Fiscal system and female employment in Italy

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Introduction

The primary interest of this report is the impact of taxes and benefits on patterns of female employment and unemployment in Italy. We focus on incentives and disincentives on the supply side, while skirting the impact of taxation on labour demand. This does in no way imply that the demand side is less important. An additional limitation is that we do not include retirement issues in the analysis. While we consider social security contributions towards retirement in the analysis of the tax burden, we purposely overlook retirement provisions. Since early retirement still significantly contributes to keeping the overall employment rate down, especially among Italian women, the rationale for such exclusion may be questioned. Our sole justification is that it keeps the scope of the analysis within manageable proportions. .

The foundations of the taxation system currently in place in Italy were laid in the early seventies. The hallmark of the system is the combination of individual taxation of earnings with a benefit system that is often family based or is very selective. This combination gives rise to few 'overt' gender biases (if any) but several 'gender effects' stemming from the interaction of apparently neutral rules with highly gendered patterns of employment, unemployment and unpaid work. We focus on four main types of effects, respectively, differential tax compliance and incidence of 'grey' employment for men and women, inactivity traps, unemployment traps and differential income protection coverage.

Until recently, these effects failed to attract much attention in Italian policy circles, within academics, or in the media. Interest is being revived by the growing awareness that low female employment is very costly in fiscal terms and by the increasing importance of taxation as an electoral issue. The reforms to the tax or the benefits systems currently under discussion are often radical. Some put female employment at the centre, others cannot avoid including employment growth among the alleged goals. However, the discussion over possible reforms has not yet spread to the public at large or generated a sufficient amount of political consensus over specific proposals. Also, the current crisis may be temporarily diverting political and academic interest away from long term employment goals.

Chapter 1 describes the Italian tax and benefits system and its main gender effects. Chapter 2 reviews evidence on labour supply responsiveness to monetary incentives, hence to reforms of the tax and benefits system. Chapter 3 briefly discusses the main reforms that have been implemented in recent years, and assesses evidence on their employment impacts; however, most of the changes have been modest and much of the analysis in the chapter is monopolized by the debate on desired reforms. Chapter 4 summarizes.

1. The national taxation system and its main 'gender effects

1.1. The system of taxation in Italy

The foundations of the taxation system currently in place in Italy were laid in the early seventies, though several important changes have been made since. The main features are summarized below, with further details given in Table A.1. Rules, rates and values refer to 2007, but several figures are given in percentage of the average annual wage in order to provide relatively stable order of magnitudes. A few changes occurred since 2007 and are also detailed in Table A.1. In the Italian system of personal income taxation:

- *The unit of taxation is the individual*. As of 2009 an *exception* has been made for family firms that employ no wage labour, provided that the revenue falls below € and other conditions are met *('contribuenti minimi')*. Under the new provision the head of the family (any of the partners, but usually the husband) has sole responsibility for filling a tax return for the whole family. The income produced by family assistants such as the spouse is imputed to the head. Note that assisting

family members of family firms that do not meet the above requirements continue to be taxed separately on the basis of imputed income.

- *Couples can choose between filing a joint or separate returns*. However, filing a joint return has very little in common with what is normally understood with joint filing. Taxes are calculated separately but any of the two partners can file a joint return where the two separate tax balances are algebraically summed. So, for example, if he owes € 10000 while she is entitled to a credit of €1500, then he or she can opt for joint reporting and will pay € 8.500.
- *The personal income tax schedule is fairly progressive and features 5 rates,* from 23% below € 15000 per year to 43% above € 75000 per year. With an average wage totalling 23990 in 2007, these rates amounts to fairly high taxation. *However the first € 8000 for wage employees and € 4800 for self-employed are disregarded.*
- Earnings are also taxed to finance social security. Social security contributions are compulsory, do not make any distinction based on marriage or sex but differ between employees and professionals, across income brackets and across firms of different sizes. Rates for employees vary between 9.2 and 10.5% of gross earnings up to the absolute income threshold of 3.8 times the average wage. No contribution is due on income higher than this threshold.
- No social assistance is granted in Italy, except to pensioners living in families below a given income threshold and no other source of income of their own.
- Tax credits and family benefits, however, tend to reduce the fiscal pressure at the bottom. Starting from 2007, a non-refundable tax credits replaced previous tax allowances. Credits are granted, at decreasing rates, for gross earnings up to €80000, i.e. 3 times average gross industrial earnings. Moreover, credits are granted for dependent children and spouse. Children in particular, are a relatively new addition to the list of criteria for eligibility. At low incomes the most important credit provision is the standard tax credit which can reach up to 8% of the average wage. At comparable income levels the credit due for each child is somewhat less than that due for the spouse, the highest amount for either of them being equivalent to 3.5% of the average wage rate. Notably, child tax credits are equally split among the parents unless there is explicit request to attribute them to the highest earner.
- Unlike the income tax, family benefits are set at the household level. There are three main types of family benefits, namely, the family allowance, the maternity allowance and the allowance for households with at least three minors (below the age of 18), all of which are means tested. The family allowance is the most important provision and grants cash transfers to families of employees, former-employee pensioners, and unemployment benefit recipients. For a couple with two children living on the equivalent of the average wage, the allowance represents and addition of 6.6% to total household income. The addition goes up to 26% for the same household with half this income, while it decreases to 2.5% for a total income one and a half times the average wage.[1] The maternity allowance is granted on a per child basis to mothers with children below 1 year of age not entitled to any other maternity benefit, and amounts to 6.1 percent of the average annual wage. As for the remaining allowance, the maximum amount payable also amounts to around 6% of the average wage.
- Most housing benefits are also means tested on family income. They include tax credits for tenants, rent subsidies, provisions of limited rent – the so-called 'social rent' – and rent rebates for publicly owned flats and houses. The first three schemes are means tested, with amounts and eligibility conditions for rent subsidies and provisions of limited rent being set by regional or municipal government. For

[1] The average vale for the wage is given in the OECD 2007 tax file for Italy

example, social rent in the Tuscany region amounts to 7% of total taxable household while the maximum amount of rent subsidies in the Lombardy region varies between 13 and 16% of the average wage, depending on town size. In contrast, rent rebates for publicly owned dwelling are not set according to social policy goals and eligibility is largely discretionary.

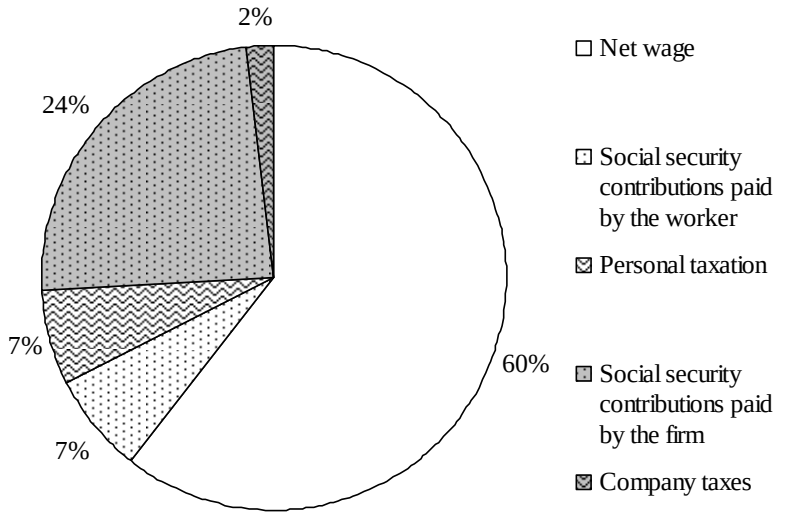
- Unemployment benefits and wage supplementation provisions offer limited and differential coverage. There are three types of provisions, respectively the ordinary unemployment benefits, a wage supplementation fund known as *Cassa Integrazione Guadagni* – henceforth CIG – and mobility benefits. Job seekers entering the labour market from schools or non activity – by far the largest proportion of the unemployed – are not entitled since the three schemes only cover workers having been dismissed or forced to reduce working hours. By the same token workers on fixed term contracts remain outside coverage once their contract have expired.

  So called 'ordinary benefits' are the main short term unemployment scheme; they accrue to people having been laid off individually, not entitled to GIC or mobility benefits and satisfying minimum employment record requirements. The 2007 unemployment benefit was between 30 and 40 percent depending on the previous employment record, and was granted for a maximum of 6 or 9 months depending on the age of the worker. Starting with 2009 it has been increased to a minimum of 40 and a maximum of 60%, and the period of fruition has been extended to 8 or 12 months, partly in the attempt to reduce disparity of treatment with CIG or mobility benefits.

  Unlike ordinary benefits, mobility benefits are targeted on long-term unemployment while the CIG is designed to prevent seasonal or long-term unemployment. Eligibility to Both schemes is restricted to employees of large firms (more than 200 employees) or to workers in industry and construction manufacturing in concerns with more than 15 employees. Moreover eligibility is conditional on having been forced to reduce hours (CIG), or having been dismissed via a collective dismissal procedure or as a result of bankruptcy (mobility benefits). The replacement rate is 80 percent, down to 60 percent for mobility benefits paid after the 12th month. The length varies but it is usually 12 to 24 months for workers facing or having experienced collective dismissals; it may go up to 36 months for CIG and 48 months for mobility benefits in 'exceptional' cases. *All unemployment benefits are capped.*

The above rules concur to determine monetary incentives to employment on the supply side. However, the demand side is equally and often more important for actual employment patterns. Although this report focuses primarily on the supply side, some basic information on the taxation of firms and the way this impacts on total labour costs is warranted. In addition to paying social security contributions and payroll taxes, firm in Italy are regularly expected to regularly contribute to the financing of an 'end of service' allowance (known as *Trattamento di Fine Rapporto or TFR*). The nature of this allowance is contested – some view it as a worker's credit to the firm cashable at the end of the person's career in the firm, others consider it as an implicit tax. In purely accounting terms, social security contributions paid by firms (including TFR) and other taxes paid by firms make up some 26.2% of total labour costs. This combined share is relatively high despite having benefitted from the reduction enacted by the Governo Prodi in 2005. Taxes and social security contributions paid by the worker add another 14% to labour costs, the residual share accruing to net wages (60%).

Figure 1. The composition of labour cost in Italy, 2006*



Note: The white area corresponds to the gross wage, the patterned areas to the shares paid by the worker (unshaded) and by the firm (shaded). Social contributions paid by the firm include the TFR.
*Calculations refer to a worker with spouse and 2 dependent children and an industrial firm over 50 employees.
Source: own elaboration on CNEL 2008 (p.263)

1.2. Gender biases and their effects

'The devil is in the detail', so we cannot rule out instances of overt gender bias in tax rules in Italy in the fine print of tax and benefits regulations. However, we could not find trace of such biases in the literature, or clearly identify them by inspection of the main rules. As noted, the tax unit is the individual, and no rule or rate overtly discriminates on the basis of sex or family role.

Payment rules may be controversial from a gender perspective. Generally the option is given as to who the payee should be. The option of separate versus joint reporting is the most general example. One specific example is that of family benefits which can be paid directly to the spouse of the eligible worker upon request. Another example is that of tax credits for children: the amount and payment is split between parents, unless there is a specific request to attribute them to the highest paid earner. Feminist economists in the UK have successfully fought for child benefits to be paid directly to the 'main carer' on the grounds that this increases the carer's bargaining power over the way the money is actually spent and is thus more likely to go to the benefit of the child (Himmelweit 2000). Other feminists, however, object that such mandatory rule might also legitimize and thus 'freeze' the division of labour in the household. Not everybody, therefore, would concur that leaving the option opened creates a bias.

Biases mainly arise indirectly, i.e. from asymmetries in gendered patterns of employment and unemployment and may produce effects that go in favour or against desirable given labour market outcomes. We shall focus primarily on four types of effects for Italy, respectively differential tax avoidance or evasion, inactivity traps, unemployment traps and lower coverage under income protection schemes. Note that the direction of causation can go both ways: different employment patterns may produce unequal taxation (benefit) outcomes for men and women but, in turn, taxation may contribute to unequal employment (unemployment) outcomes.

1.3. Impact of taxation on gendered patterns of employment and unemployment

Prior to assessing the relevance of taxation for (gendered) employment patterns, some key features of female employment and unemployment in Italy are worth recalling, although all of them are fairly well known. Official Eurostat or national data around 2007 indicate that:

- Italy records the second lowest female participation rate in Europe in headcount terms as well as in full-time-equivalent units (respectively 46.6 and 41.6%).
- The North-South disparity is very important: 7.3 every 10 working age women are employment in the North against 3.1 in the South;
- The employment rate gap between the least and the best educated Italian women is almost five point above the EU15 average and more than 2 points above the EU27 average. Less than three every 10 women with low educational attainment work in Italy (29.6 in 2008) as opposed to nearly 4 in 10 in EU27 countries. The gap with other European countries is much lower for the best educated.
- The parenthood penalty - i.e. the difference in employment rates between women without children and with at least a child below 6 - is comparatively low, as it stands at 5.6 percentage points against 13.6 in EU27, but is significant nevertheless (EC 2008, p. 54). Differences with other countries would lessen if older children were considered.
- The female unemployment rate is broadly in line with the European average (7.9 and 7.8, respectively, in 2007) – although higher in Southern Italy (15%). However, young women are a much larger component of total female unemployment than elsewhere in Europe, the rate for 15 to 24 years old females being as high as 23.3% (in 2007).

One reason for such low employment rates is hidden or irregular employment motivated by tax evasion. The issue of tax evasion also raises the possibility that the effective tax burden differs for women and men on account of different compliance rates. There is scant literature affording a gender perspective on tax evasion, but the findings throw some light on the processes at work.

Tax compliance and hidden/irregular female employment

Tax avoidance and evasion are high and unevenly distributed in Italy for historical and anthropological reasons. As we are interested in the economic rather than the legal aspects, we shall use the term tax evasion with the understanding that it may sometime overlap with tax avoidance. Current and material reasons for tax evasion include uneven enforcement of relatively high rates across different employment segments, as well as the plight of fiscal drag. The notional tax burden in Italy ranks the country 6th from the top in Europe after Belgium, Hungary, Germany, France and Austria (OECD 2008b, Figure I.1): more of a middle than an extreme position. However, notional figures can be misleading, especially with respect to women, because the rate of compliance differs across employment segments. It is lower among the self-employed – where women are under-represented – and among low income earners, employees or self-employed, where women are over- represented[2]. This raises two intertwined possibilities, namely that women's and men's tax compliance rate may differ and that women may not be equally represented within irregular or hidden employment. Let's examine them in turn.

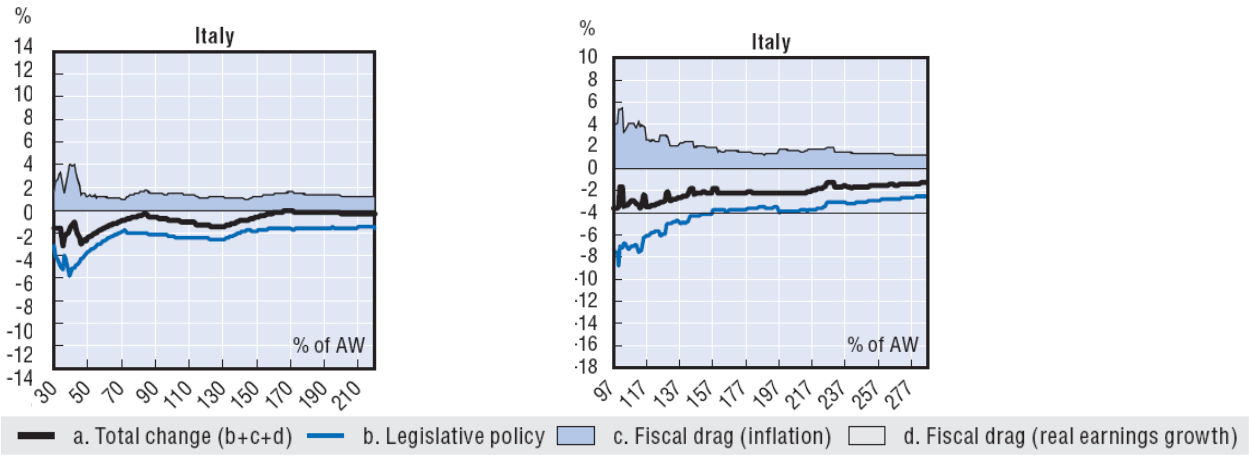
High political and administrative costs of effective monitoring are an important factor accounting for low tax compliance among self-employees and professionals. An additional factor that encourages tax evasion is the presence of fiscal drag. As it is well known, fiscal drag arises if the tax system is progressive and inflation is positive, since inflation tends to progressively shift lower and middle income recipients to the next bracket. As the Italian system envisages no

[2] The share of women among the self-employed was 28.9% in 2008 as opposed to 43.3 among employees.

form of compensation for the effects of inflation, fiscal drag is sizeable. More importantly, it bears a disproportionate impact on low income earners, giving them extra incentives to evade from taxes. Figure 2 below traces the evolution of the tax wedge since 2000, showing how the impact of legislation aiming to reduce tax pressure particularly at low levels of income was offset by the fiscal drag. Following the OECD source, the Tax Wedge (TW) denotes the difference between labour cost to the employer and after-tax pay received by the employee and is expressed in percentage of labour costs. It includes social security contributions paid by employees and the employers, payroll taxes paid by employers, and income taxes minus any family cash benefits.

Figure 2. The fiscal drag effect between 2000 and 2006 on the fiscal wedge.

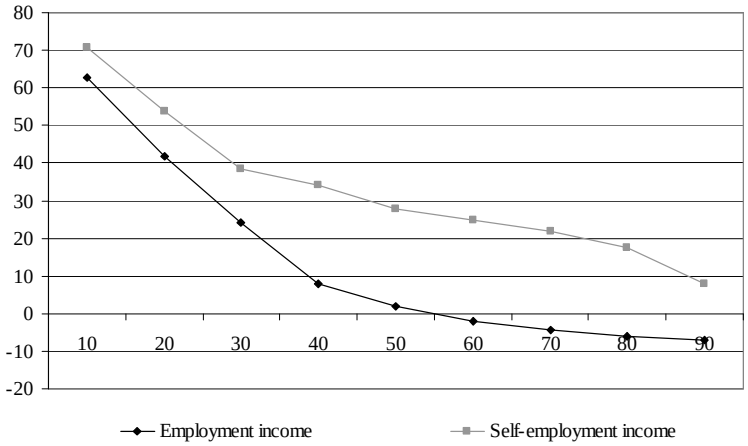
a) Single individuals b) Two-earner families



Source: OECD (2007b, Fig. S.4, p.33)

While disproportionate impact of the fiscal drag on low income earners adds cogency to the need to address the problem, it does not imply that, overall women are more likely to evade tax. Higher evasion at low income levels may, in fact, be compensated by under-representation among the self-employed. Indirect evidence in support of such compensating effect is provided by a recent study on tax evasions where rates of non compliance have been estimated by income deciles and types of employment. Tax evasion is highest in the first and second income deciles, thereafter showing a dramatic decline among employees and a much slower decline among the self-employed.

Figure 3. Tax evasion (in % of undeclared income) by deciles of personal income distribution and type of employment, Italy 2000.



Note: The simplest ways to account for the (slightly) negative rates attributed to wage employees at top income deciles is to view them primarily as a result of estimation algorithms and as an indicator of zero evasion.

Source: own elaboration on Fiorio and D'Amuri (2005: Tab.2, p.259)

Tax evasion at bottom income deciles is more likely to hide forms of irregular or hidden employment. Thus women could be overrepresented in the grey and the invisible labour market. Current evidence is consistent with this possibility but not conclusive. The Istituto per la Formazione Professionale (ISFOL 2007: Tab.1, p.2) recently estimated a 14.5% share of 'irregular' employment out of total female employment in 2001, 3.9 percentage points higher than the corresponding figure for men. However it remains unclear how much accounting for grey employment would add to the official figures for female employment, since the methodology of official labour force survey has been designed to also capture irregular employment, at least in part.

It is also uncertain how far higher irregular employment in the South can explain the North-South gap in female employment. Tax evasion and irregular employment are known to be higher in the South (Fiorio e D'Amuri 2005; ISFOL 2007: ibidem; ISFOL 2008: p.170). However we are aware of no robust estimate of the Norh-South differential in irregular female employment due to higher tax evasion. At the same time, there are reasons to believe that demand side factors are important. Inadequate demand may stem from lagging development in the South – Southern regions are much less developed than Northern or Central Regions according to a number of indicators - or an especially cohesive family that militates against 'externalization' of women's work (Bettio and Villa 1998; Solera and Bettio 2008). The importance of demand factors is also broadly consistent with the fact that the North-South gap in participation and employment rates is large also among men, though not as large as for women[3].

Inactivity traps and unemployment traps

The tax system often discourages female employment via its impact on so called secondary earners. 'Secondary earner' refers to a spouse whose decision to participate in the labour market or whose choice of hours of work are made conditional on the earnings of the other spouse, and the latter is expected to contribute the largest share of joint earnings. While not all women are secondary earners, women at risk of inactivity or on short working hours generally are.

The only instance of joint taxation in the current tax code is the special arrangement newly introduced for low revenue family firms *('contribuenti minimi'*). Since the provision has taken effect from the current year, data are not yet available to assess how many families are involved. Under this arrangement female and male 'assisting family members' are treated as 'invisible' tax payers, their bargaining power being weakened by the fact all the revenue from the family business is attributed to the family head, as in pre-modern tax regimes. The provision may encourage under-reporting, but it is unlikely to have any significant employment effect because assisting family members are unlikely to quit the business just on account of the tax regulations.

Barring this exception, Italian earners are individually taxed. Personal taxation systems are less at risk of secondary earners' biases, but in many European countries personal taxation is complemented by benefit systems where the reference unit is the households, which reintroduces forms of jointness by the back door. In particular, all benefits tested on the basis of family income generate this risk, be they family benefits, unemployment benefits or housing benefits. Italy is no exception.

Specific sources of potential disincentives for secondary earners in Italy are family benefits and housing benefits both of which are means tested and are phased out and eventually withdrawn with the rise in family income. Tax credit for the dependent spouse is another source of disincentive. Finally, own tax credits and tax credits for children are dependent solely upon one's earnings. However, they end up enhancing progressivity at the bottom of the earnings pyramid and may therefore add to discouraging effects against low earners.

Another source of distortion that the fiscal system may introduce to the detriment of secondary earners' is represented by costs that are incurred in order to be able to work. The main

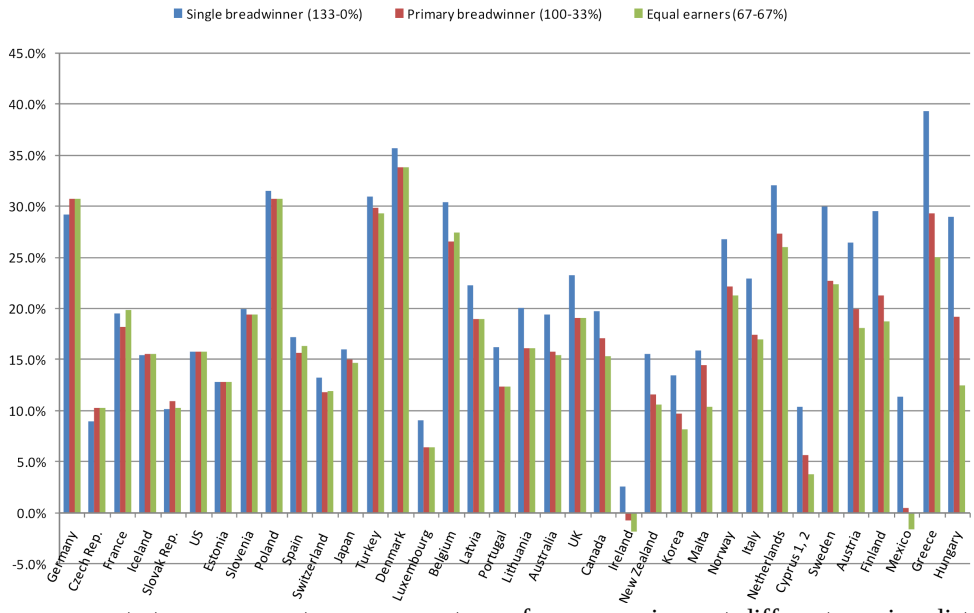
[3] The participation rate of Southern men was about 10 percentage points below that for men in Northern regions in 2007; the corresponding gap for women soared at almost 17 points (ISTAT figures).

cost item of interest here is child care costs. Own, unpaid, childcare is not taxed, while childcare services bought in the market or provided by the state at a cost are taxed. Childcare costs also distort the choice to work on pure gender grounds: as long as women are secondary earners it is 'her' decision to enter employment or to increase hours of work that is affected by child-care costs, not that of the man.

Below we combine data from the OECD tax and benefits model and from the 2008 report on childcare (Simonazzi 2008) to uncover possible biases against secondary earners' employment on account of personal taxation rules and childcare costs. We use three indicators, respectively differential taxation of one earner versus two earner families, the elasticity of after tax income and the participation tax. Data for the first two indicators are derived from OECD sources and take into account childcare benefits, not the costs. We were able to incorporate childcare costs only in the third indicator, which, however, is the most important indicator in the Italian context.

The first indicator we consider is the most general, as it tracks possible biases by comparing the tax treatment of one earner versus two earners families. On the assumption that women are secondary earners, their employment would be discouraged by preferential treatment of one earner families. This does not appear to be the case in Italy. For a dual earner couple with two children (aged 6 and 1) and joint gross earnings of €31099.39 per year in 2006, the average net payment to the government in percentage of gross earnings was roughly the same whether the earnings were split equally or one spouse earned one third of the other spouse's amount. By contrast, a single earner household with two children of the same age and with the same level of earnings would pay some five percent more to the government mainly because the single earner would have reached a higher income bracket (see Figure 4 below).

Figure 4. Incentives towards a more equal sharing of paid work



Note: Average payments to governments as a percentage of gross earnings, at different earning distributions of a couple with two children age 6 and 11 (if tax reliefs or cash transfers vary within this age range, the most generous provisions are taken, and the case of twins is explicitly disregarded) and with family income equal to 133% of average earnings, 2006.
Source: OECD Neutrality of tax/benefit systems (Chart 1).

The elasticity of after tax earnings – our second indicator – is used to gauge whether secondary earners already in employment are discouraged from increasing hours of work. This indicator measures the percentage addition to net earnings that follows a one percent increase in gross earnings, at given earnings level: the higher the elasticity the higher the 'pay in the pocket' increase. Table 1 below compares the values of this elasticity for Italy and the EU-15 average, different family typologies and different household income levels. In general, the Italian figures

are fairly close to the average European values across typologies and income levels. Also, the percentage of retained earnings is sufficiently high as not to discourage additional working time on the part of either spouses[4]. If we look more closely for secondary effect biases, we need to consider two earners households. For this typology the table hypotheses joint earnings between 133 and 167% of the average wage: in one case 'he' is supposed to contributes 100% while 'she' contributes 67%; in the other case 'her' contribution is 33% and 'his' is 100%. In both cases, however, the percentage of retained earnings is fairly high at between 72 and 77%. I anything, disincentives are marginal higher for a more unequal splitting, i.e. when she is likely to work part-time. However additional evidence discussed below does not disclose a consistent bias against secondary part-time workers.

Table 1 . Percentage increase in net income following a 1% increase in gross earnings (%), 2007

Family type	Single No child.	Single No child.	Single No child.	Married 2 children	Married 2 children	Married 2 children	Married no child.
Wage level (in % of gross average wage)	67	100	167	100-0	100-33*	100-67*	100-33*
Italy	0.80	0.86	0.79	0.68	072	0.77	0.80
EU-15	0.81	0.83	0.83	0.71	0.75	0.76	0.80

Note : * - two earner family
Source: elaboration on OECD(2007b, Table I.8, p.78)

As noted in our brief review of female employment, the problem for Italy lies in employment rates, and not so much less in short hours of work for women. The relevant indicator with respect to incentives to enter or re-enter employment is the so-called AETR (Average effective tax rate, AETR, or otherwise participation tax rate). The participation tax measures the proportion of earnings that are lost to the individual when s/he enters employment from unemployment or non activity. This loss is accounted for by taxes, (net) reductions in benefits and additional work related expenses like childcare. Because of difficulties in measurement, the participation tax is often computed before accounting for child care or other costs (see OECD 2008a). As we can avail ourselves of a reasonable estimate of childcare costs, we carry out our tax calculation both ways.

In the exercise tabulated below we estimate the participation tax for a two earner couple with two children and relatively poor earning potential. In the initial situation 'he' works whereas 'she' only works at home and does not cash unemployment benefits. Later on 'she' decides to enter employment. We compare four cases by combining the possibility that 'she' works part or full time and that 'her' entry into employment implies paying for child care or not. Full time work is assumed to bring her the same earnings as her husband's, which we fix at 67% of the average wage, while part-time work halves the earnings. We finally assume that, child care costs consists in the fee parents pay to a (subsidized) child care centre for 11 months per years and that they halve for part-time workers.

For wages, taxes and (fiscal) benefits we use the 2006 values from the OECD data basis, while the estimate of childcare fees is drawn from a nationwide survey in Italy and amounts to €288 per month for the same year (quoted in Simonazzi 2008). The results should be assessed bearing in mind that the gross average wage in 2006 was 23388 (OECD figure) per year and the poverty income line for the type of family in question was €18980 net per year (Istat figures).

Table 2. Participation tax rate for the secondary earner, Italy 2006

[4] In comparison, the sole earner of a couple in a two children family is more discouraged from adding hours of work, but the comparative disadvantage is modest and arises at low income levels, i.e. a whole family of four relies on one average salary, but This partly reflects higher losses in benefits as family income increases. Of course, this sole earner is more often a man than a woman.

Household type: couple with two children (one below 3 years of age)

Percentage of gross average wage for primary-secondary earner	Second spouse (secondary earner) Gross additional earnings (p.a.)	Additional earnings net of taxes and fiscal benefits	Additional earnings net of taxes, fiscal benefits and childcare costs (p.a)	Participation Tax in % of gross earnings	Family income net of taxes, benefits and child care costs
67%- 0%, no paid childcare	0	0	0	***0****	16873*
67%-67%; no paid childcare	15667	9102	-	***41.9****	25830*
67%-67%; paid childcare	15667	9102	5934	***62.1***	22662
67%-33%; no paid childcare	5222	3760	-	***28.0****	22430*
67%-33%; paid childcare	5222	3760	1584	***58.3***	20846

Notes: * calculated using the OECD tax-benefit model; note that there is a further degree of approximation in our estimates because the OECD figures refer to children aged 6 or more, unlike in our assumptions. However, differences in benefits based on the age of children are minimal and would not significantly change the results.

The wage level we have hypothesized is such that both members of the couple would need to work in order to avoid falling below the official poverty line (€ 18980 in 2006). However, in view of the fact that 14.5% of all the two-parents-with-two-children households fell below the poverty line in 2006 (up to 24.4% in the South: Istat 2007) the exercise is meaningful for a significant subgroup of the Italian population, and one where women are more at risk of being out of the labour market.

In the absence of childcare costs, the participation tax for full-timers is high (41.9%) but incentives to work remain significant (see also OECD 2008a). With the jump from 0 to 67% of the average wage, the secondary earner devolves some 13.6% points to personal income tax but loses some 8.4% of AW in net benefits, as the family level of income is now sufficiently high to sit very comfortably above the poverty line. However, if the costs of full-time child care is added up the participation tax jumps to 62.1%[5]. These findings confirm the indications from the literature that, at low earnings, child care costs severely reduce the incentive for secondary earners to enter the labour market if entering employment means having to pay for childcare.

Is part-time a better choice? In absence of child-care, part-time is favoured by taxation in that the participation tax falls from almost 42 to 28%. Also, a part-time work option affords almost the same net increase in family income as the full-time option in presence of child-care. If however, the fact of working part-time does not avoid having to pay for child care, then the participation tax jumps at 58%, and family income falls dangerously close to the poverty line.

In sum, for secondary earners facing low wage prospects the disincentive effect of the current tax system are overwhelming, but only in connection with child-care costs. As child care costs can be significantly high also in the presence of children older than 6 – because of failure to coordinate working schedules and school schedules, school holidays and workers' holidays and so on – bringing more women into employment at low level of earnings requires reducing rates, reforming benefits or ensuring that child care options exists and are cheaper than they are today.

Let us now consider unemployment in light of taxation. From women's perspective the fiscal treatment of unemployment is an issue not so much because existing provisions may trap them into persistent unemployment status – although this risk selectively exists - but because they receive rather limited 'protection' in the guise of money or of assistance to get back into employment. This follows from three well known facts about female employment. First,

[5] The cost and availability of childcare services have increasingly gained central stage in the Italian literature on female participation and fertility since the early nineties (Bettio and Villa 1993 and 1998, Del Boca 2002 and 2007, Oliva et al. 2009).

women's labour supply continues to grow, over-exposing them to the risk of lingering among first job seekers who are not covered by any benefit. Job seekers returning to the labour market are also more likely to be female and they too are not entitled to unemployment benefits. In contrast, women are under-represented in industry and construction as well as in larger firms. Hence those of them who have been forced to reduce working hours during a crisis or a slack are less likely to be eligible to CIG, which is rather generous provision. And those who have become unemployed following collective dismissal are less likely to be entitled to mobility benefits, which is also rather generous (CNEL 2003, Fig. 46; Trivellato 2009, Tab. 3.3).

Low coverage rates are, therefore, the most important reason why unemployment traps are less of a concern for women than is downright exclusion from any protection. The rate of coverage of all unemployment benefit schemes has been recently estimated at between 28 and 31% and is rather unlikely to be much higher among women for the reasons we just mentioned (Trivellato 2009). Note how the rules of the wage supplementation fund contribute to keeping the overall coverage rate low: the beneficiaries of wage supplementation retain employee status while on the scheme. When CIG finally expires they may resume work normally or be dismissed, but do not figure among the unemployed until this happens.

For the minority of women (and men) who are eligible to either ordinary benefits or mobility benefits how serious are unemployment traps? Recall that (i) in 2007 the replacement rate was 40% (or lower) for ordinary unemployment benefits, the scheme with the widest coverage, up to between 80 and 60 percent for mobility benefits; (ii) Starting from 2009 the replacement rate for ordinary unemployment benefits has been raised to 60% for a maximum length of eight months. OECD calculations, indicate, however, that even before this year's rise in the replacement rate beneficiaries were at high risk of unemployment traps in the initial months of unemployment. Table 3 below reports the average effective tax rate (AETR) for an unemployed person in his/her first month across different types of households. The AETR reported in the table is computed in the same way as the participation tax, with the following differences: the person transiting into employment is assumed to perceive unemployment benefits at the time of the transition but not to incur fresh childcare costs when entering employment. OECD finds consistently high AETR values – above 70 percent – making traps plausible. Having said that, these are potential values and we are aware of no research investigating the actual incidence as compared to the possible incidence of traps.

Table 3. Average Effective Tax Rates (AETR) for transitions from full-time unemployment to full-time employment for persons entitled to Social Assistance, Italy 2006

	Type of family	$AETR_{33\%}$	$AETR_{67\%}$	$AETR_{100\%}$
1	Single	59.2	71.8	73.0
2	single parent 2 children	59.2	63.2	76.1
3	one earner married couple, no children 1st spouse = inactive, 2nd spouse…	59.2	68.3	75.8
4	one earner married couple, 2 children 1st spouse = inactive, 2nd spouse…	59.2	61.5	73.7
5	married couple, no children 1st spouse = 67% AW, 2nd spouse…	60.8	73.5	73.0
6	married couple, 2 children 1st spouse = 67% AW, 2nd spouse…	64.2	71.0	76.1

Note: families with children are shaded in light grey.

Given high replacement rates over potentially long periods CIG beneficiaries also face the risk of important de facto unemployment traps, despite formally retaining employee status. In fact, the very retention of employee status may encourage expectations that work will eventually resume and discourage the search for alternatives. Also, it is widely recognized that CIG has often encouraged moonlighting among those male beneficiaries who could more easily find a secondary job in the grey labour market.

Overall, the current system of employment protection is inequitable as well as inefficient, Inequitable because it affords comparatively more protection to men and adult workers among whom the rate of unemployment is much lower; inefficient in that it allocates a disproportionate amount of resources to a small minority of the unemployed. In spite of continuous revisions, the system remains 'outdated' as it was clearly modelled on the one earner, male breadwinner family in a context of lifelong-job-with-the-same-employer. A fairly large consensus on the inefficiencies and inequities of the system – shared by the experts of the present network (Bettio and Mazzotta 1995; Villa 2005) - has not sufficed to ensure radical change.

2. Responsiveness of the labour supply to taxation

2.1. Responsiveness of the labour supply to taxation

The fiscal policies of the seventies and the eighties were inspired by a fair amount of consensus in academic and policy circles around 'demand side' views of female employment, emphasizing the risk that the latter could be 'demand constrained' because it was less 'productive' or because it was perceived as such (discriminated). This led to persistent attempts to subsidize firms that employed or hired women, via lower contributions or taxes.

Research on the supply side focussed on the study of labour supply elasticities and documented large differences between men and women (see below). Following the Chicago-Columbia school of home economics, this difference was seen to reflect a 'natural' division of labour in the household whereby husbands only choose between two alternative use of their time – leisure and paid work – while women choose among three– leisure, housework and paid work. With a higher opportunity cost of their time, women's decision to participate or to increase hours worked is bound to be more sensitive to monetary incentives. This raises women's labour supply elasticity compared to men. The implicit understanding in this line of reasoning is that, since gender differences in elasticity reflect a natural state of the world, one should document them in order to correctly estimate the impact of any taxation policy, but taxation should not be used to interfere with levels of employment. The Chicago-Columbia school shared with the demand side view the idea that, in earlier days, discrimination was a problem for female employment, but did not derive the implication that firms ought to be subsidized in order to combat its effect

Starting with the nineties, the importance of working schedules and of childcare became increasingly apparent. Partly because of the rising to dominance of a supply-side perspective, partly because of actually very rigid labour market and trade unions regulations in Italy, the consensus in policy circles and in academic circles – the former before the latter - gradually came to identify part-time as an important factor in the laggardness of female employment growth (Del Boca et al. 2000). In the late nineties, therefore, subsidies began to be given to firms that would enforce part-time contract, and provisions were repeatedly enforced to this effect between the late 90s and the early 00s. Part-time has grown considerably since the late 1990s, and Italy is now much closer to the European average (26.9 / 5% among female/male workers in 2007 against 36.7/8.3% for EU15 and 31.2/7.7% for EU27). However, we are aware of no attempt to actually verify whether the subsidies made a real difference. We would speculate that simple de-regulation may have been more effective than subsidies, if only because part-time has grown significantly in the very latest years despite the fact that subsidies have been discontinued, with growth occurring in the context of fast expansion of all 'atypical contracts'.

There has been considerable research on innovative working schedules other than part-time, including by the members of this network (Bettio et al. 1998; Villa 1997). Visionary research about women's friendly re-organization of the city's clock - such as coordination of shop's and school hours with working hours in order to ease reconciliation - deserves special mention (references in the working time report). However changing the organization of working

time is more difficult than de-regulating the labour market or finding in the folds of the budget some money to subsidize firms. In fact, this type of research has not been readily translated into policy, although it has occasionally featured high in the policy debate of the early 1990s[6].

Responsiveness of female employment to child-care costs and availability, taxes and benefits are central to the current debate. The costs and availability of childcare services have gained central stage in the Italian literature on female participation and fertility starting from the early nineties (Bettio and Villa 1993 and 1998, Del Boca 2002 and Del Boca&Vuri 2007; Oliva et al. 2009), and a comprehensive discussion is found in Simonazzi (2008). As to the employment impact of taxation, available research offers a number of simulation results for future reform options rather than systematic assessment of the impact of current regulations.

Reform options will be discussed in the next section. Prior to this it is important to ask how far money can really go (via taxation) in changing the behaviour of men and women vis-a-vis work. The answer hinges crucially on the magnitudes of labour supply elasticities.

Box 1: Labour supply elasticities

The most important labour supply elasticities are **own wage elasticity** or elasticity toot court, **cross elasticity** and **participation elasticity**. Own wage elasticity is the percentage variation in working hours in response to a (small) percentage variation in the net wage rate. For married women living with their spouse, the cross elasticity is the percentage variation in 'her' working hours in response to a (small) percentage change in 'his' net wage rate. Finally, the participation elasticity measures the variation in the probability to enter employment in response to a small percentage variation in the his/hers wage rate.

Positive values of the elasticity indicate that, if the wage rises, s/he will respond by increasing the labour supply while the response will be a decrease if the sign of the elasticity is negative. Values close to ±1 indicate that, say, for a 2 percent increase in the wage, hours of work or the probability to participate will also increase (decrease) by 2 percent. Values lower than 1 indicate that the labour supply response is weaker than the change in the wage that caused it, and conversely for values above 1. Finally, values close to zero indicate that the labour supply does not respond to changes in net wages, hence in taxes or benefits.

2.2. Research on labour supply elasticities

The ever growing dependence of macroeconomic fiscal balance on the number of people in employment, combined with the very poor of female employment in the country is reviving interest in the nexus between taxation and personal tax policy. With the ultimate employment impact of any tax reform hinging critical on the value of labour supply elasticities, this revival of interest means that a few recent and detailed estimates of wage elasticities have become available and allowing for comparison with earlier results.

Studies on labour supply elasiticies capable of yielding detailed and reliable estimates and few and far between. Those available indicate that differences in elasticites are large and important not only by sex and type of elasticity but also by income decile, region or age:

Participation elasticities tend to be are higher than own wage elasticities for women. The implication is that fiscal policy is more likely to influence women's decision to entry employment than their decision to vary hours of work.

Own wage elasticities for men and women differ considerably across income deciles, but the values for men tend to be low across the entire income distribution with the exception of the first two income decile. Fiscal policy is, therefore expected to be most effective at lowest wage level, i.e. where the female labour supply is thin

Own wage elasticities for single women are much lower than for married women, but only at low and middle deciles of the distribution of earnings. This indicates that education and high income considerably weaken the impact of marriage on the responsiveness of women's supply. It also indicates that fiscal policy is not likely to be particularly effective at high earnings levels

[6] More details on the debate on working time and related policies are in the 2009 report for Italy on this issue (Simonazzi 2009).

Own wage elasticities for married women are higher than for married men, but gender differences taper off at middle to high earnings deciles. This follows from the previous results and has the similar implications

Cross wage elasticities are rather low for both sexes, but they are negative and higher for women. This means that, for example, a generalized reduction of taxes would be slightly less effective in boosting female employment than a reduction targeted exclusively on women, because the impact of a parallel increase in 'her' and 'his' wages partly compensate one another.

There is some evidence of declining gender differences over time in own wage elasticity for (married) women. This clearly reflects increasing labour force attachment among them, but it also suggests that the fiscal leverage will gradually loose effectiveness as a tool to regulate female employment.

The crucial finding from all this body of research is that potential targets for employment boosting in Italy – southern women, married women and low educated women - are exactly those groups who exhibit the largest responsiveness to fiscal stimuli. While, however, there is consistent evidence that these group's responsiveness is sufficiently high in regard to the decision to enter or re-enter employment, the findings for the degree of responsiveness in terms of hours of work are slightly more mixed, although more established estimation approaches yielding rather low values.

Box 2: Detailed findings on labour supply elasticities

The paper by Colombino and Del Boca (1990) is one the very early studies of labour supply elasticity in Italy that distinguishes by sex (Table A.5, Appendix for details). The study uses a local survey of couples living in Turin in 1979 and finds that the labour supply of married women is elastic with respect to both her wage and his income, hence his earnings, while the supply of married men is found to be inelastic to variations in both his wage and her income[1]. Moreover, for married women the elasticity of participation is found to be higher than the elasticity of hours of work (0.64 and 0.54 respectively).

Later research used national representative data. Two studies by Aaberge et al. (1999 and 2002) are cases in point. Data for the first study refer to 1987 and are drawn from the annual household survey carried out by the Bank of Italy (Survey of Households on Income and Wealth: SHIW). The second study uses this same survey for year 1993. The estimated elasticities are also reported in Table A.5 of the Appendix. If we compare the earlier study by Colombino and Del Boca with these later studies we find that married women's wage elasticities declined considerably since the seventies, while there is no clearly declining trend for participation elasticities, although a few percentage points reduction seems to have set in by the early nineties. The twin studies by Aaberge et al. also allow for gender comparisons to be made, and indicate considerable differences in participation elasticities but not wage elasticities between men and women (respectively xxx versus xxx and xxx versus in 1993). In particular, the average male values are consistently below 0.1 often close to zero.

One additional, key finding from the these studies is the marked and progressive decline of elasticities when income rises. This tendency is especially striking for married women who retain values above 0.5 for the wage elasticity only up to the second decile in the distribution of earnings , and up to the eight decile for participation elasticities. Note how this finding questions the efficacy of flattening the tax schedule in order to encourage labour supply increases, since higher income earners among women would hardly respond to flatter taxes. Finally, cross elasticities are found to be generally negative for married women – unlike for married men – indicating that 'she' will reduce her working hours or her willingness to enter employment if 'his' earnings (income) goes up. However, the estimated values are generally very low ranging between -0.04 and -0.15 around 1993.

Contemporary research by (Pacifico 2009), uses a different methodology to that of the authors just surveyed but the same data source, bringing the estimates forward to 2002. With all the caution warranted by problems of comparability, the results only partially generally confirm the previous findings by Aaberge et al. with regard to gender differences, as they yield much higher values for women's wage elasticities and only a slight decrease as income rises. The estimated value of the wage elasticity is close to 1 for women (0.87) and very low but still above zero for men (0.15: see Table 7 ibidem for the detailed estimates). The study also provides evidence that elasticities tend to be higher in Southern Italy among middle to low educated partners and among childless, married couples (see Table A.2 in the Appendix).

3. Reforms of the national taxation system over the last 10/15 years

3.1. Recent developments in the national tax system

As we shall show in this section, the above evidence on the actual responsiveness of the female supply inspires some of the proposals to reform the taxes and benefits system in Italy that are currently debated. With a few exceptions, however, there is little sign that awareness of the desirability of higher female employment or knowledge of the degree to which it responds to monetary incentives was at the heart of the reforms implemented over the last decade.

In Italy, like elsewhere, taxation is a hot electoral issue, even more so on account of right and left wing governments rapidly alternating in government over the past decade. Despite heated debates, however, implemented reforms have been moderate. The main changes affected personal and corporate taxation, family and unemployment benefits and the fiscal treatment of overtime hours. Overall the system has became slightly more progressive (OECD 2007-2008: tables II.1b and II.3b) and the tax burden has become lighter for families with children (Table 4)

Table 4 . Evolution of the tax burden*, 2000-2008

	Single persons without children at 100% of average earnings		One-earner married couple with two children at 100% of average earnings		Two-earner married couple with two children, one at 100% of average earnings and the other at 67%	
	2000	2008	2000	2008	2000	2008
Italy	46.9	46.5	39.0	36.0	44.0	41.3
EU-15	43.3	42.4	33.4	32.3	38.0	36.7

Note: Tax burden is defined as 'Income tax plus employee and employer contributions less cash benefits as a % of labour costs'.
Source: OECD 2008b (Tables II.2a, II.5a, II.7a).

The personal tax schedule changed three times and not consistently in the same direction. Compared with the schedule in force in 2001, the current one features a lower distance between the top and the bottom rates. Overall the changes went in the direction of reducing progressivity, but lower progressivity on paper was compensated by other developments, including the fiscal drag see above).

Family benefits also evolved significantly. The major reform was implemented by government between 2006 and 2007: the overall amount of benefits increased, there was a smoothing out of the decline in benefits from one income bracket to the next decrease in order to lessen inactivity traps, and working tax credits were introduced (SSEF 2008). However, the amount of WTCs is still rather modest (Baldini and Leonardi 2008).

As repeatedly noted, moreover, ordinary unemployment benefits were made more generous as the duration was extended and the replacement rate raised from between 30 to 40% of the previous wage to between 35 and 60% in the first two months (see Table A.1).

Finally a considerable reduction of payroll taxes and social contributions paid by employers and employees was implemented between 2006 and 2007 in an attempt to curb labour costs. Guerra and Giannini (2008) estimate a reduction of the tax burden equivalent to 6.3 percent of the gross wage between 2006 and 2007.

Two specific provisions with potentially opposite effects on female employment were implemented by the two latest governments. First is the (re)introduction in 2007 of a rebate in taxes paid by firms per every woman newly hired on a standard contract in Southern regions, a provision that was advocated by the then Ministry for Equal opportunities. Second is the de-taxing of overtime hours implemented in 2008. If successfully implemented, this latter provision will primarily increase earnings among men, for the well known reason that women do much less overtime.

3.2. The employment impact of reforms

The changes introduced in the 00s to taxes and benefits are not radical, but some could have made a difference. However, none of them have been intentionally and specifically monitored and most of them are too recent for independent research to have conclusively investigated the issue. For example, we looked for evidence on the actual impact of the rebate on newly signed contracts for women in the South, but found none. At the same time, simple inspections of aggregate employment and unemployment patterns can be misleading because of the negative trends that have set in with the current crisis. Take, for example the reduction of labour costs following the reduction in social contribution and payroll taxes introduced by the 2006 budget law. Not only did the fiscal drag offset part of this reduction (Guerra and Giannini 2008), but the recession soon came to obscure its impact on employment flows. De-taxation of overtime is another case in point. By the time the provision took effect in 2008, the recession had already taken a toll on employment and it would be surprising if it did not also curtail firm's demand for overtime. Finally, the unemployment benefit systems is less segmented now than it was a decade ago, and much less so than two decades ago. However, the overall coverage rate is still very low, women are still more likely not to be covered, and for those covered unemployment traps can be large.

While actual changes to the tax and benefits system have been less than radical in recent years, and while the incumbent crisis is forestalling their expected impact, scholars and commentators are seeking compensation in a debate over grand desirable reforms. The interesting feature of this debate is that it often places gendered employment patterns at the centre. We will concentrate on three main types of reform proposals concerning, respectively, the unit of taxation, cash benefits, and gender differentiated tax schedules.

The current government is considering changing the personal tax unit from the individual to the family via the so-called splitting quotient (*quoziente familiare*). Under the splitting system taxable household income is family income, but the latter is split among household members, each of which is given a different weight. The sum of the individual weights is called 'quoziente'. The system is enforced – in all or in part – in a few other European countries – France is an example – but has potential disadvantages for female employment if the taxation system is progressive. Since, by assumption, secondary earners add their wages and salaries to existing household income, they are taxed at a higher rate than that of the primary earner whenever the additional income implies a move to the next income bracket. Reducing the weight attached to secondary earners income via the quotient, eases the problem but does not solve it. The alleged appeal of the system is that it can yield so called horizontal fiscal equity between one earner and two earner families, since weights can applied to individual family members so as to compare families of different size or composition in terms of income 'equivalent ' for consumption purposes. E.g. a two-adults household needs less than twice the monetary income of a one-adult household to afford the same level of consumption thanks to economies of scale.

While the proposal has been around for sometime, it was officially included among future reforms in the National Reform Plan (NRP) presented to the Commission in 2008, allegedly in order to favour one earner households many of which face high risk of poverty. However, two recent simulations exercises indicate that (i) the reform would lead to substitution of women's work with men's work; (ii) it would primarily favour higher income families, especially those where the wife does not work; lower income families with children would apparently be better off under the current system (Cavalli and Fiorio 2006). While the findings about women fully conform to expectations, this 'side effect' was not even mentioned in the national NRP, despite the abysmal record of the country for women's employment (Villa and Smith 2008: 19). Also, the potential bias in favour of better off families puts a question mark on the actual equity gains that the reform could deliver.

In contrast, Alesina and Ichino (2007) put forward the idea of gender based taxation exactly for the purpose of encouraging female employment. Given lower participation and higher labour supply elasticities for women, the argument goes, the tax schedule should be

differentiated by sex, with lower rate(s) applied to women. Allegedly this would bring two primary advantages and several side advantages, while expected shortcomings are more uncertain. The first alleged advantage is that gender based taxation is more efficient since it complies with the principle of optimal taxation according to which individuals should be taxed in inverse proportion to their labour supply elasticity. The second advantage is that it would lead to a higher level of employment. Imagine rising men's tax rate(s) and lowering women's rate(s) so as to keep tax revenue constant; men would hardly react to the ensuing decrease in net wages since their elasticity is close to zero, while women would significantly increase their supply since their elasticity is much higher.

Alleged side advantages include change in working models and the countering of discrimination. By raising the opportunity cost of women's time, gender based taxation is believed to increase the bargaining power of the female partner within the couple, and therefore favour a redistribution of unpaid housework and care. Furthermore, lower tax rates are expected to lead to lower pre-tax wages for firms and higher post-tax wages for women. Firms would thus find it cheaper to both hire women and promote them to higher positions, which in turn would counter discrimination. Potential but rather uncertain disadvantages include a higher probability of divorce and the fact that, in the long run, a more entrenched position in the labour market could lower elasticities also for women.

The proposal is captivating for its vision and its simplicity. However it has been questioned on grounds of feasibility, efficiency and equity. Doubts about political feasibility are widespread as the proposal is deemed unpopular for various cultural and historical reasons. However, a poll conducted by the financial newspaper il Sole 24 only partly supports this conjecture as 41% of the interviewee favoured the proposal[7]. Objections are more frequently voiced on grounds of equity e.g. the fact that taxing women less implicitly institutes a male celibacy tax (a provision unhappily associated with fascism) or introduces an unjustified disparity between, say, a female single earner with children and a male single earner with children (Casarico and Profeta 2007; Baldini and Leonardi 2008). Finally it is contended that gender based taxation may not enhance fiscal efficiency while at the same time increasing employment (Boeri and Del Boca 2007). Labour supply elasticities are not constant for either sex, and differences among women may be as high or higher than differences between men and women. Recall, in fact, that estimates of participation and wage elasticities are low for married women on middle to high earnings, and are consistently low for single women. Such objections raise the question of whether alternative schemes that directly target low income earners could achieve the gains in efficiency that gender taxation is after, without creating inequities.

Some believe that reformation of existing benefits could do just that. Let us start from unemployment benefits. One clear proposal is to replace all existing provisions with only one scheme covering all job seekers and offering the same replacement rate (Boeri and Garibaldi 2009) Others go beyond this (Colombino 2006) and dress in new clothes the well known idea of a generalized income protection scheme. A modern version of a generalized income protection scheme, it is argued, could be delivered as a 'personal endowment' or as a negative income tax provision ensuring that no individual falls below a minimum income[8].

The idea of a personal endowment was first launched by demographers as a measure to encourage fertility by subsidizing the cost of raising children. However it may be viewed as a more general welfare provision, for example a monetary endowment that the person can access when reaching adulthood and enables him or her to finance education, periods of job search, or simply moving out of parent's home. Alternatively a negative income tax could be granted to individuals who are too poor to pay taxes (*incapienti*) and whose income falls below a minimum income threshold: the amount of the tax would be just enough to allow the individual to reach the

[7] See the results of the poll at:
http://www.ilsole24ore.com/fc?cmd=sondaggio&chId=30&sezId=8720&id_sondaggio=410&azione=risultati

[8] The idea of minimum guaranteed income (*reddito minimo garantito*) was widely discussed some years ago but not implemented (except in the Campania region and on experimental basis).

threshold. Provisions of these kinds are universal in nature and can be adapted to women's specific needs, but they are often blamed for creating serious employment disincentives. By exploiting his own detailed estimates of labour supply elasticities (see above) Colombino (2006) was able to simulate the effects of a generalized negative income tax scheme ensuring a level of income equivalent to at least two thirds of the official poverty line. The simulation revealed no significant disincentive effect.

If ruling out disincentives to work is important, then negative income tax schemes could be made more restrictive by conditioning the receipt of benefits on minimum hours worked. The Working Tax Credit (WTC) in the UK does exactly that, and a sufficiently large consensus is developing in Italy that WTC could be used to increase fiscal efficiency as well as encourage (female) employment (Boeri and Del Boca 2007; Baldini e Leonardi 2008). Current family benefits provisions are themselves forms of tax credit, but their disadvantage compared to the WTCs in UK or the US is that they are linked to family income and are not made conditional on working. Specifically, experts advocate replacing all family benefits with WTCs conditional on both partners being in work[9].

Despite the increasing popularity of WTC schemes in the Italian debate, other countries' experience invites a word of caution. Recent estimates of the employment impact of WTCs in the UK indicate that the scheme considerably boosted the employment rate of lone mothers but actually decreased that of married women, if slightly (Brewer et al. 2006). Lone mothers are still a minority in Italy, so careful assessment of existing WTCs schemes is warranted before concluding that they are the best option to foster women's labour market participation.

Summary

The first important 'gender employment effect' of the Italian taxation system stems from unevenly distributed tax evasion. Tax evasions occurs much more frequently among self-employees, and among professionals in particular. However, low pay wage employees often evade tax via irregular or hidden employment as a way to top up their earnings. Existing evidence indicates, in fact, that women are more likely to be part of hidden employment, which goes some way towards accounting for their low employment rate, especially in the South. Fiscal drag is partly to blame and must be addressed.

A different type of 'gender effects' stems from the combination of an individual, progressive taxation of personal income with benefits rules that refer back to household income. Women are potentially affected as secondary earners by the tax credit due for dependent spouses, by family allowances and housing benefits being made dependent on family income and by the design of other benefit schemes.

Using the OECD tax and benefits model, and cautioning for the fact that calculations disregard housing benefits, we ascertained that disincentive effects operate more at the extensive margin, i.e. with respect to the decision to enter employment, that at the intensive margin, namely with respect to the choice of increasing hours of work. At low income levels, moreover, the combined disincentive from progressive taxation and benefits withdrawal for a secondary earner in a couple with two children facing the choice of entering employment is high but perhaps not overwhelming. If, however, entry into employment implies having to pay for childcare, the size of the disincentive effect increases by about half. We could not find systematically lower or higher disincentives for secondary earners on part-time schedule compared to full-timers, but the issue requires further investigation. As child care costs are perhaps the single most important components of the 'disincentive package' for secondary earners, it is more efficient to first target this component at policy level.

[9] As repeatedly noted, WTCs have been introduced starting with 2007 (see above) but the magnitudes involved are still very modest to be making a difference.

The issue of who should be entitled to cash benefits for dependants is partly controversial. With specific reference to child benefits, payment to the 'main carer' has been advocated in the literature as a means to enhance the welfare of the ultimate beneficiary – the children. The Italian systems lets the couple decide who should receive the payment rather than mandating payment to the main carer. However, possible welfare increases for children afforded by payment to the 'main carer' should be weighed against the risk of freezing the division of labour in the household.
Unemployment benefit schemes afford low coverage rate, which may be even lower for women. Low coverage is, therefore, the most important reason why unemployment traps are less of a concern for Italian women than is downright exclusion from any protection. For the minority of women (and men) who are eligible to one of the existing unemployment benefit schemes, the risk of unemployment traps is high, particularly in the initial months. Overall, the current system of employment protection is widely recognized to be both inequitable and inefficient, but a fairly large consensus among experts or scholars as well as in some political quarters has not sufficed to ensure radical change. Whatever change has been implemented, it has nevertheless lessened inequities and enlarged coverage in the recent years.

It is no surprise that the segment of (female) employment that are found to be more at risk of facing disincentives to enter employment or work longer hours largely overlap with the more elastic segments of the labour supply. Recent empirical studies on labour supply elasticities confirm the well known fact that the female labour supply is much more responsive to changes than that of men to a change in (net) pay – hence to changes in taxation - although there is some evidence that elasticities for women are decreasing. Additional, important findings are that responsiveness decreases markedly as income rises, especially among women, and that it is higher with regard to the decision to enter employment than to increase hours of work. Taken together these findings imply that progressive taxation is efficient and that taxing women more than men could also be efficient but only at low levels of earnings. They also indicate that the responsiveness at low level of earnings level is sufficiently high for a policy of fiscal incentives on the supply side to bear at least some impact. It must be stressed, however, that measures such as elasticities are good indicators of potential impact, but may overestimate actual impact since money is not the only reason why people work.

Perhaps the most radical proposal for changing taxation in order to stimulate female employment is gender based taxation. However, the finding of very different elasticities for women on high and low earnings calls for caution, and the same holds for some of the inequities that gender based taxation is expected to create. An alternative and no less radical proposal currently under discussion envisages combining progressive taxation with a drastic redesign of the benefits systems , e.g. some kind of negative taxation for people falling below a minimum income threshold, or an individual 'endowment fund' to be handed over at some point in one's life-cycle.

In the meantime the government's action or proposals have gone in somewhat opposite direction. Overtime earnings have recently been de-taxed, raising expectations for an improvement of earnings among men and not women as soon as the economy picks up, and lowering incentives to hire women. More importantly, the government announced its willingness to discard the individual taxation system in favour of the splitting system. The latter is known not to favour the employment of secondary earners.

Radical debates may perversely compensate for the fact that the recent years have witnessed moderate change despite all electoral promises to overhaul the taxation system. A welcome feature of the present debate is that issues of female employment – and even other gender issues – feature at the centre. However, sound empirical evidence on probable outcomes of the different proposals is still scant. Also, more attention needs to be paid to labour demand.

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Table A.1 The tax-benefit system in Italy, 2007/2008

<table>
<tr><th></th><th>Description</th><th></th></tr>
<tr><td>Income Tax [Tax credits]</td><td>The tax is paid on an individual basis (spouses are taxed separately) and has a progressive nature.
The following tax schedule is applied to taxable income, TI:
<table>
<tr><th>Bracket (EUR)</th><th>Rate (%)</th></tr>
<tr><td>TI <=15 000</td><td>23</td></tr>
<tr><td>15 000< TI <=28 000</td><td>27</td></tr>
<tr><td>28 000< TI <=55 000</td><td>38</td></tr>
<tr><td>55 000< TI <=75 000</td><td>41</td></tr>
<tr><td>75 000< TI</td><td>43</td></tr>
</table></td><td>No change</td></tr>
<tr><td>Unemployment Benefits</td><td>Ordinary unemployment benefits currently stand at 60%of the average gross earnings received over the last three months, with a maximum benefit of EUR 886,31 per month, raised to EUR 1.065,26 (in 2009) for gross earnings exceeding EUR 1.917,48 per month. After sixth months of unemployment the level of benefit reduces to 50% during the 7th and 8th month, and (only for people aged 50 and over) to 40% in the remaining period up until 12 months.
CIG (both Ordinary and Special) stands at 80 % of the average gross earnings paid for non-worked hours, with a maximum level of benefit equal to that of unemployment benefits (886,31 / 1065,26). The maximum duration is 13 weeks, with possibility to extend it until 12 months (24 months in some territories).
Mobility benefits equal CIGs during the first 12 months, reduced by 20 % after one year, with a maximum level of benefit equal to that of unemployment benefits (886,31 / 1065,26). The duration of mobility benefits are linked to the age of recipient when he became unemployed. For those ≤39 y.o. it lasts 12 months in Center/North Italy and 24 month in the South. For those aged 40-50 y.o. it lasts correspondingly 24/36 months and for those over 50 y.o. – 35/48 month.</td><td>From 01.01.08 the duration of ordinary unemployment benefits have been increased: - to 8 months for those who are under 50 y.o. [before it was 6 months];
-12 months for those who are over 50.
The size of the benefit has also been increased up to: 60% during the first 6 months [before it was 40%]; - 50% for the next two months; - 40% for the remaining period.</td></tr>
<tr><td>Family Benefits - Working Family Tax credits</td><td>Family benefits are means tested and paid on the basis of the total household income (Assegni per il nucleo familiare) or the indicator of an economic situation (Maternity allowance and allowance for families with more than 3 children). Family benefits are single cash transfers paid to each family depending on the number of family members and inversely connected to the amount of joint taxable income, as shown in the Table below. The benefit is paid in case the sum of incomes that derive from dependent work, pension or other labour-related incomes does not exceed 70% of the total family income. The benefit is paid by employers on behalf of the National Social Security Institute (INPS) and the income brackets are yearly adjusted to the consumer price index. Part-time workers receive the entire amount of the benefit if they work at least 24 hours per week. Moreover, the benefit depends on the number of days worked and is computed on a six days per week basis. One days work per week would allow to receive only 1/6 of the full amount.
Family allowances for married couples without children (EUR per month*)
<table>
<tr><th rowspan="2">Household Taxable Income</th><th colspan="7">Number of family members</th></tr>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th></tr>
<tr><td>0 – 12.014,38</td><td>-</td><td>46.48</td><td>82.63</td><td>118.79</td><td>154.94</td><td>191.09</td><td>227.24</td></tr>
<tr><td>12.014,39 – 15.017,33</td><td>-</td><td>36.15</td><td>72.30</td><td>103.29</td><td>144.61</td><td>185.92</td><td>216.91</td></tr>
<tr><td>15.017,34 – 18.020,26</td><td>-</td><td>25.82</td><td>56.81</td><td>87.80</td><td>129.11</td><td>180.76</td><td>206.58</td></tr>
</table></td><td>Budgetary law for 2007 has introduced a new tax credit system replacing the former system of tax allowances, as well as a new bracket structure for the family cash transfers.
The treatment of married couples and lone parents, both with at least one child, has been unified since 2007.
The employer in the South of Italy would receive a tax credit equivalent to EUR 333 per month for each employee during the three consequent years if he employs a young person on a permanent basis. The amount of tax credit increases to EUR 416 per month if it concerns a newly employed women.</td></tr>
</table>

18.020,27 – 21.022,03	-	10.33	41.32	72.30	113.62	170.43	196.25
21.022,04 – 24.024,37	-	-	25.82	56.81	103.29	165.27	185.92
24.024,38 – 27.027,89	-	-	10.33	41.32	87.80	154.94	175.60
27.027,90 – 30.030,24	-	-	-	25.82	61.97	139.44	160.10
30.030,25 – 33.032,01	-	-	-	10.33	36.15	123.95	144.61
33.032,02 – 36.033,76	-	-	-	-	10.33	108.46	134.28
36.033,77 – 39.036,70	-	-	-	-	-	51.65	118.79
39.036,71 – 42.039,65	-	-	-	-	-	-	51.65

Note: * the reference household income valid from the 1st of July 2008.

One form of maternity allowance is provided at national level and is addressed to mothers who have resigned their job during their pregnancy and have paid contributions for at least three months over the period between 18 and 9 months preceding birth. The size of the benefits amounts to EUR 1.902,90 in 2009. Mothers who receive this benefit are not eligible for others.

Maternity allowance provided by municipalities amounts to EUR 309,11 per month (2009) for the duration of 5 months, 1.545,55 in total, and is granted to mothers whose ISE lies below a certain threshold. Insured mothers receiving maternity benefits smaller than that amount are entitled to receive the difference. The threshold has been fixed by the law with reference to a three-member family: in this case mothers can receive the allowance if their ISE is below EUR 32.222,66 (in 2009). The threshold is modified according to the equivalence scale, related to the number of household members.

Budgetary law for 2007 has introduced a new tax credit system replacing the former system of tax allowances, as well as a new bracket structure for the family cash transfers. The treatment of married couples and lone parents, both with at least one child, has been unified since 2007.

The PAYE tax credit (TC) is defined as a function of taxable income:

Taxable Income, *TI* (EUR)	PAYE tax credit (EUR)
TI <=8 000	1 840
8 000< TI <=15 000	Max TC+502*(15 000-TI) / 7 000
15 000< TI <=55 000	Max TC*(55 000-TI) / 40 000
55 000< TI	0

The maximum value for the tax credit depends on the level of taxable income, although does not vary much. It stayed within 1338-1378 EUR:

The tax credits for family dependants*, which have replaced the former tax allowances, are as follows:

Family tax credits (EUR)		Amount (EUR)
Spouse		800 decreasing to 0 for net income over 80 000
Children	Under three years of age	900 decreasing to 0 for net income over 95 000
	Over three years of age	800 decreasing to 0 for net income over 95 000

	Other dependent relatives 750 decreasing to 0 for net income over 80 000 Note: * Tax credits are granted for family dependents earning less than EUR 2 840.51 The child and spouse tax credits are also calculated as a function of income. Families with more than 3 children receive an additional tax credit of EUR 200 per child. A lone parent receives an actual tax credit for the first child equal to the maximum of the spouse tax credit and the child tax credit. Tax credits for children have to be equally shared between the parents. If the spouse's tax liable net of the PAYE tax credit is less than his/her share (50 per cent) in the child tax credit, the entire child tax credit is provided to the principal earner.	
Social Assistance	There is no universal income support in Italy, except for a social benefit scheme (the so-called *assegno sociale* – "social allowance" – previously known as *pensione sociale* – "social pension") limited only to people aged over 65 without other sources of income. In 2007 this benefit (that is not taxable) amounts to EUR 389.36 per month for gross annual earnings not exceeding EUR 5,061.68 (in case of recipient not married) and EUR 10,123.36 (if related to the couple). At local level there can be some provision for people in need, but these are local initiatives in the absence of national guidelines. There is not a general minimum income scheme, apart from a recent trial (the so-called *reddito minimo di inserimento* -- RMI), initially tested in 1998 in very few municipalities, then extended in 2001 to a still limited area, and eventually terminated by the Parliament. In 2005 Regione Campania was the only region that launched a basic income scheme, although other Regions are working on the possibility to launch similar or more limited initiatives.	
Social security contributions	Social security contributions are compulsory and are paid both on the side f employee and employer. The average rate of *employee contributions* is 9.49% on earnings up to 40 083 EUR; 10.49% - over 40 083 and up to 87 187 EUR; for higher earnings the employee pays the amount given by (0.0949*40 83)+0.1049*(87 187-40 083); There is no distinction by marital status or sex. *Employer contributions* equal 32.08% on earnings up to 87 187 EUR. For higher earnings the amount is fixed at 0.3208*87 187	0.3 per cent increase in the social security contribution rate in 2007 Might be there already in oECD files please check 'INPS contributi sociali'
Housing benefits	Housing policies are addressed both to those who can afford to buy a house (tax allowances for the entire amount of taxes on the imputed income deriving from home ownership (until 2000, there was a limit of ITL 1.8 million [EUR 930]); 19 per cent-tax credit on mortgage loan interests up to certain amount for first-time buyers; there are considerable rebates on property transfer taxes for first-time buyers; low interest loans which are means-tested and regulated by local legislation for first-time buyers) and to those who can only afford to rent a house (means-tested tax credits). Among the rent assistance provisions, the main are: 1) Fiscal measures on rents; 2) Rent subsidies for low-income people (only part of the eligible people are actually covered); 3) Rent-limiting legislation, mainly regulated at local level; 4) Controlled rents for State-owned dwellings. Conditions for receipt: a) Tax credits are granted to people who rent a house and are means-tested. b) Rent subsidies for rented houses are granted whenever the household taxable income falls short of twice the amount of the statutory minimum pension (EUR 5,669.82 x 2 = 11,339.64 per year) and the rent exceeds 14 per cent of this income. These are minimal requirements which can be modified at local level. c) Limited rents - known as social rents - for people with low-income (below twice the amount of the statutory minimum pension), are set for some categories of State-owned dwellings. Family size and different household needs are considered as eligibility conditions	

	d) State-owned dwellings, specifically those belonging to Social Security State Agencies, are generally rented at prices below market value according to criteria which however are not explicitly related to social policy goals. The yearly housing tax credit is EUR 495.80 if the personal taxable income is less than EUR 15 493.71 per year. It amounts to EUR 247.90 if the personal taxable income ranges between EUR 15 493.71 and 30 987.41 per year. The maximum amount varies with the size of the city population, and is higher for bigger cities. Rent-limiting legislation is finalised to set a social rent, the amount of which is subject to regional provisions.	
In Work Benefits (employment conditional)	Family allowances and tax credits described above are one type of in-work benefits. Supplementary benefits (*integrazioni al minimo*) for low-income households are granted to recipients of old-age and survivors' pensions whenever their accrued benefits fall short of a statutory minimum, set equal to EUR 5.956,60 per year in 2009. Eligibility for supplementary benefits is subject to the requirement that the claimant's personal taxable income - if married then both partners' cumulated incomes - be below a given threshold. While the 1995 pension reform abolished supplementary benefits for new enrolees, no changes were introduced for all other cases. Since October 2007, pensioners of 64 years old, having an annual pension inferior to EUR 8,504.73, will have the following supplementary benefits if worked as employed: • a total of EUR 262.00 for pensioners with less than 15 years of contribution as employees; • a total of EUR 327.00 for pensioners with more than 15 and less than 25 years of contribution as employees; • a total of EUR 392.00 for pensioners with more than 25 years of contribution as employees; • a total of EUR 262.00 for pensioners with less than 18 years of contribution as self-employed; • a total of EUR 327.00 for pensioners with more than 18 and less than 28 years of contribution as self-employed; • a total of EUR 392.00 for pensioners with more than 28 years of contribution as self-employed.	The Italian government has signed, in July 2007, with the social partners (CGIL, CISL, UIL, UGL, Confindustria and many other organizations), two important agreements. The first one, regards the increase of the lower pensions to support approximately 3 million persons. The second agreement, concerns several measures, in particular, the "maintenance" of 1995 pensions' reform and the modification of the previous government law with regard to the sudden extension of the active life duration from 57 to 60 years. The agreement concluded foresees now the shift from 57 to 58 years at the 1st of January 2008, a gradual increase of the pensionable age until 2013 and adequacy of the coefficients of transformation within the contributory system.
Out-of-pocket childcare fees paid by parents	The rebates of out-of-pocket childcare fees paid by parents is not universally provided but eventually administered at municipal level. In some cases a means-tested voucher is paid by local administrations in order to cover such expenditures, under the condition of using it only in certified institutions. This holds for children 0-3 years old. In the pre-school years, childcare services are offered almost universally and are free of charge for the families. Child-care services are essentially nurseries for children below 3 years of age. They are provided according to rules set by regional laws and implemented at municipal level with different criteria. Those measures mainly consist of in-kind means-tested benefits. Generally speaking, the household income and composition are considered to rank eligibility and fees. Above 3 years of age, while not compulsory, the public system provides for an almost universal and free of charge coverage (except for food) through the State and municipal "maternal" schools.	

Note: In 2007 the AW earnings level in Italy was EUR 23 990
Source: OECD tax-benefit database.

Table A.2 Summary of Empirical Studies on labour supply elasticities in Italy

Authors (year)	Data Series	Sample: characteristics of sampled individuals			Representativeness of sample:			Own wage elasticity		Cross elasticity (for married)	
		Characteristics of the sample	Characteristics of earnings	Number of observations	National	Regional	Local	Women	Men	Female spouse	Male spouse
Colombino and Del Boca (1990)	1979 survey of 1000 households, designed by researchers from the Department of Economics of the university of Turin.	Households with working husband	*Wage:* net marginal wage for the ith tax bracket, measured in thousands of lira. It is computed as wki = wi(1 - tk), where the gross wage is obtained by dividing gross labour earnings by hi (hours worked). *Income:* virtual unearned income for the ith tax bracket. Actual unearned income includes total net non- labour income. For women it also includes net earnings of the partner or other household members.	832 couples	no	no	yes	Participation 0.65 Hours 0.54	-	Participation: -0.44 Hours: -0.22	-
Aaberge, Colombino and Strom* (1999)	1987 SHIW Survey on Household Income and Wealth, conducted by the Central Bank of Italy.	Married couples, age 20-68 y.o. Couples with income from self-employment exceeding 20% of gross household income, were excluded from the sample.	Labour net of social security contributions and taxes on personal income. Gross income obtained by applying the 'inverse' tax code. Hourly wage rates derived on the basis of gross annual wage income and observed hours.	2953 households	yes	no	no	*Participation* 0.654 I: 2.837 II: 0.742 III: 0.031 *Hours* 0.078 I: 0.467 II: 0.100 III: 0.004	*Participation* 0.046 I: 0.053 II: 0.051 III: -0.010 *Hours* 0.007 I: 0.021 II: 0.011 III: -0.030	*Participation* -0.357 I: -1.089 II: -0.356 III: -0.122 *Hours* -0.136 I: -1.410 II: -0.150 III: -0.060	*Participation* -0.081 I: - 0.109 II: -0.086 III: -0.013 *Hours* -0.035 I: -0.017 II: -0.045 III: -0.015

Table A.2 continued

Authors (year)	**Data Series**	**Sample: characteristics of sampled individuals**			**Representativeness of sample:**			**Own wage elasticity**		**Cross elasticity (for married)**	
		Characteristics of the sample	Characteristics of earnings	Number of observations	National	Regional	Local	Women	Men	Female spouse	Male Spouse
Aaberge, Colombino, Wennemo** (2002)	1993 SHIW Survey of Household Income and Wealth	Age 18-54	-	-	yes	no	no	*Single:* Participation 0.06 I: 0.71 II: 0.22 III: 0.03 IV: 0.00 V: 0.00 Hours 0.04 I: 1.81 II: 0.24 III: 0.03 IV: 0.02 V: 0.00 *Married:* Participation 0.51 I: 2.40 II: 1.35 III: 0.54 IV: 0.16 V: 0.10 Hours 0.15 I: 1.60 II: 0.83 III: 0.18 IV: 0.04 V: 0.04	*Single:* Participation 0.08 I: 0.52 II: 0.18 III: 0.03 IV: 0.05 V: 0.05 Hours 0.03 I: 0.28 II: 0.11 III: 0.02 IV:-0.02 V: -0.01 *Married:* Participation 0.02 I: 0.04 II: 0.05 III: 0.01 IV: 0.02 V: 0.02 Hours: 0.09 I: 0.28 II: 0.12 III: 0.08 IV: 0.06 V: 0.04	Participation -0.16 I: 0.26 II: -0.19 III: -0.18 IV: -0.16 V: -0.15 Hours: -0.04 I: 0.55 II: 0.05 III: -0.06 IV: -0.04 V: -0.02	Participation -0.01 I: -0.02 II: -0.02 III: -0.01 IV: -0.01 V: 0.00 Hours -0.01 I: 0.09 II: 0.02 III: -0.02 IV: -0.02 V: -0.02

Table A.2 continued

Authors (year)	**Data Series**	**Sample: characteristics of sampled individuals**			**Representativeness of sample:**			**Own wage elasticity**		**Cross elasticity (for married)**	
		Characteristics of the sample	Characteristics of earnings	Number of observations	National	Regional	Local	Women	Men	Female spouse	Male spouse
Pacifico*** (2009)	2002 SHIW Survey of Household Income and Wealth	21 thsnd. observations and 8 thsnd. households. Couples are excluded if any of the spouse has more than 60 y.o., self-employed, involved in a full time education or serving the Army, self-employed.	Gross hourly wages and Equivalent gross household income which corresponds to the gross household income divided by the square root of the number of members.	2002 couples	yes	no	no	*Married* 0.87 I: 1.10 II: 1.02 III: 1.00 IV: 1.00 V: 0.97 VI: 0.9 VII: 0.84 VIII: 0.67 IX: 0.66 X: 0.49	*Married* 0.15 I: 0.26 II: 0.19 III: 0.18 IV: 0.16 V: 0.16 VI: 0.13 VII: 0.13 VIII: 0.12 IX: 0.11 X: 0.02	-0.12 I: -0.19 II: -0.12 III: -0.04 IV: -0.06 V: -0.06 VI: -0.08 VII: -0.08 VIII: -0.11 IX: -0.15 X: -0.28	-0.01 I: 0.00 II: -0.01 III: 0.00 IV: 0.00 V: 0.00 VI: -0.01 VII: -0.01 VIII: -0.01 IX: -0.01 X: -0.01

Note: * for Aaberge et al. (1999) I – 10% poorest household; II – 80% in the middle of the distribution of disposable household income; III – 10% richest household.
**For Aaberge et al. (2002) I = first decile; II = second decile; III = third to eighth deciles; IV = ninth decile; V = tenth decile.
***For Pacifico (2009) I-X stand for deciles of gross equivalent income, which corresponds to the gross household income divided by the square root of the number of family members. In this study moreover discrete choice of work hours is used to model the labour supply behaviour.