

Gender and Ethnicity in Bolivia, Ecuador, and Guatemala

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Abstract

This article examines the structure of gender and ethnic wage gaps, and the distribution of both paid and unpaid work in LAC countries. The results indicate that women are highly discriminated in the job market and undertake most of the domestic activities of the households. The indigenous population also suffers from discrimination, but the wage gap is mainly explained by the difference in endowments, highlighting their limited access to education. The wage quantile decomposition results suggest the presence of sticky floors effects for both women and indigenous workers.

Keywords: Discrimination; ethnicity; gender; time-use

JEL Classification: J22; J31; J71

1 Introduction

Since the late 90s Latin American countries have experience fast growth, a reduction in analphabetism, and a transformation from agricultural economies to industrialized middle income countries. Most of the population has enjoyed the benefits of a bigger growth rate, increasing the mean income level of the population and diminishing poverty. However, beyond the regional specificities, the relevance and pervasiveness of poverty, inequality, and social exclusion is very heterogeneous within the region. Bolivia, Ecuador, and Guatemala

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have high poverty levels and very low educational attainments, which explain its low Human Development Index that reaches 0.66, 0.72 and 0.57 respectively. But the low level of education and high poverty rates are not the only cause of their slow growth, inequality also plays an important role. While almost all Latin American countries have considerable reduced inequalities in their societies, Guatemala is still among the most unequal countries of the region and Bolivia does not perform better ranking in 3rd position.

The backlog endured by these countries makes us wonder about its causes and consequences. By having a closer look, we realize their proximity. Bolivia, Ecuador, and Guatemala share some characteristics; they are all Latin American middle income countries with important natural resources. Their exports mainly consist on primary goods such as coffee and oil and they have a large indigenous, rural based population (more than 60% for Bolivia and around 40% for Guatemala). They also share similar conditions of employment characterized by a low rate of unemployment but high levels of informality, around 80% of the labor force for the three of them. Inequality in these countries is mainly driven by ethnic and gender discrimination suffered by the population not only on the job market, but also in education and health access. Therefore, if inequality plays such an important role in the population and in the economy, what is the actual cost of discrimination suffered by the different ethnic and gender groups and what would be the benefit of reducing the gap?

Much of the research on gender and ethnic inequality focuses on wage differences, neglecting the importance of domestic labor and time use. In this article, we examine the gender and ethnic gap of wages and the allocation of time to paid and unpaid work in Bolivia, Ecuador, and Guatemala. We pay particular attention to the role of education in explaining and reducing the gap along the wage and time distributions. The low level of human capital in the region, is an important factor that determines women's expected social role in domestic activities, and it certainly plays a part in the inequality of opportunities endured by ethnic minorities and women in these countries.

Ethnic and gender disparities have two main consequences in the job market. The first one is the existence of significant entry barriers to the formal job market and the second one, is that even when these barriers are crossed, there is still a wage gap between the discriminated group and those who are not. This wage differential leads to a smaller labor force participation from the discriminated people and increases the demand for domestic production on in-home activities. In this context, women have a bigger incentive to stay at home and accomplish domestic tasks than participating in the labor market, especially when the wage differential is significant.

In order to assess the importance and determinants of the wage gap between the discriminated population group and those who are not, we conduct the usual Blinder-Oaxaca decomposition (BO decomposition, hereafter), and complete the analysis with a quantile

decomposition method proposed by [Firpo et al. \(2009\)](#).

In order to explain the determinants of weekly allocation of time between domestic and paid market activities, while taking into account the inter-dependence of decision-making process inside the household, we use seemingly unrelated regressions.

The structure of the paper is as follows: Section 2 reviews the theoretical framework. Section 3 provides a literature review. Section 4 introduces the econometric methodology used to measure gender and ethnic disparities in Bolivia, Ecuador and Guatemala. Section 5 describes the data, and Section 6 presents the results of the estimations and concludes.

2 Theoretical Framework

In a broader sense, discrimination is defined as the unjustified difference in treatment between two distinct groups of the population based on cultural or physical characteristics such as gender, age, race, religion, or political views. In the labor market it is usually measured in terms of wage differentials between workers, the degree of segregation in different types of employment or sectors, and labor force participation, see [Cain \(1987\)](#) and [Altonji and Blank \(1999\)](#).

Neoclassical theory of discrimination is divided in two classes of models: competitive and collective models. In collective models, as its name indicates, groups act collectively against each other, while competitive models focus on individual behavior. Competitive models are further divided in taste-based models with complete information and statistical models of discrimination with imperfect information. The former one is the primary interest of this article since it is the model introduced by [Becker \(1957\)](#), which gives the theoretical framework for the well know and widely used, BO decomposition.

Taste-based models consider “prejudice” as the source of discrimination. In fact, Becker introduced the idea that some consumers, employers, and employees may have prejudices against certain groups of workers (minority or discriminated group). In his work, prejudice is modeled as a “taste for discrimination”. This discriminatory coefficient is captured by a disutility parameter that reflects the cost associated with discriminatory tastes. In the case of employers discrimination, this premium is added to the cost of hiring workers from a minority or discriminated group. The size of the wage gap depends then on the numbers of discriminating employers on the labor market and the intensity of their prejudice against members of the discriminated group. Segregation of the minority group in certain types of jobs is the natural outcome of market equilibrium. See [Cain \(1987\)](#) and [Altonji and Blank \(1999\)](#) for discussion of customer, and employee discrimination, and extensions of the original model.

The main drawback of these models is that pre-market discrimination is not taken into

account. Differences in endowments are certainly explained by the environment in which each individual evolves. For instance, immigrants families usually live in sectors where criminality rates are high, integration with country natives is limited, and education is of low quality. In this context, the probability that children from immigrated families attend to college may be significantly reduced. Therefore, in average, these children have a clear disadvantage compare to those who have had access to a good education and have grown up far from violence and criminality.

Discrimination in the labor market is an open, pervasive, and persistent phenomenon as many of the empirical works have shown. But discrimination or disparities also exist inside the households. The gender differences in the allocation of time to housework and labor market activities is a recognized fact. Indeed, it is known that women spend more time in housework activities compared to men. It is more questionable why this is the case.

In order to explain the differences in time allocation three main theories have been proposed: The time availability hypothesis, the relative resource hypothesis, and the gender hypothesis. First, the time availability hypothesis argues that time spend on domestic chores is related to the amount of time available for each family member, thus there is an inverse correlation between the hours spend in market labor activities and the hours spend in domestic task, see [Hiller \(1984\)](#) and [Coverman \(1985\)](#). The relative resources perspective suggests that the amount of hours spend on household chores depends on the bargaining power of each partner, so that the member of the couple with the bigger bargaining power imposes his own housework preference on the other one, see [Brines \(1994\)](#). The last perspective is a more sociological one, the gender hypothesis explains that the amount of housework done by women is bigger than those of men simply because the society automatically link housework and gender. This perspective highlights that there is no a real trade off between labor market activities and housework since all the housework is dictated to women by the social norm, see [Bianchi et al. \(2000\)](#).

Households's time allocation theory was first introduced by [Becker \(1965\)](#) and later by [Gronau \(1977\)](#), here the household is considered not only as a consumer unit but also as producers. In this framework, the family maximizes its utility with respect to final consumption goods produced by family member themselves. These consumption goods are produced with market goods and time as inputs; the latter is allocated between working time and time spend in domestic activities (housework). This modelisation of the household opened the door to decision-making models, which aim to explain the decision-making process within the family members. Three main categories can be deduced: the collective model mainly due to [Chiappori \(1997\)](#) and [Apps and Rees \(1997\)](#), the bargaining cooperative models developed by [Manser and Brown \(1980\)](#) and [McElroy and Horney \(1981\)](#), and finally the non cooperative bargaining model of [Lundberg and Pollak \(1993\)](#).

All these models include household labor supply into Becker's time allocation frame-

work. Their main difference lies in the way the decision-making process is generated within the household. The [Lundberg and Pollak \(1993\)](#) model assumes that the members of the family do not cooperate while taking a decision, which leads to a Nash equilibrium. The other two methods assume a cooperative decision-making process, which leads to a Pareto equilibrium instead.

2.1 A Model of Allocation of Time

Following [Kooreman and Kapteyn \(1987\)](#), the husband m and the wife f of a household maximize the utility u represented by the function:

$$u = U(x_m, x_f, c_m, c_f, l_m, l_f), \quad (1)$$

subject to time and monetary constraints:

$$l_m + c_m + h_m = T_m, \quad (2)$$

$$l_f + c_f + h_f = T_f, \quad (3)$$

$$p(x_m + x_f) = w_m h_m + w_f h_f + v, \quad (4)$$

where x_i is the consumption of market goods, c_i the housework time, l_i the leisure time, h_i the labor market hours, w_i the net wage rates, p the market price of goods x_i , v other non-labor income, and T_i fixed time endowments, with $i \in \{m, f\}$.

Combining the two constraints, under the assumption of perfect substitutability of time between activities, yields the full income constraint:

$$p(x_m + x_f) + w_m(l_m + c_m) + w_f(l_f + c_f) = w_m T_m + w_f T_f + v \equiv Y, \quad (5)$$

Solving this maximization problem yields solutions for x_i , c_i , l_i , h_i (endogenous variables of the model) as function of the exogenous variables w_i , T_i , v , and Z .

$$q_k = f_k(w_m, w_f, T_m, T_f, v, Z), \quad (6)$$

with

$$q_k \subseteq (x_m, x_f, c_m, c_f, l_m, l_f, h_m, h_f), \quad (7)$$

where Z is the other exogenous variables affecting the utility, such as household's demographic characteristics.

3 Literature Review

Empirical evidence on wage disparities is extensive and it has been mainly studied using the BO decomposition or some extension of it. Results are well established, women and gender minorities are discriminated in the labor market, with an intensity that varies from country to country. Among the works that use Latin America data we find those by [Tenjo et al. \(2005\)](#), who analyse the evolution of the gender gap in six LAC countries and finds evidence of statistical discrimination. [Ñopo \(2012\)](#) finds that gender and ethnic earnings gaps persist in the region, even though important changes have occurred regarding the situation of these groups in labor markets and the society in general. Finally, [Popli \(2013\)](#) uses a nonparametric-distributional approach to study the gender wage differential and finds evidence of a reduction of labour market discrimination against women resulted from a fall in the estimated discrimination at the lower tail of the wage distribution.

Regarding the differences in the allocation of time to domestic and market activities, it has been shown that there is an important inequality in the time spend in housework activities between men and women, see [Wales and Woodland \(1977\)](#), [Sousa-Poza et al. \(2001\)](#) and [Álvarez and Miles \(2003\)](#). Indeed, women tend to spend more time doing household chores compared to men and men spend more time in paid work activities. Articles studying the determinants of the allocation of time in Latin American countries are limited, probably because of the scarcity of Time Use surveys in the region. Some of the few works found in the literature are those of [Newman \(2002\)](#) who uses survey data from Ecuador to examine the effects of women's employment on the allocation of paid and unpaid labor within the household, and finds that market labor opportunities for women have no effect on women's total time in labor but increase men's time in unpaid labor, which in turn reflects women's increased bargaining power in the home. [Medeiros et al. \(2007\)](#) analyze paid and unpaid work-time inequalities among Bolivian urban adults, and find that gender is an important variable to explain how much paid and unpaid work is done by individuals, but not so important to explain why some people have a higher total workload than others.

4 Methodology

4.1 The Blinder-Oaxaca Decomposition

The standard approach for the study of earnings differentials was introduced in the economics literature by [Blinder \(1973\)](#) and [Oaxaca \(1973\)](#). From the estimation of wage equations this method allows to decompose the mean wage difference between two groups into three effects: the "Endowments effect", that amounts to the part of the differential due to group differences in the vector of characteristics; the "Coefficient effect", that corre-

sponds to the differences in the coefficients; and the “Interaction effect”, that accounts for the simultaneous existence of differences in endowments and coefficients.

In the original BO decomposition, one has to choose the reference group for the counterfactual. For instance, assessing the potential wage of women in absence of discrimination, one usually assumes that the male wage structure provides a good counterfactual, but this is not always the case. [Reimers \(1983\)](#), [Neumark \(1988\)](#) and [Oaxaca and Ransom \(1994\)](#) suggest different alternatives for a new wage structure that can be used instead. One popular application is to calculate β^* from a pooled regression over both groups, with the inclusion of a dummy variable as group indicator in order to avoid the transfer of parts of the unexplained component into the explained one, see [Jann \(2008\)](#). This is the procedure used in this article for the Oaxaca decomposition as well as for the [Firpo et al. \(2009\)](#) decomposition.

Concerning the wage equation, the usual regression model is based on the “human capital specification”, but recent approaches additionally control for occupation and industry in order to reduce the error term and to take into account occupational segregation. As pointed out by [Blau and Kahn \(2000\)](#) any approach that relies on a statistical residual is open to questions regarding the inclusion of all necessary independent variables in the regression. Unobserved factors such as ability can overstate the size of the unexplained part of the wage gap. On the other hand, the inclusion of economic sectors and worker occupation may understate the part attributed to discrimination if occupational segregation is the result of discriminatory practices in the labor market.

4.2 The RIF Regression

Decomposition methods for parameters other than the mean face econometric complications since the law of iterated expectations does not hold for them. Various methods to overcome this problem have been proposed. Among them, the most popular are the residual imputation method by [Juhn et al. \(1993\)](#), the conditional quantile regression method by [Mata and Machado \(2005\)](#) and [Melly \(2005\)](#), and the RIF regression method by [Firpo et al. \(2009\)](#). In this article we use the latter one since it allows the computation of the effect of each covariate on the unconditional wage distribution, and it is also less computational demanding than those proposed by [Mata and Machado \(2005\)](#) and [Melly \(2005\)](#).

A detailed explanation for the method used here and for all the other decomposition methods cited above, can be found in [Firpo et al. \(2010\)](#). In the following we give a short overview of the RIF-regression method.

Let Y be the output variable, in our case wages, and $\nu(F_Y)$ the distributional statistic of interest, in our case quintiles. The influence function $IF(y; \nu)$ of ν at the observed wage y

is given by:

$$IF(Y, Q_\tau) = \frac{\tau - \mathbb{1}\{Y \leq Q_\tau\}}{f_Y(Q_\tau)}, \quad (8)$$

where τ represents the quantile of interest, $\mathbb{1}\{\cdot\}$ is an indicator function expressing whether the outcome variable is smaller or equal to the quantile, and $f_Y(\cdot)$ is the density of the marginal distribution on Y evaluated at the population τ -quantile of the unconditional distribution of Y .

Since the recentered influence function is defined as $RIF(y; \nu) = \nu(F_Y) + IF(y; \nu)$, for the quantile case it is written as:

$$RIF(Y, Q_\tau) = Q_\tau + \frac{\tau - \mathbb{1}\{Y \leq Q_\tau\}}{f_Y(Q_\tau)}. \quad (9)$$

After computing the RIF, usually by kernel methods, it replaces the outcome variable in the regression over the covariates. The RIF regression is carried out in a standard OLS framework. Once this has been done, the estimated coefficients are used to perform a detailed decomposition in the same spirit of the classical Blinder-Oaxaca methodology.

4.3 Seemingly Unrelated Regressions

Theoretical models suggest that the decision of time allocation between housework hours and labor market activities is jointly determined by all individuals of the household. In order to take into account the inter-dependance of the decision-making process, we use seemingly unrelated regressions. The reduced equations based on the [Kooreman and Kapteyn \(1987\)](#) model explained above, leads to the following estimation specification:

$$h_m = \alpha w_m + \gamma_1 Z_m + \gamma_2 Z + \epsilon_i, \quad (10)$$

$$c_m = \alpha w_m + \gamma_1 Z_m + \gamma_2 Z + \epsilon_i, \quad (11)$$

$$h_f = \alpha w_f + \gamma_1 Z_f + \gamma_2 Z + \epsilon_i, \quad (12)$$

$$c_f = \alpha w_f + \gamma_1 Z_f + \gamma_2 Z + \epsilon_i, \quad (13)$$

where Z_m and Z_f includes all the individual characteristics that affect labor and domestic activities, Z all the other household demographic characteristics, and ϵ_i is the regression residual.

The principal problem that one faces when dealing with data concerning time allocation to domestic activities, is the presence of zero observations. This is a common characteristic of time use data and there are two possible explanations: either the individual in question does not participate in domestic activities at all, or the individual usually participates but for some reason he/she did not do it during the recording period. Since one cannot differentiate one from the other, this fact needs to be taken into account during the estimation. Common procedures include the Tobit and the Heckman selection model. The choice of the model depends on the results of the normality and homoskedasticity tests, hypothesis that our results reject¹. In this article we use the Heckman two stages procedure for men's time allocation in domestic activities. Since the proportion of women that shows zero observations for housework activities correspond, in average, to 1% of each country sample, there is no need to perform this procedure for them. The other three equations are performed by OLS, and the whole system is estimated as seemingly unrelated regressions.

4.4 Self Selection Problems

This article does not address self selection into the job market. The reasons are as follows: first, in order to better address the interdependence of the decision-making process inside the household, the analysis for the allocation of time concerns only couples where both individuals work. Second, we are interested in studying wage disparities conditional on being employed. Finally, selection bias correction in a quantile framework requires techniques that are less developed, with just few studies addressing the problem. These studies, in turn, rely on the validity of instruments and the correct identification of the intercept of the wage equation².

5 Data

Bolivia

The first dataset used in this study comes from the Bolivian National Living Standards Survey (MECOVI) 2001 conducted by the Bolivian National Institute of Statistics (INE). The original dataset includes 25,166 individuals who answered questions regarding ethnic background, income, expenditure, and time use on domestic activities. Information on wages, transfers, and other non labor income is collected, as well as common socio-demographic characteristics such as level of education, age, gender, marital status, area of

¹The test procedures are detailed in [Cameron and Trivedi \(2009\)](#). Results are available from authors upon request.

²See the works of [Buchinsky \(1998\)](#), [Albrecht et al. \(2009\)](#), and [Chzhen et al. \(2012\)](#)

residence, etc. From the initial sample we selected working individuals aged between 20 and 70 years, living in nuclear families, either in couple or alone. The final sample has 4,430 persons living in 3,738 households. Table 1 gives descriptive statistics for the final sample used in this study. The average age of the individuals is 40 years old. Level of education is low, with 55% of the sample attaining at most primary level. Indigenous population represent 63% of the individuals on the sample. The Aymaras and the Quechuas, which are the more predominant indigenous ethnias, account for 31% and 26%, respectively.

Table 1: Descriptive Statistics (Whole Sample)

Variables	Bolivia		Ecuador		Guatemala	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Income per Capita	889.29	(897.40)	240.23	(234.30)	17,926.42	(45,144.21)
Household Size	4.34	(2.06)	3.89	(1.70)	5.03	(2.17)
Age	39.86	(11.77)	42.59	(11.77)	39.77	(11.89)
Percentage Urban Households	0.53	(0.50)	0.60	(0.49)	0.50	(0.50)
Percentage Couples	0.87	(0.34)	0.83	(0.38)	0.87	(0.33)
Primary Education	0.55	(0.50)	0.52	(0.50)	0.76	(0.43)
Secondary Education	0.31	(0.46)	0.29	(0.45)	0.18	(0.38)
Tertiary Education	0.14	(0.34)	0.19	(0.39)	0.06	(0.24)
Native indigenous	0.63	(0.48)	0.07	(0.26)	0.38	(0.49)
Non indigenous	0.37	(0.48)	0.93	(0.26)	0.62	(0.49)
Observations	4330	-	12046	-	5637	-

Note.- Income data is shown in local currency, Peso Boliviano, American Dollar, Quetzales.

Ecuador

The analysis in this paper draws also on individual level data from the Ecuadorian Survey of Employment and Unemployment (ENEMDU) 2007 conducted by the Ecuadorian National Institute of Statistics and Census (INEC). The original dataset includes 75,975 individuals who, as in the previous case, answered questions regarding ethnic background, income, expenditure, and time use on domestic activities. Information on common socio-demographic characteristics is also collected. From the initial sample, working individuals aged between 20 and 70 years, living in nuclear families, either in couple or alone were selected. The final sample consist of 12,046 persons living in 9,933 households. As pointed out in Table 1, the average age of the individuals is 42 years old, the level of education is low, with 52% of the sample attaining at most primary level, and the Indigenous population represent 7% of the sample.

Guatemala

The third dataset used in this study is the Guatemalan National Living Standards Survey (ENCOVI) 2000 conducted by the Guatemalan National Institute of Statistics (INE) and the World Bank. The ENCOVI survey final sample is composed by 7,276 rural and urban households, interviewed during the calendar year 2000, which represents approximately 0.33% of all Guatemalan households. In order to collect the data, the national territory was divided on 11,159 zones of which 740 were selected for the sample survey. As for the previous countries, from the initial sample we selected working individuals aged between 20 and 70 years, living in nuclear families, either in couple or alone. The final sample has 5,637 persons living in 3,720 households. The average age of the individuals is 40 years old. Level of education is the lowest of the three countries, with 76% of the sample attaining at most primary level. Indigenous population represent 38% of the individuals on the sample.

General

For the second part of the study, in order to take into account the possible simultaneity of the time use equations, we work with a restricted dataset consisting on couples where both individuals work. For the case of Bolivia, the restricted dataset has 1,578 observations. The dataset of Ecuador consists on 4,810 observations and that of Guatemala on 2,114 observations.

6 Results

Table 2 shows the descriptive statistics of the weekly hours spent on domestic and paid market activities for the male, female, indigenous, and non-indigenous population of the sample. A quick glance at the table tells us that in average people devote twice as much time to paid labor activities than to domestic activities. In general, men spend more time in the job market compared to women, but women spend in average four times more hours performing domestic tasks than men. Women dedicate almost the same amount of time in domestic chores than in the paid market activities (around 40 hours for each of them). In fact, women are double burdened and tend to accumulate both types of work, while men concentrate only on paid market work. Concerning the indigenous population, they spend similar amount of hours doing domestic activities than the rest of the population, but spend around 3 hours less in the paid market activities.

The large differential between the numbers of hours spent on domestic activities for men and women may be driven by lower wages for women in the paid market activities

compared to men, pushing them to carry out most of the housework activities. The bigger the wage gap, the larger the incentive for women to stay at home. In order to test this assumption we study the determinants of the allocation of time and look for the magnitude and significance of the wage coefficients. This is done once we have calculated the proportion of the gender wage gap that is usually attributed to discrimination.

Table 2: Descriptive statistics: Time allocation

Mean hours spent in	Domestic Work	Market Work
Bolivia		
Whole Sample	17.828	43.939
Male	10.428	46.987
Female	33.182	37.614
Native indigenous	17.183	40.984
Non Native indigenous	17.862	44.095
Ecuador		
Whole Sample	19.820	42.283
Male	11.120	45.381
Female	35.926	36.548
Minority	19.805	40.632
Non Minority	19.822	42.507
Guatemala		
Whole Sample	17.590	47.824
Male	7.026	51.972
Female	39.333	39.286
Native indigenous	18.305	46.318
Non Native indigenous	17.158	48.731

Note.-Mean values per week

The results of the BO decomposition are shown in Table 3. As explained in Section 4, the decomposition method divides the wage gap into two components: the explained component, which is the part of the gap that is attributed to the difference of endowments between the discriminated population and those who are not, and the unexplained component, which is the difference on the wage usually attributed to discrimination.

The case of Bolivia, is of particular interest, since the wage gap seems to be in favor of women. A couple of reasons can explain these results. First, the lower labor market participation of Bolivian women with respect to men. Either for self-selection out of the job market, or because the entry barriers are stronger. Second, ethnic discrimination is significant in a country where the majority of the population is indigenous, so average

wages of men along the distribution may be pulled down due to the important presence of male indigenous workers.

Table 3: Blinder-Oaxaca Decomposition

Bolivia	Wage Gap	Explained Component	Unexplained Component
Based on indigenous wage structure	0.538	0.365	0.174
Based on female wage structure	-0.062	-0.279	0.216
Ecuador	Wage Gap	Explained Component	Unexplained Component
Based on minority wage structure	0.354	0.225	0.129
Based on female wage structure	0.167	-0.082	0.249
Guatemala	Wage Gap	Explained Component	Unexplained Component
Based on indigenous wage structure	0.755	0.450	0.305
Based on female wage structure	0.579	-0.295	0.874

The Oaxaca decomposition also shows that, in average, the explained effect accounts for the biggest proportion of the wage gap between indigenous and non-indigenous workers. Indeed, even if indigenous workers are also discriminated in the job market, the difference in wages is mainly driven by the difference on endowments. Highlighting again, the importance of public policies conceived to improve educational attainment in these countries.

Table 4 shows the decomposition of the gender and ethnic wage gap at different points of the distribution. In general, the wage gap is wider at the lower tail of the distribution for both, the gender and ethnic perspective, suggesting the presence of a “sticky floor” effect.

The RIF method allows to analyze the contribution of each explanatory variable to the endowment and coefficient effects³. Along with the human capital specification, we have also controlled for economic sector and occupation. As pointed out in Section 3, results must be interpreted carefully since if occupational segregation is due to discriminatory practices in the labor market, it will understate the measure of discrimination.

For the case of Ecuador, we notice that the gender wage gap is primarily due to the effects on the coefficients, while the ethnic wage gap is due to differences in endowments or characteristics. An important point is that the explained part of the gender gap is negative through all different quantiles of the distribution. This pattern is increasing and suggest that women have better endowments than men, specially at the upper part of the wage distribution.

Looking at the detailed decomposition, one can see that tertiary education accounts for approximately one third of the explained component for the higher quantiles. Indeed,

³The results of the detailed decomposition are shown in Tables A.1 - A.6 in the Appendix.

women advantages in terms of education and job related characteristics, at the top of the distribution, offset almost the totality of the unexplained part, reducing significantly the total wage gap in that part of the distribution. Moreover, 51% of the coefficients effect on the upper part of the distribution is due to the different returns to education that women perceive with respect to men, implying that even when women in our sample are more qualified than men in terms of education, possibly due to a strong selection into the job market, they still perceive lower wages.

Table 4: RIF- OLS Regressions (Gender Wage Gap)

Quantile	Gender Wage Gap					Ethnic Wage Gap				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Bolivia										
Difference	-0.139	-0.013	0.003	-0.045	-0.045	0.991	0.669	0.425	0.335	0.330
Explained	-0.439	-0.407	-0.177	-0.106	-0.109	0.655	0.517	0.309	0.240	0.177
Unexplained	0.300	0.394	0.180	0.061	0.064	0.336	0.152	0.116	0.095	0.153
Ecuador										
Difference	0.340	0.268	0.191	0.068	0.033	0.582	0.464	0.343	0.335	0.485
Explained	-0.063	-0.061	-0.078	-0.117	-0.114	0.440	0.294	0.290	0.348	0.2897
Unexplained	0.403	0.328	0.270	0.186	0.147	0.142	0.170	0.053	-0.013	0.196
Guatemala										
Difference	0.506	0.852	0.633	0.471	0.417	0.930	0.918	0.693	0.595	0.662
Explained	-0.859	-0.408	-0.225	-0.092	-0.021	0.396	0.487	0.457	0.410	0.477
Unexplained	1.365	1.260	0.858	0.562	0.438	0.534	0.431	0.236	0.185	0.185

Regarding the ethnic wage gap, we see that the explained part accounts for a bit more than half of the gap at the lower and upper quantiles, and almost the totality of the gap at the median and the 0.7 quantile, implying that ethnic discrimination is stronger at the extremes of the distribution.

The ethnic wage gap in the Bolivian case is of particular interest since more than 60% of the population is indigenous. The gap is mainly driven by differences in endowments, but the distance between the explained and unexplained components at the upper part of the distribution is extremely small.

The Guatemalan case is outstanding to the extent that both, gender and ethnic wage gaps are important. The ethnic wage gap is primarily driven by the endowments effect from the median and upper quantiles, but at the lower quantile the coefficients effect represents more than half of the wage gap. Difference in education and working in the agricultural sector contribute to more than half of the endowments effect for the upper tail of the distribution, but being a skilled agricultural worker, the absence of social security, and living in the urban areas is what explains the endowments effect at the lower quintiles.

Overall, the wage gap is bigger at the lower tail of the distribution, for both women and indigenous population, suggesting a sticky floor effect. In all three countries education and living in the urban areas constitute a large portion of the endowments effect of the ethnic wage gap, which suggest that indigenous population have limited access to education and are concentrated in rural areas with a limited access to the job market.

In the following, we discuss the results obtained regarding disparities in the intra-household allocation of time. Table 5 shows the coefficient estimates of the seemingly unrelated regressions of weekly hours of work spend on labor market and domestic activities for selected variables⁴.

Table 5: SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Bolivia				
Tertiary Education	-2.893	1.895	3.101*	-5.917**
Wage	-10.036***	-9.494***	0.221	0.412
Ecuador				
Tertiary Education	1.318	5.027***	2.949	-3.319**
Wage	-6.954***	-6.237***	-0.387	-0.141
Guatemala				
Tertiary Education	-5.969*	5.178	-4.190	1.655
Wage	-3.251***	-6.893***	0.155	-0.023

Note.-All dependent variables are in weekly hours.

*p<0.05, **p<0.01, ***p<0.001.

From the regression on the number of hours spent in paid market activities, one can see that the bigger determinants of weekly working hours are wage, living in urban areas, and whether the person comes from a poor family. Among them, only the area of residence increases the hours spend in the labor market for both men and women in all three countries, what suggests that demand for labor is still higher in bigger cities. The impact is more evident in Bolivia, where men's coefficient is multiplied by 4 compared to Ecuador and Guatemala. The significant negative impact of the household's poverty status reflects the restricted access, of some groups of the population, to formal labor markets.

Regarding the results from the regression of the number of hours per week spent on domestic activities, one can see that tertiary education, in Bolivia and Ecuador, decreases the time that women spend on domestic activities, and for Bolivia, it also increases the time

⁴Tables A.7, A.8, and A.9 in the Appendix, show the complete estimation results.

of men. This suggests that education increases the bargaining power of women inside the households, which, in turn, implies that in households where women are more educated, domestic tasks are shared in a more equitable way. This is, of course, important since the level of education in the three countries is very low. As it has been pointed out in the wage decomposition results, education explains a significant part of the wage gap, in particular for the indigenous population. It also reduces the gap in the upper quantiles, especially for women. In this context, investing in women's education becomes an effective tool for reducing gender and ethnic inequalities, considering that in Bolivia and Guatemala an important proportion of the population is indigenous.

Concerning labor earnings, we observe that wages have no effect on unpaid work activities neither for women nor for men. This suggests that social norms play a significant role in the allocation of time to domestic activities. Once again, the importance of increasing the level of education of the population becomes evident.

Finally, childcare burden seems to be supported more by women than by men. While men are almost unaffected by the presence of children, one additional infant (0-5 years) in the household increases the time spent by women on domestic activities by more than double the effective increase of their partners in Bolivia and Ecuador, while it has no effect in the Guatemalan sample. The rest of the variables present different signs and magnitudes among the countries. Their effects can be attributed to cultural differences and respective development levels.

Conclusions

Some of the factors that are directly related to low economic development and poor performance of a given society, are the level of income inequality as well as the limited and unequal access to social services within a country. This is, in turn, reflected in the low human capital endowments and labor market outcomes of the majority of the active population mostly composed by low skill workers. Social exclusion, ethnic and gender discrimination are direct consequences of the inequality of opportunities faced by a person during his/her life path.

In this paper we study gender and ethnic disparities in Bolivia, Ecuador, and Guatemala. Overall, the results suggest that ethnic discrimination in the labor market is higher in Guatemala and Bolivia, than it is in Ecuador. After decomposing labor earning differences, we found that nearly half of the gap in wages is explained by differences in human capital endowments, while the other half can be attributed to discrimination. In the three countries, indigenous workers are paid less than non-indigenous workers, even when they have the same level of endowments. This fact is confirmed by the quantile decomposition,

where one can see that even when the ethnic wage gap is reduced along the wage distribution, it is still persistent and significantly higher at the lower tail of the distribution. Results should be interpreted with caution since potential selection bias and workers unobserved characteristics may influence the measure of discrimination.

The results from the seemingly unrelated regressions show that, at least for the case of Bolivia and Ecuador, education decreases the number of hours that women spend on domestic work and increase the one of men, suggesting that more educated persons share domestic tasks in a more equitable way. Thus, considering the low level of human capital in the three countries, effective public policies should target improvements in educational attainment and modification of social norms regarding the expected role of women in the society.

In general, ethnic disparities are more clearly reflected in wage differences on the labor market, while gender disparities can be found in both, wages and access to the labor market, as well as in the allocation of time for domestic activities within the household.

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AppendixA

Table A.1: Bolivia, RIF- OLS Regressions (Gender Wage Gap)

Quantile	Endowments Effect					Coefficients Effect				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Total	-0.439***	-0.407***	-0.177***	-0.106***	-0.109**	0.300***	0.394***	0.180***	0.061	0.064
Secondary	0.012*	0.017**	0.010*	0.010**	0.003	-0.066	-0.031	-0.009	0.036	0.033
Tertiary	-0.003	-0.006	-0.008*	-0.017*	-0.024*	-0.021	-0.012	0.010	0.003	0.027
Urban	-0.026*	-0.033**	-0.012	-0.018*	-0.049***	0.084	0.153*	-0.025	-0.023	-0.039
Age	0.034	0.013	0.011	0.015	0.020	1.074	0.762	0.665	0.928	-0.204
Age squared	-0.032	-0.017	-0.013	-0.017	-0.018	-0.544	-0.235	-0.240	-0.354	0.160
Ternure	-0.085***	-0.038***	-0.009	0.008	0.009	-0.026	-0.102	-0.031	-0.022	0.017
Social security	-0.000	-0.002	-0.002	-0.001	-0.001	-0.018	0.119	0.019	0.102	-0.076
Senior official/managers	-0.003*	-0.001	0.002	0.006*	0.016*	-0.002	-0.003	-0.002	-0.000	0.014
Professionals	0.006	0.006	-0.022***	-0.035***	-0.043**	-0.001	0.001	-0.018	-0.016	0.053
Technicians	-0.004*	-0.004	0.003	0.006*	0.008	-0.002	0.013	0.006	0.010	0.021
Clerks	0.003*	0.001	-0.006*	-0.005	-0.002	-0.001	-0.002	0.003	0.010	0.005
Service and sales	0.047*	0.100***	0.033	-0.002	-0.008	0.046*	0.034	-0.004	-0.001	0.048
Skilled agricultural	-0.319***	-0.439***	-0.204***	-0.083***	-0.010	0.286***	-0.012	-0.048	-0.028	-0.007
Craft	-0.039***	-0.032**	0.004	-0.002	-0.013	0.099**	0.070	0.041	0.031	0.055
Plant/machinery operators	-0.030***	-0.022*	0.005	0.013	0.008	0.020**	-0.000	0.002	0.003	0.015
Agriculture	-0.067***	-0.062**	-0.034	-0.030	-0.035	-0.021	-0.001	0.038	0.081	0.066
Manufacturing	-0.000	0.005	0.003	0.000	-0.001	-0.040	0.006	-0.006	-0.008	-0.022
Commerce	0.065***	0.106***	0.061***	0.046***	0.029	-0.021	-0.010	0.028	0.019	0.023
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*p<0.05, **p<0.01, ***p<0.001.

Table A.2: Bolivia, RIF- OLS Regressions (Ethnic Wage Gap)

Quantile	Endowments Effect					Coefficients Effect				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Total	0.655***	0.517***	0.309***	0.240***	0.177***	0.336**	0.152**	0.116**	0.095*	0.153**
Secondary	0.007	0.003	0.003	0.002	0.001	0.047	0.095*	0.032	-0.019	-0.100**
Tertiary	0.016	0.014*	0.017**	0.029***	0.042***	0.014	0.038	0.031	0.027	-0.020
Gender: male	-0.012	-0.014*	-0.006	-0.002	-0.002	0.320*	-0.097	-0.034	-0.045	0.130
Urban	0.034**	0.019**	0.006	0.009	0.020**	0.083	-0.141*	-0.093	-0.049	0.012
Age	-0.178*	-0.037	-0.065**	-0.072**	-0.064*	-1.746	-1.566	-1.920**	-1.404*	-2.711**
Age squared	0.177*	0.042	0.069**	0.073**	0.053	0.559	0.709	0.910**	0.601	1.193*
Ternure	0.091**	0.065***	0.022**	-0.006	-0.004	0.297*	0.118*	0.049	0.077*	0.018
Social security	0.003	0.012**	0.015**	0.011**	0.005	0.026	-0.265**	-0.126	-0.060	0.169
Senior official/managers	-0.002	-0.001	0.001	0.004	0.008	-0.001	0.001	0.003	0.004	-0.014
Professionals	-0.003	-0.002	0.005	0.016*	0.017*	0.008	0.002	-0.015	-0.009	-0.026
Technicians	-0.005	-0.009*	0.002	0.013**	0.011*	-0.006	0.013	0.003	0.003	0.008
Clerks	-0.004	-0.002	0.002	0.007*	-0.000	0.000	0.002	-0.006	0.001	0.003
Service and sales	-0.001	-0.002	-0.001	0.000	0.000	0.013	0.029	0.031	0.012	0.033
Skilled agricultural	0.265***	0.267***	0.115***	0.044***	0.016	-0.389***	0.175**	0.118*	0.083	0.037
Craft	0.003	0.002	-0.000	0.000	0.001	-0.079	0.054	-0.013	0.024	0.048
Plant/machinery operators	-0.002	-0.001	0.000	0.001	0.000	-0.026	-0.007	-0.012	-0.011	-0.007
Agriculture	0.029*	0.020*	0.021**	0.017*	0.010	0.008	0.185**	0.079	-0.012	0.020
Manufacturing	-0.000	-0.002	-0.002	-0.000	0.001	0.006	0.031	0.047***	0.031*	-0.008
Commerce	-0.006	-0.007	-0.005	-0.003	-0.002	-0.010	0.054*	0.046*	0.040*	-0.010
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*p<0.05, **p<0.01, ***p<0.001.

Table A.3: Ecuador, RIF- OLS Regressions (Gender Wage Gap)

Quantile	Endowments Effect					Coefficients Effect				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Total	-0.063***	-0.061***	-0.078***	-0.117***	-0.114***	0.403***	0.328***	0.270***	0.186***	0.147***
Secondary	-0.003*	-0.004**	-0.004**	-0.006**	-0.004**	-0.016	-0.030	-0.023	-0.001	0.004
Tertiary	-0.013***	-0.020***	-0.027***	-0.045***	-0.046***	-0.000	-0.029*	-0.020	0.002	0.075**
Urban	-0.025***	-0.015***	-0.008**	-0.005	-0.006	-0.010	-0.067*	-0.063*	0.009	0.061
Age	0.029	0.034***	0.041***	0.066***	0.068***	0.320	-0.666	-0.091	0.057	1.748**
Age squared	-0.041*	-0.044***	-0.043***	-0.062***	-0.056***	-0.184	0.404	0.130	0.096	-0.852**
Turnure	-0.025***	-0.008*	0.002	0.022***	0.028***	0.008	0.003	-0.029	-0.082**	-0.089**
Social security	-0.005*	-0.006*	-0.007*	-0.009*	-0.004	-0.031	0.166***	0.166***	0.180**	0.078
North	0.001	0.001	-0.000	-0.001	-0.001	-0.012	0.001	0.009	0.021	0.026
Central	0.006**	0.003**	0.002*	0.002	0.003	-0.023	0.006	0.031**	0.025	0.023
South	0.005**	0.000	-0.002*	-0.002	0.001	-0.010	0.010	0.018*	0.026*	0.020
Armed Forces	-0.001	0.000	0.003***	0.009***	0.026***	0.000	0.001**	0.001*	0.001*	-0.000
Senior official/managers	0.000	0.001*	0.003*	0.006*	0.009*	0.000	0.001	0.001	-0.001	0.011
Professionals	-0.001	-0.008***	-0.017***	-0.044***	-0.062***	-0.000	0.006	-0.003	-0.003	0.051**
Technicians	-0.001	-0.004***	-0.007***	-0.015***	-0.010***	-0.004	-0.001	-0.004	-0.006	0.002
Clerks	0.001	-0.003*	-0.009***	-0.018***	-0.012***	0.001	0.005	-0.003	-0.001	0.015
Service and sales	0.003	-0.003	-0.012*	-0.032***	-0.023**	-0.001	-0.016	-0.007	0.019	0.028
Skilled agricultural	-0.031***	-0.006**	0.007***	0.010***	0.008***	0.001	0.040**	0.019	0.033**	0.017
Craft	0.005	0.016***	0.021***	0.016***	-0.001	0.042**	0.020*	0.025**	0.039***	0.032*
Plant/machinery operators	0.011	0.018***	0.028***	0.037***	-0.002	-0.001	-0.000	-0.004	0.000	0.006
Agriculture	0.000	-0.029***	-0.055***	-0.050***	-0.029***	0.002	-0.070**	-0.063***	-0.013	0.034
Manufacturing	-0.004*	-0.003*	-0.003*	-0.003*	0.000	-0.006	-0.006	-0.010	-0.014	-0.017
Commerce	0.025***	0.017***	0.010***	0.006	-0.002	-0.010	-0.003	-0.023*	-0.003	0.009

*p<0.05, **p<0.01, ***p<0.001.

Table A.4: Ecuador, RIF- OLS Regressions (Ethnic Wage Gap)

Quantile	Endowments Effect					Coefficients Effect				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Total	0.440***	0.294***	0.290***	0.348***	0.289***	0.142*	0.170***	0.053	-0.013	0.196***
Secondary	0.036***	0.025***	0.034***	0.050***	0.029***	0.014	0.018	0.009	0.016	0.004
Tertiary	0.034***	0.032***	0.050***	0.081***	0.072***	0.030	0.029	0.013	0.029*	0.020
Gender: male	-0.007	-0.005	-0.004	-0.003	-0.002	-0.101	0.000	-0.033	0.016	0.070
Urban	0.091***	0.043***	0.021*	0.012	0.018	0.044	0.021	-0.012	-0.007	-0.092*
Age	0.006	0.008	0.009	0.015	0.014	-1.807	-1.033	0.795	0.682	-0.569
Age squared	-0.004	-0.005	-0.005	-0.007	-0.006	1.209	0.814	-0.113	-0.200	0.342
Tenure	0.022*	0.013*	-0.001	-0.030***	-0.032***	0.069	-0.015	0.005	0.111	0.132
Social security	0.047***	0.055***	0.062***	0.077***	0.029***	-0.128	-0.039	0.062	-0.145	0.014
North	0.004	0.002	-0.001	-0.003	-0.002	-0.040	-0.015	-0.006	-0.003	0.083
Central	0.043***	0.024***	0.015*	0.011	0.027*	0.089	0.126	0.087	0.039	0.131
South	0.000	-0.000	-0.000	-0.000	0.000	-0.011	0.016	0.031	0.013	0.049
Armed forces	-0.002***	0.001*	0.003***	0.008***	0.017***	-0.000	0.000	0.000*	-0.000	-0.000
Senior official/managers	0.000	0.003*	0.005*	0.011*	0.016*	0.000	0.002	0.005	0.005	-0.022*
Professionals	0.002	0.012***	0.022***	0.048***	0.068***	-0.001	0.002	0.007	0.010	-0.005
Technicians	0.002	0.008***	0.013***	0.024***	0.018***	-0.001	0.001	0.001	-0.002	-0.028*
Clerks	0.000	0.005**	0.008***	0.013***	0.008**	0.001	0.004	0.003	0.001	0.002
Service and sales	-0.004	-0.001	0.005*	0.014***	0.011**	-0.011	0.026	0.021	0.014	-0.010
Skilled agricultural	0.207***	0.042***	-0.045***	-0.080***	-0.042***	-0.015	0.106	0.047	0.026	0.020
Craft	-0.000	-0.001	-0.001	-0.001	-0.000	0.008	0.023	0.003	-0.058**	-0.012
Plant/machinery operators	0.002	0.007***	0.011***	0.012***	0.001	0.009	0.007	0.007	-0.004	-0.010
Agriculture	-0.011	0.037***	0.099***	0.104***	0.042***	0.031	0.064	0.179*	0.114	-0.003
Manufacturing	-0.002	-0.002	-0.003	-0.002	-0.000	0.029	0.027	0.034*	0.057***	0.035
Commerce	-0.025***	-0.010***	-0.009***	-0.007*	0.001	-0.026	-0.021	0.001	-0.016	-0.003

*p<0.05, **p<0.01, ***p<0.001.

Table A.5: Guatemala, RIF- OLS Regressions (Gender Wage Gap)

Quantile	Endowments Effect					Coefficients Effect				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Total	-0.859***	-0.408***	-0.225***	-0.092**	-0.021	1.365***	1.260***	0.858***	0.562***	0.438***
Secondary	-0.001	-0.003	-0.008*	-0.014*	-0.011	-0.056	-0.056**	-0.029	-0.035	0.035
Tertiary	0.000	0.001	0.004	0.010	0.023	-0.006	-0.010	-0.003	0.012	0.048*
Urban	-0.076***	-0.066***	-0.046***	-0.035***	-0.015*	-0.205*	-0.203***	-0.307***	-0.159***	-0.050
Age	-0.127*	-0.084***	-0.059**	-0.066***	-0.084***	0.250	-1.471	-0.973	0.712	0.820
Age squared	0.114*	0.078***	0.057**	0.061***	0.070***	-0.167	0.719	0.431	-0.339	-0.324
Tenure	-0.101***	-0.049***	0.000	0.027***	0.040***	-0.281**	-0.175***	-0.018	-0.014	-0.130**
Social security	0.054***	0.055***	0.056***	0.051***	0.029***	-0.140	0.100	0.549***	0.864***	0.654***
Senior official/managers	0.000	-0.000	-0.001	-0.001	-0.002	0.001	0.006	0.002	0.013	0.024*
Professionals	0.005	-0.006*	-0.022***	-0.031***	-0.035***	0.018	-0.008	-0.027*	-0.004	-0.015
Technicians	-0.003	0.001	0.007**	0.009**	0.011*	0.010	-0.003	-0.013*	-0.007	-0.014
Clerks	0.000	-0.000	-0.000	-0.001	-0.000	0.002	-0.001	-0.009	-0.002	-0.006
Service and sales	-0.010	-0.034*	-0.082***	-0.062***	-0.065***	0.007	0.046	0.032	0.023	0.061
Skilled agricultural	-0.622***	-0.118***	-0.001	0.039***	0.010	-0.086**	0.028	0.021	-0.010	-0.008
Craft	-0.001	-0.002	-0.003	-0.003	-0.001	0.187***	0.178***	0.074*	0.053	-0.005
Plant/machinery operators	0.009*	0.012***	0.026***	0.022***	0.002	0.013	0.009	-0.005	-0.001	0.016**
Armed Forces	0.001	0.001*	0.001	0.001	0.003	0.000	0.000	-0.000	-0.000	-0.000
Agriculture	-0.163**	-0.234***	-0.163***	-0.115***	-0.001	-0.017	-0.153***	-0.223***	-0.106***	0.038
Manufacturing	0.053***	0.043***	0.033***	0.026***	0.005	0.033	-0.051	-0.050	-0.073*	0.057*
Commerce	0.024	0.018	0.001	0.013	0.016	-0.012	-0.122**	-0.140***	-0.073*	-0.006
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*p<0.05, **p<0.01, ***p<0.001.

Table A.6: Guatemala, RIF- OLS Regressions (Ethnic Wage Gap)

Quantile	Endowments Effect					Coefficients Effect				
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9
Total	0.396***	0.487***	0.457***	0.410***	0.477***	0.534***	0.431***	0.236***	0.185***	0.185***
Secondary	0.035*	0.026***	0.039***	0.047***	0.060***	-0.015	0.017	0.040**	0.019	-0.038
Tertiary	0.012	0.005	0.027***	0.054***	0.153***	-0.007	0.014*	0.014**	0.015**	0.018
Gender: male	-0.045**	-0.046**	-0.030**	-0.021**	-0.025**	-0.001	-0.388***	-0.278***	-0.243***	0.016
Urban	0.135***	0.081***	0.051***	0.033***	0.023*	0.204*	-0.073	-0.070**	-0.012	-0.032
Age	0.060	0.021	0.017	0.018	0.031	-0.774	-0.404	-0.153	1.198*	0.773
Age squared	-0.058	-0.020	-0.016	-0.017	-0.027	0.392	0.224	0.053	-0.493	-0.120
Temure	0.022	0.037***	0.006	-0.009*	-0.022***	0.125	0.135*	0.182***	0.086**	-0.109*
Social security	0.090***	0.106***	0.089***	0.070***	0.029**	-0.259**	-0.089	0.139*	0.285***	0.623***
Senior official/managers	-0.000	0.004	0.008**	0.010**	0.018**	0.018	0.019*	0.015**	0.012*	0.015
Professionals	0.005	0.017***	0.018***	0.023***	0.031***	0.055***	0.030**	0.021*	0.007	-0.053*
Technicians	-0.003	0.007*	0.012***	0.019***	0.020**	0.013*	0.010**	0.003	0.002	0.008
Clerks	0.001	0.007**	0.010***	0.011***	0.008	0.017**	0.016***	0.007*	0.001	-0.020*
Service and sales	0.006	0.012*	0.020***	0.015***	0.017**	0.097*	0.048	0.002	-0.022	-0.012
Skilled agricultural	0.206***	0.108***	0.018*	-0.009	-0.009	-0.270***	0.070	0.056*	0.017	-0.033
Craft	0.001	-0.008*	-0.012**	-0.010**	0.000	0.208***	0.177***	0.034	-0.027	-0.045
Plant/machinery operators	0.007	0.015***	0.018***	0.012***	0.001	0.029**	0.016**	0.006	-0.011*	-0.016
Armed Forces	0.000	0.001	0.001	0.000	0.002	0.000	0.001*	0.000	0.001	0.002
Agriculture	0.013	0.042*	0.119***	0.111***	0.082***	0.308**	0.171*	0.006	0.093*	0.231***
Manufacturing	0.003	0.003	0.002	0.002	0.000	0.021	0.058**	0.043**	0.013	0.074*
Commerce	0.000	0.000	-0.008**	-0.005	0.004	-0.016	-0.017	0.001	-0.013	0.042
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*p<0.05, **p<0.01, ***p<0.001.

Table A.7: Bolivia, SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Age	-0.231	1.013*	-0.146	0.240
Age Squared	0.002	-0.013*	0.003	-0.003
Secondary Education	2.044	1.818	0.625	0.795
Tertiary Education	-2.893	1.895	3.101*	-5.917**
Wage	-10.036***	-9.494***	0.221	0.412
Urban	7.905***	3.716*	-3.223***	-0.827
Poor Household	-13.191***	-13.892***	.259	4.652*
Kids under 5	0.662	-3.378*	0.680	4.858**
Female Kids under 12			-0.658	-0.456
Mills Ratio			-2.104	
Constant	66.925***	31.205***	11.578*	27.735**
No. of cases	691			

Note.-All dependent variables are in weekly hours

*p<0.05, **p<0.01, ***p<0.001.

Table A.8: Ecuador, SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Age	0.507**	0.487*	-0.252	0.173
Age Squared	-0.007***	-0.006*	0.001	-0.004
Secondary Education	2.350**	0.862	0.382	0.120
Tertiary Education	1.318	5.027***	2.949	-3.319**
Wage	-6.954***	-6.237***	-0.387	-0.141
Urban	2.522***	4.940***	-0.618	-2.563*
Poor Household	-10.397***	-12.828***	-1.349	4.192***
Kids under 5	-0.025	-1.286	1.550*	7.499***
Female Kids under 12			-0.325	-1.494
Mills Ratio			9.480	
Constant	39.905***	25.572***	20.951***	36.749***
No. of cases	2,161			

Note.-All dependent variables are in weekly hours

*p<0.05, **p<0.01, ***p<0.001.

Table A.9: Guatemala, SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Age	-0.838*	0.303	0.450	0.371
Age Squared	0.009*	-0.006	-0.003	-0.003
Secondary Education	-3.308	2.142	-0.566	4.448
Tertiary Education	-5.969*	5.178	-4.190	1.655
Wage	-3.251***	-6.893***	0.155	-0.023
Urban	2.855	5.978**	-0.412	-4.299
Poor Household	-6.583***	-15.753***	-0.401	9.835***
Kids under 5	1.710	-3.915	-2.067	1.541
Female Kids under 12			-0.046	-2.926
Mills Ratio			6.191	
Constant	73.720***	43.461***	6.824	30.973*
No. of cases	581			

Note.-All dependent variables are in weekly hours

*p<0.05, **p<0.01, ***p<0.001.