Why Not Women Too? An Analysis of the Effects of Women's Marital Status and Other Related Factors on Wages[1]

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The male marriage premium has been well established in economic theory in recent years. Even controlling for demographics, industry, occupation, and a host of other relevant characteristics, married men still earn more than unmarried men (Gray 1997, Korenman and Neumark 1991). However, while this marriage premium's presence in wages is unmistakable, economists are undecided about its origin. Some of the more prominent theories involve employer discrimination, human capital increases, and immeasurable qualities inherent in married men.

While a marriage premium has consistently been found for men, there is less certainty about whether women receive a similar premium or penalty as a result of marriage. Women are more difficult to test than men, since they tend to show less labor force attachment as a result of motherhood and possibly loyalty to a more traditional household model (Van Velsor and O'Rand, 1984). In addition, studies of women's wages as they relate to marriage are hindered by two known factors; self-selection, whereby women choose not to participate in the labor force, and the endogeneity of marriage. While we acknowledge the problems that these two issues raise, it is beyond the scope of this paper to adequately deal with either of these issues.

The goal of this paper is twofold: to examine the strength of past theoretical work on women's marriage premiums, and to attempt to determine the existence of a premium or penalty resulting from marriage for women. We attempt to derive this result using data from the 1979 to 2004 waves of the National Longitudinal Survey of Youth. We would also like to put forth and test a number of hypotheses involving the role of religion, children and duration of marriage in determining the ways in which marriage affects women's wages.

Given the purpose of the paper, it is organized into seven parts. Part II consists of a review of the existing literature on male and female marriage premiums. Part III is a summarization of the theory concerning the marriage premium. Part IV is a more thorough description of the data, Part V relates our model, and Part VI examines our estimation procedure and results. We conclude our study with some remarks in Part VII.

I. Literature Review

In examining the literature on the relationship between women's earnings and marital status there are two factors that have to be considered; the relatively small amount of research that has been conducted, and the theoretical consequences that result from the male marriage wage premium. While this study primarily focuses on the relationship between women's earnings and their marital status, the literature specifically addressing the women's marriage premium is limited. While by no means conclusive or abundant, significantly more work has been done concerning the male marriage wage premium. Multiple studies have found that married men, on average, make 10 to 40 percent more than men who never marry (Gray 1997). While none of the theoretical justifications for this premium have proven conclusive, their explanations often imply either a female marriage wage premium or penalty. Therefore this study would be remiss if it did not begin by looking at the possible consequences of a male wage premium.

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Male marriage premiums have been well researched by many economists over the past decades. Kenny (1983) shows that an increase in labor capital for wives leads to an average decrease in the specialization by their husbands. Nakosteen and Zimmer (1987), however, argue that marriage does not significantly impact the wages of men. Their research concludes that once the endogeneity of marriage is taken into affect the true coefficient is insignificantly different from zero.[2] Korenman and Neumark (1991) indicate that the location of married workers in higher-paying jobs within a given firm plays a strong part in the existence of a male marriage premium. After controlling for wives' education, Loh (1996) finds that experience matters less (all experience variables fell to insignificance and showed no clear pattern) but wives' education was a major factor in the wage effects of marriage. Loh concludes that women should also experience those same intangible benefits when they have more educated husbands. Cornwell and Rupert (1997) argue that the premium men receive through marriage is an intercept shift that does not vary with how many years they have been married. Two findings from their paper cast significant doubt on the specialization theory. First, men who were not married in 1971 but eventually will be, earn as much as men who are already married. Second, the presence of children produces an additional intercept shift, suggesting further "settling down." Theoretically, marriage could also cause a shift in behavior choices for women. However, there are most likely significant differences between a woman who maintains employment after marriage and, more relevantly, after having a child and a woman who does not.

The literature relating to a male marriage premium is well-established, but there are far fewer papers about the marital status and wages of women. Hill (1979) was one of the first to examine the wage effects of marriage and children on women. She uses the ninth wave of the Panel Study of Income Dynamics from 1976, which contains over five thousand full-time working heads of houses and wives aged 18-64. Hill constructs multiple cross-sectional OLS regressions and emphasizes different proxies. Her results, while fulfilling her original purpose of determining the wage differences between men and women with children and marital status as her major proxies, also show that ever-married women and currently married women demonstrate "weaker attachment to the labor force through other characteristics than did single women" (588). The author finds substantial variance between black and white women. Hill also notes that motherhood plays a significant factor in determining wages for women, typically a negative association. She concludes, after controlling for worker aspects, that workers with greater financial responsibility for their families earn higher wages, ceteris paribus.

Van Velsor and O'Rand (1984) approach the relationship between marriage and motherhood and its effect on wages by analyzing the effects of marriage and motherhood with the family-life cycle as a proxy. They divide their data set into five distinct sections, categorizing married mothers based on labor force participation and timing of childbirth. The authors dropped from the data any wives with premarital pregnancies, as this would create unintentional biases in the data. Almost half of the black demographic element had premarital pregnancies; this resulted in dropping that entire demographic from the data. They conclude that mothers who do not work at all until after their first child is born, have the lowest wages compared to other working mothers. Midlife wives, those who did not work at all until after their final child was three years old, receive the greatest payoffs to their individual educational status.

[2] It is worth noting that other researchers have found this argument to be weak (Cornwell and Rupert, 1997; Hersch and Stratton 2000) and have called into question basing any solid conclusions on a "parameter estimate's standard error, when the parameter remains large and positive" (Cornwell and Rupert 1997 p. 286).

Using the National Longitudinal Survey of Young Women for the year 1982, Korenman and Neumark (1992) conclude that there are hidden biases in panel data analyses of women's wages with respect to children and marriage. They attempt to recreate the studies of previous authors with both the standard OLS estimates and an Instrumental Variables regression. They build models that control for both experience and tenure, but find differing results. The OLS regressions give similar output to previous authors' findings of insignificant coefficients for marriage and motherhood. However, the IV analysis displays a negative association between children and wages among both married and unmarried women. Korenman and Neumark conclude that the type of cross-sectional analysis used for marriage premiums is subject to endogeneity, heterogeneity, and employment selectivity biases.

Their next paper on the subject (1994) attempts to eliminate much of the inherent bias noted above. They correct for heterogeneity by using a pool of 1000 sisters from the Young Women's cohort of the National Longitudinal Survey for 1982. Korenman and Neumark estimate several different regressions, using standard OLS, Instrumental Variables, and 2 Stage Least Squares methods to compare the variances between coefficients and attempt to eliminate the bias. The variables in these basic regressions include marital status, employment, children, experience, education, and a lagged time-based own-wage variable. Korenman and Neumark find that after adjusting for heterogeneity, endogeneity, and selection-bias, the marriage premium for both black and white women is positive and significant, even though it was negative and insignificant before the corrections.

Although not often included in baseline wage analyses, religion is an important aspect of the labor force that should be accounted for. Lehrer (2004) describes how past research has concluded that certain religious groups "make a sharp distinction between male and female social and economic roles, encouraging the traditional division of labor within the household when children are present" (p. 713). In our opinion, any study of marriage and wages should include some attempt at controlling for variations in religious beliefs, given the fact that marriage can be very closely tied to one's religious orientation.

II. Theory

There are three major theories regarding the impact of marriage on wages. The first and most widely tested is the specialization theory, developed by Nobel laureate Gary Becker **(**1973, 1985**)**. It assumes that each spouse will specialize in either the household or in the labor force. The spouse specializing in the labor force is able to allocate more time and resources to his/her job, which results in higher productivity and higher wages. Assuming a traditional married household in which a husband specializes in market work and a wife in household activities, married men are able to earn higher wages than single men. This leaves the woman in charge of the household activities, resulting in less attachment to the labor force, and thus, on average, marriage acts as a penalty on women's wages.

The most widely held justification for married men's higher wages, and the resulting productivity increase, is the specialization theory. Although there is some empirical support for the theory (Kenny 1983), in recent years a number of studies have emerged, that cast significant doubt on those productivity gains resulting from an increase in specialization (Loh 1996; Cornwell and Rupert 1997; Hersch and Stratton 2000). The differing studies test the specialization hypothesis using methods ranging from controlling for wives experience and education (Loh 1996) to controlling for the endogeneity of marriage (Cornwell and Rupert 1997) to controlling for the time each spouse spends on housework (Hersch and Stratton 2000).

Because of the wide range of methods used to test it and the consistent rejection of the specialization theory, it has to be concluded that, at best, specialization is only a small part of the explanation for the potential productivity increases associated with marriage.

Another common theory is that employers discriminate in favor of men because men traditionally fill the role of provider for the family. This theory posits that employers are more inclined to promote married men, as they are less likely to move suddenly or exhibit high-risk behavior. According to Hill (1979), the knowledge that a worker is responsible for greater portion of a family income causes the employer to pay married men more. In regard to women, the employer discrimination theory is inconclusive. Mostly, it is assumed that married women are more dedicated to family/husband than to their jobs. This would result in lower wages for married women, since hiring them brings a slightly greater risk to the employer. This risk is based on the likelihood that married women will show less attachment to their work. However, married women who are the main providers for their families could potentially benefit from this same employer discrimination that grants men a premium.

While specialization argues that marriage makes men more productive, the selection theory dictates that more productive men are more likely to get married. Hersch and Stratton (2000) conclude that there are some immeasurable qualities of men, aspects like responsibility or personality, which make them more attractive to both future spouses and to employers. Men with these characteristics are more likely to earn higher wages and to be married; thus there appears to be a correlation, but without clear causality. These same immeasurable characteristics can also be found in women, but it seems that again there is no predominant argument. Women, who possess the same personality traits as the more productive men, should, similarly, earn higher wages and be more likely to get married. While this logically holds true, it is notoriously difficult to identify and measure what personality traits are valued and rewarded by employers. In addition, one could argue that the same traits which make a woman more likely to earn higher wages are not the same traits that make her more likely to get married.

III. Data

Using the National Longitudinal Survey of Youth (NLSY) from 1979 to 2004, our initial sample size was 12,686 men and women. Their ages ranged from 14 to 22 at the start of the survey. The survey is panel data conducted every year from 1979 to 1994, and every two years from 1994 to 2004. Although there is some variation in which women responded, the survey generally interviewed the same women once a year through 1994 and every other year after that. All men, anyone with military service and anyone self-employed were immediately dropped from the sample. The sample was further limited to women who earned at least $2.00 an hour and less than $200.00 per hour and worked between 35 and 72 hours a week[3]. For our baseline regression, our dependent variable is the natural log of real wages, with 1982-1984 BLS CPI-U values serving as a base.

The summary statistics for the women used in our sample can be found in Tables 1-5. For the cross-sectional analyses, we chose the years 1984, 1990, 1994, 2000, and 2004 to test. These years span the data set, and provide us with a rotating four and six year update on the

[3] Women earning less than $2.00/hr and more than $200/hr were dropped in order to eliminate any possible misunderstandings of the wage measurement (such as women who entered their annual salary instead of hourly wage). Women who worked less than 35 hours/wk or more than 72 were eliminated in order to maintain clean and reasonable data as well as to match our results to previous theory on full time women. The regressions were run with all working hours included and a part time control variable without significantly altering the results.

respondents. The first row of each table displays mean hourly real wages for women categorized by marriage. Divorced, separated, *or* widowed women consistently earn less than married and never-married women, although they have greater potential experience in all five years. Married women tend to have higher tenure than non-married women, while divorced, separated, or widowed women have the lowest tenure. Never-married women consistently show higher levels of urbanization and are more likely to be in a union than their counterparts in all five years. Not surprisingly, a much smaller percentage of never-married women have children across the survey years than among married or divorced, separated, or widowed women. Whites, defined as non-Hispanic and non-black, have a plurality of the demographics in each consecutive year. On average, and especially before 2000, never-married women obtain the most schooling, with divorced, separated, and widowed women obtaining the least.

IV. Model

The theoretical model illustrated below is derived from the previous literature as well as some hypotheses that we intend to test using the data.

$$W_i = \propto + \beta MAR_i + \gamma JOB_i + \phi LOC_i + \psi RACE_i + \rho HUM_i + \delta REL_i + \epsilon_i$$

W_i is the natural log of a respondent's real wage. MAR_i is a function of the respondent's marital status. In addition, our hypothesis on the impact of children is captured in this variable. JOB_i controls for the respondent's unionization status, their industry, their occupation and other job related variables that could influence wages. LOC_i represents a respondent's residential location, both urban and geographical status. $RACE_i$ controls for racial differences among the respondents. HUM_i attempts to capture any human capital differences among the wage earners. REL_i is a vector of variables related to the respondent's religious affiliation.

All of the regressions in our paper are basic OLS models. Our primary variable is *married*, a dummy variable representing whether or not the individual in question is married in the given year φ[4]. We included a dummy variable *child* to measure the impact of a child upon full-time women workers. This allowed for the addition of an interaction term *marriedwchild*, composed of two dummy variables *married* and *child*, as seen in Table 7. Also included in the regression are measurements of geographic region[5], experience, job tenure, highest grade completed in school, and dummy variables for urban homes, race, and job sector (civil service). As controls, we incorporated ten dummy occupation variables and eleven industry variables to minimize the effect of cross-occupation and cross-industry wage differentials. However, due to alterations in the NLSY survey in 2004, the industry controls for that year include several new classifications.[6] To generate a variable to measure the number of years in marriage, we followed the methods used by Borjas, Bronars, and Trejo (1992). Their study was based around the economic assimilation of young internal migrant workers in the United States. They developed a variable that measured the number of years since a migrant worker moved across state lines. We are replicating their method for creating a variable measuring duration of time. Since their

[4] When devising our married variable, we grouped all non-married women together--this includes divorced, widowed, and separated women. We found that grouping them with the never-married women in our model did not have any significant impact on the marriage variable in any year except 1994, in which it changed the sign on the (insignificant) married94 variable from negative to positive.

[5] Geographic regions of the country were divided into four parts, consisting of the Northeast, the South, the West, and the Midwest.

[6] See Appendix 1.

model calculates the economic benefits of each additional year as reflected in wages, our model can use the same type of variable to measure wage premiums in marriage over time.[7]

V. Results

We are presenting four separate regressions designed to augment one another. Each regression is a cross-sectional analysis of the same five years, 1984, 1990, 1994, 2000 and 2004.[8] The baseline regression consists of nothing more than the standard control variables outlined above in the data section. The results for the baseline regression are displayed in Table 1. The married variable for *full time women* is insignificant in every year but 2000, when it is positive and significant at the 5% level. Throughout our analysis there are a number of outliers that occur within the 2000 cross section. Finding no remarkable differences between the summary statistics in the 2000 sample and the other years, we were unable to come to a satisfactory conclusion as to why the year 2000 consistently produced significant results when all other years failed to do so.

The variables for *tenure*, *northeast*, *west*, *urban*, *black*, and *education* (in the form of highest grade completed) were consistently significant across all regressions and years. *Union* was significantly positive in every regression in every year with the exception of 1994, in which it was insignificant and slightly negative. Due to possible changes in the sample demographics before 1994, the *south* variable returns insignificant in 1984 and 1990. From 1994 onward, living in the *south* is found to be significant and negative. The insignificance and general inconsistency of the *marriage* variable is not totally unexpected, especially in an OLS model with known biases. Nonetheless, we propose a number of additional factors that potentially could impact the ways in which marital status affects women's wages.

We posited that a logical explanation for any impact on wages due to marriage is a result of the presence of children. Therefore we added an additional variable, m*arried with child*, to our baseline regression in order to gauge the impact of marriage, children and their interaction. The results of the baseline regression with the additional *married with child* variable are shown in Table 7. The *marriage* variable remained insignificant in every year. In 2000, the year that inexplicably had a positive and significant coefficient in the baseline regression, the results show a negative and insignificant coefficient. Interestingly, the year 2000 is the only year in which *married with child* is returned with a significant coefficient. Unfortunately, due to the lack of consistent findings across the other years not much in the way of strong conclusions can be gathered from this single significant figure.

Given the impact of religious beliefs and religiosity on marriage, we constructed a separate OLS model that controls for Catholicism and two of the more conservative protestant religions, Methodist and Baptist (combined into a conservative protestant variable). In addition,

[7] While calculating the yearsmarried variable, we came across many unforeseen missing values in the data. To correct for these, we interpolated with regards to marital status. For any person with a missing value who had the same values in the previous year and in the following year, we assumed that the same value would be correct. This assumption was based on our hypothesis that any effects of a marriage lasting less than 12 months or a divorce lasting less than 12 months would be statistically negligible.

[8] A chow test was run to examine potential differences of the model's estimation of wages for married and non-married women. The baseline chow test failed to reject the null hypothesis at a 1% level or better. An additional chow test was conducted using the baseline regression with religion controls included. Once again, there was a failure to reject the null hypothesis. Thus, there appears to be no structural differences in our model's estimation between married and non-married women. Accordingly, we have no reason to believe that it is necessary to separate our model into separate regressions for married and non-married women.

this model also attempts to examine the relationship between marriage and these religions using an interaction term composed of marriage and each religion. Methodist and Baptist are being treated homogeneously as conservative Protestants. We reasoned that men and women raised and/or living in a more fundamentally-based home will be more likely to maintain the traditional model of family labor-force participation. Furthermore, we hypothesized that women would experience wage penalties as a result. The results of the regressions with the additional four religious variables are shown in Table 8. Unfortunately, there were no consistent findings across the years. Once again, the year 2000 emerged as an anomaly. In this case the *marriage* variable was significantly positive, with a larger magnitude than in the baseline, while the *catholic* variable and the *marriage and catholic* interaction term were significantly negative in 1984 and 2000. Once again, however, we hesitate to draw any firm conclusions from a single cross section OLS.[9]

The final factor we attempted to access was the impact of duration of marriage on wages.[10] The results from this regression are displayed in Table 4, titled Time Effects. This factor is especially relevant to the various theories outlined at the beginning of the paper, specifically the specialization theory. If this theory holds, there should at least initially be a positive growth in productivity for men specializing in the labor force, and a productivity and wage loss for women as they further specialize in housework. Unfortunately, we once again were left with little more than an outlier in the case of the year 2000. In the year 2000, every additional year in a marriage adds 1.1% to a woman's wages, with a slight reduction in additional wages with each passing year. Once again, we must hesitate against forming any strong conclusions when the cross sectional analysis is confined to a single year; even more so when that year emerges repeatedly, which indicates a possible consistent and regular bias.

VI. Concluding Remarks

While our research is certainly not on the cutting edge of economics, we have come to several important conclusions. To the best of our knowledge, this paper represents the most recent examination of the marriage effect of women's wages, specifically using the years 2000 and 2004 in our data set. Our models show that, for the most part, women's wages are not influenced by marital status. Each of our focus variables (*marriage*, *married with child*, religion and its interaction terms, and the duration of marriage) were consistently insignificant, with the exception of the year 2000. The results from the variables in the year 2000 were outliers in nearly every model we ran. Given that the *marriage* variables proved insignificant nearly every year, we believe that marriage does not play a major role in determining the wages of full-time women workers. This implies that employer bias, if present, is undetected in our model. This possibly represents a change in employment patterns or in the socio-economic position of women in the labor force. However, past research which indicates both the presence of women's marriage penalties as well as premiums cannot be ignored. There were a number of variables

[9] It is worth noting that in the NLSY, the question of religion was only asked in the years 1979, 1982 and 2000. Consequently in order to test our hypothesis of the impact on religion we had to choose the year closest to when the question was asked. It's not unreasonable to think that the significance in the years 1984 and 2000 could be a direct result of their proximity in time to the question.

[10] While most professional economists would not use a duration of marriage variable because they utilize more advanced econometric models (such as a fixed effects technique) that inherently account for time effects, it was beyond the scope of our research to expand our models to fully incorporate our panel data. However, we still felt it necessary to control for duration of major, so we adapted other techniques that control for time duration in OLS models, such as the Borjas, Bronnars, and Trejo (1991) method mentioned previously.

that could have potentially impacted our results, but unfortunately we were not able to include the variables because the data was not available. These range from more specific explanatory variables for women's wages, including wealth and religious status, as well as different theoretical approaches, such as differences in spousal education, wealth, or earnings that could potentially impact a woman's wage profile (Loh 1996). Further research using a more advanced model, such as a fixed-effects regression, may reveal more accurate results and provide greater clarity into the existence or causes of a marriage effect on women's wages.

Table 1: Summary Statistics for Women* Classified by Marital Status in 1984

Variable	Married	Never Married	Divorced, Separated, or Widowed	Combined
Real Hourly Wage	5.392	5.320	4.921	5.308
	(2.192)	(2.226)	(1.805)	(2.175)
White	.697	.575	.678	.635
	(.459)	(.494)	(.468)	(.481)
Black	.123	.288	.207	.212
	(.329)	(.453)	(.406)	(.409)
Hispanic	.179	.136	.114	.151
	(.383)	(.343)	(.319)	(.358)
Age	23.541	22.770	23.9	23.201
	(2.026)	(2.199)	(1.968)	(2.149)
Highest Grade Completed	12.132	12.699	11.692	12.364
	(2.236)	(1.965)	(2.066)	(2.118)
Child	.508	.166	.585	.349
	(.500)	(.372)	(.494)	(.477)
Potential Experience	5.937	4.542	6.792	5.343
	(2.683)	(2.371)	(2.618)	(2.656)
Tenure	2.308	1.937	1.728	2.068
	(1.897)	(1.762)	(1.635)	(1.817)
Government/Public Sector	.890	.893	.85	.887
	(.312)	(.308)	(.358)	(.315)
Union	.154	.169	.15	.161
	(.361)	(.375)	(.358)	(.367)
Urban	.758	.828	.807	.797
	(.428)	(.376)	(.395)	(.401)
Sample Size	558	666	140	1364

*Limited to full-time workers who comply with the standards set by the OLS regression described in Section IV.
†Standard deviations in parentheses.

Table 2: Summary Statistics for Women* Classified by Marital Status in 1990

Variable	Married	Never Married	Divorced, Separated, or Widowed	Combined
Real Hourly Wage	6.704	7.093	6.035	6.687
	(3.927)	(3.458)	(2.921)	(3.634)
White	.668	.468	.592	.595
	(.471)	(.499)	(.491)	(.490)
Black	.179	.402	.278	.263
	(.384)	(.490)	(.448)	(.440)
Hispanic	.151	.128	.129	.140
	(.359)	(.335)	(.336)	(.348)
Age	28.864	28.289	29.040	28.732
	(2.272)	(2.233)	(2.334)	(2.290)
Highest Grade Completed	12.776	13.542	12.069	12.860
	(2.546)	(2.530)	(2.043)	(2.503)
Child	.709	.309	.673	.586
	(.454)	(.462)	(.469)	(.482)
Potential Experience	9.432	7.814	10.196	9.113
	(4.338)	(3.996)	(4.291)	(4.321)
Tenure	3.754	3.5453	2.743	3.471
	(3.498)	(3.240)	(3.023)	(3.357)
Government/Public Sector	.808	.832	.829	.819
	(.393)	(.373)	(.376)	(.384)
Union	.160	.188	.141	.164
	(.366)	(.391)	(.348)	(.370)
Urban	.732	.853	.769	.774
	(.442)	(.353)	(.421)	(.417)
Sample Size	1112	621	417	2150

*Limited to full-time workers who comply with the standards set by the OLS regression described in Section IV.
†Standard deviations in parentheses.

Table 3: Summary Statistics for Women* Classified by Marital Status in 1994

Variable	Married	Never Married	Divorced, Separated, or Widowed	Combined
Real Hourly Wage	7.878	7.965	7.460	7.806
	(3.918)	(3.715)	(4.372)	(3.979)
White	.595	.342	.462	.505
	(.491)	(.475)	(.499)	(.500)
Black	.194	.467	.362	.297
	(.395)	(.499)	(.481)	(.457)
Hispanic	.209	.189	.175	.197
	(.407)	(.392)	(.380)	(.398)
Age	32.569	32.422	32.620	32.546
	(2.212)	(2.201)†	(2.346)	(2.240)
Highest Grade Completed	13.465	13.863	12.689	13.387
	(2.497)	(2.350)	(2.098)	(2.411)
Child	.769	.350	.735	.661
	(.421)	(.477)	(.441)	(.473)
Potential Experience	11.310	10.152	11.508	11.076
	(5.374)	(5.284)	(5.561)	(5.417)
Tenure	5.863	5.415	5.120	5.589
	(4.677)	(4.554)	(4.255)	(4.564)
Government/Public Sector	.207	.237	.212	.215
	(.405)	(.426)	(.409)	(.411)
Union	.028	.026	.008	.023
	(.167)	(.161)	(.092)	(.152)
Urban	.775	.887	.816	.811
	(.417)	(.316)	(.387)	(.391)
Sample Size	834	374	348	1556

*Limited to full-time workers who comply with the standards set by the OLS regression described in Section IV.
†Standard deviations in parentheses.

Table 4: Summary Statistics for Women* Classified by Marital Status in 2000

Variable	Married	Never Married	Divorced, Separated, or Widowed	Combined
Real Hourly Wage	8.882	7.796	7.420	8.231
	(5.637)	(5.077)	(4.169)	(5.162)
White	.553	.243	.415	.453
	(.497)	(.429)	(.493)	(.497)
Black	.231	.608	.377	.345
	(.421)	(.488)	(.485)	(.475)
Hispanic	.215	.147	.207	.200
	(.411)	(.355)	(.405)	(.400)
Age	39.098	38.800	39.018	39.018
	(2.203)	(2.136)	(2.341)	(2.236)
Highest Grade Completed	13.175	13.106	12.380	12.916
	(2.533)	(2.520)	(2.214)	(2.461)
Child	.824	.531	.759	.750
	(.380)	(.499)	(.427)	(.432)
Potential Experience	16.818	16.787	17.194	16.929
	(6.144)	(5.682)	(6.346)	(6.126)
Tenure	7.083	6.066	5.211	6.317
	(6.174)	(5.843)	(5.421)	(5.945)
Government/Public Sector	.237	.215	.210	.225
	(.425)	(.411)	(.407)	(.417)
Union	.242	.207	.184	.217
	(.428)	(.405)	(.387)	(.412)
Urban	.690	.886	.831	.769
	(.494)	(.370)	(.449)	(.467)
Sample Size	1068	386	652	2106

*Limited to full-time workers who comply with the standards set by the OLS regression described in Section IV.
†Standard deviations in parentheses.

Table 5: Summary Statistics for Women* Classified by Marital Status in 2004

Variable	Married	Never Married	Divorced, Separated, or Widowed	Combined
Real Hourly Wage	9.102	8.656	8.058	8.683
	(5.437)	(7.271)	(5.258)	(5.756)
White	.561	.236	.432	.463
	(.496)	(.425)	(.495)	(.498)
Black	.232	.599	.370	.340
	(.422)	(.490)	(.483)	(.474)
Hispanic	.206	.163	.197	.195
	(.404)	(.370)	(.398)	(.396)
Age	43.266	43.024	43.051	43.154
	(2.198)	(2.208)	(2.281)	(2.229)
Highest Grade Completed	13.065	12.972	12.233	12.777
	(2.325)	(2.502)	(2.245)	(2.360)
Child	.779	.491	.685	.698
	(.414)	(.500)	(.464)	(.458)
Potential Experience	20.936	20.933	21.668	21.175
	(5.921)	(5.651)	(6.142)	(5.956)
Tenure	8.142	7.619	6.652	7.564
	(7.100)	(6.511)	(6.101)	(6.716)
Government/Public Sector	.151	.174	.138	.151
	(.359)	(.379)	(.345)	(.358)
Union	.163	.226	.154	.171
	(.370)	(.419)	(.361)	(.377)
Urban	.722	.867	.837	.785
	(.501)	(.378)	(.406)	(.456)
Sample Size	830	287	543	1660**

*Limited to full-time workers who comply with the standards set by the OLS regression described in Section IV.
**Differs from regression sample size due to lack of relevant observations in our occupation control variable household04.
†Standard deviations in parentheses.

Table 6: Baseline Regression[11]

	1984	1990	1994	2000	2004
Married	.022	.0002	-.021	.032**	.007
	(..017)	(.015)	(.019)	(.017)	(.021)
Experience	..007	-.007	.012**	.0003	-.008
	(.010)	(.006)	(.006)	(.007)	(.011)
Experience^2	.0008	.0004	-.0004	-.00003	.00007
	(.0008)	(.0003)	(.0003)	(.0002)	(.0002)
Tenure	.079***	.066***	.040***	.022***	.032***
	(.016)	(.007)	(.006)	(.004)	(.005)
Tenure^2	-.007***	-.003***	-.001***	-.0004*	-.0008***
	(.003)	(.0006)	(.0004)	(.0002)	(.0002)
Northeast	.059**	.221***	.151***	.156***	.144***
	(.025)	(.021)	(.029)	(.027)	(.033)
South	.0004	.003	-.066***	-.042**	-.045*
	(.0225)	(.019)	(.024)	(.021)	(.026)
West	.075**	.127***	.065**	.149***	.090***
	(.028)	(.022)	(.030)	(.027)	(.034)
Urban	.087***	.105***	.094***	.048***	.054**
	(.022)	(.018)	(.024)	(.018)	(.023)
Union	.121***	.084***	-.014	.086***	.062**
	(.023)	(.021)	(.058)	(.022)	(.029)
Child	-.053***	-.049***	-.033	-.027	.016
	(.020)	(.016)	(.020)	(.019)	(.022)
Black	-.075***	-.076***	-.087***	-.098***	-.143***
	(.023)	(.019)	(.022)	(.020)	(.025)
Hispanic	-.013	-.013	-.002	-.029	-.027
	(.025)	(.023)	(.025)	(.023)	(.029)
Government	.004	.092***	-.078***	-.161***	-.048
	(.032)	(.025)	(.029)	(.026)	(.035)
Hgcf	.054***	.052***	.062***	.070***	.077***
	(.005)	(.004)	(.005)	(.004)	(.005)
# of Obs.	1364	2150	1556	2106	1659
Adj. R^2	.3521	.4714	.4500	.4852	.4499

Notes: Standard Errors are given in parentheses.
*Variable is significant at the 10% level.
**Variable is significant at the 5% level.
***Variable is significant at the 1% level.

[11] There is a wide variation in the sample size for any given year depending on whether or not respondents answered questions pertinent to our regression and whether or not the National Opinion Research Center (who was administering the survey) was able to conduct the interview. Also, in some cases respondents were dropped from the survey due to budgetary concerns and other related difficulties in conducting the interview. In any given year then the same women are not included in the regression although we have no reason to believe that a non-response bias is present.

Table 7: Married with Kids

	1984	1990	1994	2000	2004
Married	.014	.021	-.025	-.034	-.024
	(.021)	(.023)	(.031)	(.034)	(.037)
Married with Child	-.022	-.037	.005	.089**	.046
	(.035)	(.031)	(.038)	(.038)	(.044)
Experience	.007	-.006	.012*	-.0002	-.008
	(.010)	(.006)	(.006)	(.007)	(.011)
Experience^2	.0007	.0004	-.0004	-.00001	.00008
	(.0008)	(.0003)	(.0003)	(.0002)	(.0002)
Tenure	.079***	.066***	.040***	.021***	.032***
	(.015)	(.007)	(.006)	(.004)	(.005)
Tenure^2	-.006***	-.003***	-.001***	-.0004*	-.0008***
	(.002)	(.0006)	(.0004)	(.0002)	(.0002)
Northeast	.058**	.220***	.151***	.156***	.144***
	(.025)	(.021)	(.029)	(.027)	(.033)
South	-.001	.003	-.065***	-.043**	-.046*
	(.022)	(.019)	(.024)	(.021)	(.026)
West	.071**	.127***	.065**	.148***	.090**
	(.027)	(.022)	(.030)	(.027)	(.034)
Urban	.087***	.105***	.094***	.047**	.053**
	(.021)	(.018)	(.024)	(.018)	(.023)
Union	.121***	.085***	-.014	.085***	.063**
	(.022)	(.021)	(.058)	(.022)	(.029)
Child	-.063	-.030	-.035	-.063	-.002
	(.026)	(.022)	(.027)	(.024)	(.029)
Black	-.073***	-.078***	-.087***	-.096***	-.141***
	(.022)	(.019)	(.022)	(.020)	(.025)
Hispanic	-.013	-.013	-.003	-.028	-.028
	(.025)	(.023)	(.025)	(.023)	(.029)
Government	.004	.092***	-.078***	-.159***	-.049
	(.032)	(.025)	(.029)	(.026)	(.035)
Hgcf	.053***	.052***	.062***	.068***	.077***
	(.005)	(.004)	(.005)	(.004)	(.005)
# of Obs.	1364	2150	1556	2106	1659
Adj. R^2	.3517	.4714	.4497	.4863	.4503

Notes: Standard Errors are given in parentheses.
*Variable is significant at the 10% level.
**Variable is significant at the 5% level.
***Variable is significant at the 1% level.

Table 8: Religion

	1984	1990	1994	2000	2004
Married	-.012	.026	-.003	.063**	.025
	(.030)	(.027)	(.030)	(.026)	(.032)
Conservative Protestant	-.076***	.011	.032	-.021	-.055
	(.027)	(.027)	(.033)	(.027)	(.035)
Catholic	-.051*	.026	.041	-.064**	.060
	(.028)	(.028)	(.036)	(.032)	(.039)
Married and Cons. Prot.	.019	-.049	-.056	-.028	-.011
	(.041)	(.036)	(.044)	(.037)	(.047)
Married and Catholic	.081**	-.022	-.018	-.080*	-.037
	(.040)	(.037)	(.046)	(.040)	(.051)
Experience	.006	-.006	.012*	.00005	-.009
	(.011)	(.006)	(.006)	(.007)	(.011)
Experience^2	.0007	.0003	-.0004	-.00001	.00008
	(.0008)	(.0003)	(.0003)	(.0002)	(.0002)
Tenure	.079***	.066***	.036***	.021***	.030***
	(.015)	(.007)	(.006)	(.004)	(.005)
Tenure^2	-.007***	-.003***	-.001**	-.0003*	-.0007***
	(.002)	(.0006)	(.0004)	(.0002)	(.0002)
Northeast	.056**	.209***	.158***	.149***	.135***
	(.025)	(.023)	(.030)	(.027)	(.034)
South	.016	-.005	-.061**	-.035*	-.019
	(.023)	(.020)	(.025)	(.022)	(.027)
West	.071**	.119***	.066**	.145***	.092**
	(.028)	(.023)	(.031)	(.027)	(.035)
Urban	.075***	.099***	.095***	.043**	.052**
	(.022)	(.019)	(.025)	(.018)	(.023)
Union	.123***	.089***	-.034	.082***	.068**
	(.023)	(.021)	(.062)	(.022)	(.030)
Child	-.049**	-.048***	-.032	-.024	.006
	(.019)	(.017)	(.021)	(.019)	(.022)
Black	-.059**	-.074***	-.095***	-.082***	-.124***
	(.023)	(.020)	(.025)	(.021)	(.026)
Hispanic	-.015	-.026	-.013	-.044	-.059
	(.027)	(.025)	(.028)	(.025)	(.032)
Government	.004	.086***	-.067**	-.158***	-.051
	(.032)	(.025)	(.031)	(.026)	(.036)
Hgcf	.053***	.052***	.065***	.069***	.075***
	(.005)	(.004)	(.005)	(.004)	(.005)
# of Obs.	1332	2101	1392	2104	1572
Adj. R^2	.3512	.4706	.4518	.4867	.4551

Notes: Standard Errors are given in parentheses.
*Variable is significant at the 10% level.
**Variable is significant at the 5% level.
***Variable is significant at the 1% level.

Table 9: Time Effects

	1984	1990	1994	2000	2004
Married	.013	.016	.007	-.002	-.020
	(.052)	(.030)	(.041)	(.032)	(.038)
Years Married	.0003	-.004	-.005	.011*	.006
	(.046)	(.012)	(.010)	(.006)	(.007)
Years Married^2	.001	.00009	.0001	-.0005*	-.0002
	(.007)	(.001)	(.0006)	(.0003)	(.0002)
Experience	.007	-.007	.011*	-.001	-.009
	(.010)	(.006)	(.006)	(.007)	(.011)
Experience^2	.0007	.0004	-.0004	.00001	.0001
	(.0008)	(.0003)	(.0003)	(.0002)	(.002)
Tenure	.080***	.066***	.041***	.022***	.032***
	(.015)	(.007)	(.006)	(.004)	(.005)
Tenure^2	-.007***	-.003***	-.001***	-.0004*	-.0008***
	(.002)	(.0006)	(.0004)	(.0002)	(.0002)
Northeast	.059**	.220***	.151***	.154***	.142***
	(.025)	(.021)	(.029)	(.027)	(.033)
South	-.0001	.003	-.065***	-.043**	-.046*
	(.022)	(.019)	(.024)	(.021)	(.026)
West	.072**	.127***	.065**	.149***	.090**
	(.027)	(.022)	(.030)	(.027)	(.034)
Urban	.087***	.104***	.093***	.047**	.053**
	(.021)	(.018)	(.024)	(.018)	(.023)
Union	.121***	.084***	-.014	.087***	.063**
	(.022)	(.021)	(.058)	(.022)	(.029)
Child	-.057***	-.046***	-.028	-.028	.014
	(.020)	(.017)	(.020)	(.019)	(.022)
Black	-.073***	-.077***	-.088***	-.098***	-.141***
	(.022)	(.019)	(.022)	(.020)	(.025)
Hispanic	-.012	-.013	-.003	-.028	-.025
	(.025)	(.023)	(.025)	(.023)	(.030)
Government	.004	.092***	-.078***	-.162***	-.049
	(.032)	(.025)	(.029)	(.026)	(.035)
Hgcf	.053***	.052***	.062***	.069***	.077***
	(.005)	(.004)	(.005)	(.004)	(.005)
# of Obs.	1364	2150	1556	2106	1659
Adj. R^2	.3514	.4710	.4496	.4855	.4496

Notes: Standard Errors are given in parentheses.
*Variable is significant at the 10% level.
**Variable is significant at the 5% level.
***Variable is significant at the 1% level.

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IX. Appendix: Variables and Definitions

Marriedφ	=1 if respondent is married with a spouse present in the household
Years Marriedφ	=number of years the respondent has been married, if Marriedφ=1.
Experienceφ	=Current Year (φ) – Final Year of Schooling +1
Tenureφ	=number of years of tenure with current employer at time of interview
Northeastφ	=1 if respondent lives in the Northeast
Southφ	=1 if respondent lives in the South
Westφ	=1 if respondent lives the West
Urbanφ	=1 if respondent lives in a metropolitan statistical area (MSA)
Unionφ	=1 if respondent belongs to a union or has wages set by a collective bargaining agreement at the time of interview
Kidsφ	= number of children in household at time of interview
Childφ	=1 if Kidsφ>0
Married with Childφ	= Marriedφ x Childφ
Black	=1 if respondent is black
Hispanic	=1 if respondent is Hispanic
Governmentφ	=1 if respondent works in the public sector at time of interview
Hgcf	=Highest Grade Completed (Final) at time of interview
Agricultureφ	=1 if employed in agriculture, forestry, or fishery industries
Miningφ	=1 if employed in mining industry
Constructionφ	=1 if employed in construction industry
Manufacturingφ	=1 if employed in manufacturing industry
Transportationφ	=1 if employed in transportation, communication, or public utilities industries
Tradeφ	=1 if employed in wholesale or retail trade industries
Financeφ	=1 if employed in finance, insurance, or real estate industries
Repairφ	=1 if employed in business or repair industries
Personalφ	=1 if employed in personal industries
Entertainmentφ	=1 if employed in entertainment or recreation services industries
Professionalφ	=1 if employed in professional industry or in related services
Administrationφ	=1 if employed in public administration industry
Technicalφ	=1 if employed within professional or technical occupations
Managerφ	=1 if employed as a manager, official, or proprietor
Salesφ	=1 if employed as a sales worker
Clericalφ	=1 if employed within clerical and kindred

	occupations
Craftsmenφ	=1 if employed as a craftsman, foreman, or kindred occupation.
Operativesφ	=1 if employed within operatives and kindred occupations.
Laborersφ	=1 if employed as a non-farm laborer
Farmφ	=1 if employed as a farm laborer
Serviceφ	=1 if employed as a non-household service worker
Householdφ	=1 if employed in a private household
Agriculture04	=1 employed in agriculture, forestry, fishing, or hunting industries in 2004.
Mining04	=1 if employed in mining industry in 2004.
Utilities04	=1 if employed in utilities industry in 2004.
Construction04	=1 if employed in construction industry in 2004.
Manufacturing04	=1 if employed in manufacturing industry in 2004.
Trade04	=1 if employed in wholesale trade or retail trade industries in 2004.
Transportation04	=1 if employed in transportation and warehousing industry in 2004.
Information04	=1 if employed in the information industry in 2004.
Finance04	=1 if employed in finance and insurance industry in 2004.
Real Estate04	=1 if employed in real estate and rental and leasing industry in 2004.
Professional04	=1 if employed in professional, scientific, and technical services industry in 2004.
Administration04	=1 if employed in management, administrative and support, and waste management industries in 2004.
Educational04	=1 if employed in educational services industry in 2004.
Health Care04	=1 if employed in health care and social assistance industry in 2004.
Entertainment04	=1 if employed in arts, entertainment, and recreation industry in 2004.
Services04	=1 if employed in accommodations and food services industry in 2004.
Other Services04	=1 if employed in other services, excluding public administration in 2004.