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Intragenerational Distribution Across Families: What Do Generational Accounts Tell Us?

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In recent years, the Italian debate on fiscal and social policies toward families has focussed on the issue of dependants for two important reasons. The first one is related to the sharp and persistent decline of the fertility rate. Fertility decline, in turn, raises the highly questionable issue about the desirability and effectiveness of demographic policies.

The second reason is related to poverty, as the likelihood of belonging to a poor family significantly increases with the number of dependants. According to recent estimates by an ad-hoc Commission², in year 2000 the relative poverty rate amounts to 12.3 per cent among all Italian families. The ratio increases to 15.1 per cent if there is at least one dependant aged less than 18 and further to 25.8 if the family with young dependants lives in the “Mezzogiorno”. The last two rates increase respectively to 25.5 (nationwide) and 33.7 (Mezzogiorno) per cent for families with three or more children.

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² The Commission on social exclusion, appointed by the Minister of Labour. See Commissione d’indagine sull’esclusione sociale (2001, tab. II-1,2).

As for the demographic issue, Italy is experiencing one of the lowest fertility rates in the world. Total fertility is below replacement since the late seventies and has reached in 1995 its lowest value (1.18). Currently, Italy is second to Spain (1.22 and 1.15 respectively). Completed cohort fertility rates show a steady decline from 2.1 for women born in 1944 to 1.6 for the 1963 cohort. At the same time, life expectancy at birth has increased by 22 years over the last 60 years³. As one would expect, net migration flows have reversed their direction since the early Seventies, from net emigration to net immigration⁴.

The dreary demographic scenario, summarised by steady population decline and old-age dependency ratio increase⁵, and the persistence of poverty among families with dependants has stimulated a policy debate on the desirability of an increase of social protection.

The Italian welfare system is a mixture of the most recent approach based on universal programs and the legacy of some of the old categorical schemes based on profession. As for families with dependants, the current system is mainly based on the public provision of health care and education, the role of cash transfers and tax allowance being minor. Public transfers are supported by a rather generous regulation in favour of employed mothers. In the most recent years, the benefits have been gradually extended to fathers. A different approach is sometimes advocated, proposing the full income tax deductibility of the expenses incurred by families in raising children. The debate reflects the apparently never-ending struggle between selectivity versus universality, on one hand, and between cash transfers versus merit goods on the other.

The following work is part of a larger research project aimed at evaluating the financial effects on family incomes of the current set of public tax and transfer programs. By estimating the net taxes paid/received by different families, the research aims at contributing to the analysis of any possible loophole in the social security net.

In order to derive a concise measure of the financial effect of the various public programs, the conventional generational accounting methodology (henceforth GA) will be applied to Italian families. The objective is to evaluate how public finances redistribute resources within generations when families are taken as the tax units. As a

³ From 54 in 1930 to 74 in 1993 for men, and from 56 to 81 for women.

⁴ Currently, the net immigration flow is estimated at 50,000 individuals per year.

⁵ On the basis of the latest official demographic projections (see ISTAT 1997), total population begins a slow but steady decline from current 57 millions to 24 millions in 2115. The old-age dependency ratio increases from the current 26.9 per cent to 38.2 per cent in 2020, and reaches 60 per cent in 2045 before settling at around 55 per cent thereafter.

first approximation, only income effects will be estimated, as the model does not allow for any feedback effect (or substitution effect) from the existing policy instruments to individual behaviour. It will be discussed whether adding this intra-generational dimension modifies the results of traditional GA and its implications for the welfare systems

1. Conventional Generational accounting

Generational accounting assesses the impact of public finances and welfare systems on current and future generations. As it is well known⁶, GA allows one to jointly consider: *i*) currently legislated entitlements to tax and transfers; *ii*) demographic changes and *iii*) the intertemporal constraints that ensure long-term public debt sustainability.

For each representative member of the living cohorts, GA allows to estimate the net present value of transfers paid and/or received from the state during its remaining lifetime, in accordance with sex and age. A generational account is obtained by summing up the discounted value of the various public programs the cohort will receive/pay. For each individual member of a cohort, characterised by a certain age and sex, the value of the various public programs is estimated on the basis of sample surveys, legal arrangements and entitlement rules. The estimate is such that, for each program, the sum of values times the number of individuals alive in a certain year adds to the total outlays reported in the general government appropriations account for each of the tax and spending programs.

A set of GA is the present value of net tax/transfers the representative member of all living cohorts expect to receive/pay in the rest of his/her life.

For a given base year, GA allow to assess the long-term debt sustainability as well as the degree of intergenerational equity, under the assumption of unchanged fiscal policies. The public budget is projected into the future on the basis of a demographic forecast and of the estimate of the per-capita tax and transfers. As for debt sustainability, the evolution of the primary balance (e.g. net of interest payments) into the future is compared to the intertemporal budget constraint. As it is well known, the latter requires that the present value of future primary surpluses equals the level of the outstanding

⁶ Generational accounting has been developed by Auerbach, Gokhale and Kotlikoff (1991). Recent applications to the Italian case can be found in Sartor (1999, 2001), Cardarelli and Sartor

public debt in the base year. If the stance of the current fiscal policy is not sustainable in the long-run, the required change in the net per capita transfers is conventionally imputed to the unborn. The comparison between the net taxes paid by the newborn (in the base year) and the unborn allows to derive a measure of the degree of intergenerational equity⁷.

Table 1 reports the set of GA for the representative members of Italian cohorts alive in 1999. It can be noted that the accounts remarkably differ according to gender. While a male born in 1999 expects to pay net taxes during the entire lifetime equal to 48 thousands euro⁸, a female belonging to the same cohorts will receive a net transfer equal to 74 thousands euro. The reason for such a large difference entirely depends on the lower labour participation to the labour market for women. A lower rate implies low labour income taxes and social security contributions; at the same time, non-active women are entitled to many public programmes, such as health care and survivors' pensions.

Table 2 reports the long term sustainability, as well as a measure of intergenerational equity, based on the hypothesis that future fiscal policy will be the same as in 1999. Because of the unfavourable demographic scenario, the Italian fiscal policy still needs some tightening, as the intertemporal disequilibrium (a measure of public debt unsustainability⁹) equals 31 per cent of the outstanding public debt. At the same time, fiscal policy still appears to be generationally unbalanced, as, under unchanged entitlement policies for the current generations, future generations would be required to pay 27 thousand euros more than 1999 newborns. Alternatively, intergenerational equity could be restored by a 2.5 per cent tax increase or a 2.7 per cent expenditure cut for all generations (living as well as unborn).

2. Generational accounting for families

So far, GA has focused on individuals as tax units, thereby avoiding any analysis of the intragenerational redistribution of taxes and transfers across families of

(2000), Franco and Sartor (1999) and ISAE (1999). For an international comparison see Auerbach, Kotlikoff and Leibfritz (1999) and European Commission (1999).

⁷ However, see Cardarelli and Sartor (2000) for a concise survey of alternative indicators of sustainability and intergenerational equity.

⁸ Under the standard hypothesis of a 5 per cent discount rate and a 1.5 per cent rate of per-capita productivity growth.

⁹ See Cardarelli and Sartor (2000) for a discussion on the measurement of debt sustainability within the GA framework.

different kind and size. The paper reports the methodological aspects and the first batch of empirical results of a new approach which has been developed to derive the Family GA. As a first step, the research has followed a static approach, according to which a certain number of different types of families has been identified. Each of the individuals living in a certain year belongs to one family type, and will belong to the same type for the entire lifetime¹⁰.

The first problems to be dealt with are the choice of the unit (family or household) and the identification of the time horizon. Traditional GA deals with individuals, whose life is precisely identified by a date of birth and a date of death. In the case of families and households there is no unique way to define a start and an end. According to infinite time-horizon models and dynastic models, a family can be seen as a never ending social institution. For the purpose of the present research, the analysis has been focussed on families¹¹. While it is acknowledged that households are better suited to deal with some economic and financial relationships¹², the analysis of families allows to better determine the birth and the dissolution of this institution.

The research has borrowed the notion of the “minimal household unit (MHU)” proposed by Ermisch and Overton (1985). According to Ermisch (1988, p. 24), “Analysis is easier if the units are such that demographic influences on household formation and composition can be separated from economic influences. In particular, it would be helpful to separate instances of *family* formation and dissolution from *household* formation and dissolution. [...] A minimal household unit is the smallest group of persons within a household that can be considered to constitute a *demographically* definable entity. It is definable in purely demographic terms in the sense that an individual, over his lifetime, moves from one type of MHU to another by means of a simple demographic transition or event”¹³.

¹⁰ The next step will bring some dynamics into the model, in order to allow individuals to switch from one family type to another (for example, from “married with children” to “single with children”), on the basis of a transition matrix.

¹¹ By “family” it is meant a group of individuals linked by marriage (or any equivalent social arrangement) or parenthood. Thus a family is represented by parents and children. A “household” is a family line or a dynasty; it is used to indicate a group of individuals sharing the same house. Therefore a household is made up by two or more families. In the current paper, different families may well share the same house (we ignore this piece of information), therefore belonging to the same household.

¹² For example, households share some fixed costs, such as housing expenses.

¹³ The four basic MHU types identified by Ermisch and Overton (1985) are:

1. childless, non-married adults;
2. lone parents with their dependent children;
3. childless married couples;
4. married couples with dependent children.

Similarly, a “minimal family unit (MFU)” has been defined as a single or a couple of adults who are financially independent of their parents, regardless whether they still live in their parents’ house. During their life span, the couple/single may decide to have children, which will be part of the family as long as they are financially dependent from them. The family ceases to exist when all the adults have passed away¹⁴.

As for couple formation, the model considers the age at which one of the adults joins the other (conventionally, the male) and the average age difference of the couple, conditional upon the age at which the couple starts its life.

The characteristics which have been taken into account in order to define the different types of families are:

1. the number of children (0, 1, 2, 3+¹⁵);
2. the level of education of each adult (with or without university degree);
3. the occupation of each adult (dependent worker, self-employed, not employed).

As for the family formation process, the frequency distribution of the probability of the following states, conditional upon the age, have been estimated:

4. being financially independent of their parents;
5. being married;
6. (for women) delivering a child of n-th order, conditional upon having a certain level of education.

As for the structure of the Italian families and the states 5 and 6, the probabilities are based on the sub-sample of cohorts aged 36-55¹⁶. The probabilities have been applied to the entire population, therefore assuming that social lifestyles and the structure of the labour market are cohorts-independent¹⁷. Combining all the different characteristics, 174 different kind of MFUs have been identified: 144 couples, 24 single

¹⁴ Therefore, a widow as such is not considered as a “single”, but a member of a “married couple”, being the last survivor of that particular type of family.

¹⁵ For the Italian case, the average number of children for families with more than 2 dependants is 3.1.

¹⁶ The reason for choosing this age interval is twofold. On one hand, empirical investigation based on the sample survey shows that at the age of 36 all individuals are financially independent. On the other, at the age of 55 all women have delivered their children and most adults are still working (only a small fraction of public employees enjoyed, before 1993, the possibility of an early retirement scheme based on seniority – See Sartor, 2001 on this point).

¹⁷ A more realistic approach would require to estimate the probabilities separately for each of the living cohorts. This, in turn, would require the availability of longitudinal data.

women and 6 single men¹⁸. A detailed account of the analytical framework used to generate family data can be found in Appendix I.

3. The structure of Italian families

The structure of Italian MFUs has been derived from the 1997 survey on households' expenditures run by ISTAT (the National Institute for Statistics) which examines the expenditure structure, the level of income and the individual characteristics of 22,362 households sampled out of 21.5 million. More than one MFU may be derived from one household, as the expenditure survey interviews all individuals sharing the same house.

The structure of MFUs and the frequency distribution of the relevant events before mentioned are summarised in Tables 3a-b and 4 and Figures 1-3. According to the number of children, the modal type of MFU is represented by a couple with 2 dependants (Tab. 3a). When looking at each of the 174 different MFUs (Tab. 3b), the modal family appears to be made up by two undergraduate adults (a male dependent worker and a non-working female) with 2 children (14.7 per cent of all MFUs), followed by a similar family characterised by both adults being employees (9.0 per cent) and by a family similar to the modal type, but with one child only (6.8 per cent). In general, sample data confirm the irrelevance of out-of-wedlock births and living arrangements different from marriage which emerges from previous demographic studies¹⁹.

As for family formation (Fig. 1), non zero frequencies are observed in the 15-35²⁰ range of age, 50 per cent of individuals becoming independent by the age of 24 and 75 per cent by the age of 28. Marriage occurs in the 20-43 range of age (Fig. 2): 50 per cent of married men get married by the age of 29, and 75 per cent by the age of 32. The average difference of age between men and women monotonically increases with the age of marriage from -2 to +4 years, being equal to +1 and +2 respectively at the age of 29 and 32.

Table 4 and Fig. 3a-f report the age at which females deliver their children, separate for graduate and non-graduate women. Overall, the average age ranges from 25

¹⁸ Only single men without children have been considered, as sample data shows that no single men appear to have dependent children at the third decimal level. Moreover, the scarcity of single men with children prevented to further disaggregate data among different family types.

¹⁹ See, for example, Palomba (1995).

²⁰ The relatively high age at which some Italians become financially independents is the counterpart of unemployment mostly affecting first-job seekers.

(relative to the first child for undergraduate women with two or three dependants) to 33 (the third child for graduate women). As one would expect, the age at which graduate women deliver their babies is higher than non-graduates, the difference ranging from a minimum of one year (the third child for women with three dependants) to a maximum of four years (the first child for women with two children). The higher volatility of frequency distributions for graduate women depends on the smaller size of the sub-sample, as 90 per cent of women do not hold a university degree^{21 22}.

4. Family GA: some results

For each of the 174 MFUs a generational account has been calculated by summing up the GA of each of its members. It is worth stressing that individual GAs relevant to MFUs substantially differ from traditional GAs. Both are calculated by summing up the net present value²³ of the different tax and spending programs, whose algebraic sum gives the net tax which is expected to be paid in the remaining lifetime. However, while traditional GAs consider the entire lifetime, each individual GA relevant for any MFU considers only the part of the life which is spent by the individual as member of a family of a certain type²⁴. Moreover, when summing up the individual GAs for families with children, tax and spending programs which refer to children are added to adults GA starting from the average age at which the woman has delivered the baby²⁵.

Appendix II reports the methodological aspects relative to the estimation of the age, gender, education and occupation profiles relative to each of the 84 different tax and spending programs into which the general government appropriation account has been divided²⁶.

²¹ The hypothesis that the two fertility sample distributions are generated by the same population distribution was tested. The null hypothesis was rejected at the 5 per cent confidence interval using a Chi-square test (see Hogg and Craig, 1989, pp. 274-5).

²² It is worth noting that the proportion of graduate men is lower than women.

²³ Unless otherwise stated, a 5 per cent discount rate has been used, as this value has been used as the baseline scenario in all GAs so far.

²⁴ For example, an individual spends the first 20 years as a member of a family made up by a couple and three children. From age 21 onwards, that individual may become a member of a childless couple.

²⁵ Therefore, the net tax paid /received by a one year old child is added to the mothers' net tax when her age is $i+1$, where i is the average age at which the baby is delivered.

²⁶ The level of disaggregation is the same as the one adopted for the traditional GA, summarised in Tables 1 and 2. See also ISAE (1999) and Cardarelli, Sartor (2000) on this point.

Along with the net tax paid, the value of the “marginal net subsidy” (henceforth MNS) has been calculated. The MNS represents the difference between the net taxes paid by a MFU of type j with n dependants (let’s define it $MNS_{j,n}$) and the net taxes paid by a MFU of the same type with one less dependant ($MNS_{j,n-1}$). From a financial point of view, an $MNS_{j,n}$ indicates the amount of money that should be transferred to a MFU of type j at the beginning of its life in order to compensate it against a hypothetical situation in which all tax and transfer programs related to the “marginal” dependant are abolished. Note that the value of the MNS reflects not only transfer programs, public services and tax allowances directly aimed at dependants, but also tax payments that indirectly relate to the existence of an extra dependant because of any change of adults’ earning and spending arrangements.

Figure 4 reports the value of the MNS for four different family-types: *i*) a family constituted by a employee male and a non working female (the so-called “modal family”); *ii*) a nucleus similar to *i*) but with a self-employed male; *iii*) a family with both adults being employees, and *iv*) a single undergraduate employee woman²⁷. In each case the amount of MNS is presented according to the number of children (from 0 to 3). For the single woman and the family with the self-employed male, the MNS decreases with the number of children, whereas for the types where there is at least one employee the reduction of MNS is only related to the transition from the second to the third child.

Tables 5a-d present the main components of net taxes and highlights their relative importance for each of the different family-types. In general, it is worth noting that the net tax decreases as the number of children raises. In case of three children, it becomes negative for the “modal family” and for the one with the self-employed male (the types sub *i*) and *ii*). Such nucleuses are expected to receive from the Government net transfers whose net present value respectively amounts to 2,5 and 17 thousands euros).

As for the MNS, it depends on: *i*) tax and spending programs directly aimed at dependants and *ii*) the before mentioned indirect effects caused by the change in family earning and spending patterns due to the presence of dependants. As for *i*), the direct programs represent the largest source of subsidy, their magnitude being largely independent of family types. A small difference exists - reflecting the categorical component of the Italian welfare system, as cash transfers (maternity and family

²⁷ These are the characteristics of the most frequent single woman.

allowances) are more generous when the share of wages and salaries into family income exceeds 70 per cent.

As for *ii*), the indirect effects on MNS (Tab. 6) are primarily caused by the changes in spending patterns and, to a lesser degree, by changes in earnings. The size of the changes are positively related to the level of education. When comparing the indirect taxes paid by a couple of graduate employees (family type FGEMMGEM – see the legend attached to Tables 5a-d) with a couple of undergraduates (FNGEMMNGEM) the increase related to the first child is smaller for graduates.

In most of the cases the amount of the indirect taxes paid reduces when the number of children exceeds one, reflecting the existence of economies of scale in spending. For example, during its entire lifetime the “modal” family with two children pays indirect taxes equal to about 5,7 thousands euros at present value more than one-child family, whereas the additional burden amounts to less than 3,6 thousands euros for the third son.

A difference in the levels of MNS can be observed with respect to the degree of education. The diversity reflects two effects. The first one, which is relevant to the direct component of MNSs, depends on discounting. As mentioned in the previous paragraph, the average age at which women deliver their children is higher for graduate women. This implies that families with graduate women will receive public benefits at a later stage of their life, therefore reducing the net present value of the transfers. The second effect refers to the indirect component of MNSs. It is caused by the differences in the absolute amount of both direct and indirect taxes, and is independent of discounting. Tax payments are larger for families with graduated adults, as their incomes are, on average, higher than the undergraduates. However, as graduates enter the labour market later than undergraduates, the difference is partly offset by discounting.

Finally, table 7 reports the annual value of public programs directly benefited by family with dependants. Both the annual values and the net present values show that the largest program is represented by education (59 per cent of the net present value, or 54 per cent of the undiscounted value of the MNS enjoyed by the “modal” family), followed by health care and by cash transfers - as far as family characterised by a large incidence of wages and salaries are concerned. Given the low likelihood to incur into health problems when young, the universal public health care system plays an insurance role rather than being a source of subsidy for the family with children, as it represents less than 11 per cent of the MNS for the “modal” family. As for money transfers, a one-

child family yearly receives direct cash benefits whose magnitudes declines with age, from about 7,5 thousands euros when the son is 10 years old to 2,2 when he is 25.

All in all, the Italian welfare system conveys the largest proportion of the subsidies aimed at children by the public provision of education. The role of monetary transfers is limited and are mainly granted according to a categorical scheme which favours dependent workers. A relevant source of variability of the MNSs across family types is represented by the indirect effects of tax changes caused by the different income and spending behaviours. The effects of different spending patterns dominate the difference in earning profiles. Overall, the indirect change in taxes paid by families with different reproductive patterns offsets direct cash transfers. The existence of such large effects suggest to further investigate the relationship between the structure of expenditures and the number of dependants.

APPENDIX I – The Analytical Framework of Family Generational Accounting

This Appendix illustrates the analytical computations needed to get the GAs for each family type.

Let P_{mi} and P_{fi} be respectively the male and the female population aged i years, i ranging from 0 to 101.

Let $\Pi_{m,i}$, $\Pi_{f,i}$ and $\bar{\Pi}_i$ be respectively male, female and mean surviving rates at age i .

Let $a_{1,G,i}$, $a_{1,NG,i}$ be fertility rates by age of respectively graduate and undergraduate women having only one child.

Let $a_{1,G,i}$, $a_{2,G,i}$, $a_{1,NG,i}$, $a_{2,NG,i}$ be fertility rates by age of respectively graduate and undergraduate women having two children.

Let $a_{1,G,i}$, $a_{2,G,i}$, $ag_{3,G,i}$, $ag_{1,NG,i}$, $a_{2,NG,i}$ e $a_{3,NG,i}$ be fertility rates by age of respectively graduate and undergraduate women having three or more children.

The general case is $a_{nc,sc,i}$.

Let $\Omega_{m,i}$, $\Omega_{f,i}$ be the cumulated frequencies by age of male and female financial independence.

Let $\Psi_{m,i}$, $\Psi_{f,i}$ be respectively the male and female marriage cumulated frequencies by age.

Let W_k be the weight of family k .

Let $M_{m,i,M}$ be the number of surviving married males aged i ; Let $M_{m,i,S}$ be the number of surviving single males aged i ; Let $F_{m,i,M}$ be the number of surviving married females aged i ; Let $F_{m,i,S}$ be the number of surviving single females aged i .
 $M_{m,i,M} = P_{m,i} * \Omega_{m,i} * \Psi_{m,i}$, where $M_{m,i,S}$ and $F_{m,i,S}$ denote the marital status.

Let $Pro_{j,k,m,i}$ be the j -th profile of a male belonging to the k -th family at the age i , $Pro_{j,k,f,i}$ be the j -th profile of a female belonging to the k -th family at the age i and $Ch_{j,k,i}$ be the j -th profile of a child belonging to the k -th family at the age i .

$Profile_{j,k}$, - the weighed j -th profile of the k -th family, is defined as follows:

$$Profile_{j,k} = \sum_{i=0}^{101} [Pro_{j,k,m,i} * M_{m,i,s} + Pro_{j,k,f,i} * (F_{m,i,s} + Ch_{j,k,i} * nCh)] * W_k$$

where nCh is the number of children in the family.

In order to ensure that the sum of all profiles across all living individuals equals the *Aggregate_Value* reported in the General Government Appropriation Account, the mean value of each profile j (MVP_j) is determined as follows:

$$MVP_j = \frac{Aggregate_Value}{\sum_{k=1}^{n.family} Profile_{j,k}}$$

For each family type (k) the profiles of every components are calculated as follows:

$$Man_{i,j} = \Pi_{m,i} * \Omega_{m,i} * Profile_{j,k,m,i} * MVP_j$$

$$Woman_{i,j} = \Pi_{f,i} * \Omega_{f,i} * Profile_{j,k,f,i} * MVP_j$$

$$Child_{nc,i,j} = \sum_{i=0}^{101} a_{nc,sc,i} * \bar{\Pi}_i * (1 - \Omega_{m,i}) * Profile_{j,k,f,i} * MVP_j$$

The average age at which each representative women with education ns delivers the first, second and third child can be easily obtained as

$$MAge = \sum_{i=0}^{101} i * a_{nc,ns,i}$$

For each of the 84 different tax and spending programs, the annual value paid/received by a family is calculated as the sum of individual values

$$FamGA_{i,j} = Man_{i,j} + Woman_{i,j} + Child_{nc,sc,i+MAge}$$

Finally, the family Generational Account is determined as the sum of the net present values of the programs for the entire lifetime:

$$\sum_{j=1}^{n,pro101} \sum_{i=0}^{101} FamGA_{i,j} * \left(\frac{1}{1+ts} \right)^i$$

where ts is discount factor.

APPENDIX II The Estimation of Individual Profiles

Individual profiles - that is, the average per-capita value of benefits received and taxes paid by each type of individual – are estimated according to the methodology outlined in this Appendix. The estimate is subject to the constraint that, for each of the 84 different tax and spending programs, the sum of profiles across the population equals the aggregate value reported in the general government appropriation account (see Appendix I and Tab. 8).

1. Individual profiles

Unlike the traditional approach, individual profiles are determined not only by sex and age, but also by the other individual characteristics which are assumed to be relevant to the analysis. Individuals are classified according to:

1. marital status: either single or married, the latter including divorced and unmarried couples;
2. education: graduate or undergraduate;
3. working status: worker or non-worker. In particular, a distinction is drawn between employed, unemployed, retirees with pensions from past working activity, on one hand, and retirees receiving “non-contributory” pensions, non-job-seekers (like housewives), and job-seekers or non-dependant students, on the other;
4. profession: employee or self-employed;
5. number of children: 0, 1, 2, 3+.

In many cases, the legal arrangement is such that transfers benefiting a specific family member (e.g. the spouse or the child) are paid to the head of household (or to a working family member). Similarly, taxes are originated (at least partially) by family members different from those who actually pay the tax due. As a general rule, taxes paid or benefits received have been imputed to the family components causing them, even if he/she differs from the payer/receiver.

Children's profiles have been associated to their mothers' attributes, the only exception being represented by the cases (such as family allowances) in which the fathers' characteristics may be relevant for the transfer/tax attribution to children.

In all cases where the many relevant characteristics cause a fragmentation of the reference population into very small sub-groups²⁸, due to the sample size, aggregations were made referring to the less relevant characteristics²⁹. In these cases a standard profile was applied to all sub-group members.

The following sections describe the methodology followed to estimate the most relevant profiles (in terms of overall financial effects on the public budget).

1.1 General Government revenue

Four different tax categories have been identified: direct taxes on labour, real capital (equities and real estates), taxes on financial capital and indirect taxes.

Direct taxes

The ISAE static micro-simulation model (Itaxmod) was used for the items concerning labour income taxation and real estate taxes. The model computes direct taxes and monetary benefits by applying current legal arrangements to the 1998 Bank of Italy Survey on Households' Income and Wealth. The survey covers 7,147 families for a total of 20,901 individuals and includes detailed information on the main demographic and professional characteristics of the individuals, as well as their incomes, savings and wealth.

As for the imputation criterion, the direct taxation burden is attributed to taxpayers, an exception being represented by taxes on residence home, which are split between parents and children.

Indirect taxes

Individual profiles have been derived from ISAE's 'Ivamod' simulation model, based on ISTAT (The Italian Institute for Statistics) Survey on Households' Consumption for the year 1997³⁰. The ISTAT sample surveys more than 22,000 families (about 64,000 individuals). The variables relevant for the analysis are approx. 500, 300 of which refer to expenditure items. This allows to take account of detailed information on households' consumption and their demographic and social-economic characteristics.

²⁸ By considering 2 modalities for gender, 2 for the civil status, 2 for education, 3 for the working and professional status and 4 for the number of children, 96 population sub-groups emerge.

²⁹ Interpolated values are computed for profiles presenting some age brackets gaps.

³⁰ 1997 survey data were updated to 1999 on the basis of the percentage change of National Accounts aggregate data between the two years.

In estimating indirect tax profiles, all family members of any age or working status have been assumed to give rise to some consumption of goods and are responsible for a share of the indirect taxes paid by the family. A set of the so-called "OECD modified equivalence scales" was used for the purpose. According to this approach, families of different sizes and compositions are transformed into "equivalent individuals". The scale-composing coefficients indicate the larger or smaller amount of expenditure (or income) which is necessary for two households of different size and/or social-economic status to have the same wellbeing, under the simplified hypothesis that disposable income and expenditures on consumption goods determine family welfare.

Letting s^i be the scale coefficient for the i^{th} family, C^i total consumption and CEQ^i the equivalent consumption,

$$[1] \quad CEQ^i = \frac{C^i}{s^i}.$$

The so-called "OECD modified scale" proves particularly suitable to the present purposes, as it attaches a different weight to individuals according to their age. In particular, it is expressed by

$$[2] \quad s^i = 1 + 0,5(NAD^i - 1) + 0,3NMIN^i,$$

where NAD and $NMIN$ denote respectively the number of adults and minors (up to 17 years of age) living in the i^{th} family.

According to the OECD approach, dependants are ascribed the larger consumption share for which they are responsible: their share on total consumption may be computed by comparing the total family expenditure with the expenditure the family should bear to maintain the same level of wellbeing, in the absence of dependants. The estimate is obtained by taking the ratio of the equivalence coefficients s^i .

Finally, to correctly compute the V.A.T. imputed to each member of the family, some expenditure items have been split into sub-groups, according to the different V.A.T. rates applied, using the official weighting coefficients relevant to the consumer price index.

1.2. General Government Expenditures

Four main categories are identified: pensions, social assistance, health care and education. Health care expenditure is further divided into expenditure for hospitals care, drugs and other health services, while education is split into expenditures relative to the schooling system and universities. Both are assumed to depend on age and gender as well as parents' working status and level of education.

Most expenditure profiles are computed on the basis of administrative data provided by ISTAT and INPS (the National Institute for Social Security).

Non-administrative data sources are used for family allowance profiles (computed through the Itaxmod model), and indemnity allowances covering professional risks (estimated on the basis of the Bank of Italy survey data). Old age and seniority pensions profiles are derived from an ad-hoc simulation model developed by Cardarelli and Sartor (2000) that allows to take into account the future effects of the pension reforms enacted in the nineties.

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Appendix

Table 1. **Generational Accounts for All Living Cohorts** (1999 euros ; $r = 5\%$, $g = 1.5\%$)

Age	Total	Taxes on labour	Taxes on capital	Taxes on real estate	Indirect taxes	Social contributions	Other revenues	Health	Education	Pensions	Labour market and family	Other social security	Assistance	Other expenditures
Males														
0	24,871	47,438	18,488	4,362	50,562	67,818	30,489	-20,716	-53,048	-29,823	-8,634	-1,368	-3,146	-77,553
10	91,366	65,929	25,687	6,061	65,384	92,083	30,358	-21,524	-40,400	-38,233	-12,000	-1,787	-3,941	-76,251
20	188,136	89,321	34,964	8,248	83,685	114,784	29,712	-24,821	-6,087	-45,615	-16,162	-2,254	-4,371	-73,269
30	200,004	100,239	44,953	10,018	93,165	108,330	27,818	-27,810	-114	-63,127	-18,909	-2,717	-4,350	-67,492
40	154,270	84,736	53,346	10,104	84,633	83,551	25,241	-32,272	0	-70,262	-16,119	-3,094	-4,356	-61,236
50	-5,327	48,700	48,653	8,240	64,664	46,678	21,444	-37,119	0	-134,266	-11,867	-3,397	-4,740	-52,317
60	-136,177	12,477	34,820	4,762	41,354	3,387	16,824	-39,588	0	-154,844	-6,021	-3,044	-5,785	-40,517
70	-138,077	1,045	16,339	1,947	23,527	0	12,085	-35,676	0	-115,463	-5,141	-2,196	-6,027	-28,517
80	-97,276	138	3,406	752	12,049	0	7,621	-24,207	0	-70,080	-3,004	-1,335	-5,128	-17,489
90+	-56,822	33	174	30	6,375	0	4,638	-13,642	0	-38,476	-1,371	-732	-4,481	-9,369

Females														
0	-38,079	27,705	6,815	2,363	34,530	42,724	28,403	-18,781	-52,217	-25,713	-5,318	-1,065	-4,503	-73,023
10	2,790	38,612	9,493	3,292	43,503	58,437	28,228	-19,996	-40,035	-32,068	-7,412	-1,370	-5,929	-71,962
20	69,557	52,473	12,986	4,492	54,223	73,650	27,601	-24,108	-5,857	-37,404	-9,964	-1,693	-7,345	-69,497
30	61,728	52,226	16,657	5,468	57,426	69,069	26,087	-26,165	-70	-53,681	-9,513	-1,956	-8,791	-65,030
40	2,084	38,132	19,350	5,785	51,060	45,076	24,284	-28,372	0	-73,566	-6,356	-2,204	-10,841	-60,265
50	-82,829	15,851	21,847	5,076	41,260	16,618	21,694	-31,822	0	-100,769	-3,700	-2,409	-13,520	-52,955
60	-121,103	2,352	18,448	4,029	32,944	305	18,222	-33,385	0	-99,215	-2,536	-2,227	-16,782	-43,259
70	-100,534	531	14,209	2,518	23,112	0	13,610	-30,564	0	-72,675	-2,082	-1,650	-16,089	-31,454
80	-72,711	110	5,008	750	14,036	0	8,757	-22,682	0	-45,338	-1,270	-1,043	-11,722	-19,317
90+	-40,937	36	134	74	7,507	0	4,699	-12,509	0	-22,022	-689	-514	-8,255	-9,396

Table 2. **Conventional Generational Accounts - 1999**

Indicators of disequilibrium	
Difference in net taxes (future generations minus born in 1999, euros)	14,233
Tax increase for future generation	7.9%
Intertemporal disequilibrium (% of debt)	31.4%
Tax increase for all generations	2.50%
Expenditure reduction for all generations	-2.65%

Table 3a. **Italian Family Composition**

	Couples	Single M	Single F	Total
Childless	6.44	6.17	4.41	17.02
1 child	23.18	0.00	3.04	26.22
2 children	40.77	0.00	2.35	43.12
3+ children	12.63	0.00	1.02	13.65
Total	83.02	6.17	10.81	100.00

Source: Our elaborations on Istat (1997) data.

Table 3b. Italian Family Composition

Childless	Couples							Single	
	FEMALE	Non graduate			Graduate			MALE	FEMALE
MALE		Non working	Employee	Self employed	Non working	Employee	Self employed		
Non graduate	Non working	0.12	0.09	0.02	0.00	0.01	0.00	0.48	0.83
	Employee	1.67	1.69	0.18	0.04	0.20	0.01	3.44	2.39
	Self employed	0.52	0.40	0.41	0.05	0.07	0.05	1.36	0.45
Graduate	Non working	0.00	0.02	0.00	0.00	0.00	0.00	0.07	0.01
	Employee	0.11	0.13	0.00	0.01	0.35	0.01	0.58	0.63
	Self employed	0.02	0.07	0.05	0.01	0.11	0.01	0.24	0.11

1 Child	Couples							Single	
	FEMALE	Non graduate			Graduate			MALE	FEMALE
MALE		Non working	Employee	Self employed	Non working	Employee	Self employed		
Non graduate	Non working	0.61	0.25	0.13	0.01	0.02	0.01	0.00	0.72
	Employee	6.88	6.35	0.82	0.18	0.46	0.11	0.00	1.62
	Self employed	2.19	1.29	1.16	0.06	0.15	0.04	0.00	0.30
Graduate	Non working	0.05	0.02	0.00	0.00	0.01	0.00	0.00	0.01
	Employee	0.47	0.56	0.08	0.09	0.65	0.05	0.00	0.32
	Self employed	0.12	0.11	0.05	0.06	0.08	0.08	0.00	0.07

2 Children	Couples							Single	
	FEMALE	Non graduate			Graduate			MALE	FEMALE
MALE		Non working	Employee	Self employed	Non working	Employee	Self employed		
Non graduate	Non working	1.35	0.50	0.07	0.01	0.00	0.00	0.00	0.87
	Employee	14.75	9.02	1.12	0.13	0.92	0.04	0.00	1.08
	Self employed	4.48	1.73	2.01	0.06	0.31	0.05	0.00	0.20
Graduate	Non working	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01
	Employee	0.74	0.77	0.07	0.18	1.15	0.13	0.00	0.18
	Self employed	0.33	0.20	0.07	0.11	0.22	0.24	0.00	0.01

3 Children	Couples							Single	
	FEMALE	Non graduate			Graduate			MALE	FEMALE
MALE		Non working	Employee	Self employed	Non working	Employee	Self employed		
Non graduate	Non working	0.69	0.08	0.07	0.00	0.01	0.00	0.00	0.53
	Employee	5.18	1.94	0.17	0.05	0.18	0.01	0.00	0.30
	Self employed	2.09	0.34	0.70	0.01	0.08	0.04	0.00	0.12
Graduate	Non working	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
	Employee	0.21	0.19	0.01	0.06	0.26	0.01	0.00	0.06
	Self employed	0.05	0.04	0.04	0.04	0.06	0.04	0.00	0.01

Source: Our elaborations on Istat (1997) data.

Table 4. **Average Age at Birth**

	1 child	2 children		3 children		
		1st	2nd	1st	2nd	3rd
Non graduate	29	25	30	25	28	32
Graduate	31	29	32	28	30	33

Source: Our elaborations on Istat (1997) data.

Table 5a. Generational Accounts for Italian Families - childless (euros)

Family Types	REVENUES					EXPENDITURES								NET TAXES
	DIRECT TAXES		INDIRECT TAXES	SOCIAL CONTRIB.	OTHER	HEALTH	EDUCATION	PENSIONS	TAX CREDITS	FAMILY ALLOWAN.	UNEM. BENEFITS AND POV. RELIEF	MATERNITY ALLOWAN.	OTHER	
	Labour Tax	Capital Tax												
FNGNWMNGNWM0	0	9,660	39,350	0	9,076	-10,835	0	-4,584	0	0	-637	0	-35,285	6,745
FNGEMMNGNWM0	33,110	9,360	44,552	54,047	9,122	-10,835	0	-22,777	-1,611	-2,292	-2,164	0	-38,573	71,939
FNGSEMMNGNWM0	30,412	10,381	44,873	15,954	9,233	-10,835	0	-9,331	-1,656	0	-276	0	-35,284	53,471
FGNWMNGNWM0	0	9,660	39,350	0	9,076	-8,643	0	-4,584	0	0	-637	0	-35,285	8,937
FGEMMNGNWM0	28,910	9,535	42,617	38,570	9,055	-8,643	0	-22,777	-1,611	-2,292	-2,164	0	-38,552	52,648
FGSEMMNGNWM0	37,503	10,381	44,142	15,954	9,148	-8,643	0	-9,331	-1,656	0	-276	0	-35,284	61,939
FNGNWMNGEM0	27,120	12,995	44,925	44,825	9,228	-10,835	0	-17,644	-2,950	-1,110	-1,650	0	-36,017	68,887
FNGEMMNGEM0	60,229	12,695	50,127	98,872	9,275	-10,835	0	-35,836	-224	-345	-3,178	0	-39,306	141,475
FNGSEMMNGEM0	57,532	13,716	50,448	60,779	9,385	-10,835	0	-22,390	-269	-340	-1,290	0	-36,016	120,721
FGNWMNGEM0	27,120	12,995	44,925	44,825	9,228	-8,643	0	-17,644	-2,950	-1,110	-1,650	0	-36,017	71,079
FGEMMNGEM0	56,029	12,870	48,192	83,395	9,207	-8,643	0	-35,836	-224	-345	-3,178	0	-39,284	122,185
FGSEMMNGEM0	64,623	13,716	49,717	60,779	9,301	-8,643	0	-22,390	-269	-340	-1,290	0	-36,016	129,188
FNGNWMNGSEM0	23,534	14,682	46,195	12,591	9,343	-10,835	0	-8,119	-2,961	0	-361	0	-32,482	51,587
FNGEMMNGSEM0	56,644	14,383	51,396	66,638	9,389	-10,835	0	-26,312	-235	-350	-1,888	0	-35,771	123,060
FGSEMMNGSEM0	53,946	15,404	51,717	28,545	9,500	-10,835	0	-12,866	-281	0	0	0	-32,481	102,650
FGNWMNGSEM0	23,534	14,682	46,195	12,591	9,343	-8,643	0	-8,119	-2,961	0	-361	0	-32,482	53,779
FGEMMNGSEM0	52,444	14,558	49,461	51,161	9,322	-8,643	0	-26,312	-235	-350	-1,888	0	-35,749	103,769
FGSEMMNGSEM0	61,037	15,404	50,987	28,545	9,415	-8,643	0	-12,866	-281	0	0	0	-32,481	111,118
FNGNWMGNWM0	0	9,660	39,350	0	9,076	-8,643	0	-4,584	0	0	-637	0	-35,285	8,937
FGEMMGNWM0	33,110	9,360	44,552	54,047	9,122	-8,643	0	-22,777	-1,611	-2,292	-2,164	0	-38,573	74,131
FNGSEMMGNWM0	30,412	10,381	44,873	15,954	9,233	-8,643	0	-9,331	-1,656	0	-276	0	-35,284	55,663
FGNWMGNWM0	0	9,660	39,350	0	9,076	-8,643	0	-4,584	0	0	-637	0	-35,285	8,937
FGEMMGNWM0	28,910	9,535	42,617	38,570	9,055	-8,643	0	-22,777	-1,611	-2,292	-2,164	0	-38,552	52,648
FGSEMMGNWM0	37,503	10,381	44,142	15,954	9,148	-8,643	0	-9,331	-1,656	0	-276	0	-35,284	61,939
FNGNWMGEM0	27,403	13,142	43,066	42,779	9,168	-8,643	0	-17,644	-2,950	-340	-1,650	0	-36,185	68,146
FNGEMMGEM0	60,513	12,842	48,267	96,825	9,214	-8,643	0	-35,836	-224	-345	-3,178	0	-39,473	139,963
FNGSEMMGEM0	57,815	13,864	48,589	58,732	9,325	-8,643	0	-22,390	-269	-340	-1,290	0	-36,183	119,209
FGNWMGEM0	27,403	13,142	43,066	42,779	9,168	-8,643	0	-17,644	-2,950	-340	-1,650	0	-36,185	68,146
FGEMMGEM0	56,313	13,018	46,333	81,349	9,147	-8,643	0	-35,836	-224	-345	-3,178	0	-39,452	118,481
FGSEMMGEM0	64,906	13,864	47,858	58,732	9,240	-8,643	0	-22,390	-269	-340	-1,290	0	-36,183	125,484
FNGNWMGSEM0	26,948	14,619	43,126	9,856	9,207	-8,643	0	-8,119	-2,961	0	-361	0	-32,413	51,260
FNGEMMGSEM0	60,058	14,320	48,327	63,903	9,253	-8,643	0	-26,312	-235	-2,292	-1,888	0	-35,702	120,790
FNGSEMMGSEM0	57,360	15,341	48,648	25,810	9,364	-8,643	0	-12,866	-281	0	0	0	-32,412	102,322
FGNWMGSEM0	26,948	14,619	43,126	9,856	9,207	-8,643	0	-8,119	-2,961	0	-361	0	-32,413	51,260
FGEMMGSEM0	55,858	14,495	46,393	48,427	9,186	-8,643	0	-26,312	-235	-2,292	-1,888	0	-35,680	99,308
FGSEMMGSEM0	64,451	15,341	47,918	25,810	9,279	-8,643	0	-12,866	-281	0	0	0	-32,412	108,598
FNGNWS0	0	7,975	25,831	0	5,661	-6,743	0	-268	0	0	-361	0	-20,175	11,921
FNGES0	33,995	7,596	30,508	58,602	5,657	-6,743	0	-18,285	0	0	-1,981	0	-23,634	85,715
FNGSES0	45,845	8,641	33,854	22,099	5,698	-6,743	0	-6,355	0	0	0	0	-20,181	82,858
FGNWS0	0	7,975	26,387	0	5,681	-5,340	0	-268	0	0	-361	0	-20,175	13,899
FGES0	33,964	7,769	30,503	40,312	5,657	-5,340	0	-18,285	0	0	-1,981	0	-23,830	68,769
FGSES0	45,845	8,641	34,216	22,099	5,739	-5,340	0	-6,355	0	0	0	0	-20,181	84,664
MNGNWS0	0	2,297	22,042	0	5,423	-4,924	0	-124	0	0	-276	0	-21,688	2,750
MNGES0	34,997	5,747	26,840	56,817	5,442	-4,924	0	-13,212	0	0	-1,405	0	-22,592	87,709
MNGSES0	23,961	7,439	26,313	17,245	5,555	-4,924	0	-3,659	0	0	0	0	-18,576	53,355
MGNWS0	0	2,297	21,453	0	5,442	-3,972	0	-124	0	0	-276	0	-21,688	3,134
MGES0	34,997	5,747	28,681	48,155	5,556	-3,972	0	-13,212	0	0	-1,405	0	-22,430	82,117
MGSES0	23,961	7,439	28,506	17,245	5,593	-3,972	0	-3,659	0	0	0	0	-18,576	56,538

Table 5b. Generational Accounts for Italian Families - 1 child (euros)

Family Types	REVENUES					EXPENDITURES							NET TAXES	
	DIRECT TAXES		INDIRECT TAXES	SOCIAL CONTRIB.	OTHER	HEALTH	EDUCATION	PENSIONS	TAX CREDITS	FAMILY ALLOWANCES	UNEMPLOYMENT BENEFITS AND POVERTY RELIEF	MATERNITY ALLOWANCES		OTHER
	Labour Tax	Capital Tax												
FNGNWMMNGNWM1	0	9,671	42,765	0	10,909	-13,230	-13,257	-4,699	0	0	-637	0	-45,933	-14,411
FNGEMMNGNWM1	33,110	9,469	48,011	54,047	10,971	-13,230	-13,326	-22,872	-2,176	-3,398	-2,164	-1,426	-49,325	47,692
FNGSEMMNGNWM1	30,412	10,416	47,429	15,954	11,050	-13,230	-13,324	-9,956	-2,253	0	-276	0	-46,021	30,199
FGNWMMNGNWM1	0	9,670	42,181	0	10,715	-10,763	-12,472	-4,688	0	0	-637	0	-44,943	-10,937
FGEMMNGNWM1	28,910	9,646	45,250	38,570	10,736	-10,763	-12,472	-22,863	-1,590	-3,199	-2,164	-1,290	-48,317	30,455
FGSEMMNGNWM1	37,503	10,413	47,298	15,954	10,793	-10,763	-12,472	-9,898	-1,641	0	-276	0	-45,023	41,889
FNGNWMMNGEM1	27,120	13,006	47,011	44,825	11,014	-13,230	-13,257	-17,758	-3,210	-2,864	-1,650	0	-46,666	44,341
FNGEMMNGEM1	60,229	12,804	52,257	98,872	11,076	-13,230	-13,326	-35,931	-789	-1,430	-3,178	-1,426	-50,057	115,872
FNGSEMMNGEM1	57,532	13,751	51,674	60,779	11,155	-13,230	-13,324	-23,015	-867	-1,165	-1,290	0	-46,753	95,246
FGNWMMNGEM1	27,120	13,005	46,426	44,825	10,820	-10,763	-12,472	-17,748	-3,150	-2,710	-1,650	0	-45,676	48,029
FGEMMNGEM1	56,029	12,981	49,495	83,395	10,842	-10,763	-12,472	-35,922	-734	-1,350	-3,178	-1,290	-49,049	97,985
FGSEMMNGEM1	64,623	13,748	51,544	60,779	10,899	-10,763	-12,472	-22,957	-810	-1,093	-1,290	0	-45,755	106,454
FNGNWMMNGSEM1	23,534	14,694	46,774	12,591	11,085	-13,230	-13,257	-8,234	-3,222	0	-361	0	-43,131	27,245
FNGEMMNGSEM1	56,644	14,492	52,020	66,638	11,147	-13,230	-13,326	-26,406	-800	-1,585	-1,888	-1,426	-46,522	95,757
FNGSEMMNGSEM1	53,946	15,439	51,437	28,545	11,226	-13,230	-13,324	-13,491	-878	0	0	0	-43,218	76,452
FGNWMMNGSEM1	23,534	14,693	46,190	12,591	10,891	-10,763	-12,472	-8,223	-3,162	0	-361	0	-42,141	30,778
FGEMMNGSEM1	52,444	14,669	49,259	51,161	10,912	-10,763	-12,472	-26,398	-746	-1,491	-1,888	-1,290	-45,514	77,884
FGSEMMNGSEM1	61,037	15,436	51,307	28,545	10,970	-10,763	-12,472	-13,432	-821	0	0	0	-42,220	87,586
FNGNWMMGNWM1	0	9,671	42,765	0	10,909	-10,980	-13,750	-4,699	0	0	-637	0	-45,933	-12,654
FNGEMMGNWM1	33,110	9,469	48,011	54,047	10,971	-10,980	-13,750	-22,872	-2,176	-3,398	-2,164	-1,426	-49,325	49,517
FNGSEMMGNWM1	30,412	10,416	47,429	15,954	11,050	-10,980	-13,750	-9,956	-2,253	0	-276	0	-46,021	32,023
FGNWMMGNWM1	0	9,670	42,181	0	10,715	-10,763	-12,472	-4,688	0	0	-637	0	-44,943	-10,937
FGEMMGNWM1	28,910	9,646	45,250	38,570	10,736	-10,763	-12,472	-22,863	-2,121	-3,199	-2,164	-1,290	-48,317	29,924
FGSEMMGNWM1	37,503	10,413	47,298	15,954	10,793	-10,763	-12,472	-9,898	-2,196	0	-276	0	-45,023	41,334
FNGNWMMGEM1	27,403	13,154	45,057	42,779	10,964	-10,980	-13,750	-17,758	-3,210	-2,045	-1,650	0	-46,833	43,129
FNGEMMGEM1	60,513	12,951	50,303	96,825	11,026	-10,980	-13,750	-35,931	-789	-1,430	-3,178	-1,426	-50,225	113,910
FNGSEMMGEM1	57,815	13,899	49,720	58,732	11,105	-10,980	-13,750	-23,015	-867	-1,165	-1,290	0	-46,921	93,283
FGNWMMGEM1	27,403	13,152	44,472	42,779	10,770	-10,763	-12,472	-17,748	-3,150	-1,891	-1,650	0	-45,843	45,059
FGEMMGEM1	56,313	13,128	47,541	81,349	10,791	-10,763	-12,472	-35,922	-734	-1,350	-3,178	-1,290	-49,217	94,197
FGSEMMGEM1	64,906	13,895	49,590	58,732	10,848	-10,763	-12,472	-22,957	-810	-1,093	-1,290	0	-45,923	102,665
FNGNWMMGSEM1	26,948	14,631	46,541	9,856	11,040	-10,980	-13,750	-8,234	-3,222	0	-361	0	-43,062	29,409
FNGEMMGSEM1	60,058	14,429	51,787	63,903	11,102	-10,980	-13,750	-26,406	-800	-2,263	-1,888	-1,426	-46,453	97,311
FNGSEMMGSEM1	57,360	15,373	50,596	25,810	10,985	-10,763	-12,472	-13,432	-821	0	0	0	-42,151	80,485
FGNWMMGSEM1	26,948	14,630	45,956	9,856	10,846	-10,763	-12,472	-8,223	-3,162	0	-361	0	-42,072	31,185
FGEMMGSEM1	55,858	14,606	49,025	48,427	10,867	-10,763	-12,472	-26,398	-746	-2,169	-1,888	-1,290	-45,445	77,612
FGSEMMGSEM1	64,451	15,373	51,074	25,810	10,925	-10,763	-12,472	-13,432	-821	0	0	0	-42,151	87,993
FNGNWS1	0	7,987	31,097	0	7,407	-9,139	-13,257	-322	0	0	-361	0	-30,823	-7,411
FNGES1	33,995	7,601	32,600	58,602	7,487	-9,139	-13,326	-18,315	-737	-2,441	-1,981	-1,426	-34,272	58,648
FNGSES1	45,845	8,676	33,891	22,099	7,667	-9,139	-13,324	-6,960	-737	0	0	0	-30,919	57,100
FGNWS1	0	7,986	30,357	0	7,213	-7,460	-12,472	-317	0	0	-361	0	-29,833	-4,888
FGES1	33,964	7,769	32,026	40,312	7,292	-7,460	-12,472	-18,312	-668	-2,301	-1,981	-1,290	-33,475	43,404
FGSES1	45,845	8,673	33,586	22,099	7,471	-7,460	-12,472	-6,903	-668	0	0	0	-29,920	60,250
MNGNWS1	0	2,297	22,042	0	5,423	-4,924	0	-124	0	0	-276	0	-21,688	2,750
MNGES1	34,997	5,747	26,840	56,817	5,442	-4,924	0	-13,212	0	0	-1,405	0	-22,592	87,709
MNGSES1	23,961	7,439	26,313	17,245	5,555	-4,924	0	-3,659	0	0	0	0	-18,576	53,355
MGNWS1	0	2,297	21,453	0	5,442	-3,972	0	-124	0	0	-276	0	-21,688	3,134
MGES1	34,997	5,747	28,681	48,155	5,556	-3,972	0	-13,212	0	0	-1,405	0	-22,430	82,117
MGSES1	23,961	7,439	28,506	17,245	5,593	-3,972	0	-3,659	0	0	0	0	-18,576	56,538

Table 5c. Generational Accounts for Italian Families - 2 children (euros)

Family Types	REVENUES				EXPENDITURES								NET TAXES	
	DIRECT TAXES		INDIRECT TAXES	SOCIAL CONTRIB.	OTHER	HEALTH	EDUCATION	PENSIONS	TAX CREDITS	FAMILY ALLOWANCES	UNEMPLOYMENT BENEFITS AND POVERTY RELIEF	MATERNITY ALLOWANCES		OTHER
	Labour Tax	Capital Tax												
FNGNWMNGNWM2	0	9,685	49,089	0	13,322	-16,028	-28,739	-4,833	0	0	-637	0	-58,370	-36,510
FNGEMMNGNWM2	33,110	9,576	53,885	54,047	13,385	-16,028	-28,888	-22,982	-2,873	-6,157	-2,164	-3,035	-61,859	20,017
FNGSEMMNGNWM2	30,412	10,457	53,897	15,954	13,487	-16,028	-28,886	-10,686	-3,221	0	-276	0	-58,561	6,549
FGNWMNGNWM2	0	9,682	47,252	0	12,688	-12,999	-25,629	-4,798	0	0	-637	0	-55,132	-29,572
FGEMMNGNWM2	28,910	9,540	49,534	38,570	12,711	-12,999	-25,629	-22,953	-1,605	-5,487	-2,164	-2,624	-58,374	7,431
FGSEMMNGNWM2	37,503	10,447	53,268	15,954	12,811	-12,999	-25,629	-10,496	-1,626	0	-276	0	-55,296	23,661
FNGNWMNGEM2	27,120	13,020	52,665	44,825	13,397	-16,028	-28,739	-17,892	-3,877	-5,423	-1,650	0	-59,102	18,316
FNGEMMNGEM2	60,229	12,911	57,461	98,872	13,660	-16,028	-28,888	-36,041	-1,486	-2,559	-3,178	-3,035	-62,592	89,127
FNGSEMMNGEM2	57,532	13,792	57,474	60,779	13,561	-16,028	-28,886	-23,745	-1,834	-2,384	-1,290	0	-59,294	69,678
FGNWMNGEM2	27,120	13,017	50,828	44,825	12,763	-12,999	-25,629	-17,857	-3,694	-4,839	-1,650	0	-55,864	26,021
FGEMMNGEM2	56,029	12,875	53,111	83,395	12,786	-12,999	-25,629	-36,012	-1,308	-2,291	-3,177	-2,624	-59,106	75,050
FGSEMMNGEM2	64,623	13,782	56,845	60,779	12,886	-12,999	-25,629	-23,555	-1,611	-2,110	-1,290	0	-56,029	85,693
FNGNWMNGSEM2	23,534	14,708	52,824	12,591	13,465	-16,028	-28,739	-8,368	-3,889	0	-361	0	-55,567	4,171
FNGEMMNGSEM2	56,644	14,599	57,620	66,638	13,528	-16,028	-28,888	-26,517	-1,497	-2,899	-1,888	-3,035	-59,056	69,220
FNGSEMMNGSEM2	53,946	15,480	57,633	28,545	13,629	-16,028	-28,886	-14,220	-1,846	0	0	0	-55,758	52,494
FGNWMNGSEM2	23,534	14,704	50,987	12,591	12,830	-12,999	-25,629	-8,333	-3,705	0	-361	0	-52,329	11,292
FGEMMNGSEM2	52,444	14,563	53,270	51,161	12,853	-12,999	-25,629	-26,488	-1,320	-2,585	-1,888	-2,624	-55,571	55,189
FGSEMMNGSEM2	61,037	15,469	57,004	28,545	12,953	-12,999	-25,629	-14,030	-1,622	0	0	0	-52,494	68,235
FNGNWMGNWM2	0	9,685	49,089	0	13,322	-13,709	-29,810	-4,833	0	0	-637	0	-58,370	-35,261
FNGEMMGNWM2	33,110	9,576	53,885	54,047	13,385	-13,709	-29,810	-22,982	-2,873	-6,157	-2,164	-3,035	-61,859	21,415
FNGSEMMGNWM2	30,412	10,457	53,897	15,954	13,487	-13,709	-29,810	-10,686	-3,221	0	-276	0	-58,561	7,944
FGNWMGNWM2	0	9,682	47,252	0	12,688	-12,999	-25,629	-4,798	0	0	-637	0	-55,132	-29,572
FGEMMGNWM2	28,910	9,540	49,534	38,570	12,711	-12,999	-25,629	-22,953	-2,695	-5,487	-2,164	-2,624	-58,374	6,341
FGSEMMGNWM2	37,503	10,447	53,268	15,954	12,811	-12,999	-25,629	-10,496	-2,997	0	-276	0	-55,296	22,290
FNGNWMNGEM2	27,403	13,167	50,623	42,779	13,332	-13,709	-29,810	-17,892	-3,877	-4,592	-1,650	0	-59,269	16,505
FNGEMMNGEM2	60,513	13,058	55,419	96,825	13,396	-13,709	-29,810	-36,041	-1,486	-2,559	-3,178	-3,035	-62,759	86,635
FNGSEMMNGEM2	57,815	13,939	55,432	58,732	13,497	-13,709	-29,810	-23,745	-1,834	-2,384	-1,290	0	-59,461	67,183
FGNWMNGEM2	27,403	13,164	48,786	42,779	12,698	-12,999	-25,629	-17,857	-3,694	-4,007	-1,650	0	-56,032	22,962
FGEMMNGEM2	56,313	13,022	51,069	81,349	12,721	-12,999	-25,629	-36,012	-1,308	-2,291	-3,177	-2,624	-59,273	71,159
FGSEMMNGEM2	64,906	13,929	54,802	58,732	12,821	-12,999	-25,629	-23,555	-1,611	-2,110	-1,290	0	-56,196	81,803
FNGNWMNGSEM2	26,948	14,645	50,477	9,856	13,397	-13,709	-29,810	-8,368	-3,889	0	-361	0	-55,498	3,690
FNGEMMNGSEM2	60,058	14,536	55,273	63,903	13,461	-13,709	-29,810	-26,517	-1,497	-3,627	-1,888	-3,035	-58,988	68,160
FNGSEMMNGSEM2	57,360	15,406	53,409	25,810	12,923	-12,999	-25,629	-14,030	-1,622	0	0	0	-52,425	58,205
FGNWMNGSEM2	26,948	14,641	48,640	9,856	12,763	-12,999	-25,629	-8,333	-3,705	0	-361	0	-52,260	9,563
FGEMMNGSEM2	55,858	14,500	50,922	48,427	12,786	-12,999	-25,629	-26,488	-1,320	-3,313	-1,888	-2,624	-55,502	52,731
FGSEMMNGSEM2	64,451	15,406	54,656	25,810	12,886	-12,999	-25,629	-14,030	-1,622	0	0	0	-52,425	66,505
FNGNWS2	0	8,001	40,032	0	9,843	-11,936	-28,739	-385	0	0	-361	0	-43,259	-26,804
FNGES2	33,995	7,607	39,049	58,602	9,923	-11,936	-28,888	-18,350	-1,597	-4,201	-1,981	-3,035	-46,696	32,492
FNGSES2	45,845	8,717	36,810	22,099	10,114	-11,936	-28,886	-7,666	-1,597	0	0	0	-43,459	30,041
FGNWS2	0	7,997	37,587	0	9,209	-9,696	-25,629	-369	0	0	-361	0	-40,021	-21,282
FGES2	33,964	7,770	37,192	40,312	9,289	-9,696	-25,629	-18,340	-1,373	-3,743	-1,981	-2,624	-43,648	21,492
FGSES2	45,845	8,707	35,742	22,099	9,475	-9,696	-25,629	-7,482	-1,373	0	0	0	-40,194	37,493
MNGNWS2	0	2,297	22,042	0	5,423	-4,924	0	-124	0	0	-276	0	-21,688	2,750
MNGES2	34,997	5,747	26,840	56,817	5,442	-4,924	0	-13,212	0	0	-1,405	0	-22,592	87,709
MNGSES2	23,961	7,439	26,313	17,245	5,555	-4,924	0	-3,659	0	0	0	0	-18,576	53,355
MGNWS2	0	2,297	21,453	0	5,442	-3,972	0	-124	0	0	-276	0	-21,688	3,134
MGES2	34,997	5,747	28,681	48,155	5,556	-3,972	0	-13,212	0	0	-1,405	0	-22,430	82,117
MGSES2	23,961	7,439	28,506	17,245	5,593	-3,972	0	-3,659	0	0	0	0	-18,576	56,538

Table 5d. **Generational Accounts for Italian Families – 3 + children** (euros)

Family Types	REVENUES					EXPENDITURES							NET TAXES	
	DIRECT TAXES		INDIRECT TAXES	SOCIAL CONTRIB.	OTHER	HEALTH	EDUCATION	PENSIONS	TAX CREDITS	FAMILY ALLOWANCES	UNEMPLOYMENT BENEFITS AND POVERTY RELIEF	MATERNITY ALLOWANCES		OTHER
	Labour Tax	Capital Tax												
FNGNWMMNGNWM3	0	9,697	52,509	0	15,307	-18,331	-41,484	-4,943	0	0	-637	0	-68,608	-56,490
FNGEMMNGNWM3	33,110	9,532	58,890	54,047	15,355	-18,331	-41,700	-23,073	-3,567	-6,977	-2,164	-4,440	-72,034	-1,352
FNGSEMMNGNWM3	30,412	10,491	58,766	15,954	15,430	-18,331	-41,696	-11,286	-3,777	0	-276	0	-68,885	-13,200
FGNWMMNGNWM3	0	9,693	50,701	0	14,670	-15,245	-38,846	-4,908	0	0	-637	0	-65,368	-49,940
FGEMMNGNWM3	28,910	9,669	53,664	38,570	14,683	-15,245	-38,846	-23,044	-1,622	-6,494	-2,164	-4,040	-68,735	-14,693
FGSEMMNGNWM3	37,503	10,480	55,658	15,954	14,733	-15,245	-38,846	-11,096	-1,649	0	-276	0	-65,618	1,597
FNGNWMMNGEM3	27,120	13,032	56,208	44,825	15,363	-18,331	-41,484	-18,002	-4,542	-5,643	-1,650	0	-69,340	-2,446
FNGEMMNGEM3	60,229	12,867	62,588	98,872	15,410	-18,331	-41,700	-36,132	-2,180	-2,652	-3,178	-4,440	-72,766	68,589
FNGSEMMNGEM3	57,532	13,826	62,464	60,779	15,485	-18,331	-41,696	-24,345	-2,390	-2,504	-1,290	0	-69,617	49,911
FGNWMMNGEM3	27,120	13,028	54,399	44,825	14,725	-15,245	-38,846	-17,967	-4,352	-5,143	-1,650	0	-66,100	4,794
FGEMMNGEM3	56,029	13,004	57,363	83,395	14,739	-15,245	-38,846	-36,103	-1,991	-2,484	-3,177	-4,040	-69,467	53,176
FGSEMMNGEM3	64,623	13,815	59,356	60,779	14,788	-15,245	-38,846	-24,155	-2,184	-2,268	-1,290	0	-66,350	63,024
FNGNWMMNGSEM3	23,534	14,719	55,702	12,591	15,433	-18,331	-41,484	-8,478	-4,554	0	-361	0	-65,805	-17,033
FNGEMMNGSEM3	56,644	14,555	62,083	66,638	15,480	-18,331	-41,700	-26,607	-2,191	-2,911	-1,888	-4,440	-69,231	48,100
FNGSEMMNGSEM3	53,946	15,514	61,959	28,545	15,555	-18,331	-41,696	-14,821	-2,402	0	0	0	-66,082	32,186
FGNWMMNGSEM3	23,534	14,716	53,894	12,591	14,795	-15,245	-38,846	-8,443	-4,364	0	-361	0	-62,565	-10,293
FGEMMNGSEM3	52,444	14,691	56,857	51,161	14,809	-15,245	-38,846	-26,579	-2,002	-2,714	-1,888	-4,040	-65,932	32,716
FGSEMMNGSEM3	61,037	15,503	58,851	28,545	14,859	-15,245	-38,846	-14,631	-2,195	0	0	0	-62,815	45,062
FNGNWMMGNWM3	0	9,697	52,509	0	15,307	-15,956	-43,030	-4,943	0	0	-637	0	-68,608	-55,660
FNGEMMGNWM3	33,110	9,532	58,890	54,047	15,355	-15,956	-43,030	-23,073	-3,567	-6,977	-2,164	-4,440	-72,034	-306
FNGSEMMGNWM3	30,412	10,491	58,766	15,954	15,430	-15,956	-43,030	-11,286	-3,777	0	-276	0	-68,885	-12,158
FGNWMMGNWM3	0	9,693	50,701	0	14,670	-15,245	-38,846	-4,908	0	0	-637	0	-65,368	-49,940
FGEMMGNWM3	28,910	9,669	53,664	38,570	14,683	-15,245	-38,846	-23,044	-3,378	-6,494	-2,164	-4,040	-68,735	-16,449
FGSEMMGNWM3	37,503	10,480	55,658	15,954	14,733	-15,245	-38,846	-11,096	-3,570	0	-276	0	-65,618	-323
FNGNWMMGEM3	27,403	13,179	53,237	42,779	15,255	-15,956	-43,030	-18,002	-4,542	-6,413	-1,650	0	-69,507	-7,249
FNGEMMGEM3	60,513	13,014	59,618	96,825	15,302	-15,956	-43,030	-36,132	-2,180	-3,201	-3,178	-4,440	-72,933	64,223
FNGSEMMGEM3	57,815	13,973	59,493	58,732	15,377	-15,956	-43,030	-24,345	-2,390	-3,281	-1,290	0	-69,784	45,314
FGNWMMGEM3	27,403	13,175	51,429	42,779	14,617	-15,245	-38,846	-17,967	-4,352	-4,273	-1,650	0	-66,267	802
FGEMMGEM3	56,313	13,151	54,392	81,349	14,630	-15,245	-38,846	-36,103	-1,991	-2,484	-3,177	-4,040	-69,634	48,313
FGSEMMGEM3	64,906	13,962	56,386	58,732	14,680	-15,245	-38,846	-24,155	-2,184	-2,268	-1,290	0	-66,518	58,162
FNGNWMMGSEM3	26,948	14,656	53,897	9,856	15,383	-15,956	-43,030	-8,478	-4,554	0	-361	0	-65,736	-17,373
FNGEMMGSEM3	60,058	14,492	60,278	63,903	15,430	-15,956	-43,030	-26,607	-2,191	-4,342	-1,888	-4,440	-69,162	46,545
FNGSEMMGSEM3	57,360	15,440	58,296	25,810	14,869	-15,245	-38,846	-14,631	-2,195	0	0	0	-62,746	38,113
FGNWMMGSEM3	26,948	14,653	52,089	9,856	14,745	-15,245	-38,846	-8,443	-4,364	0	-361	0	-62,496	-11,463
FGEMMGSEM3	55,858	14,628	55,052	48,427	14,759	-15,245	-38,846	-26,579	-2,002	-3,500	-1,888	-4,040	-65,863	30,760
FGSEMMGSEM3	64,451	15,440	57,046	25,810	14,808	-15,245	-38,846	-14,631	-2,195	0	0	0	-62,746	43,892
FNGNWS3	0	8,012	47,394	0	11,853	-14,240	-41,484	-437	0	0	-361	0	-53,497	-42,760
FNGES3	33,995	7,612	44,282	58,602	11,929	-14,240	-41,700	-18,378	-2,306	-5,651	-1,981	-4,440	-56,924	10,801
FNGSES3	45,845	8,751	38,750	22,099	12,070	-14,240	-41,696	-8,247	-2,306	0	0	0	-53,782	7,243
FGNWS3	0	8,009	44,852	0	11,215	-11,942	-38,846	-421	0	0	-361	0	-50,257	-37,751
FGES3	33,964	7,770	41,307	40,312	11,293	-11,942	-38,846	-18,369	-2,082	-5,192	-1,981	-4,040	-53,869	-1,675
FGSES3	45,845	8,740	37,761	22,099	11,434	-11,942	-38,846	-8,063	-2,082	0	0	0	-50,515	14,431
MNGNWS3	0	2,297	22,042	0	5,423	-4,924	0	-124	0	0	-276	0	-21,688	2,750
MNGES3	34,997	5,747	26,840	56,817	5,442	-4,924	0	-13,212	0	0	-1,405	0	-22,592	87,709
MNGSES3	23,961	7,439	26,313	17,245	5,555	-4,924	0	-3,659	0	0	0	0	-18,576	53,355
MGNWS3	0	2,297	21,453	0	5,442	-3,972	0	-124	0	0	-276	0	-21,688	3,134
MGES3	34,997	5,747	28,681	48,155	5,556	-3,972	0	-13,212	0	0	-1,405	0	-22,430	82,117
MGSES3	23,961	7,439	28,506	17,245	5,593	-3,972	0	-3,659	0	0	0	0	-18,576	56,538

Table 6. Marginal Net Subsidy (euros)

Family Types	First child		Second child		Third child	
	Net Taxes	of which Indirect Taxes	Net Taxes	of which Indirect Taxes	Net Taxes	of which Indirect Taxes
FNGNWMMNGNWM	-21,156	3,415	-22,099	6,324	-19,980	3,420
FNGEMMNGNWM	-24,247	3,459	-27,675	5,874	-21,369	5,005
FNGSEMMNGNWM	-23,272	2,556	-23,650	6,469	-19,749	4,868
FGNWMMNGNWM	-19,874	2,830	-18,635	5,071	-20,368	3,449
FGEMMNGNWM	-22,193	2,633	-23,024	4,285	-22,124	4,130
FGSEMMNGNWM	-20,050	3,156	-18,228	5,970	-22,064	2,390
FNGNWMMNGEM	-24,546	2,085	-26,026	5,654	-20,762	3,543
FNGEMMNGEM	-25,603	2,130	-26,745	5,205	-20,538	5,127
FNGSEMMNGEM	-25,474	1,226	-25,569	5,800	-19,767	4,990
FGNWMMNGEM	-23,051	1,501	-22,008	4,402	-21,227	3,571
FGEMMNGEM	-24,200	1,303	-22,935	3,615	-21,874	4,252
FGSEMMNGEM	-22,735	1,826	-20,761	5,301	-22,669	2,512
FNGNWMMNGSEM	-24,342	579	-23,074	6,050	-21,204	2,878
FNGEMMNGSEM	-27,302	624	-26,538	5,600	-21,119	4,463
FNGSEMMNGSEM	-26,199	-280	-23,957	6,195	-20,309	4,326
FGNWMMNGSEM	-23,001	-5	-19,486	4,798	-21,585	2,906
FGEMMNGSEM	-25,886	-203	-22,695	4,011	-22,473	3,588
FGSEMMNGSEM	-23,531	321	-19,351	5,696	-23,173	1,847
FNGNWMMGNWM	-21,591	3,415	-22,607	6,324	-20,398	3,420
FNGEMMGNWM	-24,613	3,459	-28,102	5,874	-21,721	5,005
FNGSEMMGNWM	-23,640	2,556	-24,079	6,469	-20,102	4,868
FGNWMMGNWM	-19,874	2,830	-18,635	5,071	-20,368	3,449
FGEMMGNWM	-22,725	2,633	-23,582	4,285	-22,790	4,130
FGSEMMGNWM	-20,605	3,156	-19,044	5,970	-22,613	2,390
FNGNWMMGEM	-25,017	1,991	-26,623	5,566	-23,754	2,614
FNGEMMGEM	-26,053	2,035	-27,275	5,116	-22,412	4,199
FNGSEMMGEM	-25,926	1,132	-26,100	5,712	-21,868	4,062
FGNWMMGEM	-23,087	1,406	-22,097	4,314	-22,160	2,643
FGEMMGEM	-24,284	1,209	-23,037	3,527	-22,846	3,324
FGSEMMGEM	-22,819	1,732	-20,863	5,213	-23,641	1,583
FNGNWMMGSEM	-21,851	3,415	-25,718	3,936	-21,063	3,420
FNGEMMGSEM	-23,479	3,459	-29,151	3,486	-21,615	5,005
FNGSEMMGSEM	-21,838	1,947	-22,280	2,814	-20,092	4,887
FGNWMMGSEM	-20,075	2,830	-21,622	2,683	-21,026	3,449
FGEMMGSEM	-21,696	2,633	-24,881	1,897	-21,971	4,130
FGSEMMGSEM	-20,605	3,156	-21,488	3,582	-22,613	2,390
FNGNWS	-19,331	5,266	-19,394	8,935	-15,956	7,362
FNGES	-27,066	2,092	-26,157	6,449	-21,690	5,233
FNGSES	-25,758	37	-27,059	2,919	-22,798	1,940
FGNWS	-18,787	3,970	-16,395	7,231	-16,469	7,265
FGES	-25,364	1,523	-21,913	5,166	-23,167	4,115
FGSES	-24,413	-630	-22,757	2,156	-23,062	2,019

Table 7. **Public Programs for Families with Children - Annual Values** (euros)

Age	Health	Education		Tax credit	Family Allowances (1)	Maternity Allowances (2)	Total
		School	University				
0	-1,412	0	0	-178	-771	-376	-2,738
5	-636	-4,482	0	-184	-767	0	-6,068
10	-377	-6,295	0	-191	-617	0	-7,479
15	-425	-5,496	0	-221	-514	0	-6,657
20	-596	-1,891	-2,221	-242	-298	0	-5,249
25	-834	-56	-907	-194	-167	0	-2,157

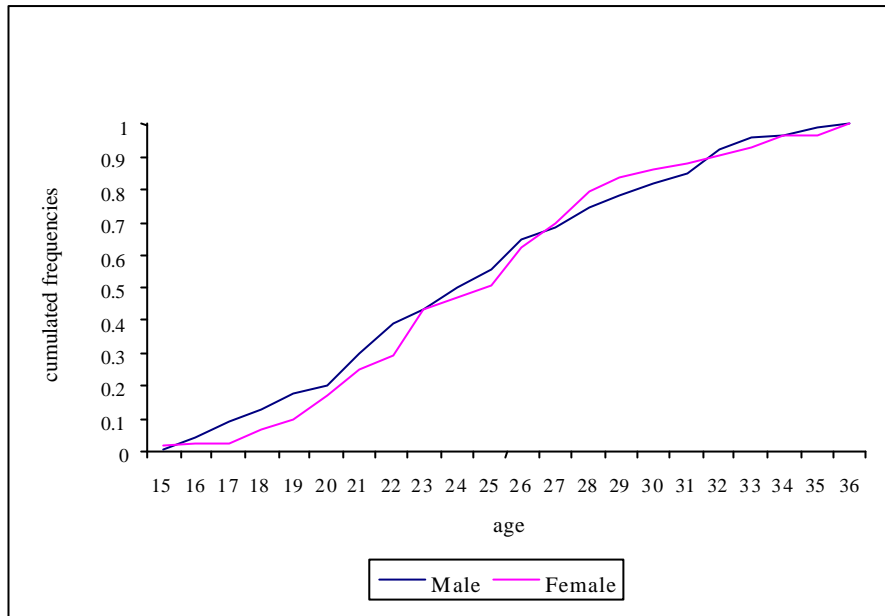
(1) When the share of wages on family income exceeds 70 per cent.

(2) For employed women only.

Table 8. **Revenues and expenditure of the Public Sector in Italy, 1999** (thousands of euros)

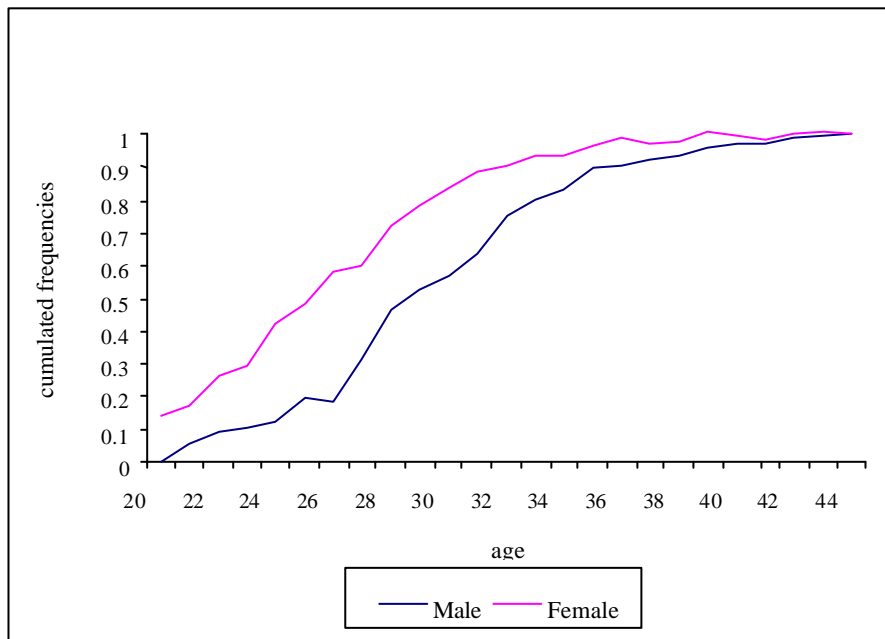
Revenues		Expenditure	
1. Net operating surplus	592	1. Compensation of employees	117,371
2. Direct taxes	170,919	Social security	2,326
2.1 Taxes on labour	99,307	Health	23,226
IRPEF on labour income (net of tax allowances)	99,307	Assistance	1,204
Tax allowances	-5,542	Education	35,821
As spouse	-3,707	School	30,986
As children	-1,835	University	4,836
2.2 Taxes on real capital	53,976	Other labor income	54,793
2.2.1 Equity and stocks	44,310	2. Intermediate consumption	77,883
Irpef on capital	15,826	2.1 Social benefits in kind	24,001
Irpeg	27,559	Health	22,943
Tax on dividends	412	Hospital care	4,945
Tax on net wealth of firms	513	Other health serv.	10,626
2.2.2 Real estate	4,833	Drugs	7,372
Irpef on real estate	2,738	Assistance	3,965
Invim	1,222	2.2 Other intermediate consumption	53,882
ICI on building sites	873	Social security	1,404
2.3 Taxes on financial capital	8,918	Health	11,673
Tax on income from financial capital	8,918	Assistance	1,668
2.4 ILOR	0	Education	6,043
2.5 Vehicle tax on families	3,259	School	5,640
2.6 Other direct taxes	5,458	University	402
3. Indirect taxes	155,282	Other	33,095
(net of those paid by public sector)		3. Revenues from sales of goods and serv.	-23,632
VAT	64,922	Litter tax	-4,106
IRAP on labour income	14,977	4. Contribution to production	14,480
IRAP on income from capital	2,800	5. Social expenditure	191,279
ICI (local tax on real estate)	8,177	5. 1 Social security	178,794
Stamp duties	12,690	5.1.1 Retirement pensions	156,473
Hydrocarbons oil tax	23,996	Old age and seniority	123,553
Petroleum and gas tax	4,939	Employees	110,819
Electric energy	2,839	Self employed	12,734
Tobacco	7,164	Survival	29,729
Betting, gaming and lottery	6,659	Employees	26,665
Concessions	2,076	Self employed	3,064
Vehicle tax on families	1,978	Invalidity	3,192
Other indirect taxes	2,065	Employees	2,863
4. Social contributions	139,866	Self employed	329
4.1 Workers	39,863	5.1.2 Labor market and family	22,321
Employee	27,514	Unemployment and mobility benefit	3,926
Self employed	12,349	Income support for the unemployed	671
4.2 Employers	100,003	Sickness and injuries allowance	2,050
5. Other transfers	12,423	Maternity allowance	1,352
6. International transfers	774	Industrial injuries rent	3,700
7. Other current revenues	5,348	Severance pay	5,220
8. Capital tax	1,164	Family benefits	4,896
Inheritance tax	907	Other	505
Other capital tax	257	5.2 Assistance	12,485
9. Contributions to investment	1,949	Social pensions	2,091
10. Other capital revenues	2,457	Disability pensions	8,289
11. Interests	2,269	War pensions	1,120
		Other	985
		6. Transfers to non profit institutions	3,785
		7. International transfers	6,224
		8. Other transfers	2,894
		9. Other current expenditure	363
		10. Interests	75,261
		11. Investments	28,980
		Social security and assistance	452
		Health	1,553
		Housing	5,286
		Education	2,672
		Other	19,016
		12. Contribution to investments	10,750
		13. Other capital account transfers	3,494
Total revenues	488,209	Total Expenditure	509,132
		Net borrowing requirement	-20,922

Figure 1. **Family Formation** (Financial Independence)



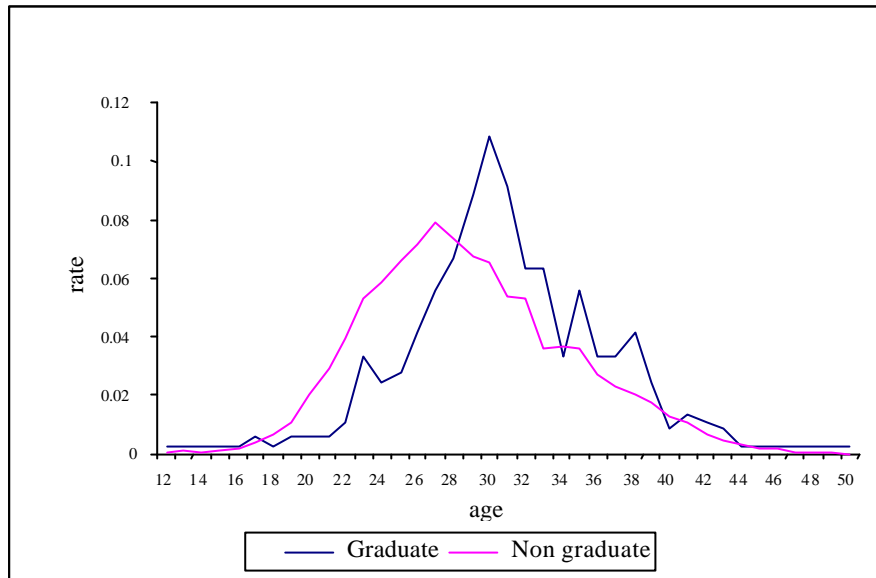
Source: Our elaborations on ISTAT (1997) data

Figure 2. **Marriage**



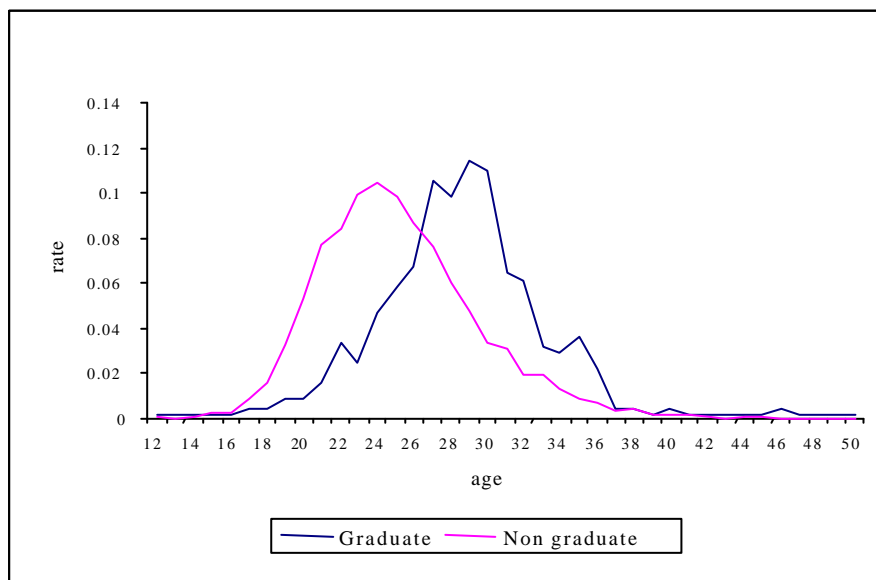
Source: Our elaborations on ISTAT (1997) data

Figure 3a. **Fertility Rate – One Child**



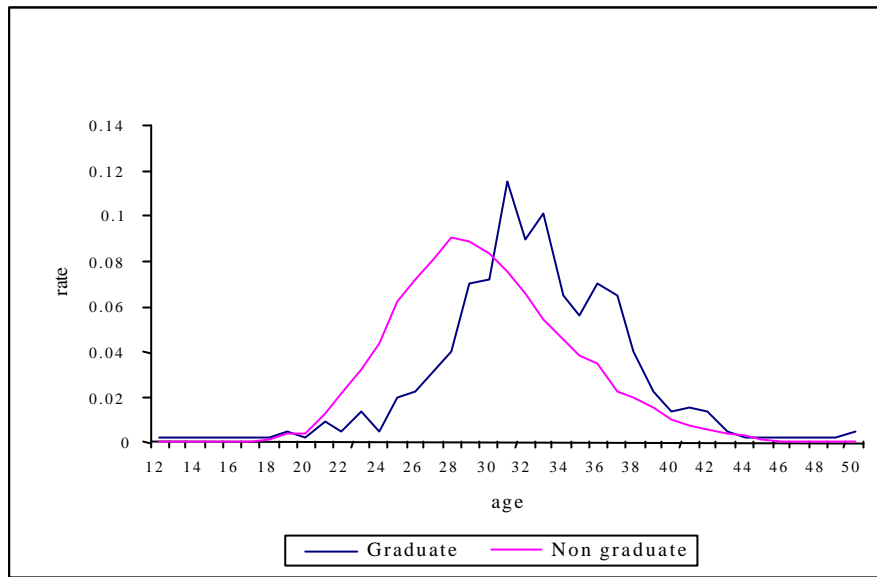
Source: Our elaborations on Istat (1997) data

Figure 3b. **Fertility Rate – Two Children (first child)**



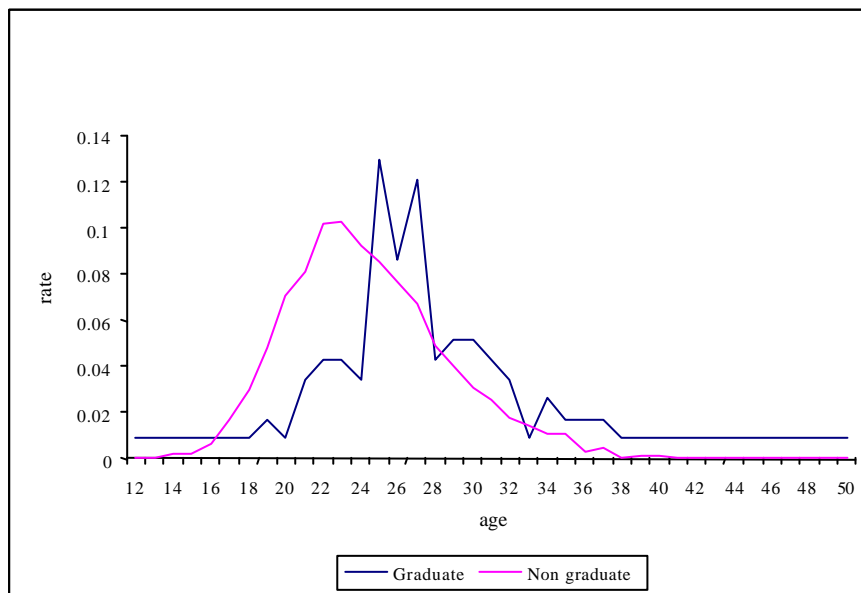
Source: Our elaborations on Istat (1997) data

Figure 3c. **Fertility Rate – Two Children**(second child)



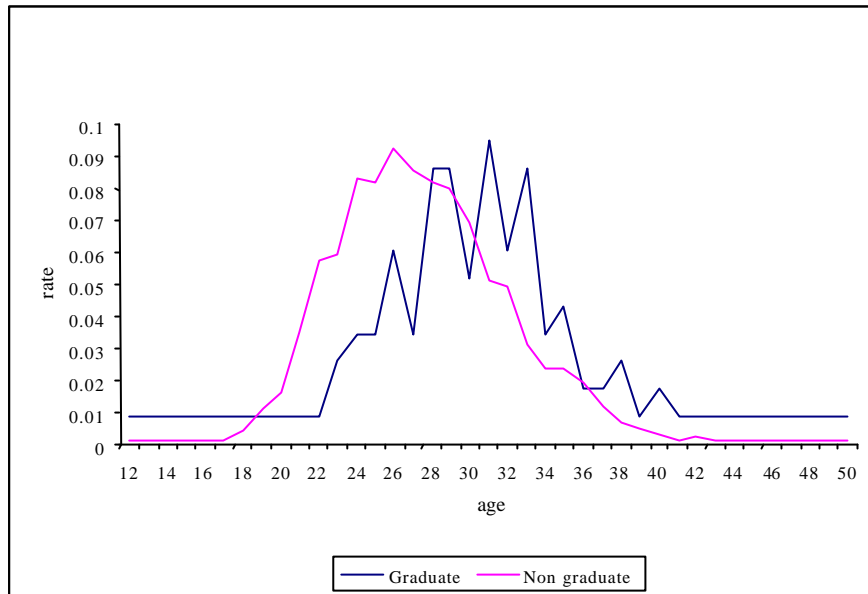
Source: Our elaborations on Istat (1997) data

Figure 3d. **Fertility Rate – Three Children** (first child)



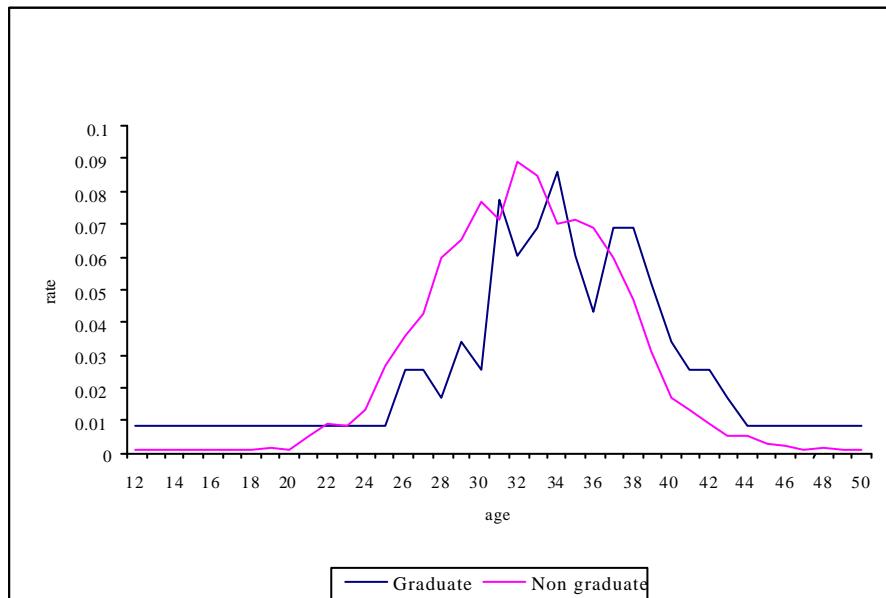
Source: Our elaborations on Istat (1997) data

Figure 3e. **Fertility Rate – Three Children** (second child)



Source: Our elaborations on Istat (1997) data

Figure 3f. **Fertility Rate – Three Children** (third child)



Source: Our elaborations on Istat (1997) data