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The Effect of a Changing Marriage Age on Marriage Continuity

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Abstract
Marriage stability has a wide range of determinants, such as education, marital history, and demographic characteristics. Age at marriage, however, has repeatedly been cited as one of the most important influences. Since the 1950s, divorce rates and the mean age at marriage for both men and women have seen a great deal of change. Past studies suggest that an early age at marriage is associated with a higher risk of divorce. Studies also propose that this relationship only holds up to a certain point. Changes to marriage age and divorce rates can have unforeseen interactions with cohabitation, fertility, educational attainment, and labor force participation. This research examines the significance of the relationship between the value of age at marriage and the changing rates of divorce. The data come from the American Community Survey form 2008 to 2017. A multivariate regression approach is implemented to estimate the probability of divorce within the past year for a given age at marriage. The analysis concludes that age at marriage does have a statistically significant effect on the probability of divorce. Older age at marriage is associated with an increase in the probability that an individual was divorced within the past year.

Introduction
➢ There have been observable changes to the rate of marriages ending in divorce as well as changes to the median ages of marriage for men and women.
➢ Past studies suggest that age at marriage is an important determinant of divorce and the changing trends in marriage.
➢ This research provides insight on the significance of this relationship. Specifically, this research analyzes the probability of divorce in the past year, given the age at which an individual was married.

Theory
Maturity Effect
➢ Younger individuals lack maturity which can result in inadequate predictions about their own potential as well as that of their partner.
➢ Increased likelihood of mistakes expectations will result in more unstable marriages.
➢ If there is an effect of age on marriage continuity such that a younger age at marriage corresponds with a higher probability of divorce, an inverse relationship will be observed.
➢ Theory predicts a decrease in probability of divorce as age at marriage increases.

Poor Match Effect
➢ As individuals get older, especially women approaching the age in which child-bearing capacity begins to decline, a sense of desperation may lead to lowering of standards when searching for a compatible spouse.
➢ Altering preferences standards may result in individuals settling for potentially incompatible mates, which would result in an increased likelihood of marital instability.
➢ If there is an effect of age on marriage continuity such that an older age at marriage corresponds with a higher probability of divorce, a positive relationship will be observed.
➢ Theory predicts an increase in probability of divorce as age at marriage increases.

Data and Summary Statistics
This study implements cross-sectional data from the American Community Survey, collected by the U.S. Census Bureau. For the purpose of this research, ACS data from 2008 to 2017 was used to analyze the interaction between age at marriage and probability of divorce. Information was gathered on divorce, age at marriage, marital history, educational attainment, employment status, personal income, presence of children, and race. Observations were restricted to individuals who have been married at least once, which resulted in a total of 18,207,029 observations.

<table>
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<th>MEAN</th>
<th>STD. DEV.</th>
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<td>Marital History</td>
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<td>Children Present</td>
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Empirical Model
This analysis implements Ordinary Least Squares regression to form a linear probability model. Two regressions were run. The first explores the overall effect of an increase in age at marriage on the probability of divorce within the past year, age|married. The second includes two dummy variables indicating individuals married at 20 or younger, |married; and individuals married at 40 or above, |married. These variables represent subsets containing marital ages that are below or above the U.S. average.

Regression I:
\[
\text{Divorce}_{ij} = \beta_0 + \beta_1 \text{age}_{i} + \beta_2 \text{married}_{ij} + \beta_3 \text{married}_{10} + \beta_4 \text{married}_{40} + \beta_5 \text{married}_{above} + \epsilon
\]

Regression II:
\[
\text{Divorce}_{ij} = \beta_0 + \beta_1 \text{age}_{i} + \beta_2 \text{married}_{ij} + \beta_3 \text{married}_{20} + \beta_4 \text{married}_{40} + \beta_5 \text{married}_{above} + \epsilon
\]

Results
➢ Regression I: results indicate that changes to age at marriage have a significant effect on probability of divorce, such that the probability that an individual was divorced within the past year increases slightly with an increase in the age at which that individual was married.
➢ Regression II: results indicate that the probability of divorce within the past year is lower for marriage ages of 20 and below than for other ages of marriage, and that the probability of divorce within the past year is higher for marriage ages of 40 and above than for other ages of marriage.

Conclusion
➢ The analysis indicates that additional years delayed before marriage increases the probability that an individual was divorced within the past year.
➢ The inclusion of two age at marriage dummy variables in the second regression allows for further analysis of this relationship.
➢ The probability of divorce is lower for those married at =20 than if otherwise.
➢ The probability of divorce is higher for those married at =40 than if otherwise.
➢ The net relationship between probability of divorce and age at marriage is positive, indicating that this analysis lends most support for the poor match effect.
➢ Main limitation of this study was the inability to account for unobservable individual characteristics, such as personality traits, mental values, and attitudes toward marriage and divorce. Future research should consider implementing an appropriate instrumental variable to capture this effect. Additionally, future research could be strengthened by considering observations across more populations and time periods.