Still in Second Place: A Structural Approach to the Gender-Pay Gap

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1. Introduction

This project was initially designed to meet the requirements of the Sociology Department Master’s program. Because Master’s projects in sociology are restricted to secondary data analysis, it was important to choose a topic that could be studied using readily available data. Through my work as an undergraduate in both history and sociology here at Wichita State, I had interest in the gender gap in income due to its ongoing significance as well as its place in the larger historical context of women entering the labor market and the ramification it has had for American society in general. Though a great number of studies have been done on the gender gap in income, this large body of literature actually inspires further, more refined research. This research looks to focus specifically on the income differences between men and women based on the occupational skills of the different positions men and women occupy.

2. Experiment, Results, Discussion, and Significance

This research utilizes data from the March 2003 Current Population Survey, Annual Demographic Supplement. This monthly survey is conducted by the Bureau of the Census for the Bureau of Labor Statistics and represents the official government data on employment and unemployment. The survey universe includes the entire civilian, non-institutionalized population living in housing units within the United States. After sample restrictions were made in order to restrict those who derive income differently, a final sample size of 64,650 was utilized.

This research is based on an income determination model pictured below:

![Gender Structural Model](image)

Adapted from Wright (1992)

According to this model, individual choice accounts for income primarily through the accumulation of human capital [1]. Thus, the decisions a person makes in education and skill acquisition directly impact their productivity and ability to impact the marginal product. Employees who are more productive will earn more money and any differences between men and women in income would logically arise from the different decisions each make in terms of skill acquisition.

Structure impacts income both directly and indirectly by acting as a filter to select attributes in order to fill positions. For example, a company looking to fill a management position is likely to look for a candidate with education to fill the position. The worker who eventually fills that position will have to have made the decision to invest in an education, but then will be rewarded by earning a position higher up in the company infrastructure. Though it may be individual characteristic that qualify a given individual for a job, it is ultimately the position he or she occupies that determines their income. Thus, it is important to look at such variables as company size, full-time status, as well as occupational and industrial sectors of the economy. These variables serve as a means of examining membership in the core/periphery economies [2] and the primary and secondary labor markets [3].

Like structure, gender impacts income both directly and indirectly. Gender limits the amount of money a woman can earn because women can earn less for being in the same positions as men [4], meaning that even if a man and woman make the same
educational investments, the woman will see less of a reward for individual choices than a man will. Additionally, gender restricts the income of women by closing off certain occupations from women and shuttling them into more appropriate “women’s work”. Therefore, the gender model segment looks at variables such as occupational sex segregation and marital status in order to address the issues of crowding within occupations [5] and job queuing [6].

Using this income determination model as a framework, the dependent variable of total wage salary from the previous year was tested using independent variables from each model segment. Separating the variables into model segments allowed for analysis of the data on a variable by variable basis, segment by segment basis, or by looking at all the variables together.

Bivariate analysis of the data revealed that based on median income, women earn 77.8% of the income of men. Even when controlling for full-time, full-year employment, women still only earn 81.1% of what men do. Multivariate tests using ordinary least squares revealed that, net of other factors, a woman earns $6,705 less than a man, meaning that even when all other factors are controlled for, a woman earns $6,705 less per year than a man simply because of her gender. Using partitioning of variance for each of the three model segments (individual, structural, and gender) revealed that, of the three model segments, structural-level variables did the best job of explaining variance by explaining 15% for females and 12% for males.

3. Conclusions

The most salient finding of this research is the sheer size of the economic penalty women face in the workforce. Basing the income gap on a per dollar basis tends to underestimate the true impact of the gap. The fact that net of other factors a woman earns $6,705 less than a man forty years after the passage of the Equal Pay Act is as shocking as it is troubling. The hypotheses for all variables were found to be supported, which was not unexpected. Increases in education, age, hours worked per week, company size, and occupational skill all lead to increases in income, as was expected. Those who resided in the south or in rural areas did earn less than those residing in other areas. Union membership did lead to increased income, as did working in white-collar and high-skill occupations. As predicted, it was found to be economical beneficial to be married, have young children in the home, or be white non-Hispanic. Though all of the hypotheses were correct in their predictions, gender is not a major component of them, yet the gap of $6,705 persists, which leads to the question, why do men and women receive experience these variables differently? What is it that makes a woman’s college degree or union membership less valuable than a man’s?

The major policy implication of this research centers on the fact that the individual-level model does such a poor job of predicting income. Education, which was though to be a panacea for income inequality, has failed to have a substantial impact on the gender gap in income. Women are actually more likely than men to be college graduates, and therefore should, at least theoretically, earn more than men. Because increasing education has not lead to a decrease in the gender gap in income, this research demonstrates that changes in individual attributes are not sufficient to address the problem of income inequality in gender. Instead, the problem must be addressed structurally. Occupations where females are over-represented still earn less than jobs where they are under-represented. Until this devaluation of “women’s work” changes, the gender gap in income will stubbornly persist.

4. Acknowledgements and References

This project would not have been possible without the guidance of my thesis advisor, Dr. David W. Wright.

5. References