

## **Review of “Male-Female Labor Market Participation and the Extent of Gender-Based Wage Discrimination in Turkey”**

It is significant that the authors used 2003 and 2010 Household Budget Surveys (HBS) to demonstrate the gender wage gap in Turkey. However, there are the following problems with the paper.

1. The title of the paper is too long.
2. “The female labor force participation rates and female-to-male earnings ratios have substantially increased in many countries over the last **century**” Instead of century, decade would be more suitable since the paper uses data from 2003 and 2009.
3. The paper would be more focused if the emphasis would be more on gender differential in labor market indicators rather than overall labor market indicators. To me, the first 4 rows under Total heading in Table 3 does not fit into the concept of the paper.
4. “Numerous studies have attempted to measure the extent of gender wage discrimination in several countries across the world. Most research to date show that there exists a substantial amount of wage differential after adjusting for sex differences in productivity, which is frequently interpreted as evidence of pay discrimination against women.” It would be better if you mention some of those studies and also mention the context/country the study is measuring.
5. Reference is missing for the 2006 EU progress report which is mentioned in the introduction 3<sup>rd</sup> paragraph.
6. 5<sup>th</sup> paragraph of the introduction mentions the literature on the gender wage gap in Turkey being scant but do not provide any reference nor the details (findings) of those studies.
7. 3<sup>rd</sup> section can be titled as literature review following the general structure in many other papers.
8. After mentioning the previous studies in 3<sup>rd</sup> section, would not it be better if you summarize the gap in the literature and link it with your rationale for using JMP technique with the following sentence. “Our study is relatively more comprehensive and detailed considering its time span and methodologies covered. To our knowledge, this is the first study to employ Juhn-Murphy-Pierce wage decomposition technique in the Turkish labor market context”
9. The findings of the study can be briefly included in the introduction.
10. Table 1 includes # of people in labor force and in employment (1<sup>st</sup> and 2<sup>nd</sup> row of Table 1) which adds very little information given that labor force participation rate, unemployment rate is already given. Similarly, employment rate row is not that necessary since unemployment rate and labor force

participation rate is already given. Similar comment is also valid for Table 2 and 3.

11. For Table 1, 2 and 3 the link ([http://www.tuik.gov.tr/VeriBilgi.do?tb\\_id=25&ust\\_id=8](http://www.tuik.gov.tr/VeriBilgi.do?tb_id=25&ust_id=8)) does not work.
12. The figures in Table 2 are percentages I guess, but it is not written in the table.
13. Descriptive statistics can be better explained. For instance, from Table 3, UR for university graduate males has declined from 2003 to 2010 whereas that of females has increased. This suggests that females are less favored in the labor market than males.
14. I would not call all the factors mentioned in World Bank report (2009) as “research” since they did not cite any scientific paper for making those remarks.
15. In section 4.2, endowment effect, renumeration effect are first used. But, these terms are explained in section 4.3. Would not it be better to explain the terms when they are first used?
16. I think there is a typo in equation 20. You probably wanted to write  $\varepsilon_{mit}$  firstly and then explain it?
17. For section 5, one needs to know which explanatory variables are used in estimation. But, it is too long. You can briefly mention the explanatory variables and put explanation of independent variables into the appendix. You may also put into explanation for the rationale for including those explanatory variables in analysis in web appendix and mention it as a footnote in the main text.
18. Why do you report descriptive statistics for all individuals although in your analysis you use only regular employees? Especially, the focus of the paper being on gender wage gap for employees, I would prefer to see the difference between females and males working for a salary. For descriptive statistics, if you report % of females working for a salary in the sample, % of males working for a salary in the sample, it would be better to get a grasp of the data. I do not think min and max columns are necessary. You could report standard deviation instead of min and max.
19. You mentioned that on average females working for a wage has higher education than males working for a wage, but then you also attribute informal employment being more prevalent among females to their low skills. Is not this contradiction?
20. “Share of having a union membership has to fallen to 9% among male workers and only 6% among female workers seems to contradict with the figures in the table 4 because % in Table 4 are for all individuals. But, you should either report those figures you discuss in the text or discuss what you report in the table 4.
21. I do not think you need to discuss each and every control variable in Table 5. Even Table 5 can be put into appendix. The important part about participation equation is only the variables that are not included

in wage equation and the inverse mill's ratio.

22. In page 19, Wald ist should be Wald stat. I guess. You talk about Wald statistic having such value. It is easier to have an idea if you report p values for Wald test. For education, it is only significant at 10% level.
23. Calling results in Table 6 as OLS estimates is a bit confusing since you use inverse mills ratio for sample selection correction. You may call the results Heckit estimates and also report OLS results without sample selection correction. Also, generally female wages are thought to be not representative since only a certain fraction of females participate into labor market. As you mentioned, only a very low percentage of females participate into labor market in Turkey. Therefore, we would expect sample selection to be more of an issue for females in Turkey. Why then inverse mills ratio for females is not statistically insignificant? Does not it contradict with your arguments in section 8 “women suffer from serious barriers to employment”?
24. For table 7, if you would report each control variable, one could see the contribution of each control variable for the explaining endowment effect.
25. In paragraph 3 of page 23, you discuss underestimating wage discrimination with extended models. However, you did not discuss the possibility of overestimating wage discrimination with models having only human capital variables at least in a footnote.
26. Are the results that you report in Table 8 based on only human capital control variables or an extended set of controls?
27. Overall, I think you use the term “discrimination” very easily without even mentioning what is called remuneration effect (unexplained part of the gap) may still consist of unobserved differences in human capital characteristics.
28. “The JMP decompositions, on the other hand, reveal that pay discrimination is more evident among the upper **income** groups.” I think instead of upper income groups, you can use “upper end of wage distribution” something like that. Do you have any explanation why remuneration effect is higher in the upper end of wage distribution?
29. Your policy recommendations does not fit with your findings from the JMP method since you found the “discrimination” is more severe for the higher wage earner females. But, you recommend to increase schooling rates for girls in all education levels. As you already mentioned, endowment effect (capturing the effect of schooling etc.) is already negative suggesting that increasing female education does not

necessarily reduce “discrimination”. You may want to explain why (from which result in your study) you suggest creating job opportunities for first-time job-seekers or establishing decent child-care facilities.

30. Language needs editing. The sentences are too long to follow.