30% in 2010. Those paying EVA are exempted from paying the VAT, they do not have to pay entrepreneurial personal income tax and if they have no other revenues, they do not have to file a personal income tax return.



### 3. DATA

#### 3.1 General description

The Hungarian database is drawn from the Community Statistics on Income and Living Conditions (EU-SILC). EU-SILC is expected to become the EU reference source for comparative statistics on income distribution and social exclusion at European level, particularly in the context of the 'Programme of Community action to encourage cooperation between Member States to combat social exclusion' and for producing structural indicators on social cohesion for the annual spring report to the European Council.

The instrument aims to provide two types of data:

- Cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions
- Longitudinal data pertaining to individual-level changes over time, observed periodically over, typically, a four year period.

Social exclusion and housing condition information is collected at household level while labour, education and health information is obtained for persons aged 16 and over. The core of the instrument, income at very detailed component level, is mainly collected at personal level but a few components are included in the household part of SILC.

The Statistics on Income and Living Conditions is conducted by the Central Statistics Office (HCSO).

The 2008 EU-SILC sample in Hungary was selected by a stratified two-stage sampling design in a part of the population and by stratified one-stage design in the other part. The final sampling units are the dwellings and, in each of them, every household is observed.

Localities were stratified by General Election Districts and size (in terms of number of dwellings). In the first part, one locality was selected with probability proportional to the number of dwellings. Within each selected locality, a systematic selection of dwellings was done. As for the other part of the population, a systematic selection of dwellings was done in each stratum.



Table 13. EUROMOD database description

		2008
EUROMOD database		HU_2008_a3.txt
Original name	UDB_c08D_ver2008-2 from 01-08-10	
Provider	HCSO; EUROSÍTAT	
Year of collection	2008	
Period of collection	n/a	
Income reference period	01/01/ to 31/12/ previous year to fieldwork	
Unit of assessment	Households*	
Coverage	Private household	
Sample size	Ind: 22,335 HH: 8,818	
Response rate	n/a	

\*Notes: Persons living in collective households and in institutions are generally excluded from the target population. Refers to a non-institutional collective dwelling such as a boarding house, dormitory in an educational establishment or other living quarters shared by more than five persons without sharing household expenses.

## 3.2 Sample quality and weights

### 3.2.1 Non-response

We have no information about the “pattern” of the non-response. In general the unit non-response in the EU-SILC refers to absence of information on whole units (households and/or persons) selected into the sample. In EU-SILC, the unit non-response has been normally addressed by re-weighting the responding cases. Some of the information for weighting comes from within the survey, such as information on units’ selection probabilities, and unit non-response rates for different subgroups in the sample. In addition, weighting normally also makes use of external control distributions of population characteristics (e.g. by household size, location, age and sex, activity status) through the use of calibration techniques.

### 3.2.2 Weights

The original Hungarian SILC wave 1 consisted of 8,818 households and 22,335 individuals. None of the households reported zero incomes from all sources.

The weights provided by the SILC are household weights aiming to correct for selective non-response and panel attrition. In EUROMOD these weights have been scaled up to offset the exclusion of 11 individuals in 3 households from the original sample. No re-weighting was performed. Population estimates were provided by the General Election Districts of Hungary on the basis of the 2001 Population Census. Table 14 presents some basic descriptive statistics for the grossing-up weight.



Table 14. Descriptive Statistics of the Grossing-up weight

	EM_data1
Number	22,335
Mean	442.51
Median	373.00
Maximum	1,100
Minimum	100
Max/Min	11
Decile 1	204
Decile 9	818
Dec 9 / Dec1	4.01

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

Income and household composition data are collected by interviews with all household members aged 16 or over. The SILC response rules require detailed information on all income components to be provided by direct reporting, but proxy answers are allowed. In the case that a proxy interview is carried out, the identification number of the person who has provided the information has to be recorded. In the Hungarian SILC database there are not person non-response, i.e. if household questionnaire was made, every person in the household answered the personal questionnaire (or proxy answers were asked).

In general the SILC item non-response refers to the situation when a sample unit has been successfully enumerated, but not all the required information has been obtained. Various approaches of imputation can be envisaged (deductive methods, deterministic methods, stochastic methods)

Deductive methods refer to imputation procedures in which the true value of a missing item is logically deduced. This means that the value is either deduced from other variables of the survey or is derived from legal regulations. An example for the first mode of deductions is the net-gross-net conversion, when either the gross value or the net value is given and the corresponding missing value is calculated by applying general rules. An example for the latter mode is when the value of the childcare benefit is missing and the effectual value can be inserted.

The difference between deterministic and stochastic methods is whether the calculation procedure to calculate the missing item produces a random output as, e.g. simulating the error term using a regression approach.<sup>4</sup>

### 3.3 Data adjustment

Generally we try to keep the original EU-SILC dataset. EUROSTAT applies several processes to validate the database. The validation process contains syntax and a logical check audit. For example the logical check audit the structural coherence of the files (household register, personal register, household data, personal data) and the coherency between different variables of the same record and other records. The detailed description of the process with the Hungarian database is not available.

<sup>4</sup> Source: EU-SILC User Database Description





### 3.4 Imputations and assumptions

#### 3.4.1 Time period

In the SILC user database, the income reference period is a 12-month period. Information on earnings refers to the last tax year. Similarly, information about pensions and benefits refers to the calendar year before the interview. Self-employment income is based on this reference period too.

In general: “The interval between the end of the income reference period and the time of the interview for the respondent concerned shall be limited to 8 months as far as possible. This applies both to the household and personal samples, and irrespective of whether the reference period used is fixed in terms of calendar dates for the whole sample or is a moving reference period determined according to the timing of the interview for the household or person concerned.”<sup>5</sup>

All monetary amounts in the SILC are expressed in annual terms. These are converted into average monthly terms (dividing by 12) for the EUROMOD database.

#### 3.4.2 Gross incomes

The Hungarian SILC data include variables on income tax, employee social insurance contributions and other deductions from gross earnings. In general, “gross income means the total monetary and non-monetary income received by the household over a specified 'income reference period', before deduction of income tax, regular taxes on wealth, employees', self-employed and unemployed (if applicable) compulsory social insurance contributions and employers' social insurance contributions, but after including inter-household transfers received.”<sup>6</sup>

#### 3.4.3 Other imputed variables

The lse00 variable shows the type of self-employment regarding taxation but this information is not available in the original SILC UDB. That is why we have to impute this variable: if the self-employment income is less than 25 000 000 HUF then the person is initially classified as an EVA payer. However, an additional correction is applied. Namely, every eighth self-employees get transferred to 'normal' taxation. We need this correction as otherwise too many people would be identified as EVA payers if we apply only the original monetary condition.

### 3.5 Updating

The factors that are used to update monetary variables from the data base year are shown in Table 15. No other updating adjustments are employed.

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<sup>5</sup> SILC UDB description

<sup>6</sup> SILC UDB description



Table 15. Updating factors

Index	Income Source/index type	2006	2007	2008	2009	2010
def_inc_uprate	default uprating factor	0.9615	1	1.0282	1.0236	1.0020
inc_uprate	wages and salaries	0.9419	1	1.0581	1.0228	0.9688
inc_uprate	self-employment income	0.9718	1	1.0447	0.9575	1.0302
inc_uprate	old age income (öregségi/saját jogú nyugdíj)	0.9177	1	1.0777	1.1543	0.9984
inc_uprate	survivor benefits (hozzátartozói jogon járó nyugdíj)	0.9192	1	1.0106	1.0602	0.9571
inc_uprate	total family benefits	0.9586	1	1.0869	1.0587	1.0293
inc_uprate	unemployment benefits (munkanélküli ellátások)	0.9484	1	1.0783	1.0850	1.0020
inc_uprate	sickness benefits (táppénz, távolléti díj)	1.0150	1	1.0831	0.9476	0.7824
inc_uprate	disability benefits	0.9167	1	1.0936	1.1299	1.0248
inc_uprate	child care fee	0.9615	1	1.0282	1.0236	1.0020
inc_uprate	maternity allowance	0.9419	1	1.0582	1.0228	0.9688
inc_uprate	social assistance, nursing fee (ápolási díj)	0.9718	1	1.0447	0.9575	1.0302

Source: Own calculation by the Yearbook of Welfare Statistics, 2006; 2007; 2008; 2009; 2010 HCSO; Hungarian National Accounts, 2006; 2007; 2008; 2009; 2010 HCSO

## 4. VALIDATION

### 4.1 Aggregate Validation

The main objective of this chapter is to assess the quality of EUROMOD simulation through the validation of the results. In order to do this, tables below compare statistics on benefits and taxes with available external sources; we do this distinguishing between tax and benefits not simulated and those simulated by EUROMOD. These provide an assessment of the results, depending on the quality of the database and modelling, but also provide some useful background. It calculates the ratio of EUROMOD (weighted EU-SILC) expenditures and numbers of recipients to estimates drawn from administrative statistics for some of the main social security benefits. All important personal income tax and social contributions are simulated, but some of the tax credits cannot be simulated.

#### 4.1.1 Non simulated taxes and benefits

Table 16 shows the benefits that we cannot simulate in EUROMOD. These numbers are compared to the original information from the EU-SILC UDB and the external statistics from the Hungarian Central Statistical Office.



In the case of the sickness benefits there are significant differences between the EU-SILC and the external statistics. The main reason of this is the difference in the definitions. The sickness benefit includes two big parts: the sick leave and the sick pay. An employee is entitled to 15 days' sick leave per calendar year to cover periods of unfitness for work occurring by reason of sickness, and the employer bears the expenses of sick leave. (HCSO, 2006). After the first 15 days of sick leave period has passed, the employee gets sick pay. The figures reported under 'external source', produced by the National Health Insurance Fund Administration data, only contains the recipients and expenditures for the sick pay. On the contrary, EUROMOD input database takes into account both the two types of sickness benefits together (i.e. the sick leave and the sick pay) and therefore reports a higher number of recipients. On the other hand, the interviewees seem to under-report significantly the amount of sickness benefit received. In 2009, the expenditure per sick pay *day* is 3,101 HUF (Source: Yearbook of Welfare Statistics, HCSO, 2010) and the average sickness benefit is 10,272 HUF per *month* in the EU-SILC dataset<sup>7</sup>. The changes in the sickness benefit of the official statistic do not show obvious trends over time neither in the number of recipients nor the expenditure amounts. The highest expenditure is found in 2009, but in 2010 this fell back under the 2007-2008 value in the external statistics.

In the case of the disability benefits, the external source includes the disability pension below retirement age, miners and early retirement pension, benefits to persons with reduced capacity to work, accident benefits and the disability benefit. The coverage of the EU-SILC and the external data is similar, but not the same. This causes an underestimate effect in the expenditure. The number of recipients of disability benefits decreases year by year, but EUROMOD number is constant over time (as not being simulated, receivers of this benefit are those reported in EU-SILC 2008 and therefore constant over time), because of this, the ratio increases. On the other hand the expenditures increase to 2009 and decrease in 2010 due to the uprating factors, the external statistics are increasing from 2006 to 2010.

Although the number of recipients of old age income benefit is similar to the external statistics, expenditures tend to be higher in EUROMOD than in the external statistics.

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<sup>7</sup> Source: Own calculation using by the EU-SILC UDB



Table 16. EUROMOD validation: taxes and benefits included but not simulated

BENEFIT	Year	Recipients			Expenditure (HUFm/month)		
		EUROMOD database (SILC)	External source	Ratio	EUROMOD database (SILC)	External source	Ratio
Sickness benefits	[2007]	609,203	100,000 (1)	6.09	5,235	8,424	0.62
	[2008]	609,203	90,000(1)	6.77	5,669	8,225	0.69
	[2009]	609,203	90,000(1)	6.77	4,960	9,121	0.54
	[2010]	609,203	90,000(1)	6.77	4,096	6,179	0.66
Disability benefits	[2007]	766,954	798,000(2)	0.96	37,590	48,825	0.77
	[2008]	766,954	788,000(2)	0.97	41,109	52,558	0.78
	[2009]	766,954	748,277(2)	1.02	42,471	52,675	0.81
	[2010]	766,954	735,000(2)	1.04	38,520	53,046	0.73
Old age income	[2007]	2,152,543	2,027,030	1.06	170,273	101,608	1.68
	[2008]	2,152,543	2,078,272	1.04	183,497	111,750	1.64
	[2009]	2,152,543	2,080,527	1.03	196,548	115,899	1.70
	[2010]	2,152,543	2,085,243	1.03	170,003	126,417	1.34
Survivor benefits	[2007]	109,926	139,000	0.79	3,765	4,842	0.78
	[2008]	109,926	133,000	0.83	3,804	4,925	0.77
	[2009]	109,926	134,114	0.82	3,991	4,845	0.82
	[2010]	109,926	127,000	0.87	3,603	4,867	0.74
Unemployment Benefits	[2007]	420,700	95,707	4.40	9,222	8,300	1.11
	[2008]	420,700	105,843	3.97	9,944	9,552	1.04
	[2009]	420,700	155,508	2.71	10,005	12,895	0.78
	[2010]	420,700	115,838	3.63	9,241	9,436	0.98

Notes: (1) This number does not contain the sick leave recipients.

Sources: Yearbook of Welfare Statistics, HCSO, 2006-2010

Because these benefits are not simulated in UROMOD, number of recipients results the same in all years as entitlement is drawn from SILC; whilst, the amounts of expenditures are only corrected by the uprating factors. The external statistics number somewhat decrease from 2007 to 2010 in the case of the recipients number, but the expenditures do not follow this effect.

In the EUROMOD dataset unemployment benefits statistics contain not all, but most of the ESSPROS elements, like the early retirement for labour market reasons, vocational training allowance, etc. Although EU-SILC data does not report all the relevant information about unemployment benefit, both the external source amounts are still lower (or similar). This is mainly because of the fact that the input data for EUROMOD counts all of the recipients in the 12 months as if they had received the benefit for the whole year (even if they got unemployment



benefit only for one month), while the official figures report the average number of recipients in each year. In 2009 the unemployment benefit system was changed significantly and the ratio between EUROMOD and the external statistic is better in term of recipients, but worse than in other years for expenditures. As explained above, the number of recipients is the same in all year in EUROMOD because entitlement for this benefit is taken from EU-SILC, while the uprating factors take care of adjusting the benefit amount. In this case, the change in expenditures due to policy changes cannot be fully picked up by the correction implemented with the uprating factors.

#### **4.1.2 Simulated income tax**

Table 17 shows the personal income tax and the simplified business tax results. The number of taxpayers is imprecisely reported in external sources for 2007 and 2008. Instead in 2009 and 2010 we have exact information about the number of persons who have taxable income. In general EUROMOD over-estimates the number of taxpayers by 20% and under-estimate the amount of personal income tax by a similar percentage.. The revenue of the personal income tax increased to 2008 and decrease from 2009, this trend is picked up from EUROMOD, and it is reflected by the ratios between EUROMOD and external statistics.

The simulation of the simplified business tax shows a rather under-estimation of the tax paid. The main reason behind this is that EU-SILC under-reports self-employment income, and the simulation of this item is not very straightforward. A second reason for this under-estimation is the lack of information about the simplified business tax payers in the EU-SILC UDB. Because of this, self-employed tax payers in EUROMOD have been identified using a random selection method which allows us to match the number of tax payers, but it is obviously not précised on the estimation of taxes paid and causes the high deviation between the external sources and EUROMOD results. The revenue of the simplified business tax increase from 2007 to 2010 and EUROMOD results follow this effect. (However, the number of taxpayers decreases in the external sources, the simulation results are the same from 2007 to 2010 due to the chose selection method).



Table 17. EUROMOD validation: income tax

	Year	Taxpayers (person)			Revenue (million HUF)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Personal Income Tax	[2007]	3,578,056	~ 3,000,000	1.19	104,133	125,253	0.83
	[2008]	3,640,532	~ 3,000,000	1.21	112,000	136,292	0.82
	[2009]	3,762,204	4,370,204	0.86	97,636	125,231	0.78
	[2010]	5,416,254	4,475,327	1.20	81,804	115,338	0.71
Simplified Business Tax	[2007]	99,933	115,425	0.87	3,385	12,734	0.27
	[2008]	99,933	~ 115,425	0.87	3,543	n.a.	n.a.
	[2009]	99,933	97,217	1.03	3,360	14,285	0.24
	[2010]	99,933	~ 97,217	1.03	4,218	15,157	0.28

.Sources: National Accounts Hungary 2006-2007; HCSO 2008-2010

### 4.1.3 Simulated social contributions

Both employees and employers social insurance contributors are well represented in EUROMOD. The revenue from the employees is somewhat overestimated in 2007 and 2009, whilst the revenue from employers is underestimated in 2009 and 2010. One of the reasons of this deviation is the “double activity in the economic status”. In Hungary there are big differences regarding social contributions paid by persons who have only one economic status (e.g. employee, self-employment) and those who have more than one status (e.g. pensioner and employee; student and employee, etc.). Not all the interviewees mentioned this double status, and this may cause a relatively big difference from the external statistics.

Another reason is the difference between the coverage of EUROMOD data and the official numbers. Indeed we cannot get information from the official statistics about the number of payers and total amounts for self-employment social contributions and therefore we have no source of comparison for EUROMOD results.



Table 18. EUROMOD validation: social contributions

	Year	Contributors (person)			Revenue (mHUF)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Employee Social Insurance Contributions	[2007]	3,996,955	~ 4,000,000	1.00	83,618	69,574	1.20
	[2008]	3,996,955	~ 4,000,000	1.00	88,650	n.a.	n.a.
	[2009]	3,996,955	3,985,514	1.00	85,689	68,638	1.25
	[2010]	3,996,955	3,985,514	1.00	81,162	80,899	1.00
Employer Social Insurance Contributions	[2007]	3,996,955	~ 4,000,000	1.00	166,443	166,122	1.00
	[2008]	3,996,955	~ 4,000,000	1.01	175,684	n.a.	n.a.
	[2009]	3,996,955	4,010,599	1.01	150,673	196,908	0.77
	[2010]	3,996,955	4,010,599	1.00	120,148	173,671	0.69
Self-employed Social Insurance Contributions	[2007]	684,928	n.a.	n.a.	30,088	n.a.	n.a.
	[2008]	685,807	n.a.	n.a.	34,034	n.a.	n.a.
	[2009]	715,840	n.a.	n.a.	27,540	n.a.	n.a.
	[2010]	696,941	n.a.	n.a.	34,695	n.a.	n.a.

Sources: National Accounts Hungary 2007-2010; HCSO 2011

Notes: \*This amount is not part of the official social statistics. The coverage of the external statistic is different from what we use in the Euromod model.

#### 4.1.4 Simulated social benefits

Table 19 to Table 23 shows child and family related benefits. These benefits are usually well estimated in the model, in particularly this is the case where the regulations are clear and all the recipients get these supports (e.g. maternity grant, family allowance), take up rates are almost 100%. Even so, there are some deviations in the child care allowance (Table 20). EUROMOD allocates this benefit where there is a child(ren) less than 3 years old in the family. However, not all eligible families get this benefit, and we cannot control for this effect in the model. This is also true in the child raising support simulation, but it does not cause huge difference from the external statistics.

The child and family related benefit does not show obvious changes from 2007 to 2010. Based on the external statistics, the largest of maternity grant recipients was in 2009 (and the expenditure is the largest in this year too), but the estimation in EUROMOD does not show this effect. On the other hand, the number of recipients of child care allowance has increased over time, but in this case we overestimate the results in EUROMOD, so we have the best result in 2010. An inverse picture is shown from the child raising support table where the number of recipients has decreased.

We have well estimated results in the family allowance simulation (Table 22). This is the largest child related allowance, both in the number of recipients and the expenditure too. (Put it into context, the numbers of maternity grant's recipients are about 100000, while more than one million family get family allowance). Accordingly, this simulation is the most important between the child family related allowances. The deviations between EUROMOD results and the external statistics are very low, the mean of the ratios is 99% in the case of this universal benefit.



The picture of the regular child protection allowance result shows worse results. This allowance is not a general allowance, so we should have to take into account the take-up rate. Additionally the number of recipients depends on the budget of the local governments, which is an unknown effect too. The official statistics coverage of the expenditure is not the same as that of EUROMOD particularly because this allowance includes an in-kind part which is not reported by EU-SILC; moreover, the cost of this is integral part of the external amount. We have information about the right amount only in 2009.

- *Maternity grant*

Table 19. EUROMOD validation: Maternity grant

	Recipients (number)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
[2007]	92,162	90,495	1.02	469	471	1.00
[2008]	92,162	95,028	0.97	492	520	0.95
[2009]	92,162	95,303	0.97	492	525	0.94
[2010]	92,162	87,048	1.06	492	479	1.03

Sources: Yearbook of Welfare Statistics, HCSO, 2010

- *Child care allowance*

Table 20. EUROMOD validation: Child care allowance

	Recipients (number)			Expenditure (mHUF)		
	EUROMOD database	External source*	Ratio	EUROMOD database	External source	Ratio
[2007]	208,358	164,832	1.26	5,653	4,756	1.19
[2008]	208,358	167,021	1.25	5,938	5,241	1.13
[2009]	208,358	174,797	1.19	5,938	5,340	1.11
[2010]	208,358	178,532	1.17	5,938	5,425	1.09

Note:\* Average monthly number of recipients

Sources: Yearbook of Welfare Statistics, HCSO, 2006-2010





- *Child raising support*

Table 21. EUROMOD validation: Child raising support

	Recipients (number)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
[2007]	48,240	42,776	1.13	1,309	1,160	1.13
[2008]	48,240	41,631	1.16	1,375	1,202	1.14
[2009]	48,240	40,107	1.20	1,375	1,154	1.19
[2010]	48,240	39,275	1.23	1,375	1,118	1.23

Sources: Yearbook of Welfare Statistics, HCSO, 2006-2008

- *Family allowance*

Table 22. EUROMOD validation: Family allowance

	Recipients (thousand person)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source*	Ratio
[2007]	1,271	1,224	1.04	26,229	26,029	1.01
[2008]	1,271	1,247	1.02	27,723	28,218	0.98
[2009]	1,271	1,250	1.02	27,723	30,643	0.90
[2010]	1,271	1,224	1.04	27,723	29,917	0.93

Notes: \*The annual expenses on family allowance are divided by 13, because the family allowance amount is a 'double benefit' in august (i.e. this is thirteenth month).

Sources: Yearbook of Welfare Statistics, HCSO, 2007-2010

- *Regular child protection allowance*

Table 23. EUROMOD validation: Regular child protection allowance

	Recipients (person)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
[2007]	411,750	489,966	0.84	343	n.a.*	n.a.
[2008]	456,814	513,070	0.89	419	n.a.*	n.a.
[2009]	490,271	555,022	0.88	474	3,497	0.27
[2010]	540,391	598,506	0.90	522	n.a.*	n.a.



\*This amount is not part of the official social statistics

Sources: Yearbook of Welfare Statistics, HCSO, 2007-2010

- *Social assistance*

Table 24 shows the social assistance results. All of these allowances have complicated regulations; moreover, EU-SILC reports several missing information in this section that makes the implementation more difficult. In Hungary the assembly of the local government provides these allowances, the amount and the number of recipients are dependent on the budget of the local government and the number of the entitled persons.

Accordingly the simulations in this table are quite different from the external statistics. In these cases the uprating factors and the implementation of benefit entitlement rules and amount calculations have not managed to pick up the variation reported in the external statistics. For example, according to the external statistics the number of recipients of the old age allowance decreases year by year, but the expenditure does not follow this trend; EUROMOD results follow a similar trend between 2007-2009, but overestimate the number of recipients in 2010. Expenditures are strongly underestimated.

In EUROMOD, the stand-by allowance is mainly replacing the regular benefit after 2008, and these results are matching well with the external sources numbers. However, the changes in the regulation of regular benefit cause a decrease in the number of recipients from 2008 to 2009 that is quite big compared to the external sources, while it improves in the next years (2009 to 2010) although the regulation has not changed significantly. I

In the case of the home maintenance support, EUROMOD grants the average amount per case. The model overestimates the number of recipients and expenditures significantly because of two main reasons. First, the benefit is means-tested and the entitlement dependent on the size of the flat/house, which EU-SILC UDB does not provide information about. Second, the main eligibility condition of this benefit is determined by the central government, but the local government decides the number of supported households and the amount of the benefit.



Table 24. EUROMOD validation: Social assistance

	Year	Recipients (person)			Expenditure (mHUF)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Old age allowance	[2007]	4,740	6,328	0.75	31	162	0.19
	[2008]	4,121	6,149	0.67	30	165	0.18
	[2009]	3,058	6,049	0.51	20	161	0.12
	[2010]	8,288	5,802	1.43	40	159	0.25
Regular benefit	[2007]	196,375*	194,779	1.01	4,266	5,004	0.85
	[2008]	197,163*	213,436	0.92	4,481	5,836	0.77
	[2009]	37,879*	71,807	0.53	467	1,925	0.24
	[2010]	37,879*	41,968	0.90	468	961	0.49
Stand by allowance	[2007]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	[2008]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	[2009]	177,695*	167,287	1.06	4,167	3,867	1.08
	[2010]	160,481*	174,539	0.92	4,529	4,813	0.94
Home maintenance support	[2007]	593,338	253,719	2.34	3,266	1,097	2.98
	[2008]	592,594	230,479	2.57	3,232	1,004	3.22
	[2009]	565,032	347,328	1.63	3,075	1,471	2.09
	[2010]	690,241	361,076	1.91	3,784	1,607	2.35

Sources: Yearbook of Welfare Statistics, HCSO, 2007-2010

\* Number of individuals.



## 4.2 Income distribution

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

### 4.2.1 Poverty

Table 25 to Table 28 introduce the poverty rates, calculated using 40%, 50%, 60% and 70% of the median equivalent income. The tables compare total population and by gender poverty rates using household disposable income as available from EU-SILC. There is no clear pattern of the results. We can find higher deviation between the original EU-SILC dataset and the EUROMOD results at 40% of the median in 2008 and 2009, in this lower poverty rate zone a smaller differences can cause a higher ratio. According to the other results the EUROMOD estimates properly the poverty rates.

Comparisons across Tables 25 to 28 suggest that the poverty rates have increased over time and seem to start decreasing from 2010. However, poverty rates calculated on EU-SILC are not showing a similar pattern and we lack available external sources for 2010 to say something more about this trend.

Table 25. EUROMOD validation: poverty rates at different poverty lines, [2007]

Percentage of individuals below:	EUROMOD	External source*	Ratio
40% of median equivalent income	2.8	2.8	1.00
Males	3.0	2.9	1.03
Females	2.6	2.6	1.00
50% of median equivalent income	6.6	6.4	1.03
Males	6.7	6.5	1.03
Females	6.6	6.3	1.05
60% of median equivalent income	11.5	12.4	0.93
Males	11.6	12.4	0.94
Females	11.4	12.4	0.92
70% of median equivalent income	19.1	20.6	0.93
Males	19.5	20.7	0.94
Females	18.7	20.4	0.92

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

\* Sources: ‘Own calculation using by the ‘EU-SILC 2008 UDB’.



Table 26. EUROMOD validation: poverty rates at different poverty lines, [2008]

Percentage of individuals below:	EUROMOD	External source*	Ratio
40% of median equivalent income	3.0	2.2	1.36
Males	3.3	2.4	1.38
Females	2.9	2.0	1.45
50% of median equivalent income	6.9	6.1	1.13
Males	6.9	6.3	1.10
Females	6.8	5.9	1.15
60% of median equivalent income	11.9	12.4	0.96
Males	12.1	12.8	0.95
Females	11.7	12.1	0.97
70% of median equivalent income	19.7	19.7	1.00
Males	20.3	19.8	1.03
Females	19.3	19.7	0.98

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

\* Sources: ‘Own calculation using by the ‘EU-SILC 2009 UDB’.

Table 27. EUROMOD validation: poverty rates at different poverty lines, [2009]

Percentage of individuals below:	EUROMOD	External source*	Ratio
40% of median equivalent income	2.9	2.0	1.45
Males	3.1	2.2	1.41
Females	2.8	1.9	1.47
50% of median equivalent income	6.9	6.0	1.15
Males	7.0	6.4	1.09
Females	6.9	5.7	1.21
60% of median equivalent income	12.1	12.3	0.98
Males	12.3	12.6	0.98
Females	11.9	12.0	0.99
70% of median equivalent income	20.2	19.8	1.02
Males	20.9	19.6	1.07
Females	19.6	19.9	0.98

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

\* Sources: ‘Own calculation using by the ‘EU-SILC 2010 UDB’.



Table 28. EUROMOD validation: poverty rates at different poverty lines, [2010]

Percentage of individuals below:	EUROMOD	External source*	Ratio
40% of median equivalent income	2.9	n.a.	n.a.
Males	3.1	n.a.	n.a.
Females	2.7	n.a.	n.a.
50% of median equivalent income	7.0	n.a.	n.a.
Males	7.0	n.a.	n.a.
Females	7.0	n.a.	n.a.
60% of median equivalent income	11.8	n.a.	n.a.
Males	11.9	n.a.	n.a.
Females	11.7	n.a.	n.a.
70% of median equivalent income	19.7	n.a.	n.a.
Males	20.0	n.a.	n.a.
Females	19.4	n.a.	n.a.

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

\* Sources: EU-SILC 2011 not yet available.

Table 29 presents the poverty rate at 60% cut-off by age groups. The table shows fairly good results. The lowest ratio EUROMOD/External-Sources is found for the 65- age categorie, where the model seriously underestimates poverty. Moreover, comparing across years, we find that according to EUROMOD the poverty rates are increasing in all age groups except elderly, where it decreases from 2.7% in 2007 to 1.80% in 2009 and increases to 3.40 in 2010.

In general, it is true that in Hungary the level of poverty among the elderly is low, therefore even a small deviation of EUROMOD estimates from the external source accounts for a large percentage difference and causes the ratio to be well under 1. Another point that needs to be taken into account is that the income of elderly people is mainly composed of pensions, which are not simulated in EUROMOD, so the main difference between the EUROMOD’s result and the external sources is not imputable to simulation biases.



Table 29. EUROMOD validation: poverty rates (median 60%) by age groups, [2007-2010]

[2007] Percentage of individuals below:	EUROMOD	External source	Ratio
Population	11.5	12.4	0.93
0-17	18.2	19.7	0.92
18-24	14.9	18.1	0.82
25-49	12.2	12.5	0.98
50-64	9.2	8.5	1.08
65-	2.7	4.3	0.63
[2008] Percentage of individuals below:	EUROMOD	External source	Ratio
Population	11.9	12.4	0.96
0-17	18.8	20.6	0.91
18-24	15.4	17.7	0.87
25-49	12.6	13	0.97
50-64	9.7	7.8	1.24
65-	2.5	4.6	0.54
[2009] Percentage of individuals below:	EUROMOD	External source	Ratio
Population	12.1	12.28	0.99
0-17	20.1	20.18	1.00
18-24	15.8	15.89	0.99
25-49	13.2	13.17	1.00
50-64	9.3	9.59	0.97
65-	1.8	4.11	0.44
[2010] Percentage of individuals below:	EUROMOD	External source	Ratio
Population	11.8	n.a.	n.a.
0-17	18.1	n.a.	n.a.
18-24	14.3	n.a.	n.a.
25-49	12.6	n.a.	n.a.
50-64	10.0	n.a.	n.a.
65-	3.4	n.a.	n.a.

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

Sources: ‘External statistics: Own calculation using by the ‘EU-SILC 2008; 2009; 2010 UDB’. ‘EU-SILC 2011 UDB’ not yet available.



#### 4.2.2 Income inequality

Table 30 to Table 33 present two main inequality indicators (Gini and S80/S20); the average income per decile and some important mean incomes.

According to EUROMOD inequality indicators do not differ significantly from the original EU-SILC results – usually within the 0.05 ranges.

Interestingly, comparing over time, inequality shows a slight tendency to increase in the period 2007-2010.

Table 30. EUROMOD validation: income inequality, [2007]

Percentage of individuals below:	EUROMOD	External source	Ratio
Gini Coefficient	0.245	0.252	0.97
Income quintile ratio (S80/S20)	3.46	3.60	0.96
Average income per decile			
1	37,887	42,594	0.89
2	55,906	61,285	0.91
3	65,562	72,514	0.90
4	73,535	82,410	0.89
5	81,669	91,733	0.89
6	90,926	101,381	0.90
7	100,439	111,483	0.90
8	112,236	125,923	0.89
9	131,118	147,868	0.89
10	195,967	225,281	0.87
Mean income (equivalised)	96,332	106,222	0.91
Mean income (unequivalised)	64,065	70,636	0.91
Median income (equivalised)	86,667	96,835	0.89
Median income (unequivalised)	56,905	63,058	0.90

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

Sources: ‘Own calculation using by the ‘EU-SILC 2008UDB’. In the case of the gini coefficient and the S80/S20 indicators: Eurostat Statistics database: <http://epp.eurostat.ec.europa.eu/>





Table 31. EUROMOD validation: income inequality, [2008]

percentage of individuals below:	EUROMOD	External source	Ratio
Gini Coefficient	0.246	0.255	0.96
Income quintile ratio (S80/S20)	3.5	3.49	1.00
Average income per decile			
1	39,289	45,053	0.87
2	58,685	63,187	0.93
3	68,997	75,147	0.92
4	77,632	84,848	0.91
5	86,432	94,198	0.92
6	96,263	104,208	0.92
7	106,258	114,922	0.92
8	118,822	129,412	0.92
9	138,898	151,601	0.92
10	206,545	226,645	0.91
Mean income (equivalised)	94,511	108,904	0.87
Mean income (unequivalised)	63,261	72,875	0.87
Median income (equivalised)	86,231	99,323	0.87
Median income (uequivalised)	56,681	65,706	0.86

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

Sources: ‘Own calculation using by the ‘EU-SILC 2009 UDB’. In the case of the gini coefficient and the S80/S20 indicators: Eurostat Statistics database: <http://epp.eurostat.ec.europa.eu/>



Table 32. EUROMOD validation: income inequality, [2009]

percentage of individuals below:	EUROMOD	External source*	Ratio
Gini Coefficient	0.246	0.247	1.00
Income quintile ratio (S80/S20)	3.49	3.40	1.03
Average income per decile			
1	40,392	42,795	0.94
2	59,426	59,343	1.00
3	70,118	70,685	0.99
4	79,052	80,021	0.99
5	88,125	89,069	0.99
6	98,279	98,167	1.00
7	108,484	108,766	1.00
8	121,533	122,743	0.99
9	142,433	142,241	1.00
10	209,589	205,616	1.02
Mean income (equivalised)	101,125	101,935	0.99
Mean income (unequivalised)	67,303	68,245	0.99
Median income (equivalised)	92,161	93,389	0.99
Median income (uequivalised)	60,028	62,306	0.96

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

Sources: ‘Own calculation using by the ‘EU-SILC 2010 UDB’. In the case of the gini coefficient and the S80/S20 indicators: Eurostat Statistics database: <http://epp.eurostat.ec.europa.eu/>



Table 33. EUROMOD validation: income inequality, [2010]

percentage of individuals below:	EUROMOD	External source*	Ratio
Gini Coefficient	0.254	n.a.	n.a.
Income quintile ratio (S80/S20)	3.64	n.a.	n.a.
Average income per decile			
1	36,800	n.a.	n.a.
2	55,660	n.a.	n.a.
3	65,177	n.a.	n.a.
4	73,780	n.a.	n.a.
5	82,060	n.a.	n.a.
6	91,375	n.a.	n.a.
7	101,551	n.a.	n.a.
8	114,600	n.a.	n.a.
9	135,834	n.a.	n.a.
10	204,017	n.a.	n.a.
Mean income (equivalised)	99,758	n.a.	n.a.
Mean income (unequivalised)	66,842	n.a.	n.a.
Median income (equivalised)	91,419	n.a.	n.a.
Median income (uequivalised)	59,781	n.a.	n.a.

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

\* Sources: EU-SILC 2011 not yet available.

#### 4.3 Summary of “health warnings”

- The sample size is relatively big but in the case of very detailed analysis the number of cases may be little.
- Please take into consideration the underestimation of the self-employment incomes.
- The tax evasions and the non-take up problem is present but we don’t know the exact measure of this.
- The original dataset contains too few people with *low* and *high* earnings; most likely the model underestimates the income inequality.

## 5. REFERENCES

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- *Sources for tax-benefit descriptions/rules*

General sources for tax-benefit descriptions/rules/regulations:

<http://www.magyarország.hu>