



# GENDER AND ETHNIC INEQUALITIES IN LAC COUNTRIES

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## General framework

### Objective

To study the discrimination endured by *women and ethnic minorities* in LAC countries.

### Why?

We know ethnic minorities and women are discriminated in the labor market but discrimination also exists at home.

Current research focuses just on wages differences in the labor market *neglecting the importance of domestic labor and time use.*

### What do we do?

- (i) We calculate wage differentials beyond the mean.
- (ii) We complete the analysis by studying the determinants of the intra-household allocation of time to paid and unpaid work.

## Methodology

- (i) Mean wage gap : Blinder-Oaxaca Decomposition
- (ii) Quantile decomposition : Firpo, Fortin, and Lemieux (2009).
- (iii) Allocation of time : SUR Estimation

Consider the wage equation :

$$Y_i = \beta_i X_i + \varepsilon_i,$$

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

By estimating the above Equation for each group and taking the difference between them, the mean wage difference can be expressed as :

$$E(Y_1) - E(Y_2) = \underbrace{\sigma^2 ((E(X_1) - E(X_2)))}_{\text{endowments effect}} + \underbrace{[E(X_1) (\hat{\beta}_1 - \beta^*) + E(X_2) (\hat{\beta}_2 - \beta^*)]}_{\text{coefficients effect}},$$

where  $\beta^*$  comes from a pooled regression.

Consider the time use equations :

$$h_i = \alpha w_i + \gamma_1 Z_i + \gamma_2 Z + \epsilon_i,$$

$$c_i = \alpha w_i + \gamma_1 Z_i + \gamma_2 Z + \epsilon_i,$$

where  $i = m, f$  for husbands and wives respectively,  $c_i$  the household time,  $h_i$  the labor market hours,  $w_i$  the net wage rates,  $Z_i$  includes all the individual characteristics that affect labor and domestic activities,  $Z$  all the other household demographic characteristics, and  $\epsilon_i$  is the regression residual.

## Data

- (i) Bolivian National Living Standards Survey (MECOVI) 2001  
→ Bolivian National Institute of Statistics (INE)
- (ii) Ecuadorian National Survey of Employment and Unemployment (ENEMDU) 2007  
→ Ecuadorian National Institute of Statistics and Census (INEC)
- (iii) Guatemalan National Living Standards Survey (ENCOVI) 2000  
→ Guatemalan National Institute of Statistics (INE) and the World Bank

TABLE 1 : Descriptive statistics

Variables	Bolivia		Ecuador		Guatemala	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Income per capita	889.29	(897.40)	240.23	(234.30)	7153.08	(7976)
Age	39.86	(11.77)	42.59	(11.77)	39.34	(11.65)
Male	0.63	(0.48)	0.65	(0.47)	0.70	(0.46)
Indigenous	0.63	(0.48)	0.07	(0.26)	0.35	(0.47)
Urban households	0.53	(0.50)	0.60	(0.49)	0.54	(0.50)
Primary education	0.55	(0.50)	0.52	(0.50)	0.75	(0.43)
Secondary education	0.31	(0.46)	0.29	(0.45)	0.19	(0.39)
Tertiary education	0.14	(0.34)	0.19	(0.39)	0.06	(0.23)
Observations	5617	-	12046	-	4492	-

Note: - Income data is shown in local currency.

TABLE 2 : Allocation of Time

Bolivia	Whole sample	Male		Female		Indigenous	Non-indigenous
		Male	Female	Male	Female		
Domestic work	17.735	10.351	33.459	17.391	18.322		
Market work	43.939	47.006	37.407	43.827	44.129		
Ecuador							
Domestic work	19.902	11.148	36.079	20.247	19.875		
Market work	42.206	45.304	36.480	39.920	42.386		
Guatemala							
Domestic work	19.725	9.259	33.833	20.624	19.237		
Market work	43.672	47.837	44.45	41.252	44.987		

Note: - Average hours per week, working individuals.

## Results

TABLE 3 : RIF- OLS Regressions

Quantile	Gender Wage Gap				Ethnic Wage Gap				
	0.1	0.3	0.5	0.7	0.1	0.3	0.5	0.7	0.9
Bolivia									
Difference	-0.130	-0.013	0.003	-0.045	-0.045	0.991***	0.669***	0.425***	0.335***
Explained	-0.439***	-0.407***	-0.177***	-0.106***	-0.109**	0.655***	0.517***	0.309***	0.240***
Unexplained	0.300***	0.394***	0.180***	0.061	0.064	0.336**	0.152**	0.116**	0.095*
Ecuador									
Difference	0.340***	0.268***	0.191***	0.065**	0.033	0.582***	0.464***	0.343***	0.335***
Explained	-0.063***	-0.061***	-0.078***	-0.117***	-0.114***	0.449***	0.294***	0.290***	0.348***
Unexplained	0.403***	0.328***	0.270***	0.186***	0.147***	0.142*	0.170***	0.053	-0.013
Guatemala									
Difference	0.234***	0.171***	0.109**	-0.008	-0.042	0.319***	0.377***	0.463***	0.515***
Explained	-0.162***	-0.123***	-0.125***	-0.141***	-0.180***	0.151***	0.221***	0.312***	0.331***
Unexplained	0.396***	0.293***	0.234***	0.133**	0.139*	0.168***	0.156***	0.150***	0.184***

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

TABLE 4 : SUR (Couples)

	Male Paid Work	Female Paid Work	Male Housework	Female Housework
<b>Bolivia</b>				
Tertiary education	-3.141	-2.591	2.577	-5.086*
Female wage	0.248	-9.141***	0.252	-0.106
Male wage	-7.979***	-1.213	-0.034	-0.539
Female child +12	-	-	-0.733	-0.827
<b>Ecuador</b>				
Tertiary education	1.602	6.322***	2.249	-3.328*
Female wage	0.104	-5.182***	0.386	-0.967
Male wage	-4.041***	-0.497	0.036	0.927
Female child +12	-	-	-0.454	-4.366***
<b>Guatemala</b>				
Tertiary education	-6.870*	-4.314	-2.355	2.297
Female wage	2.723*	-8.946***	3.338*	4.276
Male wage	-8.684***	2.424	-1.305	-1.980
Female child +12	-	-	-1.702	-7.320*

All dependent variables are in weekly hours

Bootstrapped standard errors

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

## Conclusions

- 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 the allocation of time to domestic activities within the household.
- 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.