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Abstract

This paper contributes to the literature in three ways. Our first contribution is calculating the marriage premium for Turkey. Our results suggest that married men earn 27 percent more than single men and married women earn 4 percent less than single women. Our second contribution is calculating the marriage premium for Turkey's regions. For men, the wage difference is the smallest, 0.43, in Istanbul. The difference is highest in Akdeniz region. For women, the wage difference is smallest, -0.04, in Ege and the highest, 0.62, in Dogu Anadolu. Finally, we estimated the relationship between age and the marriage premium. We found that for men, at younger ages the difference is high. For women, in most of ages single women earn more than married women.

Keywords: marriage, earnings, marriage premium

I-Introduction

Is there a marriage premium? It asks do married men earn more than single men. This question takes a lot of attention, for instance, Leonard and Stanley (2010)'s meta-regression analysis depends on 50 studies which estimate the marriage premium.

In addition, for the first time, we used Income and Living Conditions Survey (ILCS) 2009 for the marriage premium analysis. ILCS is a nationally representative dataset. When we look at the averages of wages, we see married men earn more than single men. For instance, in our 2009 sample on average single men earn 6,824 TL. On the other hand, on average married men earn 10,061 TL. It is sixty-eight percent more than single men's average. When we look at women's earnings, we see a similar pattern. On average single women earn 6,738 TL and married women earn 7,628 TL.

This paper contributes to the literature in three ways. Our first contribution is calculating the marriage premium for Turkey. Our second contribution is calculating the marriage premium for Turkey's regions. Finally, we estimated the relationship between age and the marriage premium.

Our results suggest that married men earn 27 percent more than single men and married women earn 4 percent less than single women. In addition, we looked at the marriage premium of Turkey's regions. For men, the wage difference is the smallest, 0.43, in Istanbul. The difference is highest in Akdeniz region. For women, the wage difference is smallest, -0.04, in Ege and the highest, 0.62, in Dogu Anadolu.

II-Theoretical Background

There are three main explanations why married men earn more than single men. First of all, married men might be more productive because they can specialize in non-household production. Second possibility is employers discriminate in favor of married men. Finally, married men might have some unobservable characteristics which make them attractive in both labor market and marriage market. Antonovics and Town (2004) use a dataset which includes monozygotic twins. They found when they treated the data as a cross-section the marriage premium is 19 percent. However, when they look within monozygotic twins, they found the marriage premium increases to 26 percent.

Schoeni (1990) uses Luxembourg Income Study and calculates the marriage premium for twelve different countries. He found that the marriage premium varies between 3 percent and 31 percent in the twelve countries. In addition, Schoeni (1990) investigates the relationship between age and the marriage premium. He found that the mean marriage premium for men ages 30 and 50 across twelve countries is 13.6 percent and 19.7 percent, respectively.

Ozcan et al. (2003) investigate wage differences by gender, wage and self employment in Istanbul. They use the 1994 Household Income Survey of the State Institute of Statistics. According to Ozcan et al. (2003) in Istanbul the mean earnings of married and unmarried

workers are 148.5 million TL and 63.2 million TL, respectively. They found married wage earner men earn 29 percent more than unmarried wage earner men. In addition, they found married wage earner women earn 27 percent less than unmarried wage earner women.

Furthermore, Muniz and Ruis-Neto (2011) calculate the marriage premium for Brazil. They estimate the marriage premium among formally married, informally married, and single workers. Muniz and Ruis-Neto (2011) find the wage gap is largest between formally and informally married in Brazil. When they compare single workers with formally married and informally married workers, the gap is bigger with the formally married couples.

In addition, Leonard and Stanley (2010) use a meta-regression analysis which depends on 50 studies. According to them, on average, these 50 studies report that married men earn 15.5 percent more than single men. The smallest wage premium reported is -0.39, and the maximum was 1.00. Leonard and Stanley (2010) point out that about 61 percent of the estimates are between 0.05 and 0.2.

Besides, several studies investigate the wage gap between the genders. For instance, Blau and Kahn (1996) find that the pay gap is much larger for married workers for ten countries. According to their estimates, the wage rate (women's earnings over men's earnings) is 0.55 and 0.86 for married workers and single workers in the US.

III-Estimation Procedure and Data

We used Oaxaca decomposition in this paper. According to Jann (2008), Oaxaca decomposition takes following form:

$$Y_1 = X_1 b_1 + e_1$$

$$Y_2 = X_2 b_2 + e_2$$

for some outcome variable Y in two groups 1 and 2. As long as $E(e_1)=E(e_2)=0$, the mean outcome difference between the two groups can be decomposed as

$$R = x_1' b_1 - x_2' b_2 = (x_1-x_2)' b_2 + x_2'(b_1-b_2) + (x_1-x_2)'(b_1-b_2) = E + C + CE$$

where x_1 and x_2 are the vectors of means of the regressors. In addition, E stands for Endowment, C stands for Coefficient, and CE stands for Interaction in the decomposition. If there is a selection, the model becomes

$$R\_s = x_1' b_1 - x_2' b_2 - (s_1 bs_1 - s_2 bs_2)$$

where s_1 and s_2 are the means of selection variable (S) and bs_1 and bs_2 are the coefficients of S.

In that case, our Oaxaca decomposition depends on the following regression:

$$\ln (wage) = \alpha_1 + \beta_1 \text{ Educ} + \Theta_1 \text{ Age} + e_1$$

However, in our data set, age and education are not continuous variables. The age has 14 intervals and the education has seven intervals and Table-1 shows those intervals.

IV-Results

Table-2 shows our OLS and selection model results from our Oaxaca decomposition. In our 2009 sample, the mean of the log wages is 8.96 for married men and 8.33 for single men, yielding a wage gap of 0.63.The first part reflects the mean increase in single men's wages if they had the same characteristics as married men. The increase of 0.50 in the 2009 data indicates that differences in endowments account for about eighty percent of the wage gap. The second term quantifies the change in single men's wages when applying the married men's coefficients to the single men's characteristics. The value of coefficients is 0.79. The third part is the interaction term that measures the simultaneous effect of differences in endowments and coefficients. The value of interaction is -0.67. However, these results suffer from the selection bias.

In our sample, we also corrected the selection bias. The second part shows those results. The first part reflects the mean increase in single men's wages if they had the same characteristics as married men. The increase of 0.19 in the 2009 data indicates that differences in endowments account for about sixty five percent of the wage gap. In addition, the value of coefficients is 0.40 and the value of interaction is -0.31. However, these results are not statistically significant.

In addition, we calculated the wage gap for women. In our sample, the mean of the log wages is 8.22 for married women and 8.27 for single women, yielding a wage gap of -0.05. . In addition, the value of coefficients is 0.12 and the value of interaction is -0.24. Furthermore, we corrected the selection bias. In that case, the wage gap becomes -0.04. These results suggest that married women earn less than single women in Turkey.

Table-3 shows Oaxaca decomposition results for different regions in Turkey. For men, the wage difference is the smallest, 0.43, in Istanbul. The difference is highest in Akdeniz region. Other regions have pretty similar results which are around 0.60 For women, the wage difference is smallest, -0.04, in Ege and the highest, 0.62, in Dogu Anadolu.

Table-4 shows the effect of age on marriage premium. For men, at younger ages, 15-24, the difference is high. Then, it declines to zero. After that, it starts to increase. There is one exception, 50-54, which is a negative number. For women, other than 55-59 age bracket, in all ages single women earn more than married women.

VI-Conclusion

This study makes several contributions into the literature. First of all, we used a new dataset. Then, this dataset allows us to calculate the marriage premium for different regions in Turkey. Finally, we estimated the relationship between age and the marriage premium.

For men, the wage difference is the smallest, 0.43, in Istanbul. The difference is highest in Akdeniz region. For women, the wage difference is smallest, -0.04, in Ege and the highest, 0.62, in Dogu Anadolu.When we look at the relationship between age and the marriage premium, we found that for men, at younger ages the difference is high. Then, it declines to zero. After that, it starts to increase. For women, other than 55-59 age bracket, in all ages single women earn more than married women.

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Table-1: Intervals

Education

0	Illiterate
1	People who can read without holding a degree
2	Elemantary School
3	Middle School
4	High School
5	Vocational School
6	College

Age

1	between 0 and 4
2	between 5 and 11
3	between 12 and 14
4	between 15 and 19
5	between 20 and 25
6	between 25 and 29
7	between 30 and 34
8	between 35 and 39
9	between 40 and 44
10	between 45 and 49
11	between 50 and 54
12	between 55 and 59
13	between 60 and 64
14	65 or older

Table-2: OLS and Selection Model Results

A. Men

	(OLS)		(SELECTION MODEL)	
	Coeff.	s.e.	Coeff.	s.e.
Mean 1	8.96	0.01	8.89	0.01
Mean 2	8.33	0.03	8.62	5.41
Difference	0.63	0.03	0.27	5.41
Endowments	0.50	0.07	0.19	5.17
Coefficients	0.79	0.03	0.40	5.41
Interaction	-0.67	0.07	-0.31	5.17
N	7674		7674	

B. Women	(OLS)		(SELECTION MODEL)	
	Coeff.	s.e.	Coeff.	s.e.
Mean 1	8.22	0.04	8.13	0.04
Mean 2	8.27	0.04	8.18	0.12
Difference	-0.05	0.06	-0.04	0.13
Endowments	0.06	0.04	0.04	0.10
Coefficients	0.12	0.06	0.12	0.12
Interaction	-0.24	0.05	-0.20	0.10
N	2613		2613	

Note: Mean 1 is the mean of married (wo)men and Mean 2 is the mean of single (wo)men.

Table-3: Regional Coefficients

	MEN			WOMEN		
	Coeff.	se	N	Coeff.	se	N
Istanbul	0.43	0.06	1080	0.05	0.09	408
Marmara	0.61	0.07	1397	0.44	0.08	1124
Ege	0.62	0.08	1045	-0.04	0.14	461
Ic Anadolu	0.69	0.07	1246	0.18	0.09	833
Akdeniz	0.85	0.11	786	0.18	0.15	330
Karadeniz	0.84	0.09	860	0.61	0.12	561
Dogu Anadolu	0.65	0.09	1076	0.62	0.11	739
Guney Anadolu	0.64	0.10	716	-0.18	0.27	153
Turkey	0.63	0.03	7674	-0.04	0.13	2613

Table-4: Age Coefficients

	MEN			WOMEN		
	Coeff.	se	N	Coeff.	se	N
15-19	0.49	0.26	598	-0.66	0.27	251
20-24	0.30	0.07	822	-0.18	0.13	474
25-29	0.01	0.05	1352	-0.40	0.12	517
30-34	0.10	0.09	1185	-0.45	0.15	376
35-39	0.30	0.18	1089	-0.36	0.18	351
40-44	0.14	0.23	982	-0.33	0.19	286
45-49	0.41	0.35	785	-0.43	0.27	195
50-54	-0.11	0.32	498	-0.24	0.31	98
55-59	0.09	0.67	228	0.18	0.46	42
60-64	1.11	0.45	90	-0.75	1.43	11
65+	1.63	0.95	45	-0.29	0.82	12