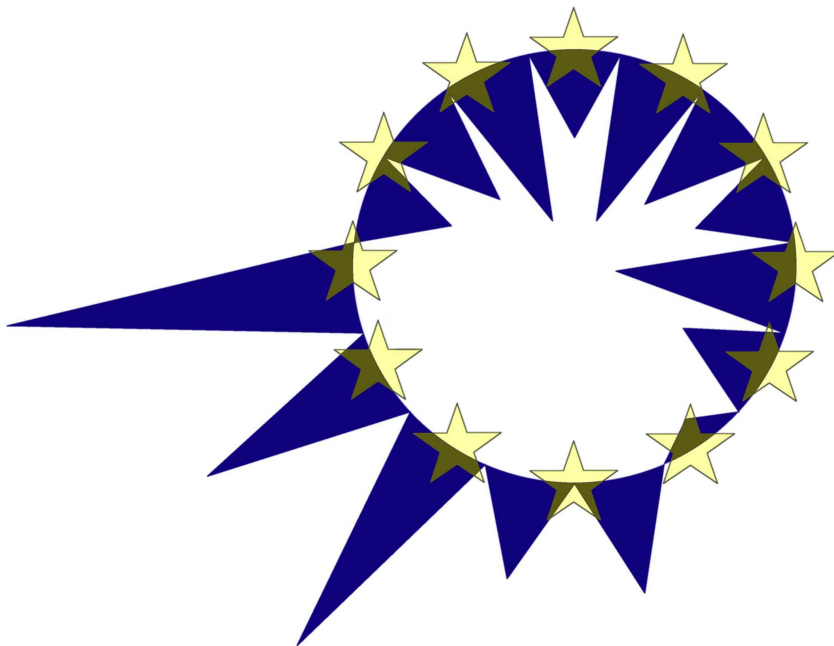


# **EUROMOD**

## **COUNTRY REPORT**



# **HUNGARY (HU)**

## **2005-2008**

**Péter Hegedűs and Péter Szivós**

**with Christine Lietz (2005) and Tina Haux (2006-2008)**

**January 2011**



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.

A major EUROMOD development project (*EUROMODupdate*), supported by DG-EMPL has the key objective to improve and extend EUROMOD's usefulness.

This involves enlarging and updating EUROMOD from 19 countries to cover all 27 Member States and recent policy systems, using EU-SILC (European Union Statistics on Income and Living Conditions) data as the input database.

*EUROMODupdate* began in February 2009 and will last for 3 years.

The work is being carried out by the EUROMOD core developer team, based mainly in ISER University of Essex, in collaboration with a group of national teams.

A project Steering Group has been established, under the chairmanship of Sir Tony Atkinson.

Preparatory work in some of the New Member States is being conducted by the European Centre, Vienna, under the leadership of Orsolya Lelkes.

EUROMOD coordinator: Holly Sutherland

EUROMOD coordinator assistant: Lucy Brown

EUROMOD developer responsible for Hungary: Tina Haux

National team for Hungary: Péter Hegedűs and Péter Szivós

The results presented in this report are derived using EUROMOD version F3.0. EUROMOD is continually being improved and updated and the results presented here represent the best available at the time of writing.

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



## CONTENTS

<b>1. BASIC INFORMATION</b>	<b>5</b>
<b>1.1 Basic figures</b>	<b>5</b>
<b>1.2 The tax-benefit system</b>	<b>5</b>
1.2.1 Basic information about the tax-benefit system, 2005-2008	6
<b>1.3 Social Benefits</b>	<b>7</b>
1.3.1 Old-age benefits	7
1.3.2 Survivors benefits	7
1.3.3 Sickness benefits	8
1.3.4 Disability benefits	8
1.3.5 Employment injuries and occupational diseases	10
1.3.6 Unemployment benefits	11
1.3.7 Maternity benefits	12
1.3.8 Child benefits	13
1.3.9 Social assistance	14
<b>1.4 Social contributions</b>	<b>20</b>
<b>1.5 Taxes</b>	<b>23</b>
<b>2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD</b>	<b>33</b>
<b>2.1 Scope of simulation</b>	<b>33</b>
<b>2.2 Simulated policies and order of simulation</b>	<b>36</b>
2.2.1 Simulated policies	36
2.2.2 Order of simulation	36
<b>2.3 Social benefits</b>	<b>37</b>
2.3.1 Maternity grant ( <i>Bmanc_s</i> )	37
2.3.2 Child care allowance ( <i>Bccnc_s</i> )	37
2.3.3 Child raising support ( <i>Bcclt_hu</i> )	38
2.3.4 Family allowance ( <i>BCHMT_S</i> )	38
2.3.5 Regular child protection benefit ( <i>bchmt_s</i> )	40
2.3.6 Social assistance ( <i>BSA_S</i> )	40
<b>2.4 Social contributions</b>	<b>42</b>
2.4.1 Employee social contributions ( <i>TSCEE_S</i> )	43
2.4.2 Employer social contributions ( <i>ERSIC_S</i> )	43



2.4.3	Self-employed social contributions (tscse_s)	44
<b>2.5</b>	<b>Personal income tax (IT_S)</b>	<b>44</b>
2.5.1	Tax unit	44
2.5.2	Exemptions	45
2.5.3	Tax base	45
2.5.4	Tax schedule	45
2.5.5	Tax credits	45
<b>2.6</b>	<b>Simplified Business Tax (EVA_HU)</b>	<b>46</b>
<b>3.</b>	<b>DATA</b>	<b>47</b>
<b>3.1</b>	<b>General description</b>	<b>47</b>
<b>3.2</b>	<b>Sample quality and weights</b>	<b>48</b>
3.2.1	Non-response	48
3.2.2	Weights	48
3.2.3	Item non-response and under-reporting	48
<b>3.3</b>	<b>Data adjustment</b>	<b>49</b>
<b>3.4</b>	<b>Imputations and assumptions</b>	<b>50</b>
3.4.1	Time period	50
3.4.2	Gross incomes	50
3.4.3	Other imputed variables	51
<b>3.5</b>	<b>Updating</b>	<b>51</b>
<b>4.</b>	<b>VALIDATION</b>	<b>51</b>
<b>4.1</b>	<b>Aggregate Validation</b>	<b>51</b>
4.1.1	Non simulated taxes and benefits	51
4.1.2	Simulated income tax	53
4.1.3	Simulated social contributions	53
4.1.4	Simulated social benefits	54
<b>4.2</b>	<b>Income distribution</b>	<b>56</b>
4.2.1	Poverty	57
4.2.2	Income inequality	58
<b>4.3</b>	<b>Summary of “health warnings”</b>	<b>58</b>
<b>5.</b>	<b>REFERENCES</b>	<b>59</b>



## 1. BASIC INFORMATION

### 1.1 Basic figures

Table 1. Basic figures

	Pop. (m.)	Pop. < 14 (%)	Pop. ≥ 65 (%)	Life expect. (years)	Fertility Rate	Unemp rate <sup>[a]</sup>	GDP per head (PPP)	Currency Name	Exch. rate <sup>[b]</sup>
2005	1,0097,549	15.6	15.6	72.75	1.32	7.2	14198	HUF	247.36
2006	1,0076,581	15.4	15.8	73.19	1.35	7.5	15002	HUF	281.93
2007	1,0066,158	15.2	15.9	73.27	1.32	7.4	15573	HUF	245.90
2008	1,0045,401	15.0	16.2	73.78	1.35	7.8	15742	HUF	237.03

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

<sup>[b]</sup> Euro exchange rate on 30<sup>th</sup> of June. Source: Hungarian Central Bank

Source: Hungarian Central Statistical Office (2008); National Accounts Hungary (1995-2007)

### 1.2 The tax-benefit system

Table 2. Tax-benefit system and government budget

	Total general government revenue <sup>[a]</sup> % of GDP	Total tax receipts <sup>[a]</sup> % of GDP	Total general government expenditure <sup>[a]</sup> % of GDP	Social protection <sup>[a]</sup> % of GDP
2005	42.2	15.5	50.1	17.0
2006	42.6	15.0	52.0	17.6
2007	44.8	15.6	49.8	17.4
2008	45.5	n/a	49.2	n/a

Source: <sup>[a]</sup> Eurostat; 2009 - <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

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

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



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

\* Corporate income and dividend tax

\*\* Includes self-employed

\*\*\*Taxes on production and import

Source: National Accounts Hungary 2004-2005; HCSO 2007; 2008: preliminary data

### 1.2.1 Basic information about the tax-benefit system, 2005-2008

- The tax-benefit system is a unified, national system, there aren't policies different across regions.
- The tax system generally changes in January each year. Main benefit changes happen at the same time, but in 2006 there were changes in the middle of the year. In Hungary, the "tax year" runs from 1 January to 31 December.
- Retirement age is 62 years for men and 60 for women (whose retirement age will increase to 62 years by 2008).
- The minimum school leaving age is 16; dependent children are defined as being under 16 or under 25 if the child is in full-time education and not married. In the case of the regular child protection benefit dependent children are defined in the tax unit 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 they do so, they don't have the right to share child related tax credit.
- 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 couple (cohabiting or married) and other adult person(s) or single adult plus any dependent children.



## 1.3 Social Benefits

### 1.3.1 Old-age benefits

The pension system was reformed in 1997, now it has 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.

**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 years for men and 60 for women, whose retirement age will increase to 62 years by 2008. There is a minimum pension with the amount of HUF 24,700 per month in 2005; 25,800 HUF in 2006; 27,130 HUF in 2007 and 28,500 HUF in 2008. No minimum for the partial pension. 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 that are hazardous 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 5 years before the retirement age. Those who need no more than 5 years of service period for the Advanced Pension, are entitled to the Advanced pension at a reduced rate (*csökkentett összegű előrehozott öregségi nyugdíj*).

### 1.3.2 Survivors benefits

For survivors benefits a surviving spouse (widow or widower, divorced spouse or cohabitant), the children and also other persons (parents, grandparents, and foster parents) can be entitled. The surviving spouse can be entitled for a permanent or a temporary widow(er)s pension if his/her deceased spouse was an old-age or invalidity pensioner or had the necessary service period.

**Temporary Widow(er)'s Pension (*ideiglenes özvegyi nyugdíj*)** is paid for 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*):** This pension is entitled if the widow(er) is above retirement age, invalid or has at least two minor children. The amount of the pension is



50% of the old-age pension or invalidity pension the deceased person would have been entitled for at the time of his/her death. This is reduced to 30% if the widow(er) receives his/her old-age or invalidity pension on his/her own right.

**Parental Pension (*szülői nyugdíj*)** is paid to those (grand)parents, who are disabled or aged 65 years or more, have been 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 who 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.

### 1.3.3 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.

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.

### 1.3.4 Disability benefits

Disability benefits are heterogeneous in Hungary, there are both insurance-based and non-contributory 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, 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 not in need of permanent care by others;
- Class I: 100% reduction of working capacity and in 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 Invalidity Pension is 37.5% to 63% of the average wage, while above 25 years of insurance period Invalidity Pension follows the old-age pension formula. In case of Class II invalidity the pension is 5% more than in Class III, while in Class I 10% more than in Class III. The minimum invalidity pension for Class III is equal to the minimum old-age pension.

The monthly amounts in HUF of the minimum invalidity pensions in the three class from 2005 to 2008 are:

	2005	2006	2007	2008
Class III	24,700	25,800	27,130	28,500
Class II	25,850	26,960	28,340	29,800
Class I	26,850	27,950	29,370	30,850

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

**Invalidity Annuity (*rokkantsági járadék*)** is paid to persons above 18 years of age who lose 100% of their working capacity before reaching the age of 25. Its amount is HUF 27,180 per month in 2005; 28,630 HUF in 2006; 30,130 HUF in 2007 and 32,610 in 2008. Adults who are not eligible for invalidity annuity, but whose working capacity has decreased by at least 67% and who 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 to those people who reach retirement age within five years and have 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. To the Regular Social Annuity those people are eligible, who haven't reached retirement age, but have half of the contribution payment periods necessary for invalidity pension. The Regular Social Annuity is HUF 21,890 per month in 2005; 23,060 HUF in 2006; 24,270 HUF in 2007; 26,420 HUF in 2008.

**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, its amount is 80% of the minimum old-age pension in case of multiple disadvantages or a severe disadvantage which makes any kind of self-help impossible; and 65% of it in any other cases.

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*).

### 1.3.5 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% 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% the annuity is payable for a maximum of two years, while if it exceeds 25% then without 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 amounts in HUF of the minimum work accident-related disability pension in the three class from 2005 to 2008:

	2005	2006	2007	2008
Class III	24,800	25,870	26,900	28,600
Class II	26,050	27,170	28,260	30,000
Class I	29,650	25,870	29,230	31,000

### 1.3.6 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.

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

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

	2006	2007	2008
Minimum	37,500 HUF	39,300 HUF	41,400 HUF
Maximum	75,000 HUF	78,600 HUF	88,800 HUF

**Pre-retirement Unemployment Assistance (*nyugdíj előtti munkanélküli segély*)**: Unemployed persons may apply if they are within five years of reaching retirement age, have received unemployment benefit for at least 140 days and have exhausted the entitlement for

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



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. It can be paid for 180 days or for 270 days for persons 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 (*álláskeresési segély*):** for the job seeker who has 180 days duration of job-seeking benefit and the duration time was used up, but who has not found work yet. The duration time of the allowance is 90 days and 180 days if the job-seeker is older than 50 years. The second type of jobseeker's allowance eligibility for the job-seekers who are not entitled to job-seekers benefit, but he/she had spent 200 employment days in the last four years. The third type of job-seekers allowance is aimed at job-seekers, who are missing maximum 5 years to reach the retirement age.

The amount of this allowance is the 40% of the minimum wage: 25,000 HUF in 2006; 26,200 HUF in 2007; 27,600 HUF in 2008. If the job-seekers average wage is lower than this amount, the amount of the job-seekers allowance is the average wage.

### 1.3.7 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 (*Öregségi nyugdíj*) = HUF 55,575 or 300% = HUF 74,100 in case of twins in 2005; 58,050 HUF and 77,400 HUF in 2006; 61,042 HUF and 81,390 HUF in 2007; 64,125 HUF and 85,500 HUF in 2008

**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 HUF 24,700 in 2005; 25,800 HUF in 2006; 26,830 HUF in 2007; 28,500 in 2008. In case of twins the amount is doubled.



**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 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 HUF 83,000 per month in 2005; 87,000 HUF in 2006; 91,700 HUF in 2007 and 96,600 HUF in 2008. Parents entitled for child care fee cannot be eligible for child care allowance.

**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.

### 1.3.8 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:

2005:

1 child in the family: HUF 5,100,  
1 child, single parent: HUF 6,000,  
2 children in the family: HUF 6,200 per child,  
2 children, single parent: HUF 7,200 per child,  
3 or more children in the family: HUF 7,800 per child,  
3 or more children, single parent: HUF 8,400 per child,  
permanently ill or severely disabled child in the family: HUF 13,900,  
permanently ill or severely disabled child, single parent: HUF 15,700,  
child in foster home/at foster parent: HUF 7,200.

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:

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 Benefit (*rendszeres gyermekvédelmi támogatás*):** This benefit is paid to the family if the income per person in the family does not exceed the amount of minimum old-age pension of HUF 24,700 in 2005. The local authority can also examine the property position of the family. The monthly amount of regular child protection benefit is 22% of the minimum old-age pension = HUF 5,434. The regular child protection benefit can be provided even after the child reaches 18 years of age if he/she is a regular student by his/her age of 23 in case of secondary education and by the age of 25 in case of tertiary education.

**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% and 125% of the minimum old-age pension in 2007 and 2008) and remaining in the family is not against the interests of the child. From 2006 the regular child protection benefit has been combined with 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 five thousand Forint support in cash for two times a year.

### 1.3.9 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),
- 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. Before that the local government awarded regular social assistance to a person who was over 18 years of age, was of active age, and had lost at least 67 per cent of his or her working ability or received blind persons' benefit, or to a person who was of active age but not in employment, in the case that their subsistence was not provided by other means. By the new terms for the support only one person in a family is entitled. The assessment 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 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 children are 0.7. The amount of support is variable and supplements the family's effective total income to the limit of the entitlement.

**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.

---

<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.





The amount of the benefit is determined by the independent local governments in a local government decrees 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 24,700 per month in 2005; 25,800 in 2006; 26,830 in 2007; 28,500 in 2008.
- 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% of it in case of a one-person household.
- From September 2005 those who nurse disabled persons in need of increased nursing are provided by a higher amount of nursing allowance, its amount is higher by 30% than the normal nursing allowance.

There is no comprehensive information available on how local authorities specify the discretionary rules of the nursing fee. 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 (62 years) 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 62 years of age or 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% of the current minimum old-age pension or 95% 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. A 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 5. Social benefits: recipients (as % of population)

	2005	2006	2007	2008
Old-age benefit	16.28%	16.46%	16.65%	17.09%
Temporary Widow(er)'s Pension	1.73%*	1.56%*	1.47%*	1.40%*
Permanent Widow(er)'s Pension				
Parental Pension	0.00%	0.00%	0.00%	0.00%
Orphan's Allowance	1.11%	1.06%	1.04%	1.01%
Invalidity Pension	8.00%	7.96%	7.93%	7.76%
Invalidity Annuity	0.27%	0.30%	0.30%	0.31%
Temporary Invalidity Annuity	0.12%	0.18%	0.21%	0.23%
Disability Benefit	0.95%	1.06%	1.08%	1.10%
Work Accident Sickness Benefit	-	-	-	-
Work Accident Annuity	-	-	-	-
Work Accident-related Disability Pension	-	-	-	-
Unemployment Benefit	1.18%	0.91%	0.95%	1.05%
Pre-retirement Unemployment Assistance	0.06%	-	-	-
Incentive Benefit for Job-seekers	0.16%	-	-	-
Job-seekers allowance	-	0.34%	0.36%	0.31%
Maternity Allowance	0.28%	0.30%	0.29%	0.29%
Maternity Grant	0.91%	0.94%	0.90%	0.95%
Child Care Allowance	1.61%	1.66%	1.64%	1.60%
Child Care Fee	0.83%	0.91%	0.93%	0.94%
Child Raising Support	0.47%	0.45%	0.42%	0.41%
Family Allowance	12.75%	12.59%	12.16%	12.41%
Regular Child Protection Benefit	6.68%	-	-	-
Regular Child Protection Allowance	-	4.41%	4.87%	5.10%
Family tax credit	11.39%	0.00%	0.00%	0.00%
Regular social benefit	1.43%	1.59%	2.08%	2.21%
Nursing Fee	0.36%	0.47%	0.52%	0.53%
Home Maintenance Support	1.95%	2.56%	2.52%	2.29%

Notes: \* The two type of widower's pensions together

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



Table 6. Social benefit: expenditure\*

	2005	2006	2007	2008
<b>Annual expenditure (million HUF)</b>	3,330,789	3,696,172,	4,111,158	4,407,235
as % of total expenditure				
Pension above retirement age	47.78%	48.05%	48.44%	50.62%
Pensions below retirement age	8.53%	7.92%	7.52%	7.39%
Allowances for survivors	7.95%	7.80%	7.62%	7.50%
Maternity allowance	0.81%	0.82%	0.81%	0.97%
Child-care fee	2.17%	2.19%	2.27%	1.90%
Sickness benefit	2.91%	2.70%	2.37%	2.33%
Benefit related to sickness	0.26%	0.27%	0.24%	n.a.
Unemployment benefit	2.78%	2.50%	2.42%	2.60%
Other benefits related to pension	1.13%	1.04%	0.92%	n.a.
Benefits of persons with reduced working ability	3.10%	2.93%	2.77%	1.66%
Family allowances	5.86%	8.61%	8.48%	8.29%
Child-care allowances, child-care-assistance benefits	2.26%	2.18%	2.08%	1.80%
Other benefits related to maternity	0.19%	0.41%	0.28%	n.a.
Regular and non-regular assistance benefits	3.65%	2.82%	2.94%	2.90%
Scholarship and other grants	1.35%	0.89%	1.24%	0.91%

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

Source: National Accounts Hungary 1995-2007; HCSO 2009; 2008: Preliminary data

- *Not strictly benefits*

**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 the other parent obliged to maintain the child, the person who takes care of the child cannot maintain the child, and if the income per person in the applicant's family does not exceed three times the current minimum amount of old-age pension. 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 threatened. 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 pose a threat to 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% of it in case of a one-person household. The amount of the funeral benefit cannot be lower than 10% 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.

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, 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 wages.

##### **Pension insurance contribution (*nyugdíjjárulék*):**

In the case of pension insurance, the rate of contribution payable by employers is 18%. The rate of contribution payable by employees, if they are members of the compulsory pension scheme of social insurance, 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 an 8% members fee to the private pension fund, above the 0.5% pension contribution. The members fee can be completed either by the employee or by the employer, up to 10%. There is an upper limit of pension contribution paid by employees, which equals the contribution payable after the gross average income threshold, in 2005 16,440 HUF/month (which equals the amount of contribution payable for 6,000,600 HUF in wages). This upper limit is 17,330 HUF in 2006; 18,490 HUF in 2007 and 19,500 HUF in 2008. 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.

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.



**Health insurance contribution (*egészségbiztosítási járulék*):** In the case of health insurance, employers pay 11%, while employees pay 4% health insurance contribution in 2005. Joint and private entrepreneurs are obliged to pay both the 11% payable by employers and the 4% payable by employees in 2005.

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 contributions are 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 payments in kind.

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%).

**Flat rate health contribution (*tételes egészségügyi hozzájárulás*):** Fixed health contributions are payable by employers according to their employees, by private entrepreneurs. Those subject to EVA are 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.

Up to 30 October 2005 it amounted to 3,450 HUF a month, after the 1st of November 1,950 HUF a month. In the case of part-time employment, the amount of contribution to be paid has to be made proportionate, but is at least 50%.



Table 7. Social contributions from 2005 to 2008

		2005	2006	2007	2008
Pension insurance contribution (nyugdíjjárulék)	Employees	8.5%	8.5%	8.5%	9.5%
	Employers	18%	18%	21%	24%
	Self employment	26.5%	26.5%	29.5%	33.5%
Health insurance contribution (egészségbiztosítási járulék)	Employees	4%	4%	7%	6%
	Employers	11%	11%	8%	5%
	Self employment	15%	15%	15%	11%
Flat rate health contribution (tételes egészségügyi hozzájárulás):	Employees	-	-	-	-
	Employers	3,450 HUF	1,950 HUF	1,950 HUF	1,950 HUF
	Self employment	3,450 HUF	1,950 HUF	1,950 HUF	1,950 HUF

### Other income related contributions

**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% in 2005. This rate has not changed until 2008.

**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.

**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%. This rate didn't change until 2008.

**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 didn't change until 2008.



In 2005, 172,610 million HUF employer contribution, 52,264 million HUF employee contribution, 6,524 million HUF entrepreneurial contribution and 27,662 million HUF vocational training contribution were paid into the Labour Market Fund.

The number of contributors (in the case of the pension insurance contribution and the health insurance contribution too) is approximately 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. 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 the 1<sup>st</sup> of January 2003. EVA addresses small-scale enterprises, not only with the aim of reducing tax burdens but also in order to simplify the 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, too. 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 tax year are not more than – since 2004 already – 25 000 000 HUF. The tax rate is 15% in 2005-2006 and 25% in 2007-2008.

**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. In 2007 and 2008 the old-age pension is part of the non-taxable emoluments too.
- 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.





#### Tax table:

In 2005 the income bracket tax rates 0 – 1,500,000 HUF 18 %; above 1,500,000 HUF 38 %;  
 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 40 %;  
 in 2008: 0 – 1,700,000 HUF 18 %; above 1,700,000 HUF 40 %.

#### 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.

Tax credit on income from wages (in 2008 together with the additional tax credit on income from wages

	2005	2006	2007	2008
Maximum monthly amount	9,000 HUF	9,000 HUF	9,000 HUF	11,340 HUF
The lower limit	1,350,000 HUF	1,500,000 HUF	1,500,000 HUF	1,250,000 HUF
The higher limit of the income	1,950,000 HUF	2,100,000 HUF	2,100,000 HUF	2,762,000 HUF

If the total income is not more than 1,302,400 HUF, the taxpayer can expect an additional tax refund. The additional tax refund is 18% of the difference between the actual monthly income from wages and 50,000 HUF, but maximum 1,260 HUF a month. In the case of gross income between 1,000 000 and 1,302,400 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.



## Additional tax credit on income from wages

	2005	2006	2007	2008
Maximum monthly amount	1,260 HUF	2,340 HUF	2,340 HUF	-
The lower limit	1,000,000 HUF	1,000,000 HUF	1,000,000 HUF	-
The higher limit of the income	1,302,400 HUF	1,561,600 HUF	1,561,600 HUF	-

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

**Family tax credit (*családi adókedvezmény*):** Every household with children is eligible for family tax credit if it has a taxable income. In 2005 the amount varies according to the number of children in the family:

- One child family: HUF 3,000,
- Two children family: HUF 4,000 / child,
- Three or more children: HUF 10,000 / child.

A considerable change happened in 2006, from this year the families whose bringing up one or two children do not have to be eligible for family tax credit. From 2006 yearly 144,000 forints ( $3 \times 4000 \text{ HUF} \times 12$ ) may be brought into a claim the families with three children, where all three children are qualified as a dependent.

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. Above this income level, the part of allowance that is above the 20% of the income above the 8,000,000 HUF can be claimed.

The total value of the allowance cannot be more than 100,000 HUF in the case of people whose total income is below 6,000,000 HUF (3,000,000 HUF in 2007 and 2008). If the total income is between 6,000,000 and 6,500,000 HUF (between 3,000,000 and 3,900,000 HUF in 2007 and 2008), the maximum of the allowance group linearly decreases. In the case of income above the highest limit, these allowances cannot be claimed. The tax calculated on the basis of income types to be consolidated and decreased by the amount of tax credits, is completed with the tax payable for the separately taxed income.

#### Non-simulated tax credits:

Although this detailed system of tax credit 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, except if the taxpayer reaches retirement age before 1 January 2020, in that case 130,000 HUF. 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 inland. 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 60,000 HUF. 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. 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. The 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.
- 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, is 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 is 20%. 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 due 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 month afterwards. The amount spent on purchasing can be deducted from the income originating from sale.



- Income originating from the sale of movable property. Tax is 20%. Tax-exempt, if the income originating from the sale of movable property is not more than 200,000 HUF. If it is more than that, 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 is 35%. It is tax-exempt, if the contract ensuring support for life, the testamentary contract or the life-annuity contract was made with a private person. It is also tax-exempt 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. Tax exempt if life-annuity was received in return for real estate, right of property or movable property.
- Income originating from rate of exchange gain. Tax is 25%.
- Income originating from securities lending. Tax is 20%.
- Income raised by right of dividends Tax 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 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.

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 luncheon 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. Luncheon 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 near relatives, either together with or separately from the employee. Its limit is the amount of the minimum wage, in 2005 57,000 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. The most important task is the simulation of the personal income tax.

**Corporate tax (*társasági adó*):** Corporate tax is paid by economic societies, co-operatives, non-profit companies, foundations etc. on the basis of their yearly profit. The tax rate is 16%. In 2005, 430,051 million HUF corporate tax were collected by the budget.

At the same time, it must be clear that in Hungary, the number of small-scale enterprises is very high, but a great proportion of these is not an economic enterprise in the classical sense but simply a way of fending for oneself or being connected to the labour market and as such, the revenues, expenses, rates and taxes of these companies are in fact, completely or in part, household revenues, expenses and taxes. However, the ratio of these among corporate tax payers has been decreasing since the introduction of the simplified business tax discussed below and almost all company tax is paid by economic societies in the real sense.

**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 with and there are relatively less rates and taxes to be paid. In 2005, 91,365 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, too. 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 tax year are not more than – since 2004 already – 25,000,000 HUF. 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 etc.

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. Although 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, we can still 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 3100 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:** In 2005, 670,673 million HUF excise tax was collected by the budget, 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:** In 2005, 3,155 million HUF environmental protection fee was collected by the budget. Environmental protection fee is payable by the circulator or the importer when the products listed below are imported or put on the market for the first time.

- other crude oil products
- rubber tyre



- refrigerator, coolant
- wrapping
- battery
- advertising medium on paper
- electric and electronic equipment

The larger part of the sum, either directly or indirectly burdens the population but one part is divided between different economic organisations. No estimates are available about the proportion of this.

**Charge for environmental load:** 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. In 2004, 6.5 billion HUF were collected (of 14 billion planned) as charge for environmental loads. It is hard to make a precise estimate but probably only a small proportion of these revenues come from households.

**Gambling tax:** In 2005, 66,377 million HUF gambling tax was collected by the budget. 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 on 1 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. It is impossible to tell exactly how much of the given tax collected by the budget, 68,279 million HUF in 2005, is coming from households, because in the case of small companies private property and company property cannot be accurately separated. 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:** Energy tax was introduced on 1 January 2004. 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. In 2005, 12,732 million HUF energy tax was collected by the central budget.

- *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)

	2005	2006	2007	2008
<b>Direct taxes</b>				
Personal income tax	44.15%	44.24%	45.56%	n.a.
Corporate tax	12.32%	12.30%	12.63%	n.a.
Simplified business tax	1.14%	1.15%	1.15%	n.a.

Source: Source: Hungarian Tax and Financial Control Administration, 2005

Table 9. Taxes: revenue

	2005	2006	2007	2008
<b>Annual revenue (million HUF)</b>	6,631,893	7,163,894	8,653,988	n.a.
<b>Direct taxes</b>				
Personal income tax	21.68%	22.05%	20.80%	n.a.
Corporate tax	6.48%	6.54%	7.13%	n.a.
Simplified business tax	1.38%	2.00%	1.77%	n.a.
<b>Indirect taxes</b>				
Value Added Tax	26.92%	25.57%	22.87%	n.a.
Environmental protection fee	0.34%	0.33%	0.31%	n.a.
Gambling tax	1.00%	1.00%	0.83%	n.a.

Source: Hungarian Tax and Financial Control Administration, 2005

## 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 its output income variables (e.g. Value Added Tax). Others are not possible to simulate accurately with the available data (old-age benefits, 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 by the model. Tables 10 and 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

	Variable name(s)	Treatment in Euromod				Why not fully simulated?
		2005	2006	2007	2008	
Old-age benefit	poaA	I	I	I	I	No data on contribution history
Early Retirement Pension	poa	I	I	I	I	No data on contribution history
Advanced Pension	poa	I	I	I	I	No data on contribution history
Temporary Widow(er)'s Pension	psu	I	I	I	I	No data on contribution history
Permanent Widow(er)'s Pension	psu	I	I	I	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	I	I	I	No data on contribution history
Orphan's Allowance	psu	I	I	I	I	No information about the eligibility conditions
Absence Fee	bhl	I	I	I	I	Data available is not sufficient to simulate all eligibility conditions
Sickness Benefit	bhl	I	I	I	I	Data available is not sufficient to simulate all eligibility conditions
Invalidity Annuity	pdi	I	I	I	I	No information on disability
Temporary Invalidity Annuity	pdi	I	I	I	I	No information on disability Data available is not sufficient to simulate all eligibility conditions
Disability Benefit	pdi	I	I	I	I	Data available is not sufficient to simulate all eligibility conditions
Work Accident Sickness Benefit	bhl	I	I	I	I	No information about the sickness
Work Accident Annuity	bhl	I	I	I	I	No information about the sickness
Work Accident-related Disability Pension	pdi	I	I	I	I	No information about the sickness
Unemployment Benefit	bun	S	S	S	S	No data on contribution history (coded (PS) but currently switched off)
Pre-retirement Unemployment Assistance	bun	I	I	I	I	No data on contribution history
Incentive Benefit for Job-seekers	bun	I	I	I	I	No data on contribution history
Maternity Allowance	Bmact	I	I	I	I	No data on contribution history
Maternity Grant	Bmanc_s	S	S	S	S	
Child Care Allowance	Bccnc_s	S	S	S	S	
Child Care Fee	Bccct	I	I	I	I	No data on contribution history
Child Raising Support	bcclt_s	S	S	S	S	
Family Allowance	bchnm_s	S	S	S	S	
Regular Child Protection Benefit		S	-	-	-	
Regular Child Protection Allowance	bchmt_s	-	S	S	S	
Old-age allowance	poamt_s	S	S	S	S	
Regular benefit	bsa00_s	S	S	S	S	
Home maintenance support	bsoho_s	PS	PS	PS	PS	No information about the size of flat
Nursing fee	-	I	I	I	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

	Variable name(s)		Treatment in Euromod				Why not fully simulated?
	2005	2006-2008	2005	2006	2007	2008	
Personal income tax	tin_s	Tin_s	PS	PS	PS	PS	No information about all of the tax credits
Corporate tax	-	-	E	E	E	E	No information available
Simplified business tax	tbs_s	Tbs_s	S	S	S	S	No information about the type of the self-employment, but we estimate the number of the tax payers. Every eighth self-employment chose this type of tax paying in 2005. (~100 000 person or firm)
Employee Social Insurance Contributions	Tscee_s	Tscee_s	S	S	S	S	
Employer Social Insurance Contributions	Tscer_s	Tscer_s	S	S	S	S	
Self-employed Social Insurance Contributions	Tscse_s	Tscse_s	S	S	S	S	

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

## 2.2 Simulated policies and order of simulation

### 2.2.1 Simulated policies

2005 was the first simulated year of the Hungarian policies in the EUROMOD, see the order of simulation below.

### 2.2.2 Order of simulation

- *Order of simulation in 2005 and in 2006-2008*

The following table shows the order in which policies of the Hungary system are simulated. This table is extracted from the EUROMOD parameter sheet spine hu\_2005.

Table 12. EUROMOD Spine: order of simulation, 2005 - 08

Policy	Description	Main output
Bunct_hu	Unemployment benefit (munkanélküli járadék), currently switched off	bunct
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
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
Bchm_hu	Family Allowance (Családi Pótlék Tartásdíj)	Bchm_s
Bchmt_hu (2005)	Family allowance (családi pótlék tartásdíj)	Bchmt_s
Bchmt_hu (2006-08)	Regular child protection benefit (rendszeres gyermekvédelmi támogatás)	Bchmt_s
Bsa_hu	Social assistance (szociális segélyek)	Bsa_s

In the Hungarian system there are five means-tested benefits that can be simulated (these four benefits are in three policies: bchmt\_hu and bsa\_hu). Regular child protection benefit (bchmt\_hu); Regular child protection allowance (bchmt\_hu); old-age allowance, regular benefit, home maintenance support (bsa\_hu ) all depend on income after income tax (tin\_hu and tbs\_hu) and employee and self-employed contributions (tscee\_hu, tcse\_hu) 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 maternity or child related benefits (bmanc\_hu, bccnc\_hu, bcclt\_hu, bchmt\_hu) depend on the age of the child or the number of the dependent children in the household. The first three benefits are part of means-tests for social assistance and must therefore be simulated before social assistance.



## 2.3 Social benefits

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

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 in 2005.

- *Definitions*

The unit of analysis is the family (tu\_cbfam\_hu). This comprises the head, his spouse or partner and their own children.

- *Eligibility conditions*

This benefit is paid if at least one one-year old child lives in the family.

- *Income test*

This benefit isn't dependent on other incomes. An income test therefore is not necessary.

- *Benefit amount*

The maternity grant is an annual amount (period = y), i.e. in the Euromod monthly output it is divided by 12). The formula for calculating the maternity grant is as follows: (minimum old age pension /12)\*2.25.

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

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.

Dependent children are defined in the taxunit as age<=2 (dag<=2) or age<=9 if disabled (dag<=9|ddi=1), grandparents are defined in the taxunit as parents of the child's mother or father.



- **Eligibility conditions**

Eligible are units where at least one adult person does not work more than 4 hours ( $lwh \leq 4$ ), and is caring for a 0-2 year old child if the person is the parent ( $IsParentOfDepChild$ ), or a 1-2 year old child ( $\#1\_AgeMin=1$ ) if the person is the grandparent ( $!IsParentOfDepChild$ )

- **Income test**

Incomtest is not applicable

- **Benefit amount**

The monthly amount is equal to the (monthly) 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 and their own children.

Dependent children are defined in the taxunit as aged 16 or younger ( $dag \leq 16$ ) or 24 or younger ( $dag \leq 24$ ) if they are in full time secondary education ( $dec=3|dec=4$ ), not married ( $dms=2$ ) and not cohabiting ( $idpartner=0$ ).

- **Eligibility conditions**

Eligible are families with at least 3 dependent children ( $nDepChInTu \geq 3$ ) where there is at least one child with  $3 \leq age \leq 7$  ( $nDepChInTu > 0$ ,  $\#1\_AgeMin=3$ ,  $\#1\_AgeMax=7$ ) and no child with  $0 \leq age \leq 2$  ( $nDepChInTu=0$ ,  $\#2\_AgeMin=0$ ,  $\#2\_AgeMax=2$ ) (i.e. a 3-7 year old child is the youngest).

- **Income test**

Income test is not applicable

- **Benefit amount**

The monthly amount is equal to the (monthly) minimum old age pension ( $\$MinPension\_m$ ).

### 2.3.4 Family allowance (*BCHMT\_S*)

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.

- **Definitions**

The unit of analysis is the family (tu\_cbfam\_hu). This comprises the head, his spouse or partner and their own children.

Dependent children are defined in the taxunit as aged 16 or younger (dag<=16) or 20 or younger (dag<=20) if they are in full time secondary education (dec=3/dec=4), not married (!dms=2) and not cohabiting (idpartner=0).

- **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 6,000 (in 2005); HUF 12,000 (in 2006), HUF 12,700 (in 2007) and HUF 13,700 (in 2008),

2 children (nDepChInTu=2): HUF 7,200, HUF 13,000, HUF 13,800, HUF 14,800 per child (IsDepChild),

3 or more children (nDepChInTu>2): HUF 8,400 HUF 15,000, HUF 15,900, HUF 17,000 per child (IsDepChild),

Permanently ill or severely disabled child (IsDisabled): HUF 15,700, HUF 23,000, HUF 24,400 HUF 25,900.

The monthly amounts for other families (bchnm = 0) are:

1 child (nDepChInTu=1): HUF 5,100, HUF 11,000, HUF 11,700, HUF 12,200,

2 children (nDepChInTu=2): HUF 6,200, HUF 12,000, HUF 12,700, HUF 13,300 per child (IsDepChild),

3 or more children (nDepChInTu>2): HUF 7,800, HUF 14,000, HUF 14,900, HUF 16,000 per child (IsDepChild),



Permanently ill or severely disabled child (IsDisabled): HUF 13,900 HUF 21,000 HUF 22,300, HUF 23,300, by respective years of 2005-2008.

The special amount for foster children cannot be simulated.

### 2.3.5 Regular child protection benefit (*bchmt\_s*)

This benefit is paid to the family if the income per person in the family does not exceed the amount of 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.

Dependent children are defined in the taxunit as aged 17 or younger (dag<=17) or 23 or younger (dag<=23) if they are in full time secondary education (dec=3|dec=4), not married (tu\_cbfam\_hu|cd\_Married) and not cohabiting (idpartner=0) or 25 years old or younger (dag<=25) if they are in full time tertiary education (dec=6), not married (!dms=2) and not cohabiting (idpartner=0).

- *Eligibility conditions*

Eligible are families where per capita monthly income (as defined in il\_meanstestY) is below the amount of the minimum old-age pension

- *Income test*

The il\_meanstestY is defined as disposables income (ils\_dispy) with the exception of this benefit and social assistance (as they are not yet calculated)

- *Benefit amount*

The benefit per child amounts to 22% of the minimum old-age pension ( $\$MinPension_m * 0.22 * nDepChInTu$ ).

### 2.3.6 Social assistance (*BSA\_S*)

#### 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.





Taxunit comprises only head and his/her partner, i.e. income of other household members is not taken into account.

- ***Eligibility conditions***

Eligible are couples (nPersInUnit=2) where at least one is 62 or older (dag>=62) and singles (nPersInUnit=1) who are 62 or older (dag>=62).

- ***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***

For couples the maximum benefit amounts to 80% of the minimum old-age pension (\$MinPension\_m) per person. For singles the maximum benefit amounts to 95% of the minimum old-age pension (\$MinPension\_m). Income of the couple/single (as defined in il\_meanstestY) is withdrawn completely from maximum benefit (withdraw\_rate=1).

### 2.3.6.2 Regular benefit

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.

- ***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 persons who are 18 years or older (dag>=18) and have a disability degree of at least 67% or receive disability benefit (ddi>0) or are non-employed, i.e. unemployed (les=5) or inactive (les=7) and do not have income as defined in il\_sareexclY (il\_sareexclY<=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 80% of the minimum old-age pension. The payable amount is the difference between per capita income (sin01 = il\_meanstestY / hh-members) and that maximum.



### 2.3.6.3 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. 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 2,500 HUF.

## 2.4 Social contributions

In Hungary, the social insurance system has two large parts: the pension scheme and health insurance. Between 2005 and 2008, there have been a number of changes to the proportion and amounts of social insurance collected (see table below):



Table 13. Social contributions from 2005 to 2008

		2005	2006	2007	2008
Pension insurance contribution (nyugdíjjárulék)	Employees	8.5%	8.5%	8.5%	9.5%
	Employers	18%	18%	21%	24%
	Self employment	26.5%	26.5%	29.5%	33.5%
Health insurance contribution (egészségbiztosítási járulék)	Employees	4%	4%	7%	6%
	Employers	11%	11%	8%	5%
	Self employment	15%	15%	15%	11%
Flat rate health contribution (tételes egészségügyi hozzájárulás):	Employees	-	-	-	-
	Employers	3450 HUF	1950 HUF	1950 HUF	1950 HUF
	Self employment	3450 HUF	1950 HUF	1950 HUF	1950 HUF

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

Pension insurance contributions amount to 8.5% of employment income with a daily upper limit (uplim\_amount)

Employees pay 4% health insurance contribution and general employee insurance contributions amount to 1% of employment income.

No employee social insurance contributions are paid if in receipt of old age pension (poa>0). The tax unit is the tu\_individual\_hu.

#### 2.4.2 Employer social contributions (ERSIC\_S)

Pension insurance contributions amount to 18% of employment income and the health insurance contributions amount to 11% of employment income. The upper limit for this is 16,440 HUF per day in 2005 (17,330 in 2006, 18,490 in 2007 and 19,500 in 2008).

Fixed health contributions of a monthly amount of 3,450 HUF are paid by employers for their employees in 2005. From 2006 onwards this contribution was reduced to 1,950 HUF per month. 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 employer insurance contributions amount to 3% of employment income.

The tax unit is tu\_individual\_hu.

### 2.4.3 Self-employed social contributions (tscse\_s)

Entrepreneurs (tscse=1) and EVA (simplified business tax) payers (tscse=2) pay self-employed contributions.

Contribution base for entrepreneurs (tscse=1) is self-employment income (yse) but at least the amount of the minimum wage. In the case of EVA payers (tscse=2) 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 ( $\{tscse \neq 2\} \mid \{tscee=0\}$ )

For example, in 2005 pension insurance contributions amounted to 8.5% (employee-part) + 18% (employer-part) of contribution base. If in receipt of old age pension  $\{poa > 0\}$  only the employer part, i.e. 18% of contribution base, has to be paid. Health insurance contributions amount to 4% (employee-part) + 11% (employer-part) of contribution base. If in receipt of old age pension only the employer part, i.e. 11% of contribution base, has to be paid. General insurance contributions amount to 1% (employee-part) + 3% (employer-part) of contribution base. If in receipt of old age pension only the employer part, i.e. 3% of contribution base, has to be paid.

Fixed health contributions of a monthly amount of 3,450 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. From 2006 onwards this contribution was reduced to 1,950 HUF per month.

## 2.5 Personal income tax (IT\_S)

The main tax simulated for Hungary is personal income tax (it\_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 (tu\_individual\_hu). However, as explained shortly, there is a partial exception to this rule: family tax credit are jointly assessed (tu\_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. Dependent children are defined as aged 16 or younger ( $dag \leq 16$ ) or aged 24 or younger ( $dag \leq 24$ ) if they are in full time secondary education ( $dec=3 \mid dec=4$ ). Children cannot be married ( $!dms=2$ ) or cohabiting ( $idpartner=0$ ).



## 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' (tscse=2) self-employment income. Their self-employment income is stored in coYSE 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 (The following syntax consists the incomes what we can use in the model. These are the most important type of incomes, and the amounts of these incomes cause the errors/divergence of the simulating.) :

IL: taxableY

taxableY= child raising support (gyermeknevelési támogatás, co\_bcclt) + child care allowance (gyermekgondozási segély, co\_bcnc) + child care fee (gyermekgondozási díj, BCCCT) + sickness benefits (táppénz, távolléti díj, BHL) + maternity allowance (terhességi-gyermekágyi segély, BMACT) + unemployment benefits (munkanélküli ellátások, coBUN) + employment income, YEM) + property income (YPR) + self-employment income (YSE)

## 2.5.4 Tax schedule

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

In 2005, the tax schedule included 2 brackets. Income up to 1,500,000 HUF annual in 2005 (1,550,000 in 2006 and 1,700,000 in 2007 and 2008) is taxed with a rate of 18%, income above with a rate of 38%.

## 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 consists most of these tax credits but these are switched off. In this chapter we listed only the simulated tax credits.

### 2.5.5.1 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). Band rate 1 for this tax credit is 18% from 2005 to 2008. Band rate 2 varies between the years, it is 38% in 2005, 36% in 2006



and 40% in 2007 and 2008. Income up to 1,500,000 HUF annual in 2005 (1,550,000 in 2006 and 1,700,000 in 2007 and 2008) is taxed.

#### **2.5.5.2 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 2005 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 1,350,000 HUF annual amount and 1,950,000 HUF annual amount.

#### **2.5.5.3 Additional tax credit on income from wages**

The refund is only available for those with positive wage income (`il_wageY>0`). For example in 2005 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 1,260 HUF (monthly) but the maximum tapers off if total income (as defined in `il_totaly`) is between 1,000,000 HUF (annual) and 1,302,400 HUF (annual) in 2005.

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

#### **2.5.5.4 Tax credit for serious disability**

Eligible are persons with a disability level of at least 67% (`ddi>0`). The tax credit amounts to 2 000 HUF monthly amount

#### **2.5.5.5 Family tax credit**

In 2005 the family tax credit amounts to 3,000 HUF monthly amount if there is one dependent child in the family (`nDepChInTu=1`)

4,000 HUF monthly amount per child (`nDepChInTur*amount`) if there are two dependent children in the family (`nDepChInTu=2`)

10,000 HUF monthly amount per child (`nDepChInTur*amount`) if there are three or more dependent children in the family (`nDepChInTu>2`)

Tax credit is granted fully if total income is below 8,000,000 HUF annual amount, if total income is above, for each HUF above, 20% are deducted from tax credit

The tax credit is shared (proportionally to tax after deduction of other tax credits) among parents to make the maximum use of it.

## **2.6 Simplified Business Tax (EVA\_HU)**

Calculation of EVA (Egyszerűsített Vállalkozói Adó – Simplified Business Tax) is based on the amount of total revenues together with the VAT. The tax rate is 15% in 2005 and 2006; 25% in 2007 and 2008. 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).

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 2007 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 14. EUROMOD database description

<b>2007</b>	
EUROMOD database	HU_2007_a4.txt
Original name	udb_c07_ver 2007-1 from 01-03-10.sav
Provider	HCSO; EUROSÍTAT
Year of collection	2007
Period of collection	n/a
Income reference period	01/01/ to 31/12/ 2006 previous to fieldwork
Unit of assessment	Households*
Coverage	Private household
Sample size	Ind: 22,297 HH: 8,737
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. The EUROSTAT published just the household response rate that is 62%

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 reweighing 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 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. Sample statistics and output estimates were projected to a reference population of 10,097,549 individuals in 3,837,087 households. Population estimates were provided by the General Election Districts of Hungary on the basis of the 2001 Population Census. Table 15 below presents some basic descriptive statistics for the grossing-up weight of the adjusted data.

### 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 UDB for Hungary database there aren't 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.

### **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. 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. Even so, another validation process comparing it to the detailed description of the process with the Hungarian database is not available.

The only adjustment that is being made is dropping the children born in the year of the data collection, i.e. 2007. In the case of Hungary this meant that 26 children were dropped and the overall sample size therefore changed from 22,297 to 22,271.



Table 15. Descriptive Statistics of the Grossing-up weight

	<b>EM_data1</b>
Number	22271
Mean	4444.7317
Median	385.0000
Maximum	1100
Minimum	100
Max/Min	11
Decile 1	189
Decile 9	805
Dec 9 / Dec1	4.26

### 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 (e.g. 01/01/2006 – 31/12/2006 in 2007). 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.”

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

#### 3.4.2 Gross incomes

The UDB for Hungary 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.”



### 3.4.3 Other imputed variables

The TSCSE variable is show the type of self-employment regarding taxation but this information is not available in the original SILC UDB. That's why we have to impute this variable: if the self employment income less than 25,000,000 HUF we look this person like an EVA payer. Additionally we have to apply a correction, in case of every eighth self-employment turn 'normal' taxation. We need this correction because too many people went to EVA payer if we apply only the original monetary condition.

### 3.5 Updating

The factors that are used to update monetary variables from the mean of the data year are shown in Table 18. No other updating adjustments are employed.

Table 16. Updating factors

Index	Income Source/index type	HU_2005	HU_2006	HU_2007	HU_2008
def_factor	<i>default uprating factor</i>	0.96000	1	1.07900	1.14374
yem	<i>wages and saleries</i>	0.93261	1	1.06168	1.12343
yse	<i>self-employment income</i>	0.97867	1	1.02904	1.07500
poa	<i>old age income (öregségi/saját jogú nyugdíj) survivor benefits</i>	0.94245	1	1.08963	1.17426
psu	<i>(hózzátartozói jogon járó nyugdíj)</i>	0.94417	1	1.08785	1.09934
bfa	<i>total family benefits</i>	0.69325	1	1.04319	1.13390
bun	<i>unemployment benefits (munkanélküli ellátások)</i>	1.01441	1	1.05445	1.13703
pfl	<i>sickness benefits</i>	0.98615	1	0.98523	1.06705
pdi	<i>disability benefits</i>	0.93721	1	1.09088	1.19299

Source: Def\_factor: EUROSTAT; HCPI:

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tsieb060&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>, Own calculation by the Yearbook of Welfare Statistics, 2005; 2006; 2007; 2008 HCSO; Hungarian National Accounts, 2005; 2006; 2007; 2008 HCSO

## 4. VALIDATION

### 4.1 Aggregate Validation

#### 4.1.1 Non simulated taxes and benefits

The table below compares statistics on benefits and taxes that are not simulated by EUROMOD with external sources. This provides an assessment of the quality of the database and also provides some useful background information for the validation of simulated components of income, which may depend on or be associated with the non-simulated components. It



calculates the ratio of EUROMOD (weighted SILC) expenditures and numbers of recipients to estimates drawn from administrative statistics for some of the main social security benefits that are not simulated by the model.

All important personal income tax and social contributions are simulated, but some of the tax credits can't be simulated.

Table 17. EUROMOD validation: taxes and benefits included but not simulated

BENEFIT	Year	Recipients			Expenditure (HUFm/month)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Sickness benefits	2005	521,379	102,000*	5.11	4,511	8,164	0.55
	2006	521,379	100,000*	5.21	4,574	8,424	0.54
	2007	521,379	90,000*	5.79	4,506	8,225	0.55
	2008	521,379	90,000*	5.79	4,881	8,653	0.56
Disability benefits	2005	740,794	424,000**	1.75	30,195	23,633	1.28
	2006	740,794	428,000**	1.73	32,218	25,217	1.28
	2007	740,794	798,000**	0.93	35,146	48,825	0.72
	2008	740,794	788,000**	0.94	38,436	52,558	0.73
Old age income	2005	2,101,332	1,985,719	1.06	142,150	87,883	1.62
	2006	2,101,332	2,010,186	1.05	150,830	93,250	1.62
	2007	2,101,332	2,027,030	1.04	164,350	101,608	1.62
	2008	2,101,332	2,078,272	1.01	177,114	111,750	1.58
Survivor benefits	2005	105,950	140,000	0.76	3,662	4,292	0.85
	2006	105,950	137,000	0.77	3,878	3,825	1.01
	2007	105,950	139,000	0.76	4,219	4,842	0.87
	2008	105,950	133,000	0.80	4,263	4,925	0.87
Unemployment benefit	2005	468,175	98,032	4.78	9,784	7,703	1.27
	2006	468,175	91,550	5.11	9,645	7,687	1.25
	2007	468,175	95,707	4.89	10,170	8,300	1.23
	2008	468,175	105,843	4.42	10,966	n.a.	

Notes: \* This number does not contain the sick leave recipients. An employee is entitled to 15 days' sick leave per calendar year to cover periods of unfitness for work occurring by reason of sickness. The employer bears the expenses of sick leave. (HCSO, 2006). The above signed 'external source' number is shown by the National Health Insurance Fund Administration data, the EUROMOD database number is the two type of sickness benefits together (i.e. the sick leave and the sick pay together). On the other hand the interviewees underestimated the sum of the sickness benefit significant. The expenditure per sick pay *day* is 2,595 HUF and the average sickness benefit is 10,272 HUF per *month* in the SILC dataset in 2005.

\*\*This amount includes the following benefits: disability pension below retirement age, miners' and early retirement pension, benefits to persons with reduced capacity to work, accident benefits, disability benefit

Sources: Yearbook of Welfare Statistics, HCSO, 2005-2008



#### 4.1.2 Simulated income tax

Table 18. EUROMOD validation: income tax

	Year	Taxpayers (person)			Revenue (million HUF)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Personal Income Tax	2005	3,062,894	~3,000,000	1.02	84,222	84,135	1.00*
	2006	3,007,498	~3,000,000	1.00	92,167	94,907	0.97
	2007	3,125,854	~3,000,000	1.04	104,762	110,356	0.95
	2008	2,417,343	~3,000,000	0.81	99,690	n.a.	
Simplified Business Tax	2005	107,708	115,425	0.93	1,416	8,018	0.18**
	2006	107,708	115,425	0.93	1,470	9,900	0.15
	2007	107,708	115,425	0.93	2,482	12,734	0.19
	2008	107,708	115,425	0.93	2,593	n.a.	

Notes: \*Not all the tax credits can be simulated, on the other hand in the original EU-SILC database there are too many self employed with low incomes, this causes a relative good ratio, so this amount is too *high*. (if we were able to simulate the tax credits we would receive a significantly smaller result.

\*\* The EU-SILC survey underestimates the self-employment incomes. The average monthly income of a 'simplified business tax payer' self-employment is approximately 600,000 HUF and this amount is just 85,502 HUF in the 2005 database.

Sources: National Accounts Hungary 2004-2005; HCSO 2007-2008

#### 4.1.3 Simulated social contributions

Table 19. EUROMOD validation: social contributions

	Year	Contributors (person)			Revenue (mHUF)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Employee Social Insurance Contributions	2005	3,865,949	~4,000,000	0.97	57,908	42,039	1.38
	2006	3,865,949	~4,000,000	0.97	62,092	47,693	1.30
	2007	3,865,949	~4,000,000	0.97	83,013	69,574	1.19
	2008	3,865,949	~4,000,000	0.97	87,841	n.a.	
Employer Social Insurance Contributions	2005	4,050,705	~4,000,000	1.01	36,100	19167	1.88
	2006	4,050,705	~4,000,000	1.01	36,927	15403	2.40
	2007	4,050,705	~4,000,000	1.01	40,486	16780	2.41
	2008	4,050,705	~4,000,000	1.01	42,473	n.a.	n/a
Self-employed Social Insurance Contributions	2005	852,814	~800,000	1.07	155,010	122,789	1.26
	2006	852,814	~800,000	1.07	159,233	154,027	1.03
	2007	852,814	~800,000	1.07	168,588	166,122	1.01
	2008	852,814	~800,000	1.07	177,940	n.a.	n/a

Sources: National Accounts Hungary 2004-2005; HCSO 2007



#### 4.1.4 Simulated social benefits

- *Maternity grant*

Table 20. EUROMOD validation: Maternity grant

	Recipients (number)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
2005	90,238	93,311	0.97	418	441	0.95
2006	90,238	95,146	0.95	436	472	0.93
2007	90,238	90,495	1.00	459	471	0.97
2008	90,238	95,028	0.95	482	520	0.93

Sources: Yearbook of Welfare Statistics, HCSO, 2008

- *Child care allowance*

Table 21. EUROMOD validation: Child care allowance

	Recipients (number)			Expenditure (mHUF)		
	EUROMOD database*	External source**	Ratio	EUROMOD database	External source	Ratio
2005	229,461	161,404	1.42	5,668	4,205	1.35
2006	229,461	166,922	1.37	5,920	4,579	1.29
2007	229,461	164,832	1.39	6,225	4,756	1.31
2008	229,461	167,021	1.37	6,540	5,241	1.25

Notes: \* The EUROMOD grants this amount where a less than 3 years old child is in the family, but not all these families get this benefit.

\*\* Average monthly number of recipients

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

- *Child raising support*

Table 22. EUROMOD validation: Child raising support

	Recipients (number)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
2005	45,119	47,304	0.95	1,114	1,160	0.96
2006	45,119	45,819	0.98	1,164	1,187	0.98
2007	45,119	42,776	1.05	1,224	1,160	1.06
2008	45,119	41,631	1.08	1,286	1,202	1.07

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



- *Family allowance*

Table 23. EUROMOD validation: Family allowance

	Recipients (thousand person)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source*	Ratio
2005	1,289	1,265	1.02	13,999	14,703	0.95
2006	1,289	1,269	1.02	26,917	25,341	1.06
2007	1,289	1,224	1.05	28,565	26,029	1.09
2008	1,289	1,247	1.03	30,229	28,218	1.07

Notes: \*The annual expenses on family allowance 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, 2006-2008

- *Regular child protection benefit*

Table 24. EUROMOD validation: Regular child protection benefit

	Recipients (person)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
2005	307,314	623,673	0.49	3,371	3,726	0.90

Sources: Yearbook of Welfare Statistics, HCSO, 2006

- *Regular child protection allowance*

Table 25. EUROMOD validation: Regular child protection allowance

	Recipients (person)			Expenditure (mHUF)		
	EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
2006	598,309	444,760	1.35	4,365	n.a.*	
2007	845,161	489,966	1.72	7,043	n.a.	
2008	857,236	513,070	1.67	7,858	n.a.	

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

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



- *Social assistance*

Table 26. EUROMOD validation: Social assistance

	Year	Recipients (person)			Expenditure (mHUF)		
		EUROMOD database	External source	Ratio	EUROMOD database	External source	Ratio
Old-age allowance	2005	11,097	6,449	1.72	172	138	1.25
	2006	15,283	6,462	2.36	234	156	1.50
	2007	13,242	6,328	2.09	232	162	1.43
	2008	12,322	6,149	2.00	237	165	1.44
Regular Benefit	2005	58,310	158,565	0.37	450	2,694	0.17
	2006	51,765	160,426	0.32	394	1,906	0.21
	2007	52,125	194,779	0.28	437	5,004	0.09
	2008	48,951	213,436	0.23	421	5,836	0.07
Home Maintenance Support	2005	659,722	211,715	3.12	1,649	698	2.36
	2006	547,281	258,160	2.12	1,368	1,029	1.33
	2007	538,430	253,719	2.12	1,346	1,097	1.23
	2008	446,935	230,479	1.94	1,117	1,004	1.11

Notes: \* In the case of the home maintenance support the EUROMOD grants the average amount per case. The Euromod overestimate the number of the recipients and the expenditure significantly because of two main reason. First, the entitlement is depends on the size of the flat, but we haven't got information about this, that's why the only condition to simulate this benefit is the income. The second reason is the main eligibility conditions of this benefit are determined by the central government, but the local government decide the number of the supported households and the amount of the benefit.

Sources: Yearbook of Welfare Statistics, HCSO, 2005-2008

## 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 27. EUROMOD validation: poverty rates at different poverty lines, [2006]

Percentage of individuals below:	EUROMOD	External source*	Ratio
40% of median equivalent income	3.1	3.0	1.0
Males	3.3	3.3	1.0
Females	3.0	2.8	1.1
50% of median equivalent income	6.9	7.1	1.0
Males	7.3	7.3	1.0
Females	6.5	7.0	0.9
60% of median equivalent income	12.6	12.4	1.0
Males	12.7	12.4	1.0
Females	12.5	12.3	1.0
70% of median equivalent income	20.1	20.0	1.0
Males	19.9	19.8	1.0
Females	20.4	20.2	1.0

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 2007 - udb\_c07\_ver 2007-1 from 01-03-09, own calculation.

Table 28. EUROMOD validation: poverty rates (median 60%) by age groups, [2006]

Percentage of individuals below:	EUROMOD	External source	Ratio
Population	12.6	12.4	1.0
0-15	17.6	18.7	0.9
16-29	15.0	14.2	1.1
30-44	13.6	12.9	1.1
45-64	10.6	9.8	1.1
65-	5.4	6.2	0.9

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 2007 - udb\_c07\_ver 2007-1 from 01-03-09, own calculation.



#### 4.2.2 Income inequality

Table 29. EUROMOD validation: income inequality, [2006]

Percentage of individuals below:	EUROMOD	External source	Ratio
Gini Coefficient	0.256	0.255	1.00
Income quintile ratio (S80/S20)	3.62	3.54	1.02
Average income per decile			
1	33,643	37,443	0.90
2	49,314	55,127	0.89
3	58,829	65,543	0.90
4	66,520	74,309	0.90
5	74,041	82,417	0.90
6	82,044	91,107	0.90
7	91,493	101,235	0.90
8	102,924	114,722	0.90
9	120,220	133,319	0.90
10	180,253	208,126	0.87
Mean income (equivalised)	85,904	96,320	0.89
Mean income (unequivalised)	57,252	64,019	0.89
Median income (equivalised)	77,835	86,667	0.90
Median income (uequivalised)	51,081	56,808	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: ‘EU-SILC 2007 - udb\_c07\_ver 2007-1 from 01-03-09, own calculation. In the case of the gini coefficient: Annual Monitoring Report 2009 - Social Situation Observatory based on the EU-SILC 2007.

#### 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 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

National Accounts Hungary 1995-2007. Hungarian Central Statistical Office; Budapest, 2009.

Yearbook of Welfare Statistics 2005; 2006; 2007; 2008. Hungarian Central Statistical Office; Budapest, 2006, 2007, 2008.

EU-SILC User Database Description (Version 2005-2 from 27-06-07). EUROSTAT, Luxembourg, 2007.

Eurostat (14.12.2007):

[http://epp.eurostat.ec.europa.eu/portal/page?\\_pageid=1996,45323734&\\_dad=portal&\\_schema=PORTAL&screen=welcomeref&open=/&product=EU\\_MASTER\\_living\\_conditions\\_welfare&depth=2](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996,45323734&_dad=portal&_schema=PORTAL&screen=welcomeref&open=/&product=EU_MASTER_living_conditions_welfare&depth=2)

- *Sources for tax-benefit descriptions/rules*

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

<http://www.magyarorszag.hu/english>