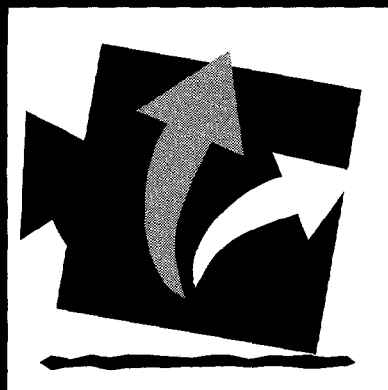


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**Women and Labor Market  
Changes in the Global  
Economy: Growth Helps,  
Inequalities Hurt and  
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# **Women and Labor Market Changes in the Global Economy: Growth Helps, Inequalities Hurt and Public Policy Matters**

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## ABSTRACT

The paper examines the level and changes in female and male participation rates, employment segregation and female relative to male wages across the world economy. It finds sufficient evidence to support the view that labor markets in developing countries are transformed relatively quickly in the sense that gender differentials in employment and pay are narrowing much faster than they did in industrialized countries. However, the paper evaluates the inefficiencies arising from persisting gender differentials in the labor market and finds them to be potentially significant. The estimates also indicate that the resulting deadweight losses are borne primarily by women while men gain mainly in relative terms -- there are no real winners from discrimination. The paper concludes that growth benefits women at large, inequalities can have significantly adverse effects on welfare, and market-based development alone can be a weak instrument for reducing inequality between the sexes. To break the vicious circle of women's low initial human capital endowments and inferior labor market outcomes compared to men's, the paper proposes greater access of girls to education and of women to training, enforceable equal pay and equal employment opportunities legislation, a taxation and benefits structure that treats reproduction as an economic activity and women as equal partners within households, and a better accounting of women's work to include invisible production.

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## I. INTRODUCTION

Today nearly 50 percent of women around the world are in the labor force, and women constitute approximately one-third of all workers. Most of the work performed by females is not paid following the traditional division of labor within the household or the nature of employment in family farms. Even when it attracts pay, women's work is valued less than men's. Typically women's earnings average around two-thirds of men's. Overall, no more than one-fifth of the world's wages accrue to women partly because women are usually engaged in low-paying jobs. Even in these jobs, women are usually paid less than men doing comparable work.

Measuring the extent of these gender differences in the labor market and their change over time can provide useful information on how human resources are used and how efficiency can increase, poverty can be reduced and welfare (of women and men) increase. The objective of this paper is to address these two issues. The paper examines first the level and changes in female and male participation rates, employment segregation and female relative to male wages across the world economy and, second, identifies emerging policy issues.

At the empirical level, the paper finds enough evidence to support the view that labor markets in developing countries are transformed relatively quickly in the sense that gender differentials in employment and pay are narrowing much faster than they did in industrialized countries. Let us look at an example of the speed at which women's labor market characteristics changed in industrialized countries. In Britain, the first country where feudalism started being phased out more than two centuries ago, the first censuses of the mid-19th century showed that nearly 30 percent of women were "economically active". This was the same figure as in the 1951 census with surprisingly little inter-censal variation but, in only thirty years after 1950, the labor force participation rate of British women nearly doubled. In terms of employment type, the biggest employer of women was domestic service until the inter-war years. Then domestic service was replaced by unskilled/junior occupations but, today, the share of women in other occupational groups has increased significantly especially in managerial jobs and in the professions. Or, consider earnings: the first British survey on wages (1886), the sporadic enumerations in the first half of the 20th century and the post-war annual surveys show that women's pay remained remarkably stable at around two-thirds of male pay till 1970. Then, female earnings increased to three-quarters of men's earnings in a period of less than 10 years. The British experience can be generalized for other industrialized countries. Compared to this century-long scenario for industrialized countries, the evidence in this paper suggests that in many developing countries significant changes have taken place within the last few decades.

From a policy perspective, the analysis of the evidence suggests that there is significant scope for further improvement in women's labor market outcomes in developing countries. These, if achieved, can lead to output gains and a reduction in poverty in general and an improvement in women's welfare in particular. The reasons for gender differences in the labor market and the paper's estimates of the potential welfare gains associated with the elimination of these differences leads to the conclusion is that inequalities hurt and public policy matters. The paper suggests a series of policies that can be useful in this respect.

The next four sections are empirical and present an aggregate view of participation rates in the labor force (Section II), examine employment segregation and female earnings (Sections III and IV), and answer the

question "what if there were no gender differences in the labor market?" (Section V). The implications of the empirical findings are discussed next (Section VI) and a review of emerging policies last (Section VII).

## II. LABOR FORCE PARTICIPATION RATES

As a general rule most men are in the labor force during prime age. This results in high male participation rates with little variance across countries and world regions. By comparison, female participation rates are diverse both across countries and also over time (Table 1).

Over time male participation rates have shown some tendency to decline mainly because of increasing education enrollments among the young and the availability of pensions for older workers. In contrast, the female participation rate tends to increase over time. On a global basis during the last three-four decades, the working age population and the male labor force increased by nearly two percent per annum (Table 2). The female labor force increased by nearly twice as much (3.5 percent per annum). Today, nearly half of women aged 20-59 are in the labor force compared to only one-third in the 1950s. The gender gap in participation narrowed significantly.

Some of the increase in female participation rates over time may be in part a statistical artifact, that is, the result of changing definitions of work. For example, in Angola, Mozambique and Guinea-Bissau the participation rates were surprisingly low in the 1960s (7, 7 and 1 percent respectively) compared much higher rates in other parts of Africa (eg 67 percent in Botswana, 73 percent in Zaire and 81 percent in Dahomey; Nyberg, 1993). The initially low female participation rate was the result of statistical conventions applied under Portuguese rule that largely excluded unpaid and family work (Durand, 1975) as was also the "growth" that followed independence (for example, the "data" show that in Mozambique the growth rate in female participation was nearly 10 percent per annum between the 1960 and the 1980s).

Also, according to the Dominican census of 1981 rural female labor force participation was 21 percent but a special study conducted three years later suggested a figure of 84 percent. The difference was due to the exclusion from the census estimates of activities such as garden cultivation and animal care (Pou, 1987). In India, narrow and broad definitions of what constitute work result in estimates of participation rates of 13 percent and 88 percent respectively (ILO, 1994: Michel Fromont: *World of Work: Fighting for Equality on All Fronts*). According to the Turkish census of 1980 there were 40,000 carpet weavers but estimates based on annual carpet production and number of looms in operation bring the figure of carpet weavers to around half a million most of them women (Berik, 1987).

**Table 1**

**Population, Labor Force and Participation Rates for World Regions**

Regions	N	Population (Age 20-59)		Labor Force ( Age 20-59)				Participation Rates			
		Earliest Census (,000)	Latest Census (,000)	Earliest Census		Latest Census		Earliest Census		Latest Census	
				Male (,000)	Female (,000)	Male (,000)	Female (,000)	Male	Female	Male	Female
East & Southern Africa	8	14,724	22,145	7,015	2,002	9,702	4,812	92.3	35.3	89.7	44.8
West Africa	6	8,199	10,370	3,786	2,175	4,765	2,997	91.3	60.7	89.7	57.1
East Asia & Pacific	20	128,837	276,355	58,504	27,799	126,316	74,960	92.6	35.4	88.9	50.9
South Asia	4	262,789	341,669	125,306	54,692	166,793	54,273	94.4	39.0	91.3	29.2
East. & Central Europe	9	186,658	245,462	75,978	67,036	109,888	99,993	93.5	61.9	90.4	76.0
Rest of Europe	26	176,958	219,164	80,399	35,612	99,551	59,960	95.0	36.6	90.4	53.5
Middle East	8	16,050	32,697	7,764	869	15,421	2,155	93.3	11.7	91.5	22.8
North Africa	5	22,217	41,883	10,293	1,630	19,217	2,789	92.5	N.A.	91.1	14.1
Americas	38	171,110	289,804	78,483	24,024	127,631	68,495	94.1	32.7	89.9	46.8
<b>Total</b>	124	987,545	1,479,548	447,529	215,838	679,283	370,434	93.7	35.9	90.1	47.9

Source: ILO data basis using the earliest (1950s/1960s) and latest (1980s/1990s) information for each country.

**Table 2**  
**Annual Growth (Percent) in Labor Force and Participation Rates (Population aged 20-59)**  
**Between Earliest (1950s/1960) and Latest Censuses (1980s/1990s)**

	Population	Labor Force			Participation Rates		
		Male	Female	F/M	Male	Female	F/M
East & South Asia	2.57	2.50	3.98	1.45	-0.12	1.42	1.54
West Africa	2.06	2.02	2.18	0.16	-0.10	0.18	0.28
East Asia & Pacific	2.33	2.11	4.17	2.01	-0.16	1.73	1.88
South Asia	2.00	1.82	-0.37	-2.15	-0.13	-2.36	-2.23
East/Central Europe	0.71	0.80	1.20	0.40	-0.12	0.67	0.79
Rest of Europe	0.88	0.82	2.19	1.37	-0.20	1.44	1.64
Middle East	4.75	4.71	9.36	4.34	-0.08	4.29	4.37
North Africa	2.48	2.62	3.82	1.16	-0.03	1.49	1.53
Americas	2.08	1.90	3.84	1.91	-0.21	1.74	1.96
Total	1.99	1.88	3.51	1.59	-0.16	1.53	1.69

Source: ILO Data Base: Census Data

The sensitivity of what constitutes women's work, in the sense that the dichotomy between work and non-work is to a large extent socially constructed, can be best seen paradoxically with reference to Sweden where "today equality between women and men is the norm" (Nyberg, 1993). Sweden provides a striking example with respect to the measurement of female work that ran well into the 1960s. As Table 3 indicates, farm-wives' participation was initially excluded from the measurement of the labor force (only 751 such women were included in the statistics against nearly a quarter-of-a-million married male farmers in 1930). Apart from the perception that women's work was seen as an undesirable family necessity and that the husband should be able to support a family, the loose labor market conditions at the time aggravated women's prospects in the labor market: during the depression in the 1930s the parliament debated laws to restrict women's right to work (Lofstrom, 1981). The situation continued to be very much the same till the end of World War II when there were again as many married male farmers as in 1930 but very few women. In practice, nearly zero percent of male farmers lived with a wife who worked.

The situation changed somewhat in the censuses of the 1950 and in 1960. In the earlier date women's work in agricultural households counted only if the work was the responsibility of another member of the household (this referred in effect to grown-up daughters or domestic workers). In 1960 the definition expanded to include those who spent half of the normal working time on work. The increase in the share of male farmers with working wives was significant (it more than doubled, from 3 percent to 8 percent) but still



defied the emerging definitions of work. A special investigation was called and the 1965 census expanded the definition of work to include agricultural activities (such as caring of animals, milking and so on). The "increase" in the number of working women was dramatic, from 8 percent to 52 percent. Today (1992) information from labor surveys shows that 84 percent of women with children under the age of 7 years are in the labor force. The figure for men, also with under age children, is 95 percent.

**Table 3**  
**Working Farmers in Sweden, Various Censuses**

	1930	1945	1950	1960	1965
Female	751	151	5217	10387	58283
Male	221777	212594	195764	135263	104823
% of farmers with working wives	0	0	3	8	56
Source: Adapted from Nyberg (1989)					

Sources: Lofstrom, 1981; Nyberg, 1993.

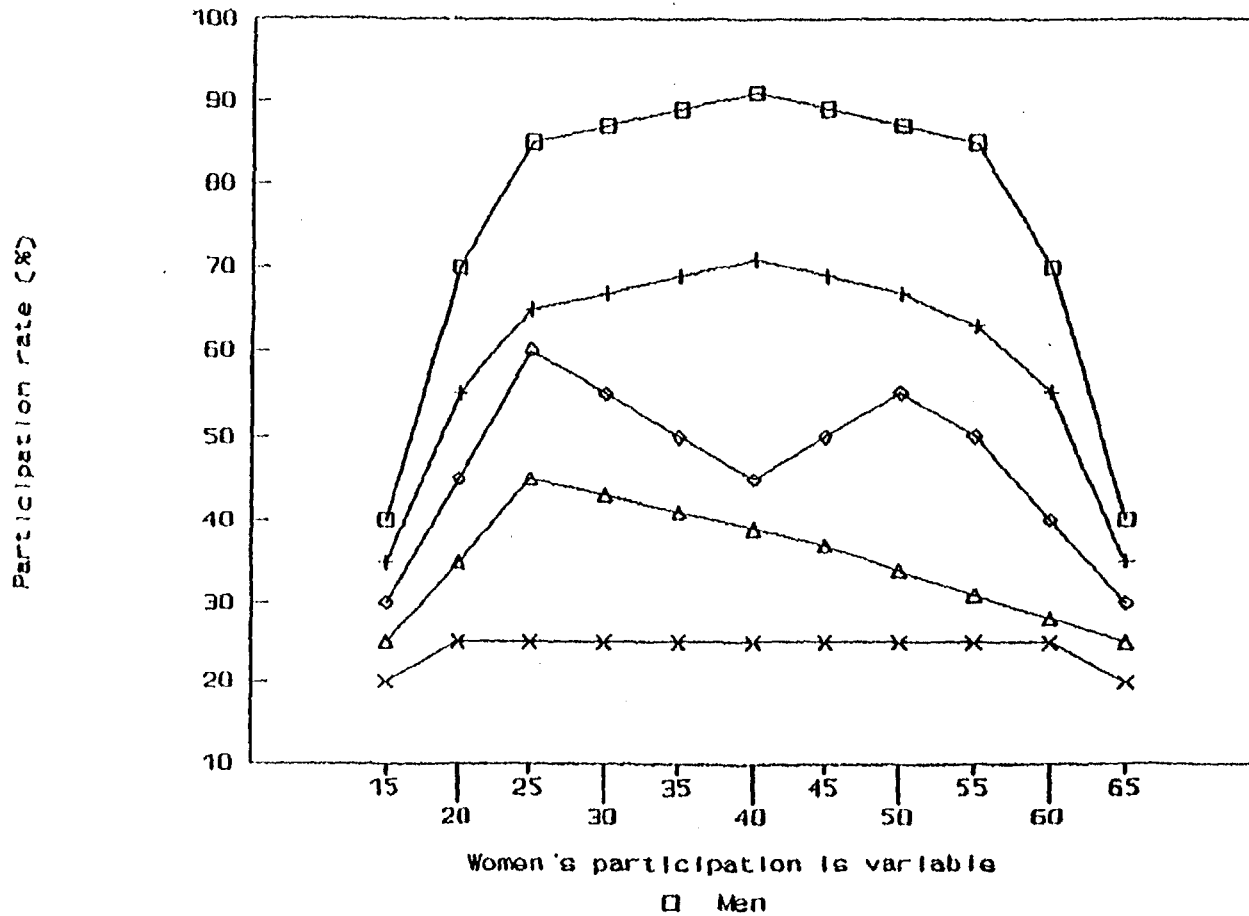
Setting aside statistical effects, significant variation in the female participation rates arises from the interplay of demographic and social factors and women's family responsibilities. This is the reason why conventional econometric analysis often fails to explain much of the cross-country variation in the level of female participation rates although it may well include a priori sensible determinants of participation such as education, per capita GDP, sectoral composition of output and so on (Behrman and Zhang, 1994). To the extent that non-economic determinants are excluded from the analysis, a lot of the variation remains unexplained. The powerful effects of non-economic factors can be seen from the fact that the single most significant predictor of female labor force participation across countries is religion: religion alone can explain 35 percent of the cross-country variation in female participation rates over time (Psacharopoulos and Tzannatos, 1991, Table A-1).

For these reasons, women's age-participation profiles follow different patterns (Figure 1). In broad terms, these patterns can be grouped into three. The first one is relatively flat across age. This can be associated with high or low participation. Countries with relatively high female participation rates are the Philippines, Thailand, Malaysia, Indonesia and many African countries where the engagement of women in agriculture, domestic services, petty trade and handicrafts places relatively little pressure on child care and can be reconciled with other domestic activities. On the other hand, countries where female participation is universally low are Nepal, Bangladesh, Sri Lanka, India and Pakistan where attitudes are not conducive to women working outside the family (Lim, 1993).

The second type of age-participation profile is single-peaked. The peak occurs at a relative young age usually before family formation and suggests that women, once married, drop out of the labor force and do not return even after children start attending school and the need for childcare becomes somewhat less pressing. It is still found even in some advanced countries, such as Ireland, and also in Singapore and Hong Kong where respectively Catholicism and Chinese-Confucianism beliefs support the view that the

FIGURE 1

Stylized Participation Rates by Age



prime responsibility of married women is within the family (Horton, 1994). This is also the pattern in many Catholic Latin American countries.

The third type of age-participation profile is the double-peaked. The first peak occurs prior to marriage. Upon marriage and childbearing women drop out of the labor force but return as children grow older. Korea and Japan fit this pattern as well as rural Malaysia.

Despite the effects of demographic and cultural effects on the female participation rates over time, economic effects are becoming more significant over time. Initially, female participation rates may decline due to declining employment opportunities, existence of non-trivial adjustment costs and income effects. Declining employment opportunities arise from the movement of the locus of production away from the household, agriculture/family farm and small business (such as handicrafts) to the wider market. Adjustment costs arise from the need to learn a new trade or to emigrate. And as incomes increase with growth, there is less pressure for women to contribute to family monetary incomes. The female participation rates can later recover when the proportional contribution of additional income to family welfare declines as GDP per capita increases. This weakens the negative income effect. Female participation can increase due to a positive substitution effect when female wages start rising (Mincer, 1964; Ashenfelter and Layard, 1984; Goldin, 1990). This stylized exposition describes much of the process underlying changes in female participation rates over periods of growth.

This broad review of participation has many implications that are pursued in the next sections but, for the time being, let us conclude this section iterating that female participation rates in developing countries are rising relatively fast, and this is only in part due to a better statistical practices for measuring women's work.

### III. EMPLOYMENT SEGREGATION

When women are in the labor force, they usually perform different tasks and work in different sectors than men. The conditions of their employment are on average inferior to those faced by men and are often "atypical" (i.e., part-time, temporary, or casual work, work in the home and subcontracting). In terms of occupations, for example, nearly two-thirds of women in manufacturing are categorized as laborers, operators and production workers while only a few can be found in the administrative and managerial positions predominantly held by men. Women workers are usually employed in a limited number of industrial sectors: more than two-thirds of the global labor force in garment production is female—accounting for almost one-fifth of the total female labor force in manufacturing. With respect to employment status, the majority of family workers are female and, it may be added, often unpaid.

These patterns suggest that women and men in the labor market are employed in different sectors and that, even when they are in the same sector, they carry out different tasks at different levels of responsibilities. This phenomenon, *sex segregation* in the labor force, makes female and male workers work in "compartmentalized" activities that usually lead to different rewards and different career opportunities even though workers may have comparable labor market attributes.

From the perspective of this paper, the interest is in changes in segregation over time. Sex segregation is difficult to measure, and existing statistics do not represent adequately the complex economic and social processes that generate it. However, a commonly used statistic is the Duncan index (Duncan and Duncan, 1955), an index of employment *dissimilarity* between any two groups of workers. In the case of women and men the Duncan index,  $D$ , takes the form

$$D = \frac{1}{2} \sum_{i=1}^N |f_i - m_i|$$

where  $i = 1, 2, \dots, N$  is the total number of sectors of interest (for example, industries or occupations),  $f_i$  and  $m_i$  are the sectoral employment ratios of women and men to their respective labor force, and the summation refers to the absolute differences between women's and men's ratios within each sector. The minimum value of the index is zero; it occurs when women and men have identical employment distributions across sectors, i.e., when the percentage of women in each sector is the same as the percentage of women in total employment. The maximum value, unity, occurs when there is complete dissimilarity (no women and men work in the same sector).

A worldwide examination of data shows that for all types of workers across the world employment dissimilarity by industry as measured by the Duncan index declined on average from 0.35 to 0.31 in the period between the 1950s/1960s and the 1980s/1990s (Table 4). But employment dissimilarity among employees only, albeit higher initially (0.40 in the earlier period), declined more quickly and currently stands at the same level as the dissimilarity for the whole labor force (0.31).

Similarly, occupational dissimilarity among all workers registered practically no change between the two periods under consideration (0.39 and 0.38), but the dissimilarity among employees declined from 0.44 to 0.40 (Table 5). One explanation for the more rapid decline in segregation among employees compared with all workers may be that market forces are less discriminating against women than non-economic factors: It may be more difficult for women to break sex stereotypes in self-employment and family work that is undertaken more often at the village or community level.

Taking "Rest of Europe" as representative of the group of industrialized countries, the decline in segregation has generally been much slower than in the developing regions in general. As in the case of participation, changes in developing countries are taking place at a relatively fast rate.

**Table 4**  
**Employment Dissimilarity (Duncan Index) by Industry**  
**(Unweighted Regional Averages; N = no. of countries)**

ALL WORKERS <sup>1</sup>

	N	Early Duncan	Late Duncan
Africa (excl. North Africa)	4	0.2772	0.2509
East Asia & Pacific	9	0.2723	0.2182
South Asia	3	0.1487	0.2041
Eastern & Central Europe	5	0.2105	0.2604
Rest of Europe	15	0.3448	0.3028
Middle East and North Africa	6	0.3761	0.3995
Americas	19	0.4519	0.3656
Total	61	0.3458	0.3058

EMPLOYEES ONLY <sup>2</sup>

	N	Early Duncan	Late Duncan
Africa (excl. North Africa)	4	0.4559	0.3003
East Asia & Pacific	9	0.3368	0.2332
South Asia	3	0.2827	0.2677
Eastern & Central Europe	5	0.3234	0.3141
Rest of Europe	15	0.3711	0.3216
Middle East and North Africa	6	0.4250	0.3781
Americas	19	0.4602	0.3258
Total	61	0.3948	0.3097

1 Wage employment, self-employment and family work

2 Wage employment only

3 The calculation of the index is based on 7 industries: agriculture, mining, manufacturing, construction, utilities, transport and services as tabulated by ILO.

Sources: ILO (International Labour Organization) (1990) *Yearbook of Labour Statistics: Retrospective Edition on Population Censuses 1945-1989*. Geneva: ILO.

**Table 5**  
**Employment Dissimilarity (Duncan Statistic) by Occupation**  
**(Unweighted Regional Averages; N = no. of countries)**

ALL WORKERS <sup>1</sup>

	N	Early Duncan	Late Duncan
West Africa	2	0.2258	0.2301
East Asia & Pacific	9	0.3169	0.3190
South Asia	2	0.2011	0.1958
Eastern & Central Europe	1	0.2655	0.2623
Rest of Europe	13	0.4068	0.4022
Middle East and North Africa	5	0.3566	0.4623
Americas	11	0.5191	0.4469
Total	45	0.3860	0.3804

EMPLOYEES ONLY <sup>2</sup>

	N	Early Duncan	Late Duncan
West Africa	2	0.3807	0.2909
East Asia & Pacific	9	0.4052	0.3257
South Asia	2	0.4783	0.3528
Eastern & Central Europe	1	0.2548	0.2714
Rest of Europe	13	0.4254	0.4165
Middle East and North Africa	5	0.4072	0.4926
Americas	11	0.5442	0.4553
Total	45	0.4421	0.4030

1 Wage employment, self-employment and family work

2 Wage employment only

3 The calculation of the index is based on 7 occupations: professional, administrative, clerical, sales, services, farmer and production.

Sources: See sources to Table 4

#### IV. FEMALE LABOR EARNINGS

Though there are many developing countries for which information on female relative earnings exists, in only a few does information extend to more than one points in time. This limits considerably the number of countries for which changes in relative earnings can be observed. Countries for which such information exists are presented Table 6.

**Table 6**

**Female Relative Earnings in Selected Countries and Their Change Over Time  
(percent)**

Country	Year	F/M wage	Year	F/M wage	Annual Change
Cote d' Ivoire	1985	75.7	1988	81.4	2.4
Brazil	1981	50.2	1990	53.6	0.7
Colombia	1984	67.2	1990	70.2	0.7
Philippines	1978	70.9	1988	80.0	1.2
Thailand	1980	73.5	1990	79.8	0.8
Indonesia	1986	55.6	1992	60.0	1.3
Chile	1980	68.0	1987	71.0	0.6
Costa Rica	1980	90.0	1989	97.0	0.8
Honduras	1986	65.0	1990	68.0	1.1
Malaysia	1973	56.8	1984	69.3	1.8
Korea	1984	41.9	1988	51.0	5.0
Venezuela	1981	87.0	1990	93.0	0.7

Note: Relative earnings are not usually comparable between countries

Sources: Tzannatos (1995)

There is significant cross-country variation in the level of female relative earnings. This can be explained by different definitions, survey designs, sectoral composition of employment, whether they refer to the urban sector, non-agricultural employment or the whole economy and so on. Explaining these differences is not, however, the objective of this paper. For current purposes the table shows that female relative earnings seem to be increasing over time, at least they did so during the period under consideration. Though it cannot be said whether female relative earnings will continue to rise, the current trend is positive and seems to suggest an average increase of 1 percent per annum.

Understanding the reasons why female earnings are increasing over time is important. For example, they may rise because the number of women workers in high-pay jobs has increased, or because the gender pay gap within jobs has declined, or because men's wages are decreasing. This can be examined formally

$$R = \frac{W^f}{W^m} = \frac{\sum l_i W_i^f}{W^m} = \sum l_i \frac{W_i^f}{W_i^m} \frac{W_i^m}{W^m} \quad (2)$$

through the equation

where R is the economywide ratio of average female wage ( $W^f$ ) to the average male wage ( $W^m$ ),  $l_i$  is the ratio of women's employment in sector  $i$  to total female employment, and  $W_i^f$  and  $W_i^m$  are respectively female and male wages in sector  $i$ . The level of the economywide female relative wage does, therefore, depend on the employment distribution of women workers ( $l_i$ ), the relative wages within sectors ( $W_i^f/W_i^m$ ), and the level of male wages across sectors (as indicated by the ratio  $W_i^m/W^m$ ).

The change in economywide female relative earnings would be approximately equal to the sum of changes in the three right-hand side factors in equation 2. Thus the economywide change in female relative earnings can be "decomposed" into three effects:

- an employment effect, that shows the importance of changes in the sectoral employment of women workers;
- a female wage effect, that reflects changes in gender pay differentials within sectors (an "equal pay-type" effect), and
- a structural wage effect, that reveals the effect of changes in male earnings.

This decomposition can apply to only six of the countries shown in Table 6 due to paucity of disaggregated data. The results of the decomposition based on industrial data are shown in Table 7. As a general rule, the change in female relative wages has been primarily due to the "equal pay type" effect (Column 2). In all cases (except Thailand) this effect is the single most important one and always positive (in the case of Thailand, it is likely that some of the large employment effect is due to statistical reasons as the Labor Force Surveys are often affected by significant changes in the sample size).

The relative employment effect (Column 1) and wage structure effect (Column 3) were opposite in sign with the employment effect being slightly greater than the wage structure effect (the exceptions are Indonesia and Cote d' Ivoire). This fact that can be taken to suggest that, indeed, when female employment increases, this can have a negative effect on male wages. This is what is largely indicated by the neologisms "feminization", "casualization", "informalization" and "flexibilization". However, at face value, the results suggest that the adverse reaction of male wages is generally neither sizable nor uniform.



**Table 7**  
**Percentage Points Increase in Female Relative Earnings due to Changes in**

Country	Female Employment	Female wages	Wage Structure
	(1)	(2)	(3)
Cote d' Ivoire (4)	-0.1	7.0	-0.5
Brazil (5)	0.4	5.2	-2.2
Colombia (9)	0.2	3.1	-0.1
Philippines (9)	-0.5	10.2	0.2
Thailand (8)	13.5	0.0	-8.1
Indonesia (4)	1.5	1.9	0.9

Note: Number of industries in parentheses;

Sources: Tzannatos (1995).

The last point is revisited in the next section, that is, although in most cases changes in female sectoral employment were accompanied by opposite changes in male sectoral wages, the changes in male wages were in general small indicating that women's gains do not result in a proportionate decline in men's wages. For the time being, one can conclude that female relative earnings increased because of an equal-pay type effect (women are now paid more like men than before).

#### V. GENDER DIFFERENCES AND EFFICIENCY LOSSES

If gender differences in the labor market are solely the result of discrimination and women are excluded, for example, from some occupations and crowded in others, then, by virtue of the distorted relative labor supply across occupations, pay would be higher in male-dominated occupations and lower in female-dominated occupations than it would be under nondiscriminatory conditions. Another effect of segregation would be a welfare loss (reduction in total output) arising from the misallocation of the labor force: in plain terms, competent female workers are excluded from the most productive activities they can do which are then undertaken by less able (compared to women) men.

A method to evaluate the wage and output effects under conditions of discrimination has been proposed in the context of racial segregation (Bergmann, 1971). This method can be extended to apply in a gender context (Tzannatos, 1988) on the assumption that women and men have the same supply characteristics (human capital and preferences). The exercise proceeds in two steps. First, it estimates output under current conditions, that is, when there are occupational and wage differences within industries. Second, it re-estimates output assuming that these inter-industry differentials are eliminated. The difference between these two estimates of output provide an indication of the potential (maximum) welfare gains that could be achieved, if women had the same characteristics and preferences as men, and they are treated equally in the labor market and family.

Table 8					
Effects of Elimination of Occupational Segregation					
Country	Year	% change in			Reallocations (% of labor force who would have to change occupation to achieve gender wage equality)
		Female wages	Male wages	Output (GDP)	
Argentina	1987	38	-9	4	25
Bolivia	1989	50	-9	6	28
Brazil	1980	96	-8	9	23
Chile	1987	41	-6	3	18
Colombia	1988	46	-8	5	20
Costa Rica	1989	35	-6	3	18
Ecuador	1966	59	-13	9	37
Guatemala	1989	25	-6	2	14
Jamaica	1989	61	-8	8	28
Uruguay	1989	30	-8	3	16
Venezuela	1987	24	-6	2	12

Source: Adapted from Z. Tzannatos (1991), "Potential Gains from the Elimination of Labor Market Differentials" in *Women's Employment and Pay in Latin America*, Report to the Latin American and Caribbean Technical Department. Washington DC: The World Bank.

The results of this exercise are therefore indicative of what can happen in the long run when (1) women and men are equally endowed with human capital, (2) there is no employer discrimination, (3) family constraints are no more binding upon women than men, and (4) the gender specific effects of social norms and other institutional factors have withered away. Though, obviously, subject to a series of qualifications, the simulations suggest that women's wages can increase significantly at practically little loss in male wages (Table 8, columns 1 and 2). Part of the explanation rests on the fact that there can be significant output gains (column 3). In other words, a reduction in segregation is not a purely redistributive issue; the "size of the pie" increases with women claiming a bigger share. In fact, given

that the economy grows over time, men's wages need not decline in absolute terms--a point worth noting because with zero-sum gains the losers (in this case men) may devise strategies for forestalling equality. This phenomenon has been emphasized in political economy and is known as "the reversal rest" (those losing from economic change can bribe the winners and forestall the move toward a Pareto-efficient outcome). So, a reduction in equality can have beneficial effects on women and men. However, a point that need be mentioned is may take considerable time before equality is achieved: Column 4 indicates the percentage of the labor force that would have to be reshuffled to achieve the gains estimated in the current exercise. The mere size of labor reallocations (the shift of women to men's jobs and vice versa) is not something that can be achieved in the short-run given that the main avenue for changes of existing labor market patterns are through annual *flows* to the labor force, and these are usually only a fraction of the labor force *stock*.

In conclusion, gender differences, to the extent that they are the result of discrimination, can incur significant efficiency losses that hurt women and benefit men only in relative (to women) terms. The economy suffers a deadweight loss that is primarily borne by women.

## VI. QUALIFICATIONS

The previous sections examined the pattern and trends in participation rates, employment segregation and relative wages and provided estimates of effects on wages and welfare gains if gender differentials were eliminated. On the basis of the indicators used, the analysis in this paper suggests that women in developing countries seem to hold well their position labor market, especially as employees. In many cases the risk of poverty and the well-being of a woman depends significantly on whether she has direct access to income, not just access mediated through her husband or other male family member(s). Better use of women's potential in the market results in greater efficiency at the macro level. At an individual level, women's bargaining power in the household increases when women's work is directly remunerated. Children's welfare also increases: there are substantial differences in how women and men within the household spend their incomes, and children's nutritional status tends to be more linked to the mother's earnings than the father's (Kumar, 1978). For female headed households with no additional adult support, the link is even stronger. Such households often constitute a sizable percentage of the population, often as much as one-fifth percent of all households (Buvinic, Lycette and McGreevy, 1983; Safilios-Rothchild and Mahmud, 1989). Thus, the importance of an improvement in women workers' labor market outcomes cannot be underrated and, in fact, our efficiency gains estimates may be lower than in practice as they are based only on individual workers and labor market changes, and do not take household spillover effects into account.

However, the paper's findings can be subject to the definitions used. In addition, the findings should not be taken to imply that all gender differences are necessarily harmful or that equality policies will eliminated them completely.

Consider, for example, the fact that the degree of sex segregation as measured by the Duncan index, has been declining over time. However, employment differences may arise in new forms that the index fails to capture. The introduction of new technologies usually changes not only gender employment patterns but also social relations among the people. The division of labor by sex may get reconstituted with shifts in production methods and technology and can redistribute power, resources and authority in ways that keep women in subordinate positions. In this shift a new division of labor by sex may become more

disadvantageous to women as, for example, has been argued in the case of rural Java (Wahyana, 1994). These changes may not show up in numerical measures of segregation that defeminize female jobs (for example, nurses, telephone operators, flight attendants) and feminize some formerly male jobs (for example, bank tellers, teachers). New forms of segregation can occur with women being predominantly employed in part-time work with high turnover rates, short job tenures, the lowest incidence of unsocial hours and low trade union membership. These forms of segregation are typical of workers with a weak commitment to employment careers or strong commitment to family responsibilities that lie outside the market, and such workers are usually women.

Alternatively, some evidence points to the fact that an increase in segregation is not necessarily synonymous with poorer opportunities or inferior labor market outcomes for women. In Puerto Rico, segregation patterns have been found to be consistent with median annual earnings of women that are quite close to those of men (Presser and Kishor, 1991). An explanation for this is that women are offered more opportunities for upward mobility when production is organized around strictly segregated occupations than when women and men work together. Under such an arrangement, women will be required to supervise other women and get better jobs than they would otherwise have, while in male occupations some men simply have to accept low status/pay jobs. On similar grounds, horizontal desegregation does not unambiguously represent an improvement in the labor market position of women: the feminization of previously male dominated jobs can be associated with deteriorating employment conditions due to the increase in *total* labor supply that in turn depresses wages for both women and men in those jobs. This may also lead to an increase in vertical segregation if men move up to top positions. Also, the empirical results presented in Section IV suggest that despite increases in segregation during the years under consideration in five of the countries examined (that is, except Brazil), women's earnings still increased relative to men.

Similarly, the analysis of increasing relative earnings showed that women are now paid more like men than before (the "equal-pay type effect was dominant). However, we do not know whether this is due to declining wage discrimination or because the educational attainment of women has increased. To answer this question requires additional research (and richer data).

Finally, the paper did not examine whether changes in women wages and employment have taken place while their work in the invisible economy has been constant or has not decrease to fully compensate for their greater participation in the monetized economy. In addition, if the distributional "rules" for women's and men's time allocations and costs and benefits within the household are not adjusting fast enough, the fruits from women's work may translate into increases in other household members' welfare with little net gain for them. However, as fertility declines and productivity at home rises (assuming an increase in women's education and improvements in infrastructure), the labor market changes reported in this paper may leave women with net gains. In addition, since women who earn income have greater control on how to spend it (though many working women still turn their earnings to their husbands), and since complementary research has shown that gender differentials in the wage labor market tend to decline faster over time than those in the informal/invisible economy, women in developing countries may not have to wait for two centuries before they achieve a position comparable to that of their counterparts in today's industrialized economies. Of course, even such an achievement may not necessarily imply equality.

## VII. POLICY ISSUES

The discussion on participation has many implications of which the following two stand out. First, measuring correctly women's work is not only good statistics but good economics: in general, we know little about whether the increase in female participation in developing countries has come at the (invisible) cost of longer work hours at home and inferior quality of child care. The conceptual battle for a better accounting for women's work has been largely won (Beneria, 1992) but the operationalization of these concepts still requires more resources and emphasis to be paid on the collection of data that capture unpaid work better and limit the influence cultural norms that restrict the admittance of the fact that a woman is working.

Second, women's longer attachment to the labor force (in the sense of rising participation rates) increases their experience and skills and makes them "persistent" (compared to casual or secondary) workers. This increases the incentives for employers to offer training to female workers and enhances women's career opportunities and results in greater earnings. This in turn increases the incentives for families to invest in girl's education. The role of education is important for women to be able to take advantage of new employment opportunities and increase their incomes. In a cross-country context it was estimated that a one-year increase in female education increases female participation by three years (Psacharopoulos and Tzannatos, 1991) and microeconomic evidence strongly confirms that the positive effect of education on the female participation in Africa, Latin America and Asia.

The cross-country evidence reviewed in this paper confirms that economic development contributes to a reduction of employment segregation, a fact that is increasingly acknowledged in the literature (Glyn, 1992). As in the case of labor force participation, education has enabled the female employment distribution to become more equal with respect to the male employment distribution. Gains in women's education augment their productivity and enable them to compete more effectively with men in the labor market. Higher levels of education are also associated with higher levels of labor force participation, which in turn provides women with greater work experience and skills and reduces statistical discrimination as employers' expectations about women's longevity in the labor force become more optimistic. In turn, this justifies more in-service training for women. For developing countries the elimination of gender differences in education is, therefore, a priority policy area.

Additional measures can be desirable. When sex segregation reflects the interaction of constrained choices of women resulting from gender-biased demands for child-care, exclusion strategies of male workers, discrimination by employers, and legislation, it becomes a clear policy issue. This is because it entails both inequality in the treatment of women and men and inefficient processes in the labor market, which subsequently result in the underutilization of women's labor (inefficiency), lower wages for women (inequality), lower levels of output (welfare loss) and social injustice (inequity). Policies can reduce impediments to women's employment and enable women to exercise their own choices on the same basis as men. When segregation is simply the result of a legal exclusion of women from certain activities (for example, as a result of protective legislation), the abolition of such provisions when they are no longer justified can be effective in reducing segregation.

In cases of employer discrimination, legislation that requires employers to treat women and men equally with respect to hiring, training, promotions decisions and other employment practices can be introduced. Employment discrimination that leads to segregation is still practiced in many countries and is not illegal.

Such discrimination can take the form of differential hiring, training, promotions and firings for women and men. In some countries employers make sterilization certificates, pregnancy tests, marital status and other screening practices a condition for employing women in production. In others discrimination can arise directly or indirectly from legal provisions such as gender specific clauses in family, inheritance, taxation, social insurance and other laws. These practices give rise to economy-wide inefficiency and a feedback effect that influences worker and family expectations at the micro level. The economy suffers from static inefficiency (lower levels of current output) as well as from dynamic inefficiency in the form of underinvestment in women's human capital and lower future rates of growth. Removing impediments to women's work is an increasingly pressing issue: as female labor force participation rates rise, a greater proportion of the labor force is affected, and efficiency losses from the underutilization of women's labor increase.

Public policies targeting the labor market can have an effect, but should not focus exclusively on labor legislation. Discrimination prior to entry in the labor market or within the family is an important determinant of gender differences in the labor market. There is often an implicit acceptance and a *de jure* enforcement that it is women who bear or should bear the responsibility of children. Women's employment patterns are shaped by norms or legislation that evolve around the notion that women can work while bringing up their children. Public policy can address gender biases within the household by encouraging men to share equally with women the responsibility for childrearing. Absent parents should be obliged to pay child support. Maternal leave beyond what is required for a woman to recuperate after she gives birth has already been replaced by parental leave open to both parents in some countries. Such legislation needs to be supported by changes in the tax system to ensure equal treatment of individuals within the household. The marginal tax rate on earnings of additional workers in the household should be low enough to avoid creating a disincentive to "secondary" workers, who are usually women.

In short, public policy can affect women in many ways. Family law can change the responsibilities or choices of married women. Labor law affects the labor supply of and labor demand for women and men.

Social insurance and social assistance can affect the family through the provision of benefits and the economy through the way they are financed. Labor market interventions are therefore only one policy instrument and their design and effects should be examined together with other social policies. Below, the paper discusses in some detail a series of interventions and offers subjective evaluations of them.

### Benefits

Various benefits (such as cash transfers, food benefits and health care) have different effects on work, marital and reproductive behavior (Schultz, 1994). The distributional effects of benefits are complex as are also the efficiency issues associated with possible disincentives they create and the way they are financed.

The effects of benefits on work incentives and the possibility of creating segmented (protected versus unprotected) labor market are particularly important for women. More women are than men are employed in the informal sector partly because it is easier for women to combine family responsibilities with employment. The informal sector offers more choice in terms of when work would be performed and how long it would last. But many women engage in informal sector activities because the expansion of the modern sector has been slow often due to distortionary trade and labor policies. Growth in some countries has not been sufficient to absorb the rising number of women workers in wage employment.

On the labor demand side, high payroll taxes or overly generous maternity benefits can reduce the ability of the formal sector to generate additional jobs. On the labor supply side, the evidence (predominantly from developed countries) on the effects of various benefits upon women's labor supply typically confirms they are adverse. But what is more interesting is the magnitude of these effects. If the disincentives are modest, then benefits do not reduce the work effort and the tax base unduly while they can provide income security.

In the US the receipt of benefits (AFDC -Aid to Families with Dependent Children) has been found to exercise a moderately adverse labor supply response from female heads already in receipt of benefits (AFDC) but little change in market work in order to qualify for welfare. In fact, the change in the employment rates of female heads since the late 1960s seems to have been negligible in comparison to large changes in AFDC (Moffitt, 1992). Schultz (1994) confirms this modest effect by estimating that the reduction in the probability of a recipient to be a wage earner is of the order three percent for a black woman and one percent for a white women. The effect of welfare programs on female headship and marriage have been mixed. Female headship rose as benefits rose from the late 1960s to the early 1970s.

Then the two moved in opposite directions. Studies undertaken in the 1970s found weak relationship between the two but subsequent research found stronger and positive effects (for a review see Moffitt, 1992).

Benefits are therefore an important policy instrument. Their availability can reduce the pressure to pursue social objectives via the labor market and affect its allocative role. For example, when benefits are available, the justification for minimum wages becomes weaker. So, social assistance can play a beneficial role by correcting market outcomes when these are not in line with social objectives. Alternatively, governments may introduce unintentionally harmful effects through premature increases in labor protection and rises in labor costs that inhibit growth and reduce employment creation. This situation can arise when benefits are employer financed and increase the cost of female employment or when benefit levels are so high that reduce unduly the incentives to work.

### Pensions

Pensions represent an important portion of total worker compensation. In aging societies and as divorce rates rise and non-conventional households become more common, pension coverage and the level of benefits have serious implications for distribution and poverty, and the functioning of the labor market. Even in some developed countries, though poverty rates among the elderly are falling, this trend does not seem to have benefited widows (Hurd and Wise, 1988; Burkhauser and Duncan, 1988).

Data and analyses of pension effects are lacking for women in developing countries. But women's difference labor force characteristics have an effect on their old age security. In developing countries very few women workers are members of a pensions plan. Practically all these workers are in the formal sector and most in government jobs. Even in developed countries, the percentage of workers enrolled in a pension plan is smaller for women than men (eg 45 percent of female employees and 55 percent of male employees in the US are enrolled in private pension plan). Among the already aged, the percentage of retirees receiving a private pension is 66 percent for men but only 24 percent. Two-thirds of the gender gap in pension coverage in the US can be accounted for by differences in labor market histories. The increasing attachment of women in the labor market in the form of longer tenure, full-time status and increasing earnings is contributing to the decline in the pension coverage gap (Even and Macpherson,

1994). Policies should ensure equal treatment of women and men with respect to old age security (such as in terms of scope, coverage, eligibility, contributions and benefits of pensions).

### Married Workers

In some countries, married women are by law or strong social customs prevented from work. This was also true in Japan and Korea until recently (late 1970s-early 1980s) where women had to leave their jobs upon marriage. In Korea, though it is no longer permissible to discriminate against married women in promotion and dismissal, discrimination in hiring is still not punishable by law. And in Japan employment remains sex stereotyped. In Indonesia, discrimination against married women in hiring is still permitted while in family law the husband is recognized as the head of the household. Such provisions result in women workers being initially channeled into dead-end jobs, being paid low wages and being the first to be laid off. This reduces women's incentive to stay in the labor force and the incentive to invest in human capital. The treatment of the family and married workers can therefore reinforce the traditional specialization of labor within the household and statistical discrimination.

In general, countries are removing discriminatory provisions from regulations. More recently, the issue of discrimination has been explicitly incorporated in the national statutes or by ratifying the ILO Convention 156 on workers with family responsibilities. In the Philippines unequal provisions of the family law have been removed following the 1987 constitution that explicitly calls for equality between women and men.

But gender biases still exist in various forms. Often the treatment of the family as a tax unit creates disincentives for women to work. Joint taxation tends to keep women at home more than separate taxation because of the higher marginal taxes that the earnings of the secondary worker (usually, the wife) attract. Separate taxation increases women's incentives to work while it results in greater participation by the husband in domestic activities (Cigno, 1994).

In other cases divorce laws do not oblige fathers to support their children or women lack the financial ability to get access to courts. When legal provisions enable a more equal sharing of child care and responsibilities among parents, women's constraints on work are eased and poverty among mothers declines. For example, in Sweden authorities make serious attempts to identify the fathers and make them share the financial cost of child rearing -- this increases also the price of children to men and reduces fertility with resulting beneficial effects on women welfare and work (Gustaffson, 1994).

Family responsibilities should not be solely identified with child care. Even in developed countries, the demographic trends and the higher shares of the aging population, the ill and the disable create a dependency that falls disproportionately on women. The carefully designed and timely introduction of social services covering these areas can ease time constraints on women and increase social welfare.

### Maternity Legislation

Maternity leave refers to leave that deals with the physical demands placed on pregnant women and new mothers. But there is wild variation in the provisions of maternity legislation even among developed countries -- for example, legislation grants 15 weeks leave in Canada but only six in the United States (Trzcinski and Alpert, 1994). The provisions of maternity legislation also differ to the extent that there is



a national health system or a mainly private one. In any case, the effect of children on women's work in the labor market varies according to prevailing family arrangements and generalizations about what is feasible, effective and sustainable varies across countries and time.

In the Philippines and Thailand the extended family has enabled women to continue work after family formation by providing day care. In some other South Asian countries and many African economies children do not constitute a major barrier to female labor force participation and do not seem to reduce the potential duration of working life of women relative to men. However, taking into account the unrecorded effort in home production, childbearing and rearing places an additional constraint on women's employment choices or on girls to seek education.

Maternity benefits are a relatively recent phenomenon even in industrialized countries and as a general rule parental benefits started being introduced only in the 1980s. Still, concerns about cost effects of maternity programs upon employers typically restrict the scope and coverage of maternity legislation. Legislation on maternity usually exempts firms below certain size (such as fewer than 50 employees) and requires that employees must have worked with the specific employer for some period of time (such as at least 12 months).

Legislation on maternity creates costs to employers in two ways. First, by the mere interruption of women's employment during leave. These are non-monetary costs due to protection from dismissal and the need for finding a substitute during the beneficiary worker's leave.

Second, by the monetary benefits that the employer may have to pay the worker. The obligations arising from maternity protection and family responsibilities tend to increase the costs of employing women workers and this is overcome by lowering women's wages or limiting recruitment to childless women -- medical certificates that guarantee sterility are utilized in some developing countries.

The level of maternity benefits and their finance vary significantly by country. In Germany the maternity grant is paid by the state health insurance and the paternal grant through federal funds. The employer has to cover the difference between the maternity grant (25 DM/day) and the benefit which amounts to the average wage of the last 13 weeks. In Japan, part of maternity benefits is paid for by the Social Security system. In Thailand the costs are shared equally between employers and the social security system whereas in most of the other Asian countries the costs fall mainly on employers. And Korea is now considering shifting part of the cost to the social security system.

Maternity leave and maternity benefits are often seen in the context of protecting women as women, women as mothers, women as workers and ultimately children. To the extent that benefits can accrue only to mothers, the taking-up of these benefits affect the work behavior of women but not of men and inequities both in the labor market and in the family perpetuate. In this respect, legal provisions should be broadened to include "parental" leave and benefits, that is, to eventually enable men and women to become more equal partners in the labor market and at home.

Maternity benefits should become part of family and employment policies that reinforce each other. Legislation on maternity and child care that puts the burden on employers without compensation from national insurance increases the cost of female labor and reduces the employment opportunities for women. This is the reason why in many cases such legislation is poorly enforced or by-passed by

employers requiring workers to have certain marital status. Financing maternity from general revenues, rather than through the employer, can reduce labor costs from employing women and can also reach workers in the informal sector and the population at large.

### Protective Legislation

There are two types of legislation affecting women's work. Protective legislation (such as maternity, night and hazardous work) and equity-promoting legislation (such as the requirement that women and men are paid equal wages or are afforded equal opportunities in hiring, training and promotion for the same qualifications as men or in the same/like sectors of employment).

Protective legislation tends to predate equity promoting legislation. In its early applications (generally before the 1960s) it was based on the notion that female workers are young and vulnerable laborers. Protective legislation was seen as more valuable to women than was legislation to ensure equality given the exploitative conditions women (and children) faced during the early stages of industrialization (Goldin, 1990).

Occupational and environmental hazards can have different effects on women than men. The mere fact that women tend to be employed in low-wage positions in the unregulated sector such as food vendors, petty traders, domestic workers or agricultural laborers can expose them to pesticides and other toxic chemicals, extreme temperatures, excessive noise or require undue physical effort. The undesirable effects of unsafe working conditions intensify in the case of pregnant women. Today, a series of international conventions and national legislation address specifically women's issues in the labor market and aim at protecting female workers in terms of health and safety, conditions of work and special requirements arising from women's reproductive functions. These regulations include protection against chemical and physical standards, night work, underground employment, hours of work, maternity protection and so on.

Protective legislation can lead to statistical discrimination against those groups that are deemed to benefit.

Such regulation usually helps those already at work but hampers the prospects of those searching for a job in the protected sector or creates a wedge between the covered and uncovered sectors. In fact, certain regulations are considered as incompatible with equality demands (Mason, 1988). For example, restrictions on overtime or night work or exclusions from certain occupations can unduly reduce women's ability to compete effectively with men in the labor market. Thus, protective legislation should not be "prohibiting".

### Equal Pay and Equal Treatment Legislation

In countries where wage discrimination was overt, the effects of adopting equal pay "for the same or like work" legislation have been impressive. In Britain, Australia, New Zealand, Canada and Greece female pay used to be prescribed in collective agreements with reference to (often as a percentage of) male pay. The underpayment of women was based on two notions. First, that a man has typically to support a family and should therefore be paid a "family" wage, that is, a wage that can support him and his dependents. Second, that women are working either for themselves (as single women) or, when married, their income was supplementary to family income. Thus this kind of wage setting was a reflection of the prevailing norms. At the same time, such a way of wage setting suited employers on the grounds of

short-run cost-minimization considerations. When differential pay rates for women and men workers were outlawed and a single wage rate was adopted, the gender pay gap was reduced in some cases by as much as one-third.

The success of equal pay legislation should not be overrated. The impressive effects of equal pay legislation took place only in counties where collective bargaining was widespread and wage discrimination was overt, that is, on statute. In this case enforcement took the form of "a stroke of a pen". Employers could not avoid its implementation though some adjustment, unjustified or justified, took place. For example, in Canada following the equal pay legislation some employers deliberately reclassified jobs to avoid applying the principle of equal pay "in the same or like work". In other cases, the previously "male" and "female" wage rates were replaced by rates for "heavy" and "light" work (MacDonald, 1994).

Equal pay policies are harder to administer when there exists segregation in employment and the principle of the same (or like) employment does not apply. For example, if there is an industry wide collective agreement that specifies the wage rate of, say, semi-skilled workers in the car industry, it makes little difference what these semi-skilled workers do. However, it will make a lot of difference if collective agreements are specific to skilled workers in mechanical aspects of production or in upholstery tasks. The former are usually undertaken by men and the latter by women. In this case gender pay differences will be driven by segregation in employment rather than unequal pay in the same employment. In fact, since overt wage discrimination is often illegal, firms can react to pay policies by diversifying labor demand, and jobs can become segregated between women and men so that the principle of comparison cannot apply.

Comparable worth legislation, unlike the "equal pay for the same or like work", requires that equally productive workers are paid the same. Job evaluation schemes can be undertaken to examine whether a cook is for example "worth" as much as a carpenter. Though it is true that (from a demand side) the two types of work may require the same level of training, effort, responsibility and so on, it is also possible that cooks (mostly women) are in more abundant supply than carpenters (mostly men). Under these conditions the labor market will in the first instance assign a lower wage to a cook than to a carpenter. This will not be "fair" as two comparable workers in terms of human capital characteristics will be rewarded differently. But enforcing equal pay between these two types of work will ignore differences in preferences (the supply side) and will introduce an inefficiency both in the form of higher labor costs for cooks and also in subsequently higher prices. The evidence in the US shows that there have been adverse employment effects following the adoption of the comparable worth principle and there are doubts whether women as a group benefited (Ehrenberg and Smith, 1987).

Affirmative action, in the form of prescribing quotas in employment, can be even more difficult to justify as its overall effects are difficult to predict. Quotas may induce an inefficiency, if workers who secure employment through them are less qualified than those who would have been selected in the absence of the policy. In addition, workers who benefit from the policy may have lower incentives to invest in their own human capital as long as they can find employment as a consequence of employers' obligation to satisfy numerical goals.

## VII. CONCLUSIONS

The paper evaluated the most representative labor market indicators in developing countries during the last few decades. It found that in all fronts there has been an improvement and, in fact, the speed at which labor markets in developing countries change has been much faster than the experience of industrialized countries would suggest. Continuing improvement in women's labor market outcomes and further narrowing of gender differentials can increase output and the welfare of women and men.

There are obvious definitional and statistical problems that limit generalizations. Additional research will be required whether improvements could have been greater and whether they could have taken place earlier than they actually did. Also, additional research would be useful in linking what happened to the labor market and also in invisible production.

It would be a truism to say that economic growth brings about benefits to *all* workers and women specifically *in the short-run* (*feminization* due to *globalization* has *flexibilized* both men and women - to use three neologisms that appeared in the last decade). However, it seems that women workers benefit at large from growth: the changes observed in this paper have not been small. It is unlikely that sectoral policies alone could have effected these changes in the absence of growth though at the margin they can be useful.

From a labor market perspective, the two most important recommendations of the paper are, first, policies should treat reproduction and unpaid work as recognized economic activities. Based on this distinction, benefits and other social assistance/insurance should be the concern of broad public policies and not just being linked to employers or enterprises. When benefits are employer financed, they can increase women's labor costs while they do not reach women in the informal sector who most likely need these benefits most. The case of economies in transition show that women now face a great risk of poverty as services that were traditionally borne by enterprises are now lost (such day care, child allowances, family leave).

And, second, it is important that legislation is timely and not-over-designed. This is particularly relevant in the emerging national and international economic conditions as one side effect of opening up the world markets is the increasing difficulty in enforcing labor legislation, especially in developing countries where surplus labor still exists. Legislation even in advanced countries reaches successively fewer women workers because of increasingly casual nature of contracts. The more separated the formal and informal sectors become as a result of legislation, the more difficult workers find it to switch between these two sectors. This is particularly relevant for women in developing countries who are still predominantly employed in the informal sector.

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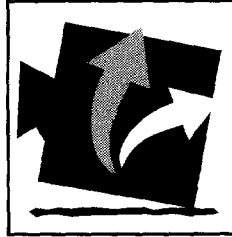
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### **Summary Findings**

The paper examines the level and changes in female and male participation rates, employment segregation and female relative to male wages across the world economy. It finds sufficient evidence to support the view that labor markets in developing countries are transformed relatively quickly in the sense that gender differentials in employment and pay are narrowing much faster than they did in industrialized countries. However, the paper evaluates the inefficiencies arising from persisting gender differentials in the labor market and finds them to be potentially significant. The estimates also indicate that the resulting deadweight losses are borne primarily by women while men gain mainly in relative terms — there are no real winners from discrimination. The paper concludes that growth benefits women at large, inequalities can have significantly adverse effects on welfare, and market-based development alone can be a weak instrument for reducing inequality between the sexes. To break the vicious circle of women's low initial human capital endowments and inferior labor market outcomes compared to men's, the paper proposes greater access of girls to education and of women to training, enforceable equal pay and equal employment opportunities legislation, a taxation and benefits structure that treats reproduction as an economic activity and women as equal partners within households, and a better accounting of women's work to include invisible production.

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