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# Ethnic and Gender Wage Disparities in Sri Lanka

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## Abstract

Ajwad and Kurukulasuriya examine wage inequalities in Sri Lanka's formal sector using data from the Sri Lanka Integrated Survey 1999–2000. The study aims to:

- Investigate whether the labor market is characterized by wage disparities among ethnic and gender groups.
- Identify the determinants of wages and the factors that affect the wage differential.
- Analyze the determinants of wages across the conditional wage distribution.
- Disaggregate the ethnic or gender wage disparities where observed into a component affected by the endowment of productive characteristics, as well as a component affected by the returns to those productive characteristics in the labor market.

The authors find that ethnicity is not a significant determinant of wages. The result is robust to different specifications. In addition, ethnicity is not significant in any of the conditional quantiles estimated.

However, there is gender disparity in wage rates in Sri Lanka. The magnitude of this disparity varies depending on the worker's ethnicity. This gender wage disparity varies by about 10 percent for Tamils and 48 percent among other ethnicities. In addition, the authors find that much of the gender disparity is not explained by productive characteristics, implying that discrimination against women may play a role. The quantile regression estimates indicate that the premium paid to male workers in the labor force is more pronounced in the upper conditional wage rate distribution.

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## **Ethnic and Gender Wage Disparities in Sri Lanka\***

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## I. Introduction

This study analyzes wage disparities in Sri Lanka's formal sector. Using household survey data from the Sri Lanka Integrated Survey 1999-2000, we examine the extent of disparities in wage earnings due to ethnic and gender differences. Sri Lanka makes an interesting case study for ethnic disparities because of the ethnic tensions that have been prevalent over the last two decades<sup>1</sup>. The claims of discrimination have sparked a civil strife that has gathered momentum since the mid '80s. A study of gender disparities in Sri Lanka is relevant because the country is often viewed as one of the most progressive countries in the region with regard to the gender dimension<sup>2</sup>. However, many of the ethnic and gender claims of equality or inequality are anecdotal and the need for rigorous evidence is clear.

This study has four main objectives. First, it investigates whether the labor market is characterized by differences in the hourly wage among ethnic groups as well as between males and females. Second, it identifies the determinants of wages and the factors that affect the wage differential. Third, the determinants of wages are analyzed across the conditional wage distribution. This allows us to identify where characteristics are rewarded most, rather than only quantify the returns to characteristics on average. Finally, where wage disparities are observed, it is disaggregated into a component affected by the endowment of productive characteristics and one, which is affected by the returns to those productive characteristics in the labor market. If it is found that the returns to productive characteristics are different across groups, we hypothesize that discrimination exists<sup>3</sup>. In determining the factors affecting wage disparities, this study controls for human capital accumulation using worker's highest level of education achieved, potential labor market experience. Other controls used include the sector of employment (i.e. public or private), geographic location, industry type and the number of hours worked.

Wage disparities among ethnic groups or between gender groups exist in almost every country and one can think of two main reasons for this. Firstly, members of different ethnic/gender groups may choose different levels of accumulation of productive skills. This maybe motivated by, among other things, culture, geographic proximity, historical reasons, etc. Second, even in the presence of equal endowments of productive skills, wage inequality may persist if employers reward productive skills differently depending on the ethnic/gender group of the worker. Such potential causes of wage disparities are not necessarily mutually exclusive and hence, may occur in conjunction with each other.

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<sup>1</sup> Claiming that the majority Sinhalese (74%) has discriminated against the Tamil minority (18%), a group of Tamil militants, named the Tamil Tigers have engaged in an intensive battle with the Sri Lankan Government for almost two decades. The New York Times (February 24, 2002) reports that the conflict has thus far taken the lives of more than 60,000 people.

<sup>2</sup> Sri Lanka boasts the first female head of state in the world and also has a high female formal sector participation rate.

<sup>3</sup> For a critical analysis of many discrimination studies, see Heckman (1998)

Considerable research on wage inequality due to ethnicity/gender has been carried out in the United States, particularly since the emergence of civil rights legislation (Becker, 1957; Arrow 1973; Squires, 1991, Marshall, 1974, Gunderson, 1989)<sup>4</sup>. A limited number of studies have examined the determinants of wages in Sri Lanka. Exceptions include, Aturupane (1997), Bowen (1990), Kelly (1993), Rama (1999), and Ranasinghe and Hartog (1997). This study distinguishes itself from the above studies in three ways. First, this study estimates wage equations with detailed information on Sinhalese, Tamils, Moors and Other ethnicities. Other studies generally concentrate on differences between Sinhalese and Tamils only. Second, this study controls for geography, using provincial indicator variables, and it controls for the industry of employment, which the above studies do not do. Third, we are not aware of any other study to investigate the ethnic and gender impacts on wages, by identifying the component of wages that is explained by the endowment of productive characteristics, versus the component that is explained by the returns to productive characteristics. In addition to the above studies, Glewwe (1986) and Dunham and Jayasuriya (2000) investigate the economic liberalization and income inequality in Sri Lanka. Other studies have explored various aspects of ethnic tension and disharmony in the island (Rotberg, 1997; Bidwai, P, 1993; Philipson, 1998). However, while there is intense interest in the ethnic disparities in Sri Lanka by the popular media, the academic literature has not pursued this topic vigorously, especially with regards to quantifying the magnitude of wage inequality between the two main ethnic groups.

The remainder of this paper is organized as follows. The next section presents a description of the data used in the study. Section III presents a description of the unconditional differences between various productive factors and labor market outcomes by gender and by ethnicity. Section IV analyzes the determinants of log hourly wages. The penultimate section presents the Oaxaca decomposition where appropriate and Section VI concludes.

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<sup>4</sup> Maume (1999) found that African American men are not promoted as frequent a rate as White men. Raudenbush and Kasim (1998) did not find that ability or occupation preference to be significant in explaining ethnic-based wage differences. Baldwin and Johnson (1996) argued that roughly two-thirds of the difference in wages of Black and White men cannot be attributed to productivity. Duncan (1994) found that labor market discrimination may limit the earning potential of Black males or that differences in school quality may not have the same effect over time for Black and White males. Maxwell (1994) further claimed that after controlling for selectivity and ability biases that exist when estimating the education-wage relationship, differences in wages arise from ethnic differences in the quality of education rather than from differences in the quantity of education. Yet, Weinberger (1998) showed that White and Hispanic males with college degrees earn, on average, 10 to 15 percent more than their comparable Black and Asian male and White female college graduates. Likewise, Hsueh and Tienda (1995) found that minority men receive less compensation for similar labor force participation as well as observing a greater incidence of unemployment periods among minority men. Mason (1999) for instance noted that 50 percent of the African American and Latino male to White male wage differentials are due to market discrimination.

## II. Data

This study utilizes the Sri Lanka Integrated Survey 1999-2000. The survey was conducted across all nine provinces in the country between October 1999 and the third quarter of 2000. The dataset is based on interviews of 7,500 households and includes data on 35,181 individuals. Given reservations regarding the quality of the data from the North and Eastern Provinces of the country (due to ongoing military operations) we conduct our analysis on a restricted dataset that excludes the two provinces. However, the North and the East are interesting regions because minorities mainly inhabit these regions. To examine the robustness of our results, we thus conduct an analysis with a dataset inclusive of the North and Eastern Provinces.

This study focuses on salaried full time (as opposed to casual and other types of) wage earners. Wages are defined as the take home salary of an employee plus bonuses and tips (the value of benefits that an employee may receive from their workplace, incomes from own businesses, property rents, and transfers are excluded)<sup>5</sup>. We restrict the sample to workers between 18 and 65 years of age and working more than 20 hours per week. Thus, the sample in total includes 2167 workers of which 92 percent are Sinhalese, 4.3 percent Tamil, 1.1 percent Moors and about 2.6% belong to other races. These proportions indicate that Sinhalese are over represented in the formal labor force, and that the other three minorities are underrepresented in the formal sector<sup>6</sup>. However, approximately 61 percent of formal sector workers are male and 39 percent female which is representative of the current gender composition of the salaried full time workforce<sup>7</sup>.

In our multivariate weighted regression model, we use as the dependent variable the log of hourly wages (LOGWAGEHR). The hours worked per day is calculated as the ratio of the reported hours worked per week to the number of working days per week (which we assume to be 5 days). Although studies of wage determinants employ different explanatory variables depending on the particularities of the study and the availability of data, this study employs a set of explanatory variables that can easily be compared with other studies on wage determinants (Blau and Beller, 1992; Oaxaca and Ransom, 1994; Olsen and Coppin, 2001; Sherer, 2000). The two most commonly employed controls for a worker's productive skills are educational attainment and number of years of work experience. We employ a series

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<sup>5</sup> There is possible selection bias here in that discrimination could be reflected not in wage rates but on whether or not a person is able to get a job that allows him or her to work more than a limited time.

<sup>6</sup> The proportion of Sinhalese in the survey sample (inclusive of all provinces) is 75% Sinhalese, 15 percent Tamil, 8 percent Moors and about 2% belong to other races.

<sup>7</sup> The Central Bank (2000) reported that the national average of males and females in the work force is approximately 65% and 35% respectively. The ethnic composition is comparable with our sample estimates.

of indicator variables that represent the level of education completed by the worker.<sup>8</sup> As with other studies, we proxy for the real experience of a worker with the potential experience given the worker's age and education. We define potential experience (EXP) as a workers age less the number of years of education received less six<sup>9</sup>.

The sector of employment is reflected by an indicator variable which divides workers into the public or private sector. An indicator variable is also included to denote whether the worker is employed in a rural or urban area. The industries represented in the sample include (a) agriculture, hunting and forestry; (b) mining and quarrying; (c) manufacturing; (d) electricity, gas, and water; (e) construction; (e) trade, restaurants, and hotels; (f) transport, storage and communications; (g) finance and business; and public administration and defense. In order to capture the potential impact of geography on wages earned for such impacts, we use indicator variables based on provincial information to identify the geographic location of the worker. The geographical coverage extends to all nine provinces of the country.

### **III. Unconditional difference between gender/ethnic groups**

Table 1 presents the unconditional sample-weighted means for a variety of variables related to the study. The unconditional difference in the hourly wages between the two ethnic groups is statistically insignificant at conventional levels of significance. The unconditional means of the sample indicates, however, that the hourly wage of Tamil male workers is approximately 0.30 Sri Lankan Rupees (SLR) lower than Sinhalese male workers. The Tamil women appear to earn about 3.4 percent more per hour than do Sinhalese women, albeit the difference is not significant. The difference in the wage rates of Sinhalese and workers of other ethnicities (including Indian Tamils, Malay, Burger and smaller Chinese workers) is also similar. Non-Sinhalese males and women earn 13 and 12 percent less than their Sinhalese counterparts, respectively. Overall, women earn about 6 percent less than male workers.

The accumulation of human capital, measured here by the highest level of education completed, suggests that, on average, all workers had completed at least 11 years of formal education<sup>10</sup>. In essence, the average worker has the equivalent of a GCE O'level certificate. Female Tamil workers tend to have a marginally higher average level of education (12 years), compared to both Sinhalese Male and Female workers and compared with male Tamil workers. Female Moors had the highest number of years of

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<sup>8</sup> As Neal and Johnson (1996) indicate, the number of years of schooling is a noisy measure of a worker's skill because it measures an input and not an output. In addition, the measure leaves out the quality of education received.

<sup>9</sup> Corrections are made to ensure that any additional years that a respondent may have spent on his or her formal education, generally due to grade repetition, is accounted for when defining the EXP variable.

<sup>10</sup> Heckman (1998) draws attention to some of the problems associated with using a measures like number of years of schooling to capture human capital, since personnel departments versus data commonly available to econometricians.



education, with 13 years. Almost 18 percent of Female Moors have an undergraduate degree, while 8 percent and 6 percent of female Tamils and female Sinhalese have undergraduate degrees, respectively.

The average age (AGE) of a worker in the sample is 35 years. Workers in the sample have approximately 17 years of potential work experience. Sinhalese workers have 1.8 years of additional experience compared to Tamil workers, although the difference is not significant. Analysis of the difference in means of experience between the two ethnic groups is significant at the 95% level for female workers.

Workers spend about 9 hours a day, on average, at work. Sinhalese females work marginally less hours per day than Tamil females (8.9 as opposed to 9.1 hours per day), while there is also no significant disparity among males of Sinhalese and Tamil ethnicity for hours worked. However, males from other races appear to work about 10.4 hours a day on average.

The distribution of worker participation in the industries (Table 2) reveals that the majority is employed in the finance and business industry (including finance, insurance and real estate/business) and the agriculture industry. The agriculture, trade and hotels and finance and business industries together accounted for more than 60% of employment. The above representation of employment reflects the underlying structure of economic activity in Sri Lanka in recent times where, along with the traditional agriculture sector, the service industries (especially in finance and tourism) have begun to play a very prominent role (Central Bank, 2000).

The proportion of Tamils workers in each industry is less than the proportion of Sinhalese workers. A complementary and pertinent statistic is the proportion of workers by ethnicity relative to the total number of workers of the same ethnicity (Table 3). An examination of the distribution of the ethnicity of the workers across the various industries reveals an interesting pattern. There appears to be a very high proportion of Sinhalese and to a smaller extent others, in the Agriculture sector. On the other hand, the proportion of Tamils and Moors is highest in the utility and public administration sectors. Interestingly, the data indicates that the proportion of Tamil workers is higher than the proportion of Sinhalese workers in public administration, finance and business, utilities and manufacturing. The proportion of other races is highest in the utilities and manufacturing sectors respectively. Participation of the ethnic groups in the various industries suggests that a large proportion of minority's are in utilities and public administration.

The sample weighted unconditional mean of wages earned by ethnic group relative to the mean industry wage suggests that any claim of bias (in wages) against Tamil workers is not obvious. For example, in the manufacturing and agriculture industries, Tamil workers earned an additional SLR.4.22 and SLR.3.28, respectively, compared to Sinhalese workers. In the case of the construction industry

Tamil workers earned an additional SLR.24.00 per hour<sup>11</sup>. In all other industries, Sinhalese workers earned (on average) more than Tamil workers, with the most dramatic difference (more than SLR 8.00) observed in the construction industry, trade, restaurants and hotels industry and transport, storage and communications industry and utilities industry. Sinhalese workers in public administration, finance and the manufacturing industries earned approximately SLR 3.00 marginally more than Tamil workers. There appears to be more inequality in wages between gender, rather than ethnic groups. In addition, the disparity is more significant among Sinhalese, rather than Tamil workers. In the case of Sinhalese workers, the gap between male and female earnings is approximately SLR 6.00 per hour (in favor of males). In contrast, female Tamil workers earn on average less than SLR 2.40 per hour relative to Tamil male workers.

More than 40% of the sample resides in the Western Province, the wealthiest of all 9 provinces in Sri Lanka. While this reflects the underlying population distribution in the island in general<sup>12</sup>, this is also bound to influence the relative wage of Tamils as they predominantly live in less economically active areas. That is, location of the workers does make a difference to their earning capacity. However, in this analysis, we exclude the North and Eastern Provinces—two of the most economically depressed the country, which should limit the extent of the downward influence.

#### **IV. Determinants of log wages per hour**

Table 4 presents the determinants of wage earnings among salaried wage earners. The dependent variable is the log of the total wages per hour. Specification (1) uses gender and ethnicity as the only determinants of wages. Workers from Other ethnicities appear to earn almost 28 percent less than Sinhalese, and men earn about 14 percent more than women.

Specification (2) includes education as an additional determinant of wages. All the education indicator variables, except the Grade 5 – Grade 9 variable, are significant at a 1 percent level. The direction of change in the coefficients when education is accounted for is consistent with existing literature (Van de Well et al, 2000; Cameron, 2000). Estimates of the returns to education based on the methodologies of Mincer (1974) and Becker (1975) have helped establish high rates of return to education in developing countries and have been cited as evidence for further investment in education, especially primary education (Psacharopoulos (1985; 1994), World Bank (1986)). The inclusion of the education variables has three main effects of other included variables. First, the hourly wage paid to

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<sup>11</sup> This result must be interpreted with care, as the number of observations for Tamil workers was very small relative to Sinhalese workers, which is more than likely to influence the mean of wages earned by this group.

<sup>12</sup> Given that more than 70% of total industrial activity is concentrated in the Western Province

Other races drops from 28 percent to 17 percent. Secondly, the wage premium paid to males increase from 14.4 percent to 18.3 percent.

Next we control for potential experience. Both potential experience and potential experience squared are significant at a 1 percent significance level (specification 3). As expected, hourly wages appear to increase with experience, but the relationship is concave. The inclusion of experience results in a further increase in the wage premium granted to Moors, while the lower wage rate observed among workers in Other races becomes insignificant. In addition, the premium paid to male workers decreases to 11 percent when experience is held constant. Interestingly, the inclusion of the experience variables also has the effect of making the Grade 5 to Grade 9 variable significant at the 5 percent level.

Specification (4) has three additional controls in the determination of log hourly wages. These controls are whether or not the worker is in the public sector, works in an urban area, and the province of the worker. The worker's sector of employment appears not to have a significant impact on the wage rate. However, several of the geographic indicator variables have a significant impact on the wage rate. For instance, workers in rural areas appear to receive about 15 percent less than their urban counterparts. None of the race variables becomes significant in specification (4). However, males appear to earn about 11 percent more than their female counterparts.

Specification (5) includes all the controls of (4), with 8 industrial indicator variables included. As in (4), all of the race variables remain insignificant, and the male indicator remains significant. Specification (6) includes the wage determinants from (5) and the log of the hours worked per day. The levels of significance of all the variables in (5) are observed in (6). In addition, it appears that the log of the hours worked has a negative and significant impact on wage rates.

The coefficients on Specification (6) deserve some explanation. First, as in all the other specifications, none of the race variables are significant at the 10 percent level. Men tend to earn about 16 percent more than their female counterparts. All the education indicator variables are significant at the 1 percent level, except that Grade 5 to Grade 9 variable, which is only significant at the 10 percent level. We find that the returns to primary education is about 8 percent, while the returns to passing the O'level examination is about 24 percent more than if the worker had less than 5 years of education. Therefore, the returns to passing the O' level examination is 16 percent relative to passing primary school<sup>13</sup>. Workers who pass the A' level examination earn about 49 percent more than workers with less than 5 years of experience and workers with a bachelor's degree earn about 78 percent more than workers with less than 5 years of experience. The pattern of the potential years of experience is as expected. That is, wage rates increase with years of experience but the relationship is concave. The optimal amount of

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<sup>13</sup> These estimates compare well with Kelly (1993). Kelly finds that the returns to primary education are about 6 percent and the returns to passing the O' level examination is 18 percent.

potential experience appears to be 36 years. The sector of employment, i.e. public or private, appears not to affect the wage rate of workers significantly. In addition, a number of geographic variables assume significant coefficients, and workers in rural areas appear to earn about 11 percent less than similar workers in urban areas. The number of hours worked has a negative impact on the wage rate and the industry indicator variables assume significant coefficients.

The OLS results in Table 4 suggest that race variables generally have no impact on hourly wages and that men are paid a premium relative to women. However, the above results have to be interpreted with caution because of the possibility of heterogeneity. Table 5 presents the OLS and quantile regression estimates of the determinants of log wages using specification (6) of Table 4. The quantile regression estimates are performed at the 0.10, 0.25, 0.50, 0.75, and 0.90 quantiles.

For the ethnicity variables, the OLS results and the quantile regression results all suggest that ethnicity has no impact on the wage rate of formal sector employees. The gender variable is positive and significant for all the estimated quantiles, as for the OLS. Interestingly, however, it appears that the returns to being male are higher at the top of the conditional wage distribution than lower in the conditional wage distribution. In the case of education variables, the coefficient signs and the significance are very similar to the OLS case. Of the variables that show variation across the quantiles, it appears that Passed GAQ/GSQ (Advanced high school) has a higher return at the top of the conditional distribution; while the variables completed Grade 5-Grade 9 and completed a postgraduate degree/diploma have lower returns at the top of the conditional wage distribution. The potential experience and potential experience squared have the expected signs across all quantiles except when  $q=0.10$ . At the lower end of the conditional wage distribution, the returns to experience appear to be close to zero. Figure 1 presents the locus traced by coefficient estimates across quantiles.

## **V. Decomposition of the Wage Gap**

The above analysis shows that the conditional impact of ethnicity is insignificant as a determinant of wages per hour. However, there is a significant gender disparity in hourly wages. In the case of the Sinhalese, female workers earn about 11 percent less than their Sinhalese male counterparts, and Tamil women appear to earn about 10 percent less than their Tamil male counterparts. These disparities are much higher for Moors and for Other races. Our estimates suggest that Moor women earn about 37 percent less than Moor men, while Other women earn about 48 percent less than their Other male counterparts. Our estimates are comparable with Kelly's (1993) estimate of a 28 percent wage premium paid to male employees and Rama (1999), and Ranasinghe and Hartog (1997) estimate of a 20 percent wage premium paid to males relative to females.

There appears to be a significant variation in the conditional wage disparities between males and females for the four ethnic groups considered here. Therefore, it would be useful to decompose the difference into that which is explained by productive characteristics between the groups and a component that measures the returns to productive characteristics. A disparity in the returns to productive characteristics is defined as discrimination.

This study employs a decomposition proposed by Blinder (1973) and Oaxaca (1973). Both studies decompose the mean inter group wage differential into that which is attributable to differences in productive characteristics and into differences in returns to characteristics, as might arise from discrimination. Applications of the Oaxaca- Blinder decomposition include identifying the gender wage disparities in 15 Latin American countries (Psacharopoulos and Patrinos, 1994), measuring the disparity in living standards between ethnic minorities in Vietnam (Van de Welle and Gunewardena, 2000), estimating the gender compensation gap among high level executives in the US (Betrand and Hallock, 2000), and estimating the public-private wage differentials in Canada (Mueller, 1998).

Following the Blinder (1973) and Oaxaca (1973) methodology, the log of the wage rate of individual  $i$  belonging to group  $j$  is given by,

$$\ln W_{ij} = X_{ij} \beta_j + e_{ij} \quad [1]$$

where  $X_{ij}$  is a vector of observed wage-related characteristics and  $e_{ij}$  are distributed normally with zero mean and constant variance. The vector  $\beta_j$  represents the returns to the observed characteristics. These returns are assumed to be common across members of the same ethnic group but can be different across groups. In effect, members of each group compete with each other, but not with members of the other group. So, the return to each characteristic is equalized within groups, but not necessarily across groups. Non-discrimination thus means that all workers regardless of ethnicity compete in the same market.

Equation [1] is estimated for males and females separately. If it were the case that the returns to characteristics of the males are the baseline, then a female worker with the average characteristics of a male, and compensated under the wage structure of a male worker, will receive  $\bar{W}_{if}^* = \hat{\beta}_M \bar{X}_{if}$ . In this case, the wage differential can be attributed to differences in productive characteristics between the male and female workers, but not due to unequal pay structures. That is:

$$\ln \bar{W}_{im} - \ln \bar{W}_{if}^* = \hat{\beta}_M (\bar{X}_{im} - \bar{X}_{if}). \quad [2]$$

Equation [2] provides a measure of the difference in observed wages between males and females, purely due to the group's characteristics and not due to differences in returns to characteristics.

The wage differential due to the difference in the rates of return on characteristics for a female, with mean female characteristics, is given by,

$$\ln \bar{W}_{if} - \ln \bar{W}_{if}^* = (\hat{\beta}_F - \hat{\beta}_M) \bar{X}_{if} \quad [3]$$

Since expression [3] is the wage difference due to the different rates of returns to skills based on whether a worker is male or female, it can be interpreted as a measure of discrimination.

The wage differential between males and females, each with mean skills, is then given by subtracting [3] from [2],

$$\ln \bar{W}_M - \ln \bar{W}_F = \hat{\beta}_M (\bar{X}_M - \bar{X}_F) + (\hat{\beta}_M - \hat{\beta}_F) \bar{X}_F \quad [4]$$

The above specification uses the characteristics of a male worker as the baseline.<sup>14</sup> The total gender wage differential is then given by the sum of the difference in characteristics between members of the two groups and the difference in returns to characteristics for mean female characteristics. The first term,  $\hat{\beta}_M (\bar{X}_M - \bar{X}_F)$ , refers to the pre-market factors that lead to a wage disparity. In other words, it represents the impact of the difference in the productive characteristics between the sexes. The second factor,  $(\hat{\beta}_M - \hat{\beta}_F) \bar{X}_F$ , measures the difference in returns to skills between the males and females. This is our measure of discrimination, since it relates to the inconsistent rewarding of productive characteristics for women versus men.

Table 6 presents the Oaxaca decomposition of the wage differential between males and females, disaggregated by ethnicity. The results are obtained by estimating [4] separately for the four ethnic groups using Specification (6). The first row of the table presents the findings when males are the baseline, while the second row presents the findings when women are the baseline<sup>15</sup>.

When the male wage structure is assumed to be the true wage structure, the explained portion is always smaller in magnitude than the unexplained portion of the gender wage differential. The overall average wage gap between the sexes appears to be 15.8 percent for Sinhalese workers. Negative 2.4 percent of this difference in wages is explained by differences in characteristics, while 97.6 percent of the gap is not explained by productive characteristics. For Tamils and Moors the overall wage gap is 5 percent and 16 percent respectively. The unexplained portion of this wage differential exceeds the total log wage differential, suggesting that the productivity related characteristics of women is higher than the characteristics for men, but the returns to those characteristics is lower for women than for men. For Other races, the overall wage gap is -54, implying that the women are favored to the men in this ethnicity. Furthermore, there is an even split between the unexplained and explained portions of the overall wage differential.

For Sinhalese and Tamils, a similar pattern of results is observed when the female wage structure is assumed to be the true baseline. That is, the unexplained portion of the wage differential exceeds the

<sup>14</sup> For Tamils as the baseline,  $\ln \bar{W}_M - \ln \bar{W}_F = \hat{\beta}_F (\bar{X}_M - \bar{X}_F) + (\hat{\beta}_M - \hat{\beta}_F) \bar{X}_M$ . Ransom and Oaxaca (1994) show that the use of the two baselines provides two extremes.

<sup>15</sup> Ransom and Oaxaca (1994) show that the decomposition obtained using the two baselines are in fact extreme cases and hence, any combination of  $\beta_M$  and  $\beta_F$  are possibly.

actual wage differential between the sexes. For Moors, the unexplained and explained portions of the gender wage differential are negative 365 percent and 465 percent respectively. The result that the explained portion of the wage differential exceeds the actual gender wage gap suggests that Moor women have lower productive skills than Moor men, but the returns to those skills are higher for women than for men. Thus, Moor women appear to be favored in the labor market, conditional on other factors. In the case of Other races, there appears to be an even split between the explained and the unexplained gender wage differential.

The Oaxaca decompositions reveal that a large fraction of the wage gap between men and women is not explained by differences in accumulation of productive characteristics. The implication here is that discrimination (as defined in this paper) is playing a role in the determination of wages in the Sri Lankan labor force.

## **VI. Conclusion**

This paper investigates the gender and ethnic wage disparity in the formal sector of employment using the Sri Lanka Integrated Survey 1999-2000. The study begins with an analysis of the unconditional wage disparities among ethnic and also gender groups. In addition to wage rates, other differences between the ethnic groups and the gender groups are observed. Second, using standard models of the determinants of wages, the factors that affect wage rates are identified. Third, we analyze the manner in which the rates of return to log wages per hour vary with the estimated quantile. In other words, we measure, not only the return to various characteristics on average, but also the returns to characteristics for different points in the conditional distribution. Thereby identifying where characteristics matter, rather than only whether they matter on average. Finally, where wage disparities are observed, i.e. gender, the difference is disaggregated into a component that is affected by the endowment of productive characteristics as well as a component, which is affected by the returns to those productive characteristics in the labor market. The latter component is thought of as a measure of discrimination.

There are differences in the unconditional wage rates between ethnic groups and between the gender groups. However, when human capital and other labor market determinants are controlled for, the difference in the wage rates is small between ethnic groups. In fact, the finding of ethnicity not impacting wages is robust to various specifications and the results are unaffected by the choice of the restricted and unrestricted samples. On the other hand, there appears to be a sizable difference in the wage rates between males and females in the formal sector, controlling for ethnicity. Conditionally, there appears not to be a significant impact of being a member of a minority group in determining wage rates. There is a gender disparity in hourly wages, which amounts to a 15 percent premium paid to males. We find that the conditional gender wage differentials are about 11, 10, 37 and 48 percent for Sinhalese, Tamils,

Moors and Others. Decomposition of the wage differentials into a component explained by productive skills and a component that is unexplained by productive skills suggests that much of the differential is unexplained by the stock of productive characteristics for Sinhalese, Tamils and Other races. However, Moor women appear to be favored relative to Moor men with respect to wage rates.

There are three main shortcomings of this study. First, estimating the impact of discrimination on wages is complicated by the many endogenous factors that affect labor market outcomes. For instance, the decision to pursue education may be affected by discrimination itself. The direction of the bias is not clear because on one hand, the lower returns to educational attainment could lead to a lower overall level of education in the discriminated group, while on the other hand, the discriminated group may choose to “over educate” themselves in order to compensate for difference in wages due to discrimination. Second, unobserved variables that are correlated with ethnicity/gender make the interpretation of the coefficients difficult. To minimize the impact of unobserved variables tainting the results, we also estimate the equations for males and females separately and obtain similar patterns of coefficients. A third shortcoming is that we focus on wage disparities only, ignoring ethnic and gender inequalities in hiring decisions, promotions, etc. For instance, if Tamils were held to a higher standard when managers make hiring decisions, but pay the hired workers the same salary as they would a Sinhalese worker, then the above analysis would not capture the discrimination.



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## Annex

This section provides a brief recap of the theory of asymmetric returns to productive skills due to gender. Wage inequalities do not always imply that discrimination does not prevail, nor does wage equality always imply that there is no discrimination. Consider two scenarios in which a fair labor market leads to unequal wages between two groups. Consider, first, a case in which one group has a specific skill that is highly rewarded in the market. In this case, workers with the skill would be more employable and command higher wages. In such a scenario, a labor market, driven by productivity considerations and not by discrimination, will show unequal outcomes across the different groups. Another example of a fair labor market resulting in unequal outcomes across races could be caused by geography. For instance, if one group inhabits geographic areas that are underdeveloped and undercapitalized, then labor market outcomes would also reflect inequality. Whether the wage inequality is caused by pre-market factors or whether it is caused by discrimination in the labor force has different policy prescriptions.

In this paper, we adopt the model presented in Becker (1957). The driving force behind discrimination is assumed to be racist preferences (or racial animus) by some agents in the model. Assume that price taking firms produce output from labor input. The production function is then:

$$y=f(L) \quad [A1]$$

where  $L$  is the total labor input. There are two groups of workers in the model, say, Sinhalese (S) and Tamils (T). Assume that each agent supplies labor inelastically at  $\bar{L}_S$  and  $\bar{L}_T$  respectively for S and T. Suppose that the wages for S and T are respectively  $w_S$  and  $w_T$ . In addition, suppose that labor from the two groups are perfect substitutes. Then the firm's profit function is:

$$\pi(L_S, L_T) = f(L_S + L_T) - w_S L_S - w_T L_T \quad [A2]$$

Suppose that firm owners have identical, but possibly racist preferences. The utility function is then given by,

$$u(\pi, L_S, L_T) \quad [A3]$$

A utility maximizing firm owner solves:

$$\max_{(L_S, L_T)} u((\pi, L_S, L_T), L_S, L_T) \quad [A4]$$

The first order conditions are given by,

$$\frac{\partial u(\pi, L_S, L_T)}{\partial \pi} [f'(L) - w_S] + \frac{\partial u(\pi, L_S, L_T)}{\partial L_S} = 0 \quad [A5]$$

$$\frac{\partial u(\pi, L_S, L_T)}{\partial \pi} [f'(L) - w_T] + \frac{\partial u(\pi, L_S, L_T)}{\partial L_T} = 0 \quad [\text{A6}]$$

In equilibrium, labor supply must equal labor demand, thus:

$$w_S - w_T = \frac{1}{\frac{\partial u(\pi, \bar{L}_T, \bar{L}_S)}{\partial \pi}} \left( \frac{\partial u(\pi, \bar{L}_T, \bar{L}_S)}{\partial L_S} - \frac{\partial u(\pi, \bar{L}_T, \bar{L}_S)}{\partial L_T} \right) \quad [\text{A7}]$$

Hence,  $w_S > w_T$  whenever

$$\frac{\partial u(\pi, \bar{L}_T, \bar{L}_S)}{\partial L_S} > \frac{\partial u(\pi, \bar{L}_T, \bar{L}_S)}{\partial L_T} \quad [\text{A8}]$$

Condition [A8] suggests that groups S earn a higher wage whenever employers prefer group S workers more than workers from group T.

**Table 1: Unconditional means**

| Description                                | Total Sample | By Ethnicity |         |                  |         |         |         |         |         |
|--------------------------------------------|--------------|--------------|---------|------------------|---------|---------|---------|---------|---------|
|                                            |              | Sinhalese    |         | Sri Lankan Tamil |         | Moors   |         | Others  |         |
|                                            |              | Male         | Female  | Male             | Female  | Male    | Female  | Male    | Female  |
| Number of Observations                     | 2167.000     | 1184         | 763     | 68               | 33      | 63      | 21      | 25      | 10      |
| Age                                        | 34.995       | 37.489       | 31.668  | 35.041           | 28.266  | 37.620  | 28.481  | 29.446  | 31.236  |
| Total hourly wage                          | 30.567       | 33.120       | 26.756  | 32.834           | 30.182  | 33.451  | 28.103  | 20.350  | 32.561  |
| log (total hourly wage)                    | 3.216        | 3.280        | 3.122   | 3.278            | 3.228   | 3.342   | 3.182   | 2.807   | 3.346   |
| Up to Grade 5 (6 years of schooling)       | 0.050        | 0.049        | 0.041   | 0.059            | 0.087   | 0.120   | 0.000   | 0.126   | 0.160   |
| Grade 5- Grade 9                           | 0.278        | 0.289        | 0.253   | 0.350            | 0.138   | 0.347   | 0.172   | 0.426   | 0.506   |
| Grade 10 (Passed GCE O'Level)              | 0.253        | 0.264        | 0.246   | 0.244            | 0.220   | 0.163   | 0.169   | 0.224   | 0.000   |
| Grade 11- Grade 12 (Passed A'Level)        | 0.321        | 0.300        | 0.354   | 0.299            | 0.415   | 0.346   | 0.478   | 0.223   | 0.063   |
| Passed GAQ/GSQ (Advanced High School Exam) | 0.029        | 0.030        | 0.027   | 0.044            | 0.056   | 0.000   | 0.000   | 0.000   | 0.271   |
| Degree                                     | 0.053        | 0.053        | 0.060   | 0.004            | 0.083   | 0.015   | 0.181   | 0.000   | 0.000   |
| Post Graduate Degree/Diploma               | 0.016        | 0.016        | 0.019   | 0.000            | 0.000   | 0.008   | 0.000   | 0.000   | 0.000   |
| Number of years of schooling completed     | 11.563       | 11.457       | 11.856  | 10.852           | 11.969  | 10.783  | 12.922  | 9.559   | 10.627  |
| Potential experience, Age – Eyears – 6     | 17.438       | 20.037       | 13.814  | 18.188           | 10.369  | 20.837  | 9.944   | 13.888  | 14.610  |
| Exp squared                                | 428.526      | 531.070      | 283.132 | 438.696          | 179.811 | 577.135 | 202.106 | 328.360 | 319.235 |
| Public sector                              | 0.421        | 0.477        | 0.372   | 0.231            | 0.314   | 0.324   | 0.546   | 0.097   | 0.170   |
| Private sector                             | 0.579        | 0.523        | 0.628   | 0.769            | 0.686   | 0.676   | 0.454   | 0.903   | 0.830   |
| Proportion living in urban areas           | 0.226        | 0.217        | 0.171   | 0.589            | 0.460   | 0.745   | 0.705   | 0.189   | 0.403   |
| Proportion living in rural areas           | 0.774        | 0.783        | 0.829   | 0.411            | 0.540   | 0.255   | 0.295   | 0.811   | 0.597   |
| Hours worked per day                       | 9.231        | 9.429        | 8.900   | 9.668            | 9.098   | 9.147   | 7.572   | 10.304  | 8.745   |
| Hours worked per week                      | 46.153       | 47.144       | 44.501  | 48.340           | 45.490  | 45.737  | 37.858  | 51.519  | 43.726  |
| log(Hours worked per week)                 | 2.198        | 2.220        | 2.162   | 2.242            | 2.163   | 2.186   | 1.997   | 2.308   | 2.154   |
| Manufacturing                              | 0.027        | 0.041        | 0.005   | 0.092            | 0.000   | 0.003   | 0.000   | 0.000   | 0.000   |
| Agriculture                                | 0.029        | 0.039        | 0.015   | 0.068            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| Mining industry                            | 0.335        | 0.258        | 0.487   | 0.107            | 0.301   | 0.110   | 0.246   | 0.182   | 0.400   |
| Construction industry                      | 0.068        | 0.065        | 0.039   | 0.223            | 0.037   | 0.161   | 0.068   | 0.580   | 0.197   |
| Electricity, gas and water                 | 0.008        | 0.009        | 0.004   | 0.059            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| Trade/restaurants/hotels                   | 0.093        | 0.150        | 0.009   | 0.112            | 0.004   | 0.112   | 0.141   | 0.057   | 0.034   |
| Transport, Storage, communications         | 0.079        | 0.089        | 0.059   | 0.119            | 0.245   | 0.050   | 0.025   | 0.000   | 0.136   |
| Finance and Business                       | 0.310        | 0.298        | 0.337   | 0.169            | 0.364   | 0.444   | 0.521   | 0.118   | 0.170   |
| Public Administration and Defense          | 0.050        | 0.051        | 0.046   | 0.052            | 0.048   | 0.120   | 0.000   | 0.062   | 0.063   |
| Proportion living in Western Province      | 0.468        | 0.483        | 0.448   | 0.463            | 0.374   | 0.452   | 0.412   | 0.513   | 0.607   |
| Central Province                           | 0.123        | 0.118        | 0.099   | 0.420            | 0.393   | 0.098   | 0.186   | 0.165   | 0.058   |
| Southern Province                          | 0.144        | 0.151        | 0.159   | 0.020            | 0.000   | 0.082   | 0.075   | 0.000   | 0.070   |
| Northern Province                          |              |              |         |                  |         |         |         |         |         |
| Eastern Province                           |              |              |         |                  |         |         |         |         |         |
| North Western Province                     | 0.102        | 0.092        | 0.119   | 0.048            | 0.170   | 0.193   | 0.195   | 0.000   | 0.000   |
| North Central Province                     | 0.034        | 0.038        | 0.032   | 0.014            | 0.000   | 0.055   | 0.093   | 0.000   | 0.000   |
| Uva Provinces                              | 0.053        | 0.054        | 0.045   | 0.015            | 0.016   | 0.057   | 0.040   | 0.323   | 0.266   |
| Sabaragumawa Provinces                     | 0.074        | 0.064        | 0.099   | 0.020            | 0.048   | 0.063   | 0.000   | 0.000   | 0.000   |

Source: Authors' estimates using Sri Lanka Integrated Survey 1999-2000 (Excluding North and East)

**Table 2: Percentage of workers in each industry by ethnicity relative to total working population**

|                | Sinhalese | Tamil | Moor | Other |
|----------------|-----------|-------|------|-------|
| Manufacturing  | 3%        | 0%    | 0%   | 0%    |
| Agriculture    | 27%       | 1%    | 0%   | 0%    |
| Mining         | 2%        | 0%    | 0%   | 0%    |
| Construction   | 1%        | 0%    | 0%   | 0%    |
| Utility        | 5%        | 1%    | 1%   | 1%    |
| Trade/hotel    | 8%        | 0%    | 0%   | 0%    |
| Transp/communc | 7%        | 1%    | 0%   | 0%    |
| Finbus         | 30%       | 1%    | 2%   | 0%    |
| Public admin   | 5%        | 0%    | 0%   | 0%    |

Source: Authors' estimates using Sri Lanka Integrated Survey 1999-2000 (Excluding North and East)

**Table 3: Percentage of workers in each industry relative to total number of workers of the same ethnicity**

|                | Sinhalese | Tamil | Moor | Other |
|----------------|-----------|-------|------|-------|
| Manufacturing  | 3%        | 0%    | 2%   | 0%    |
| Agriculture    | 13%       | 23%   | 4%   | 27%   |
| Mining         | 23%       | 0%    | 10%  | 0%    |
| Construction   | 0%        | 4%    | 2%   | 0%    |
| Utility        | 2%        | 0%    | 2%   | 0%    |
| Trade/hotel    | 0%        | 1%    | 2%   | 0%    |
| Transp/communc | 1%        | 0%    | 2%   | 0%    |
| Finbus         | 1%        | 6%    | 9%   | 3%    |
| Public admin   | 4%        | 0%    | 10%  | 0%    |

Source: Authors' estimates using Sri Lanka Integrated Survey 1999-2000 (Excluding North and East)

**Table 4: Determinants of Log Total Hourly Wages**

|                                             | (1)                    | (2)                  | (3)                   | (4)                   | (5)                   | (6)                   |
|---------------------------------------------|------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Intercept                                   | 3.12981 ***<br>(0.022) | 2.796 ***<br>(0.049) | 2.469 ***<br>(0.062)  | 2.609 ***<br>(0.067)  | 2.803 ***<br>(0.087)  | 4.443 ***<br>(0.159)  |
| Tamil                                       | 0.034<br>(0.030)       | 0.054<br>(0.054)     | 0.082<br>(0.057)      | 0.029<br>(0.042)      | 0.075<br>(0.043)      | 0.069<br>(0.040)      |
| Moor                                        | 0.065<br>(0.077)       | 0.090<br>(0.058)     | 0.105<br>(0.059)      | 0.024<br>(0.050)      | 0.054<br>(0.050)      | 0.008<br>(0.048)      |
| Other ethnicity                             | -0.275<br>(0.125) **   | -0.172 *<br>(0.058)  | -0.103<br>(0.058)     | -0.111<br>(0.047)     | -0.019<br>(0.047)     | -0.025<br>(0.044)     |
| Male                                        | 0.144 ***<br>(0.074)   | 0.183 ***<br>(0.12)  | 0.115 ***<br>(0.121)  | 0.109 ***<br>(0.040)  | 0.108 ***<br>(0.041)  | 0.150 ***<br>(0.040)  |
| Grade 5 - Grade 9                           |                        | 0.043<br>(0.082)     | 0.129 **<br>(0.080)   | 0.123 *<br>(0.032)    | 0.088 *<br>(0.033)    | 0.083 *<br>(0.032)    |
| Grade 10 (Passed<br>GCE O'Level)            |                        | 0.161 **<br>(0.11)   | 0.277 ***<br>(0.105)  | 0.267 ***<br>(0.048)  | 0.240 ***<br>(0.049)  | 0.235 ***<br>(0.045)  |
| Grade 11- Grade 12<br>(Passed A'Level)      |                        | 0.502 ***<br>(0.026) | 0.611 ***<br>(0.004)  | 0.587 ***<br>(0.054)  | 0.539 ***<br>(0.073)  | 0.488 ***<br>(0.067)  |
| Passed GAQ/GSQ<br>(Advanced High<br>School) |                        | 0.904 ***<br>(0.073) | 1.004 ***<br>(0.000)  | 0.940 ***<br>(0.056)  | 0.808 ***<br>(0.079)  | 0.727 ***<br>(0.079)  |
| Bachelors Degree                            |                        | 0.872 ***<br>(0.094) | 0.986 ***<br>(0.027)  | 0.963 ***<br>(0.057)  | 0.906 ***<br>(0.054)  | 0.775 ***<br>(0.051)  |
| Post Graduate<br>Degree/Diploma             |                        | 1.331 ***<br>(0.057) | 1.383 ***<br>(0.070)  | 1.367 ***<br>(0.120)  | 1.370 ***<br>(0.057)  | 1.199 ***<br>(0.054)  |
| Potential years of<br>experience            |                        |                      | 0.022 ***<br>(0.087)  | 0.023 ***<br>(0.081)  | 0.023 ***<br>(0.059)  | 0.022 ***<br>(0.057)  |
| Experience squared                          |                        |                      | 0.0002 ***<br>(0.056) | 0.000 ***<br>(0.096)  | 0.000 ***<br>(0.118)  | 0.000 ***<br>(0.119)  |
| Public sector                               |                        |                      |                       | 0.007<br>(0.004)      | 0.042<br>(0.083)      | -0.017<br>(0.079)     |
| Rural                                       |                        |                      |                       | -0.154 ***<br>(0.000) | -0.111 ***<br>(0.098) | -0.110 ***<br>(0.096) |
| Log(Hours worked<br>per day)                |                        |                      |                       |                       |                       | -0.734 ***<br>(0.004) |
| Industries                                  | No                     | No                   | No                    | No                    | Yes                   | Yes                   |
| Provinces                                   | No                     | No                   | No                    | Yes                   | Yes                   | Yes                   |
| DF Model                                    | 4                      | 10                   | 12                    | 20                    | 28                    | 29                    |
| df Error                                    | 2162                   | 2156                 | 2154                  | 2146                  | 2138                  | 2137                  |
| Corrected Total                             | 2166                   | 2166                 | 2166                  | 2166                  | 2166                  | 2166                  |
| R-squared                                   | 0.0175                 | 0.255                | 0.294                 | 0.341                 | 0.354                 | 0.411                 |
| F                                           | 9.63                   | 73.85                | 74.82                 | 55.45                 | 41.92                 | 51.43                 |

Source: Authors' estimates using Sri Lanka Integrated Survey 1999-2000 (Excluding North and East)

Note: White-correct standard errors are in parentheses. \* - statistically significant at the 10 percent level, \*\* at the 5 percent level, \*\*\* at the 1 percent level (using Chi-squared p-values).

**Table 5: Determinants of Log Total Hourly Wages using OLS and quantile regressions**

|                                       | OLS                   | q=0.10                | q=0.25                | q=0.50                | q=0.75                | q=0.90                |
|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Intercept                             | 4.443 ***<br>(0.159)  | 4.002 ***<br>(0.290)  | 4.363 ***<br>(0.147)  | 4.460 ***<br>(0.134)  | 4.703 ***<br>(0.201)  | 4.542 ***<br>(0.244)  |
| Tamil                                 | 0.069<br>(0.040)      | 0.125<br>(0.105)      | 0.047<br>(0.051)      | 0.070<br>(0.047)      | 0.093<br>(0.073)      | -0.022<br>(0.079)     |
| Moor                                  | 0.008<br>(0.048)      | -0.150<br>(0.092)     | -0.046<br>(0.061)     | 0.087<br>(0.057)      | 0.043<br>(0.081)      | -0.008<br>(0.085)     |
| Other ethnicity                       | -0.025<br>(0.044)     | -0.071<br>(0.153)     | -0.003<br>(0.081)     | 0.046<br>(0.076)      | -0.052<br>(0.123)     | -0.166<br>(0.136)     |
| Male                                  | 0.150 ***<br>(0.040)  | 0.118 **<br>(0.047)   | 0.123 ***<br>(0.023)  | 0.135 ***<br>(0.022)  | 0.143 ***<br>(0.032)  | 0.170 ***<br>(0.039)  |
| Grade 5 - Grade 9                     | 0.083 *<br>(0.032)    | 0.263 ***<br>(0.083)  | 0.191 ***<br>(0.051)  | 0.067<br>(0.046)      | -0.003<br>(0.071)     | 0.032<br>(0.077)      |
| Grade 10 (Passed GCE O'Level)         | 0.235 ***<br>(0.045)  | 0.287 ***<br>(0.086)  | 0.225 ***<br>(0.052)  | 0.200 ***<br>(0.047)  | 0.183 **<br>(0.074)   | 0.192 **<br>(0.080)   |
| Grade 11- Grade 12 (Passed A'Level)   | 0.488 ***<br>(0.067)  | 0.556 ***<br>(0.089)  | 0.465 ***<br>(0.053)  | 0.393 ***<br>(0.048)  | 0.422 ***<br>(0.076)  | 0.518 ***<br>(0.084)  |
| Passed GAQ/GSQ (Advanced High School) | 0.727 ***<br>(0.079)  | 0.558 ***<br>(0.147)  | 0.659 ***<br>(0.076)  | 0.686 ***<br>(0.075)  | 0.794 ***<br>(0.109)  | 1.257 ***<br>(0.115)  |
| Bachelors Degree                      | 0.775 ***<br>(0.051)  | 0.787 ***<br>(0.131)  | 0.811 ***<br>(0.066)  | 0.720 ***<br>(0.063)  | 0.736 ***<br>(0.097)  | 0.785 ***<br>(0.107)  |
| Post Graduate Degree/Diploma          | 1.199 ***<br>(0.054)  | 1.356 ***<br>(0.157)  | 1.221 ***<br>(0.085)  | 1.034 ***<br>(0.086)  | 1.033 ***<br>(0.131)  | 1.069 ***<br>(0.120)  |
| Potential years of experience         | 0.022 ***<br>(0.057)  | 0.012 *<br>(0.007)    | 0.021 ***<br>(0.003)  | 0.023 ***<br>(0.003)  | 0.025 ***<br>(0.004)  | 0.031 ***<br>(0.005)  |
| Experience squared                    | 0.000 ***<br>(0.119)  | 0.000<br>(0.000)      | 0.000 ***<br>(0.000)  | 0.000 ***<br>(0.000)  | 0.000 ***<br>(0.000)  | 0.000 ***<br>(0.000)  |
| Public sector                         | -0.017<br>(0.079)     | -0.048<br>(0.059)     | -0.063 **<br>(0.028)  | -0.004<br>(0.027)     | 0.008<br>(0.039)      | 0.071<br>(0.049)      |
| Rural                                 | -0.110 ***<br>(0.096) | -0.087<br>(0.053)     | -0.074 ***<br>(0.025) | -0.047 **<br>(0.023)  | -0.119 ***<br>(0.033) | -0.201 ***<br>(0.038) |
| Log(Hours worked per day)             | -0.734 ***<br>(0.004) | -0.722 ***<br>(0.107) | -0.770 ***<br>(0.051) | -0.748 ***<br>(0.048) | -0.742 ***<br>(0.073) | -0.628 ***<br>(0.086) |
| Industries                            | Yes                   | Yes                   | Yes                   | Yes                   | Yes                   | Yes                   |
| Provinces                             | Yes                   | Yes                   | Yes                   | Yes                   | Yes                   | Yes                   |
| # Obs.                                | 2167                  | 2167                  | 2167                  | 2167                  | 2167                  | 2167                  |
| R-squared                             | 0.411                 | 0.179                 | 0.233                 | 0.276                 | 0.306                 | 0.312                 |

Source: Authors' estimates using Sri Lanka Integrated Survey 1999-2000 (Excluding North and East)

Notes: White-correct standard errors are in parentheses. \* - statistically significant at the 10 percent level, \*\* at the 5 percent level, \*\*\* at the 1 percent level.



**Table 6: Oaxaca Decomposition**

|           | Gender wage differential | Male baseline |           | Female baseline |           |
|-----------|--------------------------|---------------|-----------|-----------------|-----------|
|           |                          | Unexplained   | Explained | Unexplained     | Explained |
| Sinhalese | 15.8%                    | 97.6%         | 2.4%      | 102.4%          | -2.4%     |
| Tamil     | 5.0%                     | 378.9%        | -278.9%   | -239.8%         | 339.8%    |
| Moor      | 16.0%                    | 279.4%        | -179.4%   | -430.1%         | 530.1%    |
| Other     | -54.0%                   | 47.9%         | 52.1%     | -19.8%          | 119.8%    |

Source: Authors' estimates using Sri Lanka Integrated Survey 1999-2000 (Excluding North and East)

Notes: Specification (6) is estimated for each of the ethnicity – race combinations.



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