

According to conventional wisdom, shotgun marriages, i.e. marriages that occur post-conception but pre-birth, have declined over time and are nearing obsolescence. Contrary to conventional wisdom, we find evidence that shotgun marriages have remained stable as a share of all births and represent an increasing share of births to married parents. In some population groups, the share of births that follow a shotgun marriage has actually increased.

This study uses two administrative data sources from North Carolina covering the years 1990-2011: long-form birth certificate data, which contain information on all births in North Carolina, including date of birth, gestational age, and parents' names; and marriage license data, which contain, for all marriages, the parties' names and the date of marriage. Using mother/bride and father/groom names, we matched records across data sources to identify whether parents who were married at the time of the birth had married after the child's conception date. The birth record data, which also include demographic characteristics of parents and children, contain 2.4 million births, of which 86,395 (3.5%) were identified as having occurred following a shotgun marriage (a "shotgun birth").

Shotgun births are the product of two potentially offsetting components: the ratio of births conceived non-maritally to all births, and the ratio of shotgun marriages to all non-marital conceptions, as illustrated in the following equation:

$$\frac{\# \text{ nonmarital conceptions}}{\# \text{ births}} * \frac{\# \text{ shotgun marriages}}{\# \text{ nonmarital conceptions}} = \frac{\# \text{ shotgun marriages}}{\# \text{ births}}$$

The first of these ratios is the share of conceptions that are at risk of leading to a shotgun marriage and the second ratio is the share of at-risk conceptions that lead to a shotgun marriage.

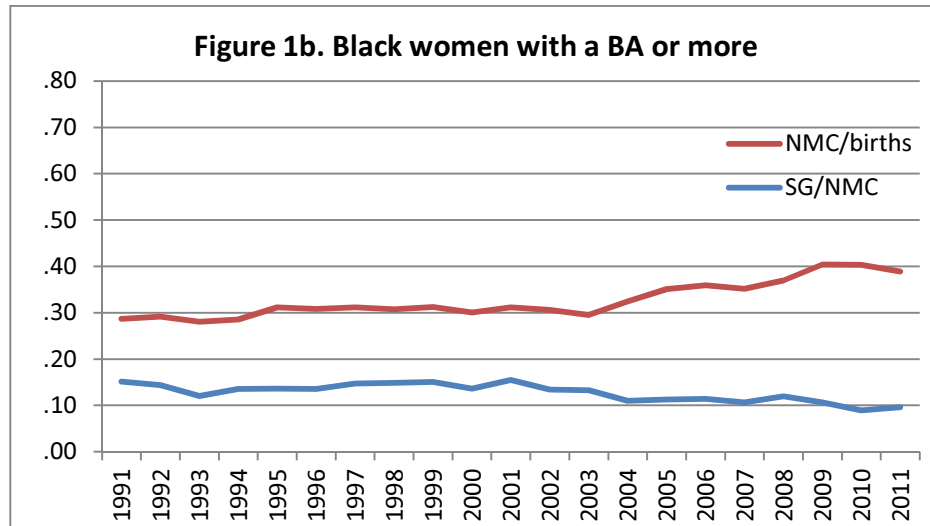
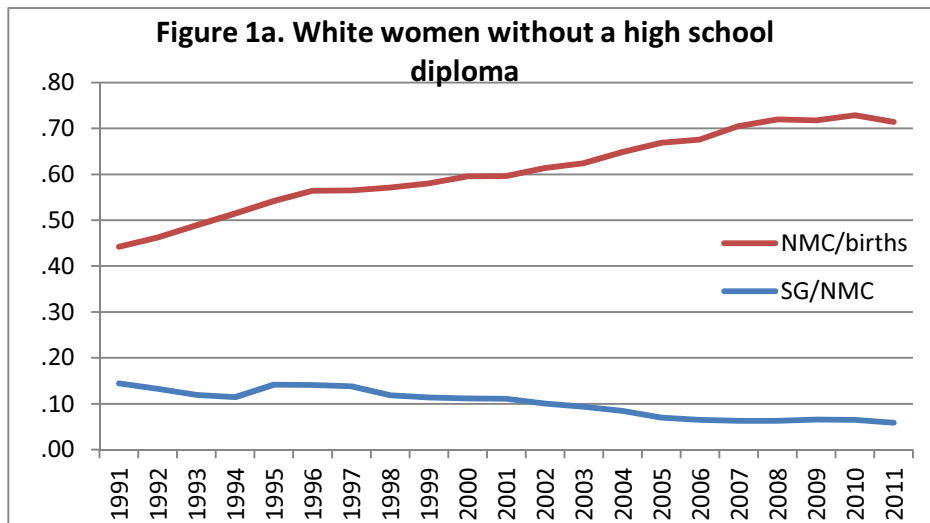
These two ratios can (and in fact do) change in opposing ways. Our data allow us to measure all of these ratios, with the caveats that we only observe conceptions that end in births, and that we will fail to identify any shotgun marriage that occurred outside of North Carolina prior to a within-North Carolina birth.

Overall, we find that the components of shotgun marriage have, indeed, changed in offsetting ways. The share of non-marital conceptions that result in shotgun marriage has declined over time. However, the share of all births that are conceived non-maritally has risen over time, increasing the size of the pool of conceptions that could result in shotgun marriages. Thus, the overall trend in shotgun marriages as a share of all births has been relatively stable over the last 21 years (about 3.5% of all births). Moreover, as marriage rates have declined, the fraction of married births that are shotgun births has actually increased by one-fifth, from 5% in 1990 to 6% in 2011.

Over-time changes in the two ratios, and the prevalence of shotgun births overall, differ strikingly by maternal race and ethnicity and maternal education. We find particularly large over-time changes for non-Hispanic white women without a high school degree (“less-educated whites”) ($n=198,162$) and for non-Hispanic black women with at least a four year college degree (“highly educated blacks”) ($n = 74,903$). As illustrated in Figure 1, , the ratio of non-marital conceptions (NMC) to births (labeled “NMC/births” on graph) has risen sharply over time, from 45% to 70%, for less-educated whites and has risen from 30% to 40% for highly educated blacks. (It has risen slightly for highly-educated whites and has remained flat, at around 90%, for less-educated blacks. Data not shown.) For less-educated whites, while the ratio of shotgun (SG) births to non-marital conceptions (“SG/NMC”) has decreased from 15% to 7%, the rise in NMC/Births means that the proportion of births to parents who had a shotgun marriage,

SG/Births, has declined much less, from 6% to 4%, as shown in Fig. 2a. Moreover, the contribution of shotgun births to all married births, (“SG/Married Births”), has actually increased, from 10% in 1991 to 13% in 2011 (Fig. 2a). For highly educated Blacks, the opposing trends have led to stable shares of SG/Births and SG/Married Births over time despite a fall in SG/NMC from 15% to 10%. The full paper will include analyses for all racial and ethnic and educational subgroups.

Components of shotgun marriage



Shotgun births as a fraction of all births and all married births

