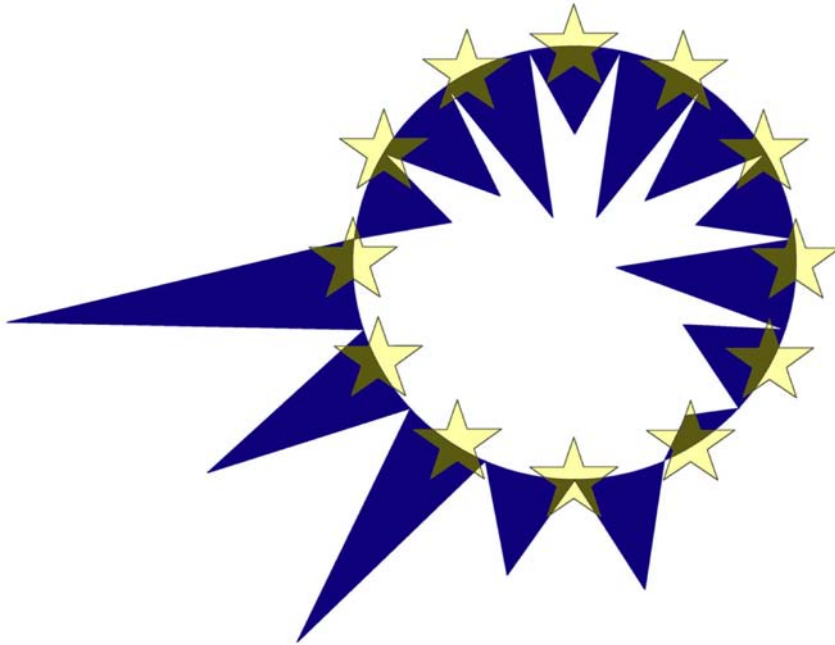


# **EUROMOD**

## **COUNTRY REPORT**



# **ITALY (IT)**

## **2005 - 2008**

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**13/12/2010**

**EUROMOD version F3.0**



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*) is being supported by DG-EMPL with the key objective to improve and extend EUROMOD's usefulness.

This will involve 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* project began in February 2009 and will last 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.

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The results presented in this report are derived using EUROMOD 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>



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## 1. BASIC INFORMATION

### 1.1 Basic figures

Table 1. Basic figures

	Pop. (m.)	Pop. < 18 (%)	Pop. ≥ 65 (%)	Life expect. (years)		Fertility rate	Unemp rate	GDP per head (PPP)	Currency
				Female	Male				
2005	58,607,043	18.00	19.60	83.64	78.02	1.32	7.7	23,600	euro
2006	58,941,499	18.01	19.84	84.20	78.50	1.35	6.8	24,500	euro
2007	59,375,289	18.99	20.00	84.13	78.63	1.37	6.1	25,400	euro
2008	59,832,179	17.95	20.28	84.10	78.80	1.41	6.8	25,200	euro

Source: Eurostat (2010), Istat (2009), *Regional data-set on health*, for Life Expectancy 2007, 2008

### 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>[b]</sup> % of GDP
2005	43.78	40.9	48.15	26.4
2006	45.37	42.1	48.70	26.6
2007	46.41	43.3	47.90	26.7
2008	46.02	43.2	48.73	27.8

Source: [a] OECD (2010); [b] Eurostat (2010)

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	26.73	5.99	50.67	9.96	4.37	2.02	0.07	0.19
2006	26.87	5.91	50.79	9.65	4.49	2.01	0.08	0.20
2007	26.14	6.00	51.42	6.67	4.71	1.78	0.08	0.20
2008	26.37	5.95	51.32	9.40	4.74	1.94	0.08	0.21

Source: Eurostat (2010)



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

	Personal income tax	Corporate income tax	Social security contributions		Taxes on goods and services	Other taxes
			Employees*	Employers		
2005	25.5	6.8	9.4	21.4	26.4	6.0
2006	25.6	8.1	9.2	20.6	25.6	6.6
2007	25.9	8.7	9.4	20.8	24.5	4.9
2008	26.8	8.6	9.8	21.3	24.5	5.3

\* Includes self-employed

Source: OECD (2010)

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

- The tax-benefit system is a national system, with minor differences among Regions and Municipalities due to some local autonomy. For example, Regions can increase the *Personal Income Regional Additional Tax* (Addizionale Regionale IRPEF) of at most another 0,5%. Municipalities can fix the *Local Property Tax* rate between 4‰ and 7‰ and also differentiate the rate according to the type of house.
- The tax system is mainly modified by the *Financial Law* (Legge Finanziaria) approved by the Parliament by the end of September and by the *Associated Government Bills* (Disegni di Legge Collegati) approved by the 15<sup>th</sup> of November each year. Changes are in force starting from the next calendar year.
- The State pension age in 2005 was 65 for men and 60 for women.
- Starting from the Academic year 2005/2006 (from September 2005) the minimum school leaving age is 18 years. Until then it was 14 years. A child is defined *dependent child* if she is a relative or a relative-in-law, and has an income of less than 2.840,51 euro, regardless of the age and cohabitation status.
- The income tax system is individual.
- Incomes from capital gains and return on capital are mainly subject to separate taxation
- By the 31<sup>st</sup> July each year taxpayers must fill their *Personal Income Tax* return with respect to incomes received the previous calendar year and on the basis of the *Financial Law* in force before September of the previous year.
- The tax system does not provides any indexation. Thresholds for means-tested benefits and contributions are yearly updated by the National Statistical Office taking into account the consumer price index for working class households.
- The means-tested benefit system (mainly at local level) assesses entitlement according to benefit unit income and, in some cases, according to a combination of income and wealth (*ISE – Indicatore della Situazione Economica*). The benefit unit is the family, made of the couple, or the lone parent plus all the dependent family members.



### 1.3 Social Benefits

Seeking for clearly and completeness, which is a challenging task in a complex and fragmented system as the Italian one, we describe the bundle of social benefits using the following classification criteria:

- **Social Insurance**
  - *Benefits related to the end of the working activity*
  - *Benefits related to the temporary suspension of the working activity*
  - *Benefits related to the reduction in working ability, family and social allowances*
  - *Other benefits*
- **Social Assistance**
  - *Family Support*
  - *Pro-poor allowances*
  - *Benefits related to the reduction in working ability*
  - *Other benefits*

We adopted the traditional distinction between Social Insurance and Social Assistance based on the financing means: the first one is funded by workers' contributions and the benefits are therefore linked to the individuals salary history; the second one, instead, is inspired by a condition of need of the recipient, and the benefit is disconnected with any contribution or working history.

Here we are not concerned about the fund's source, which can be either the National Institute of Social Security (*INPS*), the State or the Local Institutions (Regions, Provinces and Municipalities).

#### 1.3.1 Social Insurance: Benefits related to the end of the working activity

##### **Old-Age Pension** (*Pensioni di Vecchiaia – poa*)

The old-age pension is related to a *pay-as-you-go* social security program. The old-age pension is obtained when three conditions are contemporarily fulfilled: (i) age; (ii) minimum contribution; (iii) end of working activity (this last condition does not hold for self-employed individuals). The system has been radically changed in 1995 from a retributive to a contributive one. Under the contributive system, the pension is linked to the individual contribution righted up by applying a rate related to the gross domestic product's growth.

Eligible individuals are 60 years old women and 65 years old men with at least five contribution years.

##### **Invalidity Pension** (*Pensioni di Invalidità – phl*)

The invalidity pension is given to employees or self-employed individuals suffering from some physical or mental disease which leads to an inability to work. If the disease reduces the ability to work by one third or more, the worker is entitled to receive the **invalidity benefit** (*assegno di invalidità*). The invalidity benefit is allowed for a period of three years and it can be renewed if the inability persists. After three extensions it is automatically renewed. If, instead, the working ability is totally cleared, the worker is entitled to receive the **inability pension** (*pensione di inabilità*).





### **Survivors' Pension** (*Pensioni ai Superstiti – psu*)

The survivors' pension is the benefit due to eligible family members of a deceased insured worker or retired individual.

Eligible family members are:

- the spouse, also if separated or divorced but not re-married;
- dependent children (natural, adoptive, legitimate, in-low), who are minor, students and disable;
- dependent grandchildren;
- 65 years old parents, if there are no eligible spouse, dependent children or grandchildren;
- unmarried brothers and sisters if there are none of the above.

Quotes of pension differ among eligible members and the pension could be reduced over given amounts.

### **Unemployment benefit** (*Indennita' di disoccupazione – bunct02*)

In the Italian system we count five unemployment benefits:

- The **ordinary unemployment benefit** (*indennità di disoccupazione ordinaria*);
- The **unemployment benefit with minor requirements** (*indennità di disoccupazione con requisiti ridotti*);
- The **ordinary agricultural unemployment benefit** (*indennità di disoccupazione agricola ordinaria*);
- The **agricultural unemployment benefit with minor requirements** (*indennità di disoccupazione agricola con requisiti ridotti*);
- The **special benefit for agricultural and building unemployment** (*trattamenti speciali per disoccupazione agricola ed edilizia*)

The unemployment benefit is granted to insured employees who have been dismissed. The benefit is not granted to resigned employees, unless the resignation is due to *good cause* as, for example, missed wage payment, sexual harassment, mobbing. The benefit is also given to employees who have been suspended for transitory reasons and causes not due to employers or employees behaviour.

Eligible individuals are employees who have paid (i) contribution against unemployment for at least two years or (ii) 52 weeks of contribution in the two-years period before the date of work suspension.

The benefit amount and the duration of the treatment is different according to the age of the employee. For a detailed description of the ordinary unemployment benefit, we remand to section 2.

The benefit is no more due when the employee (i) has received the benefit for all the allowed days; (ii) starts a new employment; (iii) retires; (iv) refuses an employment proposal with a wage non less than the 20% of the previous one; (v) refuses to be enrolled in social activities; (vi) is erased from the employment lists.

### **Procedure for mobility and collective dismissals** (*Mobilita' – bunct02*)

The procedure for mobility and collective dismissal is a benefit in favour of employees who (i) have already been granted of redundancy payment for all the allowed period; (ii) have been dismissed as a result of a firm policy of staff reduction or production transformation; (iii) have been dismissed for firm shutdown.

The difference between the procedure for mobility and collective dismissals and the redundancy payment is that the latter is an alternative to the employee dismissal, the former comes after the employee dismissal.



Eligible individuals are employees who: (i) have been hired with a long-term contract; (ii) have been enrolled in the mobility lists made out by the Regional Labour Office on the basis of troubled firms reports; (iii) have at least twelve months service in the same firm; (iv) have worked at least for six months in the same firm.

The duration of the allowance is different according to the age of the employee and the firm geographical position:

Age	Duration
<39	12 months
40-49	24 months
>50	36 months
<i>Southern Italy</i>	
<39	24 months
40-49	36 months
>50	48 months

In general, the benefit cannot be granted for more than the employee service period. The benefit amount is proportional to the redundancy payment that the employee received (or would be entitled to receive) in the period right before the dismissal. In particular:

Benefit Amount (% of Redundancy Payment)	Duration
100%	first 12 months
80%	months 13 to 36
<i>Southern Italy</i>	
100%	first 12 months
80%	months 13 to 48

### 1.3.2 Social Insurance: Benefits related to the temporary suspension of the working activity<sup>1</sup>

#### Redundancy payment (*Cassa Integrazione Guadagni – bunct01*)

The Redundancy payment is a benefit in favour of troubled firms which provides to employees an income substitute for wage income.

There are types of redundancy payments:

- The **ordinary redundancy payment** (*cassa integrazione ordinaria*)
- The **extra-ordinary redundancy payment** (*cassa integrazione straordinaria*)
- The **building redundancy payment** (*cassa integrazione edilizia*)

Eligible individuals are blue collars, white collars and executives (apprentices excluded) whenever working activity is suspended or reduced because of (i) transitory reasons and causes not due to employers or employees behaviour; (ii) temporary market stagnation.

The benefit amount is the 80% of the gross wage, subject to upper limits, for the lost working hours. For the majority of firms the redundancy payment is granted for a maximum period of 13 weeks to 12 months (according to possible extensions).

<sup>1</sup> In addition to the benefits listed in the section. **Call to arms benefit** (*Indennità di richiamo alle armi*). It is a benefit which replaces the wage for worker called to military service after the draft. The benefit is supplied, for the whole military service period, to blue collars, white collars, and executives employed in the private sector. Also short-term workers, workers on probation or notice, workers at home and seasonal workers. The benefit amount is equal to the civil wage. For officers executive officers, graduated and members of the special forces it is equal to the difference between the civil wage and the military wage (if lower) for each period of recall after the first two months of the year.



**Salary supplement for agriculture workers** (*Integrazioni salariali a favore dei lavoratori agricoli – Included in bunct01*)

It is an instrument for supporting firms when it is not possible to carry on working and for pledging some income to the employees. Eligible individuals are employees (blue collars, white collars and executives) working full time in farms for at least 180 days per year.

The benefit amount is equal to the 80% of the wage received in the month before the working suspension, subject to upper limits, and it is granted for at most 90 days. The benefit is directly paid by INPS to the employees.

**Marriage leave** (*Assegno per congedo matrimoniale – Included in yem*)

It is a benefit granted for the wedding of an employee. Entitled individuals are: (i) employed individuals (not white collars) working in manufacture and industrial sector or a cooperative society (also workers at home and apprentices) simple soldiers and non-commissioned officers who have been working at the wedding day from at least one week; (ii) workers and seamen who resigned to get married; (iii) unemployed workers and seamen who at the wedding day have worked at least 15 days in the previous 90; (iv) seamen at military service who have been enrolled for 15 days in the 90 before the recall to arms or the end of the draft. Both spouses are granted if one is entitled. The amount is given without income test and it is equal to seven salary days (eight for seamen). Employers, on behalf of INPS, pay out the benefit at the beginning of the leave period. For unemployed individuals or called to arms it is paid by INPS.



### 1.3.3 Social Insurance: Benefits related to the reduction in working ability, family and social allowances<sup>2</sup>

#### Sickness leave (*Indennità di Malattia – Included in yem*)

The sickness leave is an allowance substitute for the wage which is granted starting for the fourth sickness day of the worker and for no more than 180 days each year. Eligible to receive the benefit are private sector blue-collars, white collars of tertiary and services sectors. Moreover, it is supplied also to unemployed and suspended individuals within 60 days from the end of the working activity (except for short-term workers). The benefit is granted without income test and it is equal to the 50% of the average daily wage for the first 20 days of the sickness period, and to the 66.66% for the subsequent days of sickness related to the same disease or relapse.

#### Inability Pension (*Pensione di Inabilita' – phl*)

It is a pension owed by employees or self-employed individuals suffering from some physical or mental disease which leads to an inability to work. Entitled individuals have a contributory history of at least five years, three of which paid in the five years before the pension request.

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<sup>2</sup> In addition to the benefits listed in the section.

**Special Sickness allowances** (*Indennità e assegni per malattia speciale*). It is an allowance substitute for the wage granted to employees and family members suffering of tuberculosis. The cost is beared by INPS, while the national health system covers the sanitary assistance. Eligible individuals have at least a year of contribution, then other conditions apply according to the type of allowance. The **daily allowance** (€12 or €6 for the family members) is due to the worker who does not receive the full wage during the hospital or outpatient treatments. The **post-sanatorium allowance** (€20 or €10 for the family members) is due to recovered or stabilized individuals after an hospitalization of no less than 60 days, or after an outpatient treatment which lasted at least 60 days and the worker did not work for 60 days, or after a treatment both at hospital and outpatient of at least 60 days. The **treatment or support allowance** (€ 80.67 in 2009) is supplied for two (renewable) years to workers affected by tuberculosis whose earning capacity is reduced by more than one third and who do not receive a continuative full-time wage. The **Christmas allowance** is given to individuals who have benefited in the month of December of at least one day of tuberculosis benefit, and the amount equals 30 days of the most favorable benefit received in December.

**Death Allowance** (*Rendita per morte*). If the accident at work causes the employee death, the family members are entitled to receive an allowance equal to the 100% of previous year wage, divided as following: 50% to the spouse and 20% to each child (in any case it cannot exceed the 100% of the wage).

**Hours of Rest** (*Riposi orari, ex allattamento*). Within the first year of age, the mother (also the adoptive mother) is entitled to two hours of rest each day if the working hours are at least six, one if the working hours are less than six. In case of multiple delivery or adoption, the hours of rest are doubled. While, in case the working mother benefits of a childcare supplied by the employee in the working place or close to it, the permit is halved. The hours of rest are in every respect considered as working hours. These hours can be granted also to the working father if it is the only guardian, in alternative to the mother, if the mother is not employed, or if the mother is dead or seriously injured.

**Daily permits for blood and spinal cord donors** (*Permessi giornalieri per donatori di sangue e midollo*). Blood and spinal cord donors are entitled to receive the full wage for the day they abstain from work to donate. INPS refunds the employers.

**Daily permits for mountain and spelaeological rescuers** (*Permessi giornalieri per i volontari del soccorso alpino e speleologico*). Employees voluntary mountain and speleological rescuers are entitled to receive the full wage for the day the leave work. Self-employed individuals are entitled to receive 1/22 or 1/26 of the average monthly earning in the industrial sector, fixed every year by ISTAT.



Moreover, to be entitled, an individual cannot work, been enrolled in a professional register or in the lists of farmers or self-employed workers.

### **Inability Allowances for Civil Servants** (*phl*)

Civil servants can access to different inability allowances or pensions. In the following we briefly summarize the most important ones.

- **Absolute and Permanent Inability to the assignment** (*Pensione per inabilità assoluta e permanente alla mansione*) The inability to the assignment is limited to the type of task the worker is assigned to, and it gives right to receive the pension only in the case the employee cannot be assigned to a different task at the same working status. Entitled individual (i) have been civil servants for at least 15 years (20 years if enrolled in Local Institutions or Health Institutions), (ii) have been recognized unable to the assignment by a special Committee and (iii) have been dismissed because of the disability. The benefit amount is computed with the same rules as the ordinary old-age pension.
- **Absolute and Permanent Inability to profitable activity** (*Pensione per inabilità assoluta e permanente a proficuo lavoro*) It is granted to workers who have been employed for more than 15 years who suffered by a disability which is not completely disabling, but enough disabling to prevent individuals from being uninterrupted profitably enrolled.
- **Absolute and Permanent Inability to work** (*Pensione per inabilità assoluta e permanente ad attività lavorativa*) After the clinic recovery, INAIL (the National Institute for the Insurance against accidents at work) checks whether the worker has been permanently injured and to what extent. If the inability is greater than the 11%, the worker is entitled to receive an allowance proportional to the degree of disability and his wage in the year before the accident. In case of a worsening in the conditions, the worker can ask for a revision of the allowance. The allowance is computed by summing up two components: a workers' compensation for the biological disability and an indemnity for the economic consequences of the accident. Entitled employees have at least five years of contribution.
- **Direct Disability Pension** (*Pensione Diretta Privilegiata*) The direct disability pension is an allowance granted to employee who have been disabled because of the working activity. The benefit amount is proportional to the infirmity extent and ranges from 8/10 to 1/3 of the pensionable wage. Slightly different rates apply to local institutions' servants.

### **Family Allowance** (*assegni familiari – bfacpwc\_s, bfacpxc\_s and bfalp\_s*)

The Family Allowance is targeted to families of employees and pensioners with family incomes below determined thresholds. The thresholds and the amounts of the benefit are different according to the household composition and number of members, and are fixed every year by Law. This benefit is simulated and we refer to section 2.3.1 for a detailed description.

### **Maternity Allowances** (*Included in yem, yse or bmase and bmals*)

Italian law provides two maternity allowances: the **mandatory maternity leave** (*Indennità per astensione obbligatoria*) and the **parental leave** (*Indennità per astensione facoltativa o congedo parentale*). Moreover, there are a **State** and a **Municipalities dependency benefits** (*Assegno di maternità dello Stato e dei comuni*).



- **Mandatory Maternity Leave Allowance** (*Indennità per astensione obbligatoria – included in yem or yse*)

It is a substitute for the wage and it lasts at most five months, divided in two periods: two months before and three months after the delivery. If the health status of the worker is fine and the working conditions do not harm the future mother and the baby, the period of mandatory leave before the delivery can be shortened to one month, and therefore the period after becomes four months.

For the self-employed mothers, there is no mandatory leave from work.

Entitled to receive the allowance are employee mothers, self-employed mothers enrolled in the lists of the craftsmen, wholesale traders, farmers, who paid the corresponding social contributions, and some temporary workers depending on their contract.

For the employees the allowance is the 80% of the average daily wage. For the self-employed mothers, it is the 80% of the *conventional* daily remuneration, which are fixed each year by law.

- **Parental Leave** (*Indennità per astensione facoltativa o congedo parentale – included in yem or yse*)

Each parent can leave from work until the child is eight years old. The leave cannot exceed jointly for the two parents ten (to eleven) months. The benefit applies also to parents of an adopted child, with different age limits: during the first three years after the adoption, until the child is twelve years old, for a maximum of six (seven for the father) months or ten (to eleven) months if the leave is cumulated between the two parents. If the child enters in the family when she is 12, the age limit is extended to 15.

Entitled to request the parental leave are:

- (i) Employed mothers (unless they are unemployed or suspended, employed in domestic and familiar services or working at home) who can leave up to a continuative or fragmented period of up to six months until the child is eight years old;
- (ii) Employed fathers
- (iii) Lonely parents up to ten months
- (iv) Self-employed mothers who can leave for three months within the first year of the child life.

The allowance is granted without income test for at most six months cumulated between the parents within the first three years of the child.

If the parental leave exceeds six months, from age three to eight, the allowance is means tested: the income of the applicant parent cannot be higher than 2.5 times the minimum pension fixed by law in the year of the request.

The parental leave allowance is the 30% of the average daily wage.

- **State Maternity Benefit** (*Assegno di Maternità concesso dallo Stato*)

It is a benefit granted to mothers with Italian citizenship, EU citizenship or extra-EU citizenship and a long-term residence permit, for each natural or adopted child.

Eligible for the allowance are: (i) working mothers who have at least three months of contribution in the last 18 to 9 months before the delivery (or the adoption); (ii) unemployed mothers if the period between the loss of the social insurance and the delivery or adoption is shorter than nine months; (iii) mothers who voluntarily resigned during pregnancy and have at least three months of contribution in the last 18 to 9 months before the delivery (or the adoption); (iv) mothers who have had some



allowances from INPS (for example unemployment benefit or sickness benefit), provided not much time has passed (and in any case no more than nine months).

The State allowance is given to eligible mothers without income test.

The Benefit Amount is 1,747.82 euro in 2005 (145.65 per month) and it is updated every year.

**Family leave for severe disability** (*Congedo retribuito per assistenza a familiari in condizione di handicap grave – Included in yem*)

It is a benefit granted to (in order of eligibility) employed parents, siblings, children, spouse of an individual affected by severe disability. The benefit is equal to the last wage and comprehends the figurative social security contribution. It is granted for at most two years (consecutive or apportionable) and until an annual maximum which is linked to the average growth rate of the consumer price index for working-class households, elaborated by the National Statistical Office (*ISTAT*).

Table 5. Family leave for severe disability: Annual Maximum Benefit

Year	Euro
2005	39,749.03
2006	40,424.77
2007	41,233.26
2008	41,934.23

Source: INPS circular letters 14 and 83 (2007), 48 (2008)

### 1.3.4 Social Insurance: Other Benefits

**Compensation benefit** (*Pensioni Indennitarie – phl*)

The compensation benefit is given to workers disabled by an industrial accident.

**War Pension** (*Pensione di Guerra – phl*)

The benefit is given by the Ministry of Economy and Finance to disabled citizens or to eligible family members of a deceased citizen because of war events.

### 1.3.5 Social Assistance: Family Support

**Family Allowance for families with at least three children** (*Assegno di sostegno per nuclei familiari con almeno tre figli minori – bchot*)

The Support Benefit for families with at least three children is paid off by the municipalities. The means testing criterion to be entitled of the benefit is based on the Indicator of Economic Situation (*ISE*) which is defined both on income and wealth components.

**Scholarships and Free Textbooks Supplies** (*Fondi destinati all'erogazione di borse di studio in favore degli alunni nell'adempimento dell'obbligo scolastico e nella successiva frequenza della scuola secondaria e fornitura, anche in comodato, dei libri di testo in favore degli alunni della scuola secondaria superiore – bed*)



The Ministry of Public Education gives each year funds to the regional scholastic offices to finance scholarships and free textbooks supplies.

For the scholarships, eligible students must be enrolled in primary or secondary State or equally recognized institutions and live in families with poor economic status (the threshold is fixed by each region).

As for the free textbooks supplies, eligible students are enrolled in lower secondary schools (grade 6 to 8) and higher secondary schools. Moreover, they live in families whose income is below the threshold fixed each year by law (15,493 euro in 2005).

Note that textbooks for primary education are free of charge for everybody.

For academic years 2007/2008, 2008/2009 e 2009/2010 the scholarships have been suspended.

### 1.3.6 Social Assistance: Pro-poor Allowances

#### **Social Pensions and Social Allowances to individuals older than 65** (*Assegni sociali a ultra sessantacinquenni – poamt*)

The social pension has been substituted in 1996 by the Social Allowance to individuals older than 65. It is a benefit granted to poor individuals older than 65 years without any income source or an income less than the social allowance. Eligible individuals are Italian resident citizens, San Marino residents, political refugees, EU citizens resident in Italy and extra-EU citizens with long-term residence permit. The monthly amount is related to the income level and the family status of the entitled individual and it is index-linked to the minimum pensions granted by INPS. We refer to section 2.3.5 for a more detailed description.

#### **Minimum Insertion Income** (*Reddito Minimo di Inserimento – bsa*)

The Minimum Insertion Income was introduced in 1999 as an experimental policy to tackle poverty and social exclusion. The policy was originally limited to 39 municipalities in the two-years period 1999-2000, and subsequently extended for the period 2001-2002 to 267 new local administration, for a total of 306 municipalities. For the second period, the Ministry of Labour and Social Policies has allocated €180,759,914.68 in 2001 and €222,076,466.61 in 2002. These funds had to be originally used within the end of 2004, but this deadline has been postponed first to the 30<sup>th</sup> of April 2006 and finally to the 30<sup>th</sup> of June 2007, to give the possibility to the municipalities still having some money to use it.

Eligible individuals either do not have any income or have an income below the fixed threshold. The threshold was then adjusted by using the following equivalent scale to take into account the number and type of family members (for example, for one-individual family the equivalence scale is 1 and the income threshold €278.88, while for a two-individuals family, the equivalence scale is 1.5 and the income threshold is €437.84)

Family Members	Equivalence Scale	Threshold (2002), €
1	1.00	278.88
2	1.50	437.84
3	1.69	568.92
4	2.06	686.04
5	2.40	794.81

The equivalence scale was then increased of 0.35 for each other component, of 0.2 if there is just one parent and children aged below 18, of 0.5 for each disabled component and of 0.2 for families with children aged under 18 and working parents. Income taken into account for the





means test is the sum of incomes of all family components. By law, employment income accounts only for the 75%.

The benefit amount is the difference between an individual monthly income and the threshold.

### **Housing Benefit** (*bho*)

Regions dispose on monetary transfers in order to promote the purchase of the main residence or to help paying the rent (different names are given to these transfers: *Buona casa per le giovani coppie* in Emilia Romagna, *Mutui a Tasso Zero per le Giovani Coppie* in Veneto, *Risparmio Casa* in Trento; source: IreR 2005); such contribution is usually addressed to special kinds of households, such as young couples, couples with young children and single mothers. The contribution is aimed either to reduce the mortgage interests paid for the purchase of the main residence or to provide a sporadic cash benefit; its amount changes among Regions. Two are the main criteria followed in order to provide such contributions: eligibility criteria (means testing), and selectivity criteria (rankings that necessarily rule eligible individuals out, because of budget constraints). The eligibility criterion differs according to the Regions: differences are mainly in the maximum age allowed for one or both members of the couple and in the maximum ceiling for the household's income and wealth. Regions have access to a special location-fund (*Fondo nazionale per il sostegno all'accesso alle abitazioni in locazione*), the consistency of which is fixed by law each year, as summarized in the following table.

The variable included in the dataset (*bho*) is related to rent-related benefits, mortgage benefits plus a residual component (anything which is not rent-related).

### **1.3.7 Social Assistance: Benefits related to the reduction in working ability<sup>3</sup>**

The so-called civil disabled persons are entitled to receive a benefit (*pdi*) without any working and contributive history. Entitled to receive the benefit are Italian citizens, EU citizens or extra-EU citizens with a long term residence permit, acknowledged as disabled by special committees of a Local Health Institute (*Azienda Sanitaria Locale - ASL*). In particular, the following different allowances are granted to different disabled individuals.

#### **Civil Infirmary Allowance** (*Prestazione di invalidita' civile*)

Eligible individuals are (i) Italian citizens and foreigners with long-term residence permit, (ii) with total (100%) invalidity, (iii) aged between 18 and 65, (iv) with an income not larger than the fixed thresholds (in 2007 €14,256.92, in 2008 €14,466.67). The allowance is incompatible with other benefits granted for the same invalidity reason, as war benefits working and other invalidity benefits supplied by other social security institutions. The monthly allowance, granted for 13 months, was 242.82 euro in 2007 and 246.73 euro in 2008.

#### **Monthly Assistance Allowance** (*Assegno mensile di assistenza*)

Eligible individuals are (i) Italian citizens and foreigners with long-term residence permit, (ii) with an invalidity between 74% and 99%, (iii) aged between 18 and 65, (iv) not capable of working, (v) without any other allowances from any social security institution (vi) with an yearly income not larger than the fixed thresholds (in 2007 €1,171.44, in 2008 €1,238.26). The monthly allowance, granted for 13 months, was 242.82 euro in 2007 and 246.73 euro in 2008.

<sup>3</sup> In addition to the benefits listed in the section. **Allowances for Earthquakes Victims, Libyan re-entered individuals and ex Army employees** (assegni per i colpiti da terremoti, rimpatriati dalla Libia e indennità ai dipendenti delle ex FF.AA.)

**Accompany Benefit** (*Indennita' di accompagnamento*)

Eligible individuals are (i) Italian citizens and foreigners with long-term residence permit, (ii) with a total invalidity (100%), (iii) not able to walk or not able to do daily life activities. The monthly benefit, granted for 12 months without any income mean test, was 457.66 euro in 2007 and 465.09 euro in 2008.

**Frequency Benefit** (*Indennita' di frequenza*)

It is a benefit awarded for 13 months to minor citizens living in Italy and foreigners with long-term residence permit, who are enrolled in schools, vocational schools, rehabilitative institutions, having persistent troubles in daily life activities or having an ear damage of more than 60 decibel in the healthiest ear. The monthly amount was 242.82 euro in 2007 and 246.73 euro in 2008.

**Sightness Pension** (*Pensione di cecita'*)

There are two types of sightless pensions, according to the degree of sightless of the individual: **absolute** or **partial sightless**. The sightless is defined partial if the residual sight is at most a twentieth in both eyes. Entitled individuals are Italian resident citizens and foreigners with long-term residence permit, not hospitalized. The pensions are means tested (the threshold was €14,256.92 in 2007 and €14,466.67 in 2008), and the monthly benefit amount of the absolute (partial) sightless was €62.62 (€42.84) in 2007 and €66.83 (€46.73) in 2008 for 13 months.

**Special Benefit** (*Indennita' speciale*)

Individuals affected by partial sightless (residual sight of at most a twentieth in both eyes) are entitled to receive, without income test a monthly benefit of 168.70 euro in 2007 and 172.86 euro in 2008 for 12 months.

**Deaf-Dumb Pension** (*Pensione ai sordomuti*)

It is a monthly benefit granted to deaf-dumb individuals. When the individual is 65 years old, the pension is turned into a social allowance. Eligible individuals are Italian citizens and foreigners with long-term residence permit, aged between 18 and 65, with an income not larger than the fixed thresholds (in 2007 €14,256.92, in 2008 €14,466.67). The monthly benefit amount is granted for 13 months and it was 242.84 euro in 2007 and 246.73 euro in 2008.

**Communication Benefit** (*Indennità di comunicazione*)

It is a benefit granted without income test to Italian resident citizens and foreigners with long-term residence permit. To be entitled for the benefit, the hypacusia must be at least 75 decibel (60 for individuals younger than 12) in the healthiest ear and it must have been occurred in the first twelve years of life. The benefit is incompatible with the frequency benefit, but compatible with the accompany benefit. The monthly benefit amount was 229.64 euro in 2007 and 233.00 euro in 2008.

**Personal, Long-term Assistance Allowance** (*Assegno per assistenza personale continuativa*)

Entitled individuals (i) have been defined by INPS as disabled to working activity, (ii) are incapable to walk alone or (iii) are in need of a permanent help because not able to do everyday activities. The benefit can be requested contextually to the inability pension (see Social Insurance) and it is not granted in case of hospitalization periods provided by the public administrations.



### 1.3.8 Scope and scale

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

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

	2005	2006	2007	2008
Old Age Pension	18.57	18.85	19.06	19.14
Invalidity Pension	3.53	3.29	3.06	2.87
Survivors Pension	7.80	7.76	7.72	7.66
Civil Infirmity Allowance	1.75	1.67	1.63	1.58
Social Pension	3.73	3.97	4.11	4.28
War Pension	1.31	1.32	1.32	1.33

Source: MEF, 2008, 2009 and 2010

Table 7. Social benefit: expenditure as % of total social protection expenditure

	2005	2006	2007	2008
Old Age Pension	56.81	57.38	57.54	43.81
Invalidity Pension	5.36	4.95	4.54	4.76
Survivors Pension	13.02	12.79	12.53	15.18
Civil Infirmity Allowance	1.65	1.58	1.51	3.23
Social Pension	4.48	4.68	4.73	7.83
War Pension	1.32	1.31	1.28	1.55
Benefits to severe disability children's parents	0.00	0.06	0.06	0.05
Family Allowances	0.00	0.12	0.11	0.07
State Maternity Allowances	0.00	0.09	0.08	0.05

Source: MEF 2008, 2009 and 2010

### 1.4 Social contributions

Social contributions are due by employees, employers and self employed individuals on earned income, and the due amount is different according to: (i) the source of income (employment or self-employment income); (ii) the sector of activity (manufacturing, building, mining, publishing, public administration, handicrafting, agriculture, banking and insurance, services, cooperative sector, broadcasting); (iii) the number of persons working in the firm; (iv) the occupational status (executives, white collars, blue collars). The average contribution rate is about 40%: part is due by the employer, part by the employee.

The National Institute of Social Security (*INPS*) collects contributions for the following insurances:

- Invalidity, Old Age and Survivors (*Invalidità, Vecchiaia, Superstiti*)
- Unemployment (*Disoccupazione*)
- Dependency benefit Fund (*Cassa Unica Assegni Familiari*)
- Redundancy Fund (*Cassa Integrazione Guadagni*)
- Procedure for mobility and Collective Dismissals (*Mobilità*)
- Sickness and Maternity Benefit (*Malattia e Maternità*)
- Severance Pay (*TFR*)

See Section 2.4 for details.



### 1.4.1 Scope and scale

Table 8. Social contributions: contributors (as % of population)

Social contributions	2005	2006	2007	2008
Invalidity, Old Age and Survivors	41.29	40.22	40.10	40.78
Unemployment	23.47	23.32	22.69	22.76
Dependency benefit	22.63	22.97	23.21	23.30
Redundancy Fund	6.78	6.85	8.29	8.36
Procedure for mobility and Collective Dismissals	5.05	5.11	5.89	6.02
Maternity Benefit	15.56	15.79	15.95	16.01
Sickness Benefit	21.70	21.52	21.75	21.83

Source: RGS 2007 and RGS 2008 Tables PS.12, 19, 20, 21, 25, 26, 27, RGS 2009 Tables PS.10, 19, 20, 21, 25, 26, 27

Table 9. Social contributions: annual revenue (€millions)

Social contributions	2005	2006	2007	2008
Invalidity, Old Age and Survivors	149,260	157,996	168,046	175,781
Unemployment	3,128	3,271	3,281	4,031
Dependency benefit	5,072	5,512	5,839	6,096
Redundancy Fund	2,514	2,636	2,869	2,966
Procedure for mobility and Collective Dismissals	479	460	581	574
Maternity Benefit	818	918	976	1,028
Sickness Benefit	3,500	3,659	3,905	4,147

Source: MEF 2007 and MEF 2008 Tables PS.12, 19, 20, 21, 25, 26, 27, MEF 2009 Tables PS.10, 19, 20, 21, 25, 26, 27

## 1.5 Taxes

### 1.5.1 Personal Income Tax (*IRPEF Imposta sui redditi delle persone fisiche – tinna\_s*)

*IRPEF* has been introduced in 1974, substituting a large number of previous real taxes on income. It is an *individual* and *progressive* tax on total income. Family dimension and composition is also taken into account by the system of deductions and tax credits. The tax is due by resident individuals (wherever the income is produced) and non-resident individuals (for incomes produced in Italy). The definition of taxable income is broad, but the actual tax base is smaller because several income sources are subject to separate taxation. The tax base is made of income from land and buildings, from employment and self-employment, business income and capital income in a marginal way (only a quote of dividends and capital gains from dividends and capital gains from a given type of holding - *Partecipazione Qualificata*<sup>4</sup> - are included in the personal income tax base).

See Section 2.5 for details.

<sup>4</sup> For listed securities, the 2% of the vote rights or the 5% of the company capital; for non-listed securities, the 20% of vote rights or the 25% of the company capital.



### **1.5.2 Personal Income Regional Additional Tax (*IRPEF Addizionale regionale – tinrg\_s*)**

The Regional Additional Tax is due on the same tax base of the Personal Income Tax. The tax rate is made of two components: a mandatory rate of 0.9% and an additional discretionary rate of up to 0.5%. See Section 2.6.1 for details

### **1.5.3 Separate Taxation on Capital Income (*Imposte sostitutive sui redditi da capitale – tinktcp\_s, tinktdt\_s, tinktdv\_s, tinktbd\_s, tinktgb\_s*)**

Even if capital income is theoretically included in the personal income tax base, it is mainly subject to separate taxation. There are two different tax rates: 27% and 12.5%: long-term investments are encouraged by applying the lower rate. With respect to capital gains, some differences arise according to the type of savings regime chosen by the investor. If the portfolio is managed by a financial intermediary, capital gains are taxed at the accrual and it is possible to compensate capital losses with capital income. Otherwise, if the investor self-manages her savings, capital gains are taxed at realization and capital losses may be compensated only with capital gains.

A different regime applies to returns on social security investments which are favoured by applying a rate of 11%, and to arrears, severance pay and private pensions paid out in form of capital. See Section 2.6.2 for details

### **1.5.4 Corporate Tax (*IRES - Imposta sui redditi delle società*)**

The corporate tax is a proportional tax levied on net profits. The basis is roughly computed by adding revenues (sales of goods, services, corporate shares, bonds), capital gains (at realizing), perceived dividends and interests (at nominal value), stocks and subtracting the cost of labor, of goods and services, capital losses, paid interests, depreciation and current losses. The tax rate has been 33% until 2007. Starting with the business year after 2007, the rate is 27.5%.

### **1.5.5 Value Added Tax (*IVA - Imposta sul valore Aggiunto*)**

The base of the Value Added Tax is the total business value added minus investment expenses, and therefore coincides with the value of final consumption. The due tax is computed by the method *tax-to-tax*. The normal tax rate is 20%, but there are also two lower tax rates 4% and 10%. The lowest is applied to primary goods such as milk, butter, cereals, pasta and bread, books and newspapers. Exemptions apply on financial transactions, public services and health, education and welfare, and a favorable regime is granted to agriculture.

### **1.5.6 Regional Tax on Business (*IRAP - Imposta sui Redditi delle Attività Produttive*)**

*IRAP* provides about a half of the financing for Regions (mainly devoted to the health system). The tax is imposed on all those engaged in commercial business and on public administrations. It is charged on the net value added resulting from the business pursued in the region defined as the sum of labor costs, interests paid and profits, net from depreciation.

### **1.5.7 Municipality Property Tax (*ICI - Imposta Comunale sugli Immobili*)**

The municipality property tax (*ICI - Imposta comunale sugli immobili*) is due by: (i) owners of buildings, building areas, arable lands located in Italy; (ii) individuals enjoying some real rights



on that buildings areas or lands (holders of usufruct, right of user, right of occupancy, emphyteusis, building lease); (iii) lessees; (iv) licensees of State demesne.

For buildings registred at the cadastre, the tax base is the cadastral value raised by 5% multiplied by a coefficient which is different according to the building type (from 140 to 34). For the building areas, the tax base is the current selling value. For arable lands, the tax base is the estate income, raised by 25% and multiplied by 75.

Starting from 2008 *ICI* is no more due for the main residence, with the exception of luxury flats, villas, castles and palaces of historic or artistic importance. See the final section on health warnings for details.

Each municipality fixes its own tax rates, which can be found on the web site of the Ministry of Finance: <http://www.finanze.it/dipartimentopolitichefiscali/ici/delibere>

### 1.5.8 Other indirect taxes

There is a wide amount of other indirect taxes, traditionally classified in three categories: (i) business taxes; (ii) taxes on production and (iii) monopoly and State lottery.

- The **Registration Duty** (*Imposta di Registro*) is levied upon the legal registration of acts of different nature (concerning a legal transaction or an administrative or legal operation). The main source of revenues is connected to real estate transaction and corporate operations.
- The **Mortgage Duty** (*Imposta Ipotecaria*) is linked to mortgage institutions, modifications or redemptions, and transcriptions concerning real estate's immovable.
- The **Stamp Duty** (*Imposta di Bollo*) is levied upon acts (civil, commercial, legal, extrajudicial), notices, posters, advertisements.
- **Excise duties on energy** which particularly hits oil products (petrol and diesel oil), but which is levied also on beer and spirits.
- **Monopoly and State lottery** provides a non-negligible source of revenue.



### 1.5.9 Scope and scale

Table 10. Taxes: taxpayers (as % of population)

	2005	2006	2007	2008
<b>Direct taxes</b>				
IRPEF	71.24	70.87	70.91	70.11
IRES	1.57	1.63	1.67	1.72
<b>Indirect taxes</b>				
IVA <sup>[a]</sup>	9.65	9.77	9.58	8.83
IRAP	9.88	9.72	9.78	8.47

Source: Dipartimento delle Finanze. [a] Includes only IVA paid by self-employed and professionals

Table 11. Taxes: annual revenue (euro, millions)

	2005	2006	2007	2008
<b>Direct taxes</b>				
IRPEF	131,237	137,247	146,204	153,828
IRES	29,368	34,131	39,960	51,111
Regional IRPEF	23	23	22	16
Withholding Capital Tax	11,997	9,138	11,282	13,243
<b>Indirect taxes</b>				
IVA	101,599	106,594	115,884	121,250
IRAP				
Registration Duty	4,477	4,688	5,133	5,665
Mortgage Duty	1,268	1,373	2,026	2,476
Stamp Duty	5,223	5,009	5,654	5,578
Excise duties on energy	24,953	26,659	26,738	25,694
State lottery	14,605	12,364	10,191	11,800
Tobacco	8,700	8,738	9,588	10,043

Source: MEF 2009, pp.III-221-222



## 2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD

### 2.1 Scope of simulation

In the following Table 12, we provide the list of benefits and taxes which are included in EUROMOD.

Table 12. Simulation of benefits and taxes in EUROMOD

	Variable name	2005	2006	2007	2008
Family Allowance for families with at least three children	bchot	I	I	I	I
Scholarship	bed	I	I	I	I
Family Allowances	bfalp_s				
	bfacpxc_s	S	S	S	S
	bfacpwc_s				
Housing Benefits	bho	I	I	I	I
State and Municipalities Dependency Benefits	bmals	I	I	I	I
Maternity leave for selfemployed	bmase	I	I	I	I
Minimum Insertion Income	bsa	I	I	I	I
Redundancy Payment	bunct01	I	I	I	I
Unemployment Benefits, Procedure for Mobility	bunct02	I	I	I	I
Unemployment Benefits, training	bunst	I	I	I	I
Benefits related to the reduction in working ability	pdi	I	I	I	I
Inability Pensions, Infirmity Allowances and War Pension	pfl	I	I	I	I
Old Age Pension	poa	I	I	I	I
Social Allowance to individuals older than 65	poamt	I	I	I	I
Survivors Pension	psu	I	I	I	I
Personal Income Tax	tinna_s	S	S	S	S
Personal Income Regional Additional Tax	tinrg_s	S	S	S	S
Separate Taxation on Capital Income	tinktcp_s				
	tinktdt_s				
	tinktdv_s	S	S	S	S
	tinktbd_s				
	tinktgb_s				
Separate Taxation on arrears and severance pay	tinsv_s	S	S	S	S
Property Tax	tpr	I	I	I	I
Employee Social Insurance Contributions	tsceepi_s	S	S	S	S
	tsceesf_s				
Employer Social Insurance Contributions	tscerpi_s				
	tscerui_s				
	tscersv_s	S	S	S	S
	tscerfa_s				
	tscersf_s				
	tscersi_s				
Self-employed Social Insurance Contributions	tscsepi_s	S	S	S	S
	tscseml_s				

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



## 2.2 Simulated policies and order of simulation

### 2.2.1 Simulated Policies

Table 13. Simulated policies

Section	Policy	Description	2005	2006	2007	2008
2.3.1	bfalp_it, bfacpxc_it, bfacpwc_it	Family allowances	X	X	X	X
2.3.4	bunct02_it	Ordinary Unemployment benefit	X	X	X	X
2.4.1	sicer_it	Employer SICs	X	X	X	X
2.4.2	sicee_it	Employee SICs	X	X	X	X
2.4.3	sicse_it	Self-employed SICs	X	X	X	X
2.5	tintsna_it, tintc_it, tinna_it	Personal Income Tax	X	X	X	X
2.6.1	tinrg_it	Additional Regional Personal Income Tax	X	X	X	X
2.6.2	tinkt_it	Separate Taxation on Capital Income, arrears and severance pay	X	X	X	X

### 2.2.2 Order of simulation

Besides the policy sheets containing the uprating factors (Uprate\_it), the definition of income lists (ILdef\_it) and tax units (TUDef\_it), the first “policy” in the spine (ConstDef\_it) allows the user to decide whether implementing or not the correction for tax evasion (see more detail in Section 3.4.2). By default, the correction is switched on.

The simulation of social insurance contributions (sicee\_it, sicer\_it and sicse\_it) and ordinary unemployment benefit (bunct02\_s – switched off by default in the systems) precedes the simulation of the personal income tax because social insurance contributions (paid by employees and self-employed) are deductible and unemployment benefit is taxable. The personal income tax is simulated in three different policy sheets: tintsna\_s (including the main tax deductions and the tax schedule), tintc\_s (personal tax credits) and tinna\_s (family tax credits and final calculation of the tax). Additional regional personal income tax (tinrg\_it) and separate taxation on capital income (tinkt\_it) follow.

The last three policy sheets of the spine (before the “output” policy sheets) include the simulation of the family allowances (bfacpxc\_s, bfalp\_it and bfacpwc\_it).



Table 14. EUROMOD Spine: order of simulation, 2005-2008

Policy	Description	Main output
Uprate_it	Uprating factors	
ConstDef_it	Tax evasion corrections and other system definitions	
ILDef_it	Income concepts	
TUDef_it	Assessment units	
sicee_it	Employee SICs	tscepi_s, tsceesf_s
sicer_it	Employer SICs	tscerpi_s, tscerui_s, tscersv_s, tscerfa_s, tscersf_s, tscersi_s
sicse_it	Self-employed SICs	tscepi_s, tsceeml_s
bunct02_it	Ordinary Unemployment benefit	bunct02_s
tintsna_it	Personal Income Tax: Deductions and tax schedule	tintsna_s
tintc_it	Personal Income Tax: personal tax credits	tinna_s
tinna_it	Personal Income Tax: family tax credits and final tax	tinna_s
tinrg_it	Additional Regional Personal Income Tax	tinrg_s
tinkt_it	Separate Taxation on Capital Income, arrears and severance pay	tinktcp_s, tinktdt_s, tinktdv_s, tinktbd_s, tinktgb_s, tinsv_s
bfacpxc_it	Family allowance: couple and 0 child	bfacpxc_s
bfalp_it	Family allowance: one parent and children	bfalp_s
bfacpwc_it	Family allowance: two parents and children	bfacpwc_s
output_std_it	Standard output – individual level	
output_std_hh_it	Standard output – household level	

### 2.2.3 Structural changes between 2005 and 2006

**New-Born Benefit:** In 2006, the benefit is granted only to family where the newborn is at least the second child.

### 2.2.4 Structural changes between 2006 and 2007

**New-Born Benefit:** is no longer granted.

**Personal Income Tax (IRPEF)** income brackets and tax rates change as explained in the table below:

2006		2007	
Income Brackets (euro per year)	Tax rate (%)	Income Brackets (euro per year)	Tax rate (%)
≤26,000	23	≤15,000	23
26,000-33,500	33	15,000-28,000	27
33,500-100,000	39	28,000-55,000	38
≥100,000	43	55,000-75,000	41
		≥75,000	43

Source: Agenzia delle Entrate

No-tax-area and progressivity allowance and tax allowances for dependent family members have been substituted with a system of tax credits.



New tax credits for the 19% of the following expenses: personal care; children's sport activities; rents paid by university students living in a different city than their parents; real estate agency fees; computers bought by teachers; donations to teaching institutions (not simulated).

New tax credit for the 55% of the expenses of energy requalification of existing buildings (not simulated).

New tax credit for the 20% of the following expenses: substitutions of refrigerators; digital televisions; highly efficient engines (not simulated).

New tax credit for young individuals aged 20-30 for the rent paid for their principal home (not simulated).

### 2.2.5 Structural changes between 2007 and 2008

**Personal Income Tax (IRPEF):** The upper bound where to apply the 19% tax credit on mortgages for the principal home has increased to 4,000 euro.

New tax credit for the 19% of dependent child voluntary contribution for the years spent at university (not simulated).

New tax credit for the 19% of the expenses for subscriptions to public transportation (not simulated).

New tax credit for the 19% of expenses for childcare fees (not simulated).

The upper bound where to apply the tax deduction for integrative funds to National Health System has increased to 3,615.20 euro (not simulated).

## 2.3 Social benefits

### 2.3.1 Family Allowances (*bfacpxc\_s*, *bfalp\_s*, *bfacpwc\_s*)

The **Family Allowances** (*Assegno per il nucleo Familiare*) are targeted to families of employees and pensioners with family incomes below determined thresholds. The thresholds and the amounts of the benefit are different according to the household composition and number of members, and are fixed every year by Law.

- **Definition**

The unit of analysis is the family (*tu\_fa\_family\_it*) including<sup>5</sup>:

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<sup>5</sup> Other entitled individuals (not included in the simulation due to lack of information in the data) include i) children aged above 18 unable to work; ii) siblings and nephews aged under 18 or aged above 18 unable to work, if they are orphans of both parents and do not receive any survivor pension, iii) one single person receiving a survivor pension (orphan or spouse), if she is aged under 18 or aged above 18 unable to work.



- The referent person who asks for the benefit;
- The spouse;
- Children and grandchildren of direct ascendant if aged under 18.

- **Eligibility conditions**

Eligible individuals are: employees, retired employees, unemployed individuals receiving the unemployment benefit, individuals under severance pay, individuals under procedure for mobility and collective dismissal, employees on sick or maternity leave (recipients of income source included in the income list *il\_fa\_dep*).

An individual is entitled to receive the benefit if the sum of the above income sources, net of social contributions, amounts to at least 70% of the whole family members' income (*il\_fa\_totinc*). Sources of income not subject to income tax or subject to withholding tax (*il\_fa\_disregy*) are included only for the amount larger than 1,032.91 euro per year (disregarded amount: *ydg01\_s*).

The income relevant for the benefit is the income produced in the solar year before the 1<sup>st</sup> of July of each year, and it remains valid until the 30<sup>th</sup> of June of the following year. Therefore, for example, for the period between the 1<sup>st</sup> of July 2008 and the 30<sup>th</sup> of June 2009, income produced in 2007 is taken into account. For the simulation of the benefit, we assume the family income to stay constant in two consecutive years and we use the income thresholds as of 1<sup>st</sup> July (instead of 30<sup>th</sup> June).

- **Income test**

The access to the benefit is restricted to those families below an income threshold. The threshold is different according to the composition of the family (presence of either spouses or just one, presence of children aged under 18) and increasing in the number of family members. Income thresholds are adjusted each year and index-linked to the annual average growth rate of the consumer price index for working-class households, elaborated by the National Statistical Office (*ISTAT*):

Table 15. Annual Average Growth Rate of consumer price index ( $\Delta\%$  with respect to previous year)

Year	$\Delta\%$
2006	+2.0
2007	+1.7
2008	+3.2

Source: ISTAT, FOI, Indice Nazionale dei prezzi al consumo per le famiglie di operai ed impiegati.

- **Benefit amount**

The employer has to pay the benefit to entitled employees who ask for it. The benefits to be paid to children of divorced parents, to natural children, to siblings, to nephews, to invalid family members and to family members living abroad have to be approved by the National Institute of Social Security - INPS.

The benefit is paid off together with the wage for employees. Then, the employer asks INPS to be refunded. Unemployed individuals and pensioners receive the benefit from INPS.

Below, we report the tables regarding the income thresholds and the benefit amount (valid from 1<sup>st</sup> July to 30<sup>th</sup> June) for families without disabled members for year 2005. Family income



thresholds for 2006, 2007 and 2008 are found by applying the rates show in Table 15. Benefit amounts remain constant over the period considered.

Table 16. Monthly Benefit Amount for a family with no children – 2005 (*bfacpxc\_s*)

Annual Family Income	Number of Family Members	
	1	2
Up to 11,388.31	-	46.48
11,388.32 – 14,234.77	-	36.15
14,234.78 – 17,081.23	-	25.82
17,081.24 – 19,926.57	-	10.33

Table 17. Monthly Benefit Amount for a family made of one parent and at least one child aged <18 – 2005 (*bfalp\_s*)

Annual Family Income	Number of Family Members					
	2	3	4	5	6	7 <sup>[a]</sup>
Up to 13,886.81	99.68	184.89	412.13	554.16	724.59	891.92
13,886.82 - 16,733.28	79.53	164.75	372.37	531.43	715.81	869.20
16,733.29 - 19,578.06	54.23	136.34	332.60	491.67	701.86	843.89
19,578.07 - 22,424.52	23.24	102.26	289.73	454.48	676.04	821.17
22,424.53 - 25,271.54	20.66	73.85	230.34	403.35	616.65	744.21
25,271.55 - 28,117.43	20.66	48.55	190.57	369.27	593.93	721.49
28,117.44 - 30,963.31	-	34.09	159.07	315.56	559.84	693.09
30,963.32 - 33,809.23	-	34.09	136.34	261.33	528.34	659.00
33,809.24 - 36,654.56	-	28.41	119.30	221.56	499.93	639.37
36,654.57 - 39,502.13	-	28.41	119.30	204.52	378.05	605.29
39,502.14 - 42,348.58	-	28.41	102.26	204.52	284.05	465.84
42,348.59 - 45,193.36	-	-	102.26	176.11	284.05	369.27
45,193.37 - 48,040.38	-	-	102.26	176.11	244.28	369.27
48,040.39 - 50,886.82	-	-	-	176.11	244.28	318.14
50,886.83 - 53,733.83	-	-	-	-	244.28	318.14
53,733.84 - 56,579.73	-	-	-	-	-	318.14

Notes: [a] For families with more than 7 members the monthly benefit amount is increased by 10% plus a lump sum of 53.71 euro per month.



Table 18. Monthly Benefit Amount for a family made of two parents and at least one child aged <18 – 2005 (*bfacpwc\_s*)

Annual Family Income	Number of Family Members				
	3	4	5	6	7
Up to 11,989.56	130.66	250.48	358.94	492.18	619.75
11,989.57 – 14,836.01	114.65	220.53	339.83	481.34	600.64
14,836.02 – 17,681.91	92.45	190.57	312.97	473.07	584.11
17,681.92 – 20,526.70	65.59	158.04	283.02	453.97	565.00
20,526.71 – 23,373.71	43.90	111.55	241.70	407.48	507.68
23,373.72 – 26,219.59	25.82	81.60	217.43	390.96	488.57
26,219.60 – 29,066.60	15.49	57.33	176.63	364.10	466.88
29,066.61 – 31,911.40	15.49	38.73	135.83	339.31	439.50
31,911.41 – 34,757.30	12.91	25.82	102.77	317.62	426.08
34,757.31 – 37,602.64	12.91	25.82	91.93	225.18	398.70
37,602.65 – 40,450.21	12.91	23.24	91.93	154.42	292.83
40,450.22 – 43,296.09	-	23.24	78.50	154.42	218.98
43,296.10 – 46,142.56	-	23.24	78.50	132.21	218.98
46,142.57 – 48,988.44	-	-	78.50	132.21	189.02
48,988.45 – 51,835.46	-	-	-	132.21	189.02
51,835.47 – 54,682.48	-	-	-	-	189.02

Notes: [a] For families with more than 7 members the monthly benefit amount is increased by 10% plus a lump sum of 53.71 euro per month.

- **EUROMOD notes**

Since in the dataset we do not have any detailed information on the disability status (as defined by the Law) of the individuals, in the simulation we assume that there are no disabled persons.

The discipline of the benefit applies also to part-time workers, with some differences. If the worker has worked at least 24 hours a week, the allowance is due without reductions for each weekday, including Saturday (even if it is not a working day). If the worker has worked less than 24 hours a week, the allowance is due only for the working days. Due to lack of data on the hours worked, the reduction for part time workers is not considered in the simulation.

As mentioned above, for the simulation of the benefit, the family income is assumed to stay constant in two consecutive years (e.g. by law the income thresholds valid at 30<sup>th</sup> June of 2005 are applied to the income earned in 2003. In the simulation we observe income earned in 2005, assuming that family composition and family income do not change between 2003 and 2005 and we use the income thresholds as of 1<sup>st</sup> July (instead of 30<sup>th</sup> June).

### 2.3.2 Newborn Benefit (*Bonus Bebè*)

Not simulated in EUROMOD version F3.0

- **Definitions**

It is a benefit in favour of families of newborn or new-adopted children (in 2006, the benefit is granted only to family where the newborn is at least the second child). The benefit stopped in 2007.



- **Eligibility Conditions**

Eligible individuals (i) have the paternal authority of a newborn (second-born or more for the 2006) or new-adopted child, (ii) are Italian or EU citizens,

- **Income Test**

Individuals must have a family (*tu\_fa\_family\_it*) income of less than 50,000 euro. By law, the family income of the previous year must be considered

- **Benefit Amount**

The benefit amount is an annual lump-sum of 1,000 euro for each new born child.

- **EUROMOD notes**

In the simulation, the income test uses the current income, assumed to be the same as the year before.

### 2.3.3 Municipalities Maternity Benefit (*Assegno di Maternità concesso dai Comuni – bmals*)

Not simulated in EUROMOD version F3.0

- **Definitions**

It is a benefit granted to mothers with Italian citizenship, EU citizenship or extra-EU citizenship and a long term residence permit or under political asylum, for each natural or adopted child.

- **Eligibility Conditions**

Entitled mothers do not receive any other maternity benefit, or receive another benefit which is smaller than the municipality one (in this case the municipality supplies the difference).

- **Income Test**

The benefit is means tested by using the Indicator of Economic Situation (*Indicatore della situazione economica - ISE*), and the threshold is fixed each year by law for a reference family of three members:



Table 19. Annual Indicator of Economic Situation threshold (3-members family)

Year	Threshold 3-members family
2005	29,596.45
2006	30,099.59
2007	30,701.58
2008	31,223.51

Source: *INPS circular letters* (59.2005, 51.2006, 48.2008, 77.2007)

For families with a different composition the following equivalence scale applies:

Table 20. Equivalence Scale

Family Members	Parameters <sup>1</sup>
1	1.00
2	1.57
3	2.04
4	2.46
5	2.85

<sup>1</sup> +0.35 for each other member; + 0.2 if there are minors and a lonely parent; + 0.5 for each other disable member; +0.2 for families with minors where both parents work.

Source: Decreto Legislativo 31 March 1998, n. 109

- **Benefit Amount**

The benefit amount is fixed each year by law and it paid by INPS:

Table 21. Municipalities Maternity Benefit Amount

Year	Monthly Amount (Euro)	Total Amount (Euro)
2005	283.92	1,419.59
2006	288.75	1,443.73
2007	294,52	1,472.60
2008	299.53	1,497.65

Source: *INPS circular letters* (59.2005, 51.2006, 48.2008, 77.2007).

- **EUROMOD notes**

In the simulation the eligibility is taken from the data (*bmals*).

### 2.3.4 Ordinary Unemployment benefit (*Indennita' di disoccupazione ordinaria – bunct02\_s*)

- **Definitions**

The ordinary unemployment benefit is granted to insured employees who have been dismissed.





- **Eligibility Conditions**

The benefit is not granted to resigned employees, unless the resignation is due to *good cause* as, for example, missed wage payment, sexual harassment, mobbing. The benefit is also given to employees who have been suspended for transitory reasons and causes not due to employers or employees behaviour. The benefit is no more due when the employer (i) has received the benefit for all the allowed days; (ii) starts a new employment; (iii) retires; (iv) refuses an employment proposal with a wage non less than the 20% of the previous one; (v) refuses to be enrolled in social activities; (vi) is erased from the employment lists.

Eligible individuals are employers who have paid (i) contribution against unemployment for at least two years or (ii) 52 weeks of contribution in the two-year period before the date of work suspension.

- **Income Test**

There is not an income test, but the law fixes a maximum monthly amount which depends on the wage. These thresholds are summarized in the following table.

Table 22. Ordinary Unemployment Maximum Amount

Year	Wage Threshold	Benefit Maximum Amount	
		Below the threshold	Above the threshold
2005	1,773.19	819.62	985.10
2006	1,797.31	830.77	998.50
2007	1,826.07	844.06	1,014.48
2008	1,857.48	858.58	1,031.93

Source: INPS Circular Letter (13.2006, 30.2007, 14.2008)

- **Benefit Amount**

The benefit amount and the duration of the treatment are different according to the age of the employee as detailed in Table 23. The benefit is taxable.



Table 23. Ordinary Unemployment Benefit Amount

Year	Duration	Benefit Amount (% of average gross wage of last three months)
2005	Aged <50	7 months
	Aged >= 50	10 months
2006	Aged <50	7 months
	Aged >= 50	10 months
2007	Aged <50	7 months
	Aged >= 50	10 months
2008	Aged <50	8 months
	Aged >= 50	12 months

- **EUROMOD notes**

By default the simulation of unemployment benefit is switched off in the spine. The implemented simulation takes into account the previous earnings and the number of months spent in work which need to be specified in the respective variables by the user.

### 2.3.5 Social Pension and Social Allowance to individuals older than 65 (*Assegno sociale per ultrasessantacinquenni – poamt*)

Not simulated in EUROMOD version F3.0

- **Definitions**

These are a purely social assistance benefits dedicated to old indigent Italian citizens, or other EU citizens living in Italy.

- **Eligibility Conditions**

Eligible individuals are at least 65 years old. They must be Italian citizens living in Italy or (starting from the 11th April 2007) other EU citizens who have been living in Italy for at least three months or (starting from the 1<sup>st</sup> of January 2009) other EU citizens who have been living in Italy consecutively and legally for at least ten years.

- **Income Test**

The sum of all incomes of the individual (non married) or the cumulated incomes of the two spouses, except:

- one third of the pension computed with the pay-as-you-go contributive system,
- the arrears subject to separate taxation,
- the redundancy benefit,
- any kind of family allowance,



- the cadastral value of the main residence,
- the social allowance,
- the accompanying allowance,
- the allowances related to some sort of disability
- the war pension

cannot exceed some maximum amounts, summarized in the following tables

- ***Benefit Amount***

Eligible individuals receive the total benefit amount only if their income is zero. Otherwise, they receive the difference between the benefit amount and their income. No benefit is due if the income exceeds the fixed thresholds.



Table 24. Income test and Benefit amount for Social Allowance for elderly

Year	Maximum Income of the pensioner (RP)	Maximum Income of the pensioner + spouse (RT)	Amount to be subtracted from the benefit amount	Benefit Amount
2005	Zero	< 9,835.01	Zero	239.63
	> 3,115.19	Any	239.63	Zero
	< 3,115.19	> 12,950.20	239.63	Zero
	< 3,115.19	< 9,835.01	RP/13	
	< 3,115.19	> 9,835.01 & < 12,950.20	RP / 13 (*) or (RT – 9,835.01) / 13 (*)	
2006	Zero	< 10,002.21	Zero	243.71
	> 3,168.23	Any	243.71	Zero
	< 3,168.23	> 13,170.35	243.71	Zero
	< 3,168.23	< 10,002.21	RP/13	
	< 3,168.23	> 10,002.21 & < 13,170.35	RP / 13 (*) or (RT – 10,002.21) / 13 (*)	
2007	Zero	< 10,202.26	Zero	248.59
	> 3,231.67	Any	248.59	Zero
	< 3,231.67	> 13,433.93	248.59	Zero
	< 3,231.67	< 10,202.26	RP/13	
	< 3,231.67	> 10,202.26 & < 13,433.93	RP / 13 (*) or (RT – 10,202.26) / 13 (*)	
2008	Zero	< 10,375.70	Zero	252.82
	> 3,286.66	Any	252.82	Zero
	< 3,286.66	> 13,662.36	252.82	Zero
	< 3,286.66	< 10,375.70	RP/13	
	< 3,286.66	> 10,375.70 & < 13,662.36	RP / 13 (*) or (RT – 10,375.70) / 13 (*)	

Source: INPS circular letter 142.2007, Annex1

## 2.4 Social contributions

The incidence of social contributions on earned income is different according to: (i) the source of income (dependent, self-employment); (ii) the sector of activity (manufacturing, building, mining, publishing, public administration, handicrafting, agriculture, banking and insurance, services, cooperative sector, broadcasting); (iii) the number of persons working in the organization; (iv) the occupational status (executives, white collars, blue collars).

Due to lack of data, we simulate a simplified version of the social contribution system, by applying to all dependent workers the rates of the Industrial Sector with more than 50 employees, discriminating between blue and white collars. As for the self-employed workers we differentiate only between craftsmen, tradesmen, and farmers.



Table 25. List of different sectors to determine the contributory rates

<b>General Industry</b>	<b>Radio and Television Industries and Show business</b>
<=15 employees	Industrial Sector
between 15 and 90 employees	Radio and television private industries
More than 90 employees	Not employed artists
<b>Building Industry</b>	Bingo Arcades
<=15 employees	Developing, Print and Distribution <15
Between 15 and 50 employees	Developing, Print and Distribution >15 & <50
More than 50 employees	Developing, Print and Distribution >50
<b>Stone Industry</b>	Trading Sector
<=15 employees	<b>Commerce - Tertiary</b>
between 15 and 50	Commerce <=50
More than 50	Commerce > 50, <200
<b>Handicraft</b>	Commerce >200
Craftsman	Temporary job placement Agencies
Induced craftsman	Travel Agencies <=50
Building craftsman	Travel Agencies >50
Induced building craftsman	Cleaning Agencies <=15
Stone craftsman	Cleaning Agencies >15
Induced Stone craftsman	Security Services <=15
<b>Agriculture</b>	Security Services >15
Farming	Logistic Services <=50
Farms owned by a tenant farmer	Logistic Services >50 & <200
Cooperative	Logistic Services >200
<b>State Administration</b>	Firm Refectories <15
State Administration	Firm Refectories >15
Secular chaplain	<b>Special Funds</b>
Regular chaplain	Road haulage contractors craftsmen
Prison Inmate	Road haulage contractors industry
Work yards and reforestation	Road haulage regional or governative contractors
State Schools	Flight Fund
<b>Arts and Professions</b>	<b>Banks and Insurance</b>
Political Parties and Unions	<b>Regions, Provinces, Municipalities</b>
Bingo Arcades	<b>Cooperatives</b>
Fast Mail Carriers	<b>Personnel abroad</b>
Tertiary	<b>Apprentices</b>

The average contribution rate is about 40%: part is due by the employer, part by the employee. The National Institute of Social Security (*INPS*) collects contributions for the following insurances:

- Invalidation, Old Age and Survivors (*Invalidità, Vecchiaia, Superstiti*), which is the contribution valid for the pension
- Unemployment (*Disoccupazione*);
- Dependency benefit Fund (*Cassa Unica Assegni Familiari*);
- Redundancy Fund (*Cassa Integrazione Guadagni Straordinaria*);
- Procedure for mobility and Collective Dismissals (*Mobilità*);
- Sickness and Maternity Benefit (*Malattia e Maternità*);



- Severance Pay (TFR).

Contribution is proportional to the gross wage defined as compensation in money and in kind. The following are excluded: the amounts received as Severance Pay, as encouragement to leave, as indemnity, as insurance premium, family benefits, the amounts received as scholarships, childcare and summer camps for family members, fringe benefits within €258.23, travelling expenses within given thresholds.

The wage cannot be lower than the minimum wage (*minimale*) fixed by the Law: as a consequence, also social contribution cannot be lower than the minimum contribution fixed by the Law. On the other hand, there is also a threshold above which contribution is no more due (*massimale*) and it applies to workers who started their working activity after the 1<sup>st</sup> of January 1996.

Table 26. Monthly Minimum and Maximum wages for social contribution: Employees

	2005	2006	2007	2008
Min	728.74	741.13	755.99	768.82
Max	7,004.08	7,123.17	7,265.58	7,389.08

Source: INPS: circular letters n. 11 (1-2-2008), n.34 (6-2-2007), n.18 (8-2-2006), n.21 (4-2-2005)

As we showed in Table 25, the Italian contributory system is very fragmented and we do not simulate the rates for all the possible combinations, considering that they differ very little and we do not have enough information in the data. In the following two paragraphs we report the most common ones (the ones reported in the Annual Report of the Ministry of Finance) which are simulated in EUROMOD.

#### 2.4.1 Employer social insurance contributions (*tscerpi\_s*, *tscerui\_s*, *tscersv\_s*, *tscerfa\_s*, *tscersf\_s*, *tscersi\_s*)

The following table reports the employer social contributions for blue collars (b.c.) and white collars (w.c.) in the four considered years, related to industrial firms with more than 50 employees.

Table 27. Employer social contribution rates (%), industrial firms with more than 50 employees

	2005		2006		2007-08	
	b.c.	w.c.	b.c.	w.c.	b.c.	w.c.
IVS	23.81	23.81	23.81	23.81	23.81	23.81
Unemployment	1.91	1.91	1.91	1.91	1.91	1.91
T.F.R.	4.48	4.48	4.48	4.48	4.48	4.48
Family allowances	1.68	1.68	0.68	0.68	0.68	0.68
Redundancy Fund	2.80	2.80	2.80	2.80	2.80	2.80
Sickness and Maternity	2.68	0.46	2.68	0.46	2.68	0.46

Source: MEF (2009)

Notes: b.c.: blue collars; w.c.: white collars



### 2.4.2 Employee social insurance contributions (*tscepi\_s, tsceesf\_s*)

The following table reports the employee social contributions for blue collars (b.c.) and white collars (w.c.) in the four considered years, related to industrial firms with more than 50 employees.

Table 28. Employee social contribution, rates (in %)

	2005		2006		2007-08	
	b.c.	w.c.	b.c.	w.c.	b.c.	w.c.
IVS	8.89	8.89	8.89	8.89	9.19	9.19
Redundancy Fund	0.30	0.30	0.30	0.30	0.30	0.30

Source: MEF (2009)

Notes: b.c.: blue collars; w.c.: white collars.

### 2.4.3 Self-employed social contributions

In the same way as the subordinate employment social contributions, self-employed social contribution provides a minimum and a maximum level of income, below and above which contribution is no more due. In the following table we summarize the minimum income (*minimale*) and the maximum income (*massimale*) for computing contribution for craftsman and retailers.

Table 29. Monthly Minimum and Maximum wages for social contribution: Craftsmen and Retailers

	2005	2006	2007	2008
Min	1,094.42	1,112.08	1,133.17	1,151.58
Max	5,366.83	5,457.92	5,567.08	5,661.83

Source: INPS: circular letters n. 13 (1-2-2008), n.28 (29-1-2007), n.24 (15-2-2006), n.36 (25-2-2005)

For farmers, instead, the criterion for determining the contributory amount is based on the definition of a *normal income*, which is defined by law each year and differentiated for the age of the worker (younger or older than 21 or older than 65), the location of the land (normal, mountain or depressed areas) and the type of activity. We report in the following table, as an example, the *normal incomes* for farmers older than 21 operating in normal areas.

Table 30. Normal annual incomes: Farmers (> 21, normal areas)

	2005	2006	2007	2008
Activity 1	2,253.92	2284.93	2,334.31	2,368.48
Activity 2	2,717.95	2758.78	2,824.10	2,869.16
Activity 3	3,182.00	3232.65	3,313.90	3,369.83
Activity 4	3,646.04	3706.50	3,803.70	3,870.49

Source: INPS: circular letters n. 71 (8-7-2008), n.95 (27-6-2007), n.79 (17-6-2006), n.86 (30-6-2005)



Note that we simulate the benefit for farmers on the basis of their *actual* (declared) income, since from the data we have it is impossible to recover all the information needed to find the *normal income*.

The following table reports the self-employed social contributions levied on self-employment income (*yse*) for craftsman (*crm*), retailers (*ret*) and farmers (*agr*) in the four considered years:

Table 31. Self-employed social contributions, rates (in %)

	2005			2006-2007			2008		
	crm	ret	agr	crm	ret	agr	crm	ret	agr
IVS (%)	17.20	17.59	20.30	19.50	19.59	20.30	20.00	20.09	20.30
Maternity (€/per year)	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49

Source: MEF (2006), MEF (2007), MEF (2008), MEF (2009).

Note: *crm*: craftsman, *ret*: retailers, *agr*: farmers.

## 2.5 Personal income tax

The main tax simulated for Italy is the Personal Income Tax (*IRPEF - Imposta sul Reddito delle Persone Fisiche, tinna\_s*). All residents are responsible to pay IRPEF on their income (and non resident for income produced in Italy).

### 2.5.1 Tax unit

Personal Income Tax is individual. However, the dimension and the composition of the family are taken into account by mean of tax allowances and tax credits due to the presence of “fiscal dependent” persons. In order for a family member to be considered *dependent* she has to live within the same residence as the reference individual and her income cannot exceed 2.840,51 euro (*ils\_origrepy*). This income is defined as all incomes which are included in the personal income tax base and also incomes received by international organizations, consular and diplomatic representatives, the Holy See and organizations directly controlled by it.

### 2.5.2 Exemptions

The following income components are not included in the concept of gross income:

- Incomes subject to withholding taxation (mainly income from financial assets (*iyi*), such as capital gains and dividends (*iyidv*));
- Income subject to separate taxation as, for example, salary arrears (*yempv*), pensions paid out in form of capital (*ypp01*), and severance pay (*yunsv*);
- Incomes free of income tax as, for example, school benefits (*bed*), some disability pensions (*pdi*), social allowance for elderly (*poamt*), family allowances (*bfacpxc\_s*, *bfalp\_s*, *bfacpwc\_s*), child benefits (*bchot*).

### 2.5.3 Tax allowances

The tax allowances scheme in Italy can be divided in three main deduction classes.

The first class gathers traditional tax allowances which remain the same over the four fiscal years considered (2005, 2006, 2007, and 2008).





The “no-tax area and progressivity” allowance and the tax allowances for dependent family members apply only in 2005 and 2006.

### **Traditional Tax Allowances (2005-2008)**

The main tax allowances are social contribution due by employed (*ils\_sicce*) and self-employed (*ils\_sicse*) individuals and contribution to private pension plans (*tintapv\_s*). With respect to the contribution to private pension plans, tax deduction cannot exceed the 12 % of individual total income (*il\_taxableY*) and in any case it cannot be greater than 5,164.54 euro per year. From 2007, the limit of 12% of taxable income is abolished.

Another important tax allowance is the tax deduction for the main residence equal to its cadastral income (*amriv*).

Other tax allowances are related to disabled persons health expenses, grants to religious institutions, expenses for domestic help (*tintaos\_s*). Due to lack of information in the data, the amount of these allowances is given by a coefficient (defined by income classes and calibrated on the aggregate information collected from the Ministry of Finance) multiplied by individual income.

### **“No-tax-area and Progressivity Allowance” (2005 - 2006)**

The no-tax area and progressivity allowance is differentiated according to the type of income earned by the tax-payer (income from employment, self-employment, pension) and her level of income.

Everyone is allocated with a Base Personal Tax Deduction of 3,000 euro. In addition to that, the individuals are entitled to receive an additional amount proportional on the number of months she received some kind of income, in the following way:

- Employed: 4,500 euro
- Retirees: 4,000 euro
- Self-Employed: 1,500

The final amount of the Potential Personal Tax Allowance is equal to the Base Personal Tax Deduction (*Deduzione base per la no-tax area*) plus the most convenient Additional Personal Tax Deduction (self-employment additional Tax Deduction is mutually exclusive with the others).

The next step is to find the personal deducibility coefficient, by applying the following formula:

$$(26,000 + \text{Potential Tax Allowance (i.e. } \textit{sin06\_s}) + \text{Deduction for main residence (i.e. } \textit{amriv}) + \text{Deductible amounts (i.e. } \textit{tintapv\_s} \text{ and } \textit{tintaos\_s}) - \text{Total income (i.e. } \textit{il\_taxableY}) ) / 26,000$$

The final amount of the Personal Tax Allowance (*tinta00\_s*) is equal to 0 when the deducibility coefficient is less than or equal to 0, and it is equal to the Potential Personal Allowance when the deducibility coefficient is greater than or equal to 1. If the deducibility coefficient is between 0 and 1, the final amount of the Personal Tax Allowance is equal to the Potential Personal Allowance times the Deducibility coefficient.

Note that the deduction is decreasing in the level of total income and it becomes zero at a total income equal to 33,500 for employed individuals, 33,000 for retired individuals, 30,500 for self-employed and 29,000 for the others income producers.



### Tax Allowances for Dependent Family Members (2005 - 2006)

The procedure for the computation of the total tax allowance for dependent family members (*tinta01\_s*) is similar to the no-tax-area and progressivity allowance. The potential maximum allowance level is different for different family members according to the following table:

Table 32. Theoric tax allowance for dependent family member

Dependent Family Member	Potential Tax Allowance (Euro per year)
Married partner	3,200
Child age >= 3	2,900
Child age < 3	3,450
Other family member	2,900

Source: Agenzia delle Entrate (2006)

The potential tax allowance for dependent child becomes 3,200 euro for the first child if there is just one parent (and 3,700 if the child is a disabled person, not simulated due to lack of data). Summing up all the potential tax allowances for dependent family members, we obtain the total potential tax allowance for dependent family members (*sin14\_s*). Then we need to find the deducibility coefficient, by applying the following formula:

$$(78,000 + \text{Potential Tax Allowance (i.e. } \textit{sin14\_s}) + \text{Deduction for main residence (i.e. } \textit{amriv}) + \text{Deductible amounts (i.e. } \textit{tintapv\_s} \text{ and } \textit{tintaox\_s}) - \text{Total income (i.e. } \textit{il\_taxableY}) / 78,000$$

Again, the final amount of the Allowance for dependent family members (*tinta01\_s*) is equal to 0 when the deducibility coefficient is less than or equal to 0, and it is equal to the potential tax allowance when the deducibility coefficient is greater than or equal to 1. If the deducibility coefficient is between 0 and 1, the Allowance for dependent family members is equal to the Potential Tax Allowance times the deducibility coefficient

Parents can split the potential tax allowance for dependent children in any proportion (in the simulation the total tax allowance is assigned to the parent with higher income in first instance and if she cannot use the full amount of the tax allowance the part of the potential tax allowance not used (*sin18\_s*) is attributed to the partner).

Starting from 2007, no-tax-area and progressivity allowance and tax allowances for dependent family members have been substituted with a system of tax credits.

#### 2.5.4 Tax base

The tax base is defined as gross income minus the various exemptions outlined above. The gross income is defined as the sum of the following income sources:

- 85% of income from Land and Buildings (*tintbrt\_s*)
- Income from Employment (*yem*) and assimilated incomes as vocational training (*bunst*), redundancy payment (*bunct01*), income from mobility and collective dismissals (*bunct02*), income received by people aged under 15 (*yot*), old age pension (*poa*), survivor pension (*psu*), invalidity pension (*phl*)
- Fringe benefits (*kfb\_s*) exceeding 258.23€/per year



- Income from Self-Employment (*yse*) and maternity benefits for self employed people (*bmase*)
- Capital component of private supplementary pensions (assumed to be 70% of total, *ypp02*)
- Cadastral income of main residence (*amriv*) and other residence (*aobiv*).

### 2.5.5 Tax schedule

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

In 2005 and 2006, there were four income brackets with the following tax rates:

Table 33. Income brackets (2005, 2006)

<b>Income Brackets (Euro per year)</b>	<b>Tax rate (%)</b>
≤26,000	23
26,000-33,500	33
33,500-100,000	39
≥100,000	43

Source: Agenzia delle Entrate

Starting from 2007, the number of brackets has been modified to five:

Table 34. Income brackets (2007, 2008)

<b>Income Brackets (Euro per year)</b>	<b>Tax rate (%)</b>
≤15,000	23
15,000-28,000	27
28,000-55,000	38
55,000-75,000	41
≥75,000	43

Source: Agenzia delle Entrate

### 2.5.6 Tax credits

Tax credits are classifiable into 4 classes. The first two classes apply all along the four fiscal years taken into account, while the last two have been introduced in 2007 to replace the no-tax area and progressivity allowance and the tax allowances for dependent family members applied in 2005 and 2006.

All tax credits are non-refundable: as a consequence the tax liability cannot be negative.

#### Tax credits for personal expenses (2005-2008)

It is possible to subtract from the tax liability the 19% of 36 different cases from health expenses to education expenses, to gifts to art or sport institutions, to travel expenses for commuters, and many others. The most important are the following:



- Interests paid on mortgage loans (*xhcmomi*) for the purchase of the main residence, not exceeding 3,615.20 euro or 4,000 euro from 2008 (*tintcmi\_s*);
- Health Expenses (for the amount exceeding 129.11 euro), also for the dependent family members, guide dog and expenses for visual, hearing or deambulation aids for disabled persons;
- Life premium and insurance premium against permanent disability, not exceeding 1,291.14 euro;
- Expenses for high and university education;
- Funeral Expenses;
- Donations to non profit organizations;

All the tax credits but *tintcmi\_s* are imputed by applying a coefficient calibrated by income classes to get the total amount of tax credits (*tintcox\_s*) as reported in the aggregate fiscal data).

### **Tax credits with incentive purposes (2005-2008)**

In order to stimulate some consumers' behaviours the following tax credits are allowed:

- For tenants subject to controlled rent contracts (Contratti Convenzionali), 495.80 euro if total income is less than 15,493.71 euro and 247.90 euro if total income is between 15,493.71 and 30,987.41 euro;
- For tenants who are employees and move their main residence closer to their working place, being in a different region and further than 100 Km from the original location, 991.60 euro if total income is less than 15,493.71 euro and 495.80 euro if total income is between 15,493.71 and 30,987.41 euro;
- The 36% (optional at 41% starting from 2006, not simulated) of the expenses for the refurbishment of buildings, not exceeding 48,000 euro (*tintc01\_s*);
- Starting from 2007, the 55% of the expenses for energy conservation's interventions.

Within this list, due to lack of data we simulate only the tax credit for the expenses for the refurbishment of buildings (36%), by applying a calibration coefficient which takes into account the possibility of claiming this tax credit in 5 or 10 years.

### **Tax credits for income source (2007-2008)**

The tax credits for income source apply in a different way to different classes of taxpayers: employees (*tintcee\_s*), pensioners aged 75 and above, pensioners aged below 75 (*tintcpe\_s*) and self-employed workers (*tintcse\_s*).

The tax credits define a *no tax area* for the four classes of taxpayers and it is then linearly decreasing in the level of gross income minus the cadastral value of the main residence (*il\_taxabley\_pertc*). At 55,000 euro the tax credit is zero.

If more than one source of income is received, the tax credits apply in proportion to the period the individual received that source of income.



Table 35. Tax credits for income source, amounts per year (2007, 2008)

<b>Employment income and assimilated (<i>il_emp</i>)</b>	
Until 8,000	1,840
8,001-15,000	$1,338 + 502 * ((15,000 - il\_taxable\_perc) / 7,000)$
15,001-23,000	$1,338 * ((55,000 - il\_taxable\_perc) / 40,000)$
23,001-24,000	$1,348 * ((55,000 - il\_taxable\_perc) / 40,000)$
24,001-25,000	$1,358 * ((55,000 - il\_taxable\_perc) / 40,000)$
25,001-26,000	$1,368 * ((55,000 - il\_taxable\_perc) / 40,000)$
26,001-27,700	$1,378 * ((55,000 - il\_taxable\_perc) / 40,000)$
27,701-28,000	$1,363 * ((55,000 - il\_taxable\_perc) / 40,000)$
28,001-55,000	$1,338 * ((55,000 - il\_taxable\_perc) / 40,000)$
<b>Pensions (<i>il_pensions</i>): pensioners aged below 75</b>	
Until 7,500	1,725
7,501-15,000	$1,255 + 470 * ((15,000 - il\_taxable\_perc) / 7,500)$
15,001-55,000	$1,255 * ((55,000 - il\_taxable\_perc) / 40,000)$
<b>Pensions (<i>il_pensions</i>): pensioners aged 75 and above</b>	
Until 7,750	1,783
7,751-15,000	$1,297 + 486 * ((15,000 - il\_taxable\_perc) / 7,250)$
15,001-55,000	$1,297 * ((55,000 - il\_taxable\_perc) / 40,000)$
<b>Self-employment income (<i>yse</i>)</b>	
Until 4,800	1,104
4,801-55,000	$1,104 * ((55,000 - g.i.) / 50,200)$

Source: Agenzia delle Entrate

The tax credits related to employment income and pensions depends on the number of months in receipt of the given income source. The tax credit for employment income cannot be lower than 1,380€ per year if the individual has a temporary contract ( $lap00 = 1$ ) or lower than 690€ per year otherwise ( $lap00 = 0$ ). The tax credit for pensions cannot be lower than 690€ per year if the individual is aged below 75 years or lower than 713€ per year if the individual is aged 75 years or above.

They cannot be summed up, and the individual can choose the most profitable one.

### Tax credits for dependent family members (2007-2008)

The tax credits for dependent family members are different for the spouse, the children and other family members. Moreover, the tax credit changes with the children age (more or less than three years old) and the number of the children.

A family member is defined as *dependent* if she lives with the referent person and does not have more than 2,840.51 euro of gross income (*ils\_origrepy*). The tax credit is decreasing in individual gross income (*il\_taxable\_perc*) and it is computed according to the following table:



Table 36. Tax credits for dependent family members (amounts per year)

<b>Spouse</b>	
Up to 15,000	$800 - (110 * (il\_taxable\_perc / 15,000))$
15,001 – 29,000	690
29,001 – 29,200	700
29,201 – 34,700	710
34,701 – 35,000	720
35,001 – 35,100	710
35,101 – 35,200	700
35,201 – 40,000	690
40,001 – 80,000	$690 * ((80,000 - il\_taxable\_perc) / 40,000)$
<b>Child &lt; 3 years old (potential tax credit)</b>	
900	
<b>Child &gt;=3 years old (potential tax credit)</b>	
800	
<b>Others</b>	
$(750 * \text{number of dependent persons}) * ((80,000 - il\_taxable\_perc) / 80,000)$	

Source: Agenzia delle Entrate

The potential tax credit for dependent child is increased by 200 euro starting from the first child if there are more than three children.

To compute the final tax credit is necessary to calculate an “increment” given by the number of dependent children minus 1 times 15,000 (*sin09\_s*).

Then we need to find the tax credit coefficient, by applying the following formula:

$$(95,000 + \text{Increment (i.e. } sin09\_s) - \text{Total income (i.e. } il\_taxableYperc)) / (95,000 + \text{Increment (i.e. } sin09\_s))$$

The final amount of the tax credit for dependent children (*tintch\_s*) is equal to 0 when the tax credit coefficient is less than or equal to 0 (or equal or larger than 1). If the tax credit coefficient is between 0 and 1, the Tax credit for dependent children is equal to the potential tax credit times the tax credit coefficient

Parents can split the potential tax allowance for dependent children in any proportion (in the simulation the total tax credit is assigned to the parent with higher income in first instance and if she cannot use the full amount of the tax credit the residual is attributed to the partner).

If the head of tax unit is a lone parent and the tax credit for the potential spouse is greater than the tax credit for the oldest child, the difference is given as additional tax credit for lone parent (*tintclp\_s*)

#### **Tax credits for families with at least four children (2007-2008)**

Moreover, an additional tax credit of 1,200 euro is given to families with at least four children (and for the whole year, regardless on when the fourth child was born).



## 2.6 Other taxes

### 2.6.1 Personal Income Regional additional tax (*Addizionale Regionale all'IRPEF*)

The regional additional tax (*Addizionale Regionale*) is computed on the same tax base (*il\_taxable\_regtax*) as the personal income tax (*IRPEF*). The tax rate is 0.9% but each region can increase it of at most another 0.5%. In the following table we provide the tax rates for each region in the four considered years. Taxation is generally graduated, with progressively higher marginal tax rates applying to higher income brackets except where the income brackets are asterisked (\*): in that case the tax rate applies to the whole income according to the relevant classes. The simulated tax is stored in the variable *tinrg\_s*. Note that the regional additional tax is positive only if the national personal income tax (after tax credits, i.e. *tinna\_s*) is positive.

Table 37. Personal income regional additional tax rates, by region and year

Variable drgn2	Region	2005		2006		2007		2008	
		Income Brackets	Tax rate %	Income Brackets	Tax rate %	Income Brackets	Tax rate %	Income Brackets	Tax rate %
1	Piemonte	≤10,672.82	0.9	≤10,854.26	0.9	≤11,071.35	0.9	≤15,000	0.9
		≥10,672.83*	1.4	≥10,854.26*	1.4	≥11,071.35*	1.4	15,000-22,000* ≥22,000*	1.2 1.4
2	Valle d'Aosta		0.9		0.9		0.9		0.9
3	Lombardia	≤15,493.71	1.2	≤15,493.71	1.2	≤15,493.71	1.2	≤15,493.71	0.9
		15,493.7-30,987.41	1.3	15,493.7 – 30,987.41	1.3	15,493.7- 30,987.41	1.3	15,493.7-30,987.41	1.3
		≥30,987.4	1.4	≥30,987.4	1.4	≥30,987.4	1.4	≥30,987.4	1.4
4	Bolzano				0.9		0.9		0.9
5	Trento				0.9		0.9		0.9
6	Veneto	≤29,000	0.9	≤29,000	0.9	≤28,000	0.9	≤29,500	0.9
		≥29,000*	1.4	≥29,000*	1.4	≥28,000*	1.4	≥29,500*	1.4
7	Friuli Venezia Giulia		0.9		0.9		0.9		0.9
8	Liguria		0.9	≤13,000	0.9	≤20,000*	0.9	≤25,000	0.9
				13,000-20,000*	1.25	≥20,000*	1.4	≥25,000 *	1.4
				≥20,000*	1.4				
9	Emila Romagna		0.9		0.9	≤15,000	1.1	≤15,000	1.1
				15,000-20,000*		1.2	15,000-20,000*	1.2	
				20,000-25,000*		1.3	20,000-25,000*	1.3	
				≥25,000*		1.4	≥25,000*	1.4	
10	Toscana		0.9		0.9		0.9		0.9
11	Umbria	≤26,000	0.9	≤26,000	0.9	≤15,000	0.9	≤15,000	0.9
		≥26,000*	1.1	≥26,000*	1.1	≥15,000*	1.1	≥15,000*	1.1
12	Marche	≤15,500	0.9	≤15,500	0.9	≤15,500	0.9	≤15,500	0.9
		15,500 – 31,000	1.2	15,500 – 31,000	1.2	15,500 – 31,000	1.2	15,500 – 31,000	1.2
		≥31,000	1.4	≥31,000	1.4	≥31,000	1.4	≥31,000	1.4
13	Lazio		0.9		1.4		1.4		1.4
14	Abruzzo		0.9		1.4		1.4		1.4





15	Molise	1.2	1.4	1.4		1.4
16	Campania	0.9	1.4	1.4		1.4
17	Puglia	0.9	0.9	0.9	≤28,000	0.9
					≥28,000*	1.4
18	Basilicata	0.9	0.9	0.9		0.9
19	Calabria	1.4	1.4	1.4		1.4
20	Sardegna	0.9	0.9	0.9		0.9
21	Sicilia	0.9	1.4	1.4		1.4

Source: Agenzia delle Entrate, Annuario, various years

## 2.6.2 Taxation on Capital Income

Capital income is mainly subject to separate taxation. The separate taxation regime is articulated into two different tax rates shown in the table below. Long-term savings is encouraged by applying the lower rate.

In addition private pensions paid out in form of capital, arrears and severance pay are subject to separate taxation as well.

Table 38. Tax rates on Capital Income (2005 – 2008)

<b>Source of income (variable name)</b>	<b>Rates (%)</b>
Interests on bank and postal accounts ( <i>yyitdp</i> )	27.0
Interests on State bonds and Postal Bonds ( <i>yyitsb</i> )	12.5
Interests on long-term bonds - more than 18 months ( <i>yyitob</i> )	12.5
Dividends ( <i>yydv</i> )	12.5
Private pensions paid out in form of capital ( <i>ypp01</i> )	26.0
Arrears ( <i>yempv</i> ) and severance pay ( <i>yunsv</i> )	26.0

Note: Interest on bank's bonds and Interests on short-term bonds (less than 18 months) are taxed at a rate of 27%. Due to lack of information we cannot simulate these.

Source: *Bosi Guerra, various years*



### 3. DATA

#### 3.1 General description

The Italian database is based on the national version (IT-SILC) of the European Union Statistics on Income and Living Conditions (EU-SILC). This is a rotating panel survey (4 rotational groups), representative of the Italian population in private households. The survey takes place in the second half of the year following the income reference year.

The unit of assessment is the sociological household, defined as the persons living at the same address.

The response rate for the total sample<sup>6</sup> is equal to 85.43. The User Data Base on which the EUROMOD database is based upon (ITSILC XUDB 2006 - version April 2008) is delivered by the Italian Institute of Statistics (ISTAT).

More information on technical issues concerning the Italian SILC 2006 can be found in the Intermediate Quality Reports provided by the Italian Institute of Statistics (ISTAT, 2006)

Table 39. EUROMOD database description

	Year 2005
EUROMOD database	IT_2006_a4
Original name	ITSILC XUDB 2006 – April 2008
Provider	ISTAT
Year of collection	2006
Period of collection	2006 Q1 – 2007 Q1 (most in 2006 Q4)
Income reference period	2005
Sampling	2-stage sampling; with stratification of sampling units (no clustering of sampling units)
Unit of assessment	Italian household defined as cohabitants related through marriage, kinship, affinity, adoption, patronage and affection.
Coverage	Private households
Sample size	54,142 individuals 21,499 households
Response rate	85.43% (household response rate for total sample)

<sup>6</sup> Response rate (“old” households (3/4) and “new” households (1/4) together) is defined as: (number of addresses successfully contacted / number of valid addresses contacted) \* (number of household interviews completed and accepted for the database / number of eligible households at contacted addresses)\*100.



## 3.2 Sample quality and weights

### 3.2.0 Non-response

Household non-response rates (NRh)

$$NRh = (1 - (Ra * Rh)) * 100$$

Where

$$Ra = (\text{Number of addresses successfully contacted} / \text{Number of valid addresses selected}) = 0.99042$$

$$Rh = (\text{Number of household interviews completed and accepted for the database} / \text{Number of eligible households at contacted addresses}) = 0.86258$$

$$Nrh = (1 - 0.99783 * 0.60618) * 100 = 14.5679$$

So, the household non-response rate is 14.6%

Individual non-response rates (NRp)

$$NRp = (1 - (Rp)) * 100$$

Where

$$Rp = (\text{Number of personal interview completed} / \text{Number of eligible individuals}) = 1$$

$$NRp = (1 - 0.99160) * 100 = 0$$

So, the individual non-response rate is 0

Overall individual non-response rates (\*NRp)

$$*NRp = (1 - (Ra * Rh * Rp)) * 100 = (1 - (0.99042 * 0.86258 * 1)) * 100 = 14.5679$$

So, the overall individual non-response rate is 14.6 %.

### 3.2.1 Weights

The weights provided in the Italian SILC are household weights, imputed for each person in the household. The weights were developed in four steps. The initial weights are the inverse of the inclusion probability of each household. The second step contains a slight correction for non-response both at household and individual level. Later, correction for over/under representation of certain population groups is implemented through calibration taking account of NUTS I-level and NUTS II-level, age, sex, amount of national and non national population. Finally, an integrative calibration is performed to make sure that members in the same household all receive the same weight. The following Table presents some basic descriptive statistics of the Grossing-up weights.



Table 40. Descriptive Statistics of the Grossing-up weights

<b>IT_2006_a4</b>	
Number	54,142
Mean	1,078.968
Median	885.324
Minimum	72.287
Maximum	11,276.75
Max/Min	155.999
Decile 1	252.389
Decile 9	2080.768
Dec 9 / Dec1	8.244

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

An overview of item non-response is provided in the Italian SILC Quality Report (ISTAT, 2006).

Concerning under-reporting, the Italian SILC Quality Report (ISTAT, 2006) makes comparisons between some income target variables and the number of persons who receive income from each ‘income component’, with external sources. In particular, as external benchmarks, they use data from National Accounts and Labour Force Survey by ISTAT, Fiscal Agencies of the Ministry of the Economy and Pensions Register by INPS (National Institute for Social Security). The checked variables are: (i) Employee cash or near cash income (PY010N); (ii) a variable computed as the sum of Old-age benefits (PY100N), Survival benefits (PY110N) and Disability benefits (PY130N). No appreciable differences are found.

### 3.3 Data adjustment

Adjustments to variables are kept to a minimum. There is some minor data cleaning that is done to make sure that the relationships of individuals within households, are coherent (for example, that both partners identify each other correctly, to rule out inconsistencies in family structure).

### 3.4 Imputations and assumptions

#### 3.4.1 Time period

All income information in EU-SILC 2006 (as well as in IT-SILC) refers to the fiscal year 2005 (January – December). Monetary amounts in the original variables are normally expressed in yearly totals, unless otherwise is indicated. For most income variables, information is included on how many months a certain income or benefit was received.

For the construction of the EUROMOD database from the Italian SILC, all monetary amounts are re-scaled to “an average month”, dividing yearly amount by 12.

In the EUROMOD database, the information refers as much as possible to the income reference period (i.e. 2005). Different sources of information available in EU-SILC are combined in order to ensure a consistent picture with regard to income sources and non-monetary information such as labour market and socio-economic characteristics. In order of preference:



- Direct information from EU-SILC referring to the income reference period (e.g. monthly labour market information) is being used where possible.
- In addition, information on the income reference period is derived from the current reference period (e.g. education activity, labour market activities).
- If no alternative is available, the current value is taken as the best proxy for the value during the income reference period (e.g. hours usually worked per week)

In this way, we approximate best the general consistency of the personal and household characteristics with the incomes that are reported.

Moreover, all children born after 31 December 2005 are dropped from the dataset.

### 3.4.2 Gross incomes

Original data provide only net incomes. We reconstruct gross incomes, according to the tax rules in place in 2005, via a microsimulation procedure built upon an existing tax benefit model, TABELITA which was originally programmed on data collected in 2004 by the Bank of Italy and published in the Survey of Household Income and Wealth (SHIW). TABELITA belongs to a family of microsimulation models developed and maintained at Econpubblica (D'Amuri and Fiorio, 2006, Cavalli and Fiorio 2006, Fiorio, 2009).

Because tax evasion is prevalent in particular among self-employed, self-employment income recorded in the survey has been split in two components, assuming that only part of the total income has been declared to the tax authority and then grossed up. A calibration factor has been applied in order to obtain an aggregate amount of the gross self-employment income corresponding to that reported in fiscal data. The user can decide whether running EUROMOD considering such a correction for tax evasion or not (sheet *ConstDef\_it*).

### 3.4.3 Other imputed variables

Due to lack of information in the IT-SILC 2006 data, the variable *aobiv* (cadastral value of secondary residences) has been imputed by applying a calibration coefficient to the variable *amriv* (cadastral value of main residence) derived using information on imputed rent for owners.

## 3.5 Updating

The factors that are used to update monetary variables from the mid-point of the data year to mid-point of simulation years until 2008 are shown in the following table.

No other updating adjustments are employed. Thus the distribution of characteristics (such as employment status and demographic variables) as well as the distribution of each non simulated income source remain as they were in 2005.



Table 41. Updating factors

<b>Income Source</b>	<b>2005 -2006</b>	<b>2005 -2007</b>	<b>2005 -2008</b>	<b>Source / comments</b>
Default	1.022	1.042	1.079	EUROSTAT HICPs
Employment income (yem)	1.027	1.050	1.083	Bank of Italy 2008
Arrears (yempv)	1.027	1.050	1.083	Bank of Italy 2008
Fringe benefit (kfb)	1.027	1.050	1.083	Bank of Italy 2008
Investment income				
- Dividend (yiydv)	1.138	1.261	1.315	Bank of Italy 2008
- Bank and Postal Accounts (yiyitdp)	1.138	1.261	1.315	Bank of Italy 2008
- Long-term bonds (yiyitob)	1.138	1.261	1.315	Bank of Italy 2008
- State bonds (yiyitsb)	1.344	1.676	1.656	Treasure Department
Property income (ypr)	1.048	1.112	1.146	Bank of Italy 2008
- Rent (yprrt)	1.048	1.112	1.146	Bank of Italy 2008
- Rent main residence (yprmr)	1.048	1.112	1.146	Bank of Italy 2008
Self employment (yse)	1.169	1.219	1.262	Department of Finances
- Declared to tax authority (yseev)	1.169	1.219	1.262	Department of Finances
- Non declared (yсенr)	1.169	1.219	1.262	Department of Finances
Maternity benefit Self Emp (bmase)	1.169	1.219	1.262	Department of Finances
Maternity benefit Lump sum (bmals)	1.022	1.037	1.068	Istat, FOI
Social assistance (bsa)	1.031	1.062	1.095	MEF 2009
Unemployment benefit CIG (bunct01)	1.027	1.050	1.083	Bank of Italy 2008
Unemployment benefit mobility (bunct02)	1.027	1.050	1.083	Bank of Italy 2008
Unemployment benefit training (bunst)	1.027	1.050	1.083	Bank of Italy 2008
Disability pension (pdi)	1.031	1.061	1.091	MEF 2009
Disability pension – contributory (phl)	1.031	1.061	1.091	MEF 2009
Old Age pension (poa)	1.031	1.065	1.096	MEF 2009
Survivor pension (psu)	1.032	1.066	1.098	MEF 2009



## 4. VALIDATION

### 4.1 Aggregate Validation

In this section we present the validation results from our model. First we compare how well the survey represents aggregate data for the main income sources included in the model and not simulated. This is followed by the tables which show how 2005 income data are updated to match 2006-2008 actual data. After that we present the validation of the simulated instruments: income taxes (and its components), social insurance contributions, benefits (Family Allowance is the only benefit simulated). We present figures related to both income aggregates and the numbers of receivers or payers (where available). All the results are obtained correcting the self-employment income for tax evasion (see above). Section 4.2 includes distributional statistics, such as income deciles, inequality indices and poverty measures within socio-economic groups.

#### 4.1.1 Non simulated incomes

To check how well the Italian SILC, which is the basis also for EU-SILC, represents actual aggregate data, we compare income components (wages and various benefits) between the survey and administrative source (Agenzia delle Entrate, various years). Aggregate amounts from EUROMOD are obtained using the gross incomes reconstructed by the net-to-gross procedure explained above, because original data provide only net incomes.

Overall the survey matches quite well the administrative sources. The comparison of the number of recipients needs to be done with caution because the unit of analysis in the survey and in the administrative statistics are not always strictly comparable. This is the case of property income but also self-employment income because the same individual can have more than one source of self-employment income. On the one hand, we would expect aggregate number of recipients of self-employed income from EUROMOD being smaller than in the administrative source, while we get the opposite. On the other hand, the number of individuals with self-employment income from EUROMOD includes also potential tax evaders who do not declare their income to the tax authority at all. This effect seems to prevail.

The aggregate numbers of recipients of unemployment benefits are underestimated in the survey while the aggregate amount matches well the external figures.





Table 42. EUROMOD validation: income sources included and not simulated, 2005

	Recipients (individuals)			Expenditure/Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employment income	19,542,427	20,128,274	0.97	382,288,914,825	367,361,277,000	1.04
Self-employment income	8,140,698	7,644,486	1.06	106,106,294,992	102,727,575,000	1.03
Property income	22,613,109	18,707,767	1.21	31,310,300,278	31,023,197,000	1.01
Pensions	15,116,617	15,388,125	0.98	199,656,715,808	192,568,001,000	1.04
Unemployment benefits	1,017,067	1,692,117	0.60	4,140,543,277	4,122,640,000	1.00

Notes: Property income in EUROMOD is obtained by the sum of rent and cadastral income on main residence and other buildings (imputed due to the lack of info in the original data). Self-employment income corrected for tax evasion. Expenditure/revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.

Next we evaluate how well the 2005 income data re updated to match 2006-2007 actual data. Using the uprating factors of monetary values included in the model, we are able to capture quite well the aggregate amounts. The unchanged socio-economic structure of the data (i.e. we do not apply any re-weighting of the data) does not seem to create a problem in the representation of the aggregate numbers of recipients.

Table 43. EUROMOD validation: income sources included and not simulated, 2006

	Recipients (individuals)			Expenditure/Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employment income	19,542,427	20,362,036	0.96	392,641,133,203	383,828,100,000	1.02
Self-employment income	8,140,698	7,416,924	1.10	121,100,869,490	116,576,589,000	1.04
Property income	22,613,109	18,819,008	1.20	32,316,339,203	32,102,103,000	1.01
Pensions	15,116,617	15,329,420	0.99	205,771,729,188	199,990,856,000	1.03
Unemployment benefits	1,017,067	1,734,841	0.59	4,252,338,688	4,327,559,000	0.98

Notes: Property income in EUROMOD is obtained by the sum of rent and cadastral income on main residence and other buildings (imputed due to the lack of info in the original data). Self-employment income corrected for tax evasion. Expenditure/revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.



Table 44. EUROMOD validation: income sources included and not simulated, 2007

	Recipients (individuals)			Expenditure/Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employment income	19,542,427	21,144,563	0.92	399,973,821,094	401,872,780,000	1.00
Self-employment income	8,140,698	7,569,352	1.08	126,311,567,910	124,089,980,000	1.02
Property income	22,613,109	19,683,306	1.15	33,486,657,757	34,138,841,000	0.98
Pensions	15,116,617	15,333,698	0.99	212,602,222,635	206,024,343,000	1.03
Unemployment benefits	1,017,067	1,701,032	0.60	4,345,893,177	4,205,511,000	1.03

Notes: Property income in EUROMOD is obtained by the sum of rent and cadastral income on main residence and other buildings (imputed due to the lack of info in the original data). Self-employment income corrected for tax evasion. Expenditure/revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.

For 2008, there are no complete aggregate statistics available (at time of writing) and hence we present the aggregate figures from EUROMOD and the available external statistics.

Table 45. EUROMOD validation: income sources included and not simulated, 2008

	Recipients (individuals)			Expenditure/Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employment income	19,542,427	21,144,665	0.924224952	412,808,556,130	415,277,903,000	0.99
Self-employment income	8,140,698	---	---	129,952,330,346	---	---
Property income	22,613,109	19,835,447	1.140035261	34,604,441,733	35,152,019,000	0.98
Pensions	15,116,617	15,323,148	0.986521634	218,806,205,930	213,594,560,000	1.02
Unemployment benefits	1,017,067	---	---	4,484,958,367	---	---

Notes: Property income in EUROMOD is obtained by the sum of rent and cadastral income on main residence and other buildings (imputed due to the lack of info in the original data). Self-employment income corrected for tax evasion. Expenditure/revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.

#### 4.1.2 Simulated income tax

Income tax revenue (IRPEF) is simulated at about 100-102% level over the different years. The number of tax payers is slightly larger than in administrative sources, but again the caveat about the comparison of these numbers related to taxpayers should be borne in mind.

The validation of each component of the income tax is presented in the tables below. Deductions and tax-credits which have been imputed (see above) from external data tend to match the aggregate amount by construction, while the number of individuals is greatly overestimated in EUROMOD because we assume that all tax payers benefit from these imputed deductions and tax credits.

The regional additional income tax is overestimated by 10%, probably due to the representation of the taxable income in the survey by regions. Tax on capital income is greatly underestimated and this reflect the well-known poor quality of surveys in capturing capital incomes.

Table 46. EUROMOD validation: income taxes, 2005

	Taxpayers (individuals)			Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Total taxable income	42,080,468	40,561,496	1.04	723,239,239,441	701,601,828,000	1.03
Deduction for main residence	21,988,085	15,629,188	1.41	7,348,219,997	7,348,182,000	1.00
Imputed deductions	42,049,214	1,669,190	25.19	770,657,014	763,945,000	1.01
Total deductions	42,079,254	11,716,084	3.59	10,715,119,149	17,150,360,000	0.62
Deduction for "no-tax area"	38,354,242	35,873,238	1.07	171,119,269,184	148,988,296,000	1.15
Family Deductions	10,854,463	12,071,998	0.90	45,197,501,549	42,688,415,000	1.06
Net taxable income	42,250,503	30,708,650	1.38	493,581,955,170	499,680,633,000	0.99
Gross tax (IRPEF)	31,995,506	30,234,014	1.06	134,537,040,853	132,070,789,000	1.02
Tax credits for mortgage interest (at 19%)	2,694,020	3,461,562	0.78	1,104,373,274	943,481,670	1.17
Imputed tax credits at 19%	42,049,214	16,723,725	2.51	4,026,007,830	3,722,900,330	1.08
Tax credits at 36%	2,397,570	3,577,540	0.67	1,506,686,575	1,506,460,000	1.00
Total tax credit	42,070,639	18,199,523	2.31	6,637,067,678	7,081,130,000	0.94
Net tax (IRPEF)	31,388,701	29,278,668	1.07	128,378,739,058	125,412,377,000	1.02
Regional additional income tax (IRPEF)	31,388,701	29,562,838	1.06	6,945,465,413	6,249,833,000	1.11
Tax on capital income	17,036,420	---	---	2,813,855,623	8,882,000,000	0.32

Notes: Revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.

Table 47. EUROMOD validation: income taxes, 2006

	Taxpayers (individuals)			Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Total taxable income	42,080,468	40,561,496	1.04	755,819,465,088	741,348,473,000	1.02
Deduction for main residence	21,988,085	15,629,188	1.41	7,509,865,367	7,440,739,000	1.01
Imputed deductions	42,049,214	1,669,190	25.19	864,403,248	858,356,000	1.01
Total deductions	42,079,254	11,716,084	3.59	11,079,007,898	18,522,142,000	0.60
Deduction for "no-tax area"	37,964,747	35,873,238	1.06	166,262,609,201	145,502,558,000	1.14
Family Deductions	10,793,172	12,071,998	0.89	44,327,950,189	41,570,185,000	1.07
Net taxable income	42,249,591	30,708,650	1.38	531,466,742,098	538,736,507,000	0.99
Gross tax (IRPEF)	32,568,355	30,234,014	1.08	144,951,133,617	143,504,509,000	1.01
Tax credits for mortgage interest (at 19%)	2,694,020	3,461,562	0.78	1,117,691,308	1,119,273,660	1.00
Imputed tax credits at 19%	42,049,214	16,723,725	2.51	4,057,219,588	3,769,700,340	1.08
Tax credits at 36%	2,397,570	3,577,540	0.67	1,361,760,523	1,361,892,000	1.00
Total tax credit	42,070,639	18,199,523	2.31	6,536,671,419	7,195,691,000	0.91
Net tax (IRPEF)	32,150,773	29,278,668	1.10	138,803,426,415	136,701,194,000	1.02
Regional additional income tax (IRPEF)	32,150,773	29,562,838	1.09	8,173,894,387	7,466,951,000	1.09
Tax on capital income	17,036,420	---	---	3,238,020,526	12,193,000,000	0.27

Notes: Revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.

Table 48. EUROMOD validation: income taxes, 2007

	Taxpayers (individuals)			Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Total taxable income	42,080,468	41,383,840	1.02	776,371,572,785	772,261,862,000	1.01
Deduction for main residence	21,988,085	16,479,278	1.33	7,660,040,756	7,834,705,000	0.98
Imputed deductions	42,048,518	2,050,400	20.51	900,964,859	988,906,000	0.91
Total deductions	42,193,699	12,712,734	3.32	12,286,889,818	21,271,734,000	0.58
Net taxable income	42,193,584	40,415,884	1.04	761,347,975,129	741,433,402,000	1.03
Gross tax (IRPEF)	41,942,162	37,527,589	1.12	201,509,569,887	196,368,819,000	1.03
Family tax credits	10,668,371	12,791,563	0.83	11,681,687,875	11,605,039,000	1.01
Tax credits for income sources	37,720,982	34,673,303	1.09	44,753,434,998	38,021,403,000	1.18
Tax credits for mortgage interest (at 19%)	2,694,020	3,875,213	0.70	1,129,778,814	1,336,893,390	0.85
Imputed tax credits at 19%	42,048,518	18,193,420	2.31	4,283,993,059	4,155,458,610	1.03
Tax credits at 36%	2,397,570	4,230,930	0.57	1,687,492,123	1,671,078,000	1.01
Total tax credit	42,083,352	37,327,500	1.13	63,536,386,870	57,422,475,000	1.11
Net tax (IRPEF)	33,944,544	30,503,420	1.11	142,692,151,738	142,450,080,000	1.00
Regional additional income tax (IRPEF)	33,944,544	30,360,870	1.12	9,203,391,838	8,386,517,000	1.10
Tax on capital income	17,036,420	---	---	3,622,947,836	---	---

Notes: Revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.



Table 49. EUROMOD validation: income taxes, 2008

	Taxpayers (individuals)			Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Total taxable income	42,080,468	41,802,902	1.01	800,302,794,740	782,593,451	1.02
Deduction for main residence	21,988,085	16,642,294	1.32	7,928,165,759	7,951,606	1.00
Imputed deductions	42,048,518	---	---	931,405,029	---	---
Total deductions	42,193,699	---	---	12,686,202,744	---	---
Net taxable income	42,193,584	40,249,514	1.05	784,784,141,590	753,556,569	1.04
Gross tax (IRPEF)	41,942,162	39,308,786	1.07	208,853,574,443	202,516,531	1.03
Family tax credits	10,638,482	12,820,037	0.83	11,560,384,761	11,641,919	0.99
Tax credits for income sources	37,615,394	36,826,630	1.02	44,118,658,636	42,878,365	1.03
Tax credits for mortgage interest (at 19%)	2,694,020	---	---	1,204,857,864	---	---
Imputed tax credits at 19%	42,048,518	---	---	4,411,765,679	---	---
Tax credits at 36%	2,397,570	---	---	1,603,346,076	---	---
Total tax credit	42,083,352	---	---	62,899,013,015	---	---
Net tax (IRPEF)	34,479,832	---	---	150,322,575,373	---	---
Regional additional income tax (IRPEF)	34,479,832	---	---	9,541,000,761	---	---
Tax on capital income	17,036,420	---	---	3,760,030,352	---	---

Notes: Revenue amounts are expressed in euro per year. Sources: Agenzia delle Entrate, Analysis of Tax Records.

### 4.1.3 Simulated social contributions

Due to lack of external data we are not able to validate the number of individuals paying social insurance contributions. In 2005 we simulate quite well employer SICs and self-employment SICs while we over-simulate the employee SICs. In 2006 the self-employment SICs are overestimated as well: in this year we simulate an increase in the contribution rate of around 2 percentage points which however do not explain the aggregate amount.

Table 50. EUROMOD validation: social contributions, 2005

	Contributors (individuals)			Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employer SICs	19,542,427	---	---	150,575,927,474	156,189,000,000	0.96
Employee SICs	19,542,427	---	---	38,349,373,462	34,725,000,000	1.10
Self employment SICs	8,093,656	---	---	22,857,253,051	23,119,000,000	0.99

Notes: Revenue amounts are expressed in euro per year. Sources: Ministero dell'Economia e delle Finanze.

Table 51. EUROMOD validation: social contributions, 2006

	Contributors (individuals)			Revenue		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employer SICs	19,542,427	---	---	150,251,739,556	162,157,000,000	0.93
Employee SICs	19,542,427	---	---	39,361,540,565	36,091,000,000	1.09
Self employment SICs	8,093,656	---	---	29,734,894,625	25,204,000,000	1.18

Notes: Revenue amounts are expressed in euro per year. Sources: Ministero dell'Economia e delle Finanze.

Table 52. EUROMOD validation: social contributions, 2007

	Contributors (individuals)			Revenue (unit)		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employer SICs	19,542,427	---	---	153,538,674,576	---	---
Employee SICs	19,542,427	---	---	43,032,848,583	---	---
Self employment SICs	8,093,656	---	---	31,011,066,489	---	---

Notes: Revenue amounts are expressed in euro per year. Sources: Ministero dell'Economia e delle Finanze.



Table 53. EUROMOD validation: social contributions, 2008

	Contributors (individuals)			Revenue (unit)		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Employer SICs	19,542,427	---	---	158,305,885,325	---	---
Employee SICs	19,542,427	---	---	44,374,326,960	---	---
Self employment SICs	8,093,656	---	---	32,877,048,210	---	---

Notes: Revenue amounts are expressed in euro per year. Sources: Ministero dell'Economia e delle Finanze.

#### 4.1.4 Simulated social benefits

The Family Allowances are the only benefits simulated in EUROMOD version F3.0 and the simulated aggregate amount matches perfectly the external statistics from ISTAT. However, the caveat mentioned above about the simulation of the Family Allowances need to be borne in mind. In particular, comparing the simulated amount with the one recorded in the survey, it emerges a mismatch of families receiving the benefits of around 40% of beneficiaries. Moreover, the simulated Family Allowances have a greater impact on poverty reduction than the recorded ones (basically, explaining the differences in poverty rates between EUROMOD and SILC, see below).

Social pension is underestimated by around 15% while the figures on invalidity pension (showing a huge underestimation) are not strictly comparable.

Table 54. EUROMOD validation: benefits, 2005

	Recipients (individuals)			Expenditure		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Family allowances (simulated)	6,549,189	---	---	5,486,852,709	5,477,000,000	1.00
Social pension (included)	679,875	---	---	2,907,074,754	3,468,000,000	0.84
Invalidity pension (included)	1,145,109	---	---	5,933,064,566	15,053,000,000	0.39

Notes: Expenditure amounts are expressed in euro per year. Sources: ISTAT - Conti della protezione sociale - Tavola 18.

Table 55. EUROMOD validation: benefits, 2006

	Recipients (individuals)			Expenditure		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Family allowances (simulated)	6,549,189	---	---	5,607,535,869	5,412,000,000	1.04
Social pension (included)	679,875	---	---	2,971,030,082	3,576,000,000	0.83
Invalidity pension (included)	1,145,109	---	---	6,112,000,861	16,471,000,000	0.37

Notes: Expenditure amounts are expressed in euro per year. Sources: ISTAT - Conti della protezione sociale - Tavola 18.





Table 56. EUROMOD validation: benefits, 2007

	Recipients (unit)			Expenditure (unit)		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Family allowances (simulated)	6,549,189	---	---	5,719,668,875	---	---
Social pension (included)	679,875	---	---	3,030,448,556	---	---
Invalidity pension (included)	1,145,109	---	---	6,290,382,901	---	---

Notes: Expenditure amounts are expressed in euro per year. Sources: ISTAT - Conti della protezione sociale - Tavola 18

Table 57. EUROMOD validation: benefits, 2008

	Recipients (individuals)			Expenditure		
	EUROMOD	External source	Ratio	EUROMOD	External source	Ratio
Family allowances (simulated)	6,549,189	---	---	5,919,880,167	---	---
Social pension (included)	679,875	---	---	3,136,514,409	---	---
Invalidity pension (included)	1,145,109	---	---	6,473,865,704	---	---

Notes: Expenditure amounts are expressed in euro per year. Sources: ISTAT - Conti della protezione sociale - Tavola 18

## 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.

From 2005, we compare our results with statistics based on the Italian version of SILC data (same sample of EUROMOD data).

### 4.2.1 Poverty

The overall relative poverty rate is slightly underestimated in EUROMOD versus SILC. The differences are larger with lower poverty lines. As mentioned above, most of the differences are explained by the simulated Family Allowances which have a greater impact on poverty reduction than the recorded ones. Without considering any change in the structure of the population, there are no substantial differences over the four years considered.



Table 58. EUROMOD validation: poverty rates at different poverty lines, 2005

Percentage of individuals below:	EUROMOD	SILC	Ratio
All			
40%	0.0617	0.0745	0.83
50%	0.1129	0.1252	0.90
60%	0.1839	0.1946	0.95
70%	0.2649	0.2705	0.98
Children (<= 18)			
40%	0.0825	0.1085	0.76
50%	0.1427	0.1652	0.86
60%	0.2277	0.2462	0.92
70%	0.335	0.3411	0.98
Elderly (>=65)			
40%	0.0412	0.0458	0.90
50%	0.0986	0.1154	0.85
60%	0.2038	0.2172	0.94
70%	0.2973	0.3061	0.97
Females			
40%	0.0665	0.0795	0.84
50%	0.1217	0.136	0.89
60%	0.1998	0.2101	0.95
70%	0.2829	0.2894	0.98
Males			
40%	0.0567	0.0692	0.82
50%	0.1036	0.1137	0.91
60%	0.167	0.1782	0.94
70%	0.2458	0.2506	0.98

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



Table 59. EUROMOD validation: poverty rates at different poverty lines, 2005 – 2008

Percentage of individuals below:	EUROMOD			
	2005	2006	2007	2008
All				
40%	0.0617	0.0604	0.0606	0.0607
50%	0.1129	0.1133	0.1114	0.1119
60%	0.1839	0.1871	0.1855	0.1865
70%	0.2649	0.2671	0.2653	0.2657
Children (<= 18)				
40%	0.0825	0.0785	0.0799	0.0792
50%	0.1427	0.1412	0.1407	0.1415
60%	0.2277	0.2322	0.2337	0.2359
70%	0.335	0.3358	0.3342	0.3348
Elderly (>=65)				
40%	0.0412	0.0423	0.0415	0.0415
50%	0.0986	0.1087	0.1011	0.1015
60%	0.2038	0.2096	0.2039	0.2043
70%	0.2973	0.3058	0.299	0.2997
Females				
40%	0.0665	0.0654	0.0655	0.0657
50%	0.1217	0.1236	0.1208	0.1212
60%	0.1998	0.2036	0.2014	0.2023
70%	0.2829	0.2863	0.2839	0.2843
Males				
40%	0.0567	0.055	0.0554	0.0554
50%	0.1036	0.1025	0.1015	0.1021
60%	0.167	0.1696	0.1687	0.1697
70%	0.2458	0.2468	0.2457	0.2459

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.

#### 4.2.2 Income inequality

Tables 60 and 61 show the main inequality indices from EUROMOD and SILC. First of all, the Gini index from Original Income is reported from EUROMOD: it ranges from 0.502 in 2005 to 0.506 in 2006-2008. We do not have the corresponding figure from SILC because gross incomes are not included in the survey. Gini coefficient and income quintile ratio are slightly underestimated in EUROMOD, in line with the results about poverty rates. Comparison of disposable equivalised income (median) at different income deciles shows that we oversimulate the median equivalised income in the first decile by 5%, while we slightly undersimulate income from the third decile on. As a consequence, mean and median income are slightly undersimulated in EUROMOD.



Table 60. EUROMOD validation: income inequality, 2005

	EUROMOD	SILC	Ratio
Gini Coefficient Original Income	0.502	---	---
Gini Coefficient Disposable Income	0.317	0.321	0.987
Income quintile ratio (S80/S20)	5.232	5.478	0.955
Median income per decile			
1	422.94	404.29	1.05
2	657.64	657.59	1.00
3	802.05	818.09	0.98
4	954.02	982.67	0.97
5	1104.13	1138.71	0.97
6	1259.86	1300.67	0.97
7	1443.00	1487.70	0.97
8	1677.53	1732.46	0.97
9	2025.94	2072.68	0.98
10	2833.11	2912.42	0.97
Mean income (unequalised)	926.40	945.75	0.98
Mean income (equalised)	1362.53	1391.51	0.98
Median income (equalised)	1179.66	1211.56	0.97

Notes: Computed for individuals according to their household disposable income (HDI) equalised by the “modified OECD” equivalence scale. With the exception of the first line, all figures refer to disposable income.

Table 61. EUROMOD validation: income inequality, 2005-2008

	EUROMOD			
	2005	2006	2007	2008
Gini Coefficient Original Income	0.502	0.506	0.506	0.506
Gini Coefficient Disposable Income	0.317	0.321	0.320	0.321
Income quintile ratio (S80/S20)	5.232	5.315	5.292	5.294
Median income per decile				
1	422.94	448.47	460.50	474.20
2	657.64	681.79	704.64	721.08
3	802.05	832.85	859.48	880.93
4	954.02	988.69	1021.50	1046.71
5	1104.13	1147.22	1183.45	1213.34
6	1259.86	1306.12	1346.18	1380.67
7	1443.00	1499.99	1539.77	1580.23
8	1677.53	1745.39	1792.22	1838.71
9	2025.94	2115.13	2174.24	2230.62
10	2833.11	3009.57	3074.93	3158.85
Mean income (unequalised)	926.40	968.51	996.29	1022.44
Mean income (equalised)	1362.53	1425.20	1465.54	1503.99
Median income (equalised)	1179.66	1225.21	1261.80	1293.61

Notes: Computed for individuals according to their household disposable income (HDI) equalised by the “modified OECD” equivalence scale. With the exception of the first line, all figures refer to disposable income.



### 4.3 Summary of “health warnings”

This final section summarises the main findings in terms of particular aspects of the Italian part of EUROMOD that should be borne in mind when planning appropriate uses of the model and in interpreting the results. In particular:

- The correction of self-employment income for tax evasion is made by a coefficient proportional to the net self-employment income declared in the data. The user can decide to switch off such a correction in the ConstDef\_it policy sheet.
- Starting from 2008 the local property tax (*ICI*) is no more due for the main residence, with the exception of luxury flats, villas, castles and palaces of historic or artistic importance. Due to lack of details in the data, we cannot distinguish between the property tax paid on main residence and other residences, and we subtract the whole amount of property tax recorded in the data from disposable income.
- The simulation of Family Allowances is subject to limitations related to the lack of information on disability status, income and family composition in the income reference period (which is the solar year before the 1<sup>st</sup> of July of each year, and it remains valid until the 30<sup>th</sup> of June of the following year). Therefore, for example, for the period between the 1<sup>st</sup> of July 2008 and the 30<sup>th</sup> of June 2009, income produced in 2007 is taken into account. For the simulation of the benefit, we assume the family income to stay constant in two consecutive years and we use the income thresholds as of 1<sup>st</sup> July (instead of 30<sup>th</sup> June).
- The macrovalidation section included in this Country Report is based on EUROMOD version F3.0 with the following changes (merged to EUROMOD version F4.2):
  - Separate taxation of arrears and severance pay switched on in the policy sheet tinkt\_it and variable tinsv\_s included in the incomelist ils\_taxsim
  - Updating factors as in Table 41 of this Country Report
  - Tax credit for pensioners aged 75 and above (policy sheet: tintc\_it): first income limit is equal to 7,750 (rather than 7,500)
  - From 2007, private pension contributions are deductible without the limit of 12% of taxable income (policy sheet: tintsna\_it)
  - Maximum annual amount of interests paid on mortgage loans (*xhcmomi*) is 4,000 euro from 2008 (rather than 3615.2)
  - Coefficients used to calculate the imputed deductions in 2007 and 2008 are equal to those related to 2006



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