The Effect of Marital Status on Income for Women in the United States

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INTRODUCTION

- A woman's marital status is an important factor in determining her well-being. For example, married individuals are healthier and live longer compared to those who have never been married or are widowed or divorced (Lawrence 2019).
- Additionally, literature has found that marital status and income level share a relationship for the average single woman. On average, a single woman earns more than a married woman. This suggests that married women pay a marriage penalty when it comes to their income level (Madalozzo 2008).
- This paper aims to understand ways in which marital status affects a woman's income as well as family income.

BACKGROUND

- Becker (1973) proposed that households were more efficient when the housework and outside work was divided completely between the two spouses.
- Mandalozzo (2008) found that marriage and income are closely related and married men usually have a higher income than single men.
- Marriage can provide women with financial security post-retirement, better health outcomes, and greater happiness for married women compared to unmarried women (Wilmouth & Koso, 2002).
- Marital background strongly affects the degree of change in income status after retirement for women (Greenwood et al., 2003).

DATA

- Our data comes from the Panel Study of Income Dynamics (PSID)
- This source provides the data for income on a family and individual level with information on employment, wealth, marriage, childbearing, and education.
- We will be using panel data on both the family-level and individual-level to override potential endogeneity by estimating our model using fixed effects.
- We will look at income and marital status among women during the years 2009 to 2019

Table 1
Age, Income, and Education by Marital Status

	Total		Married		Single		Other	
	Mean (SD)	Minimum Maximum	Mean (SD)	Minimum Maximum	Mean (SD)	Minimum Maximum	Mean (SD)	Minimum Maximum
Mean Age	42.10 (14.66)	16 104	43.53 (13.17)	17 94	32.89 (10.70)	16 98	52.12 (16.46)	19 104
Mean WifeInc ($)	22,460.28 (50,888.44)	0 6,300,000	29,887.73 (67,220.1)	0 6,300,000	15,602.22 (22,338.22)	0 424,000	15,351.84 (25,538.73)	0 300,000
Mean FamInc ($)	73,596.61 (101,868.2)	-267,900 6,317,099	104,556.7 (129,296.5)	-267,900 6,317,099	38,248.92 (39,528.89)	-22,000 2,602,400	49,378.85 54,745.55	-28,000 1,508,700
Mean WifeEdu	13.38 (2.57)	0 17	13.86 (2.63)	0 17	12.89 (2.32)	0 17	12.96 2.50	0 17
Observations	92,123		46,137		24,974		16,368	

MODEL

To determine if income is affected by marital status for women in the United States, we will be using the following model from Bardasi and Taylor (2008):

$$\ln(w_{it}) = \beta_1 X_{it} + \beta_2 M_{it} + \alpha_i + \gamma_t + \varepsilon_{it}$$

- w_{it} is the wage of the individual i in year t
- X_{it} is a vector of the observable individual, household, job, and employer-related characteristics that determine wages. These characteristics include age, educational attainment, industry, and occupation.
- M_{it} represents three dummy variables for marital status; married, single, and other (divorced and widowed)
- α_i captures the unobserved time-invariant characteristics of the individual.
- γ_t is a year fixed effect
- ε_{it} is the error term.
- We will be using a fixed-effects regression to allow us to control for any individual attributes that do not vary across time.

RESULTS

	Log of Women's Income				Log of Family Income	
	(1)	(2)	(3)	(4)	(5)	(6)
Married	0.407*** (0.0107)	0.0901*** (0.0109)	0.0894*** (0.0110)	0.217*** (0.0179)	0.868*** (0.00679)	0.510*** (0.00944)
Other	0.275*** (0.0158)	0.0717*** (0.0158)	0.0848*** (0.0158)	0.0557** (0.0217)	0.186*** (0.00896)	0.0503*** (0.0116)
Age		0.118*** (0.00238)	0.125*** (0.00254)	0.116*** (0.00354)	0.0578*** (0.00106)	0.0722*** (0.00160)
Age2		-0.00129*** (2.70e-05)	-0.00143*** (2.90e-05)	-0.00136*** (4.37e-05)	-0.000566*** (1.09e-05)	-0.000679*** (1.84e-05)
Education		0.149*** (0.00188)	0.134*** (0.00195)	0.112*** (0.00498)	0.129*** (0.00112)	0.0550*** (0.00253)
Number of Kids in Family Unit			-0.0890*** (0.00359)	-0.0512*** (0.00498)	-0.0298*** (0.00213)	0.00428 (0.00294)
Child under 6 in Family Unit			0.0347*** (0.0104)	-0.0119 (0.0103)	-0.0273*** (0.00653)	0.0141** (0.00649)
Other Income			1.29e-06*** (5.31e-08)	1.17e-06*** (6.69e-08)		
Year FE				YES		YES
Individual FE				YES		YES
Observations	57,494	57,188	55,517	55,517	87,579	87,579
R-squared	0.024	0.159	0.178	0.097	0.374	0.136
Number of individuals				15,111		18,427

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

- Regression 4 finds that married women earn 21.7% more than their unmarried counterparts
- This suggests that single women earn less than married women which could be due to being younger or having less motivation to work due to lack of spouse and children
- Regression 6 finds that married women earn 51% more family income than their unmarried counterparts
- This suggests that married women earn more family income because there are two earners in their household rather than one

CONCLUSION

Our results indicate that the average married woman earns 21.7% more than the average single woman. This may imply that there is an age factor where the single people in our sample are much younger than the married women, suggesting that they are at a different stage in their lives.
Past research has found that the marriage penalty tax has a negative impact on marital stability, which has the potential to harm women and children, especially single women who are more likely to be in poverty (Lassila et al., 2018). A tax system that imposes greater tax burdens on married couples, as compared to single individuals, is detrimental to the well-being and progress of any nation (Lassila et al., 2018).

Bardasi, E., & Taylor, M. (2008). Marriage and Wages: A Test of the Specialization Hypothesis. *Economica*, *75*(299), 569–591. http://www.jstor.org/stable/40071818
Becker, G. S. (1973). A theory of marriage: Part I. *Journal of Political Economy*, *81*(4), 813–846. https://doi.org/10.1086/260084
Greenwood, J., Guner, N., and Knowles, J., (2003). More on Marriage, Fertility, and the Distribution of Income. *International Economic Review*, *44*, 827-62. http://www.jstor.org/stable/3663539
Lassila, D., Smith, L. M., & Zhang, D. (2018). Negative Social and Economic Effects of the Marriage Penalty Tax on Women and Society. *Journal of Accounting and Finance*, *18*(5). https://doi.org/10.33423/jaf.v18i5.35
Lawrence, E.M., Rogers, R.G., Zajacova, A., & Wadsworth, T. (2019). Marital happiness, marital status, health, and longevity. *Journal of Happiness Studies*, *20* (5), 1539-1561. https://doi.org/10.1007/s10902-018-0009-9
Madalozzo, R. (2008). "An Analysis of Income Differentials by Marital Status." *Estudos Economicos* 38 (2): 267–92. https://doi.org/10.1590/S0101-41612008000200003
Wilmoth, Janet, and Gregor Koso. (2002). Does Marital History Matter? Marital Status and Wealth Outcomes among Preretirement Adults. *National Council on Family Relations* 64, no. 1: 254–68. https://doi.org/10.1111/j.1741-3737.2002.00254.x.