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WORKING WOMEN IN LATIN AMERICA: PARTICIPATION, PAY AND PUBLIC POLICY

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By Carolyn Winter



The World Bank
Latin America and the Caribbean Region
Technical Department

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PREFACE

This report has been prepared by Carolyn Winter of the Education and Social Policy Department of the World Bank. Jessica Youniss contributed substantially to the preparation and editing of the report. Evelyn de Castro and Benjamin Crow also contributed to the production of the report. The findings, interpretations, and conclusions expressed in this publication are those of the author and should not be attributed in any manner to the World Bank, to its affiliated organizations, or the members of its Board of Executive Directors or the countries they represent.

This report summarizes the findings of a more extensive, analytical study, "Gender Discrimination in the Labor Market and the Role of the Law: Experiences in Six Latin American Countries", prepared by Carolyn Winter for the Latin American and Caribbean Region Technical Department. Background studies for this study were prepared by Ricardo Paes de Barros, Alejandra Cox Edwards, T.H. Gindling, Francisco J. Tapia Guerrero, Gustavo Márquez, Ivon Peres, María Isabel Plata, Alba Alonzo de Quesada, Lauro Ramos, Judith Roberts, Eleonora Santos, A. di Silvestro, Jaime Tenjo, Victor Pérez Vargas and Carolyn Winter.

Executive Summary

In most Latin American countries the economic problems of the 1980s have been supplanted by a period of vigorous and robust economic growth. The region is now well-placed to increase its competitiveness in the world market. To ensure that growth is sustained, countries must continue on the path of economic restructuring. But, it is also critically important that they continue to develop their human resources and ensure that these resources are deployed and utilized as effectively as possible. Unnecessary restrictions or barriers to workers' opportunities will depress individual incentives to pursue education and training, limit employment opportunities, lower the economic returns to public investments in human resource development, and ultimately, reduce economic output.

Women's labor force participation rates and pay rates are surprisingly low in Latin American countries. This is interesting given that women, on average, now have as much, and sometimes more, formal education than men. In the region at large, only around 33 percent of women work for pay. The reason for this is not clear, but increasingly attention has focused on gender labor market discrimination. It is important to ascertain whether such discrimination is indeed widespread; the underutilization and inefficient use of female labor would represent a tremendous waste of human resources.

This paper summarizes the findings of a larger analytical study "Gender Discrimination in the Labor Market and the Role of the Law: Experiences in Six Latin American Countries". This study is a first attempt to ascertain whether gender discrimination is indeed widespread in the labor markets of six countries: Chile, Honduras, Colombia, Venezuela, Costa Rica and Brazil. Using household survey data covering the 1980s, the study examines changes in women's participation rates and relative pay over the period. It uses econometric analysis to examine whether the observed differences in participation rates and pay may be attributed to discrimination. The study also reviews labor laws which govern or regulate women's working conditions and pay to see whether they reduce opportunities for gender labor market discrimination.

The study shows that, although women's participation rates continue to be low in the six countries, they have risen dramatically over the past decade. Indeed, one of the most important structural changes in the labor markets of these countries over the past decade has been the change in the sex mix of the work force. Women now comprise a greater proportion of the workforce. This increase in participation is evident among women of all ages but, interestingly, it is most evident among women of peak childbearing age. The participation data, if plotted as age/participation profiles, also suggests, contrary to what has long been assumed, that there is not a widespread tendency among women to withdraw permanently, or for extended periods of time, from the labor market once they have children. Examining data on women's participation rates over the decade also yields another interesting finding: although

women continue to be concentrated in the non-formal employment sector, the proportion of women in this sector has declined sharply over the decade. This decline has been matched by a sizable increase in the proportion of women employed in the highest-paying employment sectors.

The study also shows that the gender wage gap has diminished sharply over the past decade. This is undoubtedly explained largely by women's increased educational attainment; as their formal education level has risen relative to men's they have been better positioned to compete for job positions and higher earnings. The data also indicate that the economic recessions of the 1980s did not impose particular hardships on women who regularly participated in the labor market. Regular female employees do not appear to have been significantly more likely than men to have suffered wage cuts or retrenchment during the recessions.

The study can yield only tentative findings about the extent and nature of gender "discrimination" in the labor market. Yet, the validity of these findings is strengthened by the fact that the econometric analyses yield remarkably consistent findings across each of the countries. The findings strongly suggest that "discrimination" is indeed widespread. This discrimination appears to be practiced mainly as wage discrimination whereby women receive lower returns to their human capital than men.

A review of labor laws governing women's employment and pay in the six countries shows that these laws affect women's working opportunities in various ways. Certain laws, and particularly the older protective laws, are actually discriminatory towards women. In many cases they impose unnecessary restrictions on women's employment opportunities. Few would dispute the need for laws to protect and extend special benefits to women during pregnancy and childbearing. Yet, a review of these laws shows that they often work to encourage employers to discriminate against female workers. This happens when the laws require employers to finance much, or all, of the maternity benefits. This raises the cost of female labor relative to male labor for employers, so encouraging employers to hire the cheaper male labor whenever possible. Laws which require employers to provide and fully subsidize childcare facilities when they employ more than a certain number of female workers have similar effects. The evidence gathered for the study also suggests that equal pay and equal opportunity laws have not been particularly effective in reducing gender discrimination in the labor market. This is largely because the agencies responsible for enforcing these laws are poorly funded and ill-equipped to enforce these provisions.

Based on the empirical analyses and the review of the labor laws, the study recommends several courses of action which may be pursued to reduce gender discrimination in the labor market. It recommends that countries wanting to reduce such discrimination:

- **Assess how laws affect women's economic opportunities:** Countries should review labor laws to determine whether they work to reduce women's employment opportunities and if they increase the cost of female labor relative to males for employers. This information should help governments determine which laws adversely affect women's employment opportunities and pay and indicate which laws should be modified or revoked.
- **Take steps to blur gender distinctions in the law:** It is important, to the extent possible, that laws are phrased in gender neutral terms. Laws which require employers to provide special benefits for women raise the cost of female labor relative to males' for employers. This encourages employers to discriminate against the more expensive female labor.
- **Strengthen existing enforcement mechanisms:** Effective enforcement of carefully conceived laws is important if they are to have their intended effect. In most Latin American countries this will require that the institutional capacity of the Labor Inspectorate systems be strengthened.
- **Identifying necessary judicial reforms:** The labor courts and tribunal systems are often overburdened and very slow. Highly formalistic procedures followed by the courts are also costly and difficult for the average worker to comprehend. A careful review of the operation of the labor courts would help identify what steps could be taken to make them more accessible to their clients.
- **Improving workers' knowledge of their rights:** Laws will have little effect if their target population is not educated about their rights. Governments could reduce discrimination by promoting women workers' knowledge of the law.

WORKING WOMEN IN LATIN AMERICA: PARTICIPATION, PAY AND PUBLIC POLICY

INTRODUCTION

Optimism over Latin America's economic future is currently widespread. The economic problems experienced by many Latin American countries in the 1980s have been largely replaced by vigorous and robust economic growth characterized by rapid expansions in inter-regional and foreign trade and increases in foreign investment. The continuing growth and increased competitiveness of Latin America in the world market, however, will depend upon many factors, key amongst which will be the continuing development and effective utilization of its human resources. Latin American countries have been, and are continuing to, invest heavily in the education and training of their populations. Most countries have already achieved quite remarkable increases in school enrollments with the result that the average educational attainment of men and women has risen sharply over the past two decades (see Box 1).

To maximize the returns to these investments in human resource development, however, it is essential that countries ensure that educated manpower can participate effectively in an open and competitive labor market. Artificial or unnecessary restrictions on workers' opportunities will depress individual incentives to pursue education and training, lower the returns to investments in human resource development, and, ultimately, reduce economic output.

The concern over the need to ensure human resources are deployed as effectively and efficiently as possible is causing attention to focus more on women workers. Significant, and largely inexplicable, differences exist between men and women in terms of their labor force participation and pay. Women's participation rates are surprisingly low, with only around 35 percent of women in the region working for pay. This is below levels recorded in the developing countries in Asia with which Latin America must compete in the international market. A large gender wage gap also exists in most Latin American countries; on average, working women earn only 66 percent of men's wages. The gender differences in participation rates and pay are of particular concern given that most countries have invested heavily in female education.

Why are women's participation rates so much lower than men's? And what explains the large gender wage gap? Circumstantial and anecdotal evidence suggests that women may be subject to different hiring and employment practices, many of which are discriminatory. If gender discrimination in the labor market is indeed widespread it raises two concerns. First, it can impose serious economic costs on society. Studies in industrialized countries have shown that such discrimination reduces national income. And, second, such discrimination raises serious equity concerns. Not only is a sizable proportion of the population subject to unjust

Box 1: Educational Attainment in Latin America

A substantial body of empirical research now exists attesting to the significant economic benefits derived from investments in formal education and training. Higher worker productivity and increased national output are directly linked to investments in education. Growth accounting estimates for Latin American countries report that investments in education accounted for over 4 percent of annual growth in Chile, Colombia, and Ecuador, and as much as 16 percent in Venezuela in the 1970s.

This education-economic growth nexus has spurred governments in most Latin American countries to invest heavily in expanding educational access over the past few decades. Particular attention has been paid to increasing school access to underserved population groups. As a result, girls' educational access and attainment has increased very substantially. In many countries girls' participation rates now equal, or exceed, boys' rates at the primary and secondary levels. Even at tertiary levels, women make up almost 50 percent of enrollments in many countries.

Expanded educational access for girls over the past few decades has translated into a more educated pool of female labor. Indeed, working women in many countries now average more years of formal education than men as shown in the Table:

Average Years of Formal Schooling by Gender
(Late 1980s/Early 1990s)

	<i>Working Men</i>	<i>Working Women</i>	<i>All Women</i>
Colombia	7.6	8.7	7.1
Costa Rica	6.6	8.5	6.2
Venezuela	6.9	8.5	6.3
Honduras	4.9	6.3	4.6

The expected outcome of women's increased human capital would be a growth in women's labor market participation and a decrease in the gender wage gap as women become more competitive in the labor market.

treatment, but fewer employment opportunities and lower wages translate into poorer standards of living for this group. The consequences are likely to be particularly severe for female headed households.

This paper summarizes the findings of a recent study conducted under World Bank auspices, "Gender Discrimination in the Labor Market and

the Role of the Law: Experiences in Six Latin American Countries". Drawing on employment and earnings data available in country household survey data covering the 1980s, the study reviews trends in women's participation and relative pay. The study also makes a first attempt, using econometric analysis, to assess the extent and nature of gender labor market discrimination. Building on this information, the study then re-

views and, to the extent possible, evaluates public policies and labor laws which govern or regulate women's working conditions and pay. In sum, this information provides a fairly comprehensive overview of women's working conditions. It provides a basis on which to formulate policy measures to ensure that women's productive potential is realized more effectively in the labor market.

The six countries included in the study are Chile, Honduras, Colombia, Venezuela, Costa Rica and Brazil. They are broadly representative of economic and social conditions in the region at large. The countries are variously experiencing rapid and slower rates of economic growth. Some are highly urbanized, while in others a significant proportion of the population continues to be engaged in rural production. Rates of un- and under-employment are high in certain of the countries and very low in others. Despite these differences, the separate country analyses yield remarkably consistent findings which suggests that the conclusions drawn have broad applicability to the region at large.

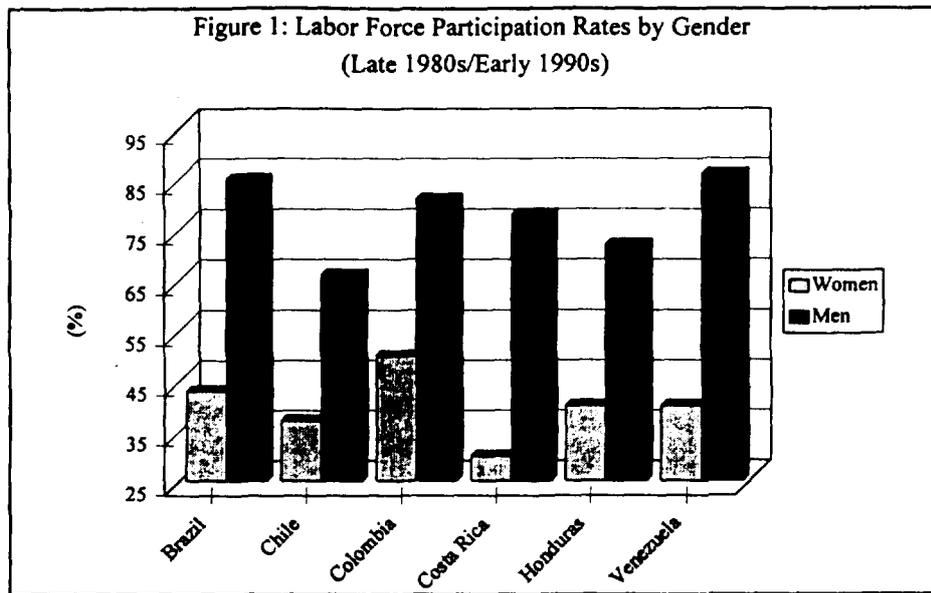
This paper provides a very concise and much simplified discussion of the findings of this more comprehensive study. It aims to inform readers of the major findings of the larger study and stimulate thought about appropriate and effective policy interventions. For this reason, explanations of the various methodological approaches used in the larger study are not included here and are reviewed only briefly in the Appendix. Readers interested in obtaining more information about the methodo-

logical techniques used, and the results obtained in the six separate country analyses, are referred to the larger study.

This paper begins by summarizing information from the larger study on women's labor force participation rates. Existing gaps, trends and changing patterns in women's participation rates are discussed. The paper then presents summary information on the gender wage gap, describing how it has diminished over time and discussing how the size of the gap has fluctuated during periods of economic recession. In the next section of the paper the discussion turns to the possible explanations for the observed gender differences in participation rates and wages. The focus is on gender discrimination in the labor market. The results of an empirical analysis which estimates the extent and nature of this discrimination are presented. Policy measures to combat gender discrimination in the labor market, common to the six countries, are discussed in the subsequent section. The effectiveness and outcomes of these policies are reviewed and discussed. The final section of the paper outlines recommendations and policy actions which might be considered by countries interested in promoting women's participation in the labor market.

WOMEN'S LABOR MARKET PARTICIPATION

Until recently, little attention has been given to women's labor market participation rates in Latin America. The rate and changes observed in women's labor force participation how-



ever, can provide insight into the robustness and competitiveness of the economy and into changing societal attitudes towards women. In a vigorous and open economy, women's participation rates will increase as the demand for labor increases and as the opportunity cost of women's non-market work rises. The increasing participation of women is also a reflection of changing attitudes about women (particularly married women) working outside the home, of perceptions about what constitutes "suitable" work for women, and of women's right to plan their families so they might pursue careers in the labor market.

Given the growth of Latin American economies and the industrialized nature of this growth, one would expect women's labor market participation rates to be fairly high in the region. These rates however, are surprisingly low. In the region at large, only around 35 percent of women worked in the labor market. By comparison, in fast-growing Asian economies, such as In-

donesia and Thailand, women's participation rates had climbed above 50 percent by the late 1980s.

The low participation rate for the region at large does, however, mask considerable differences in women's participation rates across Latin American countries. In some, women's participation rates are comparable to those in Asian countries. In Colombia, for instance, close to 50 percent of women worked in the labor market in 1989. A fairly high proportion of women (around 43 percent) also worked for pay in Honduras and Brazil by the end of the 1980s. In the latter two countries, however, the high rates are probably more a consequence of the continuing importance of agricultural production in the economy than of women's absorption into manufacturing and industrial activities. Interestingly, women's participation rates were relatively low in Venezuela (40 percent in 1989) and Chile (37 percent in 1987) despite their higher levels of industrialization. Exceptionally low participation rates of

around 30 percent were recorded in Costa Rica at the end of the decade.

Women's participation rates compare unfavorably with men's in all six case study countries. The proportion of women working for pay is well below that for men (see Figure 1). This disparity raises questions about why so few women choose to work for pay. Gender differences in educational attainment clearly do not provide a satisfactory explanation. There must, then, be either economic factors or cultural or legal barriers which discourage women from entering or remaining in the labor market.

Trends in Women's Labor Force Participation Rates

Although women's participation rates continue to be low in much of Latin America, there has been a quite dramatic increase in these rates over the

past decade (see Figure 2). Some of the most impressive gains are recorded in the faster growing economies and in countries where women's participation rates were initially very low. Such is the case with Chile, for example, where the rate surged from 31 percent in 1980 to 37 percent in 1987, a 17 percent increase in women's participation rates over a seven year span. A substantial increase is also recorded in Costa Rica where the proportion of women working for pay was initially very low; women's participation rates jumped from around 24 percent in 1980 to almost 30 percent in 1989. Less dramatic, but still very substantial increases also occurred in Venezuela and Brazil. Rates increased rather more slowly in Colombia where the proportion of women in the paid labor market was already fairly high at the beginning of the decade; a seven percent increase in participation rates was recorded between 1980 and 1989.

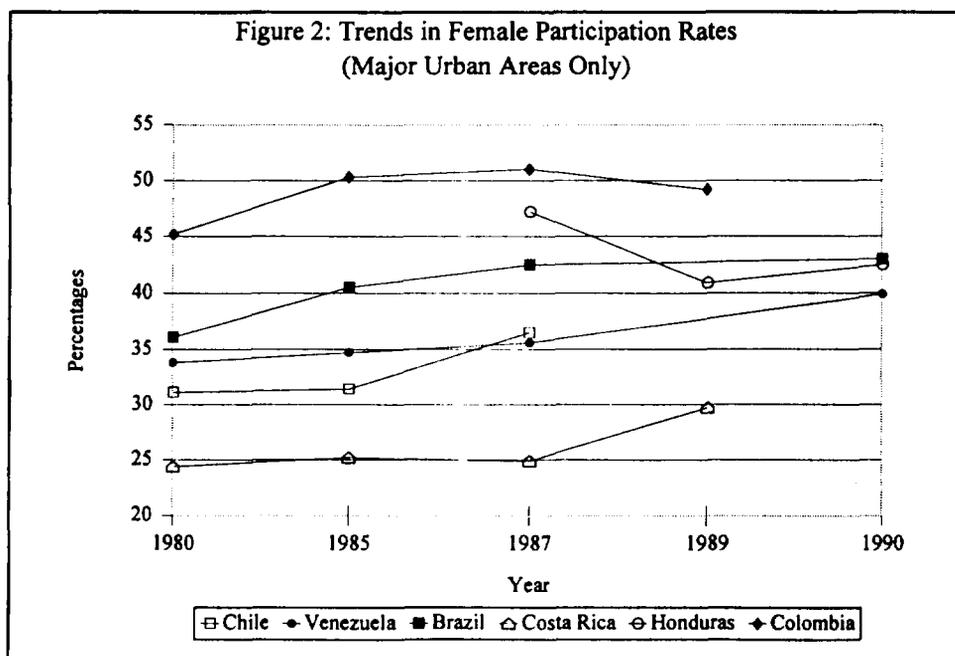


Table 1: Changes in the Ratio of Female/Male Workers in the 1980s

Country	Base/End Years	Ratio of Female/Male Workers		Point Change over Period
		Base Year	End Year	
Chile	1980/1987	0.47	0.55	0.08
Honduras	1986/1990	0.55	0.58	0.03
Colombia	1980/1989	0.57	0.62	0.05
Venezuela	1981/1990	0.39	0.55	0.16
Costa Rica	1980/1989	0.32	0.39	0.07
Brazil	1981/1990	0.43	0.51	0.08

The rapid increase in women's labor force participation rates, coupled with steady or slightly declining rates of participation among men, has meant that the sex mix of the labor force changed significantly in all six countries over the 1980s. Women now comprise a substantially larger proportion of the paid work force than previously, as is evident from the observed changes in the female/male sex ratio over time. As Table 1 shows, the change in the gender composition of the labor force has been particularly striking in Venezuela, but it has also been marked in Chile, Brazil and Costa Rica.

Participation and Childbearing

If it can be determined why women's participation rates are low, effective policy measures can be introduced to remove impediments to their participation. Women's childbearing and childrearing responsibilities have long been assumed to be an important factor limiting their participation in Latin American countries. Efforts to

influence policy have thus often focused on the need to expand access to child care and improve the maternity benefits accorded to working women.

The assumption that childbearing responsibilities limit women's market participation has been fueled by findings in many other countries, both developing and industrialized, that women's participation rates, when graphed by age group, often show a single- or double-peaked pattern. In the single-peaked pattern, women's participation rates rise steadily after the school-leaving age and then drop sharply around the prime childbearing age, never to resume an upward trend. This pattern indicates that women tend to withdraw permanently from the labor market following childbearing. The double-peaked pattern, evident in several fast-growing Asian countries (as in Korea and Malaysia) and in many industrialized countries, shows that women tend to withdraw from the market at childbearing and re-enter the labor force again when their childbearing responsibilities have diminished. Clearly,

though, both patterns of participation are linked to reduced labor force participation rates among women.

Interestingly, age/participation profiles of women in the six Latin American countries exhibit neither of these expected patterns. Instead, the profiles have a "plateau" shaped curve which rises after school-leaving age, peaks at around 30 to 35 years, holds steady until about 40 or 45 years, and then declines (see Figure 3). No "dip" in participation is evident during women's prime childbearing years. This age/participation profile closely resembles that of men and indicates that women tend to remain attached to the labor market once they have entered it. There is no evidence that women typically withdraw from the market because of childbearing. It is also notable that there has been a general upward shift in this age/participation profile for women over the past decade with particularly large increases being observed among women of prime childbearing age (20 to 35 years).

Why do women's age/participation curves resemble men's in these countries? And, why is the expected dip in women's participation not observed? It is not possible to definitively answer these questions, but there are several possible contributing explanations. One explanation centers on the fact that women's educational attainment is generally high in these countries and is often equal to men's. More educated women may enter the labor market and choose to remain there in order to recoup their investments in their education. Indeed, a very strong, positive, relationship is found between educa-

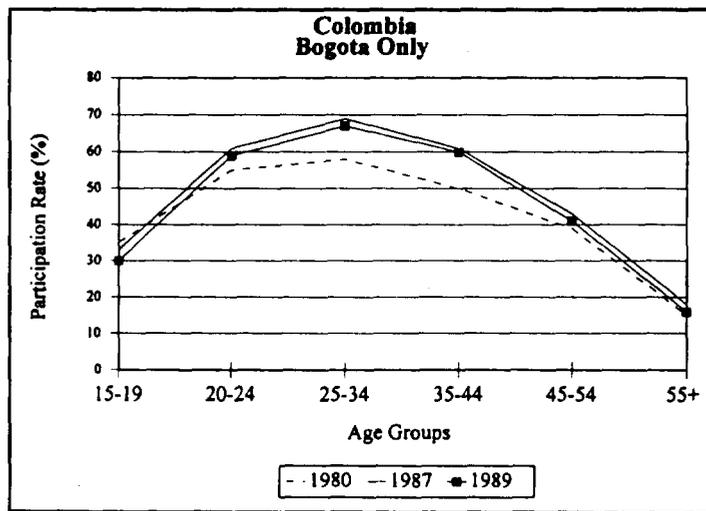
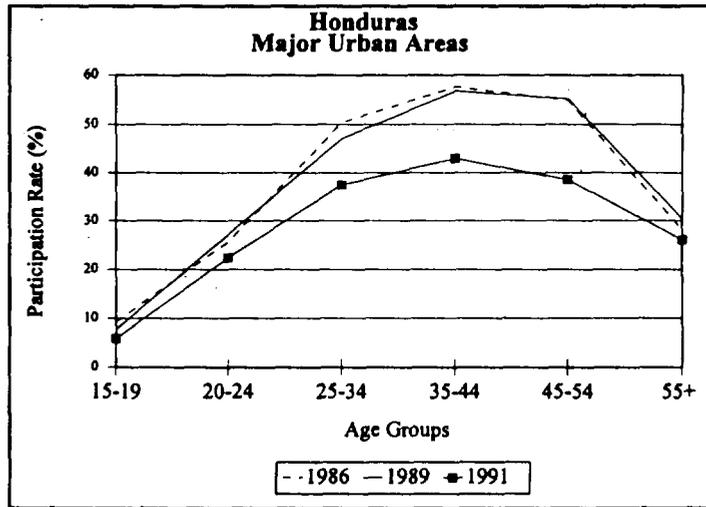
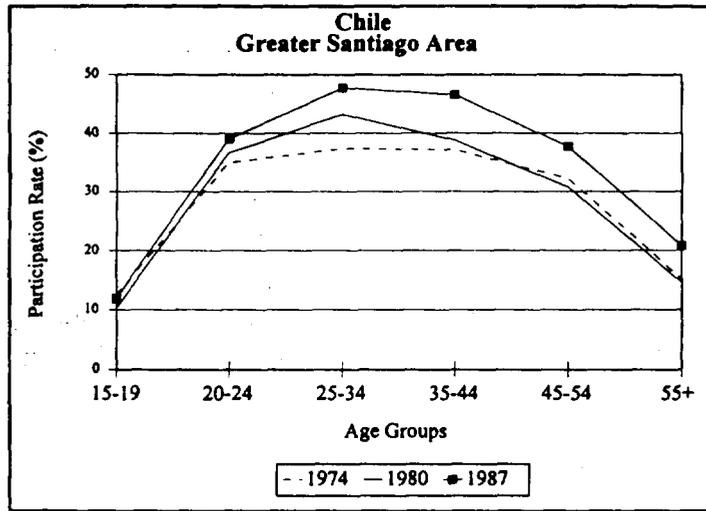
tional attainment and the probability of labor force participation in all six countries. In Venezuela, for instance, the probability that a woman will work for pay was 29 percent among those with primary education but rose to 50 percent for women with secondary education.

A second explanation may lie in women's declining fertility rates. Over the past decade, tremendous strides have been made in Latin America in improving women's access to family planning. As women's capacity to delay and space their children has increased, they have been more able to participate in higher education and training and commence work with a definite career path. Women in this situation will be less likely to withdraw from the labor market after childbearing because the opportunity costs of their time in the home will be so much higher. Some circumstantial evidence exists to support this explanation; a strong negative relationship is found in all the countries between the number of children a woman has and the probability that she will work for pay. Women with fewer children are much more likely to be in the labor force.

Women's Sectoral and Occupational Distribution

It is well-known that women workers in Latin America tend to be concentrated in lower-paying, less stable employment sectors and occupations. This means that women work predominantly in the non-formal sector, rather than in the public sector or private sector. As employees in the non-

Figure 3: Age/Participation Profiles of Women Workers in Three Countries



formal sector, they typically are not covered by minimum wage regulations and do not benefit from labor provisions which establish minimally acceptable working conditions. Of the women who work in the formal sector, a large proportion are generally concentrated in lower-paying occupations such as the service, clerical and sales occupations.

It is not well-understood why women are concentrated in the lower-paying employment sectors and occupations. Gender differences in educational attainment clearly do not explain this. It is possible that these employment differences may be partly explained by women's tendency to pursue training and careers in "female" lines of work (where wages and employment opportunities are typically more limited). This does not seem to provide a completely satisfactory explanation, however. Other factors must also be important and increasingly attention is turning to the role discrimination might play in explaining these differences.

Although working women are predominantly concentrated in the non-formal employment sector, employment and earnings data show that the proportion of working women in the non-formal sector has declined sharply over the decade in several of the countries. In Colombia, for example, around 38 percent of working women were in the non-formal sector in 1980, but by 1989 less than 32 percent worked in this sector. This decline was matched by a sizable increase in the proportion of women employed in the highest-paying sector, the private sector. Similar changes are observed in Venezuela where the percentage of women in the

non-formal sector fell from 40 percent in 1981 to around 32 percent in 1990. Women's private sector participation rose considerably over the same period. These changes in women's employment patterns are likely to have had far-reaching consequences; women in the formal sector will have profited from more stable employment, higher average salaries, and coverage under the various labor laws providing benefits such as social security coverage and maternity leave.

This trend is not, however, common to all countries. In Honduras, for example, the proportion of women working in the non-formal sector has remained relatively constant over the six years for which data are available. Likewise, little change in the distribution of women across employment sectors is observed in Costa Rica during the 1980s.

Limited data make it more difficult to ascertain whether similar changes have been occurring in the distribution of women across occupational categories. Available data for Venezuela suggests at first glance that more women have moved into higher-paying occupations, including the professional and technical and managerial occupations. However, when a simple measure (the Duncan Index) is used to assess the extent of dissimilarity that exists in the employment distributions of women and men, the picture becomes less clear. As Table 2 shows, a higher value of the index (55.5) is obtained in 1990 than in 1981 (50.6), indicating that the dissimilarity in the gender composition of the work force across occupational categories has increased rather than de-

Table 2: Venezuela: Occupational Distribution of Workers
by Gender, 1981 and 1990

Occupational Grouping	1981			1990		
	Women (%)	Men (%)	Duncan Index	Women (%)	Men (%)	Duncan Index
Professional & Technical	23.9	5.5	9.2	26.6	6.6	10.0
Managerial	1.3	3.7	1.2	2.6	5.9	1.7
Clerical & Sales	34.1	17.6	8.2	39.4	17.1	11.2
Agricultural Workers	2.4	14.0	5.8	1.1	10.1	4.5
Miners	0.0	0.3	0.2	0.0	1.1	0.6
Transport	0.6	14.2	6.8	0.5	12.3	5.9
Operatives	13.2	35.7	11.3	7.1	37.1	15.0
Service Workers	21.8	8.9	6.5	19.3	9.7	4.8
Domestic Workers	2.8	0.1	1.4	3.5	0.0	1.8
Duncan Index Across all Occupational Groupings			50.6			55.5

creased. It appears, then, that women have become more, not less, concentrated in certain occupations than they were in 1981. Estimates using data from Brazil suggest a similar pattern; women continue to be concentrated in the lowest-paying occupation (Services). They are, however, more heavily represented in the two highest-paying occupational groupings (Managerial and Technical) than men.

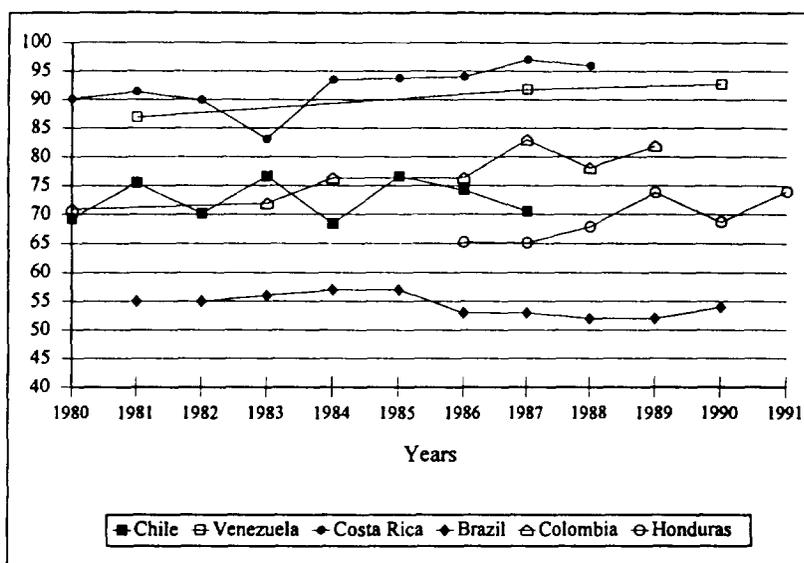
THE GENDER WAGE GAP

Women workers, on average, earn less than men workers in all Latin American countries. This remains true even after controlling for differences in the hours worked by women and men. On average, women workers in Latin America earn only 66 percent of men's wages. This average figure, however, masks the fact that the wage gap differs

considerably across countries. It is especially large, for instance, in Brazil where women earned only 55 percent of men's hourly wages in 1990. It is exceedingly small in Venezuela and Costa Rica where women's hourly wages were 93 percent and 97 percent of men's wages in 1989, respectively.

Increasingly, questions are being raised about why women's wages are below men's. The fact that working women's educational attainment equals men's means that it is no longer possible to attribute the wage gap to gender differences in educational attainment. And, preliminary information shows that women are not necessarily more unreliable workers and are not prone to higher absentee or quit rates than men as has often been posited. Attention, then, is turning to the role which gender discrimination might play in explaining the wage gap. But, although anecdotal

Figure 4: Ratios of Female/Male Hourly Wages, 1980-1991



Country	Base/End Year	Ratio of Female/Male Hourly Wages		Point Change over Period
		Base Year	End Year	
Chile (a)	1980/1987	0.68	0.71	0.03
Honduras (a)	1986/1990	0.65	0.68	0.03
Colombia (b)	1980/1989	0.63	0.86	0.23
Venezuela (a)	1981/1990	0.87	0.93	0.06
Costa Rica (c)	1980/1989	0.90	0.97	0.07
Brazil (a)	1981/1990	0.55	0.55	0.00

Notes : (a) Data for larger metropolitan areas only.
 (b) Data for Bogota only.
 (c) Data for entire country.

evidence of wage discrimination is widespread, empirical evidence attesting to its existence has been exceedingly limited to date. Before discussing the findings of the empirical analyses of wage discrimination, it is useful to present some basic data on the gender wage gap and examine trends over time.

The Diminishing Wage Gap

In most Latin American countries, the gender wage gap has dimin-

ished sharply over the past decade or so. This is undoubtedly largely explained by women's increased educational attainment; as their formal education level has risen relative to men's they have been better positioned to compete for job positions and higher earnings.

Figure 4 charts changes in the female/male ratio of hourly wages over time. In five of the six countries women's wages have increased substantially relative to men's over the dec-

ade. The largest change is recorded in Colombia where the female/male hourly wage ratio was 0.63 in 1980 and 0.86 in 1989, a 0.23 point change. Despite this very substantial change, however, women still, on average, earned only 86 percent of men's hourly wages in 1989. The decline in the wage gap was more modest, but still significant, in Costa Rica and Venezuela. In Costa Rica the ratio of female/male wages increased from 0.90 in 1980 to 0.97 in 1989. Women's average hourly wages also increased relative to men's in Chile and Honduras, but rather less substantially. Only in Brazil did the ratio of female/male hourly wages remain more or less unchanged over the decade.

Wage Trends by Occupational Category

It is interesting to examine changes in women's wages relative to men's by occupational category. Have the increases in women's relative wages been uniform across occupational categories or have they been greater in certain occupations?

The available country data suggest that the increases in women's relative wages have been very significant in the higher-paying occupational categories (Managerial and Technical) where women's participation rates have increased sharply, and the lowest-paying categories where the majority of women workers are typically concentrated. This is well-illustrated by data from Colombia. Although female/male wage ratios decreased in most occupational categories in Colombia, larger decreases occurred in the highest-paying

occupational category, Managerial occupations. Here, the female/male ratio of hourly wages increased remarkably from 0.51 in 1980 to 0.81 in 1989 (a 58 percent increase in the ratio). The increase in the ratio was also substantial in the Services occupations where the bulk of women work. Similar changes are observed in Venezuela where the largest decrease in the ratio is recorded in the Professional/Technical occupations, followed by Clerical Occupations and Service Occupations.

The Wage Gap and Recession

There has been much interest and speculation about the effects economic recessions have had on women's working conditions. It is often asserted that women have fared particularly badly during economic downturns. Charting female/male hourly wage ratios over time provides a more accurate picture of how women have fared during these periods. As Figure 4 shows, the decline in the gender wage gap did not occur steadily, but was interrupted by sharp, but temporary, increases in the wage gap. These fluctuations in the wage gap coincide with periods of recession in the respective countries, providing support for theories that women's working conditions deteriorated during recession. In Costa Rica, for instance, the wage gap increased sharply during the recession of 1982/83; the female/male hourly wage ratio decreased from 0.91 in 1981 to 0.83 in 1983, but then resumed its upward climb in 1984 following the recession. A similar pattern is observed in Chile where the wage gap increased during

the recession of 1982 but contracted sharply after the recession in 1984.

On the basis of these graphs it is tempting to conclude that women workers are indeed more likely than men to suffer wage cuts and retrenchment during recession. Regression estimates run on the time-series data available in the six country cases, however, suggests that such conclusions might well be incorrect. While the regression estimates confirm that the wage gap increased during recessions, they also show that the average human capital endowments of women workers declined during these periods. Once the economy picked up, women's human capital endowments again increased relative to men's. The most feasible explanation for this finding is that less educated women temporarily entered the market during recession, possibly in an attempt to "shore up" falling family incomes. Their low human capital probably meant that it does not pay them to work in more prosperous times, so they withdrew from the market when economic conditions improved. If this hypothesis is correct, and an increasing number of empirical studies suggest it is, the widening of the wage gap during recession is not necessarily a consequence of worsening employment and pay conditions for the pool of women workers who regularly work in the labor market. Instead, the increased wage gap reflects a temporary change in the composition of the female work force and a decline in women's average human capital.

GAPS IN PARTICIPATION AND PAY: THE ROLE OF DISCRIMINATION

The reason why women's participation rates and pay are low relative to men's is not clear. Evidently, human capital differences between men and women do not provide a satisfactory explanation; women's average educational attainment now equals, or exceeds, men's in most countries.

Other explanations why such a small proportion of women work for pay can be proposed, most of which are rooted in societies' attitudes and perceptions towards women. Two explanations appear to be of particular import. One is that women suffer **wage discrimination**, meaning that they receive lower wages than men even when they perform the same work and have the same human capital endowments. In other words, women may be receiving lower wages than men simply because of their sex. To the extent this occurs, women may be discouraged from entering the labor market. Women, far more so than men, face very clear opportunity costs to their time in the market; they are primarily responsible for childrearing and family maintenance tasks in the home that compete with the time they can allocate to market work. Rationally, then, women will compare the potential returns to labor market work with the competing demands for their time in the home. Lower wages in the market will raise the opportunity cost of their time in the home, possibly tipping their decision in favor of remaining at home.

The second possible explanation is that women are not given equal opportunities and equal access to job positions in the market -- that they are subject to **employment discrimination**. If this is the case, women may either fail to gain employment or may be unable to obtain employment in positions commensurate with their education or skill level. In the latter case, they may be unwilling to compromise and accept employment positions below their skill level and choose to withdraw from the labor market.

Discrimination, be it wage discrimination or employment discrimination, presents a feasible, if as yet empirically untested, explanation as to why women's participation rates and pay are low in Latin American countries. The larger study on which this report draws makes a first attempt to assess the extent and nature of gender labor market discrimination in Latin America. The objective of the study is to ascertain whether wage and employment discrimination are important factors contributing to the observed gender wage and participation gap. By establishing the extent and nature of discrimination, the study should provide a basis for deriving policy measures which could be implemented to limit such discrimination.

The study utilizes two different econometric models, the Oaxaca Decomposition and the Brown, Moon and Zoloth Decomposition, to arrive at an estimate of gender labor market discrimination in each of the six countries. The Oaxaca model yields only a broad assessment of whether discrimination

exists. The Brown, Moon and Zoloth model provides a more accurate assessment of discrimination and indicates whether it is practiced principally as wage discrimination or employment discrimination. The methodological underpinnings of each of these models are briefly described in the Appendix. Readers interested in more a more in-depth discussion of the methodologies and applications of the models are referred to the larger study.

Both econometric models are rooted in economic theories which hold that rational employers hire workers and establish wage rates on the basis of workers' potential productivity, which is most easily assessed from their human capital endowments (level of formal education, labor market experience, skills training, etc.). A gender wage gap, then, should simply reflect differences in the human capital endowments of women and men workers. Yet, experience in many industrialized countries has shown that this is not necessarily the case; a gender wage gap may exist even though women and men have equal human capital endowments. It appears, then, that employers are not entirely economically rational in their response to labor; their decisions to hire and reward labor may be influenced, among other factors, by personal prejudices and propensities to discriminate. The two econometric models attempt to provide estimates of the extent to which gender discrimination is practiced. An important caveat regarding this estimate of discrimination should be borne in mind, however. The models attribute the part of the gender wage gap not explained by gender differences in human capital (here, measured as

years of formal education) entirely to discrimination. It is quite possible, though, that other factors also contribute to the wage gap. Because these other factors remain unidentified or unmeasured, their effects will be incorrectly attributed to discrimination. Thus, the measure of "discrimination" obtained using the econometric models is very likely overestimated and should not be taken as a precise measure of discrimination. Instead, it is only broadly representative of the extent of discrimination. Forthwith, this measure is always referred to as "discrimination" to make it clear that this is an estimated, not an actual, measure of discrimination.

"Discrimination"

The econometric analyses conducted in each of the six Latin American countries yield remarkably consistent findings. In each country, "discrimination" largely accounts for the gender wage gap. Gender differences in human capital endowments explain only a very small part of the gender wage gap (see Box 2). In Chile, for example, only 21 percent of the wage gap is explained by such differences over the decade. The remaining 79 percent of the wage gap not explained by human capital endowments is therefore ascribed to "discrimination." A similarly large portion of the wage gap in Colombia is also attributed to "discrimination." Interestingly, in three of the six countries--Venezuela, Costa Rica, and Brazil--women workers' average human capital endowments are actually higher than men's. Hence, no part of the wage gap can be explained in

terms of a male advantage in human capital endowments. The wage gap is therefore entirely attributed to "discrimination."

Results from the separate country analyses thus strongly indicate that "discrimination" plays a significant role in explaining the gender wage gap. The question remains, though, as to whether this discrimination is practiced as wage "discrimination" or employment "discrimination."

Wage versus Employment "Discrimination"

The determination as to whether "discrimination" is practiced principally as wage "discrimination" or employment "discrimination" was undertaken using the Brown, Moon and Zoloth Decomposition method. This technique recognizes that women workers are generally concentrated in certain employment sectors and occupational categories and acknowledges that this may be a consequence of differences in women's and men's work opportunities and unequal access to employment opportunities. The Brown, Moon and Zoloth Decomposition technique thus seeks the causes of the gender wage gap by examining gender differences in human capital endowments in each employment sector (or occupational category) while taking the different employment patterns of women and men into account.¹

¹ The technique actually requires that average wages of women and men be weighted according to each sex's representation in the respective employment sectors (or occupational categories).

Box 2: Explaining the Gender Wage Gap

It is well established that human capital endowments, and specifically formal education level, are the best predictors of worker productivity. Rational employers typically hire workers and set salaries based on workers' human capital endowments. Hence, two equally qualified workers performing the same, or very similar, work should receive much the same wages. But, it is argued that this is not the case in many Latin American countries and that employers choose to discriminate against women workers. The fact that a gender wage gap is found in all Latin American countries suggests this may be true. Does such discrimination exist? Do women tend to receive lower returns to their human capital?

If the gender wage gap is not largely explained by gender differences in human capital endowments it would suggest that employers are influenced by other, less rational, factors in setting wages. Econometric analysis of wage and employment data in six Latin American countries shows very clearly that differences in human capital endowments between the sexes do not explain the gender wage gap. In Colombia and Chile such differences explain 25% and 21% of the wage gap, respectively, and they explain only 4% in Honduras. In Venezuela, Costa Rica, and Brazil, women's average human capital endowments are actually higher than men's, so such differences do not help explain the wage gap at all.

Country	Total Female/Male WageGap	Percent of Wage Gap	
		explained by Human Capital Differences	not Explained by Human Capital Differences
Chile (1975-1987)	.259	21	79
Honduras (1986-1991)	.431	4	96
Colombia (1980-1989)	.417	25	75
Venezuela (1981-1990)	.173	0	122(a)
Costa Rica (1980-1989)	.216	0	120(a)
Brazil (1981-1990)	.544	0	113(a)

Note:: (a) Percentages greater than 100 indicate that women's average human capital endowments exceed men's. Human capital differences between women and men therefore do not help explain the wage gap.

Women do, then, on average, appear to receive lower returns to their human capital than men in the six Latin American countries. This is indicative of discrimination.

For ease of interpretation, Table 3 presents the results of the Brown, Moon and Zoloth Decomposition for each of the six countries for just one

representative year, 1987.² This particular analysis examines gender differ-

² Results covering the years 1980 through 1990 are presented separately for each of the six countries in the larger study.

ences in human capital endowments by employment sector (private, public and non-formal) rather than by occupational category. The separate country analyses yield very consistent results and show that the total female/male wage gap is largely a consequence of wage "discrimination".

The Decomposition results are best understood by referring to one country example. In the case of Chile, for instance, the total female/male wage gap was 0.181 in 1987. The decomposition results show that wage differences within employment sectors accounted for much of this wage gap ($W = 0.140$). Gender differences in access to employment sectors explained very little ($J = 0.041$) of the wage gap. The cen-

tral question, though, is how much of the wage difference is explained by gender differences in human capital (WE) and how much is attributed to wage "discrimination" (WU). The Decomposition results clearly indicate that human capital differences did not explain the wage gap. Of the gender wage gap within employment sectors ($W = 0.140$), exceedingly little ($WE = 0.001$) was explained by gender differences in human capital. Wage "discrimination" thus accounted for almost all of the wage gap ($WU = 0.139$). These findings are replicated in the other country analyses. One factor should be emphasized, however. In three countries (Venezuela, Costa Rica, and Brazil) women, on average, have higher human capital endowments than

Table 3: Explaining the Wage Gap: Decomposition
Results from Six Country Analyses, 1987

	Total Gender Wage Gap	W	J	WE	WU	JE	JU
Chile	.181	.140	.041	.001	.139	.009	.032
Honduras	.467	.440	.027	.009	.431	.001	.026
Colombia	.297	.281	.015	.045	.236	.006	-.036*
Venezuela	.174	.212	-.038*	-.017*	.229	.002	-.040*
Costa Rica	.199	.230	-.030*	-.039*	.268	.006	-.036*
Brazil	.530	.460	.070	-.090*	.550	NA	NA

Notes: W - Portion of the wage gap explained by differences in wages between employment sectors
 J - Portion of the wage gap explained by gender differences in access to employment sectors
 WE- Differences in earnings explained by gender differences in human capital
 WU- Differences in earnings unexplained by gender differences in human capital
 JE- Differences in access to employment sectors explained by gender differences in human capital
 JU- Differences in access to employment sectors unexplained by gender differences in human capital

* The negative signs indicate that women actually have an advantage over men in terms of human capital endowments.

men. This advantage means that all of the wage gap within employment sectors is attributed to wage "discrimination" in these countries.

It is notable that in all countries, although gender differences in access to employment sectors (J) contributed only minimally to explaining the total gender wage gap, the different employment patterns of women and men workers is largely explained by employment "discrimination." Gender differences in human capital endowments do not explain the differences in the employment patterns of men and women.

The results from each of the six country analyses indicate that "discrimination", practiced principally as wage "discrimination," accounts for much of the gender wage gap. How much faith should be put on these results? Are they sufficiently robust to form the basis for policy formulation?

Several factors increase confidence in the decomposition results. First, very consistent findings are obtained from each of the different country analyses. Second, decompositions run using different population samples (one which excluded domestic servants from the analysis and one which included only single/unmarried workers) also yielded very similar findings. And, third, decompositions run substituting more finely disaggregated occupational categories for the broader employment sectors also provided the same general findings. Thus, it would appear that the results are indeed robust and may form a basis upon which to formulate policy. The findings should still, however, be considered preliminary. Considerably

more analytical research still needs to be undertaken before a clear and accurate understanding of gender labor market discrimination is obtained.

PUBLIC POLICY: CURRENT INTERVENTIONS AND NEW DIRECTIONS

Both widespread anecdotal evidence and the results of the preliminary empirical analyses indicate that gender discrimination may well be commonplace in Latin American labor markets. This is rather puzzling given that all countries in the region have implemented policies and enacted labor laws whose intent is to reduce opportunities for discrimination and guarantee workers the right to equal opportunities and equal pay. The existence of such discrimination suggests that the laws and policies are not being fully effective.

Clearly, if women's potential contribution to economic development is to be fully realized, gender discrimination in the labor market must be minimized. This will require that loopholes and shortcomings in current laws and policies be identified and rectified. To date, however, almost no efforts have been made to document the laws governing and regulating women workers or to assess their effectiveness. As a first step in this direction the larger study on which this summary is based documented and reviewed labor laws which specifically cover women workers in the six selected countries. On the basis of this information, the study proposes some tentative recommendations as to how existing policies might be re-

formed to better facilitate women's labor market participation.

Existing Laws and Policy Interventions

Although the intent of existing laws and policy interventions is to improve women's working conditions, many actually appear to have an adverse effect on women's economic opportunities. Rather than decreasing the gaps in women's participation rates and pay, many of the laws work to maintain these gender gaps. Clearly, these laws have very different outcomes than those which were originally intended. There is a need, then, to fully evaluate their effect so that they might be revised and reworked to better promote women's economic opportunities.

Laws regulating and governing women's employment may be grouped into four broad categories, each of which have somewhat different effects and outcomes on women's employment opportunities and pay.

(i) Protective Laws

Protective laws, designed to safeguard women from employment conditions considered hazardous to their health or mental well-being, are entrenched in the Labor Codes of most Latin American countries. Generally adopted in the mid-1950s, these laws were intended to protect women from exploitation and the unduly heavy and dangerous industrial work associated with the mechanization of production occurring at that time. The laws typi-

cally restrict women's employment in certain occupations and settings, including in night and shift work, mining occupations, work around "dangerous" machines and chemicals, (lead, for example), "morally hazardous" occupations, and in work requiring that heavy weights be lifted or pushed. The laws also sometimes mandate a shorter legal work week for women, grant them longer work breaks during the day, and set earlier retirement ages for women.

Most industrialized countries which had adopted these laws moved to revoke them in the early 1970s as perceptions about what was "appropriate" work for women changed. Many of the protective provisions were considered to unnecessarily restrict women workers' economic opportunities. The laws continue to be in effect, however, in most Latin American countries as Table 4 shows. Among the six case study countries, only Brazil has revoked these laws on the grounds that they are discriminatory.

A careful examination of these laws shows that they actually do work to discriminate against women in several ways. In some cases, they impose unnecessary restrictions on the employment of women in certain occupations or industries. Such is the case, for instance, with laws which place a blanket prohibition on women's employment in industries using chemicals which are potentially hazardous to the unborn child. While the rationale for prohibiting women of reproductive age from such industries is clear, there is no reason to bar women who are sterilized or past childbearing age. Yet, employers are prohibited from hiring these women

Table 4: Protective Laws Regulating Women's Employment in Six Latin American Countries

<i>Protective Provisions</i>	<i>Chile</i>	<i>Honduras</i>	<i>Colombia</i>	<i>Venezuela</i>	<i>Costa Rica</i>	<i>Brazil</i>
General Employment Prohibitions /Limitations	<p>Physical Capacity: Labor Code: Art. 15: Prohibits women from work which exceeds their strength or constitutes a danger to their physical condition because of their sex.</p> <p>Lead: Women prohibited from work involving use of white lead or lead sulfate.</p> <p>Radiation: Low dose levels of radiation exposure set for women of childbearing age.</p>	<p>Physical Capacity: Labor Code, Art. 127: Work of women to be adapted to their age, state of health.</p>	<p>Physical Capacity: Labor Code: Art. 242: Prohibits women from jobs requiring great strength, from dangerous jobs, and where working conditions might be unhealthy for women.</p> <p>Lead: Women prohibited from work involving use of lead.</p>	<p>Physical Capacity: Labor Code, Art. 114: Women prohibited in: loading/unloading of ships; loading/unloading with cranes/winches; work in quarries; work underwater; work as trimmers or stokers, or in foundries; maintaining moving machinery; work using circular saws or other dangerous machinery; work in manufacture of metal or glass; work in distillation of alcohol; work with explosives, inflammable or caustic materials.</p> <p>Lead: Women prohibited from work involving use of lead paint.</p> <p>Radiation: Higher maximum dose levels of exposure set for women.</p> <p>Weights: Weight limits set for women.</p>	<p>Physical Capacity: Labor Code: Art. 87: Employment of women prohibited in work which is physically unhealthy, hard or dangerous.</p>	<p>Radiation: Low maximum dose levels set for women of child-bearing age.</p>
Prohibitions on Employment in the Mining Industry	<p>Labor Code, Art. 15: Prohibits women from underground mining. Exceptions for women in leadership positions, health service workers, or where it is required as part of an educational program.</p>	<p>Labor Code, Art. 84: Women's employment prohibited in mines.</p>	<p>Labor Code, Art. 242: Prohibits women from mining work.</p>	<p>Labor Code, Art. 112: Women prohibited from work in mines.</p>	<p>Laws 2512 & N-3877: prohibit women's employment in underground mines.</p>	
Prohibitions on Night Work		<p>Labor Code, Art. 147: Women may not work +5 hours at night. Ruling does not apply in public sector or agricultural undertakings.</p>	<p>Labor Code, Art. 242: Prohibits night work except in family undertakings from 18:00 to 06:00.</p>	<p>Labor Code, Arts. 111 & 208: General prohibition between 19:00 and 06:00 except women in responsible management positions not involving manual work. Exemptions set for some industries.</p>	<p>Labor Code, Art 88: Prohibits employment of women except in family undertakings, health and domestic work from 19:00 to 05:00. Partial exemptions can be obtained from Dept. of Labor Inspection. The law has been suspended in times of high unemployment.</p>	
Prohibitions on employment unsuitable to women's moral development		<p>Labor Code, Art. 127: Work of women to be appropriate to their mental and moral development.</p>			<p>Labor Code, Art. 88: Prohibits employment of women in "morally inappropriate" work.</p>	
Special requirements	<p>Work Time: Pregnant women may not work overtime.</p>	<p>Work Time: Labor Code, Arts. 130/140: Women and minors granted one 2 hour work break per day. Other rest periods granted if a medical certificate indicates a need.</p>		<p>Work Time: Daily rest of at least 11 consecutive hours for women working shifts in industry. A reduction to 10 hours for a maximum of 60 days per year may be authorized by the Labor Department. A minimum of 9 hours in exceptional circumstances for women in hotels, restaurants and domestic service.</p>		<p>Facilities: Special ventilation requirements for female workers.</p>

too. A similar argument can be made of laws which bar all women from occupations requiring hard physical labor (underground mining, for example) without giving due regard to the individual's capacity to perform such work.

Other protective laws impose broader restrictions on women's employment. Laws prohibiting women's employment in night or shift work, for example, prevent women from pursuing flexible work arrangements which may better suit their dual role as mother and worker. They also preclude them from earning the higher wages and premiums often associated with such work.

Protective laws may also, in some instances, actually induce employers to discriminate against female labor. The laws do this by raising the cost of female labor relative to male labor. Laws requiring that women workers be granted longer work breaks than men, for example, will cause women's average daily output in the workplace to be below men's. Employers, then, will consider women to be less productive employees than men and their rational response will be to discriminate against female labor by either not hiring women or by offering them a lower wage. A similar situation will occur under provisions which establish shorter maximum work weeks for women than men.

Thus, protective laws, while designed to safeguard women, often work against women's economic interests. They tend to limit women's employment opportunities and sometimes actually induce employers to discriminate against female labor. Although the link cannot be clearly established, it is

very possible that these laws contribute to the observed gender gaps in pay and participation in Latin America. The modification and reform of protective laws is evidently a necessary first step in removing obstacles to women's participation and in increasing women's relative pay.

(ii) Maternity Protection Laws

Following the guidelines established by several International Labor Office Conventions, all Latin American countries have enacted laws granting pregnant and nursing women workers special protections and benefits. The maternity protection laws currently in force in the six case study countries are summarized in Table 5. Usually, the benefits and protections provided for under Latin American law are similar to those extended to women in the industrialized countries. Typically, women qualify for a period of maternity leave of around 18 weeks, are awarded a stipend equal to their pre-leave salary during maternity leave, and are protected from dismissal during pregnancy and for some time following childbirth. The manner in which these benefits and protections are financed in Latin American countries, however, differs from that in industrialized countries.

The method of financing the benefits often works to increase the cost of female labor relative to male labor. This situation arises largely because of the way the laws are implemented; the burden of financing the maternity benefits is often passed on to the employer rather than being covered by public sector programs. The employer,

Table 5: Maternity Protections and Benefits Provided in Six Latin American Countries

<i>Country</i>	<i>Qualifying Conditions</i>	<i>Length of Maternity Leave</i>	<i>Benefits Payments</i>	<i>Prohibition of Dismissal</i>	<i>Nursing Breaks</i>
Chile	Social insurance coverage and 11 consecutive months of contributions before commencing maternity leave.	18 weeks (6 pre- and 12 post-natal) of non-renounceable leave. May be extended if need is established through medical certification.	Benefits are calculated as the workers' taxable salary for 6 months preceding the 5 months before the beginning of maternity leave divided by 180. Funded by the State - neither employers or the social insurance system contribute.	Dismissal prohibited during pregnancy and for one year after completion of maternity leave except when just cause is approved by a judge. In such cases, the worker continues to receive all benefits until the end of maternity leave.	Two 30 minute paid breaks daily until child is 2 years. Traveling time may be added if infant is in child care facilities outside the workplace. The employer must also pay travel costs.
Honduras	Social insurance coverage (in regions where there is coverage) and attendance at work for 75 days in the 10 months preceding pre-natal leave. Must have provided medical certificate confirming pregnancy to the employer in the first months of pregnancy.	- 18 weeks (6 pre- and 12 postnatal) of non-renounceable leave for married and cohabiting women in the private sector. - 18 weeks (6 pre- and 12 post-natal) of non-renounceable leave for married women in the public sector.	Benefits equal the worker's average salary in the 180 days prior to maternity leave. In regions covered by social insurance, it pays 66% of the salary and employers 44%. In regions not covered by social insurance, employers pay the full salary.	Dismissal prohibited during pregnancy and for the 3 months following birth unless just cause is established and approved by the Ministry of Labor.	Two 30 minute paid breaks daily while infant under 6 months.
Colombia	Social insurance coverage and 12 weeks of contributions, 4 of which must have been during the 9 months preceding request for maternity leave.	12 weeks which may include one week of paternity leave. If paternity leave is taken, women qualify for 11 weeks. 2-4 weeks for spontaneous abortion.	Benefits equal the worker's regular salary. Funded by the social insurance system through a 13.5% payroll tax to which employers contribute 9% and workers 4.5%.	Dismissal prohibited during pregnancy, maternity leave or breast-feeding unless just cause is established and approved by a Labor Inspector.	One 30 minute paid break daily until infant is 6 months.
Venezuela	Social insurance coverage. Workers must provide employers with medical certification of pregnancy to qualify for maternity benefits.	18 weeks (6 pre- and 12 post-natal). Allowances for pre-natal leave may not be transferred and used as post-natal leave. 10 weeks provided for adoption.	Benefits equal the worker's regular salary. Social insurance fund 66% and employers 34%.	Dismissal prohibited during pregnancy and for one year after confinement unless just cause is established and approved by the Labor Inspector.	Two 30 minute paid breaks if nursing facilities available in the firm. Two 60 minute breaks if nursing facilities not available in the firm.
Costa Rica	Social insurance coverage and provision of medical certification to employer and social insurance agency early in pregnancy.	- 16 weeks (4 pre- and 12 post-natal) in the public and private sector. - 16 weeks (8 pre- and 8 post-natal) for teachers. - 12 weeks for adoption. - May be extended if need established through medical certification.	Benefits equal the worker's regular salary. Funded by the social insurance system (50%) and the employer (50%). Benefits for daily/hourly workers estimated from average pay in 180 days prior to confinement. If the worker has worked less than 180 days, payment estimated on average pay during that period.	Dismissal prohibited during pregnancy and breast-feeding unless just cause is established and approved by the National Central Administration and General Inspector of Labor. If just cause is established the worker loses all maternity benefits.	Either two 30 minute paid breaks daily or 15 minutes every 3 hours. Firms employing more than 30 female workers must provide special facility for feeding. Length of benefits not established. Employer required to provide mother with additional paid rest time if requested.
Brazil	Social insurance coverage	17 weeks. Leave may be extended on presentation of a medical certificate. 5 days of paid paternity leave provided.	Benefits equal the worker's regular salary. Funded by social insurance through a 0.3% monthly payroll levy on all employers. Employers pay the benefits and deduct the amount from their monthly social security contributions. Domestic servants receive benefits directly from social insurance offices.	Dismissal prohibited during pregnancy and confinement and for 5 months after childbirth.	Two 30 minute paid breaks daily until infant is 6 months.

then, is faced with higher costs when employing women. This is best illustrated in the case of the maternity stipends paid to women during their maternity leave. In three of the six case study countries (Costa Rica, Honduras and Venezuela), the law requires employers to contribute directly, and sometimes very substantially, to the worker's maternity benefits. The financial burden on employers is greatest in Honduras. Here, employers are required to pay 44 percent of the absent worker's wage in regions covered by the social security system. In regions not covered by the social security system they must pay the full salary of the absent worker. In Costa Rica, employers are required to pay 50 percent of the maternity stipend.

Other maternity protection laws also work to increase the relative cost of female labor. Requirements that employers subsidize breaks (generally one hour per day) during which mothers can nurse their infants, for example, have this effect.

Given the extra costs which maternity protection laws impose on employers, employers have every incentive to either avoid hiring women or seek ways to avoid compliance with the laws. The rather scanty information available with which to assess the effects of these laws suggests that they do indeed encourage employers to discriminate against women. In all six countries, employers reportedly frequently (and illegally) require female job seekers to provide medical certification that they are not pregnant. In Brazil, certificates of sterilization are reportedly commonly required. And, in

countries such as Chile, many employers hire women, especially lower-skilled women, only in a temporary capacity since such workers do not qualify for maternity benefits.

The question, then, is how to safeguard working women during child-bearing without prejudicing their economic opportunities. Clearly, maternity laws which impose direct costs on employers create incentives for discrimination and non-compliance. What approaches have other countries used to minimize distortions in labor pricing caused by maternity protection laws? The most straightforward approach is to ensure maternity benefits are funded through social security systems or special public funding sources rather than by direct contributions from employers. This is not always feasible, though, where social security systems are poorly resourced or where coverage is limited. Another approach used is to modify maternity leave laws so they no longer require women to remain off work for the full period of maternity leave. This directly reduces the cost of the leave to the employer. It does, however, raise the risk that women will be pressured to return prematurely by employers.

A more innovative approach used in several European countries is to broaden laws so either parent can qualify for maternity leave and benefits. This, to some extent, helps blur the distinction between male and female employee benefits, so reducing (but obviously not eliminating) employers' propensity to associate the costs of maternity benefits directly with women workers. This approach has been adopted, for example, in Sweden. Here, the law

requires the mother to take 29 days of maternity leave following the birth of the child. The father is also accorded a short period of paternity leave. After the woman's 29 days of leave either parent may elect to take the remaining 151 days of maternity/paternity leave.

(iii) Laws on Child Care

Believing that access to adequate and convenient child care will facilitate women's labor market participation, many Latin American countries have passed laws requiring employers to provide and fully subsidize child care facilities. Preliminary assessments of these laws, however, suggest that they, too, sometimes work against women's economic interests. This is the case where the laws require employers to bear the costs of providing these services and where mandatory provision of services is linked to the number of women workers employed in the firm.

Such is the case with laws in Chile and Brazil. In Chile, the law requires employers of 20 or more female workers to provide child care facilities. In Brazil, employers with more than 30 women workers must subsidize child care. Clearly, these laws create strong incentives for employers not to hire more than a certain number of women (19 in Chile and 30 in Brazil). In other words, they encourage employers to discriminate against women. Interestingly, interviews with employers revealed that even though enforcement of these laws is often weak and the chances of being fined for non-compliance small, employers factored the costs of a fine into their overall as-

sessments of the cost of female labor. Most employers, therefore, expressed an unwillingness to hire women if it meant they then became liable for child care provision.

The fact that child care laws often seem to have adverse effects on women's employment opportunities does not, however, mean that efforts to provide such assistance should be abandoned. Rather, it means that there is a need to carefully assess the economic consequences which alternative policy measures may have on women. Child care provision in other countries, such as Colombia and Costa Rica, financed either through general payroll taxes or through a parent fee structure, have generally been more successful and do not adversely affect women's economic opportunities.

(iv) Equal Pay Provisions

All six Latin American case study countries have enacted equal pay policies, often following ratification of international Conventions promoting such policies (including the United Nation's Convention on the Elimination of All Forms of Discrimination Against Women). However, widespread anecdotal evidence, now supported by the results of the empirical studies undertaken in this study, indicates that wage discrimination persists despite the existence of these laws. What accounts for this?

Preliminary assessments in the six countries indicate that two factors partly explain why equal pay laws have had such limited effectiveness. The

first, and perhaps most important of these factors, is the structure of the laws. The laws are oftentimes too narrow in scope to have any real impact. Although this is true in many Latin American countries, equal pay laws in Honduras provide a useful illustration of this. Here, the law allows for a very narrow interpretation as to when equal pay for equal work policies may be applied; employees must work in precisely the same occupation, must work the same number of hours per week, and provide proof they are equally efficient. Clearly, these provisions make it very difficult for workers to press claims for unequal pay. In other countries, broader provisions establishing workers' rights to equal pay for similar work have generally been used more effectively by workers claiming wage discrimination.

The second factor which has clearly limited the effectiveness of equal pay laws has been the institutional weakness of enforcement agencies in most Latin American countries. These agencies, typically Labor Inspection Bureaus, are generally severely under-resourced, poorly equipped, and have not received any training on issues related to women workers. Their weakness means that little pressure is brought to bear on employers to comply with these laws. Moreover, the next level at which workers can seek redress --the labor courts-- also suffers inefficiencies and problems. Not only is it generally extremely costly for a worker to bring a case to the courts, but it is also a very slow process; in many countries four years may pass before a case is heard.

CONCLUSIONS AND RECOMMENDATIONS

Remarkably few women participate in the labor market in Latin America. Towards the end of the 1980s, only around 35 percent of women in the region at large worked for pay. Time series data from six selected countries, however, shows that very considerable changes have taken place over the decade. The proportion of women working for pay rose sharply throughout the 1980s. And, as more women have entered the labor force, they have become better represented in the higher-paying, more stable job positions in the formal sector. It also appears that women, once in the labor market, choose to remain there; they do not seem to withdraw from the labor market because of child-bearing.

The increases in women's participation rates have been matched, in five of the six countries, by very considerable increases in women's wages relative to men's. This undoubtedly results largely from the fact that women workers now generally have the same, or more, formal education than men. But, the fact that women are increasingly moving into higher-paying job positions must also partly explain the declining wage gap.

Despite these changes, women's labor force participation rates and relative pay remain inexplicably low in most Latin American countries. These countries have entered a phase of rapid economic growth in which they must increase their competitiveness on the world market. This means that they must use their available resources, par-

ticularly human resources, as effectively as possible. Presently, women are not fulfilling their real economic potential. They have high levels of formal education but, for reasons that are unclear, do not participate actively in the labor market.

Preliminary, and as yet tentative, studies in the six selected countries suggest that women's low relative pay and participation rates may be largely a consequence of "discrimination". Analysis of earnings and employment data indicates that women are very probably subject to wage "discrimination", meaning that they are paid lower wages than men even though they have the same human capital as men. Women also seem to experience some limited "discrimination" in gaining access to higher-paying employment sectors and occupations.

Implications for Policy

If gender discrimination in the labor market is indeed commonplace, there are several reasons why Latin American countries should take steps to eliminate or reduce it. First, discrimination reduces economic efficiency by arbitrarily restricting women from high productivity, high-paying jobs. This clearly prevents women from making their maximum contribution to national output. Second, the returns to public investments in women's education, which have been very significant over the past few decades, will be lowered if women are blocked from making their full economic contribution. And, third, the countries' broader equity objectives will be frustrated.

All Latin American countries have already instituted policies and laws designed to limit gender labor market discrimination. A preliminary assessment of these strategies, however, indicates that they are not achieving their intended effects. In fact, in many cases it appears they are actually adversely affecting women's employment opportunities and pay. They are often poorly conceived, are not designed to be part of a coherent strategy to combat discrimination, are implemented without sufficient consideration being given to the economic incentives they create, and are sometimes only weakly and erratically implemented. The following problems and shortcomings in countries' policies and strategies are identified in the larger study:

- Many of the labor laws governing women's employment work counter to women's economic interests. Protective laws, for instance, actually discriminate against women by limiting their employment opportunities. Other laws, particularly the maternity protection laws and some child care provision laws, work to raise the cost of female labor relative to male labor. The laws therefore establish incentives for employers to discriminate against female labor; employers can reduce operating costs by hiring male, rather than female, workers.
- Laws and policies designed to ensure women have equal opportunities and rights in the market place are largely ineffective. Their wording and application is

generally too broad and diffuse to effect any real change.

- Laws which have potential to reduce unfair labor practices and discrimination against women are not routinely enforced because of institutional weaknesses in the Labor Inspection Bureaus.

These factors suggest that there is a real need for governments to review policies and laws currently in place to reduce gender labor market discrimination. A careful and deliberate assessment of the effects of these laws should help guide the revision and modification of these policies so they work to enhance women's employment opportunities. Strong, carefully-conceived, and well-implemented policies and laws have been shown to be effective in reducing gender labor market discrimination in many industrialized countries. Public action in Latin American countries can be similarly effective if it is well-conceived and implemented effectively. The findings of the present study suggest that public policy reform would need to be based on the following actions:

- **Assessing how laws affect women's economic opportunities:** The most immediate need is for countries to systematically review the labor laws which govern women workers. This needs to be done with an eye to determining what effect they have on women's economic opportunities. Special attention should be given to assessing whether the laws reduce women's employment opportuni-

ties and whether they work to increase the female cost of labor relative to male's. This information should help governments determine which laws adversely affect women's employment opportunities and pay and provide the basis for further actions to modify or revoke such laws.

- **Ensuring laws governing women's employment are rooted in a consistent premise:** In most Latin American countries, different laws simultaneously discriminate against women, encourage the differential treatment of women on the grounds that they have different physical capabilities, and require the equal treatment of women. A disparate conglomeration of laws works to undermine commitment to ending discrimination by sending very different and often contradictory messages about what is to be categorized as discrimination. A clear and consistent approach to gender discrimination needs to be formulated in each country and laws and policies modified accordingly.
- **Taking steps to blur gender distinctions in the law:** In their present form, several laws, and particularly the maternity laws, work to raise the cost of female labor relative to male labor, thereby creating incentives for employers to discriminate against female labor. It is important that, in granting women specific benefits, the law does not require employers to bear the financial costs of

providing these benefits. It is also important that laws be reformulated so that the benefits accorded to the workers are, as far as possible, gender neutral. Laws which require employers to subsidize benefits if they hire more than a specific number of women, for example, are particularly injurious to women and should be reworked to be gender neutral.

- **Strengthening existing enforcement mechanisms:** Effective enforcement of carefully conceived laws is important if they are to have their intended effect. Improved enforcement in Latin American countries will require governments to strengthen the institutional capacity of the Labor Inspectorate systems. As a first step, the operational budgets of the Inspectorates will need to be increased. This should pave the way for better staffing compositions, improved training programs, and greater responsiveness to reported violations. Efforts should be made simultaneously to increase the accountability of Inspectorates through improved reporting procedures.

- **Identifying necessary judicial reforms:** In many countries the labor courts and tribunals are overburdened and very slow. In addition, highly formalistic procedures followed by the courts are costly and difficult for workers with less education to comprehend. These problems discourage workers from seeking reparation if their labor rights are violated. A careful review of the operation of the labor courts would help identify what steps could be taken to make them more accessible to their clients.
- **Improving workers' knowledge of their rights:** Laws will have little effect if their target population has limited knowledge of them. In many Latin American countries women suffer discrimination and job loss because they are not informed about their rights. Governments could reduce discrimination by promoting worker education about the labor law. Various groups could assist with this process--unions, interested non-government organizations, and women's ministries, for example.

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APPENDIX 1: ANALYTICAL METHODOLOGIES

The Oaxaca Decomposition

Oaxaca's (1973) technique decomposes the male/female earnings differential into two parts: a part which can be explained by gender differences in human capital endowments (E) (years of education, work experience, etc.) and a part that cannot be explained by differences in these productive characteristics (U). This second part is commonly taken to represent the "upper bound" or upper extent of "discrimination."¹

The decomposition is performed as follows:

Let the mean log wages (W) of men (M) and women (F) be represented by:

$$W_i = \beta_i' \bar{x}_i \quad i = M, F \quad (1)$$

Where:

\bar{x}_i = a vector of human capital characteristics of men and women

β = a vector of coefficients to be estimated

The Oaxaca technique then decomposes the wage differential as follows:²

$$W_M - W_F = \beta_M' (X_M - X_F) + (\beta_M - \beta_F)' X_F \quad (2)$$

(E) + (U)

Where:

X_M = a vector of average endowments for men

¹ One caveat about the Oaxaca decomposition should be noted here. The vector of mean human capital characteristics (\bar{x}_i) in the equations may not capture all skill components that influence wage levels. Any omitted explanatory variables will cause the part of the wage differential not explained by human capital differences (U) to be larger. Hence, it must be recognized that the unexplained pay gap represents an upper bound to "discrimination." The difficulties in interpreting U are well documented in Cain (1986).

² Note that the Oaxaca decomposition could be estimated in two ways:

$$\begin{aligned} B_m X_m - B_f X_f &= (B_m - B_f) X_m + B_f (X_m - X_f) \\ &= (B_m - B_f) X_f + B_m (X_m - X_f) \end{aligned}$$

where B_i $i = m, f$ are the estimated coefficients of the earnings functions and X_i $i = m, f$ are the averages of the explanatory variables in the earnings functions. There is no "best solution" to this index number problem which is frequently experienced in applied economics. The country studies in this study estimate the Oaxaca using the male means.

- X_F = a vector of average endowments for women
 E = the portion of the wage differential explained by differences in male/female human capital endowments
 U = the portion of the wage differential that is not explained by differences in human capital endowments. U is actually the difference between women's present earnings and the earnings they would receive if they were paid the same wages as men for their human capital. Hence, the higher the value of U, the greater the level of labor market "discrimination."

The Brown, Moon, and Zoloth Decomposition

The principal methodology used in the six country studies in this study is the Brown, Moon, and Zoloth Decomposition (hereafter referred to as BMZ). The important contribution of this methodology is the recognition that the different occupational distributions of male and female workers could be a significant factor explaining male/female wage differentials. It recognizes that the distribution of male and female workers across occupations/sectors might be the result of labor market "discrimination;" women may be denied access to higher paying positions because of employer prejudice or because protective labor legislation prohibits their employment in certain sectors.

The BMZ technique goes one step beyond the Oaxaca decomposition by treating average wages as weighted averages of wages for each occupation, where the weights are the employment shares of those occupations/sectors. Thus, while the Oaxaca technique decomposes aggregate wage differentials into two elements (coefficients and endowments), the BMZ does this and also identifies the impact of occupational distribution.

The BMZ methodology requires a three stage analysis. The first stage estimates the parameters of multinomial logit equations for the choice of occupation/sector by gender. The estimated coefficients from the males' sample are then used to predict the occupational/sectoral distribution that would be observed for females if females had the same occupational attainment as males, given their observed characteristics. In the second stage, wage equations are estimated by gender for each occupation/sector. In the third stage, the estimated wages and occupational/sectoral distributions are used to decompose the gender wage differentials.

It is assumed that women's observed occupational/sector attainment is somehow constrained, either by employer wage "discrimination," or unequal access to job opportunities. The BMZ decomposition method thus allows us to estimate how average wages would change if these restrictions were removed.

The procedure also assumes that, in the absence of these restrictions, women's occupational/sectoral attainment distribution would be similar to men's. Hence, BMZ calculates the expected occupational attainment of women using the multinomial logit equation estimated for men and uses the difference between the actual and expected occupational/sectoral distribution as the basis for the estimate of the portion of the wage differential that is attributed to occupational segregation.³

³ As with the Oaxaca method, there is an index number choice to be made. The choice made will have a small effect on the results.

The BMZ methodology is developed as follows:

First, let the proportion of men or women (i) working in a given occupation/sector (j) be represented by P_{ij} . Then, let the mean natural logarithm of wages of men (M) and women (F) be represented by:

$$W_{ij} = \beta_{ij}' X_{ij} \quad (1)$$

Where:

W_{ij} = the mean log wages of men or women in a given occupation/sector

X = a vector of individual characteristics

β = a vector of coefficients

The BMZ technique treats male and female average wages as a weighted average of wages in various occupations/sectors. Hence:

$$W_M - W_F = \sum_j P_{Mj} \beta_{Mj}' X_{Mj} - \sum_j \left(\beta_{Mj}' X_{Mj} \left[P_{Mj} \beta_{Fj}' X_{Fj} \right] \right) \quad (2)$$

Here, J is the portion of the wage differential due to the different occupational/sectoral distribution of male and female workers. W is the portion of the wage differential attributed to male/female wage differences within occupations/sectors (the "within sector wage differential").

It is possible to further decompose J and W into "explained" and "unexplained" portions along the lines of Oaxaca. By adding and subtracting $\sum_j \beta_{Mj}' X_{Mj} P_{Fj}$ and $\sum_j \hat{P}_{Fj} \beta_{Mj}' X_{Fj}$, expression (2) becomes:

$$\begin{aligned} W_M - W_F &= \\ &\sum_j \left(P_{Fj} \left[\beta_{Mj}' X_{Fj} - \beta_{Fj}' X_{Fj} \right] \right) + \sum_j \left(\beta_{Mj}' X_{Mj} \left[P_{Fj} - P_{Fj} \right] \right) \\ &\sum_j \left(P_{Fj} \left[\beta_{Mj}' X_{Mj} - \beta_{Mj}' X_{Fj} \right] \right) + \sum_j \left(\beta_{Mj}' X_{Mj} \left[P_{Mj} - \hat{P}_{Fj} \right] \right) \\ &= (WU) + (JU) \\ &\quad + (WE) + (JE) \end{aligned} \quad (3)$$

JE is the portion of the wage gap that is explained by the different human capital endowments of male and female workers through its effect over sector allocation. It corresponds to the "across sectors explained wage differential."

JU is the portion of the wage gap that occurs because male and female workers with the same measured human capital endowments are employed in different occupations/sectors. JU corresponds to the increase in females' wages that would occur if women had the same occupational/sectoral distribution as men. The change is calculated over males' actual wages. JU represents the "unexplained difference in occupational/sectoral allocation" or "**discrimination in occupational/sectoral allocation.**"

WE is the portion of the wage differential within occupations/sectors that is explained by differences in the human capital endowments of male and female workers. It yields the increase in female wages that would be observed if females had the same human capital endowments as males and if they were paid the same wages as males. It is calculated as the difference in average wages that would result if we used the wage equation for males but assumed that the occupational/sectoral distribution is the same as that of females workers. This is referred to as the "within sector explained wage differential."

WU is the portion of the wage differential within occupations/sectors that is not explained by differences in the human capital endowments of male and female workers. It is a weighted average of the difference between what women earn now in each occupation/sector and what women would earn in each occupation/sector if they were paid according to the same wage structure as men. WU is thus referred to as the "within sector unexplained wage differential" or "within sector wage discrimination."

Of course, to calculate WE, WU, JE, and JU, estimates of P_{Mj} , P_{Fj} , β_{Mj} and β_{Fj} are needed. That is, equations for the probability of employment in each occupation/sector and wage equations estimated within each occupation/sector must be estimated. The probability of employment in each occupation/sector is estimated using a multinomial logit model where the probability that the average male or female works in sector j is:

$$P_{ij} = \frac{e^{\beta_{ij}' X_i}}{1 + \sum_k e^{\beta_{ik}' X_i}} \quad (4)$$

Where:

- P_{ij} = the proportion of men or women in each occupation or sector
- β_{ij} = a vector of sex- and sector-specific parameters
- j = represents the occupational/sectoral categories
- X_i = a matrix of exogenous individual characteristics

The wage equations in each sector are estimated using a simple Mincer-type equation where log wages is the dependent variable.

Selectivity Issues

Much consideration was given to the potential effect sample-selection bias might have on the results of the six country studies. Sample-selection bias could be caused if the analysis were to be undertaken using non-random samples. A case in point would be an analysis of the differential returns to education for men and women which used a sample of working men and women. The sample of working women very probably is not representative of all women (working and non-working); working women are likely to be those with higher potential returns (i.e., higher education levels) and lower tastes for remaining at home. They are likely to be a self-selected sample. Similarly, it is also very possible that workers in a specific occupation/sector are a self-selected sample.

Various approaches are available to correct for selectivity bias, the most common of which is the Heckman-type correction used when estimating a multinomial logit model.⁴ The use of selectivity correction in the Brown, Moon, and Zoloth decomposition is, however, problematic because of the three-stage analysis required. To correct for selectivity bias in the different stages, a Heckman-type correction would need to be undertaken in the first stage and a set of Lee's λ_j be used in the second stage to correct for selectivity in each of the occupation/sector wage equations.⁵ To use Lee's selectivity correction the multinomial logit estimation in the first stage must pass the test for Independence of Irrelevant Alternatives (IIA), which is based on the assumption that workers decide simultaneously to enter the labor force and to work in a particular sector.⁶ This assumption may not hold true for our model, however. Instead, it may well be the case that the real selectivity effect occurs at the stage when women select into the labor force.

Tests were run in three of the country studies (Brazil, Costa Rica, and Venezuela) to determine whether selectivity corrections should be undertaken. The outcomes were clear and consistent in all three countries; selectivity corrections should not be undertaken. In all the countries, for most years, most sectors, and for both sexes, the selectivity correction term in the wage equation was not statistically significantly different from zero.⁷ Performing the IIA test on the multinomial logit equations for Costa Rica and Venezuela also pointed to the inappropriateness of selectivity corrections. The test indicated that the hypothesis of IIA should be rejected. This would mean that if the studies corrected for selection bias in the female sample they would possibly be using inconsistent estimates of the parameters of the selection equation. Moreover, when estimating the second stage equation by OLS as

$$\ln(\text{wage}_{ij}) = \gamma' Z_i + (\sigma\rho) \lambda_j + \eta$$

the coefficients for λ are not statistically different from 0 (using a simple t test). Hence, the decision was made not to correct for selectivity; an uncorrected OLS is used in all six country studies to estimate the wage equations.

⁴ The methodology for this is developed in Heckman (1979) and Lee (1983).

⁵ Using Lee's method, a selectivity correction term would be added in estimating the wage equations.

⁶ Hausman and McFadden (1984).

⁷ This conclusion was drawn from the Ordinary Least Squares (OLS) standard errors. In the presence of selectivity, the OLS standard errors are heteroskedastic and not consistently estimated. Under the null hypothesis that selectivity does not exist OLS standard errors consistently estimate the true standard errors.