

Dipartimento di Economia Politica  
Viale Berengario,51  
41100 Modena (Italia)  
e-mail: [addabbo@unimo.it](mailto:addabbo@unimo.it)

\*\*  
Università degli Studi di Bologna  
Dipartimento di Scienze Economiche  
Strada Maggiore,45  
40125 Bologna (Italia)  
e-mail: [mbaldini@spbo.unibo.it](mailto:mbaldini@spbo.unibo.it)

## Abstract

This paper shows how the extension of income to account for unpaid work could highlight the potential discouraging labour supply effect of welfare policies, with an application to a welfare policy currently in an experimental phase in Italy (minimum insertion income, MI). MI aims at combining the provision of a minimum income to very poor families with policies encouraging labour market participation by at least one of its members (by obliging them to follow training courses or to accept job offers). Women who are likely to be exposed to this discouraging effect have a low level of education and belong to poor households. This analysis also shows how low income households' welfare is sustained by women's high unpaid work load.

### **Public policy suggestions:**

When one extends income to include unpaid work it is possible to perceive how the effect of an active policy against social exclusion like MI can be appreciably reduced with respect to women and to a group of women who are more likely to be excluded (those living in the poorest households and having a low level of education). If this discouraging effect is to be avoided, care must be taken in the provision of MI to the weakest members within the family. The *choice* of exiting the labour market if poor and with a low level of education, when one has a child aged less than 3, may otherwise become irreversible. An extension of public service provision at low costs for low income families and more information about the long run effects of exiting from the labour market may reduce the discouraging effect.

This study deals with very low income families. However the problem of making a choice about labour market participation and the role of the welfare state in affecting it, is also a problem arising for medium income families whenever there are young children or elderly persons needing care in the family, and when at least one of the parents is a non-dependent worker, these families are more often likely to be excluded from public services or included at high tariffs.

*We would like to thank the research group on unpaid work and standard of living directed by Professor Antonella Picchio for useful comments on a previous version of this paper. The usual disclaimers apply. Financial support from CNEL is gratefully acknowledged.*

## 1. INTRODUCTION

The analysis carried out in this paper can be set alongside the literature which analyses the effect of public policy by gender, like the research conducted since the beginning of the 90's by the UK Women's Budget Group<sup>1</sup> or by Budlender, Sharp and Allen (1998) in South Africa and in Australia. Himmelweit (1998) discusses how the different employment conditions and working profiles over the life cycle of men and women can affect the impact of the same public policy by gender and states that ignoring these differences can sensibly reduce the efficacy of the policy itself. After acknowledging the economic relevance of unpaid work,<sup>2</sup> the effect of public policies on its distribution and size need to be evaluated.

'If the effect of budgetary policy is to move women's time from unpaid care economy to other sectors of the economy, the full ramifications have to be recognized, planned and budgeted for...This is not to argue that women's (or men's) labour time should not be transferred between sectors, but that the costs and benefits to society should be looked at overall' (Himmelweit, 1998, p.10).

The importance of acknowledging the gender impact of welfare policies is addressed in Addis (1999) who stresses the discouraging effect on women's labour supply of the Italian welfare state system.

This paper analyses the impact of a policy recently introduced in Italy and still in an experimental phase: minimum insertion income (thereafter MI). MI is aimed at very poor families and matches a cash transfer with policies aimed at encouraging labour market participation by at least one family member in working age. Section 2 deals with the characteristics of this policy and contains a simulation on how many households can benefit from it. Section 3 contains an evaluation on how, by extending income to include unpaid work, family labour supply decisions can change. This evaluation regards a sample with couples in working age with or without children, from the 1995 Bank of Italy survey on households income and wealth (hereafter SHIW). The SHIW data set contains useful information on the household sociodemographic structure and on household income but does not report information on unpaid work. It is therefore necessary to use a matched data set obtained by matching SHIW records with unpaid work information estimated from the last available ISTAT time budget survey (ISTAT 1989).<sup>3</sup>

## 2. The Minimum Insertion Income

An experimental form of minimum insertion income (MI) has recently been introduced in Italy, and the aim of this work is to evaluate the effects that it could have on the propensity of the women currently out of the labour force to search actively for a job.

The receipt of the minimum income is indeed conditional on joining an insertion program with the objective of reintroducing the beneficiary in the labour market, through the acceptance of any job proposals, the attendance of training courses, the involvement in socially useful activities. Women belonging to households with incomes so low as to be eligible for MI, however, are generally characterised by low educational level, and the low wages that they could probably earn once in the labour market are very unlikely to compensate for the reduction in the component of extended income produced by their unpaid work.

---

<sup>1</sup> See Picchio (1999) analysis and survey on women budget studies and Himmelweit (1999) for a report on the UK Women's budget group activities.

<sup>2</sup> See Picchio (1996 and 1999).

<sup>3</sup> See Addabbo & Caiumi (1999) for details on the matching procedure.

In general, the introduction of MI seeks to remedy the lack, in Italy, of a last resort safety net that may guarantee a minimum standard of living to all needy households<sup>4</sup>. Many local authorities provide some forms of minimum income, but in a totally uncoordinated and discretionary way.

In a first and experimental phase of three years, starting in 1999, MI will be introduced only in 39 local areas (among them Naples, Catania, Genoa, Reggio Calabria), chosen according to a complex set of social and economic characteristics, and mainly concentrated in the southern part of Italy, the poorest one. The amount of minimum income for 2000 is set at 0.52 million Italian lire per month for a single person, while for other households the levels are calculated by applying an equivalence scale simply defined as the number of components raised to the power 0.65 (the elasticity of the scale)<sup>5</sup>. Thus, the household is the reference unit to evaluate the welfare of an individual. The transfer is set so as to cover the difference between minimum income itself and total disposable household income (including other forms of social assistance); earnings are counted in total household income only for 75% of their total amount, to attenuate the poverty trap, so that the scheme reproduces a negative income tax with a marginal tax rate of 0.75, covering a constant share of the poverty gap (the difference between the minimum income and household income). Any amount of financial assets, however small, is a sufficient condition for losing eligibility, a requirement perhaps imposed by the nature of the scheme, aimed at alleviating situations of particularly harsh poverty and social exclusion; as for real assets, only the ownership of the house where one lives is allowed, any other real asset causing the loss of the benefit.

This scheme has been devised, following the French example fairly closely, not only as a protection against poverty but also as an instrument to promote the reintroduction of the poor into active social life: its receipt is conditional on joining an insertion program, through acceptance of any job proposals, attendance at training courses, or involvement in socially useful activities by one of the household's member in working age. This participation condition does not apply to households with children younger than 3 or with seriously invalid persons. If this measure is extended to the whole population, some simulations on the SHIW sample have shown that it will cost about 4,000 billion lire per year. MI should represent, at the end of the experimental phase, the third step of a system of benefits aimed at contrasting situations of economic difficulty: if a person loses his job, he can receive a benefit from the wage supplementation fund (Cassa Integrazione Guadagni, CIG), equal to a substantial share of the previous wage, for not more than one year, then a mobility allowance giving a lower share of the wage, and finally, if he/she still fails to find a new job, the MI, a universal safety net open to all citizens, not only to the members of the labour force. Only MI will however be available for non-dependent workers, which in Italy represent a substantial share (nearly 30%) of the labour force, and for people who have never been employed.

For an analysis of the process which led to the experimental introduction of MI in Italy see Negri (1998) and Alti and Maino (1999), who discuss the problems emerging during the first stages of the experimentation in a small town in Northern Italy; too rigid formal requirements and the presence of irregular workers who may find the amount of MI too low to apply for are, according to the authors, the two most important reasons which explain the relatively limited number of applications so far received by local authorities.

The introduction of MI is an important part of a wider reform process of the Italian system of social assistance currently taking place, which is starting with a complete revision of the targeting system: from an uncoordinated and often irrational set of means-testing instruments,

---

<sup>4</sup> The minimum income should not be confused with the basic income (or citizen's wage): the latter is an unconditional and universal money transfer, destined to all citizens without any means test, while minimum income is reserved to those who can prove that they earn less than a threshold corresponding to a minimally decent standard of living. It is therefore a conditioned and selective transfer, even if it is universal in the sense that it is potentially available to all households, and does not depend on belonging to specific categories, occupational or of other type.

<sup>5</sup> Plus some corrections aimed at identifying particularly critical situations: the scale is increased by 0.2 points if the head is a single parent, by 0.2 points if both parents work and there are children younger than 18 in the household, and by 0.5 points for each seriously physically disabled member.

mostly based on taxable income, towards a single criterion to ascertain the economic conditions of those wishing to apply for cash transfers or benefits in kind. A new indicator of the economic condition of a household, called ISE, (*Indicatore della Situazione Economica*), has been recently introduced and consists in a linear combination of the values of incomes and assets of the family<sup>6</sup>. The adoption of a new targeting system is seen as a necessary precondition for the shift from a categorical to a universal welfare state, since only with a reliable and efficient test of means can a welfare system be based on universal schemes open to all individuals, satisfying only the conditions of citizenship and need. MI should actually represent the most significant move towards universalism in the pool of potential beneficiaries. The normative of ISE has been only partially adopted in the case of MI: the definition of the family is the same, as well as the equivalence scale, while the means test is different and more severe, since it excludes from the set of potential beneficiaries those owning assets other than the house of residence, a point to which we shall return.

Many obstacles can jeopardise the success of the new system, of which ISE and MI are the first steps (provided, of course, that the resources necessary to finance MI at the end of the experimental period are to be found); in particular, all the criticisms raised against means-testing apply here (Atkinson, 1996): the risk of placing a substantial share of households in a poverty trap, the problem of low take-up levels, the distortionary effects of the informal economy, the inefficiency of the public administration which should ascertain the actual economic conditions of the applicants and organise the insertion programs for MI recipients. This last problem seems to be the most relevant for Italy, especially in the case of the local authorities of the South, where most of the poor are concentrated. As for the disincentive effects, little can be said for this particular case, but the literature has so far concluded that disincentive effects from safety net schemes are certainly present, although of limited quantitative significance (Atkinson, Mogesen, 1993).

### 3. Extended standard of life and minimum insertion income

In this section we simulate, on the microdata of the Bank of Italy survey for 1995, the possible effects of MI on the division of labour within the couple, considering how extended household income changes when at least one member of the couple modifies their working condition if the household wants to satisfy the requisites for MI eligibility.

#### 3.1 Characteristics of households eligible to MI

The first table shows the distribution of two-partner households, whose male member is between 21 and 64 years old, with or without children, into three groups: the first includes those households who, according to their composition and their total income, would have had the right to receive MI in 1995; the second group includes those households with equivalent income greater than the MI threshold, but by less than 10% of its value, and therefore singles out those households who run the risk of falling into a situation of harsh poverty; all other households are in the third group. Tables 2 and 3 have the same content, but are respectively restricted to households with and without children.

According to our simulations, about 195,000 households would be eligible for MI (for the whole Italian population, the number would increase to around 500,000 households), and 324,000 other households would not present a significantly greater disposable equivalent income. If at least one of

---

<sup>6</sup> Briefly,  $ISE = Income + 0.2 \text{ Wealth}$ . See Baldini et al. (1999) For an analysis of the institutional characteristics and distributive implications of ISE.

the partners is employed, the probability of having a small income significantly falls, though if only the man works, about half a million households would still have incomes not much greater than the MI threshold. If both partners work, the probability of receiving MI actually reduces to zero.

**Tab. 1** Distribution of households by working condition of the partners and equivalent monetary income

	Husband employed, wife not employed	Both employed	Husband not employed, wife employed	Both not employed (pensioners or unemployed or other)	Total
RMI	1.49	0.06	0	6.30	2.05
+10%	5.63	0.94	3.94	2.89	3.42
More than 10%	92.87	98.99	96.06	90.80	94.53
Total	100	100	100	100	100
Number of households (in millions)	3.793	2.951	0.541	2.22	9.485

**Tab. 2** Households with children

	Husband employed, wife not employed	Both employed	Husband not employed, wife employed	Both not employed (pensioners or unemployed or other)	Total
RMI	1.64	0.08	0	6.83	2.12
+10%	5.96	1.04	4.71	3.15	3.76
More than 10%	92.40	98.9	95.29	90.02	94.12
Total	100	100	100	100	100
Number of households (in millions)	3.365	2.493	0.433	1.645	7.936

**Tab. 3** Households without children

	Husband employed, wife not employed	Both employed	Husband not employed, wife employed	Both not employed (pensioners or unemployed or other)	Total
RMI	0.29	0	0	4.59	1.63
+10%	2.89	0.45	0.45	2.05	1.65
More than 10%	96.82	99.55	99.55	93.36	96.73
Total	100	100	100	100	100
Number of households (in millions)	0.428	0.458	0.108	0.575	1.549

Tab. 4 confirms the great concentration of poor households in southern regions, in particular in the South-West (which includes, in our classification, also Sicily and Sardinia), while the number of households potentially involved in the MI scheme is very low in north-western regions. Considering also those households who are close to the threshold, about 145,000 households with both partners present would anyway have difficult economic situations<sup>7</sup>.

<sup>7</sup> The geographic disaggregation is similar to that proposed, on the basis of many socio-economic indicators, by Attanasio and Padoa-Schioppa (1991): South-east (Puglie, Abruzzo and Molise); South-west (Calabria, Basilicata,

**Tab. 4** Distribution of households by area of residence and equivalent monetary income

	North-west	North-east	Centre	South-west	South-east	Total
RMI	0.37	0.16	1.08	6.19	2.12	1.63
+10%	1.75	1.75	2.33	6.28	6.32	1.65
More than 10%	97.88	98.10	96.64	87.52	91.56	96.73
Total	100	100	100	100	100	100
Number of households (in millions)	2.117	1.878	1.878	2.372	1.239	9.485

Women in most difficult economic conditions have low levels of education (Tab.5), which are very likely to be accompanied by a low education level of their partners. The reduced endowment of human capital implicit in these low education records could represent a serious obstacle to the possibility of finding jobs with satisfactory wages.

**Tab. 5** Distribution of households by education level and equivalent monetary income

	0-5 years schooling	8 years schooling	13 years schooling	Degree	Total
RMI	2.72	2.80	0.97	0	2.05
+10%	4.85	4.15	1.51	1.54	3.42
More than 10%	92.43	93.05	97.52	98.46	94.53
Total	100	100	100	100	100
Number of households (in millions)	3.218	2.795	2.719	0.752	9.485

On the basis of Tab. 6, the probability of being in poverty decreases constantly with respect to the age of the wife; this could be due to the greater incidence of unemployment in the first stages of the life cycle, and to the lower level of protection granted, by the current structure of the welfare system, to households without pensioners.

**Tab. 6** Distribution of households by age of the wife and equivalent monetary income

	<=30	31-40	41-50	51-60	61-64	Total
RMI	4.15	2.87	1.12	1.01	0.96	2.05
+10%	4.96	3.71	3.83	1.93	1.05	3.42
More than 10%	90.89	93.42	95.05	97.05	97.98	94.53
Total	100	100	100	100	100	100
Number of households (in millions)	1.170	2.731	2.926	2.212	0.290	9.485

### 3.2 Unpaid work and Minimum insertion income

The average unpaid work of women who live in MI eligible households or in households whose equivalent income is not higher than 10% of the income level established to enjoy MI, totals 55 hours a week, 10 hours more than the unpaid work of women living in households whose income is higher than MI level by at least 10%.

This Section contains a simulation of the effects in terms of welfare changes of MI on different family types always amongst those who are eligible for MI.

### ***Households with children aged less than 3***

A first group of households who can enjoy MI is made up of households with children aged less than 3. These households are eligible for MI without being required to join training schemes or accept job offers. They can enjoy cash transfers and, if the wife did not work in the market before MI, extended income can increase without any change in unpaid work. However one can see how for the double-earner households closer to MI level (whose household income is not higher than 10%, the MI cutoff) and with children aged less than 3 women may be encouraged to leave the labour market. Given the lower level of education of these women, with respect to other women, and the higher discontinuity in their working profile (Addabbo, 1999 and Bettio-Villa, 1999) the probability that they will exit the labour market is particularly high. The introduction of MI, together with the low level of wages (that they can enjoy by working) and the improvement in extended welfare that the household can enjoy if the mother left the labour market work (and supplied more unpaid work), can therefore produce a discouraging labour supply effect for the mother. In fact, their exit in presence of young children is very likely to be definitive rather than temporary. Probably, even if they had a continuous work profile their wages and career prospects would not sensibly improve, and when re-entering the labour market they could not discount the years they spent outside the labour market. However, one should note that these women are more likely to exit from the labour market forever once they exit for childrearing reasons (Bettio and Villa, 1999) and therefore they are more subject to the risk of social exclusion. The literature on the fixed costs connected with working (Addabbo, 1996) shows how the costs linked with the presence of young children are higher when the individual is out of the labour market than when she is employed. The former should look for care services and the costs of searching will add to the money costs of the service itself. One can guess that the couples in this group of households will follow the following steps:

- Women will exit the labour market in order to enjoy MI without having to work in the labour market and by devoting more time to the care of their children in a particularly delicate phase of the family cycle (as is also shown by the data on unpaid work<sup>8</sup>)
- When their child is older than 3 they might not return to the labour market since the costs of market childcare could be too high, or because the labour market situation could discourage the labour supply by a potential worker whose weakness in the labour market has been augmented by her being out for three years.

In order to avoid the risk of social exclusion the following policies could be adopted:

- ✓ Increase childcare availability at low costs in order to reduce the problem of constraints connected to the high fixed costs which could discourage women from returning to paid employment. This can be done either directly (by increasing the availability of full-time public schools for children over 3) or by encouraging the provision of child care services by non-profit institutions and by arranging for low income families to use these services.
- ✓ Provide training programmes and help women to re-enter the labour market.

### ***Households without children younger than 3 and where the couple is not employed***

In most of the households who are MI-eligible, both partners are unemployed (Tab.1). If they received MI their extended income would increase because of the cash transfer they would receive. However, in order to enjoy MI at least one of the household's members in working age must join training courses or must be available to accept a job in case it is offered.

---

<sup>8</sup> Addabbo & Caiumi (1999).



In order to check whether any discouraging effect on the labour supply of one of the family members could arise, one can simulate the impact on households' welfare of the acceptance of a job (we assume a full-time job in the service sector) by each one of the formerly non-employed partners. In this case:

- ✓ Money income would increase because of the employed partner's earnings (which one can evaluate by multiplying the imputed wage obtained by estimating a human capital wage equation with labour demand variables, by 37 hours, the average number of working hours of people in this sample who are employed in the service sector)<sup>9</sup>. Where labour earnings are not enough to reach the MI cutoff the amount necessary to bring the family income to the MI level should be added to that income.
- ✓ The assumption is made that the non-employed partner will substitute the unpaid work of the employed partner by also providing the necessary childcare. The amount of money costs necessary to buy childcare services in the market is not deducted here from the household welfare.
- ✓ Extended income changes according to the unpaid work imputed by using the equations estimated in Addabbo and Caiumi (1999)<sup>10</sup> and by changing the characteristics of the partners.<sup>11</sup>

Tab.7 shows the changes in money and extended income in the case where the woman accepted the job proposal as white-collar in the Service Sector. As can be seen, in some cases the wife's earnings do not even reach the MI level, and in this case a cash transfer to the labour earnings had to be added in order to reach the MI level.

**Tab.7 – Changes in money income, unpaid work income and in extended income  
If the wife worked as white-collar in the Service sector for 37 hours a week**

Change in	Obs	Weight	Mean	Std. Dev.	Min	Max
Money income	57	39.0518	3517.184	3543.015	0	14989.36
Unpaid work inc.	57	39.0518	-4284.544	2562.035	-8850.318	6902.519
Extended income	57	39.0518	-767.3595	4462.466	-8850.316	13033.38

As Tab.7 shows, the increase of money income is on average 3,517,184, but the loss in welfare connected with the reduction in the wife's unpaid work reduction is 4,284,554, so the net loss for this type of household if the wife accepted the job proposal would be 767,359 Italian lire. This may discourage the wife from accepting the job offer.

This result is connected with the low hourly wage of women belonging to this group of households and also to the reduction in women's unpaid work.

These computations do not take account of the long run effects of women's decision to work, assuming either that there are only low returns of work experience on forward wages and on the working career of women with a relatively low level of education (as in the case of women belonging to this group of households) or a short-sighted behaviour that prevents them from evaluating the dynamic effects of their current choice.

If the husband entered the labour market while his wife continued to provide unpaid work, the household's welfare would increase on average by 14,118,690 — this because money income will on average increase more than in the case where the wife would have accepted the job proposal and given that the reduction in unpaid work income is not as accentuated as in the previous case. If

<sup>9</sup> See Appendix for wage equations.

<sup>10</sup> These equations are also reported in the Appendix.

<sup>11</sup> Only the values of the variables on each partner's characteristics will change, not the parameters of the model.

one compares the welfare losses and gains connected to the choice regarding labour market participation one can see how it would be more likely that the husband will become employed.

**Tab.8 – Changes in money income, unpaid work income and in extended income  
If the husband worked as white-collar in the Service sector for 37 hours a week**

Change in	Obs	Weight	Mean	Std. Dev.	Min	Max
Money income	57	39.0518	15552.32	22394.3	0	110425.7
Unpaid work inc	57	39.0518	-1433.633	2728.402	-11091.6	307.011
Extended income	57	39.0518	14118.69	19801.88	-421.8203	99837.24

If to these evaluations based on the computations of money and extended income one also adds the loss in self-esteem by the unemployed husband that has been found by researchers investigating the lower labour supply by the wives of unemployed men (Barrère et al., 1985), it is even more likely that the intensity of the husband's job search will be higher than the wife's propensity to supply her labour. On the one hand the employment choice made by the family on the basis of the increase in the household's welfare may lead the husband to become employed, and on the other hand the husband's job search may be encouraged by the public institution, given that the likely labour income will be further from the MI level and there will be no need for further cash transfers.

In this case one should adopt policies to increase women's human capital also to promote the economic independence of family members (an aim that is stated by the MI Decree Law itself).

### ***One-earner households without children younger than 3***

Turning to one-earner households who are MI eligible, if the wife accepted a job as white-collar in the Services Sector, one may observe:

- ✓ An increase in money income by 5,404,220 lire if one disregards the money costs connected to the care of the children in the households. However, unlike the case when both partners were not employed, in this household group one must compute a money cost for care of children below age 10, that we have imputed on the basis of 10,000 lire per hour for 37 hours a week if the family contains children from 3 to 5 years old, and on the basis of 10,000 Italian lire per hour for 20 hours a week if the family contains children from 6 to 10 years old. We are assuming the use of a market service to substitute women's care instead of the cost of a public service by assuming that children under 6 do not attend a state school and that the school for children over 6 is not full-time.<sup>12</sup> If one also considers these costs, the money income would decrease by 2,476,812 Italian lire (Tab.10)
- ✓ Unpaid work income evaluated at its opportunity cost will decrease by 6,075,152.
- ✓ The net decrease in extended income totals 670,932 Italian lire (if one excludes childcare additional costs, Tab.9) and 8,551,965 Italian lire (if one also considers the childcare money costs, Tab.10).

<sup>12</sup> There are obviously alternatives to a market service, like family or states schools. However the data set did not contain sufficient information to estimate the provision of childcare by other relatives, and as far as public childcare is concerned, it must be borne in mind that the choice of private baby-sitting is consistent with the fact that when the job offer arrives it may be difficult for the family to find a place for the child or to insert him/her in school. One should also add the costs connected with childcare search. Moreover, we have assumed that the hourly cost of childcare would not change with the number of children in the family.

From these computations one can deduce a high discouraging effect on women's participation in the labour market work in poor one-earner households, as a result of which women may either not engage in active job search or refuse a job offer.

**Tab.9 – Changes in money income, unpaid work income and in extended income  
If the wife worked as white-collar in the Service sector for 37 hours a week, one-earner households,  
not including additional child-care costs**

Change in	Obs	Weight	Mean	Std. Dev.	Min	Max
Money income	21	18.6066999	5404.22	4472.777	0	13965.08
Unpaid work inc	21	18.6066999	-6075.152	1799.864	-9650.775	-3317.772
Extended income	21	18.6066999	-670.9323	3500.853	-6410.039	4314.301

**Tab.10 – Changes in money income, unpaid work income and in extended income  
If the wife worked as white-collar in the Service sector for 37 hours a week, one-earner households  
by including additional child-care costs**

Change in	Obs	Weight	Mean	Std. Dev.	Min	Max
money income	21	18.6066999	-2476.812	11022.13	-19240	12562.71
unpaid work inc	21	18.6066999	-6075.152	1799.864	-9650.775	-3317.772
extended income	21	18.6066999	-8551.965	10868.13	-25650.04	4011.926
childcare costs	21	18.6066999	7881.032	8861.613	0	19240

## Conclusions

The aim of this paper is to show how, by considering extended income, households can change their labour market behaviour in the presence of public policies, with reference to a scheme (currently in an experimental phase in Italy) to sustain the money income of the poorest households.

The inclusion of unpaid work in household welfare highlights the potential discouraging effects on women's labour supply in very low income households (households that are potentially eligible for MI). By means of a computation based on the expected change in the household's extended income, this paper shows how low income households might prefer the wife not to accept a job offer or not to engage in job search. This can lead to a low *take-up* of MI or to continuing social exclusion of women belonging to the poorest households, who are already in a weak position as far as their labour market work is concerned.<sup>13</sup> Short-sighted behaviour (which may lead to neglecting the long run effects of the labour supply choice) together with low education levels (which can reduce the possibility of being in jobs with good career prospects) may cause women to exit from the labour market or not to accept MI if this involved accepting a job, and this can increase their economic dependence either on the State or on their partners, with very bad effects in cases of marriage breakdown.<sup>14</sup>

Moreover, the analysis of the loss in unpaid work connected with the acceptance by women of a job shows how at very low levels of household income women's unpaid work is particularly needed to sustain the household's standard of living.

<sup>13</sup> Apart from social exclusion, one should also consider (Robeyns,1998) the implications on the link between decisional power and personal income in the family (Ott,1995 and Robeyns,1990) and the loss of social connections and identity that might be entailed by exiting from the labour market (in this connection see Robeyns,1998).

<sup>14</sup> On the effect of work experience on the work profile and on forward wages see Addabbo (1996). See Joshi & Davies (1994) and Robeyns (1998) on the effects of a discontinuous work-profile in terms of the loss of potential wages and on the low rights in terms of retirement.

The knowledge of the effect on individuals' choices of family constraints should induce the public officers entrusted with application of MI to pay particular attention to the tensions and needs inside the households who entered in the MI experimental phase, and to increase the incentives to training of the weakest household members and to childcare provision.<sup>15</sup> More information on the long run effects of being out of the labour market should also be provided.<sup>16</sup>

The data on unpaid work reveal the high total work load of women and the unequal distribution of total work by gender inside the family. In households who manage not to fall into poverty by means of paid work by both partners, women have to pay in terms of a high total work load and of the difficulties of finding affordable substitutes in the market for their inputs of time or household production goods.

This analysis deals with a very low income group of households; however the problem of making choices with regard to labour market participation when there are young children or elderly members requiring care in the household is also present for women in households with higher incomes, and particularly with average income and with members who are not employee: these households are more likely to be excluded from public services or included by paying high tariffs. A subsequent extension of this work will consider how access to childcare and elderly public care services would be changed by using ISE and how the discouraging effect on women's labour supply can be reduced by changing the parameters of the ISE equivalence scale.

## References

Addabbo, T. (1996) L'offerta di lavoro un'analisi dinamica, Bologna, CLUEB.

Addabbo, T. (1999) 'Labour supply and employment probabilities in Italy a gender analysis in a regional perspective', *Economia & Lavoro*, XXXIII (3-4).

Addabbo, T. and Caiumi, A. (1999) 'Extended income and inequality by gender in Italy', Chapter 3 in Picchio A. (1999) (ed.) *Lavoro non pagato e condizioni di vita*, mimeo.

Addis, E. (1999) 'Gender in the Italian welfare state reforms', *South European Society and Politics*, (4) No 2, special issue on "Gender Inequalities in Southern Europe: Women, Work and Welfare in the 1990s".

Alti, T. e Maino, F. (1999), 'La sperimentazione del reddito minimo di inserimento in Italia: primi spunti per una valutazione', Relazione presentata al Convegno "Sicurezza sociale, mercato e -18 giugno 1999, mimeo.

Atkinson A. B. (1996) Incomes and the Welfare State, Cambridge, Cambridge University Press.

Atkinson A. B., Mogesen G. V. (eds.) (1993), Welfare and Work Incentives, Oxford, Clarendon Press.

---

<sup>15</sup> See Ward, Dale and Joshi (1996), and Robeyns (1998) on the effect of childcare services in encouraging women's paid work.

<sup>16</sup> See Robeyns (1998) for an analysis of the factors affecting the 'choice' between paid and unpaid work, and on the importance of analysing the effect on the introduction of basic income by different groups of women characterized by a different labour market work attachment and by a different level of potential labour income.

- Attanasio, O. P. and Padoa Schioppa, F. (1991) 'Regional Inequalities, migration and mismatch in Italy, 1960-1986', in Padoa Schioppa, F. (ed.), Mismatch and labour mobility, Cambridge, Cambridge University Press.
- Barrère-Maurisson, M., Battagliola, F. and Daune-Richard, A. (1985), 'The course of women's careers and family life' in Roberts, B., Finnegan, R. and Gallie, D. (eds.), New approaches to economic life, Manchester University Press, pp.431-58.
- Bettio, F. and Villa, P. (1999) 'To what extent does it pay to be better educated? Education and *South European Society and Politics*, (4) No 2, special issue on "Gender Inequalities in Southern Europe: Women, Work and Welfare in the 1990s".
- Budlender, D., Sharp, R. and Allen, K. (1998) How to do a gender-sensitive budget analysis: contemporary research and analysis, Australian Agency for international development, Canberra and the Commonwealth Secretariat, London.
- Joshi H and Davies H. (1994) 'The paid and unpaid roles of women: how should social security adapt?' in Baldwin S. and Falkingham J. (eds.) *Social Security and Social Change. New challenges to the Beveridge model* London, Harvester Wheatsheaf.
- Himmelweit, S. (1998) 'Care and the budgetary process', paper presented at 'Out of the Margin 2' Feminist approaches to economics, European session on Care, University of Amsterdam, 2-5 June 1998.
- Himmelweit, S. (1999) 'The UK women's budget group: trying to make macroeconomic policy more women friendly and gender aware', paper prepared for the: Pro-Poor, gender- and environment-sensitive budgets workshop participant form, UNICEF House, New York, 28-30 June 1999.
- Moffitt, R. (1992) 'Incentive Effects of the U.S. Welfare System: A Review', *Journal-of-Economic-Literature*; 30(1), March 1992, pages 1-61.
- Negri, N. (1998), 'Italia. Le intenzioni del reddito minimo garantito', *Assistenza Sociale* (1), pp.61-73.
- Ott, N. (1995) 'Fertility and the division of work in the family', in Kuiper, E. and Sap, J. (eds.), Out of the margin. Feminist perspectives on economics, Routledge, London.
- Paugam, S. (1998), 'Francia: gli effetti del reddito minimo di inserimento', *Assistenza Sociale* (1), pp.41-59).
- Picchio, A. (1996) 'The analytical and political visibility of the work of social reproduction' in UNDP Background papers Human Development Report 1995, New York.
- Picchio, A. (1999) 'Un approccio macroeconomico "esteso" alle condizioni di vita', in Picchio A. (ed.) *Lavoro non pagato e condizioni di vita*, research report, mimeo.
- Prometeia (1998) Rapporto di previsione, Bologna.

Robeyns, I. (1998) 'An emancipation fee or hush money? The advantages and disadvantages of a basic income for women's emancipation and well-being', paper presented at the VII conference on basic income, Amsterdam, Sep.10-12, 1998.

Ward, C.; Dale, A. and Joshi, H. (1996) "Combining employment with childcare: an escape from dependence?" *Journal of Social Policy*, 25,2:223-247.

## APPENDIX

### Unpaid work by gender, type of work and days of the week<sup>17</sup>

**Tab. A.1 – Equations on married women's housework in different days of the week**  
(OLS –Dep. Var.: logarithm of housework hours)

variables	week-days		saturdays		sunday	
	coeff	t-ratio	coeff	t-ratio	coeff	t-ratio
constant	1,017	5,581	1,200	7,739	1,072	7,564
North West	0,092	2,193				
South	0,053	1,408	0,053	1,423	0,079	1,917
wife's age	0,008	1,699			0,010	4,013
wife's education	-0,019	-2,703	-0,006	-0,984	-0,020	-3,266
wife not labour force	0,806	5,593	0,139	1,747		
wife part-time	0,283	4,053	0,068	0,964	-0,320	-1,636
wife self-employed	-0,195	-2,337	-0,200	-1,994		
wife managerial			-0,248	-1,503		
wife in Agriculture	0,670	4,24	0,237	2,030	0,190	2,573
wife in Service Sector	0,343	2,585	-0,197	-2,084		
husband's age	-0,004	-0,858	0,008	2,739		
husband's education	0,016	2,766	-0,006	-1,145		
husband not in labour force	-0,063	-1,183	-0,049	-0,737	0,062	1,144
husband part-time	0,082	1,422	0,127	3,267	0,147	2,036
husband managerial	-0,196	-1,582				
husband Service Sector	0,037	0,926				
children 0-2 years					0,083	1,283
children 15-17 years			0,051	1,070		
children 18-24 years			0,077	1,753		
children aged over 18			0,073	1,289		
employee with low educ.	0,114	1,233			-0,132	-2,076
number of minority age children	0,079	4,005	0,051	2,049	0,053	2,298
number of majority age children	0,063	2,94			0,044	1,597

### Wage Equations by gender

**Tab. B1 - Employment Probability (Heckman first step)**

Variables	Women			Men		
	Coeff.	Std. Error	t-ratio	Coeff.	Std. Error	t-ratio
<i>Constant</i>	-5.177	0.538	-9.621	-4.800	0.632	-7.599
<i>Household's income</i>	-0.001	0.002	-0.625	-0.014	0.002	-8.248
<i>age</i>	0.238	0.028	8.638	0.308	0.030	10.364
<i>Age squared</i>	-0.003	0.000	-9.095	-0.004	0.000	-11.927
<i>Education</i>	0.134	0.007	18.407	0.082	0.008	10.302
<i>n.children aged less than 3</i>	-0.343	0.088	-3.905	0.107	0.111	0.958
<i>n.children aged from 3 to 5</i>	-0.231	0.064	-3.602	0.019	0.080	0.234
<i>n.children 6-17</i>	-0.183	0.036	-5.136	-0.141	0.038	-3.681
<i>n.children 18-24</i>	-0.157	0.044	-3.550	0.088	0.045	1.951
<i>Regional unempl.rate</i>	-0.049	0.006	-8.735	-0.040	0.006	-6.601
<i>Chronic disease</i>	-0.270	0.087	-3.103	-0.119	0.084	-1.423
<i>Partner not employed</i>	0.156	0.106	1.465	-0.159	0.170	-0.934

<sup>17</sup> Here we report only the results of estimation of housework equations for married women. Equations on different types of unpaid work, by gender and by day of the week have been run by using Heckman's selection models in order to impute total unpaid work. The complete set of equations run to impute unpaid work for men and women in our sample are available on request, and can be found in Addabbo & Caiumi (1999).

**Tab. B.2 – Wage equations: second step, potential wage**

Variables	Women			Men		
	Coeff.	Std.Err.	t-ratio	Coeff.	Std.Err.	t-ratio
<i>Constant</i>	0.504	0.470	1.072	-0.237	0.302	-0.783
<i>Education level</i>	0.084	0.009	9.411	0.072	0.003	24.272
<i>Age</i>	0.030	0.019	1.556	0.089	0.014	6.249
<i>Age squared</i>	-0.000	0.000	-0.982	-0.001	0.000	-6.042
<i>Past work-experience</i>	0.064	0.019	3.373	0.078	0.011	6.824
<i>South East</i>	-0.103	0.057	-1.812	-0.152	0.026	-5.792
<i>South West</i>	-0.164	0.057	-2.855	-0.155	0.029	-5.287
<i>Centre</i>	-0.109	0.038	-2.880	-0.043	0.023	-1.848
<i>Heckman's lambda</i>	0.175	0.106	1.649	0.449	0.073	6.111
<i>Obs.</i>	1290			2455		
<i>R<sup>2</sup></i>	0.27			0.30		

**Tab. B.3 – Wage equations: (second Step Heckman's selection model)**

Variables	Women			Men		
	Coeff.	Std.Err.	t-ratio	Coeff.	Std.Err.	t-ratio
<i>Constant</i>	1.039	0.449	2.311	-0.324	0.332	-0.976
<i>education</i>	0.048	0.009	5.427	0.053	0.004	14.108
<i>age</i>	0.023	0.018	1.267	0.106	0.016	6.813
<i>Age squared</i>	-0.000	0.000	-0.513	-0.001	0.000	-6.395
<i>South</i>	-0.169	0.046	-3.702	-0.211	0.025	-8.555
<i>Centre</i>	-0.103	0.036	-2.863	-0.056	0.024	-2.318
<i>Manager</i>	0.119	0.071	1.681	0.246	0.038	6.446
<i>White collar or teacher.</i>	0.178	0.044	4.079	0.100	0.028	3.632
<i>Professional</i>	0.135	0.109	1.233	-0.076	0.056	-1.351
<i>Self-employed</i>	-0.182	0.051	-3.560	-0.187	0.029	-6.518
<i>Collab.</i>	0.317	0.330	0.960	-0.087	0.256	-0.338
<i>Employer</i>	-0.557	0.107	-5.202	-0.137	0.047	-2.907
<i>agriculture</i>	0.046	0.075	0.610	-0.098	0.043	-2.289
<i>Building</i>	-0.186	0.136	-1.369	-0.076	0.035	-2.188
<i>Trade</i>	-0.038	0.046	-0.822	-0.098	0.031	-3.157
<i>Transports and Communications</i>	0.122	0.129	0.947	0.096	0.043	2.229
<i>Credit and Insurance</i>	-0.041	0.065	-0.635	0.099	0.039	2.540
<i>Other Service Sectors</i>	0.014	0.054	0.261	0.015	0.056	0.264
<i>Public Service</i>	0.146	0.044	3.346	0.089	0.026	3.444
<i>Heckman's lambda</i>	0.082	0.100	0.823	0.588	0.080	7.357
<i>Obs.</i>	1290			2455		
<i>R<sup>2</sup></i>	0.34			0.37		