

The gender division of household production in a lifecycle perspective. A comparison between Italy and Spain

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Abstract

Recently time use surveys spread, easing the growth of studies on gender division in household production. This literature shows as in most cases adult women, especially since the moment they are mothers, have a more active role compared to men in domestic production. This pattern is particularly marked in European Mediterranean countries, which show greater gender differentials in time devoted to household and family care.

In this paper, we identify and assign a monetary value to domestic productive activities in Time Use Survey (TUS), in order to make them comparable with standard measures of national accounts. Then, age and sex specific profiles of time consumption and time production are estimated for Italy and Spain. Our preliminary results indicate the existence of a strong gender division of household production in both countries, although if to a less extent in Spain for which men are more committed in housework and family care than in Italy.

1. Introduction

Although non-market production is less significant compared to the past, it has still an important role in contemporary societies and represents a fundamental component of intergenerational transfers within household members. However, unpaid domestic work, despite its social and economic relevance, is not included in Systems of National Accounts (SNA), which, as it is well known, are one of the most important tools for public policies. SNA considers as productive activities only those activities which fall within market transactions. As a consequence National Accounts and, hence, traditional measures of intergenerational transfers ignore household production. Thus, they underestimate the value of total production and in particular of that provided by women, who, even if with significant differences across countries, tend to invest more time in productive activities dedicated to household and family care.

The exclusion of household production from SNA has long been criticized because it underestimates the value of total production and, in particular, of that of women which have been traditionally committed in household and family care. A specific argument regards the perpetuation of gender inequalities, since “*if you are invisible in a nation’s economy, you are invisible in the distribution of benefits*” (e.g. Waring, 1999). The 1993 SNA revision has partly embraced those criticisms, suggesting the development of satellite accounts for household production. The idea has been reinforced by the United Nations *Fourth World Conference on Women’s* final recommendations toward national and international statistical organizations to develop time use surveys (TUS) as a tool to measure and evaluate unpaid domestic work. In recent years, thanks to the increasing availability of TUS, a number of scholars made important efforts in order to evaluate the extent of household production and to develop satellite accounts (e.g. Goldschmidt-Clermont, 1999; Ironmonger, 1996; Landfeld and McCulla, 2000; Abraham and Mackie, 2005; Krueger et al. 2009). So far, household satellite accounts have disregarded the age perspective. However, time dedicated to household and family care varies significantly during the life-course and, hence, age is a key dimension in the analysis of household production. Recently, a methodology has been introduced (Donehower and Mejia-Guevara, 2012) to further disaggregate measures of intergenerational reallocations by gender and to account for non market reallocations within the family.

This paper aims to evaluate the extent of the gender division of household production in two Mediterranean countries: Italy and Spain. First, we select and set of productive domestic activities in the Time Use Survey (TUS). Then, we assign a monetary value to these activities in order to make them comparable with standard SNA measures. Then, we estimate sex specific age profiles of production and consumption of domestic time produced and consumed. The difference between consumption and production by age provides a measure of the lifecycle deficit or surplus of time within the household. Comparing those measures by gender will help us to obtain a deeper insight into the extent of gender disparities in household production along the life-course.

2 Why estimating household satellite accounts for Italy and Spain?

In 2000, the Lisbon strategy sets the ambitious goal of achieving 70% employment rate for the overall population and 60% for women by 2010. Reaching this objective is a challenge especially for some European countries with traditionally low female employment rates, such as Italy and Spain (Eurostat, 2012). Only 50% of the Italian female active population participate in the labour market, while in Spain is slightly higher (54%).

Female low participation in the labour market is linked with the Spanish and Italian welfare system which is generally labelled as “familistic”. Although there is not a specific definition about the features of a “familistic” welfare model, generally it refers to the key role that the family plays in the overarching architecture of the welfare system. In such a welfare model, families act as the main provider of care and welfare for children and dependent individuals. In this context, there is a gender division of paid and unpaid labour, where women stay outside the labour market doing unpaid care and domestic work, while men are paid employed, following the traditional ‘male breadwinner model’. These countries would currently face a limited capacity to articulate transitions towards the “dual earner model” where both adult members of a family are in paid employment.

Although there is a general agreement on the continuity of the breadwinner model, a careful analysis of the differences between Mediterranean countries and deviation from this general path needs to be considered. In some respect Spanish welfare model seem to deviate from this common path as previously analysis show an increasing inclusion of women in the labour market during economic expansion between mid 90s until the current economic crisis.

On the other hand, the Italian female employment rate is largely behind the average of European 15 while men employment rate is very close to the average. This process which combines increasing level of women education and participation in paid employment leads some scholars to advance the hypothesis that Spain was departing from “southern” levels of women in paid employment to reach “northern” European standards. Data on labor force survey show that current economic crisis had much more devastating effects in Spain women participation in paid employment compared to Italy.

3. Data and methods

Sex specific age profiles of time production, consumption and transfers are based on micro data from the most recent Time Use Surveys (TUS) related to year 2008-2009 for Italy and 2009-2010 for Spain. TUS has a quite complex structure consisting into three files of data: a) individual file; 2) daily diary; 3) weekly diary¹. Individual file collects background information by means of interviews. It consists of one record for each person and reports socio-demographic information. Hence, this file contains as many records as the number of households’ members. The episode file consists of time data collected through the diary technique: respondents record their time use during the previous 24 hours using their own words. Time diaries are randomly distributed across the days of week to all households members aged form 3 years and over. Diaries provide extremely detailed information on the activities performed during the day, since they are based on a grid of 10 minutes intervals of time with a description of: 1) the main activity carried out by the respondent; 2) the eventual presence of a secondary or parallel activity; 3) the location; 4) the eventual presence of another person. As a result data consist of a sequence of episodes or events, each characterized by these four recording domains. In addition, individual and temporary identifier is provided. Individual identifier (“diary/person id”) enables to connect a particular respondent to a particular diary-day. It also allows connecting to background information contained in the individual file. While the temporal identifier indicates the starting and ending time of each episode in the diary and, hence, is necessary in order to calculate

¹ In order to developed our analysis we have used data from the individuals and the daily diary files.

episodes' duration. In addition to the daily diary, households' members aged from 15 years and over are required to fill a weekly diary with information related to their work time.

The first step to build age a profile of time consists in identifying, in our surveys, unpaid domestic and family care activities with an economic value, namely household production. For this purpose, we selected a set of activities that meet the third party criterion (Reid, 1934), i.e. people can potentially hire somebody else to perform the activities for them. More specifically, we referred to the follow activities: food management, household upkeep, making and care for textiles, gardening and pet care, construction and repairs, shopping and services, household management, childcare, help to an adult household member, informal help to other households and travel related to household care (e.g. travel related to shopping and services or childcare). Once selected household productive activities, monetary values are assigned to them, on the basis of the replacement method as average hourly wages provided by the Italian National Collective Agreement on the Regulation of Domestic Work (2007) and the Spanish Minimum Wage (2010)². Then, time production by age and sex can be directly estimated from survey data as the mean time dedicated to these activities by sex and age. While time production can be directly calculated from survey data, we do not have any information about time consumption, for which we need to make assumptions. We assume the overall time produced within the household to be equal to the overall time consumed, since no time saving is possible, and that time consumption varies with age but not with gender. Moreover, we distinguished between two kinds of activities: general and age-target activities. The former benefit all members of the household (e.g. cleaning, cooking etc.), while the latter benefit just particular age groups (e.g. childcare and elderly care). In order to generate age and sex specific profiles of time consumption, we adopted an approach used in literature to evaluate consumption of economic goods for individuals by age from aggregate household-level data (e.g. Mankiw and Weil 1989). The method is based on the following homogeneous linear model with coefficients varying by age but not with gender.

$$C_j = \beta(0) \cdot N_j(0) + \beta(1) \cdot N_j(1) + \dots + \beta(a) \cdot N_j(a) + \dots + \beta(90) \cdot N_j(90) \quad [1]$$

where:

C_j = total time for domestic activities produced/consumed by household j

$N_j(x)$ = Number of members aged x for household j

$\beta(x)$ = Estimate of time consumption by a person aged x

Coefficients can be interpreted as the demand or consumption of time for the respective age group. Coefficients for each single age group are smooth, using Friedman's smoother (Friedman, 1984).

The difference between consumption and production provides a measure of the deficit or surplus of time. Time surplus is completely transferred to deficit ages because all time produced must be consumed since it is impossible to accumulate time savings.

4. Some preliminary results

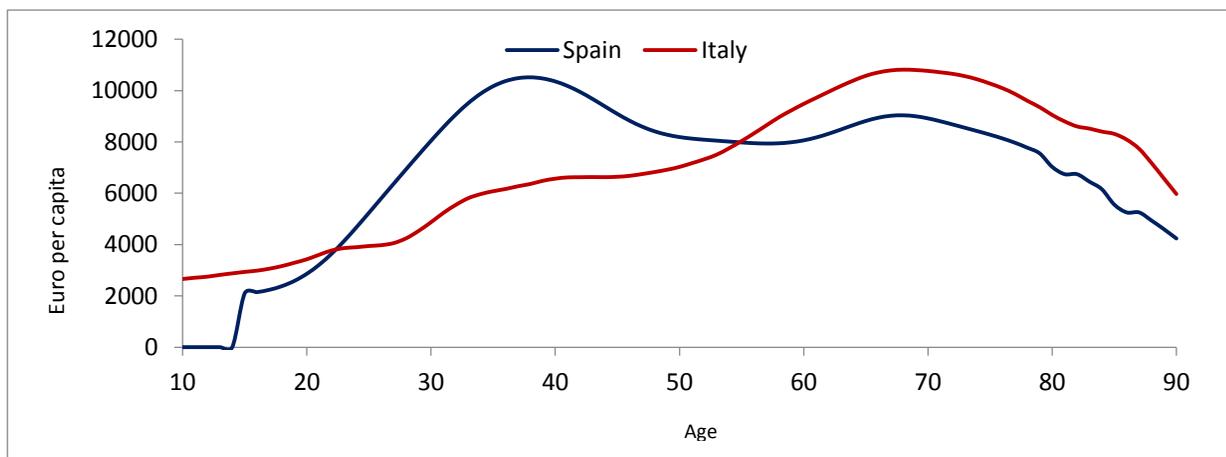
Figure 1 and 2 show estimates of monetized sex specific age profiles of household time production respectively for men and women³. Spanish and Italian men present significant differences both in the age patterns of time dedicated to domestic activities and care. In fact, the age profile of Italian men grows in a virtually monotonic way during the life course reaching its

² For the case of Spain and Italy, average hourly wages are approximately the same, ranging among 5 and 6 euro approximately.

³ Age profiles start at age 10, because the Spanish Time Use Survey reports information from this age.

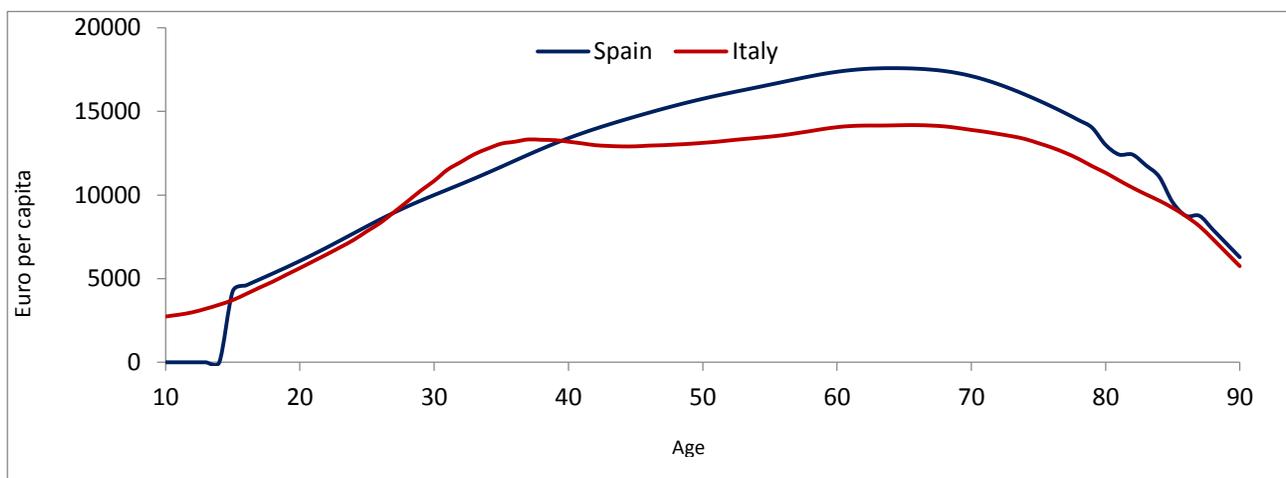
higher values at older ages. While, Spanish men household production increases more rapidly with age, has its peak between age 30 and 40 and, then, level off until around age 60 to show another less considerable peak at about age 70. Hence, Spanish men seem to contribute more to household production activities during ages in which, child bearing is more intense. Whereas, Italian men devote the most important amount of their domestic time during retirement: probably, at young-adult and central ages they concentrate their time mainly in market production and in the career achievements.

Figure 1 Men per capita age profile of household production



Source: Own elaborations on ISTAT (2008) and INE (2009)

Figure 2 Women per capita age profile of household production

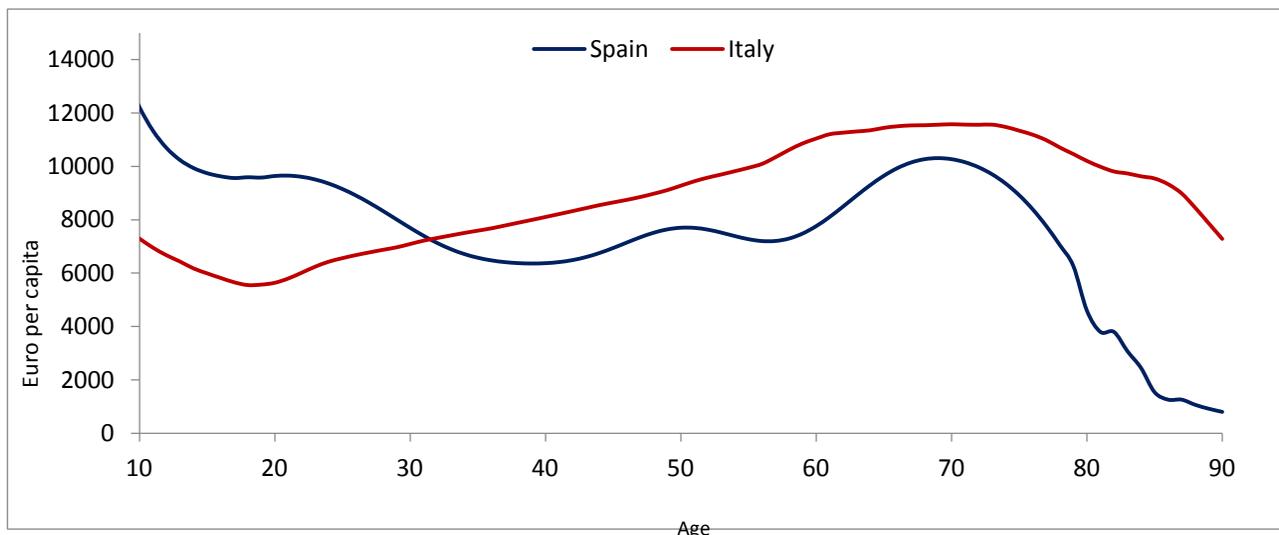


Source: Own elaborations on ISTAT (2008) and INE (2009)

Women age profiles of non-market production (figure 2) highlight the existence of very similar age pattern in both countries, but Spanish women dedicated highest amount of time compared to Italian. However, differences in those amounts may reflect similar pattern in monetary values adopted for both countries. It should be noted as production for Spanish women from about 30 to 40 years is slightly lower compared to Italian, perhaps as a consequence of higher participation of Spanish men in household activities in this phase of the life course.

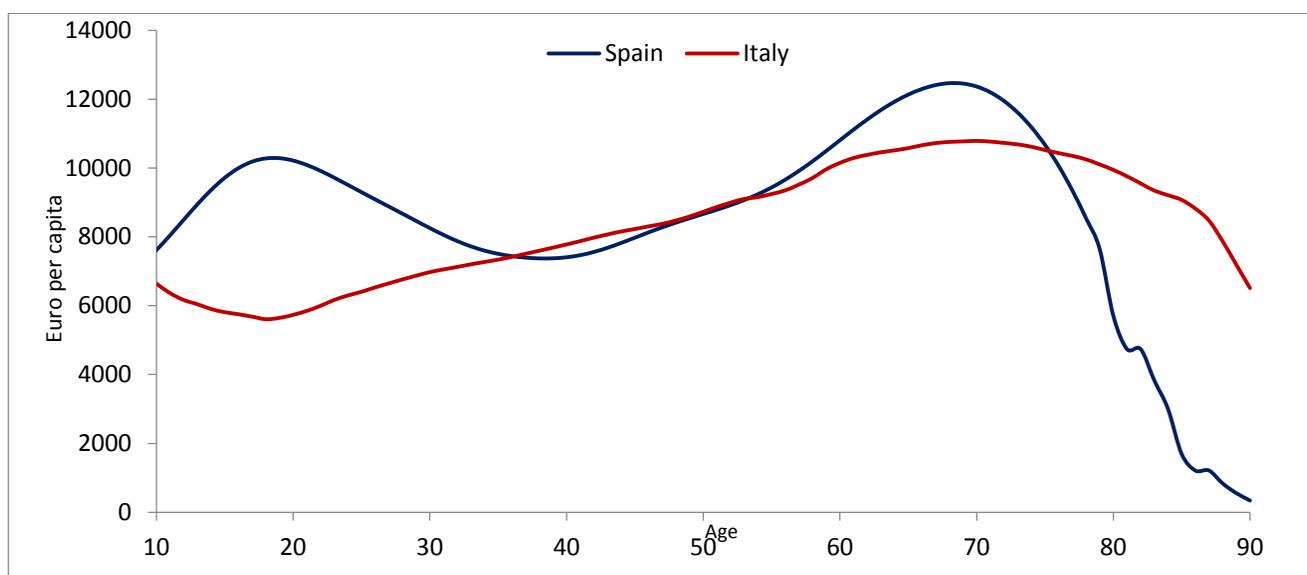
Genders dissimilarities between both countries in household consumption (figure 3 and 4) reflect mainly differences in production, since household consumption is estimated assuming that the overall time produced is equal to the overall time consumed within the household.

Figure 3 Men per capita age profiles of household consumption



Source: Own elaborations on ISTAT (2008) and INE (2009)

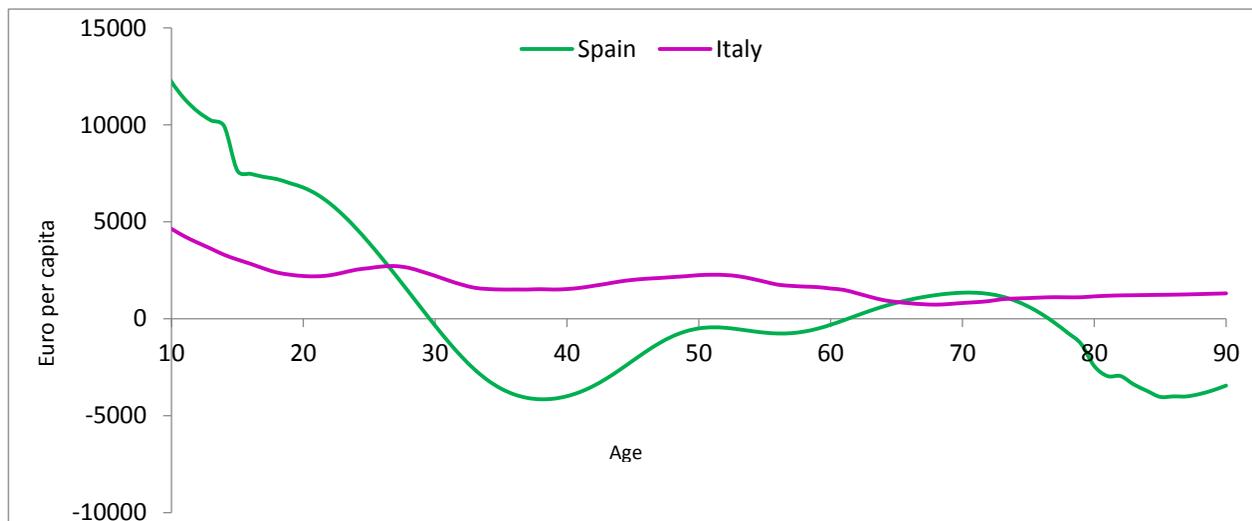
Figure 4 Women per capita age profiles of household consumption



Source: Own elaborations on ISTAT (2008) and INE (2009)

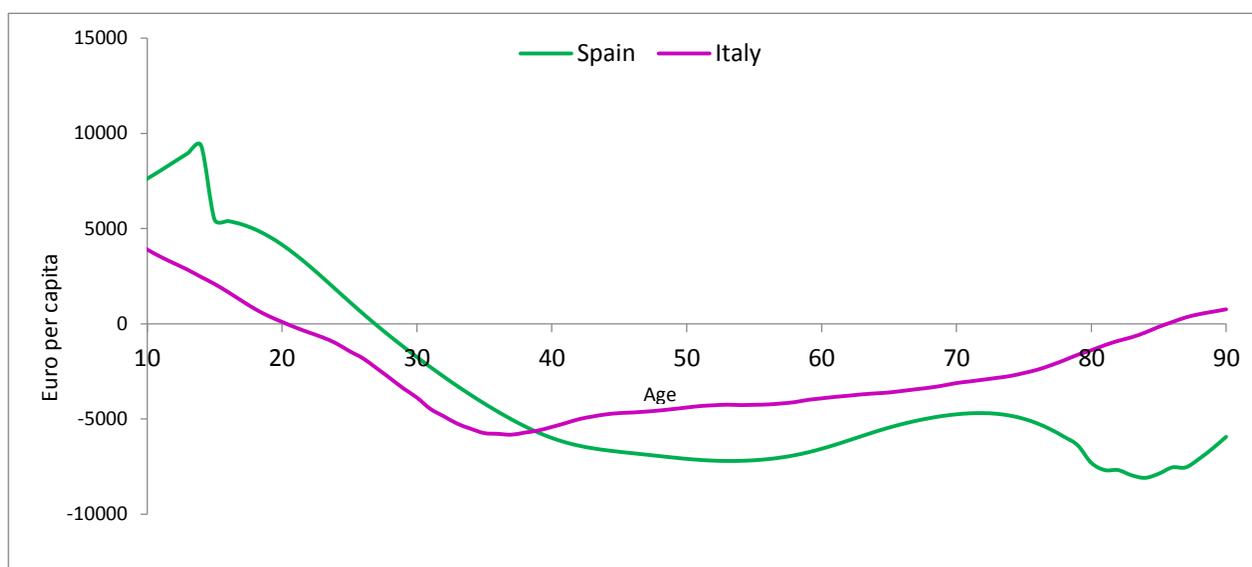
Figure 5 and 6 present the life-course deficit (LCD) of household production respectively for men and women for Italy and Spain: the difference between consumption and production. Positive values of the LCD indicate the existence of a deficit (consumption exceeds production): people need to receive time transfers from other household members; while negative values indicate the existence of a surplus (production exceeds consumption): people make transfers to other household members since they cannot save their time.

Figure 5 Men per capita age profiles life course deficit (Spain and Italy)



Source: Own elaborations on ISTAT (2008) and INE (2009)

Figure 6 Women per capita age profiles of life course deficit (Spain and Italy)



Source: Own elaborations on ISTAT (2008) and INE (2009)

In both countries, men consume more time than they produce within the household. Italian men have a deficit of time starting at age 29, until the rest of their life, on the other hand Spanish men have a surplus until about age 62. On the other hand Italian women have a surplus of time dedicated to household activities which started earlier compared to Spanish women. In fact, the former are in deficit until age 20 while the latter until age 29 likely men (from this moment women are in surplus for the rest of their life).

Summarizing, our analysis has highlight the existence of two main results for both countries: i) a downward direction of time transfers from older to younger members of the household; ii) the existence of a strong gender specialization in unpaid domestic work. However, our analysis has also pointed out an important differences between those Mediterranean countries: in Italy, time transfers are possible thanks to women contribution, which completely support not only young people but also men during all their life course; while this does not have an equivalent for Spain where men have a more active role during early adult ages.

References

- Abraham, K.G. and C. Mackie (2005), *Beyond the Market: Designing non market accounts for the United States*, Washington, D.C.: National Academies Press
- Donehower G and I. Mejia-Guevara (2012), "Everybody works: gender, age and economic activity", paper presented at the 2012 Meeting of the Population Association of America, San Francisco, Population Association of America, San Francisco, May 3-5
- Goldschmidt Clermont, L., (1999), "Households Non-SNA Production: Labour Time, Value of Labour and of Product, and Contribution to Extended Private Consumption", *Review of Income and Wealth*, vol. 45, no. 4, pp. 519-529
- Ironmonger, D. (1996), "Counting outputs, capital inputs and caring labor: estimating gross household product", *Feminist Economics*, vol.2, no.3., pp 37-64
- Landefeld, J. S. and S. H. Mc Culla (2000), "Accounting for Nonmarket Household Production within a National Accounts Framework", *Review of Income and Wealth*, vol. 46, pp. 289-307
- Reid, M. (1934), *Economics of Household Production*, New York: John Wiley
- Waring, M. (1999), *Counting for nothing: what men value and what women are worth*. Toronto: University of Toronto Press