I. Abstract

This study examines factors that explain the rising median age of women at first marriage from 1960 to 2011. We estimate the median age of women at first marriage as a function of women’s median income relative to men’s, women’s education relative to men’s, and the percentage of the population living in urban areas. Increases in relative income and education are hypothesized to increase the opportunity cost women face when considering marriage. The percentage of the population living in urban areas represents the search cost of finding a potential partner. We find that relative income and the percentage of the population living in urban areas have affected marriage decisions.

II. Theory

\[ \ln[MAGE_t] = f(RINC_t, REDU_t, URBAN_t) \]

MAGE, Women’s median age at first marriage in the United States from 1960-2011.

RINC, Women’s median income relative to men’s in the United States from 1960-2011.

REDU, Women’s education relative to men’s for people 25 years and older in the United States from 1960-2011.

URBAN, The percentage of the population living in urban areas from 1960-2011.

III. Empirical Model and Variables

\[ \ln[MAGE_t] = \beta_0 + \beta_1 RINC_t + \beta_2 REDU_t + \beta_3 URBAN_t + \epsilon_t \]

\( \beta_1 \) (+) We expect RINC, to have a positive relationship with MAGE, as women’s income increases relative to men’s, their opportunity cost to marry younger increases.

\( \beta_2 \) (+) The anticipated relationship between REDU and MAGE, is positive. As women’s educational attainment relative to men’s increases, women will postpone marriage. Many women are delaying marriage until after they have completed the highest level of education they deem appropriate. This implies that the more education a woman chooses to achieve relative to a man’s, the longer women will wait to marry.

\( \beta_3 \) (-) We expect URBAN, to have a negative relationship with MAGE, as women choose to reside in urban areas, there is a lower cost in searching for a potential partner. If so, women might marry sooner, therefore decreasing MAGE.

IV. Data

Sample size: 52 years (1960-2011)

Time series data set: Captures variations in the median age at first marriage using time series explanatory variables, represented with the subscript “t”.

Data Interpolations

RINC, Calculated women’s income relative to men’s by dividing women’s real median income by men’s real median income by people age fifteen and older using data provided by the Census Bureau.

REDU, The number of females who completed some college were combined with those who received either a bachelor’s or an advanced degree. That number was then divided by the total number of females 25 years or over. This same process was repeated for males. Using these two values, we divided women’s educational attainment by men’s. The data was missing values for years 1961 and 1963. In order to avoid reducing our sample size, we used an average to fill in the missing years.

V. Empirical Results

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>1960-2011</th>
<th>1972-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>RINC</td>
<td>1.009151</td>
<td>0.397106</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.0409)</td>
<td></td>
</tr>
<tr>
<td>REDU</td>
<td>-0.054621</td>
<td>0.684367</td>
</tr>
<tr>
<td>(0.4921)</td>
<td>(0.0007)</td>
<td></td>
</tr>
<tr>
<td>URBAN</td>
<td>-0.659595</td>
<td>-1.424739</td>
</tr>
<tr>
<td>(0.0002)</td>
<td>(0.0001)</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.980437</td>
<td>0.977168</td>
</tr>
</tbody>
</table>

(Values in parentheses represent p-values)

(Comparisons were based using Newey-West standard errors)

VI. Analysis

Column 1:

Based on the results from Column 1, a 1% increase in relative income corresponds with a 1.01% increase in median age, and for a 1% increase in the percentage of the population residing in urban areas, the median age that women marry will decrease by 0.66%.

Column 2:

From Column 2, for every 1% increase in relative income, there is a 0.6% increase in median age; for a 1% increase in relative education, the median age will increase by 0.68%; and for a 1% increase in the percentage of people living in urban areas the median age will decrease 1.42%.