



THE DECOMPOSITION OF GENDER GAP IN DOMESTIC WORK IN ALBANIA

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Abstract

This paper present the decomposition of the gender gap in domestic work in two factors, characteristics of men and women and the effect of social norms, related to gender roles in the family. The methodology is based on the Blinder-Oaxaca decomposition and uses the data from 2010 Time Use Survey in Albania to investigate about the role of factors like employment, relative employment, job offer, education, family structure, type of residence, health status, etc. versus social norms, gender identity and stereotypes to explain the gender difference in time spent in unpaid work. The study try to asses quantitatively the relation of social norms with the behaviour of agents in economic activity in the Albanian households, shedding light on the question, why there is a persistent gender inequality in the family despite the increased commitment of women in the labour market, policy making and other social aspects in Albania. The results show that the characteristics of men and women can explain only about 8-20 per cent of the gender difference in time spent in unpaid work. The rest of the unexplained variation can be attributed mainly to the influence of macro factors such as social norms, gender stereotypes or gender identity. At the end, the results of the study can serve as a basis for social policies aimed at improving the role of women in society and reducing gender inequality.

Keywords: Gender gap, domestic work, decomposition Blinder-Oaxaca, labour market, social norms

INTRODUCTION

Currently, international policies, applied in Albania, are giving special focus to raise awareness on the essential role of women in the development and the future of a society considering their role in educating the younger generations. Based on this perspective or ideology, increasing women's empowerment opportunities, their participation in the labour market, as well as their career and family empowerment are essential aspects to be addressed by policies aimed at gender equality and active participation in political, economic and social life for all women and girls.

Concretization of these objectives requires continuous efforts, not only in Albania, but also in the region or in EU countries and the latest commitment in this regard is reflected in the Sustainable Development Objectives. Different countries have focused on studying and targeting gender gap achievements in labour force participation, income, entrepreneurship, and segregation of occupations taking into account issues such as lower labour force participation by women than men, discrimination in employment or pay, and the high burden of unpaid work for home care that can reduce the well-being of a woman and the whole society.

Given the importance of gender differences in the situation of work in the country, to put into the context the inequality of men and women with regard to family unpaid work, a brief description of labour market characteristics break is presented below based on the results of Labour Force Survey in Albania.

In Albania, the overall employment rate in 2019 is 67.1 per cent. This statistic is lower than the average of 27 EU countries of 73.1 per cent but higher than other countries in the region. However, the gender decomposition of the Albanian employment rate suggests a significant gender gap amounting to 15 per cent points (p.p.) compared to 11.7 p.p. in EU-27 or countries such as Montenegro and Serbia. Specifically, only 59.7 per cent of active women in the 20-64 age groups are employed compared to 74.7 per cent of active men.

This gender gap in the employment rate in Albania in favour of men contradicts the theory of education as a productivity signal as women reflect a higher per cent of undergraduate and postgraduate education. About 19 per cent of women aged 15 and over completed high school in 2019, compared to 15 per cent of men in the same age group in the same year. Women who are active in the labour market are more likely to have completed first level (45.3 per cent) and university studies (27.1 per cent) versus men (40.4 per cent and 16.6 per cent, respectively). While men active in the labour market with secondary education (43 per cent), have an advantage over women (27.1 per cent). This observation can be attributed to the low participation of women in vocational education. In recent years, among students enrolled in secondary education, the percentage of male students attending vocational education is 5 times

higher than women, bringing not only lower access of women to the labour market but also difficulty in obtaining of professions that require relevant skills.

The increase of access to the labour market in parallel with the increase of the educational level does not result the same, even if the employment rate is taken into account according to the educational level. If for men the likelihood of being employed gradually increases with the level of education, for women, only university education translates into higher levels of women's participation in the labour market.

According to 2019 data, men and women in Albania have similar performance of the employment rate, maintaining an advantage of men at all ages. However, at different points in time, for example, during the life cycles of women and the commitments they take on at different stages of their lives, the superiority of men in employment becomes more pronounced. The employment rate of women is lower for women of the most active age, in terms of fertility, and approaches that of men in the age group 45-54 years. After this age employment levels for older women, especially women aged 55-59 and 60-64, fall much faster compared to men and confirming the greater commitment of women in child rearing and household production.

The labour force participation rate, in parallel with the employment rate, for women is below that of men for all age groups. The gender gap of 16.8 per cent points between men and women aged 20-64 varies when the level of education is taken into account. The highest gender gap is for women with secondary education (24.6 percentage points) and the lowest for those with higher education (6.6 percentage points). At the general level, the rate of inactivity remains high, along with a low level of unemployment, which shows that a significant proportion of women, not only have difficulty being employed compared to men, but also their ability to work is undermined by the lack of institutional care for children, the sick or the elderly. In 2019, 27% of inactive women have been completing household chores compared to 1.7% of men.

An important aspect of the work-life balance is part-time work and temporary contracts. In Albania, temporary employment relationships are not yet common, especially for women of whom only 5.6 per cent of salaried employees had a temporary contract, compared to 10 per cent of men. In the 27 EU countries, temporary employment is more prevalent with closer percentages, slightly in favour of women (15% for women and 14% for men). Temporary employment arrangements, though a potential risk for increasing informality, lack of health care, paid leave, and other rights, would be an employment alternative for women who prefer and can adjust the time of working with their possibilities.

Even part-time work is not evenly distributed among women and men: in Albania in 2019, 20% of women in employment worked part-time, compared to 12% of men. In EU-27 countries, these percentages are 29.9 per cent for women and 8.4 per cent for men,

respectively. The fact that there are relatively few women working part-time in Albania than in the EU-27 is due to the lack of part-time opportunities in our labour market, which makes it more difficult for women to reconcile their dual roles. In general, this is an aspect to be explored by relevant policies, as part-time employment is a more attractive option for women who aim to reconcile their desire or need to work, while also trying to perform the tasks they cover traditionally, such as caring for their children.

In Albania in 2019, the unemployment rate for the population aged 15 and over was 11.4% for women and 11.6% for men. As can be seen from the above analysis, more than the unemployment rate in Albania, the high rate of inactivity due to homework and family care is noticeable. The employee structure shows that 29 per cent of working women are engaged in unpaid work in the family business, compared to only 16 per cent of working men. A significant per cent (35 per cent) of working men are self-employed, compared to 22 per cent of women while employers, although small in per cent, have a significant margin occupying 5 per cent of employers men versus only 1 per cent of women.

Regarding the professional division, women and men tend to be employed more in certain economic activities and in different professions, occupying different positions. The negative consequences of division of labour, in addition to the impact on job evaluation and women's skills, are expressed especially in the gender pay gaps (10.1% in 2019). The structure of employee allocation by gender is quite different in Albania. Women work mainly in agriculture, manufacturing and in the sectors of public administration, social services, and other activities and services, while men are much more represented in industry, construction, and activities related to trade, transportation, hospitality, business services, and administrative. It should be noted that a significant proportion of women (about 15 per cent) are employed in the manufacturing sector versus men who occupy only 7.9 per cent. The reason may lie in the higher employment of women in tailoring enterprises where the conditions of work and the salaries are worst.

Referring to the division of labour by occupation, men are employed more than women in the occupational groups: "agricultural, forestry and fishery workers" (50%) and "clerks, sales and service workers" (21%). Although women are employed more than men in the "managers, professionals and technicians" occupations (22 per cent), which require intellectual skills and provide opportunities to take advantage of higher women's educational level, given that the occupied positions are mostly those of lower levels, may not guarantee high compensation in terms of income.

In terms of management levels, the percentage of women who own or manage an enterprise is about 25 per cent, while the percentage of women who hold management positions in public administration is 55 per cent. Men are more likely to be entrepreneurs than women, especially in owning or managing large enterprises with over 10 employees. This situation may be indicative of the obstacles that women face in accessing financial and social capital, as well as the need for support from institutions and networks that can give women a collective voice in the market and the community.

Considering this analyses that shed light in the disadvantaged position of women in Albania and the importance of the role of women in the family and society, this paper aims to describe the explicable part of endogenous mechanisms that are observable through the data, and the impact of social norms, much more intangible, but that can eventually explain the existence of a gender gap in unpaid work. Specifically, this study raises the question of whether gender differences in unpaid work are attributable to micro factors such as situation of employment, education, and other characteristics of women and men, or macro factors such as social norms, gender identity, or gender stereotypes that dictate gender roles in the family and outside. To answer these questions, this study implements a series of decomposition methods using the data from Time Use Survey (TUS) of 2011-2012, aiming to give a contribution to fill the gap of research studies in Albania in that field, that in the knowledge of this study have not been done before. Further on, the paper will be divided in 5 sections. Section 2 will be about the literature review of the studies about the factors determining the gender gap in domestic work. Section 3 will present the methodology used to test the hypothesis of this study, while Section 4 will resume findings and results. Section 5 will end with conclusions, recommendations and way forward.

LITERATURE REVIEW

The division of unpaid labour is portrayed by (1) the bargaining power of spouses in a household (Hersch & Stratton, 1994; Lachance-Grzela & Bouchard, 2010; Donni & Chiappori, 2011; Bertrand et al. ., 2015; Foster & Stratton, 2018), (2) considerations related to gender identity (Akerlof & Kranton, 2000) or (3) attitudes towards gender roles and social norms (Dhar et al., 2018; Sofer & Thibout, 2019 ; Couprie et al., 2020; Foster & Stratton, 2019; Jayachandran, 2019). While there is empirical evidence that sheds light on the link between bargaining power and the division of unpaid labour, little is known about the causal link between social norms and married women's career investment. This section focuses on economic dependence, gender identity (Akerlof & Kranton, 2000) and social norms (Jayachandran, 2019) to explore in depth the mechanisms which (1) cause the gender gap in domestic production and

(2) limit women's investment in career. Over the past few decades, an unusual shift in family roles by gender has been observed in almost every country in the world. Meanwhile, one of the most important economic changes is the increase in women's participation in the labour force (Major & Germano, 2006). In the US, for example, paid work outside the family and unpaid work have historically been segregated by gender. While the role of men in the family has been, and probably still is, the provision of livelihood sources from income in the labour market, the role of women has been, and perhaps is, the well-being of domestic production, thus creating a distribution of paid labour and unpaid by gender (Sayer et al. 2004). Research on the distribution of labour by gender in areas such as sociology, psychology and economics suggests that there are many factors that contribute to gender inequality in unpaid work. Also, Arrighi and Maume (2000) state that despite the empowerment of the role of women in society from higher participation in the labour force to their achievements in the political sphere, there has been no empowerment of the role of women in the family. Of course, re-evaluating the role of women in the family, i.e., higher engagement in domestic production does not constitute a success in itself as long as such an event is associated with the cost of dismissal or abandonment of career goals, among others.

This section aims to review the socio-economic and psychological literature about the gender gap determinants in unpaid work. These factors are summarized in two major groups: micro-factors which include the influence of the characteristics of individuals and couples, and macro-factors which include the influence of society itself on gender roles in the family. As a start, a conceptualization of domestic unpaid work is needed. In a household, unpaid work is often defined as a set of tasks that are performed in order to meet the needs of family members or the well-being of the family and its requirements (Lachance-Grzela & Bouchard, 2010). The household chores referred to, in this definition are: general house cleaning, meal planning, cooking, washing dishes or using the dishwasher, daily shopping, laundry and ironing, care to children, the elderly or sick family members, gardening, maintenance and repair of the family vehicle, physical maintenance of the apartment (inside and outside), dumping of garbage, payment of bills, and transportation of family members to educational and health and social institutions (Arrighi & Maume, 2000; Cunningham, 2007).

Following this concept, we will summarize the main theories that explain the gender distribution of domestic production, and shed light on the causes of gender inequality in the family. They are related to relative resources, gender ideology / gender identity, stereotypes and social norms.

The theory of relative resources (in the sociological literature) or the theory of bargaining power / economic dependence (in the economic literature) correlates the financial income of

men and women with the division of roles in domestic production (Mincer, 1962; Akerlof & Kranton, 2000; Mannino & Deutsch, 2007; Donni & Chiappori, 2011). An important assumption of this theory is that most people consider unpaid work activity a process from which no benefit is obtained. This means that the more income, and consequently economic power one spouse has relative to the other spouse, the easier it would be for him or her to negotiate the division of roles in domestic production.

Often, these theories and relevant models fail to explain a range of real-life phenomena. Mincer (1962) argues that based on relative advantages, agents who invest more time in paid work spend less time on housework. However, this result does not take into account asymmetries between family members. Akerlof and Kranton (2000) suggest that household-level data highlight gender asymmetries that contradict predictions of general labour supply patterns. So even when women invest more time in paid work, they take over most of the domestic production. The economic models that study economic dependence are the models of bargaining power. In essence, these models conclude that the partner with the most bargaining power, that is, the spouse with the highest relative income, engages less in domestic production. If this theoretical consideration refers mainly to men because of the gender pay gap, Bertrand, Kamenica, and Pan (2015) show the opposite: the gender gap in domestic production in the United States is larger among couples where the wife wins higher income than spouse.

Education is another mechanism which explains the connection of bargaining power and the division of domestic production by gender. Bianchi et al. (2000) present evidence that in households in which women are more educated than men, the gender gap in unpaid work is lower. However, schooling according to Mincer (1962) affects income which in turn affects the division of roles and time allocated to unpaid work. But schooling alone can affect the breakdown of unpaid work by gender in the family independently of the relative resource hypothesis. According to Davis and Greenstein (2004), if the empowerment of women's economic and educational position increases, the probability that man will be more involved in domestic production should also increase. Gershuny and Sullivan (2003) show that such likelihood is related to the education of men themselves. So the more educated spouses are also more involved in unpaid work than less educated ones. This evidence reinforces the view that schooling is a mechanism independent of economic dependence, which is mainly related to the emancipation of individuals through schooling to combat gender inequalities.

Gender ideology / gender identity theory predicts an inverse relationship between traditional gender attributes and the egalitarian division of unpaid labour (Akerlof & Kranton, 2000; Davis et al., 2007). This theory is based on the division of roles in the family by gender, and that society is built on precisely these gender bases. Let us return to the seminal study of

Bertrand et al. (2015) in which women invested more time in domestic production even though they earned more income in the labour market than their husbands. This result can be attributed to gender identity, which can influence families in which women are characterized by both high labour supply and a large contribution to domestic production.

Despite the measurement of gender ideology, the sociological literature concludes that gender ideology evolves from generation to generation (Brooks & Bolzendahl, 2004) and individuals tend to share egalitarian principles as they grow (Fan & Marini, 2000). An empirical study by Fernández, Fogli, and Olivetti (2004) finds that regardless of similar preferences between men and their wives' likelihood of employment, men raised by employed mothers are also more productive in domestic production. This suggests that the fact that they encountered an example of egalitarian ideology from both parents in childhood influences their marital behaviour. Though it is clear that ideology or gender identity influence the gender gap of domestic production, there is an inevitable problem of endogeneity. Gender ideology is influenced by education and employment status, which are also correlated with the gender gap in unpaid work. Thus, the more educated and well-employed individuals are, the more emancipated to such social matters (Fan & Marini, 2000).

A variant of this theory is the construction / gender character of individuals (Lachance-Grzela & Bouchard, 2010). Although the egalitarian attitudes those individuals have in many aspects of life, having the appropriate gender has value in itself. Davis and Greenstein (2004), postulate that the gender construction of the individuals is the essence of explaining the gender gap in domestic production. So being a man reflects higher bargaining power to contribute less than women to unpaid work as men may think women are more capable. Also, being a woman makes it easier to accept the greater burden in domestic production with the motive of protecting female identity. This theory contradicts the idea that humans are born equal or equally capable of performing certain activities.

The macro perspective that explains the diffusion in the gender gap of domestic production has received special attention in scientific research, considering the inability of micro factors to explain why women bear the greatest responsibility of domestic production (Fuwa, 2004; Geist, 2005; Hook, 2006). The macro perspective relates to the context of the society in which individuals interact, and its influence on the decisions they make. Two macro factors that are considered on the division of roles in domestic production are social / gender norms and gender stereotypes. Since society influences the formation of identity - the sense that an individual feels about himself - it is difficult to categorize identity norms separately from social or gender norms (Stryker & Burke, 2000). Considering the persistence of social norms, many

studies argue that the persistent gender gap in domestic production is a consequence of social norms (Sayer, 2005; Evertsson, 2014; Couprie, Cudeville & Sofer, 2019; Jayachandran, 2019).

Davis and Greenstein (2004) argue that culture, religion, social norms, and stereotypes that exist in society play a primary role in explaining the behaviour of individuals within and outside the family. Moreover, many studies state that the level of egalitarianism of individuals inside and outside the family is precisely dictated by society (Batalova & Cohen 2002; Fuwa, 2004; Knudsen & Wærness, 2008). The findings of these studies demonstrate that in more egalitarian societies, the division of domestic production between spouses is also more egalitarian. On the other hand, more egalitarian societies mean that within the family, all individuals share egalitarian principles, which creates the common term egalitarianism (Sanchez & Kane; Sanchez & Thomson, 1997). Evertsson (2014) suggests that shared egalitarian attitudes about housework can reduce not only men's reluctance to housework, but also the strength of gender norms.

Gender stereotypes are another macro concept that can shed light on the diffusion of the gender gap in domestic production. Gender stereotypes are misconceptions about the abilities of different genders related to a particular activity (Couprie et al., 2019). Sofer and Thibout (2011) theoretically analyse the role of gender stereotypes in the gender gap of domestic production. Despite the ideology that people are born equal and ex-ante equally capable, stereotypes contradict this principle by impairing the ability of one gender to perform a certain activity. For example, ex-ante, spouses are equally capable of doing housework. But society can impose a negative stereotype on the ability / productivity of men to do housework, thus leading not only to their refusal to participate in domestic production, but also the existence of a balance in which gender-based skills to perform homework are rightly perceived as unequal (Sofer & Thibout, 2011).

Jayachandran (2019) argues that shifting social norms is not a simple process in itself. One of the most challenging norms to move is to define the roles and responsibilities of spouses in the family. It is this norm, which dictates that women are primarily responsible for household production and child rearing, that exists in almost every society in the world. Shifting this norm towards egalitarian principles in the family would increase the weight of the gender equality dividend for women (Jayachandran, 2019). It is also possible for married men to misperceive the social norm that dictates that household chores should be performed primarily by women. So it is possible for men to believe that other men in society believe that housework should be done by women - this leads to an unequal division of time spent on household production or unpaid work. Further, updating men's beliefs about the social norm through information about the real norm in society can help the existence of an egalitarian division of unpaid work time

between spouses and can influence the decision that women make regarding the investment in career.

The following part summarizes the empirical literature that study the gender gap in unpaid work within family based on time use data, collected from a survey similar to that conducted by INSTAT in 2011-2012. Sofer and Thibout (2019) use data from the latest time use survey in France (2009-2010) to investigate the time allocation of employed partners depending on the relative power of women in the labour market. The authors judge that relative wage analysis is insufficient to explain time allocation decisions between spouses. The empirical results show that time lost in domestic production as a result of a higher career investment for women is partially offset by men over the weekend. So women's career investment, relative to their partners, does not make the latter more dedicated to domestic production on weekdays. However, women's career advancement is associated with less time investment in unpaid work during the week. This study assumes that the unexplained variation of the gender gap in domestic production can be attributed to non-monetary factors such as gender identity, social norms, or stereotypes about the ability to perform unpaid work.

Stratton and Foster (2008) explore the time use survey in Denmark and the US to investigate the impact of social norms on the bargaining power of spouses. Their hypothesis is that more egalitarian societies with more developed welfare systems are able to mitigate the impact of economic dependence on spouses' time allocation decisions. Moreover, Stratton and Foster (2008) hypothesize that leisure time can be influenced more than time at unpaid work, by the bargaining power of spouses. On the other hand, time spent on unpaid work is subject to individuals' preferences, social norms, and gender identity.

The empirical results of Foster and Stratton (2008) support the hypotheses raised: weekend leisure is influenced by the economic power of spouses, but not on weekdays. Also, economic power has no particular impact on the allocation of time to unpaid work, both in egalitarian countries and in less egalitarian countries. These results are robust to the type of profession and the job offer. Finally, their results confirm the hypothesis that not only the level of egalitarianism of a country affects the way spouses' time is allocated but also welfare institutions. In the US the benefits that women receive for increasing their level of well-being positively affect the increase of leisure time.

A study by Foster and Stratton (2018) investigates the reallocation of time to unpaid work as a result of important events in the labour market, including career promotion or dismissal. Using panel data of couples in Australia the authors find that promoting women in careers has a significant effect on the allocation of their hours to domestic production. This effect is heterogeneous according to the level of egalitarianism in the family. Specifically, among

the more traditional couples, there is no egalitarian division of domestic production even if the husband is fired. In more emancipated families with equality principles, the division of household chores is more equal.

Álvarez and Miles (2003) investigate the reasons for the asymmetric division of domestic production between employed couples in Spain. The authors use data from the 'Work situation and time use' survey conducted in 1991. The method used to explain the gender time gap in domestic production by Álvarez and Miles (2003) is the Oaxaca decomposition method. An innovative approach of this study is to control for the interdependence of couples' time decisions in Spain, in consistence with theoretical models of family time use. Also, the authors assume that the distribution of unpaid work is bivariate. The decomposition procedure takes into account observable characteristics such as education and labour market characteristics as well as the weight that these characteristics have on the structure of time in unpaid work. The results of Álvarez and Miles (2003) suggest that the asymmetry in the time allocated for home production is explained more by gender factors than by observable characteristics of couples.

Anxo and Carlin (2004) analyse time use data in France to investigate the relationship between economic variables and the division of time into unpaid work between spouses. Due to data censorship, the authors estimate various specifications of the Tobit model, including variables such as age, gender, number of children in the household, education, type of residence, and labour market characteristics. Consistent with spouses' patterns of unpaid work specialization and bargaining power models, Anxo and Carlin (2004) find that the higher a spouse's income relative to his or her spouse's income, the lower his or her time participation in unpaid work. On the other hand, if the spouse has a higher job offer than the spouse, the latter is likely to reduce his time to unpaid work but carries the highest share of time that both allocate to housework.

METHODOLOGY

Time Use Survey Data

The Time Use Survey (TUS) for the period 2010-2011 is based on a sample of 2,250 households (INSTAT, 2012). The target population for TUS includes all individuals living in Albania aged 10 and over, where the sample unit is the family. Basic information is gathered through interviews with selected family members. The purpose of the survey is mainly to investigate about (1) Work-life balance: How people divide their time between work time (paid work), unpaid work, family time and free time, and (2) the differences in time use between men and women.

The use of time is defined in general terms; activities are grouped into several categories and divided according to several classification variables; gender, age, urban area (rural), employment status (employed, unemployed, inactive), education and life cycle (e.g., under 25 without a partner and without children, or 25-45 with a partner and without children). Data are collected through a diary divided into 10-minute time intervals, where respondents record how they use the time for two days, a typical weekday (Monday to Friday) and a weekend, which are randomly selected and represent a certain period of time (in the case of the TUS a full year). The diary records a main activity, a parallel activity, the place where the activity is performed, the means of transport and the presence or absence of other people during the performance of the activity. Consequently, the data consist of a sequence of episodes or activities, which are characterized by these 4 recorded areas. The main activities are grouped into 6 categories; paid work, studies, unpaid work (all types of housework, maintenance, and childcare), personal activities, leisure and more.

Since the aim of this paper is to shed light on the mechanisms that cause the gender gap in time spent on domestic production or unpaid work, mainly between men and women who are able to participate in the labour market and are at an acceptable age for marriage, the choice is limited to adult individuals (18+ years old). Further on, the analysis is restricted to couples.

The data are collected through 2 time use diaries and 2 questionnaires: an individual questionnaire and a family questionnaire. The Family Questionnaire collects information on (1) family structure, including the number of children and the total number of individuals in the family; (2) the conditions of the dwelling and living, as well as the possession of household electrical appliances; (3) income and assistance received from outside the family. The individual questionnaire collects information on the individual characteristics of the respondents including civil status, educational level, employment status, type of employment and occupation, health status; employment in a second job, job offer; and a number of other factors that are not taken into account as they are not thought to affect unpaid work time.

The Decomposition according to Blinder-Oaxaca

The Decomposition according to Blinder-Oaxaca is a well-known method to decompose the gender gap of a variable into explicable and unexplained factors. This method was developed by Blinder (1973) and Oaxaca (1973). This section introduces this method by adapting it to the context of this paper. In essence, this decomposition assumes that in the absence of social norms, gender stereotypes or gender identity, the effect of observable factors on the time allocated to unpaid work for men and women should be statistically the same.

Let assume that the data on time spent in domestic production were collected for two groups: the disadvantaged group (d-women) and the advantaged group (a-men). Using data on the allocated time of men and women in domestic production and characteristics such as wages, labour supply, demographic and socio-economic data, the procedure for decomposing the gender gap in the time allocated to unpaid work is presented below:

1. The statistical functions of time in domestic production are estimated with OLS: $\forall j \in \{a, d\}: y_j = X_j \beta_j + \epsilon_j$ where y & ϵ are the vectors of total time in unpaid work and the random error term, and X is a matrix of explanatory variables such as salary, job offer, education, employment status etc.
2. b_a & b_d are the coefficients estimated with OLS of β_a & β_d which enjoy the following properties:

- $var(b_a - b_d) = var(b_a) + var(b_d)$
- $cov(b_a, b_d) = 0$

3. One feature of the OLS estimator is that the evaluated function passes through the mean points of the sample. This mean that:

- $\bar{y}_a = \bar{X}_a b_a$ & $\bar{y}_d = \bar{X}_d b_d$ (1)

- The difference of the means of the dependent variable predicted for both groups is:

$$\bar{y}_a - \bar{y}_d = \bar{X}_a b_a - \bar{X}_d b_d \quad (2)$$

- The difference between the coefficients vectors estimated for both groups is:

$$\Delta b = b_a - b_d, \text{ where } b_d = b_a - \Delta b. \quad (3)$$

4. The arithmetic manipulation of equations (1) and (2) decomposes the difference between the time gap in unpaid work between the two groups as follows:

- $\bar{y}_a - \bar{y}_d = b_a(\bar{X}_a - \bar{X}_d) + \bar{X}_d \Delta b$ (4)

- The first term decomposes the difference in the effect of differences into observable factors, weighted with the coefficients of the advantaged group.
- The second term can be attributed to the effect of gender differences, that are in turn unobservable, e.g., social norms, gender stereotypes or considerations of gender identity. This effect is weighted against the average characteristics of the disadvantaged group.

5. Another way to decompose the differences in the dependent variable is by substituting b_a by the equation (2.3):

- $\bar{y}_a - \bar{y}_d = b_d(\bar{X}_a - \bar{X}_d) + \bar{X}_a \Delta b$ (5)

- The first term is the effect of differences in explicable factors, weighted by the coefficients vector of the disadvantaged group.

- The second term is the effect of gender differences weighted by the average characteristics of the advantaged group.

Choosing between equations (4) or (5) to measure the effect of social norms, identity, or gender stereotypes is essentially a choice of the researcher. In practice, empirical researchers evaluate both equations. This method has two critical aspects. To measure the effect of social norms, identity, or gender stereotypes, vectors of observable characteristics should check for any aspects that may explain the time individuals spend in unpaid work. Second, if there is any reason why the estimated coefficients are different in the absence of social norms, then this procedure would be inappropriate.

RESULTS

This section presents the results of the procedure for decomposing gender differences in unpaid work according to Blinder-Oaxaca. In principle, the results of this decomposition procedure tend to indicate whether gender differences in unpaid work time come from observed characteristics or other factors such as social norms, gender identity, or a combination of these. With time spent in unpaid work as the dependent variable, the gender difference in unpaid time is decomposed according to twofold and threefold decomposition. Twofold decomposition decomposes the gender difference in unpaid work into explicable and unexplained factors. The threefold decomposition decomposes gender differences in unpaid work into three categories.

The first category reflects the average change in time in unpaid work of women if they had the characteristics of men. The second category reflects the average change in time in unpaid work of women if their characteristics were to be multiplied by the regression coefficients of men. The third category is an interaction of the first two categories. Throughout this section, if most of the variation in the gender time difference in unpaid work is explained by other unexplained factors in the model (i.e., twofold decomposition) or by the second category (i.e., threefold decomposition), then gender differences in unpaid work will be attributed to the power of social norms or gender identity. As analysed in the social norms literature, it is difficult to separate gender identity from social (gender) norms in the case of spouse roles in the family. Thus, in this study, these unexplained factors are summarized as social norms related to gender roles in the family.

Table 1 and 2 present the results of the twofold and the threefold decomposition of men and women regardless of their employment status. The prediction of average unpaid work time per week for men is 59 minutes, and for women 392 minutes, with a difference of about 333 minutes in favour of men. Only about 19 per cent of this difference or only 62 minutes is predicted by the observable characteristics of couples. The majority or about 81 per cent of the

difference is unexplained. Although over the weekend the prediction of average time in unpaid work for men shows an increase to around 76 hours, and for women a decrease to 387 hours, the difference remains high (-311 minutes), in favour of men. Only 13 per cent of this difference can be explained by observable gender characteristics that affect time in unpaid work, and about 87 per cent of this difference is attributed to the power of social norms that dictate gender roles.

Referring to threefold decomposition results, there is a reduction of 83 minutes in the time women spend on unpaid work during the week, if they would have the same characteristics as men. However, if male regression coefficients were to be applied to observable female characteristics, decomposition suggests an average reduction of 310 minutes in time spent in unpaid work. The third term, interaction, indicates that a combination of characteristics and coefficients would result in an average increase of 60 minutes of time women allocate to unpaid work. Considering the positive sign of the term interaction, women are doubly disadvantaged. Over the weekend, the results dictate a softening of social norms, but to a lesser extent.

Table 1. Twofold decomposition for all men and women

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	58.900*** (2.748)		75.835*** (2.982)	
Female	391.781*** (4.977)		387.094*** (4.767)	
Difference	-332.881*** (5.686)		-311.259*** (5.623)	
Explained		-62.052*** (4.062)		-39.236*** (3.620)
Unexplained		-270.830*** (5.924)		-272.023*** (6.379)
Observations	2,862	2,862	2,823	2,823

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 2. Threefold decomposition for all men and women

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	58.900*** (2.759)		75.835*** (2.994)	
Female	391.781*** (4.992)		387.094*** (4.785)	
Difference	-332.881*** (5.704)		-311.259*** (5.645)	
Characteristics		-83.394*** (5.617)		-56.120*** (5.137)
Coefficients		-310.189*** (6.217)		-302.796*** (6.655)
Interaction		60.702*** (6.007)		47.657*** (6.213)
Observations	2,862	2,862	2,823	2,823

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Tables 3 and 4 replicate the above results for employed men and women. The prediction of unpaid working time for employed men and women suggests an increase in the time allocated to unpaid work in weekend for both genders. However, the gender time difference in unpaid work is higher over the weekend for individuals employed in favour of men (advantaged group). Only 8 per cent of the gender difference can be explained by the observable gender characteristics in the week model, and only 5 per cent in the weekend model. The other percentage of gender differences is attributed to social norms, which are suggested to predominate more among the employed individuals.

Referring to the results of the threefold decomposition, if employed women had the characteristics of employed men, they would spend on average about 41 minutes less on unpaid work during the week, and about 28 minutes less on the weekend. Further, if the coefficients of the employed male model were to be applied to observable characteristics of employed women, their time in unpaid work would be reduced by about 256 minutes during the week, and about 270 minutes on the weekend. Interaction indicators suggest a double disadvantage of women in unpaid work during the week and weekend.

Table 3. Twofold decomposition for employed individuals

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	35.794*** (2.492)		64.173*** (3.322)	
Female	297.923*** (6.473)		338.706*** (7.061)	
Difference	-262.130*** (6.936)		-274.533*** (7.804)	
Explained		-20.609*** (3.597)		-14.512*** (3.991)
Unexplained		-241.520*** (6.704)		-260.021*** (8.147)
Observations	1,634	1,634	1,615	1,615

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table **Error! No text of specified style in document.**4. Threefold decomposition for employed individuals

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	35.794*** (2.509)		64.173*** (3.346)	
Female	297.923*** (6.532)		338.706*** (7.136)	
Difference	-262.130*** (6.997)		-274.533*** (7.881)	
Characteristics		-41.031*** (8.466)		-28.333*** (9.228)
Coefficients		-255.695*** (7.262)		-270.239*** (8.468)
Interaction		34.596*** (8.607)		24.039** (9.692)
Observations	1,634	1,634	1,615	1,615

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The following results refer to the decomposition for unemployed individuals. Table 5 suggests that among unemployed individuals, the gender difference in time spent in unpaid work is higher, though it is assumed that unemployed individuals have more time available to work in unpaid work. However, in the weekly model, about 17 per cent of the difference is explained by observable characteristics, and this indicator is the same in the weekend model. The remaining variation in gender differences over the week and weekend remains unexplained. Based on these results, the gender characteristics of unemployed individuals have a higher explanatory power of gender differences in unpaid work than the gender characteristics of employed individuals.

Referring to Table 6, if unemployed women were to have the characteristics of unemployed men, they would work only 75 minutes less in unpaid work during the week and about 68 minutes less on weekends. But if the coefficients of unemployed men were applied to their individual characteristics, the reduction in unpaid work time would be about 335 minutes per week, and about 312 minutes on weekends. Again, women are doubly disadvantaged based on the sign of the coefficient of interaction.

Table 5. Twofold decomposition for unemployed individuals

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	113.318*** (6.384)		103.389*** (6.033)	
Female	465.225*** (6.141)		425.140*** (6.126)	
Difference	-351.907*** (8.858)		-321.751*** (8.598)	
Explained		-60.455*** (6.301)		-53.728*** (6.048)
Unexplained		-291.452*** (10.312)		-268.023*** (9.836)
Observations	1,228	1,228	1,208	1,208

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 6. Threefold decomposition for unemployed individuals

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	113.318*** (6.511)		103.389*** (6.152)	
Female	465.225*** (6.192)		425.140*** (6.181)	
Difference	-351.907*** (8.985)		-321.751*** (8.721)	
Characteristics		-75.028*** (7.828)		-67.709*** (7.494)
Coefficients		-335.311*** (12.707)		-312.409*** (12.031)
Interaction		58.432*** (11.886)		58.367*** (11.196)
Observations	1,228	1,228	1,208	1,208

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Finally, the results of the decomposition of gender differences for self-employed individuals are presented (Tables 7 and 8). Referring to self-employed individuals, the average prediction of unpaid work time during the week is 37 minutes for men and 334 minutes for women, with a difference of 297 minutes in favour of men. Over the weekend this difference is 279 minutes, although both men and women increase their time participation in unpaid work. The explicable part of gender differences from the observable characteristics of men and women is about 9 per cent in the weekly and 8 per cent in the weekend model.

The three-dimensional decomposition suggests that if self-employed women had the characteristics of self-employed men, they would spend about 46 minutes less on unpaid work on weekdays and about 43 minutes less on unpaid work on weekends. If the coefficients of self-employed men were applied to their characteristics, this reduction would be about 287 minutes less during the week and about 281 minutes less during the weekend.

Table 7. Twofold decomposition for self-employed individuals

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	36.779*** (3.350)		59.729*** (4.333)	
Female	333.925*** (8.449)		339.467*** (8.859)	
Difference	-297.146*** (9.089)		-279.738*** (9.862)	
Explained		-25.795*** (4.899)		-23.351*** (5.314)
Unexplained		-271.351*** (8.889)		-256.387*** (10.237)
Observations	993	993	985	985

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 8. Threefold decomposition for self-employed individuals

Type of day	(Weekday)	(Weekday)	(Weekend)	(Weekend)
Indicators	Difference	Decomposition	Difference	Decomposition
Male	36.779*** (3.383)		59.729*** (4.377)	
Female	333.925*** (8.557)		339.467*** (8.976)	
Difference	-297.146*** (9.201)		-279.738*** (9.987)	
Characteristics		-46.031*** (11.594)		-43.932*** (12.123)
Coefficients		-287.284*** (9.526)		-271.257*** (10.778)
Interaction		36.169*** (11.713)		35.452*** (12.670)
Observations	993	993	985	985

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

This set of results demonstrates that the main hypotheses of this paper are not rejected. Thus, gender differences in time spent in unpaid work are mostly explained by aspects of social norms which express that the roles of spouses in the family are segregated by gender. This means that women are responsible for the physical well-being of the family and men have to be educated, work and keep their household financially stable. While ex-ante has no biological / natural reason to dictate a non-egalitarian division of spouses' duties in a family, ex-post presence of social norms, gender identity or misconceptions such as gender stereotypes bring results that not only suggest extreme gender inequality in the family but also outside it.

CONCLUSIONS AND RECOMMENDATIONS

This paper aims to describe gender differences in unpaid work and shed light on the impact of social norms, gender identity, or gender stereotypes on the existence of a gender gap in unpaid work. Specifically, this study raises the question of whether gender differences in unpaid work are attributable to micro factors such as economic dependence / relative resources / bargaining power or macro factors such as social norms which dictate gender roles in the family and outside. To answer this research question the study implements decomposition methods using the data of Time Use Survey (TUS) of 2011-2012.

The analysis of the decomposition of gender differences in the time spent in unpaid work, confirms the hypothesis of this study, which states that gender differences are influenced by social norms related to gender roles in the family. The decomposition results suggest a low reduction of the time women spend on unpaid work if they had the characteristics of men. However, this reduction is about 4 times higher if the female coefficients were applied to the male characteristics. According to the evaluated models, factors such as employment, relative employment, job offer, education, family structure, type of residence, health status, etc., can explain only about 8-20 per cent of the gender difference in time spent in unpaid work. The rest of the unexplained variation can be attributed mainly to the influence of macro factors such as social norms, gender stereotypes or gender identity. This assumption is certainly debatable as many other factors, unobservable and unrelated to social norms may explain some of the remaining variation. However, based on the literature review, virtually any set of factors influencing time at unpaid work has been checked, assuming that leisure preferences are similar between spouses. Another aspect relates to the fact that social norms are expected to be more influential in traditional families or in societies with a low level of progressivity. Consequently, these findings are not strongly surprising.

Finally, social or gender norms constitute a current field of research in the economic literature. One of the most sustainable social norms, independent of a country's economic development, is the norm that women should do most of the housework and have greater responsibility in raising children. One way to get women to shift this rate is to increase their labour market participation. Other social policies may be helpful as well. An obvious example is social policies which tend to reduce the time allocated to do household chores, thus freeing up physical time for the women engaged in them. However, these interventions do not directly contribute to the shift of social norms. Their effect is to reduce the time women spend on household production, not affecting the time their partners spend in the sector. Therefore, these interventions can be costly for both governments and women who carry the greater burden of family well-being.

The findings can contribute to the social policies aimed at improving the role of women in society and reducing gender inequality. One of the primary recommendations is related to the findings that there is a misperception of social norms. Consequently, to achieve gender balance, it may be useful to inform individuals, mainly men, about real norms. This can be done experimentally, by media or educationally.

The second recommendation is the inclusion of specialized educational curricula for gender equality in the family and in the labour market as it is evidence based that the individuals with higher education are more likely to participate in unpaid work and increase time participation in the sector. In this context, policies to encourage youth enrolment in university could be effective.

Finally, promoting women's careers can play an important role not only in their higher participation in the labour market but also in the redistribution of time in unpaid work between men and women. So the time women avoid unpaid work as a result of their career advancement can be offset by their partners during the week or weekend. This could lead to a more egalitarian division of domestic production between married couples. Women career promotion policies in Albania are active only in the field of politics but not in other areas. This study recommends an extension of these interventions to professions that are not necessarily powerful or characterized by a high degree of decision-making.

WAY FORWARD

Like any scientific study, this paper has some limitations that create the basis to project the way forward for other studies and research. First, the analysis of the scientific questions of this paper would be more robust if there were an experimental study. In the absence of a field

experiment, this paper remains descriptive using the data available without the possibility to control for specific aspects. Based on the findings of the study and the examples suggested by the literature, other research studies can be implemented to help policies in promoting those factors that may reduce gender disparities within and outside the family.

Second, the data of time use survey date to the period 2011-2012, and this is the most recent survey published by INSTAT. This limitation of data however does not pose a scientific problem as even in developed countries, time use surveys are published every 10 years, and the behaviour related to social norms do not change in short time. However, it would be useful to repeat this study whenever the time use survey will be conducted again in Albania. It will allow not only for more up to date results, but also to understand how the perception of social norms may have changed in the period between.

Finally, the survey does not provide sufficient information on individual income from the labour market, which limits the analysis only to employment status but cannot take into consideration the respective income. The availability of this kind of information would be useful to extend the research, adding the economic characteristics that may interfere with the unpaid domestic work.

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