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Evidence for Colombia and the United States***

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# Relative Labor Supply and the Gender Wage Gap: Evidence for Colombia and the United States

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## Abstract

Under imperfect substitution between men and women and no discrimination, a higher relative supply of labor by women should reduce female wages as compared to male wages. By contrast, under gender discrimination and perfect substitution, an increase in the relative labor supply of women should reduce the gender wage gap. Using a simple conceptual framework and 20 years of cross-sectional wage data from both the United States and Colombia, empirical tests on the relationship between relative labor supply and the gender wage gap suggest that discrimination is a more important issue than imperfect substitution. The evidence is especially strong in Colombia.

JEL classification: J31, J40, J71

Key Words: Discrimination, Substitution, and Gender Wage Gap.

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## **1. Introduction**

Social change and technology have facilitated the insertion of women in the labor force (see for example Blau and Khan, 2002 and Zandvakili, 2000 for the U.S, and Velez et al., 2002 for Colombia). What has been the likely impact on the gender wage gap of the increase in the relative supply of labor of women versus men? The answer is ambiguous a priori.

The increase in female relative supply may affect female wages negatively if workers from opposite sexes are not perfect substitutes. Employers may not substitute female with male employment if they perceive that they cannot do equivalent jobs. Males would then enjoy a relative wage premium that would increase as their relative supply decreases. This argument has been made by Freeman (1976), Katz and Murphy (1992), and Card and Lemieux (2002) in the context of imperfect substitution between high- and low-skilled labor.

However, we may also observe a reduction in the wage gap if the increase in female supply reduces labor market segmentation. Female workers may work proportionately more in sectors or industries with lower wages (Carrington and Troske, 1995, 1998; Hellerstein et al., 1999; Tenjo and Bernat, 2002). Indeed, men and women may work in different occupations not only because of differences in relative competitive advantage, but also because of differences in work and educational preferences (Becker, 1971; Bergman, 1974; Johnson and Stafford, 1998). If segmentation results from institutional constraints or social norms, a wage premium (due to higher bargaining power, for example) will exist for the non-excluded group even if observable characteristics between the excluded and the non-excluded groups, including productivity, are identical. We know that rapid technological progress, and the decline in the importance of physical strength have probably helped to reduce segmentation. In Johnson and Stafford's

(1998) model, for example, the implication is that if women entered into fields traditionally occupied by men, this should reduce the men's wage advantage in such fields, thereby reducing the wage gap.

In order to test empirically whether changes in the relative labor supply of women is contributing to an increase or decrease in the gender wage gap, we develop an empirical model in the spirit of Freeman (1976), Katz and Murphy (1992), Autor et al. (1998), and Card and Lemieux (2000). Using cross-sectional data from the U.S. for 1979-1999, and from Colombia for 1982-2000, we first estimate wage regressions to obtain trends in the wage gap controlling for observable worker characteristics. Next, we regress the gender gap against a set of variables including relative labor supply. We would expect that discrimination is a more serious issue when comparing genders than substitution (by contrast, when comparing workers with different education levels, imperfect substitution may well be more important than discrimination), so that an increase in the relative supply of women should reduce the gender wage gap. We would also expect that this effect be stronger in a country such as Colombia where legislation against gender discrimination and enforcement are both weaker. This is exactly what we find: there is a negative relationship between the relative supply of labor of women and discrimination (i.e. the more women in the labor force, the lower the wage gap controlling for observable characteristics), and this relationship is stronger in Colombia, especially within the manufacturing and transport industries.

Section 2 of the paper proposes a conceptual framework for clarifying the theoretical arguments regarding the relationship between labor supply and the wage gap. Section 3 provides our empirical estimates. A brief conclusion follows.

## 2. Conceptual Framework and Empirical Strategy

Output at time  $t$ ,  $y_t$ , is produced with a combination of male,  $M_t$ , and female,  $F_t$ , labor. Let  $u_{mt}$  and  $u_{ft}$  represent gender efficiency parameters (i.e., the marginal products of labor of men and women, respectively). To allow for imperfect substitution between male and female labor, we assume a Constant Elasticity of Substitution production function such that

$$y_t = [u_{mt}M_t^\rho + u_{ft}F_t^\rho]^{1/\rho}, \quad (1)$$

where  $-\infty < \rho \leq 1$  depends on the elasticity of substitution  $\sigma_s$  between men and women ( $\rho = 1 - 1/\sigma_s$ ). We assume further that discrimination reduces the productivity of those who are discriminated against. For example, female workers may not work as hard as they could if they feel that they do not obtain wages equivalent to those obtained by male workers performing similar tasks. Denoting the extent of discrimination against women by  $d_t$ , with  $0 < d_t < 1$ , and the gender productivity parameters in the absence of discrimination by  $\pi_{jt}$ ,  $j = \{m, f\}$ , the efficiency parameters for women and men in (1) become  $u_{ft} = d_t \pi_{ft}$  and  $u_{mt} = \pi_{mt}$  respectively. At any period  $t$ , the marginal products of labor (that are equal to the wages) for men,  $W_{mt}$ , and women,  $W_{ft}$ , are defined as

$$\begin{aligned} \partial y_t / \partial M_t &= \Gamma_t \times \pi_{mt} \times M_t^{\rho-1} = W_{mt} \\ \partial y_t / \partial F_t &= \Gamma_t \times d_t \times \pi_{ft} \times F_t^{\rho-1} = W_{ft} \end{aligned} \quad (2)$$

$$\text{with } \Gamma_t = [\pi_{mt}M_t^\rho + d_t\pi_{ft}F_t^\rho]^{\frac{1}{\rho}-1}$$

Denoting the labor supply of men relative to women  $S_t = M_t / F_t$ , in logarithms we have

$$\log\left(\frac{W_{mt}}{W_{ft}}\right) = \log\left(\frac{\pi_{mt}}{\pi_{ft}}\right) + (\rho - 1) \log(S_t) + \log\left(\frac{1}{d_t}\right). \quad (3)$$

Carrington and Troske (1995) and Tenjo and Bernat (2002) have pointed out that discrimination is a function of the relative supply of labor. Here, we will specifically assume that  $1/d_t = S_t^\alpha$ , where  $\alpha \geq 0$ . If  $\alpha$  equals zero, there is no discrimination. For a value  $\alpha = 0.3$  and a relative supply  $S_t = 1.4$ , for example,  $d_t$  is equal to 0.9, suggesting that discrimination reduces female workers' productivity and wages by 10 percent. As more women enter the labor market, discrimination and thereby the wage gap are reduced. Using this assumption for  $d_t$ , (3) becomes

$$\log\left(\frac{W_{mt}}{W_{ft}}\right) = \log\left(\frac{\pi_{mt}}{\pi_{ft}}\right) + (\rho - 1 + \alpha) \log(S_t). \quad (4)$$

The sign of the coefficient for  $\log S(t)$  is indeterminate. Under imperfect substitution and no discrimination, the coefficient will be negative. Under perfect substitution and discrimination, it will be positive. While the values of  $\rho$  and  $\alpha$  cannot be identified independently, by estimating  $(\rho - 1 + \alpha)$ , we can assess whether substitution or discrimination is the more important factor for the wage gap.

In order to estimate (4), we follow a two-step procedure. First, for each year of data, we estimate the gender wage gap controlling for observable characteristics  $X_t$  using

$$\log w_t = \phi + (\beta'_t X_t) + (\lambda_t male_t) + (\gamma'_t I_t) + \varepsilon_t, \quad t = 1, \dots, T, \quad (5)$$

where  $w_t$  represents wages at time  $t$ ,  $male_t$  is a dummy variable that takes the value of one if the observation corresponds to a male worker and zero otherwise, and  $I_t$  represents interaction terms between the male dummy and marital status and age (in other words,  $\bar{I}_t$  is the mean value in the samples of  $\bar{X}_t$  for men for these variables.) Our estimate of  $\log(W_{mt} / W_{ft})$  controlling for observables is then  $\hat{\lambda}_t + \hat{\rho}'_t \bar{I}_t$ .

Next, following work by Freeman (1976) and Katz and Murphy (1992) in the case of education, these estimates are themselves regressed against of the relative supply  $S(t)$ , a variable which can be estimated directly from the data as the ratio of male to female labor supply at time  $t$ . Note that following Sánchez-Paramo and Schady (2003) and Katz and Murphy (1992), we construct  $S(t)$  as the ratio of relative employment at time  $t$ . That is, we do not include unemployment in the estimates of the supply of labor. This is not problematic because there has been no specific trend in relative unemployment over time; also, it would not be easy to match unemployment data with the sample of formal sector salaried workers considered here.

One issue in the second stage regressions is to find an empirical proxy for  $\log(\pi_{mt} / \pi_{ft})$  in (4). While these gender relative productivity parameters may change over time, they are not directly observable. In previous work on wage differentials between high school and college graduates, Freeman (1976), Katz and Murphy (1992), and Card and Lemieux (2002) used linear trends as proxies for skill-biased technological change. We do the same here, but with both linear and quadratic time trends to allow for non-linearities in the changes over time in the ratios of male to female productivity.

Equation (4) is estimated using weighted ordinary least squares, where the inverse of the variance of the estimates of  $\log(W_{mt} / W_{ft})$  are the weights. That is, following Card and Lemieux

(2002), more weight is given to the more accurate estimates. Doing so decreases some of the sample error that would otherwise be captured by the error term.

### **3. Data and Empirical Results**

The U.S. data from 1979 to 1999 come from Current Population Survey (CPS) extracts produced by the National Bureau of Economic Research. The extracts include data for about 30,000 individuals per month. The data include information on hours worked, earnings, industry, occupation, education, union status, age, sex, race, ethnicity, and geographic location among others. The Colombian samples from 1982 to 2000 come from the *Encuesta Nacional de Hogares* carried out by the National Department of Statistics and the National Department of Planning. The survey collects information on general attributes such as personal characteristics and labor market variables for the working age population (individuals ages 12 or older).

For compatibility, the samples in both countries are restricted to workers in metropolitan urban areas (the rural labor market in Colombia is small and mostly informal, and not included here). The U.S. sample has observations from all 50 states, and the Colombia sample includes observations from the seven metropolitan areas that were present in all surveys (cities of Barranquilla, Bucaramanga, Bogotá, Manizales, Medellín, Cali, and Pasto). These areas account for 71 percent of the urban Colombian population over 1982-2000. Also, the sample is limited to wage earners between 16 and 60 years of age with a positive wage. We exclude domestic employees, self-employed workers, unpaid family workers, and firm owners from the sample<sup>2</sup>.

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<sup>2</sup> In Colombia, earnings top-coding is not much of an issue. However, in the U.S., top-coding is observed for more than 0.05 percent of the sample in selected years. Following DiNardo et al (1996), we imputed wages for top-coded observations when this affected more than 0.05 percent of the sample. Details on the procedure are available upon request.



Finally, the sample is limited to wage earners who work basically full time (between 40 and 50 hours a week in Colombia and between 35 and 45 hours a week in the U.S.)

The final samples represent respectively 63 percent and 86 percent of urban employment in Colombia and the U.S. In the U.S., we have a total of 568,144 observations, and 219,438 observations for Colombia. Table 1 gives the sample sizes for both countries, disaggregated by year and gender, which also enables us to compute the relative labor supply variables, and to see that relative female employment has increased over time. Table 2 presents selected summary statistics. In both countries, male workers have a higher mean hourly wage than female workers.

Tables 3 and 4 present the estimates for the wage regressions for selected years. The results of the wage regressions are fairly standard in terms of the impact of education, geographic location, and experience (as proxied by age) on wage earnings. In both countries, there is evidence of a substantial wage gap, whereby male workers earn more than female workers of comparable status. The resulting estimates of the gender wage gaps, together with their confidence intervals, are provided in Figures 1 and 2. In the U.S., the wage premium for male workers was approximately 16 percent for the period as a whole - a level similar to that obtained by Blau and Khan (2000), but it has decreased over time while the relative supply of labor by women has increased. In Colombia, the wage premium for male workers has been lower on average, but it has increased over time, especially during the first half of the 1990s, despite an increase in female relative supply of labor. This does not mean, however, that there is not a negative relationship between relative supply and the wage gap, since this does not control for other potential factors affecting the wage gap.

Table 5 presents our estimates of the impact of relative labor supply on the wage gap. We perform estimations with four sets of right-hand side variables: (a) time trend and relative supply; (b) time trend, squared time trend, and relative supply; (c) time trend, relative supply, and GDP growth; and (d) time trend, squared time trend, relative supply, and GDP growth. We will interpret the values assuming perfect substitution between male and female workers, so that the coefficients of the relative supply variable are equal to  $\alpha$ . Indeed, male and female workers with similar education levels are likely to be very good substitutes. Note that if there were some imperfect substitution, then the impact of discrimination would be even larger than under the assumption of substitutability, which makes our assumption a conservative one.

Before discussing the results, we need to highlight potential issues with the estimates. First, since we are dealing with time series, we may have serial correlation. To test for this, we provide Durbin-Watson statistics. In general, we do not find serial correlation in the Colombian error terms, but for the U.S., there are indications of serial correlation, which usually vanish after introducing a quadratic time trend. Second, the model may not be well specified. For example, factors such as unionization or changes in minimum wages may affect the gender gap, especially among labor-intensive sectors of the economy. To test for miss-specification, we report Ramsey's RESET test for omitted variable bias. Again, while there are in some cases indications of miss-specification, this tends to be solved when we include a quadratic time trend. Third, we may face an endogeneity issue. If relative supply depends on relative wages, we may over-estimate  $\alpha$  and thereby the extent of discrimination. This has been dealt with in the literature by assuming that labor supply is inelastic (see Freeman (1976), Katz and Murphy (1992), and Card

and Lemieux (2002), in the case of education), and we follow this procedure here<sup>3</sup>. Finally, we must realize that we have only a small number of degrees of freedom (21 observations for the U.S. and 19 for Colombia). This is a feature of the method used here, and we can't do much about it.

We now turn to the results. In the U.S., the estimates without the squared time trend suggest values for  $\alpha$  between 0.88 and 1.02 (assuming  $\rho = 1$ ). With an average value for  $S(t)$  of 1.19 in the U.S., this suggests that discrimination reduces female wages by about 15 percent. However, when a squared time trend is included in the regressors,  $\alpha$  is not statistically different from zero, in which case there is no evidence of discrimination. Given that the Durbin-Watson statistics are low, we also have autocorrelation, so that generally the results are not robust.

In Colombia by contrast, the results are much more robust. Assuming  $\rho = 1$ ,  $\alpha$  varies between 0.55 and 0.65, and is highly significant throughout. With an average value for  $S(t)$  equal to 1.35, this leads to estimates for the average value of  $d_t$  in the 0.82-0.85 range, so that discrimination reduces female wages by 15-18 percent. The important finding relates to the change in discrimination following the increase in female labor. Assuming a value of 0.60 for  $\alpha$ , the reduction in the relative labor supply of men versus women from 1.49 in 1982 to 1.20 in 2000 implies a reduction in the level of discrimination from about 22 percent in 1982 to 12 percent in 2000 (corresponding to a change in the value of  $d_t$  from 0.78 to 0.88). This represents a fairly large improvement in female wages.

We now turn to results by industry. One could argue, for example, that discrimination between male and female workers is more likely to exist among industries in which male-female

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<sup>3</sup> Previous research has found that male labor supply is quite inelastic indeed, but female labor supply is only somewhat inelastic.

segmentation is higher, such as in construction and manufacture (see Hellerstein et al., 1999, for evidence of male-female segregation in the U.S. manufacturing industry). To obtain industry-specific results, we estimated wage regressions within each industry. The results of these regressions are available upon request, and the trends in the resulting gender gaps are displayed in Figures 3 and 4. In the U.S. for example, the gender gaps are largest in the agricultural-mining, construction-manufacturing, and transportation industries. They are lower in public administration and in retail industries, and even lower in the service industry. The trends by industry are similar to the national trend, and the same is broadly true in Colombia.

Next, we regressed the industry-specific gender gaps against the same variables as before, but with the relative supply defined within each industry. To save space, we report only the coefficients for the impact of the relative supply on the gender gap in Table 6. In the U.S., there is some evidence of a relationship between relative supply and discrimination, but this evidence remains very weak: statistically significant coefficients are observed for construction and manufacturing, and for public administration, but they vanish once a squared time trend is included in the regressors. In Colombia, once again, the evidence is much stronger, with fairly robust and highly significant positive estimates of  $\alpha$  (assuming  $\rho = 1$ ) in agriculture and mining, manufacturing and transport, and services. Taking into account the values for the relative supply, our estimates suggest that the gender wage differential is highest in agriculture and mining, followed by manufacturing and transport, and finally in the services industry.

#### **4. Conclusion**

It is unclear on a theoretical basis whether the relative increase in the supply of labor by women, as compared to men, should contribute to a reduction in the gender wage gap over time. Under imperfect substitution between men and women and no discrimination, a higher supply of labor by women should reduce female wages as compared to male wages. However, if there is discrimination in the labor market and perfect substitution between genders, a higher supply of labor by women should instead increase their bargaining power and thus reduce the wage gap.

Building on the literature and using data from the U.S. and Colombia, we have provided and tested empirically in this paper a simple model allowing for both imperfect substitution and discrimination. Our results suggest that discrimination is a more important factor to explain the gender wage gap than imperfect substitution. More specifically, we find that the increase in the relative labor supply of women as compared to men has helped to reduce the gender wage gap over time in both Colombia and the U.S., although the evidence is much weaker in the U.S.

The difference in the strength of our results between Colombia and the U.S. was to be expected given that the legislation against gender discrimination and its enforcement are weaker in Colombia, so that market force may have a larger impact on wage differentials. The results for Colombia are important beyond the ethical issue of discrimination in pay. As in many developing and middle-income countries, poverty in Colombia is widespread. While it has long been recognized that the increase in the labor force participation of women represents a positive development for the reduction of poverty (since female employment increases household income and reduces income variability through diversification), our findings suggest that the benefit may be even larger than previously recognized thanks to the positive impact of relative supply on the

wages earned by women. Because the impact of relative supply on discrimination is strongest in industries where wages are lower (i.e., where many of the poor work), the gains for poverty from lower discrimination could be large for the families who directly benefit from these gains.

## References

- Altonji, J.; and Blank, R. 1999. "Race and Gender in the Labor Market". *Handbook of labor economics*, Vol. 3C. Edited by Orley Ashenfelter and David Card. New York and Oxford.
- Autor, D., Katz, L., Krueger, A. 1998. Computing Inequality: Have Computers Changed the Labor Market? *Quarterly Journal of Economics*, vol. 113, no.4: 1169-1213
- Becker, G. 1971. "The Economics of Discrimination". Chicago University Press. Chicago, IL.
- Blau, F., and Khan, L. 2002. "Gender Differences in Pay". *Journal of Economic Perspectives*, Vol. 14, no.4: 75-79
- Blau, F. 1993. "Gender and Economic Outcomes: The Role of Wage Structure". *Labour*, Vol. 7, no. 1: 73-92
- Blau, F., and Kahn, L. 2000. "Gender Differences in Pay". Unpublished paper # 7732. National Bureau of Economic Research. Cambridge, MA.
- Card, D., and Lemieux, T. 2002. "Can Fall in Supply Explain the Rising Return to College for Younger Men? A Cohort-Based Analysis". *Quarterly Journal of Economics*, Vol. 116, no.2: 705-746
- Carnoy, M., and Gong, W. 1996. "Women and Minority Gains in a Rapidly Changing Local Labor Market: The San Francisco Bay Area in the 1980s". *Economics of Education Review*, Vol. 15, no.3: 273-287
- Carrington, W., and Troske, K. 1995. "Gender Segregation in Small Firms". *Journal of Human Resources*, Vol. 30, no.3: 503-533
- Carrington, W., and Troske, K. 1998. "Sex Segregation in the U.S. Manufacturing". *Industrial and labor Relations Review*, Vol. 51, no.3.

- DiNardo, J., Fortin, N., and Lemieux, T. 1996. "Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semi Parametric Approach". *Econometrica*, vol. 64, no.5:1001-1144
- Freeman, R. 1976. "The Overeducated American. San Diego". Academic Press. San Diego, CA.
- Groshen, E. 1991. "The Structure of the Male/Female Wage Differential". *Journal of Human Resources*, Vol. 26, no.3: 457-472
- Hellerstein, J.; Neumark, D; and Troske, K. 1999. "Wages, Productivity, and Worker Characteristics: Evidence from Plant-Level Production Functions and Wage Equations". *Journal of Labor Economics*, Vol. 17, no.3: 409-446
- Johnson, G., and Stafford, F. 1998. "Alternative Approaches to Occupational Exclusion. Women's Work and Wages". *Research in Gender and Society*, vol. 2: 72-88.
- Juhn, C., Murphy, K., and Pierce, B. 1991. "Accounting for the Slowdown in Black-White Wage Convergence: Workers and Their Wages Changing patterns in the United States". *AEI Studies*, no. 520: 107-143. Washington, D.C.
- Juhn, C., Murphy, K., and Pierce, B. 1993. "Wage Inequality and the Rise in Returns to Skill". *Journal of Political Economy*, Vol. 101, no. 3: 410-442
- Katz, L., and Autor, D. 1999. "Changes in the Wage Structure and Earnings Inequality". *Handbook of Labor Economics*. vol. 3A. Edited by Orley Ashenfelter and David Card. New York and Oxford.
- Katz, L., and Murphy, K. 1992. "Changes in Relative Wages, 1963-1987: Supply and Demand Factors". *Quarterly Journal of Economics*, Vol. 107, no.1: 35-78
- Lombard, K. 1999. "Women's Rising Market Opportunities and Increased Labor Force Participation". *Economic Inquiry*, Vol. 37, no.2: 195-212
- Macpherson, D., and Barry, H. 1995. "Wages and Gender Composition: Why Do Women's Jobs Pay Less?". *Journal of Labor Economics*, Vol. 13, no.3: 426-471
- Sanchez-Paramo, C., and Schady, N. 2002. "Off and Running: Technology, Trade, and the Rising Demand for Skilled Workers in Latin America". Unpublished paper. The World Bank Group.
- Tenjo, J., and Bernat, L. 2002. "Evolución de las Diferencias Salariales Entre Hombres y Mujeres: Comparación de Seis Países Latinoamericanos". Unpublished paper. Universidad Javeriana. Santafé de Bogotá.

Velez, C., Leibovich, J., Kugler, A., Bouillón, C., and Núñez J. 2002. “The Reversal of Inequality Trends in Colombia, 1978-1995: A Combination of Persistent and Fluctuating Forces. Colombia Poverty Report, chapter III:113-145”. The World Bank Group. Washington, D.C.

Zandvakili, S. 2000. “Dynamics of Earnings Inequality among Female-Headed Households in the United States”. *Journal of Socio-Economics*, Vol. 29, no.1: 73-89



**Table 1. Number of Observations in the Samples and Relative Labor Supply**

Year	<i>United States</i>					<i>Colombia</i>				
	Number of obs.	Percent share of total sample	Percent men	Percent women	Percent men to women	Number of obs.	Percent share of total sample	Percent men	Percent women	Percent men to women
1979	31711	5.58	57.65	42.35	1.36					
1980	36291	6.39	57.24	42.76	1.34					
1981	34207	6.02	56.90	43.10	1.32					
1982	31660	5.57	56.59	43.41	1.30	13244	6.04	59.91	40.09	1.49
1983	31426	5.53	56.45	43.55	1.30	13344	6.08	59.49	40.51	1.47
1984	31685	5.58	56.30	43.70	1.29	11973	5.46	57.66	42.34	1.36
1985	29297	5.16	55.63	44.37	1.25	9210	4.2	57.75	42.25	1.37
1986	26683	4.70	55.27	44.73	1.24	9848	4.49	57.83	42.17	1.37
1987	26563	4.68	54.38	45.62	1.19	10612	4.84	56.37	43.63	1.29
1988	27050	4.76	54.05	45.95	1.18	14247	6.49	62.71	37.29	1.68
1989	27809	4.89	53.54	46.46	1.15	11431	5.21	55.47	44.53	1.25
1990	27991	4.93	53.06	46.94	1.13	9576	4.36	55.99	44.01	1.27
1991	26947	4.74	52.88	47.12	1.12	10687	4.87	53.46	46.54	1.15
1992	27102	4.77	52.81	47.19	1.12	12094	5.51	59.36	40.64	1.46
1993	27085	4.77	52.41	47.59	1.10	13154	5.99	58.51	41.49	1.41
1994	24898	4.38	51.81	48.19	1.08	13251	6.03	59.4	40.6	1.46
1995	17540	3.09	51.39	48.61	1.06	13140	5.99	58.78	41.22	1.43
1996	20147	3.55	51.72	48.28	1.07	13306	6.06	57.37	42.63	1.35
1997	20491	3.61	51.37	48.63	1.06	10922	4.98	56.45	43.55	1.30
1998	20611	3.63	51.87	48.13	1.08	10805	4.92	56.25	43.75	1.29
1999	20950	3.69	51.60	48.40	1.07	9484	4.32	55.7	44.3	1.26
2000						9110	4.15	54.59	45.41	1.20
Total	568144	100.00	54.39	45.61	1.19	219438	100	57.53	42.47	1.35

Source: Authors' estimates.

**Table 2. Selected Descriptive Statistics: Sample Means Over Period Under Review**

<b>United States</b>		Men	Women	<b>Colombia</b>		Men	Women
Number of Observations		308,989	259,155	# of Observations		126,736	92,702
1.	<i>Mean hourly wage</i>	14.38	10.42	1.	<i>Mean hourly wage</i>	2642.54	2519.96
2.	<i>Mean log hourly wage</i>	2.54	2.24	2.	<i>Mean log hourly wage</i>	7.58	7.59
3.	<i>Mean hours of work</i>	40.33	39.64	3.	<i>Mean hours of work</i>	46.69	45.91
4.	<i>Mean age</i>	37.60	37.63	4.	<i>Mean age</i>	32.17	31.12
5.	<i>Percent married</i>	0.72	0.66	5.	<i>Percent married</i>	0.47	0.64
6.	<i>Percent veteran</i>	0.31	0.01	6.	<i>Years of education</i>		
7.	<i>Percent in private sector</i>	0.80	0.74		Elementary (0-5 years)	0.28	0.19
8.	<i>Percent who are union members</i>	0.21	0.13		Incomplete secondary (6-10)	0.28	0.24
9.	<i>Mean number of dependents</i>	1.20	1.04		Complete secondary (11)	0.23	0.32
10.	<i>Years of education</i>				Some university or technical degrees (12-15)	0.08	0.11
	Elementary/middle (0-8 years)	0.07	0.03		University (16 and more)	0.12	0.13
	Incomplete high school (8-12)	0.12	0.09	7.	<i>City</i>		
	Complete high school (12)	0.44	0.46		Barranquilla	0.13	0.11
	Some University (12-15)	0.21	0.25		Bucaramanga	0.09	0.11
	University (16 and more)	0.16	0.17		Bogotá	0.26	0.30
11.	<i>Sector of employment</i>				Manizales	0.06	0.06
	Agriculture and mining	0.06	0.02		Medellín	0.24	0.23
	Manufacture and construction	0.44	0.24		Cali	0.14	0.14
	Transport, communications, utilities, and sanitary services	0.10	0.04		Pasto	0.06	0.06
	Wholesale and retail trade	0.14	0.17	8.	<i>Sector of employment</i>		
	Services	0.18	0.48		Agriculture and mining	0.02	0.01
	Public administration	0.07	0.06		Manufacturing	0.31	0.29
12.	<i>Geographical region</i>				Construction and electricity	0.11	0.02
	New England	0.08	0.08		Commerce	0.18	0.25
	Middle Atlantic	0.07	0.06		Services	0.38	0.43
	East North Central	0.14	0.13				
	West North Central	0.14	0.15				
	South Atlantic	0.19	0.20				
	East South Central	0.11	0.11				
	West South Central	0.09	0.10				
	Mountain	0.11	0.11				
	Pacific	0.07	0.07				
13.	<i>Ethnic group</i>						
	White	0.91	0.89				
	Non-white	0.09	0.11				

Source: Authors' estimates.

**Table 3. Wage regressions for selected years – U.S.**

Dependent variable:					
Log hourly wages (real terms)	1979	1985	1990	1995	1999
Gender - Male	0.136 [10.12]***	0.015 [1.00]	0.005 [0.29]	0.006 [0.24]	0.111 [5.26]***
Age	0.039 [33.35]***	0.044 [32.77]***	0.041 [30.09]***	0.040 [19.27]***	0.041 [23.25]***
Age squared	0.000 [29.12]***	0.000 [27.86]***	0.000 [25.95]***	0.000 [16.28]***	0.000 [19.47]***
Married	0.002 [0.35]	0.001 [0.10]	0.032 [4.46]***	0.017 [1.70]*	0.034 [3.82]***
African American	-0.139 [17.56]***	-0.188 [21.23]***	-0.167 [17.89]***	-0.148 [10.26]***	-0.156 [12.07]***
Other non-white American	-0.089 [5.02]***	-0.094 [5.97]***	-0.069 [5.08]***	-0.018 [1.12]	-0.042 [2.81]***
Agriculture and Mining	0.006 [0.54]	-0.035 [3.00]***	-0.083 [6.69]***	-0.017 [0.91]	-0.008 [0.52]
Transport, communications, utilities	0.102 [12.23]***	0.125 [13.60]***	0.116 [12.06]***	0.133 [9.10]***	0.097 [7.78]***
Wholesale and retail	-0.188 [28.52]***	-0.225 [31.98]***	-0.209 [28.66]***	-0.195 [18.83]***	-0.183 [20.05]***
Services	-0.143 [21.46]***	-0.106 [16.38]***	-0.085 [12.85]***	-0.090 [9.55]***	-0.079 [9.49]***
Public administration	-0.016 [1.52]	0.004 [0.36]	0.000 [0.01]	0.027 [1.61]	0.022 [1.47]
Usual hours of work	0.146 [6.67]***	0.187 [8.25]***	0.158 [7.02]***	0.170 [5.04]***	0.077 [2.62]***
Usual hours of work squared	-0.002 [6.69]***	-0.002 [7.85]***	-0.002 [6.30]***	-0.002 [4.65]***	-0.001 [2.16]**
Does not work for the Government	-0.023 [3.35]***	-0.026 [3.66]***	-0.054 [7.38]***	-0.014 [1.38]	0.007 [0.77]
New England	-0.072 [6.38]***	-0.056 [5.07]***	0.036 [2.98]***	-0.016 [0.91]	-0.044 [2.65]***
Middle Atlantic	-0.015 [1.76]*	-0.036 [3.69]***	-0.043 [3.84]***	-0.039 [2.39]**	-0.046 [2.89]***
West North Central	-0.048 [5.26]***	-0.102 [10.19]***	-0.137 [12.43]***	-0.150 [9.33]***	-0.125 [8.35]***
South Atlantic	-0.101 [12.35]***	-0.095 [10.22]***	-0.073 [6.75]***	-0.067 [4.16]***	-0.076 [4.90]***
East South Atlantic	-0.110 [12.22]***	-0.141 [13.58]***	-0.137 [11.56]***	-0.157 [8.89]***	-0.113 [6.93]***
West South Central	-0.104 [11.10]***	-0.100 [9.41]***	-0.142 [11.40]***	-0.166 [9.39]***	-0.165 [10.21]***
Mountain	0.012 [1.19]	-0.020 [1.82]*	-0.098 [8.29]***	-0.106 [6.39]***	-0.082 [5.51]***
Pacific	0.330 [30.87]***	0.262 [22.14]***	0.147 [11.33]***	0.102 [5.26]***	0.063 [3.56]***
Incomplete secondary education	0.139 [15.69]***	0.118 [10.11]***	0.150 [11.05]***	0.147 [6.44]***	0.157 [7.43]***

Complete secondary education	0.277 [34.94]***	0.293 [28.32]***	0.308 [25.36]***	0.315 [15.36]***	0.311 [16.25]***
Some university and technical degrees	0.363 [40.17]***	0.396 [35.52]***	0.426 [33.34]***	0.433 [20.63]***	0.412 [21.18]***
Complete university and more	0.596 [62.40]***	0.642 [55.40]***	0.683 [51.41]***	0.719 [32.89]***	0.719 [35.63]***
Interaction Married-Male	0.140 [14.26]***	0.159 [15.34]***	0.101 [9.88]***	0.105 [7.16]***	0.072 [5.74]***
Interaction Age-Male	0.003 [8.98]***	0.004 [10.89]***	0.005 [11.22]***	0.004 [5.90]***	0.002 [3.26]***
Constant	-1.620 [3.66]***	-2.784 [6.10]***	-2.354 [5.17]***	-2.547 [3.74]***	-0.687 [1.16]
R-squared	0.450	0.440	0.410	0.320	0.330
Observations	29791	28857	27589	17498	20895

Source: Authors' estimates. Absolute value of  $t$  statistics in brackets. Omitted categories are: gender – female; industry - services; region - East North Central; education - elementary; race - white American. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 4. Wage regressions for selected years – Colombia**

Dependent variable:					
Log hourly wages (real terms)	1982	1985	1990	1995	2000
Gender - Male	-0.028 [0.62]	-0.019 [0.36]	0.050 [1.00]	0.153 [4.41]***	0.085 [1.74]*
Age	0.013 [3.78]***	0.013 [2.98]***	0.014 [3.60]***	0.036 [13.71]***	0.052 [13.33]***
Age squared	0.000 [1.89]*	0.000 [1.09]	0.000 [1.13]	0.000 [9.21]***	0.000 [8.19]***
Single	-0.132 [7.06]***	-0.143 [6.77]***	-0.114 [6.24]***	-0.056 [4.22]***	-0.045 [2.57]**
Agriculture, manufacturing, construction	-0.058 [4.45]***	-0.061 [3.97]***	-0.030 [2.17]**	-0.047 [4.84]***	-0.068 [4.86]***
Wholesale and retail	-0.017 [1.13]	-0.056 [3.22]***	-0.039 [2.40]**	-0.093 [8.42]***	-0.079 [5.00]***
Hours of work	-0.001 [0.06]	-0.017 [0.83]	-0.016 [0.93]	-0.049 [3.70]***	0.011 [0.64]
Hours of work squared	0.000 [1.37]	0.000 [0.26]	0.000 [0.34]	0.000 [2.11]**	0.000 [1.77]*
Barranquilla	0.558 [17.62]***	0.403 [12.84]***	0.338 [11.58]***	0.215 [10.20]***	0.100 [4.15]***
Bucaramanga	0.413 [11.96]***	0.398 [12.29]***	0.352 [11.90]***	0.315 [14.74]***	0.131 [5.44]***
Bogotá	0.531 [18.86]***	0.534 [19.49]***	0.533 [20.29]***	0.400 [20.61]***	0.234 [10.25]***
Manizales	0.485 [11.30]***	0.451 [11.49]***	0.462 [13.58]***	0.174 [6.85]***	0.150 [6.18]***
Medellín	0.564 [19.16]***	0.532 [18.88]***	0.530 [19.56]***	0.326 [16.42]***	0.203 [9.19]***
Cali	0.477 [15.92]***	0.392 [12.86]***	0.486 [17.27]***	0.375 [17.97]***	0.157 [6.67]***
Incomplete secondary education	0.237 [17.16]***	0.251 [14.89]***	0.176 [10.72]***	0.174 [14.31]***	0.247 [12.72]***
Complete secondary education	0.426 [26.17]***	0.439 [22.88]***	0.386 [22.65]***	0.388 [32.47]***	0.491 [27.10]***
Some university/technical degree	0.629 [26.88]***	0.675 [25.57]***	0.621 [27.81]***	0.695 [42.80]***	0.841 [36.45]***
Complete university and more	0.753 [36.48]***	0.700 [29.39]***	0.787 [37.08]***	1.205 [79.03]***	1.311 [62.26]***
Interaction Single-Male	0.000 [0.02]	0.011 [0.39]	0.022 [0.90]	-0.097 [5.35]***	-0.079 [3.14]***
Interaction Age-Male	-0.001 [0.65]	0.000 [0.24]	-0.003 [2.34]**	0.002 [2.04]**	0.001 [1.14]
Constant	7.193 [17.08]***	7.638 [16.76]***	7.360 [18.10]***	7.766 [25.81]***	5.955 [15.42]***
R-squared	0.230	0.240	0.280	0.490	0.490
Observations	13244	9210	9576	13140	9110

Source: Authors' estimates. Absolute value of *t* statistics in brackets. Omitted categories are: gender – female; industry - services; city - Pasto; education - elementary. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 5. Determinants of gender wage gap** [All coefficients multiplied by 100.]

	United States				Colombia			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Time trend	0.68 [1.96]*	-2.01 [5.00]***	0.90 [2.54]**	-1.88 [4.06]***	1.60 [8.55]***	2.86 [5.79]***	1.68 [11.49]***	1.90 [1.85]*
Time trend squared		0.07 [7.40]***		0.07 [6.59]***		-0.06 [2.45]**		-0.01 [0.21]
Relative supply	88.09 [3.61]***	3.61 [0.22]	101.90 [4.13]***	9.27 [0.48]	64.50 [5.76]***	62.51 [7.25]***	55.36 [6.13]***	56.23 [6.55]***
GDP growth			-0.40 [1.67]	-0.09 [0.63]			0.68 [3.39]***	0.58 [1.42]
Constant	-5.44 [0.70]	26.96 [4.62]***	-8.96 [1.17]	25.17 [3.81]***	-28.69 [5.77]***	-32.36 [8.29]***	-28.36 [7.01]***	-29.05 [6.69]***
Time periods	21	21	21	21	19	19	18	18
Adjusted <i>R</i> -squared	0.79	0.95	0.82	0.95	0.78	0.84	0.86	0.86
Prob > <i>F</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>d.w.</i> statistic	0.83	1.60	1.04	1.60	1.35	1.68	2.05	2.00
Ramsey (Prob > <i>F</i> )	0.00	0.09	0.00	0.09	0.21	0.10	0.89	0.05
Implied $\bar{d}_t$	0.86	-	0.84	-	0.82	0.82	0.84	0.84

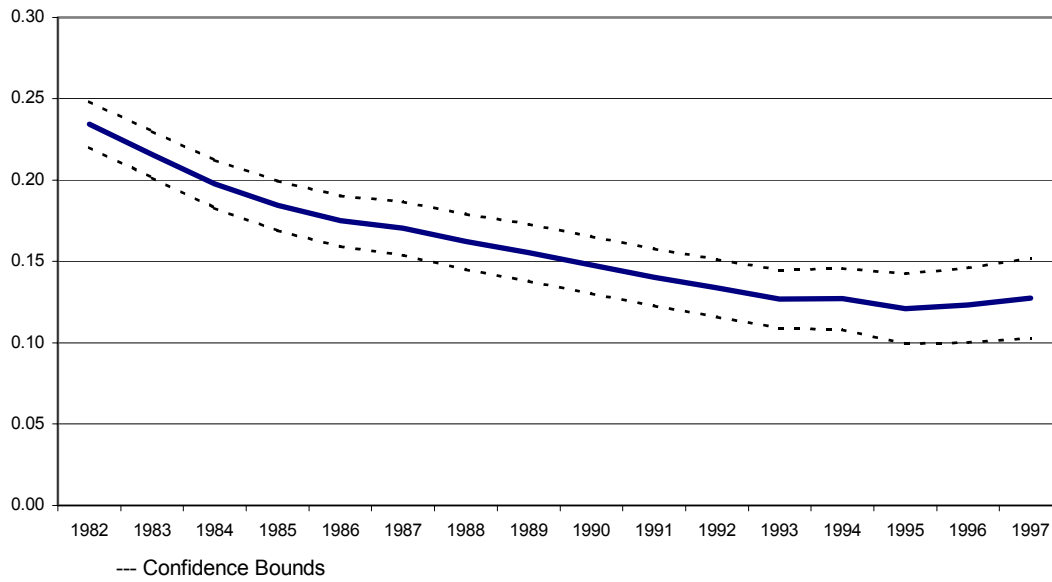
**Source:** Authors' estimates. 21 observations for the U.S., 189 for Colombia. The implied mean value  $\bar{d}_t = (1/\bar{S}(t))^\alpha$  is the discrimination coefficient obtained for the average relative labor supply and the estimate of  $\alpha$  in the regression assuming perfect substitution. These mean values are presented only when the coefficient of the relative supply variable in the regression is positive and significant. Absolute value of *t* statistics in brackets using robust standard errors. *d.w.* statistic is Durbin Watson Statistic. \* significant at 10%. \*\* significant at 5%. \*\*\* significant at 1%.

**Table 6. Determinants of gender wage gap by industry** [All coefficients multiplied by 100.]

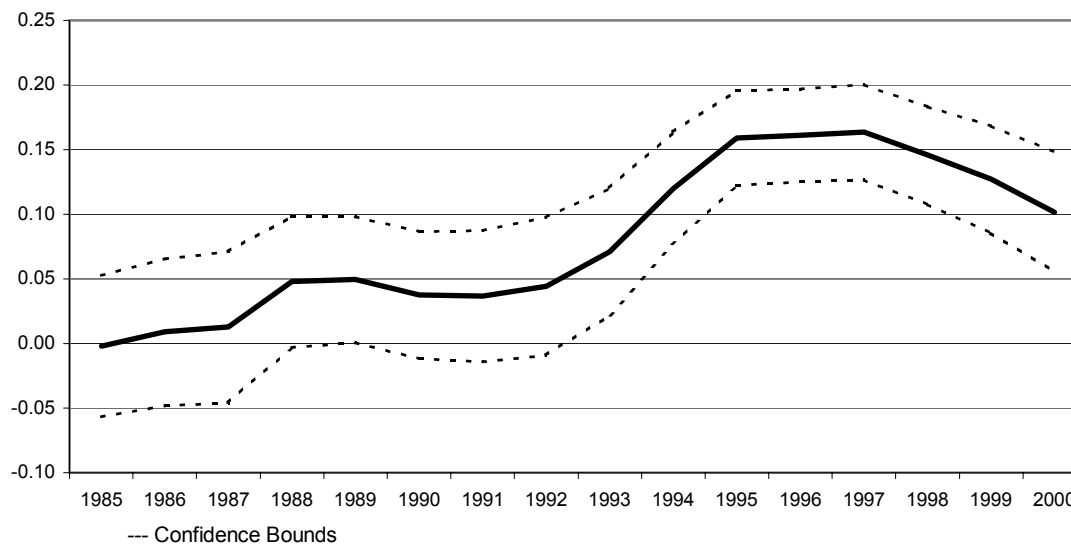
	United States				Colombia			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<b>Agriculture and mining</b>								
Relative Supply	7.04	-3.28	7.06	-3.25	31.57	48.08	42.11	47.81
	[0.38]	[0.19]	[0.37]	[0.18]	[2.51]**	[2.67]**	[3.08]**	[2.58]**
<i>d.w.</i> Stat.	1.72	2.41	1.72	2.40	1.83	2.28	2.42	2.41
Ramsey (Prob > <i>F</i> )	0.09	0.80	0.13	0.78	0.90	0.71	0.38	0.41
Implied $\bar{d}_t$	-	-	-	-	0.70	0.58	0.62	0.58
<b>Construction &amp; Manufacture (U.S.), Manufacture &amp; Transport (Col)</b>								
Relative Supply	34.06	-1.73	36.45	1.05	46.43	56.57	44.21	46.10
	[5.78]**	[0.17]	[5.70]**	[0.10]	[4.61]**	[6.94]**	[5.16]**	[5.93]**
<i>d.w.</i> Stat.	1.47	2.02	1.79	2.05	0.91	1.42	1.77	1.74
Ramsey (Prob > <i>F</i> )	0.02	0.34	0.02	0.32	0.10	0.02	0.06	0.05
Implied $\bar{d}_t$	0.76	-	0.74	-	0.83	0.80	0.84	0.83
<b>Transport, communications, utilities, sanitary services (U.S.), Construction &amp; Electricity (Col)</b>								
Relative supply	-20.54	7.10	-21.47	7.79	27.80	26.52	28.08	22.13
	[1.76]	[0.51]	[0.40]	[0.55]	[1.71]	[1.37]	[1.50]	[1.13]
<i>d.w.</i> Stat.	1.66	1.84	1.71	1.84	2.06	2.13	2.41	2.50
Ramsey (Prob > <i>F</i> )	0.01	0.10	0.02	0.13	0.12	0.26	0.69	0.79
Implied $\bar{d}_t$	-	-	-	-	-	-	-	-
<b>Wholesale and Retail</b>								
Relative Supply	20.88	-0.83	22.85	-6.01	33.63	45.17	44.18	37.14
	[1.06]	[0.05]	[1.00]	[0.26]	[1.50]	[1.65]	[1.85]*	[2.02]*
<i>d.w.</i> Stat.	1.06	1.27	1.06	1.33	1.71	1.97	2.53	2.75
Ramsey (Prob > <i>F</i> )	0.00	0.01	0.00	0.02	0.01	0.02	0.10	0.11
Implied $\bar{d}_t$	-	-	-	-	-	-	1.02	1.01
<b>Services</b>								
Relative Supply	9.51	-17.01	11.14	-16.40	49.40	46.88	44.53	44.49
	[0.54]	[1.17]	[0.58]	[1.09]	[6.31]**	[4.65]**	[4.63]**	[4.47]**
Prob > <i>F</i>	0.16	0.00	0.29	0.00	0.00	0.00	0.00	0.00
<i>d.w.</i> Stat.	0.89	1.97	0.92	1.97	2.46	2.45	2.57	2.54
Implied $\bar{d}_t$	-	-	-	-	0.92	0.92	0.92	0.92
<b>Public Administration (U.S. only)</b>								
Relative Supply	35.85	19.63	36.14	16.11				
	[4.73]**	[1.93]*	[4.30]**	[1.74]				
<i>d.w.</i> Stat.	1.56	2.04	1.57	2.02				
Ramsey (Prob > <i>F</i> )	0.31	0.53	0.46	0.26				
Implied $\bar{d}_t$	0.89	0.94	0.89	-				

Source: Authors' estimates. Specifications identical to table 4, but we show here only coefficients for the relative supply variable. 21 observations for the U.S., 189 for Colombia. The implied mean value  $\bar{d}_t = (1/\bar{S}(t))^\alpha$  is the discrimination coefficient obtained for the average relative labor supply and the estimate of  $\alpha$  in the regression assuming perfect substitution. These mean values are presented only when the coefficient of the relative supply variable in the regression is positive and significant. Absolute value of *t* statistics in brackets using robust standard errors. *d.w.* statistic is Durbin Watson Statistic. \* significant at 10%. \*\* significant at 5%. \*\*\* significant at 1%.

**Figure 1. Estimates of the Gender Wage Differential, United States, 1982-1999**

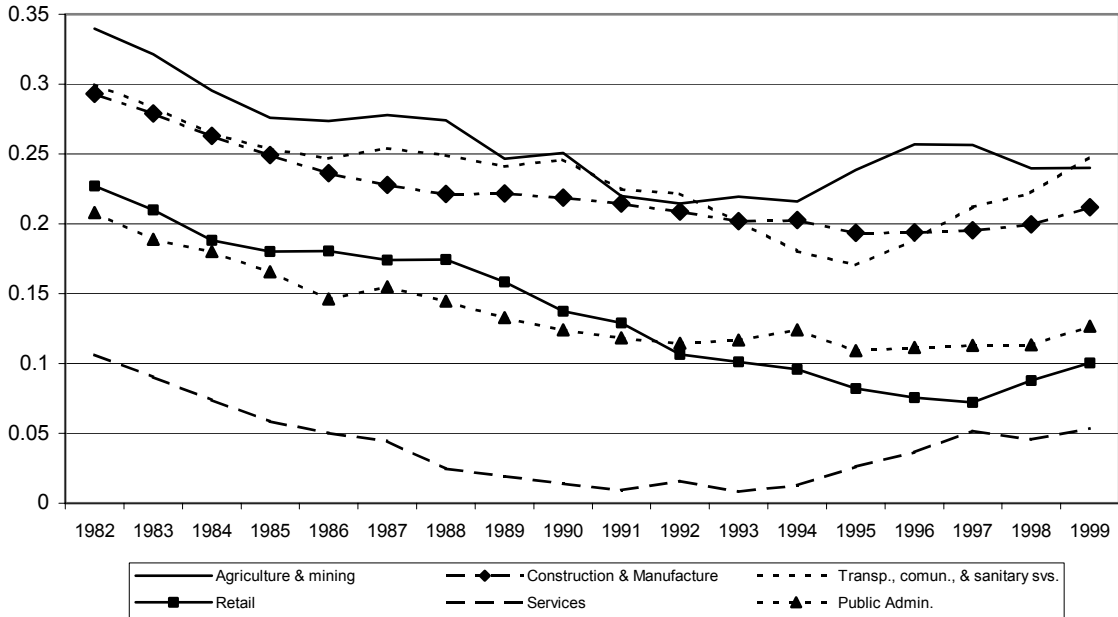


**Figure 2. Estimates of the Gender Wage Differential, Colombia, 1985-2000**

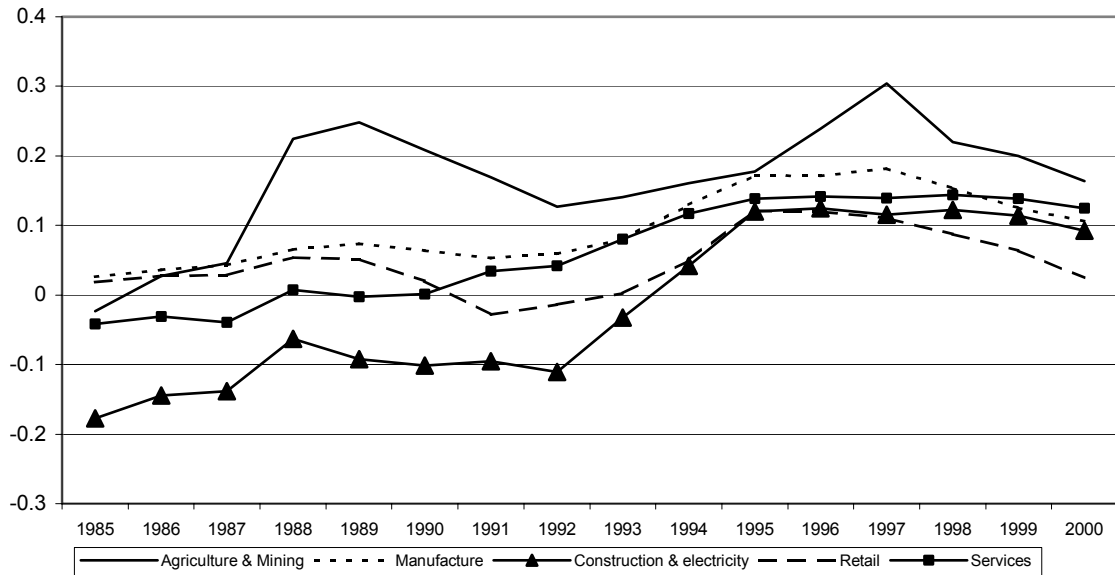




**Figure 3. Estimates of Gender Wage Differential by Industry, U.S., 1982-1999**



**Figure 4. Estimates of Gender Wage Differential by Industry, Colombia, 1985-2000**



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