BROOKINGS

Report

Horatio Alger got married in Salt Lake City: Intergenerational mobility, place, and marriage

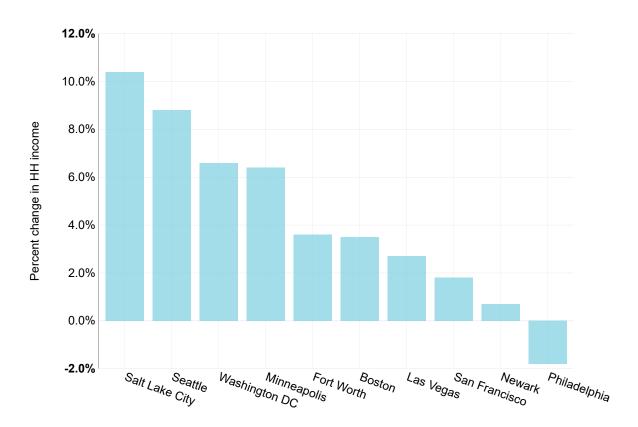
Richard V. Reeves and Sarah Nzau Thursday, October 1, 2020

ates of intergenerational mobility differ greatly between different U.S. cities and counties, as work by <u>Opportunity Insights</u> has dramatically demonstrated. In some cities, the American Dream may be fading, but <u>not in others – most famously, Salt Lake City</u>. In a <u>2015 report</u>, Raj Chetty and team wrote, "If we can make every city in America have mobility rates like San Jose or Salt Lake City, the United States would become one of the most upwardly mobile countries in the world." Unsurprisingly, ink has been spilled on the <u>magic of Salt Lake City</u> for intergenerational mobility. But the question of why upward mobility rates are so high can be explained by the fact that people growing up in Salt Lake City have a higher propensity to share household income as proxied by marriage.

Place, earnings, and marriage

The research by <u>Raj Chetty and Nathaniel Hendren</u> shows that children's economic opportunities are shaped by the neighborhoods in which they grow up. Chetty and Hendren estimate counties' and commuting zones' causal effects on children's ranks in the income distribution at age $26^{[1]}$ conditional on parent income. Growing up in Salt Lake City from birth increases the adult household income of a child raised in a low-income family by 10.4% (measured at the age of 26), compared to the average commuting zone (CZ). By contrast, growing up in Philadelphia decreases a poor child's adult income by 1.8% (Fig. 1).

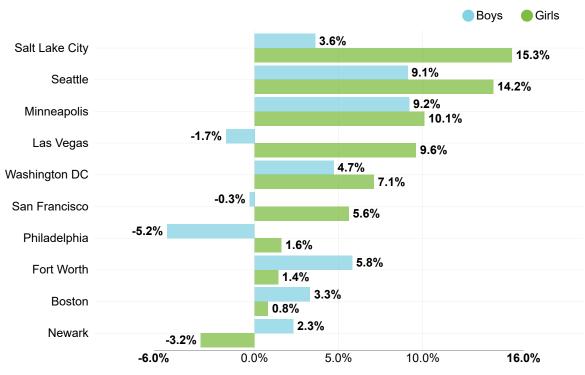
Figure 1. Effect of place on household income



Note: Figures 1-5 show the causal effect of growing up in the selected commuting zones (CZ) on various adult outcomes for children conditional on having parents at the 25th percentile of the income distribution. These estimates have a population-weighted mean of zero across CZs (using populations from the 2000 Census), so that the fixed effects can be interpreted as the causal effect of the CZ relative to the average CZ in the country.

In many cases, the impact of place varies by gender. As we will show later in this paper, these gender differences are partly related to differences in the probability that a child forms a household unit where income is shared through marriage. Philadelphia seems like a particularly bad place to grow up as a poor boy, for example, but not as a girl. Newark looks good for boys but not girls. Salt Lake City is a particularly good for girls to grow up in, in terms of the impact on their future adult household income (Fig. 2):

Figure 2. Effect of place on household income by gender

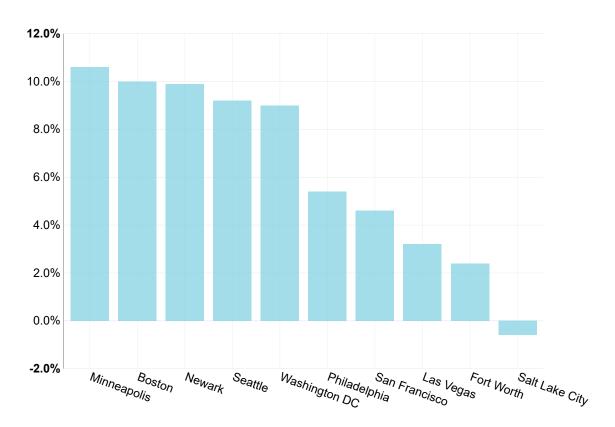


Percent change in household income by gender

Source: Chetty and Hendren, 2017.

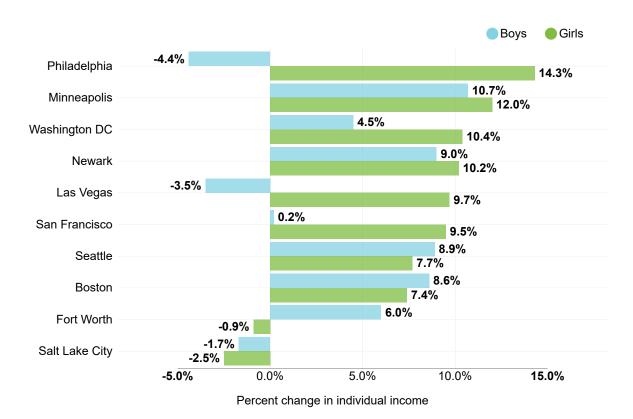
Thus far, we have shown the results for household income, both overall and separately for girls and boys. But when it comes to individual incomes, the story changes—especially for Salt Lake City. Growing up in Salt Lake City slightly reduces the individual adult incomes of low-income children at age 26 (by 0.6%). By contrast, children growing up poor in Minneapolis from birth can expect a 10.6% increase in their individual incomes at age 26 (Fig. 3):

Figure 3. Effect of place on individual income



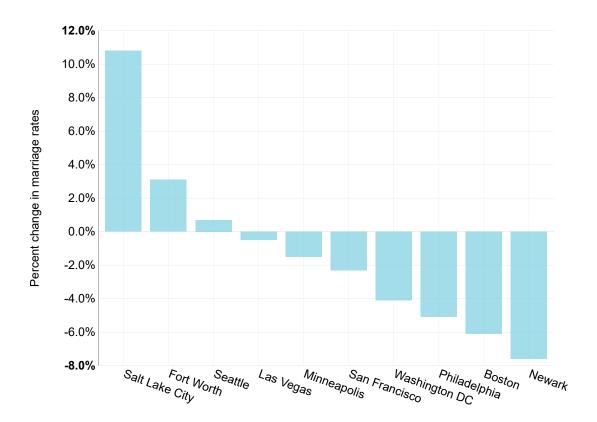
Again, these effects on individual income can be broken down by gender. Growing up poor in Salt Lake City is slightly worse for both boys and girls, in terms of their individual incomes as men and women. Fort Worth seems to be a better place for boys than girls; Minneapolis looks good for both; Las Vegas and Philadelphia again show much better outcomes for girls than boys (Fig. 4):

Figure 4. Effect of place on individual income by gender



So, the inevitable question arises: How can Salt Lake City be so good for household income mobility when it is not good at all for individual income mobility? Simple: more households in which individual incomes are shared. Growing up in Salt Lake City hugely increases the chances of being married in adulthood. In fact, no other city comes even close in terms of causal impact on marriage (Fig. 5):

Figure 5. Effect of place on marriage rates



Salt Lake City is an outlier here, for reasons related to the specific culture of the city. Most importantly, about half the population belongs to the Church of Jesus Christ of Latter-day Saints (informally referred to as the Mormon Church). But the variation in the influence of place on outcomes for individuals (in many cases differently by gender) and for household formation is important more generally. Other things equal, the places that produce the highest rates of households in which individual incomes are shared will tend to produce higher levels of household income than individual income.

Note that Philadelphia scored lowest of the ten cities in terms of impact on household incomes (Fig. 1), but highest in terms of individual earning for girls (Fig. 4). Girls growing up poor in Philadelphia do really well in terms of their own adult earnings—but then lose ground at the household level, both because boys do worse, and because they are less likely to be married.

Household formation, then, is an important and often neglected part of the story in the differences between places in terms of intergenerational mobility. (So too are the differences by gender, and we will be returning to that question in a future paper). While both individual and household income are of course important, including as measures of upward mobility, our view is that household income provides a better proxy for overall wellbeing.

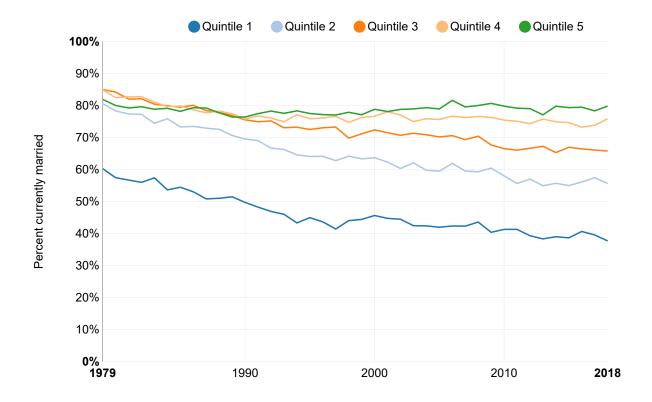
Could marriage also be factor in explaining changes in mobility rates over time? We turn to that question next.

The new class gradient in marriage

Marriage used to be an equally common experience across class lines. But in recent decades, marriage has become both more common and more stable among more affluent and better-educated Americans. As our colleague Isabel Sawhill put it in her book, *Generation Unbound: Drifting into Sex and Parenthood without Marriage*, "family formation is a new fault line in the American class structure." Our own work shows that marriage has become more strongly related to income status (Fig 6):

Figure 6. Currently Married

Age 33-44, By Income Quintile



Source: Reeves and Pulliam, 2020.

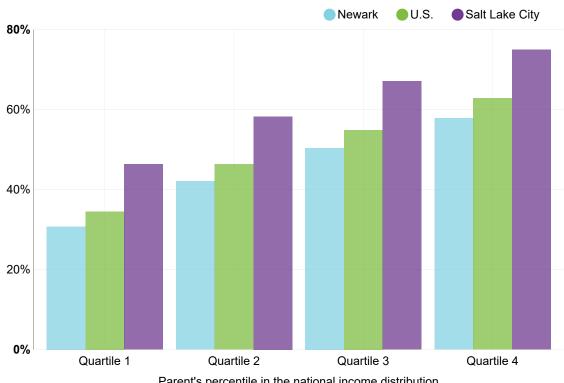
The marriage gap seems to both reflect and reinforce gaps in income, wealth and education—and is an important contributory factor to cross-sectional inequality. But it may now also be playing a role in the transmission of status across generations, as children from different backgrounds have different odds of ending up married, and therefore of sharing income within a household.

Research by <u>Chetty et al. (2018)</u> shows clearly that children growing up in families on different rungs of the income ladder have very different odds of being married as adults. The marriage rate for American children raised in families in the bottom quartile is 35%, compared to 63% for those from the top quartile. This relationship between parents' incomes and the marriage rates for their adult children holds in most cities, but at somewhat different overall levels. In the chart below we illustrate this pattern with data

for Newark, the U.S., and Salt Lake City. The marriage rate for children born in Newark to parents in the bottom income quartile is 30%, compared to 46% for those born to lowincome parents in Salt Lake City:

Figure 7. Marriage rates by parent income





Parent's percentile in the national income distribution

Note: The chart shows the mean predicted marriage rates for children born between 1978-1983.

Source: Chetty et al., 2018.

Testing the link between marriage and intergenerational mobility

These descriptive statistics suggest that as marriage becomes more related to class position, it may also play a more important role in explaining changes in intergenerational mobility. A new paper by Jonathan Davis and Bhash Mazumder attempts to address this question directly, using data from the National Longitudinal Surveys (NLS). They first show that relative intergenerational mobility has declined for cohorts born in the early 1960s compared to those born around 1950, measured using both <u>rank-rank slope and intergenerational elasticity (IGE)</u>. Here we focus on their results for the rank-rank measure, which we consider a "purer" metric for intergenerational mobility (for reasons <u>we've described here</u>). This measure describes the association between parents' rank in the earnings distribution and their children's rank in earnings distribution as adults. A higher value indicates greater persistence, and so less mobility.

The rank-rank slope rose from 0.24 for cohorts born in the 1950s to 0.36 for cohorts born in the 1960s, according to Davis and Mazumder. This means that a 10-percentile increase in parents' rank in the income distribution is associated with a 3.6 percentile increase in the child's placement as an adult for the later cohorts, compared to 2.4 for the earlier cohort. Importantly, however, these are measures of *household* income rank, and so sensitive to changes in household composition as well as individual income. Davis and Mazumder show first that there has been a significant increase in the relationship between parental income and the marriage rates of their grown-up children. Specifically, in the later cohort a child with parents at the 75th income percentile was 11.5 percentage points more likely to get married than a child at the 25th percentile, compared to a difference of just 2 percentage points for the earlier cohort.

David and Mazumder then attempt to assess how far this widening class gap in marriage rates for children from different backgrounds explains the decline in intergenerational ability. They find, strikingly, that under reasonable assumptions, the changes in marriage patterns could well explain all of the fall in intergenerational mobility. <u>As they write</u>:

"We have shown that whether a child is married is much more strongly associated with both parent income rank and log income for the later cohorts than the early cohorts. If we impute potential spouses' income for singles with average spousal income by type of parent-child pair, survey and parent income decile, the increase in persistence between the two cohorts is largely attenuated."

But caution is required here. First, the analysis is of a very specific time period. Second, taking the rising marriage gradient into account does reduce the drop-in rank-rank mobility to below the level of statistical significance, it does not eliminate it altogether. In

correspondence, Prof Davis wrote to us as follows: "The increase [in rank-rank slope] falls by about 60% from 0.12 to 0.05. With the decreased magnitude, the 0.05 increase is not significantly different from zero at conventional levels. But the confidence interval still ranges from a decline of 0.01 to an increase of 0.11, so we are hesitant to conclude marriage explains all of the increase in persistence." The authors also note that changes in the IGE remain statistically significant even allowing for change in marriage.

Theirs is the first thoroughgoing attempt in the U.S. to use longitudinal data to try and test the relationship between marriage rates for adults by parental background and intergenerational relative mobility (at least that we are aware of). Davis and Mazumder are right not to over-state their findings. But their results certainly suggest that changes in marriage patterns by social class play an important role in any recent declines in intergenerational mobility.

Not promoting marriage but promoting ingredients for household stability

Growing differences in marriage rates by parental background or between places may, then, be a bigger part of the mobility story than we previously thought. The research discussed here uses marriage as a convenient proxy for household income sharing, pointing to the fact that how income is shared is important for upward mobility and inequality. Thus, promoting household formation and stability is a policy priority. This does not mean promoting marriage, because marriage is a convenient proxy for household income sharing and there is little evidence that efforts to promote marriage produce desired results. This is a reminder that trends in household formation and composition must be considered along with other dimensions of inequality, such as in wages and wealth, when we look at intergenerational mobility. Government policy does not directly influence people's household formation choices, but policies can promote the ingredients for both household formation and stability.

Footnotes

1. 1 Age 26 is the authors' preferred baseline estimate. "Measuring children's incomes at age 26 strikes a balance between the competing goals of minimizing lifecycle bias by measuring income at a sufficiently old age and having an adequate number of birth cohorts to implement our research design. Among permanent residents (parents who stay in the same CZ from 1996-2012) at the 25th percentile of the

income distribution, the population-weighted correlation between children's mean ranks at age 26 and age 32 across CZs is 0.93. This suggests that measuring children's incomes at later ages would not affect our estimates of places' causal effects substantially," Chetty and Hendren, 2017.