## Shotgun Marriages (U.S.)

George Akerlof, Janet Yellen, and Michael Katz connect declines in shotgun marriage to the increased availability of contraception and to the legalization of abortion over the 1965 to 1989 period in their paper "An Analysis of Out-of-Wedlock Childbearing in the United States." They find that the changes in the prevalence shotgun marriage explain a sizable percentage of the increase in out-of-wedlock first births over the same period.

These findings have been used to motivate a reproductive technology shock hypothesis for the 'feminization of poverty.' The use of shotgun marriage to explain changes in out-of-wedlock births competes with alternate explanations of job availability and welfare incentives. Akerlof, Yellen, and Katz find that shotgun marriage explains about three-fifths to three-fourths of the increase in out-of-wedlock births between 1965-1969 and 1985-1989. Using an ARMA process, the authors found a change in trend in the shotgun marriage ratio, the fraction of total births where marriage occurs between conception and birth, for whites in 1970.

I would like to look at the decades preceding the ones highlighted by Akerlof, Yellen and Katz to see if there is a complementary increase in shotgun marriages. I would also like to further the analysis by looking at more recent surveys to see if there has been significant movement in out-of-wedlock birth and shotgun marriage rates.

Understanding this phenomenon is important for many reasons: it sheds light on changes in sexual behavior, marriage and divorce decisions during the Baby Boom period, and it relates to the well-being of women and children. Moreover, understanding the trend of shotgun marriage informs a longer-term perspective on how changes in marriage and household structure were responses to economic conditions and institutions at different points of the twentieth century.

In addition to shedding light on an exceptional period in U.S. demographic history, the connection between shotgun marriage and rising out-of-wedlock birthrates is interesting because of the increased possibility of negative outcomes for children raised in single-parent homes. The 'feminization of poverty' that began around 1970 and the rise in the rates of single-motherhood during the same period are fascinating not only from the perspective of their affects on the U.S. poverty rate but also because of the social change they suggest. The policy implications of these trends for welfare and other programs are also motivations for fully understanding their progress.

Part of the difficulty in identifying the history of this trend is that the data available for the period before 1965 is much less detailed than that available afterwards. I plan to use a variety of sources including the *Vital Statistics of the United States* volumes, June Supplements to the Current Population Surveys and the five cycles of the National Survey of Family Growth. For some of the earlier I was hoping to use the Integrated Public Use Microdata Series (IPUMS) but so far I have not been able to come

<sup>&</sup>lt;sup>1</sup>Akerlof, Yellen, and Katz. "An Analysis of Out-of-Wedlock Childbearing in the United States". Quarterly Journal of Economics, May 1996, 277-317.

up with even approximate measures for month of birth and month of marriage for earlier periods.

So far I have spent some time working on the GAF surveys because they are readily accessible and cover years immediately before the period used by Akerlof, Yellen and Katz. To really start looking at possible trends, I need to first establish possible definitions of shotgun marriage. Interviewers ask the women participating to report the months and years of each childbirth, marriage, and divorce. They are also asked to report the gestation lengths for each birth. These questions are asked in different sections of the survey to reduce the possibility of misreporting. In order to come up with the month of conception for each birth there are few different possibilities.

- 1. Date of pregnancy termination reported gestation length
- 2. Date of pregnancy termination average gestation (of sample with pregnancy start date > 3 months after marriage)
- 3. Date of pregnancy termination other measures of gestation (national/regional averages, based on different data sources)

This does of course seem to take as a given that women are more likely to misreport the length of gestation than either the month of birth or marriage. I would need to find some concrete, and believable reasons why this might be the case. Of course, there isn't much to be done if the month of marriage or the month of marriage and the month of birth are misreported.

There are also some strange results that possible, when month of conception occurs exactly in the month of marriage, the reported gestation length seems at odds with the health information. For example, it seems highly unlikely that a reported gestation length of 5 months in 1955 resulted in a healthy, normal-weight birth. I need to find some medical statistics to use as references.

I would also need to come up with out-of-wedlock birthrates for the years. It is much more likely that I will be able to get a more accurate picture of shotgun marriage rates using more current sources since there is more information available for more individuals. Less social stigma associated with out-of-wedlock birth may increase reporting.