

February 2015

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# Sex, contraception, or abortion? Explaining class gaps in unintended childbearing

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## Summary

There are wide class gaps in unintended childbearing among single women in the United States, resulting from different contraceptive and abortion choices across income groups. In this paper, we use data from the National Survey of Family Growth (NSFG 2011-2013) to estimate how sexual activity, contraceptive use, and abortion use vary across income lines. Though rates of sexual activity are comparable for all women, low-income women are less likely to use contraception and are less likely to have an abortion once pregnant. We use a shift-share analysis to simulate the effect of equalizing, at the rates of affluent women, the use of the contraception and abortion services across income groups. We find that equalizing contraceptive use reduces the ratio of unintended births between affluent and poor women by half, and that equalizing abortion rates reduces the ratio by one-third.

\* We thank Isabel Sawhill, Melissa Kearney, Brad Hershbein, and Ted Gayer for their invaluable comments on earlier drafts. In addition, we are grateful for indispensable assistance from Stephanie Cencula and Allegra Pocinki.

## I. Introduction

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There are large and widening gaps in rates of unintended childbearing between Americans on different rungs of the income ladder. A poor woman is more than five times as likely as an affluent woman to have an unintended birth.<sup>1</sup> Since unintended childbearing is associated with higher rates of poverty, less family stability, and worse outcomes for children, these gaps further entrench inequality.<sup>2</sup> Closing gaps in unintended childbearing is therefore important for greater equality and opportunity.

But to close the gaps, we must first understand them. In most cases, a couple must take three steps to have a child. First, have sex. Second, fail to use contraception, or use contraception unsuccessfully. Third, decide to proceed with the pregnancy rather than have an abortion.<sup>3</sup> Income gaps in unintended childbearing must therefore reflect gaps in sexual activity, contraceptive efficacy, rates of abortion, or—more likely—some combination of the three. Gaining a better appreciation of the relative importance of these income gaps may assist in the formulation of policies aimed at reducing unintended childbearing, especially for those with low incomes.

Premarital sex has been the social norm for decades, and sexual activity rates among unmarried Americans do not vary along class lines. There is no 'sex gap' by income. By contrast, lower-income individuals typically use contraception less frequently, and less successfully, than those with higher incomes. This is why so much attention has correctly been paid to the role that contraception—or the lack of contraception—plays in unintended childbearing, not least by our colleague Isabel Sawhill in her latest book, *Generation Unbound: Drifting Into Sex and Parenthood Without Marriage*, and by the team of researchers at Child Trends.<sup>4</sup> The 'contraception gap' is a big part of the story. But it is not the whole story: less affluent women are also less likely to get an abortion when faced with an unintended pregnancy.

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1 Poor here means having a family income of less than 100% of the federal poverty line (FPL); affluent indicates a family income of greater than 400% of the FPL.

2 Isabel Sawhill, Joanna Venator, and Quentin Karpilow, "The Impact of Unintended Childbearing on Future Generations," *CCF Policy Brief* 55 (2014): 1-30.; Isabel Sawhill and Joanna Venator, "Reducing Unintended Pregnancies for Low-Income Women," in *Policies to Address Poverty in America*, ed. Melissa S. Kearney and Benjamin H. Harris (Washington: Hamilton Project, 2014), 37-44; Kathryn Edin, Paula England, Emily Fitzgibbons Shafer, and Joanna Reed, "Forming fragile families: Was the baby planned, unplanned, or in between?" in *Unmarried Couples with Children*, ed. by Paula England and Kathryn Edin (New York: Russell Sage Foundation, 2007), 25-54.

3 Of course, these steps refer specifically to heterosexual couples and even amongst this population, there are alternative steps and outcomes along this path towards childbearing, such as IVF treatment or miscarriage. But for most people facing an unintended pregnancy/birth, the three steps described are the key ones.

4 Isabel Sawhill, *Generation Unbound: Drifting into Sex and Parenthood Without Marriage* (Washington: Brookings Institution Press, 2014); Jennifer Manlove, Elizabeth Cook, Quentin Karpilow, Adam Thomas, and Heather Fish, "Male Involvement in Family Planning: The Estimated Impact of Improvements in Condom Use and Efficacy on Nonmarital Births among Teens and Young Adults," *Child Trends Working Paper* 36 (2014): 1-41; Quentin Karpilow, Jennifer Manlove, Isabel V. Sawhill, and Adam Thomas, "The Role of Contraception in Preventing Abortion, Nonmarital Childbearing, and Child Poverty," Brookings Institution (2013): 1-49.

How much do these gaps matter in terms of explaining variation in unintended birth rates by income?

## II. Data and Methods

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To explore this question, we draw on data from the National Survey of Family Growth (NSFG) 2011 to 2013, which provides a nationally representative sample of 10,416 men and women aged 15 to 44 in the United States. Our sample consists of single female respondents who are not trying to have a child.<sup>5</sup> Married women are excluded from our sample because being married is likely to influence the steps taken towards childbearing. A married couple may be less cautious about contraception, even though they are not currently trying for a baby, since an accidental pregnancy would be less worrisome. They may also be more likely to continue with an unintended pregnancy rather than resort to abortion, because they are in a more stable and/or socially acceptable relationship for childrearing. Finally, marriage is also correlated with income, which would complicate an analysis of income differences in decisions about contraception or abortion.<sup>6</sup>

Our sample of single women not trying to get pregnant, numbering 3,885, is divided into five income categories: those with an income at or below the federal poverty line (FPL), 100% to 200% of the FPL, 200% to 300% of the FPL, 300% to 400% of the FPL, or 400+% of the FPL. Differences by income category at each stage towards childbearing—sex, contraception, and abortion—can then be described.

### Sex

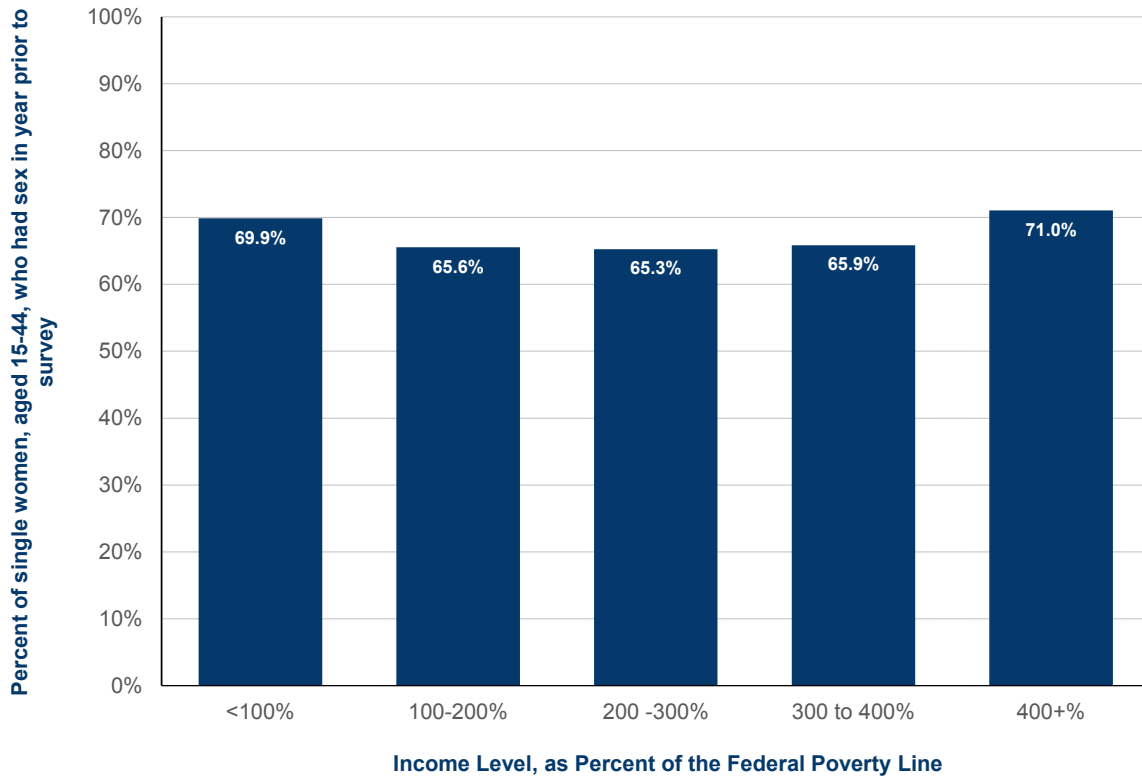
First, we looked at sexual activity. In our analysis, a woman was characterized as being sexually active in the past year if she reported one or more opposite-sex partners. Rates of sexual activity—around two-thirds of women—were almost identical across income groups:

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5 A woman was categorized as "not trying" to have a child if she was either a) using contraception; b) not using contraception, but when asked why, did not say it was because she was trying to get pregnant; or c) upon having a pregnancy, she categorized the pregnancy as unintended.

6 Analyses of the full sample and the sample of only married women reveal that contraception use and abortion decisions systematically vary by income between married and single women. While contraception use and abortions increase as income increases up to a certain point, past a certain income threshold married women become less likely to use contraception or get an abortion. This suggests that married women in better economic conditions may be less concerned by an unplanned birth, possibly because they are in a more stable situation than either married, low-income women or unmarried, high-income women.

**Figure 1. Sexual Activity by Income Group**



Source: Author Tabulations of NSFG data, 2011 to 2013; Data restricted to women who are not actively trying to conceive.

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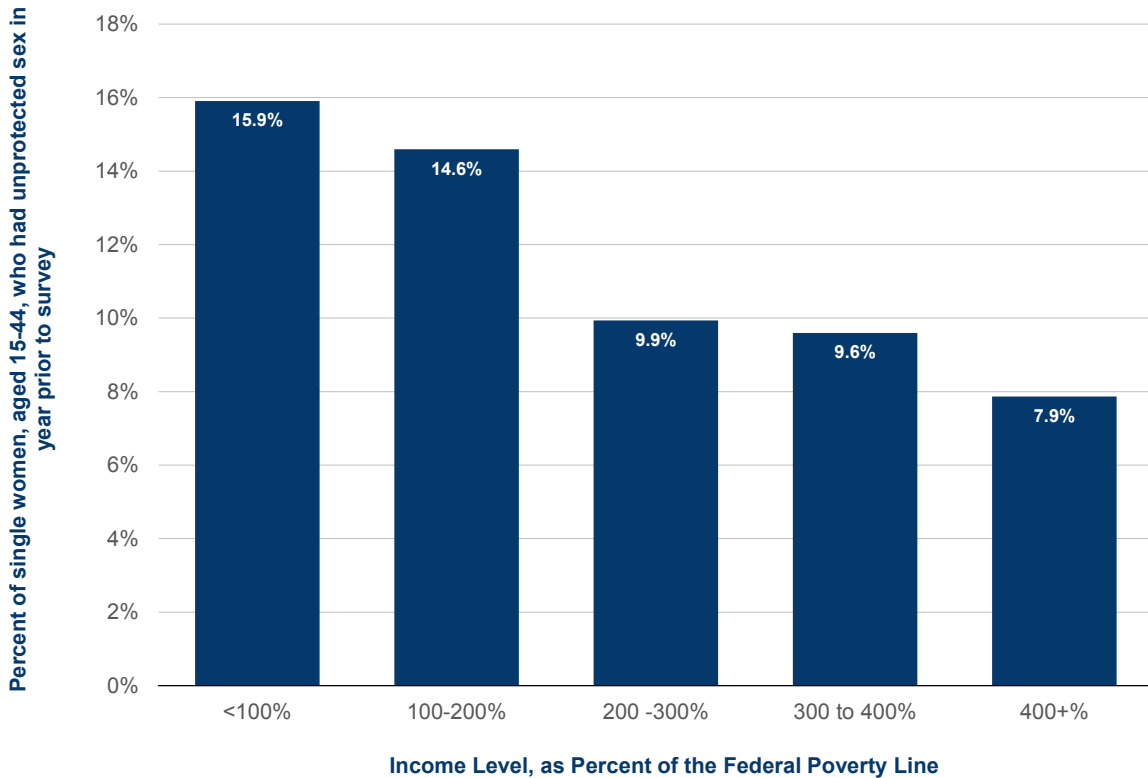
Income gaps in unintended pregnancy or childbearing do not appear, then, to be explained by differences in sexual activity.<sup>7</sup>

### **Contraception**

Next, we looked at contraception. In the NSFG, women were asked if they had used any contraception over the course of the previous year. If a sexually active woman did not report using any types of contraception during the prior year, we categorized her as using "no method." Lower incomes are associated with higher rates of non-use. Women with incomes below the FPL were twice as likely to have had sex without protection compared to women with incomes at least four times the FPL:

<sup>7</sup> Though our measure captures whether a person has ever had sex during a year's time, it does not capture frequency of sexual activity due to data limitations. Sexual frequency could be an alternative explanation for income gaps in pregnancy rates, but we are not aware of any evidence of differences by income in frequency of sexual activity. We also examined two other measures that get closer to approximating sexual frequency (sexual activity within the month prior and number of sexual partners in the last year) and do not find differences by income.

**Figure 2. Non-Use of Contraception by Income Group**



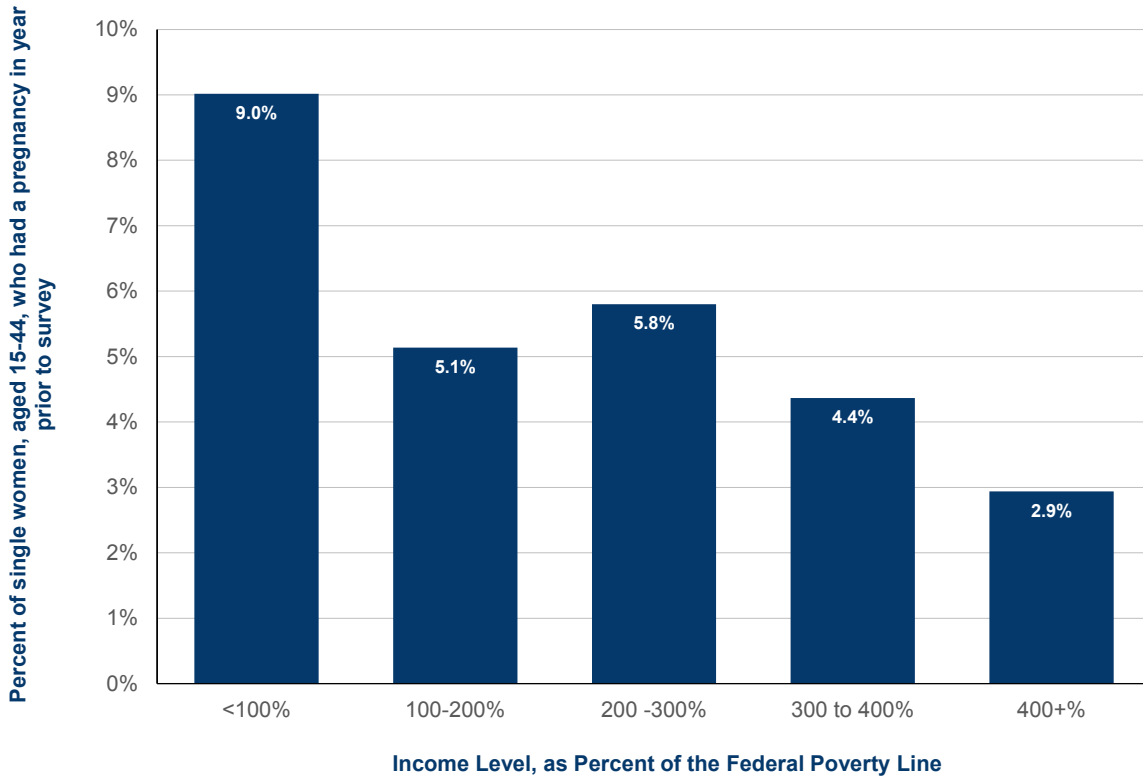
Source: Author Tabulations of NSFG data, 2011 to 2013; Data restricted to women who are not actively trying to conceive.

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Other things being equal, these gaps in contraception use will mean higher pregnancy rates for lower-income women.<sup>8</sup> As expected, nine percent of women with incomes at or below the FPL reported having a pregnancy in the last year, three times as high as the reported rate among those with incomes of greater than 400% of the FPL or more:

<sup>8</sup> We also predicted pregnancy rates by taking the average chance of a sexually active woman who is not using contraception becoming pregnant during the course of a year (85 percent) and multiplying it by the rates of non-contraception. The predicted pregnancy rates do not track precisely the actual rates, but follow a similar trend to that of actual pregnancy rates (i.e., pregnancy rates decrease as income increases).

**Figure 3. Pregnancy Rates by Income Group**



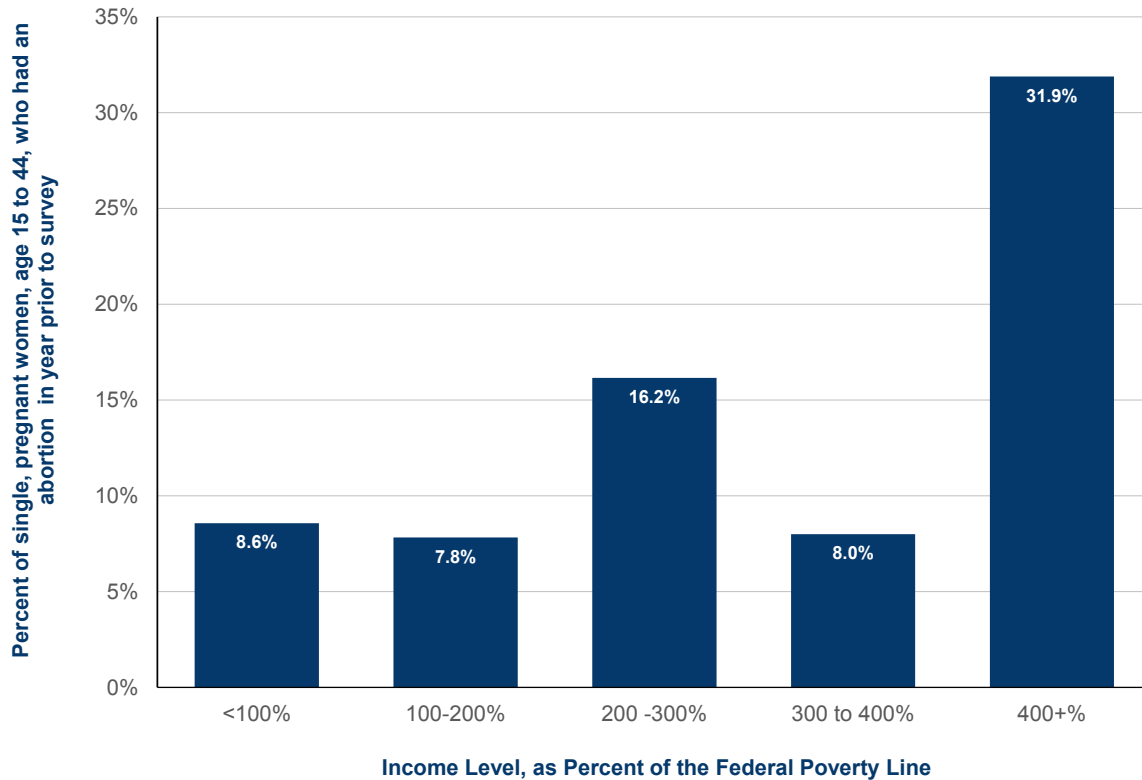
Source: Author Tabulations of NSFG data, 2011 to 2013; Data restricted to women who are not actively trying to conceive.

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### Abortion

Gaps in contraceptive use are therefore a large part of the story, in terms of understanding income gaps in unintended childbearing. But they are not the whole story. Higher-income single women are much more likely to have an abortion than low-income women. To calculate the likelihood of having an abortion in the past year, we divide the number of women who said that their most recent pregnancy ended in an abortion by the total number of women who had a pregnancy in the last year (excluding those currently pregnant). Thirty-two percent of the pregnant women in the highest income bracket had an abortion, compared to nine percent of poor pregnant women:

**Figure 4. Abortion Rates by Income Group**



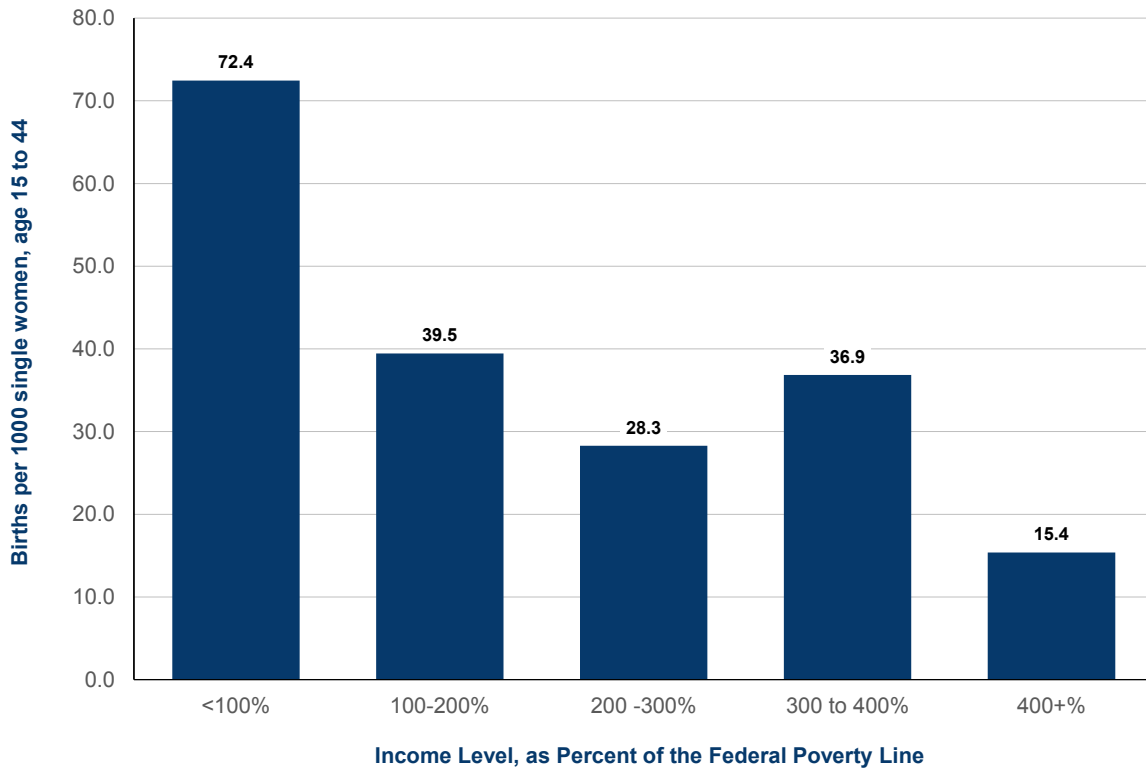
Source: Author Tabulations of NSFG data, 2011 to 2013; Data restricted to women who are not actively trying to conceive.

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### **Births**

Finally, we describe birth rates by income bracket. The birth rate for poor, single women of reproductive age (excluding those who are trying to have children) is almost five times higher than the birth rate for the comparable group of women with incomes above four times the federal poverty line (FPL):

**Figure 5. Birth Rate by Income Group**



Source: Author Tabulations of NSFG data, 2011 to 2013; Data restricted to women who are not actively trying to conceive.

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The overall picture, then, is of no variation by income in terms of sexual activity, but significant gaps in terms of both contraception and abortion. But how much difference does each make to the final birth rate?

### ***'What If' Scenario 1: Equalizing Contraception***

To answer this question, we first estimate the effect of equalizing the use of contraception across all income groups, at the current rates of women with income levels above 400% of the FPL. See Table 2 for the full tabulations. The first column, rates of sexual activity, is the same as in the previous analyses. We then multiply rates of sexual activity by 11 percent (non-use rates for women with incomes above 400% of the FPL) to calculate the percentage of people having sex without protection (column 3).

The next step is to predict the pregnancy rates based on these changed contraception rates. A complication emerges here. Pregnancy rates do not track precisely the rates of pregnancy predicted by contraceptive non-use. This is almost certainly because some of the pregnancies result from poor contraception use and use of less effective methods of contraception, rather than non-use. Once again, an income gap can be seen. The gap in pregnancy rates between low-income and high-income women is greater than the gap in reported rates of non-contraception. Specifically, the ratio between the percentage of poor women who got pregnant and the percentage of poor women not using contraception is 0.56 (i.e., 9 percent of women getting pregnant/16 percent of women having sex without contraception = 0.56). The ratio



between pregnancy rates and reported non-use of contraception percentage for women in the top bracket is much lower, at 0.375 (i.e., 3 percent pregnant/8 percent non-contraceptors = 0.375).

We therefore use these ratios to model the effects of the new contraceptive use rates on pregnancy rates. In other words, we assume that even if income gaps in use of contraception are closed, gaps in the efficacy of use are not<sup>9</sup>:

$$\text{Predicted Pregnancy Rate} = \frac{\text{Actual Pregnancy Rate}}{\text{Actual Unprotected Sex Rate}} * (\text{What If Unprotected Sex Rate})$$

We then assume that the odds of a pregnancy going to term will be the same as in the real population. To predict birth rates, we simply multiply the predicted pregnancy rate by the proportion of pregnancies carried to term. As the last column of Table 2 shows, the birth rate for women at or below the federal poverty line drops to 34.0, from 72.4—still twice the rate of affluent women, but the gap has shrunk markedly.

### ***'What If' Scenario 2: Equalizing Abortion***

As we saw in our previous analysis, there are gaps by income in abortion rates as well as in contraception. For our second 'what if' scenario, we estimate birth rates as if all women had the same abortion rate as women with income levels above 400% of the FPL. See Table 3 for the full tabulations. The first four columns are the same as in the initial analysis. But in the fifth column, we raise abortion rates across the board to 32 percent, matching the rate for women in the top income bracket. We then use this new abortion rate to calculate the proportion of pregnancies carried to term.<sup>10</sup> To predict final birth rates, we then multiply the pregnancy rate by the predicted proportion of pregnancies carried to term. As the last column of Table 3 shows, the birth rate for women at or below the federal poverty line drops to 48.9 from 72.4, substantially reducing the income gap, though not as dramatically as equalizing contraceptive use.

Our analysis suggests that if all single women adopted the same rates of contraception use as high-income single women, the ratio of unintended births between affluent and poor women would be cut in half. If all single women had the same abortion rates as high-income single women, the ratio would be reduced by one-third. A caveat is needed, of course: by definition, exercises in tabulation are a very long way from the real world. Our intention here is simply to highlight how income gaps at different stages on the path towards childbearing contribute to the observed differences in unintended birth rates, in order to suggest where our analytical and policy efforts should be focused.

### ***Preferences or Prices?***

One possibility that ought to be addressed is that gaps in both contraceptive use and abortion rates reflect group differences in preferences for having children rather than financial,

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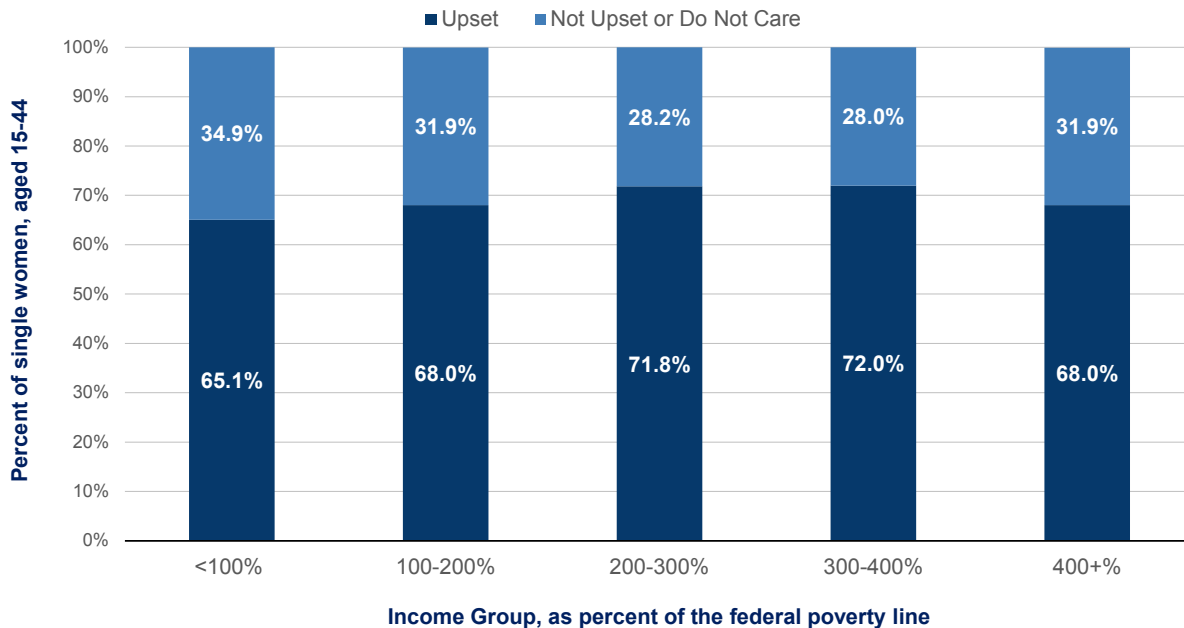
9 For a more comprehensive simulation that does account for changes in efficacy, see Karpilow, Manlove, Sawhill, and Thomas (2013).

10 Specifically, we add 32 percent to the percentage of pregnancies not carried to term due to miscarriage, still births, and ectopic pregnancies.

informational, or other barriers. Maybe poor women are less concerned about having a baby, even by accident. Work by the sociologist Kathryn Edin and others does suggest that a baby—even when unplanned—is a great source of fulfillment for women in low-income communities.<sup>11</sup> It may also be, as Melissa Kearney and Phillip Levine’s work suggests, that women with limited economic prospects will control their fertility less carefully, because they have less to lose—what they call the ‘desperation effect.’<sup>12</sup>

If poorer women are intrinsically less motivated to prevent an unintended pregnancy or birth, removing barriers to contraceptive and abortion services will have little effect on the gaps we have described in this paper. Even within our sample of single women who are not intending to get pregnant, there may be differing degrees of intent. For some, an unintended pregnancy may feel like a disaster; perhaps for others it will be an inconvenience. To explore whether income gaps in contraception and abortion can be explained by differences in preferences, we look at responses to an attitudinal question in the NSFG: ‘If you got pregnant now how would you feel? Would you be very upset, a little upset, a little pleased, or very pleased?’ There are no obvious differences by income. Approximately two-thirds of respondents in each income group of our sample reported that they would be “very upset” or “a little upset” by a pregnancy, as shown in Figure 6 (see table 4 for full tabulations):

**Figure 6. If you got pregnant now, how would you feel?**



Source: Author’s Tabulation of NSFG data, 2011 to 2013; Data restricted to women who are not actively trying to conceive.

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It is striking that a third of women who are single and not actively trying to get pregnant would not be upset by a pregnancy. This demonstrates the difficulty of getting at intent in this area of research. But for our purposes, what matters is that this proportion does not seem to vary

11 Kathryn Edin and Maria Kefalas, *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage* (Oakland: University of California Press, 2005).

12 Melissa S. Kearney and Phillip Levine, “Early, Non-Marital Childbearing and the ‘Culture of Despair,’” *NBER Working Paper 17157* (2011): 2-60.

by income. In fact, a growing body of evidence suggests that knowledge, efficacy and access are key factors in explaining income gaps in fertility. When low-income women have access to good contraception and safe abortion, they make use of them, as studies of improved access to LARCs in St. Louis and Colorado suggest.<sup>13</sup>

### III. Policy Implications

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What, if anything, do our findings suggest for policy? A few potential implications can be drawn out.

First, sex is not the problem. Policies for abstinence are fighting against the tide: the average American woman is sexually active for ten years before marriage.<sup>14</sup> More pertinent for our purposes, low and high income Americans have similarly high rates of sex outside of marriage. Chastity does not explain why more affluent women have fewer unplanned pregnancies.

Second, the large income gaps in the use of contraception are a key contributor to the gap in unintended birth rates. Our view is that income gaps in accessibility and knowledge are the key factors here. Some of the most effective forms of birth control, such as IUDs and implants, are cheaper in the long-run but have high upfront costs, making them less attractive to low-income women. The passage of the Affordable Care Act (ACA) represents a huge advance here, by making better contraception more financially accessible, but lack of knowledge about the efficacy of IUDs and implants and access to quality medical advice about contraception are still significant problems.<sup>15</sup>

Third, gaps in abortion rates by income are a significant contributory factor to the gap in unintended births. Of course, abortion is a much more difficult issue, on personal, moral, and political grounds. There is broader consensus over the need to improve access to and use of contraception for women of all backgrounds. But even if we make great progress in terms of contraception, abortion will continue to play an important role in helping women choose to prevent an unintended pregnancy from becoming an unintended birth—as it does in almost every economically advanced country.

Right now, gaps in access to abortion are even wider than access to contraception. The ACA mandate means that contraception must be included in all insurance plans. By contrast, federal policy specifically prohibits Medicaid from covering abortions, meaning that low-income women

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13 Gina Secura, “Long-acting Reversible Contraception: a Practical Solution to Reduce Unintended Pregnancy,” *Minerva Ginecologica* 65, no. 3 (2013): 271–77; Sue Ricketts, Greta Klingler, and Renee Schwalberg, “Game Change in Colorado: Widespread Use of Long-Acting Reversible Contraceptives and Rapid Decline in Births Among Young, Low-Income Women,” *Perspectives on Sexual and Reproductive Health* 46, no. 3 (2014): 125–132.

14 Richard V. Reeves, “How to Save Marriage in America,” *The Atlantic*, February 13, 2014.

15 Tessa Madden, Jenifer E. Allsworth, Katherine J. Hladky, Gina M. Secura, and Jeffrey F. Peipert, “Intrauterine Contraception in Saint Louis: A Survey of Obstetrician and Gynecologists’ Knowledge and Attitudes,” *Contraception* 81, no. 2 (2010): 112–116; Christine Dehlendorf, Kira Levy, Rachel Ruskin, and Jody Steinauer, “Health Care Providers’ Knowledge About Contraceptive Evidence: A Barrier to Quality Family Planning Care?” *Contraception* 81, no. 4 (2010): 292–298.

must pay for abortions out of pocket.<sup>16</sup> Many states also prohibit private insurers from covering abortion as well.<sup>17</sup> Increased state-level regulations on abortions have also reduced the number of providers. In Midwestern states, over 400,000 women live more than 150 miles away from the nearest abortion provider.<sup>18</sup> Regulations currently being argued in the courts could, if upheld, leave the entire state of Texas with only 8 providers.<sup>19</sup> Longer travel times mean even higher costs and more time off work—which can be especially costly for low-income women, since they are the least likely to get paid or unpaid medical leave. State-imposed waiting periods mean multiple appointments before a procedure, multiplying these costs.

## IV. Conclusion

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Control of fertility varies widely between income groups. Most unmarried women are sexually active, regardless of income. But women with higher incomes are much more successful at ensuring that sex does not lead to an accidental baby. This almost certainly reflects their brighter economic and labor market prospects: simply put, they have more to lose from an unintended birth. Improving the economic and educational prospects of poorer women is therefore an important part of any strategy to reduce unintended birth rates. But there are more immediate solutions, too. Affluent women use contraception more frequently and more effectively, and there is a clear case for policies to help close this income gap, including increasing access to long-acting reversible contraceptives (LARCs). But access to affordable abortion also matters, and this is currently limited for many low-income women. There are of course strongly-held views on abortion, but it should be hard for anyone to accept such inequalities by income, especially when they are likely to reverberate across two or more generations. Abortion is a difficult choice, but it is not one that should be influenced by financial status.

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16 Rachel Jones, Ushma D. Upadhyay, and Tracy A. Weitz, “At What Cost?: Payment for Abortion Care by U.S. Women,” *Women’s Health Issues* 23, no. 3 (2013): e173- e178.

17 Heather D. Boonstra and Elizabeth Nash, “A Surge of State Abortion Restrictions Puts Providers—And the Women They Serve—in the Crosshairs,” *Guttmacher Policy Review* 17, no. 1 (2014): 9-15.

18 Rachel Jones and Kathryn Kooistra, “Abortion Incidence and Access to Services in the United States, 2008,” *Perspectives of Sexual and Reproductive Health* 43, no. 1 (2013): 41-50.

19 Erik Eckholm, “Texas Abortion Clinic Rules Texted in Appeals Court,” *The New York Times*, January 7, 2015.

**Table 1. Pathways to Birth for Single Women, Age 15 to 44, Who Are Not Trying to Have a Child**

Percent of FPL	Had sex in last year	Percent of those who had sex who didn't use protection	Percent of total population who had protection-less sex	Percent of total population who got pregnant	Percent of pregnant women who got abortion	Percent of pregnant population that carry to term	Birth rate	Births per 1000 women
<100%	70%	23%	16%	9%	9%	78%	7.2%	72.4
100-200%	66%	22%	15%	5%	8%	75%	3.9%	39.5
200-300%	65%	15%	10%	6%	16%	46%	2.8%	28.3
300-400%	66%	15%	10%	4%	8%	82%	3.7%	36.9
400+%	71%	11%	8%	3%	32%	52%	1.5%	15.4

**Table 2. What if all women had contraception rates comparable to high-income women?**

Percent of FPL	Had sex in last year	Percent of those who had sex who didn't use protection	Percent of total population who had protection-less sex	Percent of total population who got pregnant	Percent of pregnant women who got abortion	Percent of pregnant population that carry to term	Birth rate	Births per 1000 women
<100%	70%	11%	7.7%	4.4%	9%	78%	3.4%	34.0
100-200%	66%	11%	7.3%	2.6%	8%	75%	1.9%	19.2
200-300%	65%	11%	7.2%	4.2%	16%	46%	1.9%	19.3
300-400%	66%	11%	7.3%	3.3%	8%	82%	2.7%	27.1
400+%	71%	11%	7.9%	2.9%	32%	52%	1.5%	15.3

**Table 3. What if all women had abortion rates comparable to high-income women?**

Percent of FPL	Had sex in last year	Percent of those who had sex who didn't use protection	Percent of total population who had protection-less sex	Percent of total population who got pregnant	Percent of pregnant women who got abortion	Percent of pregnant population that carry to term	Birth rate	Births per 1000 women
<100%	70%	23%	16%	9%	32%	54%	4.9%	48.9
100-200%	66%	22%	15%	5%	32%	51%	2.6%	26.2
200-300%	65%	15%	10%	6%	32%	30%	1.7%	17.4
300-400%	66%	15%	10%	4%	32%	58%	2.5%	25.1
400+%	71%	11%	8%	3%	32%	52%	1.5%	15.3

**Table 4. Preferences about childbearing: If you got pregnant now, how would you feel?**

	Income Group, as percent of Federal Poverty Line				
	<100%	100-200%	200-300%	300-400%	400+%
<b>Very upset</b>	35.7%	42.1%	39.1%	46.0%	34.5%
<b>A little upset</b>	29.3%	26.0%	32.7%	26.0%	33.5%
<b>A little pleased</b>	17.6%	15.0%	17.9%	15.9%	18.5%
<b>Very pleased</b>	16.9%	16.7%	10.0%	11.7%	13.4%
<b>Doesn't care</b>	0.4%	0.2%	0.3%	0.4%	0.1%
<b>Upset</b>	65.1%	68.0%	71.8%	72.0%	68.0%
<b>Not upset/do not care</b>	34.9%	31.9%	28.2%	28.0%	31.9%