

# The Three Norms Analysis: Technical Background

August 2015; revised March 2018

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Improving socioeconomic mobility is a complex challenge that touches on all aspects of American life, and to make headway, it's helpful to make the problem tractable with a framework to guide our thinking. This is the purpose of the "three norms" success sequence.

## **Data: the structure and limitations of the three norms analysis**

Our "playing by the rules" analysis examines the relationship between income and following three social norms: completing high school, working full time, and getting (and staying) married, while waiting until age 21 to start a family. While the analysis cannot prove that following these norms causes income to increase, we find that the likelihood of being poor when following all three rules is extremely low.

For our basic analysis we use data from the 2013 March Current Population Survey, which contains income and employment data for the previous year (2012). We then analyze the share of individuals in families with heads ages 25 to 64 who follow all three rules (full compliance), one or two rules (partial compliance), and zero rules (no compliance). Below is a detailed account of how we define each rule:

### *Rule 1: Childbearing and marital status*

In its ideal form, the first rule would require that:

- If a family has children, the head of that family must be married or have been married at the time of birth.
- If the family has children, their births did not occur before the head was age 21.

The limited nature of the survey questions in the CPS prevents the perfect measurement of compliance with the first rule. As we are able to implement it, the indicator variable for the first rule identifies the following:

- If a family has children, the head of the family must currently be married or widowed. Divorced, separated, or never married family heads living with children are coded as "norm breakers."
- If a family currently has children living with them, the difference between the age of the head of the family and the age of the eldest child cannot be less than 21.<sup>i</sup>

This proxy has drawbacks. The head of the family might not be the parent of the child in the family. For instance, we find a handful of observations with absurdly high ages for the head of the family at the time of birth of the eldest child. These could be children from a second marriage or the head of the family could be a grandparent. This biases the estimate of the number of norm-breakers upwards. If the woman who birthed the child is not the CPS family head, but had a child outside of marriage, this would bias the estimate of norm-breakers downwards. We say mothers fulfill the norm if they are currently married; if a single woman has a child and then marries later, we also count that as norm-adherence. The treatment of divorced and separated women also matters.

Still another and likely important source of downward bias is families in which the children have grown and left the household. The CPS only asks questions regarding family members residing in a household.

Thus, any head of the family who had a child outside of marriage at some point in his or her life, but whose children have left the household will remain unidentified.<sup>ii</sup>

If we redo the analysis to count divorced and separated women as still adhering to the norm, the rate at which people break the child birth norm falls from 17 to 12 percent. The change has very little effect on the cross tabulation of income and the number of norms families adhere to: only 1-2 percentage points.

With these limitations, the program then calculates the share of individuals residing in families in violation of the family-based rules. The numbers for 2008, when this analysis appeared in Sawhill and Haskins *Creating an Opportunity Society*, and 2013 are similar.

In 2008:

- 7.3 percent of individuals resided in families where the difference between the age of the head and the age of the eldest child was less than 21.
- 13.1 percent of individuals lived in families headed by an individual who was divorced, separated, or never married.
- 17.4 percent of individuals are in families where one or both of the prior conditions are violated.

In 2013:

- 7.1 percent of individuals resided in families where the difference between the age of the head and the age of the eldest child was less than 21.
- 14 percent of individuals lived in families headed by an individual who was divorced, separated, or never married.
- 17.1 percent of individuals are in families where one or both of the prior conditions are violated.

#### *Rule 2: Full-time work*

We define full-time work as working 40 or more weeks in the previous year for 35 or more hours per week.

In 2007, 83.1 percent of all individuals lived in families where at least one member of the family worked full-time. In 2012, the figure was 78.8 percent. Compliance with rule 2 is cyclical, peaking in times of economic prosperity, like the mid- and late-1990s, and dropping in times of macroeconomic downturn.

The major problem with any cross-sectional definition of work is that it doesn't tell us much about longer-term experience in the labor force. That said, as we will see, a lack of full-time work is not surprisingly the dominant determinant of a low income.

#### *Rule 3: Graduating high school*

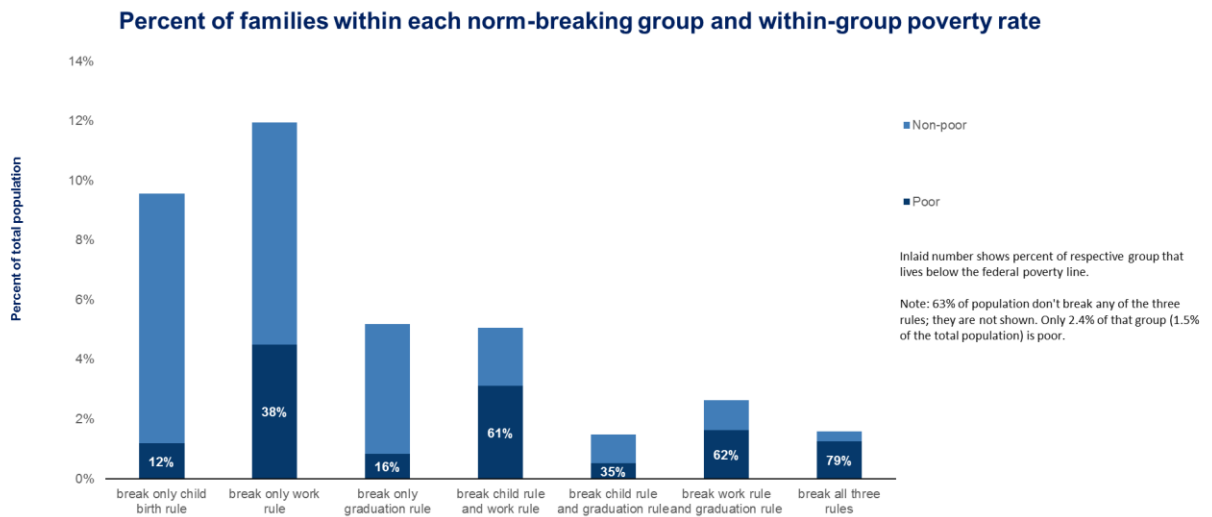
In 2008, we estimate that 88.2 percent of all individuals lived in families headed by a high school graduate (or equivalent).<sup>iii</sup> In 2013, the figure was 89.12 percent.

There is some dispute regarding the measurement of high school graduation rates, with numerous policy analysts questioning the validity of self-reported completion rates from household surveys.<sup>iv</sup> Further, it is important to note that the CPS definition of high school graduation includes GED recipients, a group which has been on the rise in recent years.<sup>v</sup> However, we should keep in mind that while GED-completers are included in the tally of those with a diploma, the labor market treats the GED differently

than a regular high school diploma; controlling for other factors, workers with a GED tend to earn less than their high school dropout counterparts.<sup>vi</sup>

*Which norms do the poor most often miss?*

Of the three norms, the work norm is most correlated with being in or out of poverty. The graph below shows the population of families that miss one, two, or all three norms (those that follow all three norms are omitted). The data are tabulated according to which specific combination of norms the family missed. The dark blue shading shows the percentage of families in that group that are poor. Notice that the norm-breaking combinations that include “lack of full-time work” have the highest poverty rates.

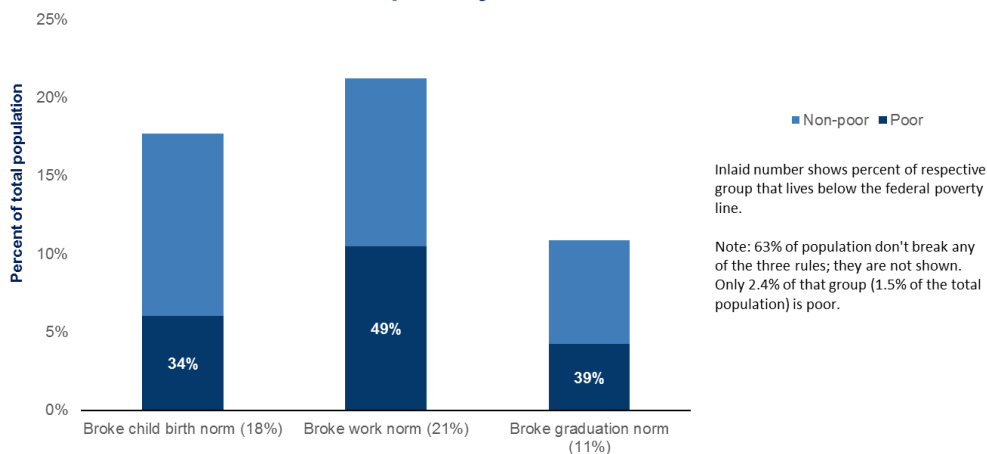


Source: Author's tabulations of the 2013 March CPS.



We can also tabulate the data into non-exclusive groups; in the graph below, families in the “broke work norm” group could have also broken none, one, or two of the other norms. Again, the families that missed the work norm have higher poverty rates:

### Percent of families within each norm group and within-group poverty rate

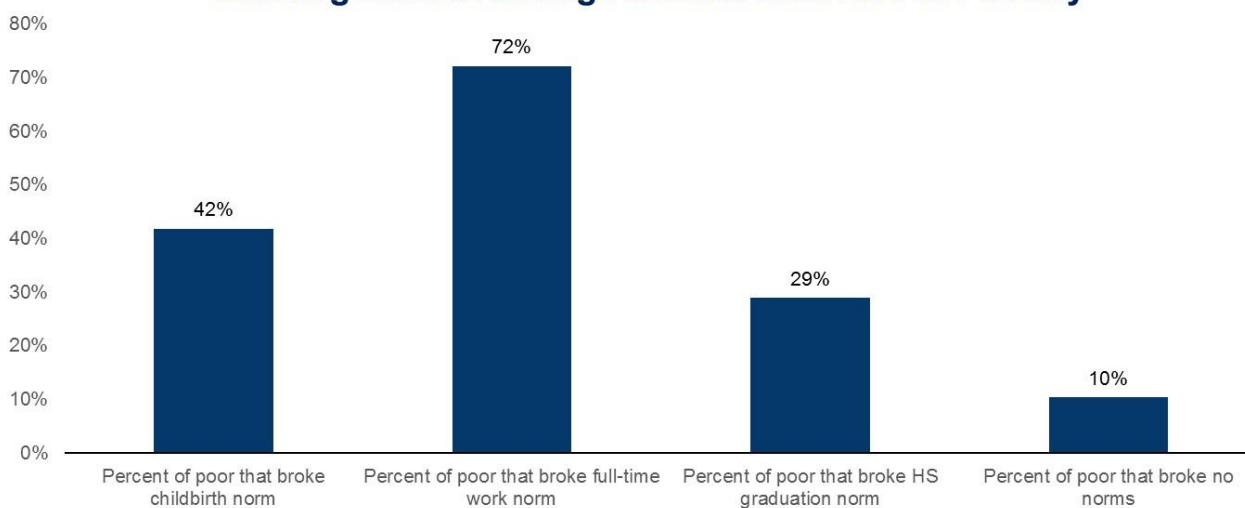


Source: Author's tabulations of 2013 March CPS

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Finally, we can tabulate the norm-related behavior among those families living below the poverty line. The graph below shows that a majority did not contain a full-time worker in 2012:

### Missing Norms Among Families That Live in Poverty



Source: Author's tabulations of 2013 March CPS

Note: Statistics refer to calendar year 2012, since survey respondents are asked about income in the previous calendar year; data only include families with heads age 25-64 who do not report receiving disability payments.

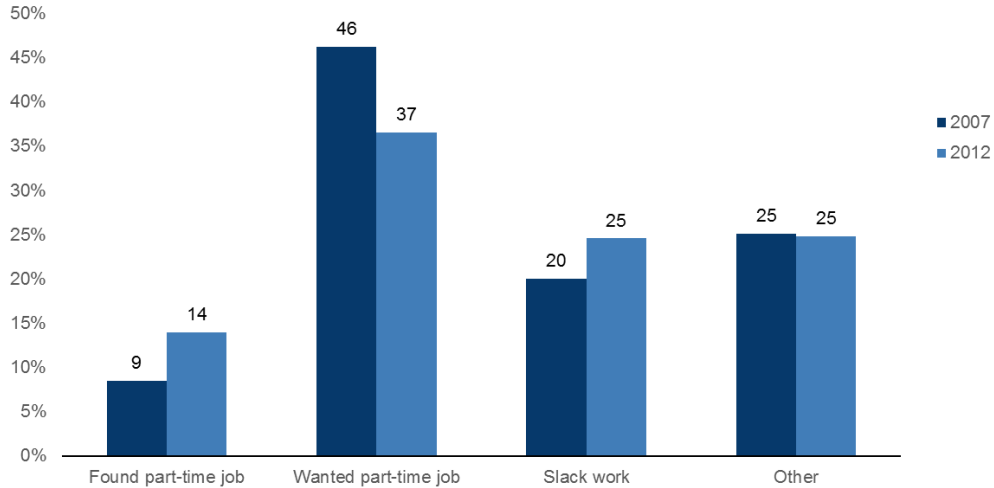
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#### Reasons for non-work

The fact that the work norm is so important raises the question of why these families lack full-time workers. Prime-age family heads who do not receive disability payments give a host of reasons for their part-time work or nonwork. These have changed somewhat since the initial analysis, but both years point to a mix of supply- and demand-side issues. Note that being ill or disabled is a prominent reason for nonwork as is being retired or in school, despite the fact that we limited the population analyzed to prime-age adults who receive no disability income. The proportion “unable to find work” was higher in

2012 at the peak of the recession than in 2007, as one would expect, but it was not a big reason for lack of work in either year.

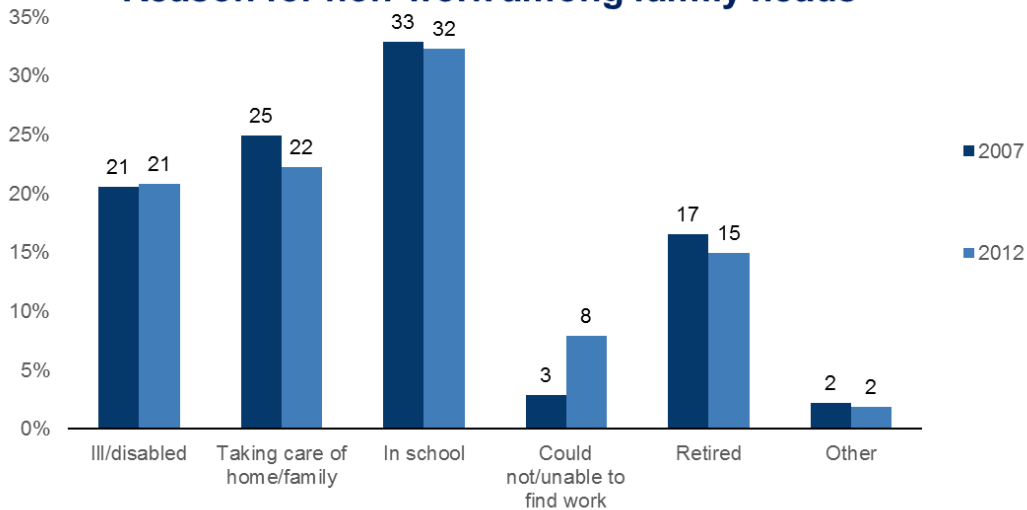
### Reason for part-time employment among family heads



Source: Author's tabulations of March CPS.

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### Reason for non-work among family heads

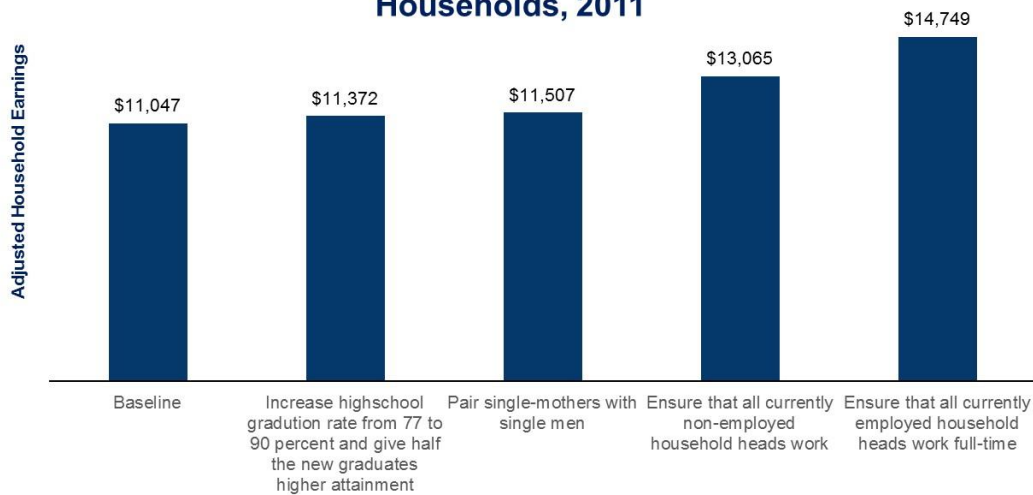


Source: Author's tabulations of March CPS.

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The table below is based on a simulation of family-size-adjusted income from a labor market model created at Brookings<sup>vii</sup>. The simulations look at households in the bottom third of the income distribution and analyze how total household earnings varies with changes in high school graduation rates, marriage, employment (at currently predicted hours), and full-time employment. This analysis, once again, shows that full-time work is the biggest driver of higher incomes among this group.

## Average Adjusted Income Among Bottom-Third Households, 2011



Source: Sawhill and Karpilow, 2015

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### A closer look at selection effects

A criticism of this type of analysis is that it does not differentiate between correlation and causation. When people self-select into particular subgroups due to unobservable factors, researchers must contend with what are known as *selection effects*. In the case of poverty, we must continually ask ourselves whether or not chronically low income is due to factors which we can measure and observe or due to some other constellation of factors about which we have little data. While proving causation is beyond the scope of our analysis, we nevertheless find that the broader literature linking education, work, and marriage with higher income suggests that much of these relationships are causal. The fact that family structure affects income aligns well with the common sense notion that two incomes are better than one (thereby reducing poverty among those who are married), although it is also the case that a low income predicts a lack of marriage. More hours of work produces more income for obvious reasons although one should not assume that the wages of those currently working are a good indicator of what the nonworking might earn if they joined the labor force; and finally how much one can earn depends on education to some extent because education improves productivity. This larger body of work (briefly reviewed below) suggests that certain observable factors, like graduating from high school, working full-time, and getting married, do have a positive effect on earnings in and of themselves.

#### *Education*

The importance of education as an anti-poverty tool depends principally on whether one subscribes to a “human capital” theory of education or a “signaling” model. Under the human capital model developed by Gary Becker, students develop productive skills as a result of additional education, and the higher wages received by individuals with higher levels of educational attainment reflect the real value of this acquired human capital.<sup>viii</sup> Conversely, under the signaling model promoted by Michael Spence, individuals with higher innate ability encounter fewer costs (e.g., psychological costs, time costs) in acquiring educational credentials.<sup>ix</sup> Educational attainment thus becomes a marker for innate ability, and

the higher wages observed for well-educated individuals primarily reflects the demand for innately intelligent workers, rather than any value added by the educational process.

The implications of the human capital and signaling models are different. If educational credentials merely represent a signal of raw ability, then concerted efforts to reduce the high school drop-out rate do not represent a viable strategy for improving the economic prospects of poorly-educated individuals. The fact that GED recipients receive lower wages in the labor market than high school graduates with ostensibly equivalent credentials lends some measure of credence to the signaling model.<sup>x</sup> The finding suggests that employers tend to interpret the GED as marking one's status as a former dropout, rather than as a credential verifying a specific level of knowledge and skill.<sup>xi</sup>

On the whole, however, most scholars believe that the observed economic return to additional schooling is mostly attributable to acquired human capital. Economists have historically leveraged two types of data: so-called "natural experiments" and data from sibling or twin pairs.<sup>xii</sup> The advent of new curriculum and programs with limited numbers of classroom seats has also allowed researchers to investigate the causal effect of education on later earnings, through randomized experimental designs.

Natural experiments are events that directly impact an individual's educational attainment but are uncorrelated with personal characteristics, such as ability, that might also affect their income. Sibling and twin studies rely on the fact that these pairs of individuals tend to share genetic backgrounds and/or family environments, making it possible to isolate the effects of different amounts of education from these other factors.

As an example of a natural experiment, Joshua Angrist and Alan Krueger exploit the fact that children born toward the beginning of the calendar year tend to start school at an older age, and thus are eligible to drop out after completing less schooling than children born toward the end of the year.<sup>xiii</sup> The authors find that 90 percent of the observed economic return to education is attributable to the skill formation associated with additional schooling.<sup>xiv</sup>

In another natural experiment, David Card explores the rate of return associated with community college education, utilizing geographic variation in college proximity as a plausibly independent factor affecting enrollment.<sup>xv</sup> Card concludes that, once he has isolated the independent effect of additional education on earnings, the economic return to additional education is higher than it first appears.<sup>xvi</sup>

Turning to sibling and twin studies, Orley Ashenfelter and Cecilia Rouse draw upon a sample of 700 identical twins and "find that the typical cross-section estimates of the return to schooling are slightly upward biased."<sup>xvii</sup> Specifically, the authors calculate that 90-96 percent of the observed economic return to schooling is attributable to education itself, rather than innate ability or family background. The authors uncover no evidence that high ability students benefit from a higher rate of return to additional schooling. In fact, the returns to schooling may be slightly lower for this group.

Concerns persist that these types of studies do not fully disentangle causation from correlation. Despite these concerns, twin studies, taken in conjunction with the general consensus among research relying upon natural experiments, provide a strong base of evidence upon which to conclude the ascendancy of Becker's model of human capital. In a superb review of the literature, Cecilia Rouse and Lisa Barrow conclude that several of the best studies "estimate that the return to schooling is at least as large as estimates by conventional procedures that relate the level of schooling to income directly."<sup>xviii</sup>

Finally, randomized controlled trial (RCT) evaluations of educational interventions provide indirect, but powerful evidence in support of Becker's model. By comparing students who, on average, share identical baseline characteristics, these program evaluations remove selection effect bias, and prove that higher-quality education allows students to earn higher wages. Examples include Small Schools of Choice, Talent Development, Career Academies, and Success for All.

### *Work*

Increasing employment and hours among low-income households presumably provides a direct mechanism for alleviating poverty. However, we must be cautious in estimating the earnings effect of increasing work among currently unemployed or underemployed adults. The marginal benefit of additional work effort for this subset of the population might be less than the marginal benefit for the non-poor segment of the population. Unemployed adults may systematically differ from employed adults with regard to observable characteristics (e.g., educational background) and unobservable qualities (e.g., people skills).

In a "Hand Up for the Bottom Third," Adam Thomas and Isabel Sawhill estimate the potential wage rates of all unemployed adults in 1998 and then simulate the effects of "putting to work" all able-bodied family heads.<sup>xix</sup> Sawhill and colleagues do something similar in a later (2016) paper.<sup>xx</sup> One problem in this case is that those out of the labor force or only working part of the year do not necessarily have the same earning power as those who are well connected to the labor force. We have tried to adjust for this fact by predicting wages based on the characteristics of those out of the labor market using a standard OLS regression model that relies on data from the sample of individuals for whom a wage rate is actually observed. Under the Thomas-Sawhill simulation, poverty rates fall nearly in half, indicating that in spite of the lower average wages rates predicted for those not working, increasing work effort among poor family heads would dramatically reduce the incidence of poverty. Granted a regression analysis does not control for characteristics that are unobservable but it is unlikely that this biases the findings in any extreme way. Similarly, Sawhill et al. (2016) find that work-based interventions have the largest impact on income among households in the bottom third of the income distribution.

### *Marriage*

Married-parent families enjoy substantially higher levels of economic well-being than lone-parent families or co-habiting families. A host of reasons exist to explain why this might be the case. Most important, married couples have a second potential earner. Indeed, in more than 60 percent of marriages, both spouses work. Conversely, only 38 percent of single parents receive any financial support from the absent parent, and such support is usually quite limited.<sup>xxi</sup>

However, as discussed above, causation might easily run in the reverse direction. Financial distress might place untenable strain on marriages. Low or stagnant earnings among less educated men may have reduced their marriage prospects and women from poor families may see little reason to defer childbearing given their own or a potential partner's limited economic prospects.

Until recently, scholars investigating the anti-poverty effects of marriage typically relied upon "shift-share" analyses, in which the proportion of children living in single parent families is artificially held constant at some earlier historical value. Although this approach provides a rough estimate of the effects of changing family structure on poverty rates, it is contaminated by selection effects.<sup>xxii</sup> To



address this concern, Thomas and Sawhill conduct a simulation in which single mothers are matched with demographically-similar unrelated males. Two additional studies, one by Robert Lerman, and another by Wendy Sigle-Rushton and Sara McLanahan, pursue a similar approach.<sup>xxiii</sup> This methodology conveys several advantages. First, it allows for the possibility that there is a shortage of “marriageable men.” That is, the simulation only pairs couples if both individuals match on the criteria, like age and education. The authors also contend that the simulation process itself controls for most unobservable differences between married men and women and their unmarried counterparts since it is the actual incomes of the two people who marry that are combined after the new household is formed, and thus there is no assumption that currently unmarried individuals have the same income-earning ability as those that are married. Under the micro-simulation analysis, Thomas and Sawhill estimate that the child poverty rate would have been 3.4 percentage points lower than its 1998 level, an effect 77 percent as large as the simple shift-share analysis.<sup>xxiv</sup> Likewise, Sawhill et al. (2016) find that matching or pairing single mothers with single men would increase average annual income by roughly \$508 among households in the bottom third of the distribution.

The research literature documenting the antipoverty effects of education, work, and marriage are littered with caveats. Nevertheless, this collection of studies, viewed together, supports the hypothesis that “playing by the rules” yields tangible economic benefits; the relationships are, to a significant degree, causal. Of course, this still leaves the question of how to help more people finish school, marry, and obtain fulltime work. The research only suggests that if they were able to do those things, their chances of entering the middle class would improve.

#### **Pseudocode: steps taken to create the three norms tabulations**

Note: all of the CPS data were obtained using the CPS Utilities software, so the variable names are different from those provided by other sources, like IPUMS.

##### *Setting up the data:*

1. Prepare individual and family weight variables, by dividing the original weight variables (wgt & famwgt) by 100.
2. Create a family ID variable, which identifies individuals grouped by the `_year`, `hhseq`, and `fampos` variables.
3. Drop all children who are secondary individuals (i.e. `pertype=1` & `_famknd=5`). This was done by Jeff Tebbs after Tim Marshall, a Census statistician, suggested doing so. (The Census Bureau does this when calculating the official poverty rate). This drops roughly 360 observations out of about 202,600 total observations.
4. Identify family and subfamily heads using the `_hhrel` variable.
5. Identify family and subfamily heads ages 25 to 64 inclusive. This will form the basis of our analysis—especially for the child bearing and high school norms. The criteria for those two norms largely depend on the characteristics of these heads.
6. Identify families with heads that receive disability income (`incds1`). We exclude these people from the analysis, which drops about another 1,300 individuals. If we keep these respondents,

the distribution of income, broken down by norm-adherence group, is almost unchanged (within a percentage point).

*Rule 1: Child-bearing*

1. Create a variable that indicates if the family contains children younger than 18.
2. If the family/subfamily head has children, and he/she is separated, divorced, or never married, the norm is broken. If they have no children, they cannot break the norm.
3. Create a variable that lists the age of the oldest child within each family.
4. Subtract the oldest child's age from the family head's age (irrespective of gender). If this difference is less than 21, the child-bearing norm is broken.

*Rule 2: Full-time work*

1. If anyone in the family worked at least 35 hours/wk for at least 40 weeks last year, this norm is upheld. The variables used are `hrslyr` and `_wkslyr`.

*Rule 3: High school education*

1. This norm is upheld if the family/subfamily head has a high school degree (`grdatn`).

*Two notes on the treatment of income:*

The code assigns primary family income (including the relevant poverty line cutoffs) to related subfamilies, since they may share resources. The code uses the modified `faminc` variable and divides it by the `povcut` variable to obtain family adjusted income as a percent of the poverty line.

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<sup>i</sup> In order to calculate the 'age of head at birth,' the program subtracts the age of the eldest child (18 or younger) in each family/subfamily from the age of the head of that same family/subfamily. Any family/subfamily in which the 'age of head at birth' is less than 21 is counted as having broken the rule.

<sup>ii</sup> Please note that another difficulty encountered involves the years of data being discussed in the CPS. While the CPS asks about *current* family conditions (including marital status and number of children), the survey asks about employment and income for the *previous* year.

<sup>iii</sup> The coding for educational attainment has changed over time. From 1962-1991, two different variables were combined to create a measure of educational attainment: `grdcom` indicated whether an individual completed the highest grade s/he attended and `grdhi` identified the highest grade attended by an individual. These two variables were then combined by Unicon to yield `_educ`. From 1992-2006, educational attainment was measured using a new variable, `grdatn` ("Educational attainment"). The educational coding has always included GED recipients.

<sup>iv</sup> For more information on this debate, see US Department of Education, National Center for Education Statistics, "Dropout and Completion Rates in the United States: 2006," NCEES 2008-053 (Washington, DC: U.S. Department of Education, September 2008); Lawrence Mischel and Joydeep Roy, *Rethinking the High School Graduation Rates and Trends*, (Washington, DC: Economic Policy Institute, 2006); Paul E. Barton, "One-third of a Nation: Rising Dropout Rates and Declining Opportunities," (Princeton, NJ: Educational Testing Service, Policy Information Center, February

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2005); and James Heckman and Paul A. LaFontaine, "The American High School Graduation Rate: Trends and Levels," IZA Discussion Paper No. 3216, December 2007.

<sup>v</sup> It is estimated that by 2001, nearly 20 percent of all new high school credentials were achieved through GED certification, compared to 2 percent in 1960. Over 65 percent of dropouts attempting to obtain certification in 2001 were younger than 24 years. See James Heckman and Paul A. LaFontaine, "The American High School Graduation Rate: Trends and Levels," IZA Discussion Paper No. 3216, December 2007, p 8.

<sup>vi</sup> See James J. Heckman and Yona Rubinstein, "The Importance of Noncognitive Skills: Lessons from the GED Testing Program," *American Economic Review*, vol 91, no 2 (May 2001): p 145-149.

<sup>vii</sup> Isabel Sawhill, Edward Rodrigue, and Nathan Joo, "One Third of a Nation: Strategies for Helping Working Families," (Washington, DC: Brookings Institution, May 2016), <https://www.brookings.edu/wp-content/uploads/2016/07/one-third-of-a-nation.pdf>.

<sup>viii</sup> Gary Stanley Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (Chicago: University of Chicago Press, 1964).

<sup>ix</sup> Michael A. Spence, "Job Market Signaling," *Quarterly Journal of Economics* vol 87, no. 3 (August 1973): p 355-374.

<sup>x</sup> Stephen V. Cameron and James J. Heckman, "The Nonequivalence of High School Equivalents," *Journal of Labor Economics*, 11, no.1 (1993): 1-47. Indeed, GED recipients generally earn wages in line with high school dropouts. This fact only holds among individuals that have not pursued post-secondary education.

<sup>xi</sup> GED receipt may signal lower average cognitive capability. Cameron and Heckman find that GED recipients score lower on the AFQT than traditional high school graduates. Perhaps more importantly, GED receipt may signal objectionable non-cognitive traits, such as impatience or lack of focus.

<sup>xii</sup> For natural experiments, see, for example, Thomas J. Kane and Cecilia Elena Rouse, "Labor Market Returns to Two- and Four-Year Colleges," *American Economic Review* 85, no. 3 (1995): 600-13; Jeffrey Kling, "Interpreting Instrumental Variables Estimates of the Returns to Schooling," *Journal of Business and Economic Statistics*, 19, no. 3 (2001): 358-64; Philip Oreopoulos, "Average Treatment Effects of Education When Compulsory School Laws Really Matter," *American Economic Review* (forthcoming). For key sibling and twin studies, see, Orley Ashenfelter and David Zimmerman, "Estimates of the Returns to Schooling from Sibling Data: Fathers, Sons, and Brothers," *Review of Economics and Statistics* 79, no.1 (1997): 1-9; Jere R. Behrman, Mark R. Rosenzweig, and Paul Taubman, "Endowments and the Allocation of Schooling in the Family and in the Marriage Market: The Twins Experiment," *Journal of Political Economy* 102, no.6 (1994): 1131-74.

<sup>xiii</sup> Joshua D. Angrist and Alan B. Krueger, "Does Compulsory Schooling Affect Schooling and Earnings?" *Quarterly Journal of Economics* 106, no. 4 (1991): 979-1014

<sup>xiv</sup> Specifically, Angrist and Krueger estimate a 7.2 percent rate of return to an additional year of education utilizing a two-stage least squares regression versus a 8.0 percent rate of return under OLS estimation (1995).<sup>13</sup> David Card, "Using Geographic Variation in College Proximity to Estimate the Return to Schooling," Working Paper 4483 (Cambridge, Mass: NBER, 1993)

<sup>xv</sup> David Card, "Using Geographic Variation in College Proximity to Estimate the Return to Schooling," Working Paper 4483 (Cambridge, Mass: NBER, 1993)

<sup>xvi</sup> The instrumental variable estimates are 25-60 percent higher than the OLS estimates.

<sup>xvii</sup> Orley Ashenfelter and Cecilia Elena Rouse, "Income, Schooling, and Ability: Evidence from a New Sample of Twins," *Quarterly Journal of Economics* 113, no.1 (1998): 253-84.

<sup>xviii</sup> Cecilia Elena Rouse and Lisa Barrow, "U.S. Elementary and Secondary Schools: Equalizing Opportunity or Replicating the Status Quo?," *Future of Children*, 16, no. 2 (2006), p.106

<sup>xix</sup> Adam Thomas and Isabel Sawhill, "A Hand Up for the Bottom Third," *The Brookings Institution*, May 2001. Thomas and Sawhill acknowledge that, "To the extent that the unobserved characteristics of the two groups (those with and without an observed wage) differ, our estimate of predicted wages will be biased, probably in an upward direction."

<sup>xx</sup> Sawhill et al, One Third of a Nation, op cit.

<sup>xxi</sup> Adam Thomas and Isabel Sawhill, "For Love and Money? The Impact of Family Structure on Family Income," *Future of Children*, 15, no. 2 (Fall 2005): p 59.

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<sup>xxii</sup> Adam Thomas and Isabel Sawhill, “For Richer or for Poorer: Marriage as an Antipoverty Strategy,” *Journal of Policy Analysis and Management* 21, no.4 (2002): 587-99.

<sup>xxiii</sup> Robert I. Lerman, “The Impact of Changing U.S. Family Structure on Child Poverty and Income Inequality,” *Economica* 63, no. 250 (1996); Wendy Sigle-Rushton and Sara McLanahan, “For Richer or Poorer? Marriage as an Anti-Poverty Strategy in the United States,” *Population*, Vol. 57, No.3 (May-June 2002), 509-526

<sup>xxiv</sup> Thomas and Sawhill dynamically recalculate various federal benefits, including food stamps, child care, and the Earned Income Tax Credit. However, their simulation is “static” in another sense: men’s and women’s earnings are assumed to remain the same after marriage. Thomas and Sawhill acknowledge the fragility of this assumption, writing that “To the extent that labor force participation were to decline – or fertility were to increase – among mothers participating in the micro-simulation, our results may overstate the poverty-reducing effects of marriage.”