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Abstract

In this article, we examine the structure of gender and ethnic wage gaps, and the distribution of both, paid and unpaid work in Bolivia, Ecuador, and Guatemala. The wage gap is assessed by quantile decomposition methods and the classical Blinder-Oaxaca decomposition. The determinants of hours allocated to paid and unpaid work activities between gender groups, are estimated by seemingly unrelated regressions. 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 mostly explained by the difference in endowments. The wider gap at the lower tail of the distribution suggest the presence of sticky floors effects for both, women and indigenous population.

Keywords: Discrimination; Ethnicity; Gender; Time-Use

JEL Classification: J22; J31; J71

1 Introduction

Since the late 90s Latin American countries have experience fast growing, a reduction in analphabetism, and a mutation from agricultural economies to industrialized middle income countries. Most of the population has enjoyed the benefits of a bigger growth rate,

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increasing the mean income level of the population and diminishing poverty. However, beyond the regional panorama, the relevance and pervasiveness of poverty, inequality, and social exclusion is very heterogeneous within the region. Bolivia, Ecuador, and Guatemala 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 the 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 economy main export is based 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 wages differences in the labor market, 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 an important entry barrier to the formal job market and the second one, is that even when that barrier is crossed, there is still a wage gap between the discriminated population 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 important.

In order to assess the importance and determinants of the wage gap between the discriminated population and those who are not, we proceed with 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-dependance 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 explains 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)

Three main economic theories of discrimination can be found in the literature: Marxism, Institutional, and Neoclassical. Since most empirical applications are based on competitive neoclassical theory, this is the one that will be revised here.

Neoclassical theory of discrimination is divided in two classes: competitive and collective models. In collective models, as its name indicates, groups act collectively against each other, while in competitive models the focus is 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 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 sort of premium is added to the cost of hiring workers from a minority or discriminated group. That is, while the cost of hir-

ing a non-discriminated worker equals the wage alone, the cost of hiring a worker from a discriminated group equals the wage rate plus the disutility parameter of the employer. 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. In the long run, discriminatory firms will leave the market since non-discriminatory firms make more profits by employing the discriminated workers at lower wages than the non-discriminated ones. Hence, this implies that in the long run discrimination disappears. See Cain (1987) and Altonji and Blank (1999) for discussion of customer, and employee discrimination, and extensions of the original model.

Statistical models introduced by Arrow (1971) and Phelps (1972) are based on the idea that discrimination arises from imperfect information. Employers may discriminate a certain group of workers based on previous beliefs that they have regarding the group in question. That is, since employers do not have a complete information regarding the productivity of individuals before hiring them, they may use previous information on the average productivity of the group to which the worker belongs in order to set wages.

The main drawback of these models is that pre-market discrimination is not taken into account. Differences in endowments are certainly influenced 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 arguable 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 of all, 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 impose his own housework preference, see Brines (1994). For example,

since men in average do more labor market activities compared to women, they have a higher wage. As a consequence, this gives them a bigger power to bargain the amount of housework executed by each household member, lowering their number of hours of housework and increasing their partner's ones. 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. For a more detail explanation please refer to Bianchi et al. (2000). Although the first and third perspective are more sociologically founded, the relative resource perspective is the baseline for most of the household's time allocation models as shown in Becker (1981) and explained below.

Households's time allocation theory was first introduced by Becker (1965) and 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 respect to final consumption goods produced by family member themselves. This consumption goods are produced thanks to two main inputs: market goods and time; 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 the Becker's time allocation framework. 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 (i.e expenditure demand and labor offer) leading to a Nash equilibrium, while the other two assume a cooperation in the decision-making process leading to a Pareto equilibrium instead. The collective model is the most widely used since its modelisation is based on an efficient outcome derived from an efficient decision (no matter how it is taken); therefore, there is no need for the decision-making process to be specified.

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 respect to the consumption of market goods x_i, the housework time

c_i and the leisure time l_i:

$$u = U(x_m, x_f, c_m, c_f, l_m, l_f). \tag{1}$$

This reduced form of utility represents the household's preferences in market and non-market consumption of goods and time. The household maximizes its utility respect to the following monetary and time constraints:

$$l_m + c_m + h_m = T_m, \tag{2}$$

$$l_f + c_f + h_f = T_f, \tag{3}$$

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

where h_i is the labor market hours, w_i the net wage rates and p and v are the market price of goods x_i and other non-labor income respectively. The first two constraints are the total time constraints T_i and monetary constraint. Combining the two constrains yields the full constraint Y:

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

then the reduced form utility allows the following solution:

$$q_k = f_k(w_m, w_f, T_m, T_f, v, Z), \tag{6}$$

with

$$q_k = (x_m, x_f, c_m, c_f, l_m, l_f, h_m, h_f), \tag{7}$$

where Z is the other exogenous variables affecting the utility, such as household's demographic characteristics. Solving this maximization problem gives as the solution for x_i, c_i, l_i, h_i (the endogenous variables of the model) as function of the exogenous variables w_i, T_i v and Z.

3 Literature Review

3.1 Wage Decomposition

Wage discrimination has for long been studied in the labor economics and gender literature. Since the seminal work of Blinder (1973) and Oaxaca (1973), a number of papers have tried to overcome some of the limitations that this decomposition technique has. For instance, the works of Reimers (1983), Neumark (1988) and Oaxaca and Ransom (1994) focus on the appropriate choice of the non-discriminatory coefficient, while the work of Neuman and Oaxaca (2004) addresses the selectivity bias.

An important part of the literature on decomposition methods is concerned with the study of differences beyond the mean. Common distributional parameters are the quintiles or percentiles of the distribution, but contrary to the mean, the law of iterated expectations does not hold for them, which makes the decomposition procedure much more complicated than the classic BO decomposition. The works of Juhn et al. (1993), DiNardo et al. (1996) , Mata and Machado (2005), Melly (2005), and Firpo et al. (2009), among others, propose different methodologies for carrying out this decomposition at quantiles level.

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 take into account occupational segregation. As pointed out by Blau and Kahn (2000) any approach that relies on a statistical residual is open to question 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.

Empirical evidence on wage disparities is extensive and it has been mostly 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 a degree that varies from country to country. Among the works that use Latin America data we find those by Tenjo et al. (2005), Ñopo (2012), and Popli (2013).

3.2 Allocation of Time

Based on the theories mentioned above, some empirical work has been done in order to explain the differences in allocation of time to domestic and market activities, in particular Wales and Woodland (1977), Sousa-Poza et al. (2001) and Álvarez and Miles (2003) have shown that there is an important inequality in the time spend in housework activi-

ties between men and women. Indeed, women tend to spend more time doing household chores compared to men and men spend more time in market working 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), and Medeiros et al. (2007).

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 corresponds to the differences in the coefficients; and the "Interaction effect", that accounts for the simultaneous existence of differences in endowments and coefficients.

Consider the wage equation:

$$Y_i = \beta_i X_i + \varepsilon_i, \tag{8}$$

where $i = 1, 2$ denotes the different groups, Y the hourly wage of the individual, X_i a vector of control variables, and ε_i the i.i.d. error term.

By estimating Equation 8 for each group and taking the difference between them, the mean wage difference can be expressed as the difference in the linear prediction at the group-specific means of the regressors. That is:

$$E(Y_1) - E(Y_2) = E(X_1)\,\hat{\beta}_1 - E(X_2)\,\hat{\beta}_2. \tag{9}$$

Expanding this expression by the assumed non-discriminatory wage structure β^*, we have:

$$E(Y_1) - E(Y_2) = E(X_1)\,\hat{\beta}_1 - E(X_2)\,\hat{\beta}_2 + E(X_1)\,\beta^* - E(X_1)\,\beta^* + E(X_2)\,\beta^* - E(X_2)\,\beta^*. \tag{10}$$

After some rearrangements Equation 10 becomes:

$$E(Y_1) - E(Y_2) = \beta^*\,((E(X_1) - E(X_2)) + E(X_1)\,(\hat{\beta}_1 - \beta^*) + E(X_2)\,(\hat{\beta}_2 - \beta^*), \tag{11}$$

where the first term on the right hand side corresponds to the endowment effect, and the second and the third term to the coefficients effect.

In the original Blinder-Oaxaca decomposition, one should choose the reference group for the counterfactual. For instance, in assessing what would be the 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 part 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.

4.2 The RIF Regression

As explained above, decomposition methods for parameters other than the mean face some 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 what follows we give a short overview of the RIF-regression method.

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

$$IF(Y, Q_\tau) = \frac{\tau - \mathbb{1}\{Y \leq Q_\tau\}}{f_Y(Q_\tau)}, \tag{12}$$

where τ represents the quantile of interest, $\mathbb{1}\{\cdot\}$ is an indicator function for 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 $RIF(y;\upsilon) = \upsilon(F_Y) + IF(y;\upsilon)$, for the quantile case it is written as:

$$RIF(Y, Q_\tau) = Q_\tau + \frac{\tau - \mathbb{1}\{Y \leq Q_\tau\}}{f_Y(Q_\tau)}. \tag{13}$$

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:

$$h_m = \alpha w_m + \gamma_1 Z_m + \gamma_2 Z_i + \epsilon_i, \tag{14}$$

$$c_m = \alpha w_m + \gamma_1 Z_m + \gamma_2 Z_i + \epsilon_i, \tag{15}$$

$$h_f = \alpha w_f + \gamma_1 Z_f + \gamma_2 Z_i + \epsilon_i, \tag{16}$$

$$c_f = \alpha w_f + \gamma_1 Z_f + \gamma_2 Z_i + \epsilon_i, \tag{17}$$

where Z_m and Z_f includes all the individual characteristics that affect labor and domestic activities, Z_i 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 it has 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. Our results reject these assumptions[1]. In this article we use the Heckman two stages procedure for men's time allocation in domestic activities. Since the proportion of women that present zero observations for housework activities correspond, in average, to 1% of each country sample, there is not need to perform this procedure for them. The other three equations are perform by OLS, and the whole system is estimated as seemingly unrelated regressions.

[1]The test procedures are detailed in Cameron and Trivedi (2009). Results are shown in the Appendix.

4.4 Self Selection Problems

In this paper we do 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 equation[2].

5 Datasets

Bolivia

The 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 sociodemographic characteristics such as level of education, age, gender, marital status, area of 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 A.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 ethnicities, account for 31% and 26% , respectively.

Ecuador

The dataset used in this study comes 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 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

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

well as common socio-demographic characteristics such as level of education, age, gender, marital status, area of 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 consist of 12,046 persons living in 9,933 households. Table A.2 presents descriptive statistics for the final sample used in this study. The average age of the individuals is 42 years old. Level of education is low, with 52% of the sample attaining at most primary level. Indigenous population represent 7% of the individuals on the sample.

Guatemala

The data 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. 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. Table A.3 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 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

Theory suggest that the allocation of time to housework and market paid activities is jointly determined by the individuals in the household. In order to take into account this 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 1 shows the descriptive statics of the weekly hours spent on domestic and paid market labor 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 rather than domestic activities. In general, men spend more time participation 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 labor job 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 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 difference between these two groups is not very big, especially when compared to the difference between men and women labor and domestic activities.

Table 1: Descriptive Statistics

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 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's coefficients. This is done once we have established the proportion of the gender wage gap that is usually attributed to discrimination. The results of the Oaxaca decomposition are shown in Table 2. As explained in Section 4, the Oaxaca decomposition divides the wage gap into two components: the explained component, which is the part of the gap that is attributed to the difference of endowment of the discriminated population compared with those who are not, and the unexplained component, which is the difference on the wage usually attributed to discrimination.

From the decomposition results, we observe that the average wage gap for the indigenous population is more important than the average wage gap for a woman worker in all three countries. However, when we look at the coefficients and endowments effects separately, we realize that the part of the gender wage gap that can be attributed to discrimination is more important than the endowments effect.

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 2: 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.

Tables 3 and 4 show 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 effects. The results of the detailed decomposition are shown in Tables A.4, A.5, A.6, A.7, A.8, and A.9 in the Appendix. 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.

Table 3: RIF- OLS Regressions (Gender Wage Gap)

	Quantile				
	0.1	0.3	0.5	0.7	0.9
Bolivia					
Difference	-0.139	-0.013	0.003	-0.045	-0.045
Explained	-0.439	-0.407	-0.177	-0.106	-0.109
Unexplained	0.300	0.394	0.180	0.061	0.064
Ecuador					
Difference	0.340	0.268	0.191	0.068	0.033
Explained	-0.063	-0.061	-0.078	-0.117	-0.114
Unexplained	0.403	0.328	0.270	0.186	0.147
Guatemala					
Difference	0.506	0.852	0.633	0.471	0.417
Explained	-0.859	0.408	-0.225	-0.092	-0.021
Unexplained	1.365	1.260	0.858	0.562	0.438

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 that 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, 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 (Ethnic Wage Gap)

	Quantile				
	0.1	0.3	0.5	0.7	0.9
Bolivia					
Difference	0.991	0.669	0.425	0.335	0.330
Explained	0.655	0.517	0.309	0.240	0.177
Unexplained	0.336	0.152	0.116	0.095	0.153
Ecuador					
Difference	0.582	0.464	0.343	0.335	0.485
Explained	0.440	0.294	0.290	0.348	0.289
Unexplained	0.142	0.170	0.053	-0.013	0.196
Guatemala					
Difference	0.930	0.918	0.693	0.595	0.662
Explained	0.396	0.487	0.457	0.410	0.477
Unexplained	0.534	0.431	0.236	0.185	0.185

Regarding the ethnic wage gap, we see first, that it is significantly greater than the gender gap at every point of the wage distribution. Second, 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 in 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. As for the previous countries the ethnic wage gap is bigger than the gender gap. It 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 being employed 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, do not having social security, and living in the urban areas is what explains the endowments effect at the lower quintiles.

Overall, the wage gap of indigenous population is more important that the one of women, and it is specially important on the lower tail of the distribution, suggesting a sticky floor effect. In all three countries education and living in the urban areas constitute a large portion of the endowment 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.

After having established the existence of gender discrimination in the labor market in these countries, we discuss the results obtained regarding disparities in the intra-household allocation of time. Next results provide evidence of gender disparities concerning the allocation of time between paid and unpaid work.

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.

Table 5 shows selected variable results of the seemingly unrelated regressions of the weekly hours of work spend on labor market and domestic activities, by country. Tables A.12, A.13, and A.14 in the Appendix, show the complete estimation results.

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 the three countries, which suggests that demand for labor is still higher in bigger cities. The impact is more important in Bolivia, where men's coefficient is multiplied by 4 compared to Ecuador and Guatemala. The important 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 the case of Bolivia, it also increases the time of men. This suggests that education increases the bargaining power of women inside the households, so the share of domestic tasks between men and women may be more equitable in households where women are more educated. 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 an important part of the wage gap, specially for the indigenous ethnic group. 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 suggest 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 not effect in the Guatemalan sample. The rest of the variables present different signs and magnitudes among the countries. Its effects maybe attributed to cultural differences and respective development levels.

Conclusions

Some of the factors 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, in turn, is 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 all 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 throughout the wage distribution, it is still persistent and significantly higher than the gender gap. 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 differences in wages in 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: Descriptive Statistics (Bolivia, Whole Sample)

	Socio-Economic Variables				
Variables	Obs	Mean	Std. Dev	Min	Max
Income per Capita	4430	889.29	897.40	6.77	6,195.74
Household Size	4430	4.34	2.06	1	18
Age	4430	39.86	11.77	20	70
Percentage of Urban Households	4430	0.53	0.50	0	1
Percentage Couples	4430	0.87	0.34	0	1
Primary Education	4430	0.55	0.50	0	1
Secondary Education	4430	0.31	0.46	0	1
Tertiary Education	4430	0.14	0.34	0	1
Native indigenous	4430	0.63	0.48	0	1
Non indigenous	4430	0.37	0.48	0	1

Note.- Bolivia data is shown in local currency, Peso Boliviano.

Table A.2: Descriptive Statistics (Ecuador, Whole Sample)

	Socio-Economic Variables				
Variables	Obs	Mean	Std. Dev	Min	Max
Income per Capita	12046	240.23	234.30	14.87	1,814.52
Household Size	12046	3.89	1.70	1	12
Age	12046	42.59	11.77	20	70
Percentage of Urban Households	12046	0.60	0.49	0	1
Percentage Couples	12046	0.83	0.38	0	1
Primary Education	12046	0.52	0.50	0	1
Secondary Education	12046	0.29	0.45	0	1
Tertiary Education	12046	0.19	0.39	0	1
Native indigenous	12046	0.07	0.26	0	1
Non indigenous	12046	0.93	0.26	0	1

Note.- Ecuador data is shown in local currency, American Dollars.

Table A.3: Descriptive Statistics (Guatemala, Whole Sample)

	Socio-Economic Variables				
Variables	Obs	Mean	Std. Dev	Min	Max
Income per Capita	5637	17,926.42	45,144.21	70.03	1,524,248.00
Household Size	5637	5.03	2.17	1	16
Age	5637	39.77	11.89	20	70
Percentage of Urban Households	5637	0.50	0.50	0	1
Percentage Couples	5637	0.87	0.33	0	1
Primary Education	5637	0.76	0.43	0	1
Secondary Education	5637	0.18	0.38	0	1
Tertiary Education	5637	0.06	0.24	0	1
Native indigenous	5637	0.38	0.49	0	1
Non indigenous	5637	0.62	0.49	0	1

Note.- Guatemala data is shown in local currency, Quetzales.

Table A.4: Bolivia, RIF- OLS Regressions (Gender Wage Gap)

	Endowments Effect					Coefficients Effect				
Quantile	**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**
	(0.05)	**(0.05)**	**(0.03)**	**(0.03)**	**(0.04)**	**(0.08)**	**(0.06)**	**(0.04)**	**(0.04)**	**(0.07)**
Secondary	0.012*	0.017**	0.010*	0.010**	0.003	-0.066	-0.031	-0.009	0.036	0.033
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)
Tertiary	-0.003	-0.006	-0.008*	-0.017*	-0.024*	-0.021	-0.012	0.010	0.003	0.027
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)
Urban	-0.026*	-0.033**	-0.012	-0.018*	-0.049***	0.084	0.153*	-0.025	-0.023	-0.039
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.09)	(0.08)	(0.06)	(0.06)	(0.09)
Age	0.034	0.013	0.011	0.015	0.020	1.074	0.762	0.665	0.928	-0.204
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(1.60)	(1.06)	(0.78)	(0.74)	(1.09)
Age squared	-0.032	-0.017	-0.013	-0.017	-0.018	-0.544	-0.235	-0.240	-0.354	0.160
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.85)	(0.55)	(0.38)	(0.36)	(0.53)
Ternure	-0.085***	-0.038***	-0.009	0.008	0.009	-0.026	-0.102	-0.031	-0.022	0.017
	(0.02)	(0.01)	(0.01)	(0.00)	(0.01)	(0.10)	(0.06)	(0.04)	(0.03)	(0.05)
Social security	-0.000	-0.002	-0.002	-0.001	-0.001	-0.018	0.119	0.019	0.102	-0.076
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.08)	(0.11)	(0.13)	(0.15)	(0.23)
Senior official/managers	-0.003*	-0.001	0.002	0.006*	0.016*	-0.002	-0.003	-0.002	-0.000	0.014
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Professionals	0.006	0.006	-0.022***	-0.035***	-0.043**	-0.001	0.001	-0.018	-0.016	0.053
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)
Technicians	-0.004*	-0.004	0.003	0.006*	0.008	-0.002	0.013	0.006	0.010	0.021
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Clerks	0.003*	0.001	-0.006*	-0.005	-0.002	-0.001	-0.002	0.003	0.010	0.005
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Service and sales	0.047*	0.100***	0.033	-0.002	-0.008	0.046*	0.034	-0.004	-0.001	0.048
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Skilled agricultural	-0.319***	-0.439***	-0.204***	-0.083***	-0.010	0.286***	-0.012	-0.048	-0.028	-0.007
	(0.03)	(0.04)	(0.02)	(0.02)	(0.02)	(0.08)	(0.06)	(0.05)	(0.04)	(0.06)
Craft	-0.039***	-0.032**	0.004	-0.002	-0.013	0.099**	0.070	0.041	0.031	0.055
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.04)	(0.04)	(0.03)	(0.03)	(0.04)
Plant/machinery operators	-0.030***	-0.022*	0.005	0.013	0.008	0.020**	-0.000	0.002	0.003	0.015
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Agriculture	-0.067***	-0.062**	-0.034	-0.030	-0.035	-0.021	-0.001	0.038	0.081	0.066
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.06)	(0.07)	(0.06)	(0.06)	(0.08)
Manufacturing	-0.000	0.005	0.003	0.000	-0.001	-0.040	0.006	-0.006	-0.008	-0.022
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)
Commerce	0.065***	0.106***	0.061***	0.046***	0.029	-0.021	-0.010	0.028	0.019	0.023
	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Table A.5: Bolivia, RIF- OLS Regressions (Ethnic Wage Gap)

	Endowments Effect					Coefficients Effect				
Quantile	**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* **
	(0.07)	**(0.05)**	**(0.03)**	**(0.03)**	**(0.04)**	**(0.11)**	**(0.05)**	**(0.04)**	**(0.04)**	**(0.06)**
Secondary	0.007	0.003	0.003	0.002	0.001	0.047	0.095*	0.032	-0.019	-0.100**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.07)	(0.04)	(0.03)	(0.03)	(0.04)
Tertiary	0.016	0.014*	0.017**	0.029***	0.042***	0.014	0.038	0.031	0.027	-0.020
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.04)	(0.03)	(0.02)	(0.02)	(0.04)
Gender: male	-0.012	-0.014*	-0.006	-0.002	-0.002	0.320*	-0.097	-0.034	-0.045	0.130
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.16)	(0.08)	(0.05)	(0.06)	(0.09)
Urban	0.034**	0.019**	0.006	0.009	0.020**	0.083	-0.141*	-0.093	-0.049	0.012
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.12)	(0.07)	(0.05)	(0.05)	(0.08)
Age	-0.178*	-0.037	-0.065**	-0.072**	-0.064*	-1.746	-1.566	-1.920**	-1.404*	-2.711**
	(0.07)	(0.03)	(0.02)	(0.02)	(0.03)	(2.33)	(1.02)	(0.69)	(0.70)	(0.98)
Age squared	0.177*	0.042	0.069**	0.073**	0.053	0.559	0.709	0.910**	0.601	1.193*
	(0.07)	(0.03)	(0.02)	(0.02)	(0.03)	(1.22)	(0.51)	(0.34)	(0.34)	(0.47)
Ternure	0.091**	0.065***	0.022**	-0.006	-0.004	0.297*	0.118*	0.049	0.077*	0.018
	(0.03)	(0.02)	(0.01)	(0.01)	(0.01)	(0.14)	(0.06)	(0.03)	(0.03)	(0.04)
Social security	0.003	0.012**	0.015**	0.011**	0.005	0.026	-0.265**	-0.126	-0.060	0.169
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.12)	(0.10)	(0.10)	(0.12)	(0.19)
Senior official/managers	-0.002	-0.001	0.001	0.004	0.008	-0.001	0.001	0.003	0.004	-0.014
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Professionals	-0.003	-0.002	0.005	0.016*	0.017*	0.008	0.002	-0.015	-0.009	-0.026
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)
Technicians	-0.005	-0.009*	0.002	0.013**	0.011*	-0.006	0.013	0.003	0.003	0.008
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Clerks	-0.004	-0.002	0.002	0.007*	-0.000	0.000	0.002	-0.006	0.001	0.003
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Service and sales	-0.001	-0.002	-0.001	0.000	0.000	0.013	0.029	0.031	0.012	0.033
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.03)	(0.02)	(0.02)	(0.03)
Skilled agricultural	0.265***	0.267***	0.115***	0.044***	0.016	-0.389***	0.175**	0.118*	0.083	0.037
	(0.04)	(0.03)	(0.02)	(0.01)	(0.01)	(0.11)	(0.06)	(0.05)	(0.05)	(0.06)
Craft	0.003	0.002	-0.000	0.000	0.001	-0.079	0.054	-0.013	0.024	0.048
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.03)	(0.03)	(0.03)	(0.03)
Plant/machinery operators	-0.002	-0.001	0.000	0.001	0.000	-0.026	-0.007	-0.012	-0.011	-0.007
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Agriculture	0.029*	0.020*	0.021**	0.017*	0.010	0.008	0.185**	0.079	-0.012	0.020
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.11)	(0.07)	(0.06)	(0.06)	(0.08)
Manufacturing	-0.000	-0.002	-0.002	-0.000	0.001	0.006	0.031	0.047***	0.031*	-0.008
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
Commerce	-0.006	-0.007	-0.005	-0.003	-0.002	-0.010	0.054*	0.046*	0.040*	-0.010
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Table A.6: Ecuador, RIF- OLS Regressions (Gender Wage Gap)

	Endowments Effect					Coefficients Effect				
Quantile	**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*** **
	(0.02)	**(0.01)**	**(0.01)**	**(0.02)**	**(0.02)**	**(0.03)**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.03)**
Secondary	-0.003*	-0.004**	-0.004**	-0.006**	-0.004**	-0.016	-0.030	-0.023	-0.001	0.004
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)
Tertiary	-0.013***	-0.020***	-0.027***	-0.045***	-0.046***	-0.000	-0.029*	-0.020	0.002	0.075**
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)
Urban	-0.025***	-0.015***	-0.008**	-0.005	-0.006	-0.010	-0.067*	-0.063*	0.009	0.061
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.03)	(0.03)	(0.04)	(0.04)
Age	0.029	0.034***	0.041***	0.066***	0.068***	0.320	-0.666	-0.091	0.057	1.748**
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.79)	(0.48)	(0.40)	(0.51)	(0.59)
Age squared	-0.041*	-0.044***	-0.043***	-0.062***	-0.056***	-0.184	0.404	0.130	0.096	-0.852**
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.42)	(0.25)	(0.20)	(0.26)	(0.30)
Ternure	-0.025***	-0.008*	0.002	0.022***	0.028***	0.008	0.003	-0.029	-0.082**	-0.089**
	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.05)	(0.03)	(0.02)	(0.03)	(0.03)
Social security	-0.005*	-0.006*	-0.007*	-0.009*	-0.004	-0.031	0.166***	0.166***	0.180**	0.078
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.03)	(0.04)	(0.06)	(0.07)
North	0.001	0.001	-0.000	-0.001	-0.001	-0.012	0.001	0.009	0.021	0.026
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Central	0.006**	0.003**	0.002*	0.002	0.003	-0.023	0.006	0.031**	0.025	0.023
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
South	0.005**	0.000	-0.002*	-0.002	0.001	-0.010	0.010	0.018*	0.026*	0.020
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Armed Forces	-0.001	0.000	0.003***	0.009***	0.026***	0.000	0.001**	0.001*	0.001*	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Senior official/managers	0.000	0.001*	0.003*	0.006*	0.009*	0.000	0.001	0.001	-0.001	0.011
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Professionals	-0.001	-0.008***	-0.017***	-0.044***	-0.062***	-0.000	0.006	-0.003	-0.003	0.051**
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Technicians	-0.001	-0.004***	-0.007***	-0.015***	-0.010***	-0.004	-0.001	-0.004	-0.006	0.002
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
Clerks	0.001	-0.003*	-0.009***	-0.018***	-0.012***	0.001	0.005	-0.003	-0.001	0.015
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
Service and sales	0.003	-0.003	-0.012*	-0.032***	-0.023**	-0.001	-0.016	-0.007	0.019	0.028
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Skilled agricultural	-0.031***	-0.006**	0.007***	0.010***	0.008***	0.001	0.040**	0.019	0.033**	0.017
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Craft	0.005	0.016***	0.021***	0.016***	-0.001	0.042**	0.020*	0.025**	0.039***	0.032*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Plant/machinery operators	0.011	0.018***	0.028***	0.037***	-0.002	-0.001	-0.000	-0.004	0.000	0.006
	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Agriculture	0.000	-0.029***	-0.055***	-0.050***	-0.029***	0.002	-0.070**	-0.063***	-0.013	0.034
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
Manufacturing	-0.004*	-0.003*	-0.003*	-0.003*	0.000	-0.006	-0.006	-0.010	-0.014	-0.017
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Commerce	0.025***	0.017***	0.010***	0.006	-0.002	-0.010	-0.003	-0.023*	-0.003	0.009
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)

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

Table A.7: Ecuador, RIF- OLS Regressions (Ethnic Wage Gap)

	Endowments Effect					Coefficients Effect				
Quantile	**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*** **
	(0.03)	**(0.02)**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.07)**	**(0.04)**	**(0.04)**	**(0.03)**	**(0.05)**
Secondary	0.036***	0.025***	0.034***	0.050***	0.029***	0.014	0.018	0.009	0.016	0.004
	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Tertiary	0.034***	0.032***	0.050***	0.081***	0.072***	0.030	0.029	0.013	0.029*	0.020
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.01)	(0.03)
Gender: male	-0.007	-0.005	-0.004	-0.003	-0.002	-0.101	0.000	-0.033	0.016	0.070
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.11)	(0.06)	(0.05)	(0.04)	(0.07)
Urban	0.091***	0.043***	0.021*	0.012	0.018	0.044	0.021	-0.012	-0.007	-0.092*
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)	(0.02)	(0.04)
Age	0.006	0.008	0.009	0.015	0.014	-1.807	-1.033	0.795	0.682	-0.569
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(1.73)	(0.91)	(0.84)	(0.72)	(1.04)
Age squared	-0.004	-0.005	-0.005	-0.007	-0.006	1.209	0.814	-0.113	-0.200	0.342
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.93)	(0.48)	(0.42)	(0.36)	(0.52)
Ternure	0.022*	0.013*	-0.001	-0.030***	-0.032***	0.069	-0.015	0.005	0.111	0.132
	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.14)	(0.08)	(0.07)	(0.06)	(0.08)
Social security	0.047***	0.055***	0.062***	0.077***	0.029***	-0.128	-0.039	0.062	-0.145	0.014
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.11)	(0.09)	(0.10)	(0.11)	(0.21)
North	0.004	0.002	-0.001	-0.003	-0.002	-0.040	-0.015	-0.006	-0.003	0.083
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.05)	(0.07)	(0.06)	(0.11)
Central	0.043***	0.024***	0.015*	0.011	0.027*	0.089	0.126	0.087	0.039	0.131
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.07)	(0.08)	(0.10)	(0.09)	(0.15)
South	0.000	-0.000	-0.000	-0.000	0.000	-0.011	0.016	0.031	0.013	0.049
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.03)	(0.04)	(0.03)	(0.05)
Social security	-0.002***	0.001*	0.003***	0.008***	0.017***	-0.000	0.000	0.000*	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Senior official/managers	0.000	0.003*	0.005*	0.011*	0.016*	0.000	0.002	0.005	0.005	-0.022*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Professionals	0.002	0.012***	0.022***	0.048***	0.068***	-0.001	0.002	0.007	0.010	-0.005
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Technicians	0.002	0.008***	0.013***	0.024***	0.018***	-0.001	0.001	0.001	-0.002	-0.028*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Clerks	0.000	0.005**	0.008***	0.013***	0.008**	0.001	0.004	0.003	0.001	0.002
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Service and sales	-0.004	-0.001	0.005*	0.014***	0.011**	-0.011	0.026	0.021	0.014	-0.010
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Skilled agricultural	0.207***	0.042***	-0.045***	-0.080***	-0.042***	-0.015	0.106	0.047	0.026	0.020
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.09)	(0.06)	(0.05)	(0.03)	(0.05)
Craft	-0.000	-0.001	-0.001	-0.001	-0.000	0.008	0.023	0.003	-0.058**	-0.012
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Plant/machinery operators	0.002	0.007***	0.011***	0.012***	0.001	0.009	0.007	0.007	-0.004	-0.010
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Agriculture	-0.011	0.037***	0.099***	0.104***	0.042***	0.031	0.064	0.179*	0.114	-0.003
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.09)	(0.08)	(0.08)	(0.07)	(0.10)
Manufacturing	-0.002	-0.002	-0.003	-0.002	-0.000	0.029	0.027	0.034*	0.057***	0.035
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Commerce	-0.025***	-0.010***	-0.009***	-0.007*	0.001	-0.026	-0.021	0.001	-0.016	-0.003
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)

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

Table A.8: Guatemala, RIF- OLS Regressions (Gender Wage Gap)

	Endowments Effect					Coefficients Effect				
Quantile	**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*** **
	(0.07)	**(0.03)**	**(0.03)**	**(0.03)**	**(0.04)**	**(0.07)**	**(0.04)**	**(0.04)**	**(0.04)**	**(0.05)**
Secondary	-0.001	-0.003	-0.008*	-0.014*	-0.011	-0.056	-0.056**	-0.029	-0.035	0.035
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.03)	(0.03)
Tertiary	0.000	0.001	0.004	0.010	0.023	-0.006	-0.010	-0.003	0.012	0.048*
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Urban	-0.076***	-0.066***	-0.046***	-0.035***	-0.015*	-0.205*	-0.203***	-0.307***	-0.159***	-0.050
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.10)	(0.06)	(0.05)	(0.05)	(0.05)
age	-0.127*	-0.084***	-0.059**	-0.066***	-0.084***	0.250	-1.471	-0.973	0.712	0.820
	(0.05)	(0.02)	(0.02)	(0.02)	(0.02)	(1.94)	(0.92)	(0.82)	(0.73)	(0.83)
Age squared	0.114*	0.078***	0.057**	0.061***	0.070***	-0.167	0.719	0.431	-0.339	-0.324
	(0.05)	(0.02)	(0.02)	(0.02)	(0.02)	(1.03)	(0.47)	(0.41)	(0.36)	(0.41)
Tenure	-0.101***	-0.049***	0.000	0.027***	0.040***	-0.281**	-0.175***	-0.018	-0.014	-0.130**
	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)	(0.10)	(0.05)	(0.05)	(0.04)	(0.04)
Social security	0.054***	0.055***	0.056***	0.051***	0.029***	-0.140	0.100	0.549***	0.864***	0.654***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.10)	(0.07)	(0.09)	(0.11)	(0.14)
Senior official/managers	0.000	-0.000	-0.001	-0.001	-0.002	0.001	0.006	0.002	0.013	0.024*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Professionals	0.005	-0.006*	-0.022***	-0.031***	-0.035***	0.018	-0.008	-0.027*	-0.004	-0.015
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Technicians	-0.003	0.001	0.007**	0.009**	0.011*	0.010	-0.003	-0.013*	-0.007	-0.014
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Clerks	0.000	-0.000	-0.000	-0.001	-0.000	0.002	-0.001	-0.009	-0.002	-0.006
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Service and sales	-0.010	-0.034*	-0.082***	-0.062***	-0.065***	0.007	0.046	0.032	0.023	0.061
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Skilled agricultural	-0.622***	-0.118***	-0.001	0.039***	0.010	-0.086**	0.028	0.021	-0.010	-0.008
	(0.06)	(0.02)	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.01)	(0.01)
Craft	-0.001	-0.002	-0.003	-0.003	-0.001	0.187***	0.178***	0.074*	0.053	-0.005
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.03)	(0.03)	(0.03)	(0.02)
Plant/machinery operators	0.009*	0.012***	0.026***	0.022***	0.002	0.013	0.009	-0.005	-0.001	0.016**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Armed Forces	0.001	0.001*	0.001	0.001	0.003	0.000	0.000	-0.000	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Agriculture	-0.163**	-0.234***	-0.163***	-0.115***	-0.001	-0.017	-0.153***	-0.223***	-0.106***	0.038
	(0.06)	(0.03)	(0.02)	(0.02)	(0.02)	(0.05)	(0.04)	(0.04)	(0.03)	(0.02)
Manufacturing	0.053***	0.043***	0.033***	0.026***	0.005	0.033	-0.051	-0.050	-0.073*	0.057*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Commerce	0.024	0.018	0.001	0.013	0.016	-0.012	-0.122**	-0.140***	-0.073*	-0.006
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Table A.9: Guatemala, RIF- OLS Regressions (Ethnic Wage Gap)

	Endowments Effect					Coefficients Effect				
Quantile	**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*** **
	(0.06)	**(0.03)**	**(0.03)**	**(0.02)**	**(0.04)**	**(0.09)**	**(0.05)**	**(0.03)**	**(0.03)**	**(0.05)**
Secondary	0.035*	0.026***	0.039***	0.047***	0.060***	-0.015	0.017	0.040**	0.019	-0.038
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.03)
Tertiary	0.012	0.005	0.027***	0.054***	0.153***	-0.007	0.014*	0.014**	0.015**	0.018
	(0.01)	(0.01)	(0.00)	(0.01)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)	(0.02)
Gender: male	-0.045**	-0.046**	-0.030**	-0.021**	-0.025**	-0.001	-0.388***	-0.278***	-0.243***	0.016
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.14)	(0.08)	(0.05)	(0.05)	(0.09)
Urban	0.135***	0.081***	0.051***	0.033***	0.023*	0.204*	-0.073	-0.070*	-0.012	-0.032
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.09)	(0.05)	(0.03)	(0.03)	(0.05)
Age	0.060	0.021	0.017	0.018	0.031	-0.774	-0.404	-0.153	1.198*	0.773
	(0.04)	(0.01)	(0.01)	(0.01)	(0.02)	(1.93)	(1.01)	(0.62)	(0.52)	(0.89)
Age squared	-0.058	-0.020	-0.016	-0.017	-0.027	0.392	0.224	0.053	-0.493	-0.120
	(0.04)	(0.01)	(0.01)	(0.01)	(0.02)	(1.01)	(0.52)	(0.31)	(0.26)	(0.43)
Ternure	0.022	0.037***	0.006	-0.009*	-0.022***	0.125	0.135*	0.182***	0.086**	-0.109*
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.12)	(0.06)	(0.04)	(0.03)	(0.05)
Social security	0.090***	0.106***	0.089***	0.070***	0.029**	-0.259**	-0.089	0.139*	0.285***	0.623***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.09)	(0.07)	(0.06)	(0.07)	(0.16)
Senior official/managers	-0.000	0.004	0.008**	0.010**	0.018**	0.018	0.019*	0.015**	0.012*	0.015
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Professionals	0.005	0.017***	0.018***	0.023***	0.031***	0.055***	0.030**	0.021*	0.007	-0.053*
	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Technicians	-0.003	0.007*	0.012***	0.019***	0.020**	0.013*	0.010**	0.003	0.002	0.008
	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
Clerks	0.001	0.007**	0.010***	0.011***	0.008	0.017**	0.016***	0.007*	0.001	-0.020*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
Service and sales	0.006	0.012*	0.020***	0.015***	0.017**	0.097*	0.048	0.002	-0.022	-0.012
	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.04)	(0.03)	(0.02)	(0.02)	(0.03)
Skilled agricultural	0.206***	0.108***	0.018*	-0.009	-0.009	-0.270***	0.070	0.056*	0.017	-0.033
	(0.03)	(0.02)	(0.01)	(0.01)	(0.01)	(0.08)	(0.04)	(0.02)	(0.02)	(0.02)
Craft	0.001	-0.008*	-0.012**	-0.010**	0.000	0.208***	0.177***	0.034	-0.027	-0.045
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.03)	(0.02)	(0.02)	(0.04)
Plant/machinery operators	0.007	0.015***	0.018***	0.012***	0.001	0.029**	0.016**	0.006	-0.011*	-0.016
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)
Armed Forces	0.000	0.001	0.001	0.000	0.002	0.000	0.001*	0.000	0.001	0.002
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Agriculture	0.013	0.042*	0.119***	0.111***	0.082***	0.308**	0.171*	0.006	0.093*	0.231***
	(0.03)	(0.02)	(0.01)	(0.01)	(0.02)	(0.11)	(0.07)	(0.05)	(0.04)	(0.07)
Manufacturing	0.003	0.003	0.002	0.002	0.000	0.021	0.058**	0.043**	0.013	0.074*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.02)	(0.01)	(0.02)	(0.03)
Commerce	0.000	0.000	-0.008**	-0.005	0.004	-0.016	-0.017	0.001	-0.013	0.042
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.03)	(0.02)	(0.02)	(0.04)
Province Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Table A.10: Normality Test

	Hours of Market Work		Hours of Domestic Work	
	NR^2	P-Value	NR^2	P-Value
Bolivia	73.41	0.00	316.56	0.00
Ecuador	94.80	0.00	612.17	0.00
Guatemala	440.98	0.00	1610.65	0.00

Note.- Ho: Data is normally distributed.

Table A.11: Heteroscedasticity Test

	NR^2	P-Value
Bolivia	680.35	0.00
Ecuador	1490.56	0.00
Guatemala	2214.52	0.00

Note.- Ho: Constant variance.

Table A.12: Bolivia, SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Age	–0.231	1.013*	–0.146	0.240
	(0.38)	(0.45)	(0.26)	(0.54)
Age Squared	0.002	–0.013*	0.003	–0.003
	(0.00)	(0.01)	(0.00)	(0.01)
Secondary Education	2.044	1.818	0.625	0.795
	(1.41)	(1.62)	(0.89)	(1.80)
Tertiary Education	–2.893	1.895	3.101*	–5.917**
	(1.76)	(1.96)	(1.28)	(2.19)
Wage	–10.036***	–9.494***	0.221	0.412
	(0.83)	(0.69)	(0.56)	(0.77)
Urban	7.905***	3.716*	–3.223***	–0.827
	(1.39)	(1.58)	(0.89)	(1.77)
Poor Household	–13.191***	–13.892***	.259	4.652*
	(1.89)	(2.03)	(1.28)	(2.26)
Kids under 5	0.662	–3.378*	0.680	4.858**
	(1.36)	(1.60)	(0.86)	(1.79)
Female Kids under 12			–0.658	–0.456
			(0.88)	(1.70)
Mills Ratio			–2.104	
			(6.24)	
Constant	66.925***	31.205***	11.578*	27.735**
	(8.04)	(9.02)	(5.37)	(10.63)
No. of cases	691			

Note.-All dependent variables are in weekly hours

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

Table A.13: Ecuador, SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Age	0.507**	0.487*	–0.252	0.173
	(0.19)	(0.23)	(0.19)	(0.30)
Age Squared	–0.007***	–0.006*	0.001	–0.004
	(0.00)	(0.00)	(0.00)	(0.00)
Secondary Education	2.350**	0.862	0.382	0.120
	(0.73)	(0.85)	(1.15)	(1.07)
Tertiary Education	1.318	5.027***	2.949	–3.319**
	(.85)	(.99)	(1.92)	(1.25)
Wage	–6.954***	–6.237***	–0.387	–0.141
	(.47)	(0.43)	(0.67)	(0.55)
Urban	2.522***	4.940***	–0.618	–2.563*
	(0.69)	(0.81)	(0.63)	(1.02)
Poor Household	–10.397***	–12.828***	–1.349	4.192***
	(0.79)	(0.88)	(1.00)	(1.10)
Kids under 5	–0.025	–1.286	1.550*	7.499***
	(0.68)	(0.82)	(0.64)	(1.03)
Female Kids under 12			–.325	–1.494
			(0.63)	(0.92)
Mills Ratio			9.480	
			(14.33)	
Constant	39.905***	25.572***	20.951***	36.749***
	(4.23)	(4.76)	(4.92)	(6.22)
No. of cases	2,161			

Note.-All dependent variables are in weekly hours

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

Table A.14: Guatemala, SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
Age	–0.838*	0.303	0.450	0.371
	(0.41)	(0.55)	(0.39)	(0.66)
Age Squared	0.009*	–0.006	–0.003	–0.003
	(0.00)	(0.01)	(0.00)	(0.01)
Secondary Education	–3.308	2.142	–0.566	4.448
	(1.72)	(2.24)	(2.72)	(2.57)
Tertiary Education	–5.969*	5.178	–4.190	1.655
	(2.34)	(3.19)	(4.89)	(3.70)
Wage	–3.251***	–6.893***	0.155	–0.023
	(0.66)	(0.81)	(0.73)	(0.93)
Urban	2.855	5.978**	–0.412	–4.299
	(1.53)	(1.94)	(1.44)	(2.22)
Poor Household	–6.583***	–15.753***	–0.401	9.835***
	(1.70)	(2.05)	(1.45)	(2.34)
Kids under 5	1.710	–3.915	–2.067	1.541
	(1.56)	(2.05)	(2.21)	(2.35)
Female Kids under 12			–0.046	–2.926
			(1.39)	(2.24)
Mills Ratio			6.191	
			(13.29)	
Constant	73.720***	43.461***	6.824	30.973*
	(8.75)	(10.85)	(10.36)	(12.98)
No. of cases	581			

Note.-All dependent variables are in weekly hours

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