

# **The Effects of Interracial Marriage on Individual-Level Earnings: An Analysis Using 2010 PUMS Data**

**Mark Gius**  
**Quinnipiac University**

*The purpose of the present study is to determine if interracial marriages have any effects on individual-level earnings. Although the effect of one's own race on income has been extensively studied, most of the research to date on the economic effects of being in an interracial marriage looked at only immigrant populations. Results of the present study suggest that persons in interracial marriages earn as much or more than persons in white marriages. The only interracial marriages that do worse than white marriages are those marriages that include an African-American male.*

## **INTRODUCTION**

According to a recent Pew Research Center report, intermarriage (marriage between persons of different races) is more prevalent now than ever before (Wang, 2012). In 2010, 15 percent of all new marriages were between spouses of different races; in 1980, that percentage was only 6.7 percent (Wang, 2012). It was also noted in this report that household earnings differed significantly between the various types of intermarriages. Households that consist of an Asian male and a white female had the highest income of any type of household, including those that consist of two whites. The intermarriage that had the lowest household income was that between two Hispanics. The income difference between the Asian/white marriage and the Hispanic/Hispanic marriage was over \$35,000. Unfortunately, this Pew report only presented descriptive statistics and did not attempt to control for other factors that may affect household earnings.

Most of the prior research conducted on the economic effects of interracial marriages has dealt with the economic assimilation of immigrants (Meng and Gregory, 2005). One of the few studies on intermarriage earnings whose focus was not on immigrants was Fu (2007). Fu examined the socioeconomic status of interracial couples in Hawaii (Fu, 2007). Using American Community Survey data and looking at whites, Filipinos, Japanese, and Hawaiians (the predominant racial/ethnic groups in Hawaii), Fu regressed income against interracial marriage dummy variables and various control variables, such as education and age. The author found that white/Japanese couples had the highest per capita incomes while Filipino/Hawaiian couples had the lowest incomes. Although this study is significant because it is one of the few studies on this topic that did not look at immigrants, Fu's study has several shortcomings including the use of individual-level variables in estimating household income and neglecting to include many explanatory variables that are normally used in a wage regression.

The purpose of the present study is to determine if interracial marriages have any effects on individual-level earnings for non-immigrant populations. Although the effect of one's own race on income has been extensively studied, no research to date has examined the effects of being in an

interracial marriage on individual-level income. There are two possible reasons why being in an interracial marriage may affect one's income.

First, although it has been years since state laws banning interracial marriages have been declared unconstitutional (*Loving v. Virginia*, 1967), there still remains a very large share of the U.S. population that is opposed to such marriages. According to Wang (2012), 28 percent of Americans believe that interracial marriage is unacceptable for everyone, and 37 percent believe that it is acceptable for others but not for themselves. Although not overtly racist, these racially discriminatory beliefs may affect an intermarried individual's opportunities in the workforce.

Second, Wang (2012) noted that young, educated individuals living on the East or West coast are more likely to be accepting of interracial marriages. It is reasonable to assume then that such individuals would also be more likely to enter into interracial marriages. Hence, individuals in interracial marriages may possess certain attributes or hold certain beliefs that may translate into greater earnings potential.

## DATA AND EMPIRICAL TECHNIQUE

In order to determine the effects of interracial marriage on an individual's income, a standard wage regression using a log-linear model is employed. Two regressions are estimated. The first regression looks at marriages that only involve the following three races: white, African-American, and Asian. The racial combination "white-white" is used as the base or excluded category. The following eight racial combinations are examined:

- (1) Asian-Asian
- (2) African-American – African-American
- (3) Male African-American – Female Asian
- (4) Male Asian – Female African-American
- (5) Male White – Female Asian
- (6) Male Asian-Female White
- (7) Male White – Female African-American
- (8) Male African-American – Female White.

The second regression looks at Hispanic marriages. For this regression, the "non-Hispanic – non-Hispanic" combination is used as the base or excluded category. The following three combinations are examined:

- (1) Hispanic – Hispanic
- (2) Male Hispanic – Female non-Hispanic
- (3) Female Hispanic – Male non-Hispanic.

All other variables included in both regressions are control variables such as educational attainment, work experience, and region of residence. It is expected that the more education and experience an individual has, the greater will be their income. It is also expected that men will earn more than women, holding all else constant.

Data for this study comes from the 2010 Public Use Microdata Sample (PUMS) of the American Community Survey (ACS). The PUMS files show the full range of responses collected on individual ACS questionnaires. For the purposes of the present study, only married individuals who had positive incomes and who were 18 years of age or older are included in the sample. In addition, in order to eliminate any issues regarding immigrants and intermarriage, only native-born U.S. citizens are examined in this study. The final sample has 636,257 observations. Descriptive statistics for the variables used are presented on Table 1.

**TABLE 1**  
**DESCRIPTIVE STATISTICS**  
**N = 636,257**

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
Annual Income	\$59,318	63,383
Hours Worked Last Week	40.38	12.1
Person Never Served in Military	0.89	0.31
Person Has Bachelor's Degree	0.234	0.423
Person Has Graduate Degree	0.152	0.358
Person Did Not Graduate From High School	0.043	0.204
Person is Male	0.54	0.49
Experience (number of years)	28	12.29
Person Lives in North	0.184	0.39
Person Lives in South	0.37	0.483
Person Lives in West	0.177	0.381
Hispanic-Hispanic	0.016	0.127
Male Hispanic – Female Non-Hispanic	0.0303	0.171
Male Non-Hispanic – Female Hispanic	0.0341	0.182
Asian-Asian	0.0035	0.059
African-American – African-American	0.0306	0.172
Male Asian – Female African-American	0.00077	0.0277
Male African-American – Female Asian	0.00101	0.0317
Male Asian – Female White	0.0127	0.112
Male White – Female Asian	0.0174	0.131
Male White – Female African-American	0.03	0.17
Male African-American – Female White	0.03	0.171

## **RESULTS AND CONCLUDING REMARKS**

As noted earlier, two regressions were estimated: one that looked at interracial marriages among whites, Asians, and African-Americans, and a second that looked at Hispanic intermarriages. OLS was used to estimate both equations. Results are presented on Tables 2 and 3.

For the interracial marriage regression, all control variables were significant with the expected signs. Regarding the effects of intermarriage, individuals in all interracial combinations had higher incomes than individuals in white-white marriages except for those individuals in marriages that included an African-American male. Individuals in a male African-American – female Asian marriage earned 8.5 percent less than individuals in a white-white marriage. Individuals in a male African-American – female white marriage earned 6.9 percent less than individuals in white-white marriages. Individuals in all other interracial marriages earned anywhere from 1.2 percent more (male white – female African-American) to 7.4 percent more (male Asian – female African-American). Regarding same-race marriages, Asians earned 8.3 percent more, but African-Americans earned 7.9 percent less.

Regarding the results of the Hispanic marriage regression, once again, all control variables were significant with the expected signs. In this regression, the excluded category was the non-Hispanic – non-Hispanic combination. An individual in a Hispanic-Hispanic marriage earned 5.9 percent less than an individual in a non-Hispanic marriage. A person in the male Hispanic – female non-Hispanic earned the same as an individual in a non-Hispanic marriage. Finally, a person in a male non-Hispanic – female Hispanic marriage earned 4.7 percent more than a person in a non-Hispanic marriage, holding all else constant.

**TABLE 2**  
**OLS REGRESSION RESULTS**  
**WHITE, ASIAN, AND AFRICAN-AMERICAN MARRIAGES**

<b>Variable</b>	<b>Coefficient</b>	<b>Test Statistic</b>
Constant	8.597	1379.447**
Hours Worked Last Week	0.0289	347.892**
Person Never Served in Military	-0.0569	-17.542**
Person Has Bachelor's Degree	0.468	199.292**
Person Has Graduate Degree	0.777	281.94**
Person Did Not Graduate From High School	-0.366	-77.075**
Person is Male	0.375	181.058**
Experience (number of years)	0.021	70.501**
Experience Squared	-0.0002	-35.286**
Person Lives in North	0.142	50.001**
Person Lives in South	0.0345	14.291**
Person Lives in West	0.118	40.507**
Asian-Asian	0.0828	5.17**
African-American – African-American	-0.0787	-14.251**
Male Asian – Female African-American	0.0742	2.191*
Male African-American – Female Asian	-0.0847	-2.867**
Male Asian – Female White	0.0549	6.506**
Male White – Female Asian	0.0725	10.00**
Male White – Female African-American	0.0119	2.15*
Male African-American – Female White	-0.0687	-12.427**
Adjusted R <sup>2</sup> = 0.366 F = 22537.335 ** = Significant at 1% * = Significant at 5%		

These results suggest that individuals in marriages that have a male African-American suffer a significant income loss due to intermarriage. It must be noted though that individuals in a same-race African-American marriage earn less than individuals in all other types of marriage except for an individual in a male African-American – female Asian Marriage. These results tend to support the findings of Wang (2012).

One potential shortcoming of the present study is that no attempt was made to correct for any potential self-selection or endogeneity problem regarding earnings and the intermarriage decision (Meng and Gregory, 2005). Several aspects of the present study should, however, mitigate any potential bias due to these two problems. First, the sample size used in this study is very large, well over 600,000 observations. Second, if both a husband and wife work, then both are included as individuals in the regression. Only non-income producing spouses are excluded. Third, unlike prior studies that examined limited immigrant populations, all of the individuals included in the present study are native-born U.S. citizens. Hence, there should be no matching issues regarding ratios of males to females or cultural issues regarding marrying somebody from another race. Given the above, any potential bias resulting from self-selection or endogeneity should be limited.

**TABLE 3**  
**OLS REGRESSION RESULTS**  
**HISPANIC MARRIAGES**

<b>Variable</b>	<b>Coefficient</b>	<b>Test Statistic</b>
Constant	8.59	1378.789**
Hours Worked Last Week	0.0289	348.053**
Person Never Served in Military	-0.0546	-16.819**
Person Has Bachelor's Degree	0.469	199.826**
Person Has Graduate Degree	0.778	282.529**
Person Did Not Graduate From High School	-0.366	-77.01**
Person is Male	0.376	182.28**
Experience (number of years)	0.021	69.934**
Experience Squared	0.0002	-34.74**
Person Lives in North	0.143	50.23**
Person Lives in South	0.029	12.248**
Person Lives in West	0.121	41.591**
Hispanic-Hispanic	-0.0586	-7.867**
Male Hispanic – Female Non-Hispanic	0.0091	1.642
Male Non-Hispanic – Female Hispanic	0.047	9.028**
Adjusted R <sup>2</sup> = 0.366		
F = 30658.094		
** = Significant at 1%		

Another potential shortcoming is that very broad racial categories were used. There are many more racial sub-categories identified in the PUMS data that could have been utilized. The primary reason that they were not used is because of the concern of having too many explanatory variables. This simplification was used to keep the wage regression manageable and probably did not substantially affect the results obtained.

Regardless of its shortcomings, the present study is a significant contribution to the literature on the effects of race on earnings because this is the first study that examines the effects of being in an interracial marriage on individual income for non-immigrants. These results suggest that being an African-American male or being married to an African-American male has very significant and negative effects on individual level income.

## REFERENCES

- Fu, Xuanning. (2007). Inter-Racial Marriage and Family Socio-economic Status: A Study Among Whites, Filipinos, Japanese, and Hawaiians in Hawaii. *Journal of Comparative Family Studies*, 38, (4), 533-554.
- Meng, Xin and Robert Gregory. (2005). Intermarriage and the Economic Assimilation of Immigrants. *Journal of Labor Economics*, 23, (1), 135-174.
- Wang, Wendy. (2012). *The Rise of Intermarriage*. Pew Research Center.