## Extended Abstract for "Love in the Time of Depression" - Matthew Hill

Marriage rates in the U.S. have been unaffected by recent recessions. For instance, during the 1982 recession (the worst in recent history), marriage rates barely responded to the 3% decline in GDP. However, prior to 1960, there was a strong correlation between the economy's performance and marriage rates. In the three biggest downturns of the period (1893, 1907, 1929) marriage rates fell by 7 to 20 percent.

This paper investigates the effect of GDP on marriage rates prior to 1960 by examining the biggest shock to GDP in that period: the Great Depression. I use microeconomic data to examine the countervailing trends underlying a decline in GDP. Cultural norms of the 1930s held that women should leave the labor force upon marriage and that new couples should establish their own household. Therefore higher male unemployment would reduce the pool of marriageable men. Primary sources from the period suggest women not only delayed marriage because potential husbands were scarce but also because their families needed their labor income. However other factors associated with falling GDP would work in the opposite direction. Single women faced increased unemployment in the period. In many ways more so than men, as firms actively discriminated against women and the government relief programs targeted married men not single women. These decreased labor force opportunities for women would increase the probability of marriage. Home prices fell substantially over the 1930s: an average of 30% in the major metropolitan areas. This reduction in the cost of starting a household would also increase the probability of marriage. Indeed, even in recent times, falling home prices have been linked to marriage rate increases.

Previous work examining trends in historical marriage rates has found a strong correlation between marriage rates and economic conditions. Haines (1996) suggests resource abundance was the cause early marriage patterns in the North American British colonies. Fitch and Ruggles (2000) argue that since 1850 marriage rates have been highly sensitive to employment and occupation. Cvrcek (2010) finds that the better the jobs and the bigger the pool of marriageable men prior to 1930, the more marriage there was. However, this work has not specifically focused on the Great Depression and it has not examined the historical correlation between GDP and marriage rates. I document the correlation between GDP and marriage rates from 1873 to 1994, showing that the breakdown in the correlation between GDP and marriage rates after 1960 coincided with the entry of married women in the labor force.

This is the first quantitative paper on the effect of the Great Depression on marriage rates. The 1930s provides an ideal setting to test the impact of GDP on marriage rates. The Depression engendered significant variation in local GDP across space and time. Spatially, the Great Depression was most severe in the Midwest, where the Dust Bowl destroyed lives and livelihoods, and also in the mountain states, where lack of industry diversification crippled local economies. Conversely, the South Atlantic states had a milder contraction due to their higher trend growth rates of employment. There were significant differences in local GDP over time in the Great Depression as well. On average, cities experienced a 30 percent drop in GDP from 1929 to 1933 followed by 20 percent recovery to 1937 before the recession of '37 struck. By 1939, most cities had returned to pre-Depression GDP figures. I exploit this variation over time and space in a duration model and a difference in differences model to estimate the effect of local GDP, housing prices, unemployment rates and retail wages on the probability of marriage for young women.

Exploiting a variety of data sets to untangle the impact of economic considerations on the marriage decision during the 1930s I find a significant positive relationship between local GDP, as proxied by retail sales per capita, and female marriage probabilities. I also find decreased labor force opportunities for women (via higher unemployment and lower wages) lead to higher female marriage probabilities. Conversely, decreased male labor force opportunities lead to lower female marriage probabilities. The fixed costs of household formation also influenced marriage probabilities; with lower home prices increasing the chances a woman marries.