

# Gender gap in time on housework: the case of Italy

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## 1. Introduction

In most contemporary Western countries, family work is unequally shared between men and women. Since female education and employment increased over the past half-century, scholars expected a higher gender symmetry in family responsibilities (Bianchi and Milkie 2010). Changes in this direction, however, have been slow and uneven and gender specialization in market and non-market work is still considerable and slightly least pronounced only when both spouses are employed full time; even in these households, however, women generally do most of the housework and childcare (Hook 2010).

Among Western countries, Italy stands out because of the high level of gender inequalities, notwithstanding the notable progresses achieved by women in the field of education and increasing participation in the labour market (Menniti and Demurtas 2012).

The gender specialization of paid and unpaid work in Italy has been demonstrated in practically all national and comparative literature, mainly based on time use data. Mencarini and Tanturri (2004) analyzed the time allocation of Italian spouses in conjunction with the arrival of a new-born child and concluded that the market time of men increased following the birth of a child while their childcare time was almost unaffected. Bloemen et al. (2010) conclude that, while there is a persistent role specialization, education and place of residence make some differences: men married to more highly educated women spend more time with their children and those living in the North do more housework and childcare than in other part of Italy.

An important contribution to evaluate the role of contextual factors in shaping time allocation of men and women on family work can be found in Anxo et al. (2011). Their study considers countries that are very different in terms of welfare state regime, employment and paid working time systems, family policies, and social norms (France, Italy, Sweden, and the United States). The gender gap exists in all countries in this study at all stages of the life course, but it is much remarkable in Italy where women spend more hours in unpaid household activities than men at all stages of the life cycle.

Recently, an international comparative studies on time use clearly show that, while in quite all the examined countries gender gaps are reducing over time on weekdays and especially weekends, in Italy men always perform more paid work and women more housework and childcare (Neilson and Stanfors 2014).

The most recent wave of Time Use Survey carried out by the Italian Institute of Statistics (Istat) in 2008-09 for the first time collected information on the relative income produced by the each partners. Menniti et al. (2015), focusing on couples where the woman work and with at least one cohabiting child under 14 years of age, show that a reduction of the double burden for women is found in those couples where the woman's income is higher or equal than that of their partners.

In this paper we will focus on gender inequalities in housework in Italian heterosexual couples of any age. We will first give a brief excursus on the trends in housework in Italy over the years. Then, we will analyze data from the most recent Italian Time Use Survey and estimate which variables significantly affect the amount of time men and women allocate on management of the house.

## 2. Trends in housework in Italian households

Table 1 shows selected statistics summarizing the participation in and time spent doing housework by men and women who are partners in a couple. Statistics refers to a) the average time spent on housework; b) the proportion of men and women who are involved in housework activities. Housework includes time devoted to preparing meals, washing dishes and setting the table; cleaning and tidying the house; doing the laundry and ironing; house repair, maintenance, and management; pet care and gardening. The analysis covers a period of 20 years and is based on the first and the last Italian Time Use surveys carried out by Istat in 1988/9 and 2008/9.

Within a period of twenty years later the male participation in housework activities increased from 54 to 62%, while for women the level of participation is stable and close to 100%. As far as the duration of housework is concerned, we observe an increase of men involvement on domestic duties by 15 minutes a day between 2008 and 1988. It is amongst the retired men that we observe the greater collaboration in running the house as well as the more substantial increase in the male collaboration in domestic tasks in the 1988-2008 period.

The most relevant changes are observed for women. Italian working women devote much less time to housework than the not-employed women who allocate to it 5 hours and half a day. Through time, a dramatic decrease in the commitment of women on housework is observed (by one hour on average).

*Table 1 - Time spent on housework among Italian couples. 1988-1989, and 2008-2008. (Duration in hh:mm, % of participation in bracket)*

	Males		Females	
	1988/1989	2008/2009	1988/1989	2008/2009
<b>Occupational status:</b>				
Employed	0:40 (48)	0:45 (55)	4:09 (99)	3:19 (97)
Unemployed	1:09 (60)	1:42 (64)	6:22 (99)	5:42 (99)
Retired	1:45 (67)	2:02 (76)	6:13 (77)	5:29 (97)
<b>Age:</b>				
<34	0:34 (48)	0:40 (51)	4:51 (99)	3:48 (97)
35-59	0:49(50)	0:57 (58)	5:53 (88)	4:42 (99)
>=60	1:34 (65)	1:47 (71)	5:55 (98)	5:22 (98)
<b>Living arrangement:</b>				
Couples with children	0:52 (51)	1:05 (59)	5:45 (100)	4:50 (98)
Childless couples	1:16 (62)	1:30 (68)	5:14 (98)	3:39 (97)
<b>Total</b>	0:58 (54)	1:14 (62)	5:36 (99)	4:46 (98)

Source: our elaboration on Istat data

## 3. Theoretical approaches and research hypotheses

In time-use literature, scholars usually refer to two main approaches in order to explain inequalities among men and women in the housework at the micro-level: a gender neutral exchange perspective based on the image of purposive actions and on the economic principle of the utilitarianism/selfishness of the players involved in the household decisions; and a gendered oriented perspective, that assign a greater weight to social and cultural influences in shaping gender roles in the household (Aassve et al. 2014).

The first class of perspectives are usually lumped into a more comprehensive “relative resources” hypothesis, that considers the division of housekeeping work as the result of a bargaining process between the two partners. The main assumptions of this hypothesis are that: a) holding own personal resources grants the individual a certain degree of decision-making power (Blood and Wolfe 1960; Hiller 1984; Mannino and Deutsch 2007); b) most people consider housework so onerous and tedious that it has to be avoided. The underlying mechanism is that, the greater the resources held by one partner compared to the other, the higher is the “power exchange” and the easier it should be to bargain his/her way out of family work and to devote less time and responsibility to unpaid work (Knudsen and Wærness 2008).

The second perspective, that is the *gender ideology perspective*, posits an inverse relationship between traditional gender attitudes and a fair division of housework (Davis et al. 2007). Rooted in the socialization theory, this theoretical approach states that men and women learn gender roles in childhood, and they successively develop preferences and reproduce behaviors consistent with them. In the Italian case, the North-South geographical gradient effectively represents the distribution of social and cultural norms related to gender roles (EVS 2011), that is we expect less equity in the distribution of household activities within couples living in the South of Italy.

In this paper, we test both the relative resources and gender ideology hypotheses. In particular, our aim is to verify the following: a) in couples where women have an advantage compared to men in terms of education and economic resources the female burden is alleviated and the male involvement increases; b) among partners living in a context where the gender system is less traditional the gender gap in the housework labour narrows.

#### 4. Data and model

We use data collected by the Italian Time Use Survey 2008/2009 over a sample of 18,250 households and 44,606 individuals.

Time Use Surveys is an extremely detailed source of information on daily activities, providing a very detailed and unique tool to measure the time devoted to different tasks. Daily time diary surveys collect precious information on time spent in non-market activities. The data set contains a very rich corpus of information on individuals and households’ background and socio-economic situation. We selected married and unmarried couples where both partners filled the diary; the restricted sample includes 10,446 couples.

We model the time devoted by men and women to the housework separately. Regression models are not appropriate in this context since the amount of time devoted to housework is equal to zero for 36.3% of the men and 2.2% of the women. This excess weight of extreme values causes biases if the usual linear regression models are used (Verbeek 2012). Indeed, models accounting for the limited structure of the response variable must be involved. In literature, several zero-inflated models have been proposed: in particular, in this context the Tobit model is widely applied since it allows to easily accommodate the truncated nature of the response variable. The model supposes there is a latent variable that depends linearly on the explanatory variables just as in a linear model. The observed variable is defined to be equal to the latent variable whenever it is above zero and to be zero otherwise. However, one limitation of standard count models is that the zeros and the non-zeros (positives) are assumed to come from the same data-generating process.

We propose to model these data through *an Hurdle model* (Cameron and Trivedi 1998) that does not constraint these two above mentioned processes to be the same. The basic idea is that a Bernoulli probability governs the binary outcome of whether a count variate has a zero or positive realization. If the realization is positive, the hurdle is crossed, and the conditional distribution of the positives is governed by a truncated-at-zero count data model. Parameters have been estimated using the maximum likelihood approach with Newton-Raphson optimization algorithm.

## 5. Results

The main results from Hurdle model are reported in Table 2. The columns headed “Zero counts” show the parameter estimates for the zero outcomes: coefficients should be interpreted as the effect of the explanatory variables on the probability of participating to housework for women and men respectively (third and fifth columns). The columns headed “Non zero counts” show the parameter estimates of the censored regression model: coefficients should be interpreted as the effect of each variable on the amount of time devoted to housework. More specifically, the coefficients in the columns headed “Zero counts” show how the independent variables affect the female (male) likelihood to be involved in domestic chores, while the coefficients in the columns headed “Non-Zero counts” indicate how the regressors influence the intensity of participation of men and women.

Table 2 – Hurdle regression model on time (in minutes) for housework. Women and men

	WOMEN		MEN	
	Non-Zero counts	Zero counts	Non-Zero counts	Zero counts
Intercept	5.342 ***	2.055***	4.780 ***	0.376 ***
Educational gender gap: he>she (ref she=he)	-0.020 ***	-0.122	-0.033 ***	-0.009
Educational gender gap: she>he (ref she=he)	-0.006 *	0.309 .	0.007 ***	0.037
Income gender gap: partner income > income respondent (ref respondent> partner)	0.030 ***	0.565 **	0.107***	0.061
Income gender gap: respondent = partner (ref respondent>partner)	-0.001	0.326	0.035***	0.065
Territory: Center (ref;north)	0.019 ***	-0.232	-0.057 ***	-0.186 **
Territory: South (ref;north)	0.084 ***	0.133	-0.136 ***	-0.458 ***
Place of residence: cities with 50000 habitants and more (ref: cities less than 50,000)	-0.095 ***	-0.024	-0.198 ***	0.092 .

Significance level: \*\*\* = 0.000, \*\* = 0.001, \* = 0.01, . = 0.05.

*Controlling for age, education, occupation, household composition, week/weekend day*

The gender ideology hypothesis appears completely confirmed by our results: as expected, in fact, the territorial context influences the allocation of time for housework, with men living in the South of the country very much less active at home than those living in the North. Also, both women and men living in big cities devote less time to domestic work, while no significant differences is observe as far as level of participation is concerned.

Instead, the relative resources hypothesis is a bit challenged by our data, specifically as far as the role of education is concerned, although it is confirmed that when the women are endowed with a higher education than their partners they obtain more male collaboration at home compared to homogamous couples. More relevant, the bargaining power of those women with higher income than their partners is fully confirmed by our results.

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