

# Research-in-Brief



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## Still A Man's Labor Market: The Long-Term Earnings Gap

### A Report on the Wage Gap and its Implications for Women, Families, and the Labor Market

This Research-in-Brief summarizes *Still A Man's Labor Market: The Long-Term Earnings Gap*, a report by Stephen J. Rose, Rose Economic Consulting, and Heidi Hartmann, Institute for Women's Policy Research (IWPR), published by IWPR in 2004. The report uses data from a 15-year longitudinal study (from the Panel Study of Income Dynamics) and shows that over that period women earned 62 percent less than men, or only 38 cents for every dollar men earned. This is less than half of the more conventional measure of the pay gap based on year-round earnings of full-time workers for a single year, which stands at 23 percent, or 77 cents for every male dollar earned. This new measure shows the costs over time for women and their families of the continued unequal division of family labor, with women having to make most of the adjustments of time in the labor market to perform family work. The report provides a detailed analysis of the gendered patterns in the labor market, showing that women are much more likely than men to have persistently low earnings; that women and especially men continue to work disproportionately in occupations where the majority of workers are of their own sex; that across the board men's jobs involve longer working hours than women's jobs, but that the pay premium for male jobs far exceeds the additional hours worked. The report also shows that over the period studied women were more likely to experience growth in earnings than men, but the earnings gap remained large.

Rose and Hartmann suggest that this reinforcing cycle of inequality in the labor market and in the distribution of domestic work, which results in low pay for women, is particularly damaging to the growing number of female-headed households. The authors end by suggesting a number of policy solutions that would close the wage gap and prevent women and their families from further losses due to the accumulated effect of the wage gap.

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### Introduction

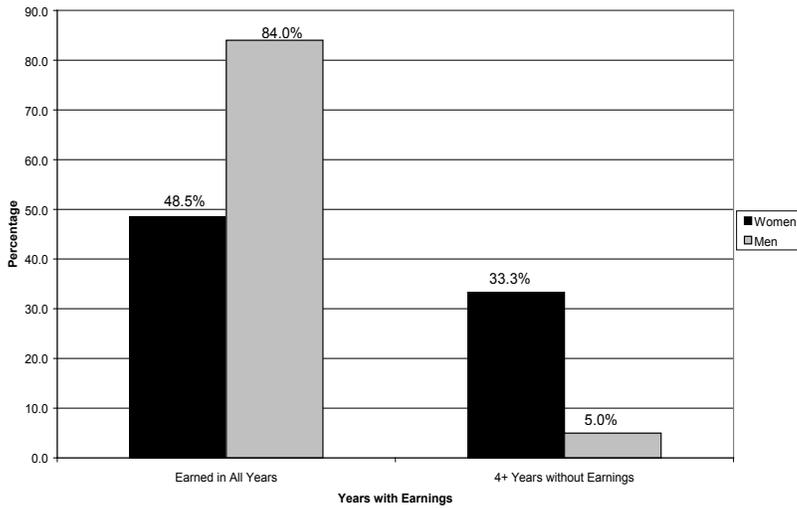
Many argue that women's prospects in the labor market have steadily increased and that any small remaining gap in earnings between women and men is not significant. They see the remaining differences as the result of women's own choices, or they argue that with women now graduating from college at a higher rate than men, and with the economy continuing its shift toward services, work and earnings differences between women and men may disappear entirely.

It is true that women have made progress relative to men. Women's labor force participation has risen rapidly; women have made progress in many occupations that previously were bastions of men; the wage gap has narrowed by more than one-third since 1960, from women earning 59 cents for every dollar earned by men, to 77 cents now. Yet this measure, by virtue of including only those who worked full-time for at least 50 weeks per year, excludes almost half of all women. While women's and men's work and careers have become more similar, important differences remain. Women

are much more likely than men to reduce or interrupt their time in paid work to deal with family responsibilities, resulting in a dramatic impact on their earnings. Figure 1 shows that over a 15-year period less than half of all women (48.5 percent) had earnings in each of the 15 years, compared with 6 of 7 (84 percent) men; 3 of 10 women report four or more years without earnings (compared with 1 of 20 men). Women are also more likely to work fewer hours per year, working on average 500 hours fewer per year (or 22 percent less) than men, even when only men and women who have earnings in each year are compared.

This division of responsibility for family care results in very different wages and hours of work for men and women. Over the 15 years, the more likely a woman is to have dependent children and be married, the more likely she is to be a low earner and have fewer hours in the labor market. The opposite holds for men: marriage and dependent children make it much more likely that a man has higher earnings and works longer hours.

**Figure 1. Women's and Men's Years with Earnings, 1983-1998**



Source: Rose and Hartmann 2004, page 11; based on the Panel Study of Income Dynamics.

When actual earnings are accumulated over many years for all men and women workers, the losses to women and their families due to the wage gap are large and can be devastating. The average woman earned only \$273,592 while the average man earned \$722,693, leaving a gap of 62 percent over the 15-year period.

### Methodology and Data

The report is based on an analysis of the Panel Study of Income Dynamics (PSID). The PSID is a longitudinal data set that tracks a representative sample of households over time. This analysis uses data from 1983 to 1998 and includes all prime-age workers (26 to 59 years old) who have at least one year of positive earnings during that period and who have provided information on labor market activity for each of the 15 years: 1,614 women and 1,212 men. All earnings have been converted into 1999 dollars.

### Low Earnings as a Persistent Characteristic of Women's Paid Work

The earnings gap is not simply explained by women having less time in paid work. Hour per hour, including only those women and men with the strongest labor market attachment who had earnings every single year, in this study women still earn only 69.6 cents of each dollar earned per hour by men (see Table 1).

Again including only those with the strongest labor force attachment, women are significantly more likely to have low earnings (less than \$15,000 annually—just above the poverty line for

a family of three in 1999) than men. One in three women had four or more years with earnings below this threshold, compared with one in fourteen men. Over the whole 15 years only a tiny minority of men (1.3 percent) fail to average at least \$15,000 per year, compared with 17.7 percent of strongly attached women (see Figure 2). Ninety percent of those who average less than \$15,000 per year are women.

The average annual earnings for most men and most women (with earnings in each of 15 years) were in the range of \$25,000 to \$49,999. But for men, that is virtually the bottom of the salary range: 44.5 percent of men earned more than \$50,000 annually. For women, it's the top; only 9.6 percent of women on average earned more than \$50,000 per year (see Figure 2).

### Sources of the Wage Gap

However the wage gap is calculated, it is important to note that men's and women's earnings differ for many reasons including: discrimination in the labor market, discrimination in pre-labor market preparation (education/training programs), unequal societal norms at home, and the constrained decisions men and women make about work and home issues, which often result in women working fewer hours when they work and taking several years out of the labor market. Table 2 decomposes the wage gap to show these effects. Many economists believe the 'remaining unexplained gap' can include the effects of discrimination.

**Table 1. The Long-Term Labor Market Experience of Women and Men: Earnings, Work Hours, and Years Out of the Labor Force, 1983-1998**

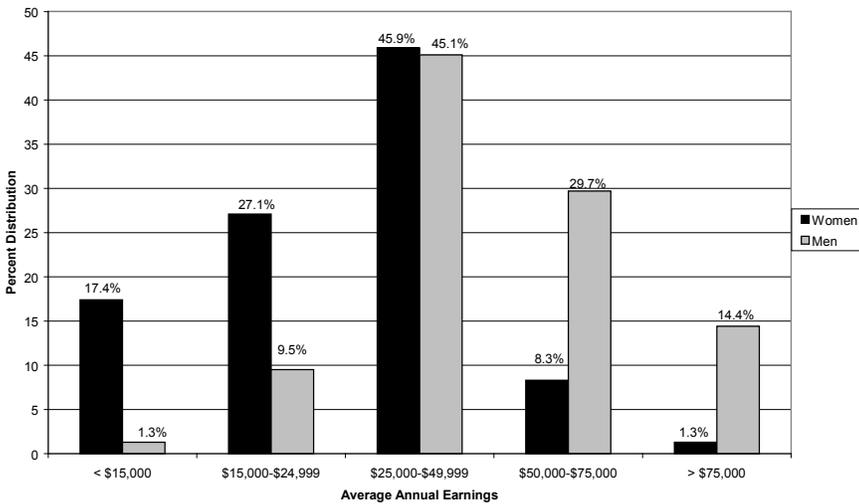
15 Year Averages <sup>a</sup>					
Number of Years Out of Labor Force	Shares	Annual Earnings	Annual Hours	Hourly Wage <sup>b</sup>	Hourly Wage Ratio <sup>b</sup>
<b>Females</b>					
All Prime-age Females	100.0	\$21,363	1,498	\$12.82	60.0
None	48.5	\$29,507	1,766	\$15.72	69.6
1	10.2	\$19,341	1,513	\$12.25	72.3
2 or 3	11.8	\$14,868	1,376	\$10.56	75.6
4 or more	29.5	\$11,280	1,100	\$9.25	63.8
<b>Males</b>					
All Prime-age Males	100.0	\$49,068	2,219	\$21.38	
None	84.0	\$52,510	2,260	\$22.60	
1	7.5	\$36,867	2,210	\$16.94	
2 or 3	4.8	\$28,777	2,062	\$13.97	
4 or more	3.7	\$21,896	1,524	\$14.50	

Notes: <sup>a</sup> Zero earnings years are not included, i.e. averages for earnings and hours are calculated only for years when work is reported. Weighted data are used to calculate all figures.

<sup>b</sup> Hourly wages are person-weighted rather than hour-weighted so that each person's wage counts equally in the calculations regardless of how few or many hours the person worked. The hourly wage ratio is calculated as 100 X women's average hourly wages/men's average hourly wages.

Source: Rose and Hartmann 2004, page 9; based on the Panel Study of Income Dynamics.

**Figure 2. The Distribution of Annual Earnings among Women and Men with Strong Labor Force Attachment, 1983-1998**



Note: For those with earnings in every year. Weighted data are used to calculate all figures.  
Source: Rose and Hartmann 2004, page 11; based on the Panel Study of Income Dynamics.

**Table 2. Reasons for the Long-Term Earnings Gap<sup>a</sup> between Men and Women, 1983-1998**

Women on average earn less than men over 15 year period (Earnings gap):	62.1%
Gap due to differences in number of years out of the labor force:	18.3%
Gap due to differences in hours worked when working:	15.8%
Remaining unexplained gap	28.0%

Note: <sup>a</sup>The earnings gap = 100 - the earnings ratio.  
Source: Rose and Hartmann 2004, page 22; based on the Panel Study of Income Dynamics.

## Sex Segregation in the Labor Market

Women also face a striking degree of sex segregation in the labor market—women work in predominantly ‘women’s jobs’ and men in predominantly ‘men’s jobs,’ that is, in jobs where the majority of workers are of one sex. To investigate this division and its impact on earnings further, the report divides jobs into three tiers or clusters—‘elite’ jobs, ‘good’ jobs, and ‘less-skilled’ jobs. Within each tier, occupations are classified as either male dominated or female dominated, thus resulting in six clusters (Table 3). For both genders, approximately 58 percent of strongly attached workers, those with earnings in all 15 years, work consistently in a *single* one of the six career occupational clusters (spending at *least* 12 of 15 years in that cluster). The remaining 42 percent have mixed work histories, mainly rotating among jobs in the bottom two tiers. At least 75 percent of workers are of one gender within each of the six tiered gender clusters. Male and female pairs of occupations within each tier require an equivalent

level of education and skills. The three male clusters account for half of all male workers; less than one in ten men (8 percent) work in the female dominated clusters; the remaining male workers had mixed work experience. Women are a little less likely to work in a cluster dominated by their own sex than men (44 percent) and more likely than men to work in a job where the majority of workers are of the other sex (15 percent)—not surprisingly, given that male dominated jobs traditionally pay more.

In each tier, women’s jobs pay significantly less than their male counterparts. This is so even though both sets of occupations tend to require the same level of educational preparation; it also holds when only full-time workers (at least 1,750 hours—35 weeks for at least 50 weeks per year) are included.

Moreover, both men and women earn more in the male sector of each tier than their counterparts do in the female sector in the same tier, indicating a premium for working in male-typed jobs, and conversely, a penalty for working in female-typed jobs. (In the elite tier, women actually earn less

per hour in male jobs than female jobs, as shown in Table 5 below, yet their annual earnings are higher in the male jobs because women in men’s jobs work more hours; despite slightly lower hourly earnings, their overall earnings opportunities may be better in the male sector.) Yet men tend to earn more than women in all tiers. In the highest paid tier, male elite jobs, men on average earned \$74,877 compared with \$51,085 for full-time female workers (in 1999 dollars).

**Table 3. A Three-Tiered Labor Market (Sample Occupations)**

	Women’s Jobs (75% or more female)	Men’s Jobs (75% or more male)
<b>Elite Jobs</b> Managerial/Professional	Teachers Nurses	Business Executives Scientists Doctors Lawyers
<b>Good Jobs</b> Supervisors, Blue Collar Craftspeople, Technicians, Clerical	Secretaries	Skilled blue-collar work Police Firefighters
<b>Less-Skilled Jobs</b> Sales clerks, Food work, Personal/Service work, unskilled blue collar work	Sales Clerks Personal Service Work	Factory Jobs

Source: Rose and Hartmann 2004, page 39.

**Table 4. Hours Worked by Continuously Employed Women and Men by Career Occupational Groups, 1983-1998**

Tier	Male Sector			Female Sector		
	Women		Men	Women		Men
	All	Full-Time	All	All	Full-Time	All
Elite Jobs	2,154	2,264	2,332	1,705	2,117	2,158
Good Jobs	2,247	2,469	2,221	1,860	1,989	2,156
Less-Skilled Jobs	1,871	2,018	2,199	1,670	2,279	2,016

Notes: <sup>a</sup>As there is not much difference in the distribution across occupational groups between men who work full-time and all men (because most men work full-time), data are not reported separately for men who work full-time.  
Source: Rose and Hartmann 2004, page 15; based on the Panel Study of Income Dynamics.

**Table 5. Earnings of Continuously Employed Women and Men by Career Occupational Average Hourly Wages**

Earnings of Continuously Employed Women and Men <sup>a</sup> by Career Occupational Cluster							
Average Hourly Wages							
Tier	Female Sector <sup>b</sup>			Male Sector <sup>b</sup>			Increase for women if move to male sector
	Women	Men	Ratio	Women	Men	Ratio	
Elite Jobs	\$22.85	\$24.28	0.94	\$22.56	\$32.11	0.70	-1.2%
Good Jobs	\$15.47	\$22.16	0.70	\$18.76	\$22.65	0.83	21.2%
Less-Skilled Jobs	\$10.54	\$16.03	0.66	\$12.55	\$16.20	0.77	19.0%

Notes: <sup>a</sup>Analysis includes workers aged 26 to 59 with earnings in all 15 years of the study period.  
<sup>b</sup>Male (female) sector jobs are defined as those having a majority male (female) workforce.  
Source: Rose and Hartmann 2004, page 15; based on the Panel Study of Income Dynamics.

### Significant Differences in Hours of Work

Another striking difference between male and female dominated jobs is in the number of hours worked on average per year. Male dominated jobs, and jobs where neither sex is in a clear majority, have significantly more work hours per year than female dominated jobs (see Table 4) at each level. This also holds for each gender—women in male dominated jobs on average work longer than women in female dominated jobs, and men in female dominated jobs work fewer hours on average than men in male dominated jobs. This suggests that the occupational difference in work hours goes beyond mere ‘preference’ by individual men and women and reflects a more systematic adjustment in hours to the gendered norm in the division of family labor.

The differences in average annual hours are partly a reflection of the greater likelihood for women to work reduced hours (less than 1,750 hours per year). Yet the differences are also stark when only those men and women working full-time are included (those who work at least 35 hours

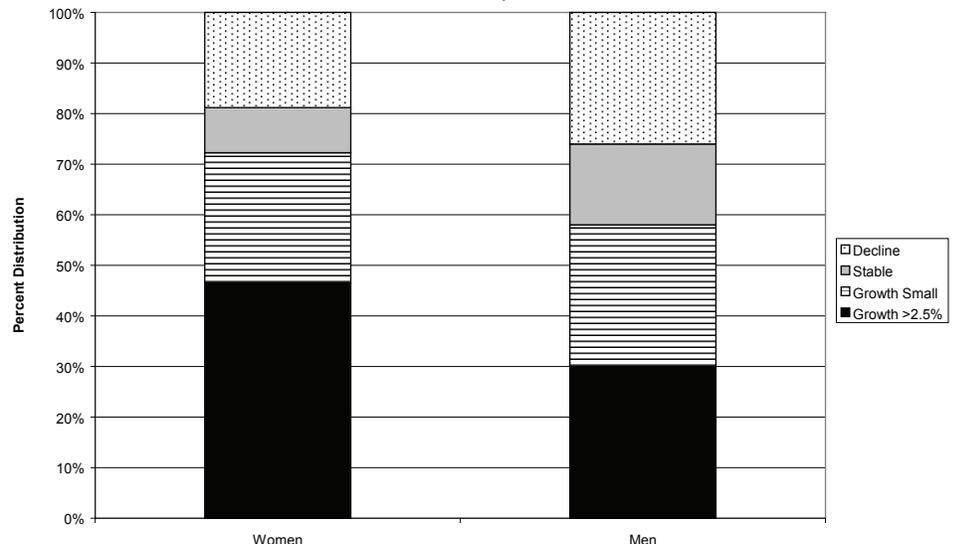
per week for 50 weeks per year; see Table 4). Men in elite male or elite female jobs typically work over an hour more per week than women in similar jobs. Men in ‘good’ female jobs on average work over three hours more per week than women in similar jobs. The pattern is less clear in the less skilled jobs.

Yet the difference in hours does not account for the earnings gap. As can be seen from Table 5, men out earn women hour by hour, even when only women with the strongest labor market attachment are included.

### Better Wage Growth over Time for Women than Men

One disadvantage of averaging male and female earnings data over the 15-year period is that such an average cannot show whether earnings disparities were higher at the beginning than at the end of the period. The earnings gap between women and men during the period from 1983 to 1998 was significantly smaller than for the previous 15-year period, a reflection of women spending fewer years out of the labor market and gaining more education and skills. To analyze whether the earnings gap has narrowed further during the period, the authors compute an average annual change rate in earnings for each worker (with at least two years of earnings). The analysis divides workers into three age groups at the start of the period, to check whether the pattern for younger women significantly differs from older women,

**Figure 3: Earnings Growth for Continuously Employed Men and Women, 1983-1998**



Source: Rose and Hartmann 2004, page 23; based on the Panel Study of Income Dynamics.

and then estimates annual growth rates over the period for men and women. The normal assumption is that over time average earnings will increase as workers progress through their careers and gain seniority and skills, but earnings, of course, might also stall or decline.

The analysis shows significant gender differences, with men on average being less likely to have seen earnings growth over the period (58 percent of men compared to 73 percent of women) and more likely to have had an actual decline in earnings (26 percent of men compared to 19 percent of women) (Figure 3). Younger men (those aged 26 to 31 in 1983) tended to do better than older men (39 to 45 years) but even in this age group one-third had no or negative earnings growth. Younger women also did better than older women, with 'only' one-fifth of them having stable or decreasing earnings compared with 44 percent of women in the older cohort.

This finding of stagnating or declining earnings for men over time corresponds to other studies. As the manufacturing sector struggled during the 1980s, many men experienced stagnating or falling earnings. Women's earnings rose both because they were in a better place in the labor market and because they increased their education and their labor market attachment. While the generally narrowing pay gap is encouraging, it is important to keep two caveats in mind: women started at such a low level that it was relatively easy to move up; and women with work interruptions likely had to start again at a much reduced level before they experienced large earning gains. Yet even though women are catching up, progress is slow and the pay gap continues to be substantial and unlikely to narrow much further without major policy adjustments.

## **Wives Who Earn More than Their Husbands**

While much of the data confirms that men generally earn more than women, this does not hold for all couples. Among the group of women who had earnings in each year, and were married for the whole period (about one-third of all women in the sample), 15 percent out earned their husbands (even if often the difference was not large). Hourly wages are higher than their husbands' for almost one-quarter of the women in this group (although, because hours might be lower, not all of them had higher average annual earnings). And, even though different working patterns mean that women earn less over the long term, among college educated women more than 85 percent had higher hourly earnings than their husbands in at least one year of the survey period.

## **Self-Reinforcing but Increasingly Unstable Gendered Division of Labor**

Although women have made some gains relative to men, progress has stalled since the early 1990s. The gender gap in earnings has a major influence on families' life opportunities, on their likelihood of experiencing poverty, on older women's retirement security, and on single mothers' ability to provide for their children's care and education. Married women continue to be at least partially insulated from the impact of women's low earnings through their connection to higher earning men. Yet most families would have a higher standard of living if women's wages and lifetime earnings were higher. Single mothers, and their families, with no other household income to make up for the lower earnings available in most women's jobs, are particularly penalized. Furthermore, women's low life-time earnings can have devastating effects in old age by preventing women from building up sufficient resources for retirement. Widowed, divorced, or never married women over age 65 share high poverty rates of approximately 20 percent.

Gender differentiation in the labor market is self-reproducing. When students express interest in non-traditional jobs, they are often not encouraged to pursue the appropriate career preparation by guidance counselors. Employers may pay women less because they believe women are more likely to leave work. They may structure jobs to provide part-time hours because they believe women are dependent on jobs with shorter work hours. Without subsidized child care, many families are left to their own resources to combine family care with paid work. When the husband out earns the wife, it makes greater economic sense for the wife, as the lower earner, to provide more or all of the child care because less income is lost if the lower-earner cuts back her work.

This gendered division of labor is self-reinforcing. Yet it is also arguably increasingly unstable and unsustainable. Men and women spend growing portions of their lives unmarried. Women's expectations are changing and they are demanding more independence and greater economic security throughout life, whether they are single or married. Women are closing the graduate school gap with men. Women have begun to outnumber men in law and medical schools and have increased their numbers substantially in business schools. But even though progress has been considerable over the last few decades, at the current speed of change it would still take 50 years for women to close the pay gap. Policy makers need to develop new policy interven-

tions that can help break the vicious cycle that makes women trade down their progress at work and makes men lose out on family time.

## Policy Implications

There is not a single cause, and hence no single solution, that will deliver equality to men and women in the labor market. The factors contributing to the long-term pay gap include continued direct discrimination in the labor market; the undervaluation of work typically performed by women; the lack of systematic work family supports; the particular disadvantages faced by the growing number of women-headed households; the marriage penalties in the tax system; the under-representation of women in higher paying occupations; and poor working conditions in the labor market especially for lower skilled jobs. A program responding to these problems needs to include:

- **Policies that reduce sex discrimination in the labor market:** Providing more resources to oversight agencies including the Equal Employment Opportunity Commission and the Office of Federal Contract Compliance would strengthen the enforcement of equal opportunity laws and lead to resolving complaints more quickly. Developing new Equal Employment Opportunity remedies to address the comparable worth problem could require employers to show that comparable jobs are paid fairly, using tools such as job evaluation systems.

- **Policies that make it easier to combine paid work with family work:** Affordable, good quality early care and education for children has many benefits, including making it easier for lower income mothers to stay in the workforce. New policies are needed to make workplaces more family-friendly, including more flexible hours and job-guaranteed paid leaves for sickness and family care, the elimination or capping of mandatory overtime, a shorter standard work week, and the increased availability of better quality, reduced hours jobs. Last but not least, encouraging men to use family leave and reduce their work hours—and tackling discrimina-

tion faced by men who take up family leave or adjust hours to deal with family care—will help change the double-standard in parenting that places the responsibility for it on women.

- **Education and training policies to increase women's presence in higher paying jobs:** Increasing resources for non-traditional skills training, improving access to vocational training especially for single mothers, and improving career counseling and information available to girls and young women still in school are all important as there are still too many women who have been discouraged from pursuing higher education and/or job training for occupations that are not traditionally held by women.

- **Policies to increase the support for women-headed households:** Families headed by single mothers who face discrimination and lower earnings in the labor market are much more likely to live in poverty. Female-headed households need increased support in the forms of improved access to the income of non-custodial fathers after divorce, improved child care support, and improved access to vocational training and education programs designed to make it possible for single mothers to participate.

- **Policies to reduce the 'marriage penalty':** Reducing the bias in income taxes and Social Security benefits on the secondary earner in a marriage will reduce the disincentives that depress the work effort of the lower earning member of a married couple.

- **Policies to tackle the low-wage labor market:** Policies that raise the minimum wage and provide resources for its proper enforcement and programs that encourage increased unionization will provide higher wages and increased access to benefits for low-wage workers, who are disproportionately female.

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Full Report:  
*Still a Man's Labor Market:  
The Long Term Earnings Gap*  
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