

Revisiting Gruber (2004):
Does growing up in a unilateral divorce regime really lead to negative later
life outcomes?

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Abstract

While divorce rates peaked in the 1980s, an estimated 33% of first marriages now end in divorce or separation within the first 10 years of marriage and debates over the effects of divorce laws are still very much alive. While there is a plethora of research documenting the effect of divorce on children, there has been relatively little empirical work seeking to assess the effect of the divorce *legislation* on children and later life outcomes. This paper seeks to narrow this gap in the literature by revisiting earlier results and by providing updated evidence on the impact of unilateral divorce laws on child outcomes. It builds on Jonathon Gruber's 2004 paper published in the *Journal of Labor Economics*, which, in addition to addressing the effect of unilateral divorce on divorce rates, looks at the effect of unilateral divorce exposure both as a child and as an adult on a variety of outcomes including education, income, marriage and suicide. In order to test the robustness of Gruber's estimates and to assess whether these trends persist with the inclusion of more recent data, I first replicate his results as precisely as possible. Then, I extend Gruber's analysis by including 2000 census data which was not available at the time of his publication. While my replication of Gruber is not perfect, for the most part, I am reasonably successful in replicating his major findings using data from the 1960-1990 time period. In my extension, I find many of the updated results found using the 1960-2000 timeframe to be smaller in magnitude and, in many instances, much less precise than those estimated with the original sample. Updated results still provide evidence of a positive, albeit smaller, effect of current unilateral divorce exposure on divorce probabilities. However, contrary to Gruber's findings, I find little evidence of strong negative effects of youth exposure to unilateral divorce on later life outcomes once the 2000 data are included.

1. Introduction

While divorce rates peaked in the 1980s, an estimated 33% of first marriages now end in divorce or separation within the first 10 years of marriage¹ and debates over the effects of divorce laws are still very much alive. In fact, a current proposal for the enactment of a unilateral divorce law in the state of New York was the subject of a recent debate featured in *LegalAffairs*. Unilateral divorce laws, which were first widely adopted in the 1970s, increase the ease of divorce by taking no-fault divorce laws one step further and allowing one spouse to leave the marriage without the consent of the other. In the article, Justin Wolfers and Katherine S. Spaht debate the likely consequences of such legislation. While Wolfers argues “the legal change being proposed is unlikely-given past evidence-to have much of an impact on the likelihood that a couple divorces,” Spaht argues against the enactment of the legislation pointing to the potential damages imposed on children growing up in such regimes.

Up until this point, most of the empirical work on unilateral divorce has focused on the effect of the laws on divorce rates; and while there is a plethora of research documenting the effect of divorce on children, there has been relatively little empirical work seeking to assess the effect of the divorce *legislation* on children and later life outcomes. In fact, to my knowledge, only two papers have looked specifically at the role of unilateral divorce laws on children [Gruber (2004) and Johnson & Mazingo (2000)].

This paper seeks to narrow this gap in the literature by revisiting earlier results and by providing updated evidence on the impact of unilateral divorce laws on child outcomes. It builds on Jonathon Gruber’s 2004 paper published in the *Journal of Labor*

¹ Bedard, Kelly and Olivier Deschenes. “Sex Preferences, Marital Dissolution, and the Economic Status of Women.” Department of Economics, UCSB. Working paper 603. 2003.

Economics, which, in addition to addressing the effect of unilateral divorce on divorce rates, looks at the effect of unilateral divorce exposure both as a child and as an adult on a variety of outcomes including education, income, marriage and suicide.

Using census data from 1960 to 1990, Gruber exploits variation in unilateral divorce laws across time and states. His results indicate that unilateral divorce laws do significantly increase the probability of divorce. Additionally, his results suggest that individuals “who were exposed to unilateral divorce regulations as children are less well educated, have lower family incomes, marry earlier but separate more often, and have higher odds of adult suicide (abstract).”

In order to test the robustness of Gruber’s estimates and to assess whether these trends persist with the inclusion of more recent data, I first replicate his results as precisely as possible. Then, I extend Gruber’s analysis by including 2000 census data which was not available at the time of his publication.

While my replication of Gruber is not perfect, for the most part, I am reasonably successful in replicating his major findings using data from the 1960-1990 time period. In my extension, I find many of the updated results found using the 1960-2000 timeframe to be smaller in magnitude and, in many instances, much less precise than those estimated with the original sample. Updated results still provide evidence of a positive, albeit smaller, effect of current unilateral divorce exposure on divorce probabilities. However, contrary to Gruber’s findings, I find little evidence of strong negative effects of youth exposure to unilateral divorce on later life outcomes once the 2000 data are included.

The remainder of the paper is organized as follows. Section 2 provides some background on unilateral divorce and highlights Gruber’s discussion of how unilateral

divorce laws may affect child outcomes. A detailed description of the data is presented in Section 3. Section 4 presents a discussion of replication results. Extensions to Gruber's work using the 2000 data are presented in Section 5. Section 6 contains an interpretation of the findings. Section 7 concludes.

2. Background

During the late 1960s and early 1970s, there was a large shift in divorce laws in the United States with the widespread adoption of unilateral divorce laws (see Table 1). During the same time period, divorce rates in the United States climbed (see Figure 1), suggesting that the laws played a large part in the rising divorce rates and destruction of the traditional family in the United States. Given that a wide range of literature has suggested children growing up in divorced households face more problems than children coming from intact families², the effect of such divorce legislation on children is of particular concern to policymakers. Indeed, in light of the negative consequences of divorce on children and on the apparent strong correlation between divorce rates and the advent of unilateral divorce laws, many critics have placed blame on the easing of divorce laws and have called for the reversal of such legislation.

Theoretically, opponents of unilateral divorce argue that the law is bad for children because, (1) unilateral divorce leads to increased divorce rates and (2) divorce is harmful to children. It is this direct channel that is often the focus of public debate. In addition, as discussed by Gruber, there are other channels through which unilateral divorce laws may accentuate or even offset the direct effect of unilateral divorce laws on children.

² For instance, in a review of 92 studies, Amato and Keith (1991) find "that children of divorce have more difficulty than children in intact families adjusting both socially and psychologically."

Following Gruber, in the remainder of this section, I first briefly discuss the first two claims listed above that, when linked together; give way to the direct channel through which unilateral divorce may affect children. Then, I summarize Gruber's discussion of the other ways that unilateral divorce might affect children.

2.1) Unilateral Divorce and Divorce Rates

While there is a fairly sizeable economics literature addressing whether unilateral divorce laws lead to increase divorce rates, the answer to this question remains inconclusive. Much of the debate surrounding these issues focuses on how, theoretically, such legislation should affect divorce propensities. Critics of unilateral divorce argue simply that allowing one spouse to end a marriage without the consent of the other allows an unhappy spouse to terminate the marriage even if her partner does not want it to end. Thus, a move from a more conservative divorce regime to a more liberal regime inevitably leads to higher rates of divorce. The counter-argument puts unilateral divorce in the context of the Coase theorem. The Coasian bargaining argument as outlined by Gruber is as follows:

“If a marriage is a contract between two partners and one partner wants to end that contract, he or she can just pay their partner for that privilege. Thus, moving from multilateral to unilateral divorce does not change the fundamental likelihood of divorce; it simply changes the amount of payment that must be made from the partner who wants to leave to the partner who wants to stay. That is, under the typical resumption from the 1970s that men were the ones that wanted to terminate their marriage contracts, unilateral divorce would not lead to rising divorce; it would simply lead to lower alimony and child-support payments to the wives left behind (p.804).”

Empirically, studies such as Peters (1986, 1992) and Gray (1998) find unilateral divorce laws have little impact on divorce probabilities, while others suggest the impact of unilateral divorce laws on divorce rates is quite large [e.g. Allen (1992), Friedberg (1998), Johnson & Mazingo (2000), Gruber (2004)].

In a recent paper, Justin Wolfers (2003) attempts to reconcile this discrepancy by examining the dynamic impact of unilateral divorce laws on divorce rates. His analysis suggests that the laws have a large impact on divorce rates in the eight years following their enactment but that this increase is reversed thereafter. He argues that the effect of such laws is seen through the initial time period as the stock of unhappy marriages are dissolved, but that once this pent up stock of discontented marriages end, the laws have very little effect.

2.2) The effect of divorce on children

Investigating the effect of divorce on children is undoubtedly a widely researched area and studies across a wide variety of disciplines have arrived at the same conclusion: *divorce is bad for children*. For instance, children of divorce have been found to perform worse in school, to engage in more risky behaviors, and to have low self-esteem. Certainly this research plays a vital role in the current analysis, for if not for the well-documented negative consequences of divorce on children, the effect of divorce laws on children would be a mute point. However, the focus of this paper is on the effect of divorce legislation on children. As such, rather than providing a detailed review of the literature surrounding the effect of divorce on children, I simply point to the overwhelming conclusion drawn from such literature and move on to a brief discussion of the other channels through which unilateral divorce laws may affect children³.

2.3) Other channels through which unilateral divorce laws may affect children

As mentioned earlier, in addition to a more detailed discussion of the channels described above, Gruber discusses other possible impacts that unilateral divorce laws

³ For a more detailed discussion of such effects see Gruber (2004), pp. 805-806.

could have children. Specifically, Gruber argues that unilateral divorce may lead to fewer separations, more marriages, and changes in household bargaining.

His first claim is relatively straightforward and requires little explanation. Clearly, unilateral divorce may lead couples who would have otherwise been separated to file for divorce, thus decreasing the number of separations in favor of more divorces. As Gruber suggests, if the negative impact of divorce on children is driven by growing up in a single parent household, then this reallocation should have little effect on child outcomes.

Unilateral divorce laws may also affect marriage rates. Making divorce easier may lead an otherwise hesitant individual to enter a marriage because he knows the marriage will be easier to exit. In such a case, the net stock of children living in two-parent homes may not change, suggesting child outcomes would not change. However, Gruber notes that, “if marriage instability per se is detrimental to child development, then child outcomes could worsen even if total marriage rates are constant (p.808).”

Gruber’s last claim follows the logic of Coasian bargaining discussed above. It is as follows. If the presence of unilateral divorce laws has the effect of altering the nature of the relationship between spouses by shifting power, and if children are affected by the relative power of their parents, then unilateral divorce may have implications on child welfare regardless of its effect on divorce rates themselves. For example, if children benefit more when their mothers have more resources or power, then shifts in power away from the wife may lead to negative consequences for children even if their parents remain married.

3. Data

This paper primarily uses the Integrated Public Use Micro Samples (IPUMS) census data from 1960-2000. Specifically, I utilize the 1960 1% sample, the 1970 Form one state 1% sample, and the 1980, 1990, and 2000 5% state samples⁴. As pointed out by Gruber, using Census data provides very large samples allowing for stronger inference of the effect of the laws on outcomes. Additionally, the data have information on state of residence as well as state of birth. Thus, the effect of unilateral divorce laws as a youth as well as the effect of such laws as adults may be analyzed. In creating my datasets, I follow Gruber's methodology as precisely as possible. I discuss his methodology below, noting any changes or assumptions I had to make.

The data is separated into three main files. Since unilateral divorce laws only vary at the state, year, and age levels, the data are collapsed into state/year/age cells for analysis. In each dataset, observations are cell means that are derived using person weights and regressions are run at this level. However, all regressions are weighted by the number of observations in each cell, thus the resulting estimates reflect the underlying micro-data rather than the US population.

The first file contains information on children aged 0-18 years old. In this file, the data are collapsed into state/year/age cells. Children are matched to their parents in order to examine the effect of unilateral divorce laws on the marital status of the parent with whom the child resides. Specifically, this data is used to analyze the effect of unilateral divorce on the probability a child resides with a parent who is divorced. The second data

⁴ Data are from www.ipums.org. While Gruber does not explicitly cite the specific Census samples used, in his replication of Gruber's divorce rate analysis, Justin Wolfers cites these samples in a footnote stating, "Following Gruber, I analyze data on US-born adults aged 25-50 from the 1960 1% sample, the 1970 Form one state 1% sample, and the 1980 and 1990 5% state samples." In attempting to reconcile discrepancies in sample size, I contacted Gruber to make sure I was using the same underlying census samples. Unfortunately, Gruber could not recall the specific sample used in his analysis. Thus, I follow Wolfers in using these specific IPUMS data sets.

set contains information on US-born adults aged 25-50. Data are collapsed into state/year/age cells and are analyzed separately by sex. This dataset is analogous to the first and is used to assess the effect of unilateral divorce laws in an individual's state of residence on their marital status. In particular, this allows for the examination of the effect of the laws on the probability of divorce.

The last dataset contains state of residence/state of birth/year/age cells. Regressions are run separately for each sex. Like the second dataset, this dataset contains information on US-born individuals aged 25-50. This dataset allows for the analysis of the effect of exposure to unilateral divorce laws as a child as well as exposure to the laws as an adult on a variety of outcomes. Specifically, the analysis includes the following dichotomous outcomes: married, divorced, separated, never married, high school dropout, high school graduate, some college, college graduate, below poverty, worked last year. The following continuous outcomes are also assessed: number of children, years of education, income per capita, weeks worked and earnings.

Unlike the first two datasets, some of the outcome variables used with the third dataset are not constant over the census years and/or require additional assumptions in their construction. Since Gruber does not discuss variable construction in detail, I cannot be sure that I have defined variables exactly as he did. Thus, I make what I feel are reasonable assumptions for variable construction. My methodology is discussed in detail in Appendix 1.

For all of the dichotomous variables discussed above, the final observation represents the cell mean which, in this case, is the proportion of individuals having a value equal to one. For the continuous variables, each observation reflects the average

value of the outcome across individuals in the particular cell. In the replication analysis (section 4), observations for the year 2000 are eliminated while in subsequent analyses (section 5), these observations are included.

In addition to the outcomes discussed above, Gruber also examines the effect of unilateral divorce laws on suicide rates. He uses the Vital Statistics Mortality data from 1978 to 1996 to get suicide rates collapsed by age, sex, and state of birth. Due to the relatively small number of suicides per year, he uses a negative binomial count model in addition to a population shares model which normalizes the data by sex/age/year/state of residence population. Due to data limitations, I use the same data, but a slightly different time period for my replication analysis. I use the Vital Statistics Mortality data from 1980 to 1998 to obtain suicide rates by age, sex, and state of birth. In the population shares model, I use publicly available population data from the census to create the denominator. This data is then merged with the Vital Statistics Mortality data to create suicide rates⁵.

Finally, information on unilateral divorce laws over time and across states is merged with each dataset and dummy variables are created to indicate the presence of such a law.

4. Replication

In this section, I discuss the replication of Gruber (2004). For analyses which use the first and second datasets, the number of observations in the sample is the same,

⁵ Vital Statistics Mortality Data was obtained from the Odum Institute at UNC. Data was provided in ascii format separately for each year. The dataset was created by first pulling out relevant variables and creating individual SAS datasets. The individual dataset were then converting to STATA and the years were merged into one dataset. Census data was used to create the state of residence/year/sex/age population counts used in the population shares models. Population data was then merged with the suicide data to create the final suicide data file used in the analysis.

reflecting the fact that there is at least one individual in each state of residence/age/year cell. However, a puzzling discrepancy in the replication arises in analyses using the third dataset. Whereas my female sample has 156,781 observations, Gruber's has 159,884. Likewise, my male sample has 157,301 observations while Gruber's has 159,487. Admittedly, the difference is especially puzzling given that I have fewer observations than Gruber and have only eliminated individuals outside of the age range (25-50) and those not born in the United States before collapsing the data^{6,7}. Despite this perplexing fact, my replication results are, for the most part, reasonably close. I thus acknowledge the differences in the sample and proceed to revisiting Gruber's main results with the replicated data and to identifying any notable differences in the analyses.

4.1) Replication: Sample Means

In order to provide insight into the degree of similarity between the replicated datasets and Gruber's samples, I begin the discussion of the replication results with the replication of the sample means. Sample means for the first and third⁸ datasets from the replication are presented in Table 2 and are listed next to Gruber's results from his Table 2. Suicide rates from the replication and from Gruber's sample are also listed at the bottom of the table.

⁶ This would be much less puzzling if I had a larger sample size than Gruber. Such a case would indicate Gruber had eliminated some individuals that I retained. However, I have fewer observations. As such, this explanation does not help. In an attempt to reconcile these differences, I contacted Gruber to ask him for his data. I also wanted to make sure I was using same underlying census samples. Unfortunately, he did not have his data nor could he tell me what specific IPUMS datasets he used. Before collapsing the data, I only eliminate individuals out of the 25-50 age range and those not born in the US. Thus, for those individuals not born in the US, I tried allocating their state of birth as their state of residence. This only resulted in a few additional observations. I also tried using a different 1970 IPUMS sample. This resulted in fewer observations. However, I did have access to Justin Wolfers's data and his do-files and was able to replicate his analysis for divorce rates. In communication with Wolfers, he indicated that he had similar problems when attempting to replicate Gruber's analysis. Thus, while I can not determine the specific source of the discrepancies, I can infer that they are at least consistent with Wolfers's analysis.

⁷ My STATA do-files which were used to create the final datasets are available upon request.

⁸ As noted by Gruber, since the third dataset is a "more finely parsed version of the second" dataset, means from the second and third datasets are identical. As such, I only report those from the third.

First, while the sample size differs, means of the marital status variables from the replicated adult sample are remarkably similar. For instance, consider marital status means for females. The replication mean for the proportion married is 70.8% while Gruber's is slightly higher at 71.7%. Likewise, the average probability of divorce from the replicated sample is 11.2% while that from Gruber's sample is 11.0%⁹. The average probabilities of being separated or never married are also close. Similar trends are seen with the male sample.

Similarly, the means of the proportion below poverty, the proportion worked last year, weeks worked, and earnings variables are quite close. For females, on average, the proportion living under poverty in the replicated sample is 11.3%, slightly lower than Gruber's mean of 11.8%; while for males, an average of 9.1% of the replicated sample is living below poverty and 8.6% of Gruber's sample is below the poverty level. For females, the number of weeks worked is roughly 30 weeks for both samples, while for males, the mean is roughly 45 weeks per year. The average proportion of females who reported working in the last year is 72.1% in the replicated sample and 71.2% in Gruber's sample. As expected, means are higher for males. In the replicated sample, the mean in the replicated sample is 93.9%, close to Gruber's mean of 94.6%. Finally, means of earnings variable for both sexes in the replicated sample are similar to those of Gruber. For females, earnings in 1990 dollars in the replicated sample are approximately \$10,828 compared to \$10,682 in Gruber's sample. Those for males are \$26,111 and \$26,223 for the replicated and Gruber sample, respectively.

⁹ The means for males are 8.5% and 8.2% for the replicated and Gruber sample, respectively. It is worth noting that the means I obtain in the replication for both males and females match those of Wolfers (2003) who also could not replicate Gruber's analysis exactly. Since Wolfers only replicates the divorce regressions, I can only replicate his results for these two regressions. However, I can infer that my methodology for all regressions is consistent with his.

In contrast, means for the number of children, income per capita, and some of the education variables are quite different. Whereas the replicated sample mean for females is 1.48 children, the Gruber mean is significantly higher at 2.20 children. In contrast, the number of children sample mean for males from the replicated sample is lower than Gruber's. Perhaps the most significant difference in sample means across the two datasets is seen in the income per capita variable. This is particularly true for males. The replicated sample mean is roughly \$25,575 while the Gruber mean is significantly lower at \$15,159. The mean for the replicated female sample is also larger than that of Gruber's sample. Likewise, the replicated mean for years of education is larger across both male and female samples. In both instances, the replicated sample mean is roughly one year greater than Gruber's. This discrepancy may be due to different variable construction. However, since I don't have detailed information on how he created his education variables, I can only infer the possible reason for this difference. Finally, while the average proportion of high school dropouts and high school graduates are roughly the same across the replicated and Gruber samples for both sexes, the average proportion of those with some college and with college degrees vary to a degree. With both males and females, the average proportion of those with some college in the replicated sample is higher than in Gruber's, whereas the average proportion of those with a college degree is lower in the replicated sample than in Gruber's sample.

Means from the child sample are slightly different from those of Gruber's. Replicated means for the proportion of children living with a mother who is divorced, separated or never married are 7.5%, 4.0%, and 4.1%, respectively. Gruber's sample counterparts are slightly lower at 6.6%, 3.5%, and 3.7%. Replicated sample means for

children living with a father who is divorced, separated or never married are 1.5%, 0.5%, and 0.7%, respectively. Again, those from Gruber’s sample are somewhat lower.

Finally, while the suicide samples are drawn from different time periods, average rates per 100,000 from the replicated sample are close to those of Gruber’s sample. The average suicide rate for females from the replicated sample is 7.2 while that from Gruber’s is a little lower at 6.3. Likewise, the average suicide rate for males in the replicated sample is 25.5 versus 22.1 in Gruber’s sample.

4.2) Replication: Unilateral divorce exposure and divorce rates

To assess whether unilateral divorce laws affect divorce rates¹⁰, Gruber runs regressions of the following form:

$$DIVORCE_{ajt} = \alpha + \beta_1 UNILAT_{jt-1} + \beta_2 RACE_{ajt} + \beta_3 \eta_a + \beta_4 \delta_j + \beta_5 \tau_t + \beta_6 \eta_a * \tau_t + \varepsilon \quad (1)$$

where the indexes a, j, t represent age, state, and year, respectively. The outcome of interest is the cell mean divorce rate (or probability a child lives with a divorced mother/father for the child sample) and is given by $DIVORCE$ and $UNILAT$ is a dummy indicator that equals one if unilateral divorce law is present in the year before the census year¹¹. $RACE$ represents dummy variables for the percentage of black and percentage of white in each cell. Age, state, and year fixed effects are represented by η, δ and τ , respectively; and $\eta * \tau$ is a full set of age*year interactions. To control for the possibility of law change in response to marital status changes (ie. unilateral laws are passed in response to high divorce rates), Gruber also runs the above model controlling for state-

¹⁰ Gruber also tests whether unilateral divorce laws affect the probability of being separated or never married. Since Gruber’s primary findings of interest are on the effects of the law on divorce rates, I focus my discussion on the divorce replication results. Gruber’s Table 3 includes all of the marital status results. A full replication of this table is presented in this paper in Appendix 2 as Table A2.1.

¹¹ As noted by Gruber, this is done since the census is conducted in the spring of each year and many of the outcomes of interest refer to the previous year.

specific time trends. As aforementioned, regressions are weighted by cell size. In addition, standard errors are adjusted by clustering at the state of residence level.

Replication results for adults are presented in the first and third columns of Table 3. They are qualitatively the same as Gruber's (columns 2 and 4) and indicate a statistically significant positive relationship between unilateral divorce and the probability of divorce for both males and females. Results without state-specific time trends suggest the presence of unilateral divorce laws increases in the odds of divorce by 0.010 percentage points, or 9.0% for females and 0.0082 percentage points, or 9.6% for men¹². While qualitatively similar, the replication estimates are slightly smaller than those of Gruber who reports comparable estimates of 0.0127 percentage points (or 11.2%) for females and 0.0095 (or 11.7%) for men.

Likewise, replication estimates from regressions including state-specific time trends suggest the presence of unilateral divorce raises the probability of divorce. For females, like Gruber's analysis, the inclusion of such time trends increases the strength of estimates. The coefficient on *UNILAT* increases from 0.010 to 0.011 or from 9.1% to 9.4%. Interestingly, for males, this pattern is different. While in Gruber's analysis the inclusion of time trends increases the strength of the coefficient on *UNILAT*, in my replication this coefficient falls from 0.0082 to 0.0076 or from 9.6% to 9.0% once time trends have been included.

Despite slight differences between the replication and Gruber's results, his main finding remains unchanged: *the presence of unilateral divorce laws in one's state of residence as an adult raises the probability of divorce.*

¹² As aforementioned, while these estimates vary slightly from Gruber's estimates, they are within a rounding error of those of Wolfers who reports a coefficient of 0.0102 (9.1%) for females and 0.0081 (9.5%) for males.

Likewise, regressions using the child dataset are also suggestive of a positive relationship between the availability of unilateral divorce and the probability of divorce. Regressions using the child dataset have, as the dependent variable, the probability that the child lives with a mother/father who is divorced.

Replication results (Table 3, bottom panel) are again qualitatively similar to Gruber's but the magnitude of the replicated coefficients is smaller than those reported by Gruber. Gruber reports unilateral divorce increases the probability of a child living with a divorced mother by 0.0061 percentage points, or 9.1% while the comparable replication estimate suggests a coefficient of 0.0036, or just 4.8% and is not statistically significant. However, in the model with state-specific time trends, the replicated coefficient is statistically significant and is closer to Gruber's. Replicated results suggest unilateral divorce increases the odds a child lives with a divorced mother by .0075 percentage points, or 10%. Likewise, replicated coefficients for children living with their fathers are quantitatively smaller than Gruber's estimates. In the model without state-specific trends the replicated results suggest the presence of unilateral divorce increases the probability a child lives with a divorced father by .0017 percentage points, or 11.2% of the baseline. Results are similar in the model controlling for state-specific time trends.

While the magnitude of the replicated coefficients is slightly smaller than Gruber's reported effects, qualitatively the replication results echo those from the adult sample and do not alter Gruber's main finding: *the presence of unilateral divorce increases the probability that a child lives with a divorced parent.*

4.3) Replication: Unilateral divorce exposure as a youth and later life outcomes

In order to address whether exposure to unilateral divorce as a child influences later life outcomes, Gruber runs regressions of the following form:

$$OUTCOME_{ajt} = \alpha + \beta_1 UNILAT_{jt-1} + \beta_2 KIDUNI_{abt} + \beta_3 RACE_{ajt} + \beta_4 \eta_a + \beta_5 \sigma_b + \beta_6 \delta_j + \beta_7 \tau_t + \beta_8 \eta_a * \tau_t + \varepsilon \quad (2)$$

where b indexes state of birth, $OUTCOME$ equals one the outcomes of interest, $KIDUNI$ is a dummy variable indicating the presence of unilateral divorce law in one's state of birth before age 18, σ is a full set of state of birth dummies, and all other variables and indexes are the same as in equation (1). This framework allows for the evaluation of the effect of both exposure to unilateral divorce as a youth and adult. As in previous regressions, regressions are weighted by cell size; however standard errors are adjusted by clustering at the state of birth level. Regressions are run with and without state-specific trends¹³.

Since the primary focus of this analysis is on the effect of exposure to unilateral divorce as a youth on later life outcomes, I focus my replication discussion on these effects. Additionally, for presentational ease, I only discuss results with state-specific time trends¹⁴. Replication results for females and males are presented in the first and third columns of Table 4, respectively. Gruber's results (from his Table 4 and Table 5, column 2) are presented in this paper in the second and fourth columns of Table 4. Outcomes are separated into four groups: family structure, educational attainment, living standards, and labor supply. Following Gruber, coefficients on dichotomous variables have been multiplied by 100. Coefficients on continuous variables are reported directly. Elasticity

¹³ In this case, trends for both state of residence and state of birth are included.

¹⁴ For full replication of Gruber's Tables 4 and 5 which include results without state-specific trends and coefficients on UNILAT, see Appendix 2, Tables A2.2 & A2.3. I focus on models with state-specific trends, because in later analyses, Gruber only presents models which include trends. Thus, for consistency, I choose to discuss replication of these analyses.

estimates are listed in brackets below the standard errors. I discuss replication results by group below.

Family structure outcomes are presented in the first panel of Table 4. Replicated divorce results for males and females are both qualitatively and quantitatively similar to Gruber's and suggest exposure to unilateral divorce as a youth does not have a statistically significant impact on the odds of divorce¹⁵. In contrast, similar to Gruber's results, for females, growing up in a unilateral divorce regime leads to a 0.0061 (versus 0.0066 reported by Gruber) percentage point increase in the odds of being married, or 9.0% of the sample average. Results for males parallel those for females are also quite close to those reported by Gruber. Replication results for both sexes suggest exposure to unilateral divorce leads to a decline in the odds of being never married and a correspondingly higher likelihood of being separated. Once again, these results are nearly identical to those reported by Gruber.

Though qualitatively similar, in contrast to the coefficients on marital status indicators, for females, the replicated coefficient on the number of children is quite different from Gruber's. Whereas the replicated coefficient suggests youth exposure to unilateral divorce laws significantly increases the number of children by 0.089, or 6%, Gruber's coefficient is much smaller in magnitude, indicating unilateral divorce laws increase the number of children by only 0.021, or just 1%. For males, while still different, the replicated coefficient is closer to Gruber's in magnitude. While Gruber's estimates suggest exposure to unilateral divorce increases the number of children by 0.046 (4.6% of

¹⁵ Results for current exposure to unilateral divorce laws are similar to Gruber's and echo those discussed in the previous section which indicate unilateral divorce exposure increases the odds of divorce. For these results see Appendix 2, Tables A2.2 and A2.3.

the sample mean), the replicated coefficient is slightly higher at 0.060 (4.8% of the sample mean).

Educational attainment results are reported in the panel directly below family structure results in Table 4. Results are qualitatively similar to Gruber's and indicate exposure to unilateral divorce as a youth decreases educational attainment by roughly 0.006 years, or 0.5% for both sexes. However, unlike Gruber's results, the replicated coefficients on years of education are not statistically significant at the 5% level. Like Gruber, results across both sexes suggest exposure to unilateral divorce increases the odds of being a high school dropout and high school graduate and decreases the odds of having some college or a college degree. The largest effects echo those of Gruber and are derived from the large, statistically significant increase in the odds of being a high school graduate and corresponding decline in the odds of being a college graduate. Indeed, replicated coefficients are quantitatively similar to those of Gruber and suggest exposure to unilateral divorce increases the odds of being a high school dropout by 3.1% and 4.1% of the baseline for females and males, respectively. Corresponding coefficients on the odds of being a college graduate suggest the divorce law decreases the odds of being a college graduate by 7.4% and 4.5% of the sample mean for females and males, respectively.

Living standard results are reported directly below educational attainment results. In contrast to the previous two groups, replicated results for income per capita are much different than Gruber's. While both sets of results suggest exposure to unilateral divorce decreases income per capita, the magnitude is quite different. However, given the wide discrepancy in the sample means, this result is not particularly surprising and, while still

different, the percentage impacts differ by less than 0.8 percentage points. Like Gruber, replicated poverty results are not highly statistically significant, suggesting unilateral divorce exposure as a youth does not play a significant role in poverty status as adult.

The last rows in Table 4 present the labor supply results. With the exception of the coefficient on weeks worked for males, the replication results are close to Gruber's for each outcome of interest. For females, results indicate that exposure to unilateral divorce as a youth has a negative effect on all labor supply outcomes as adults. Specifically, replication results suggest that exposure to the laws leads to decreased odds of employment by 0.0038 percentage points, or 0.5%. This is slightly lower in magnitude than Gruber's reported coefficient of -0.0048, or 0.7% of the sample mean. Likewise, weeks worked falls by 0.253, or 0.8% of the sample mean and exposure leads to a fall in earnings of \$233.65, or 2.2%. In stark contrast to the results for females, results for males suggest exposure to unilateral divorce as a youth leads to positive labor market outcomes. Though not statistically significant at the 5% level, replication results echo Gruber's results and suggest exposure to laws increases the odds of employment and earnings¹⁶.

While, admittedly, the replication sample as well as a few coefficients differ from Gruber's, in large part, his results are supported both qualitatively and quantitatively in my replication. In particular, the replication results support Gruber's main conclusions that "exposure to easier divorce regulation as a youth appears to worsen adult outcomes along a number of dimensions (p. 802)."

4.4) Replication: Unilateral divorce exposure as a youth and adult suicide

¹⁶ The one difference between the replicated results and Gruber's is seen in the coefficient on weeks worked for males. While the replicated coefficient is positive, Gruber's is negative. However, neither is highly statistically significant, so the difference is not particularly disturbing.

In addition to the outcomes derived from census data, using Vital Statistics Mortality data from 1978 through 1996, Gruber looks at the effect of unilateral divorce exposure as a youth on suicide rates. As discussed previously, due to the small number of suicides per year, he uses a negative binomial count model. Additionally, as a specification test, he also estimates a population shares model where the denominator is the state of residence/year/sex/age population. In my replication, I use Gruber's methodology, but due to data limitations, my data covers the time period from 1980 through 1998. Each model is run with and without state of birth time trends. Results from the suicide replication are presented in Table 5. Columns 1 and 2 contain the replicated results while columns 3 and 4 contain Gruber's results.

Results from the replication are qualitatively similar to Gruber's and suggest exposure to unilateral divorce laws as a child has a statistically significant positive effect on future suicide rates. Furthermore, like Gruber, these results are robust to both estimation approaches and to the inclusion of time trends. Quantitatively, the replicated results are, in general, slightly smaller in magnitude than those obtained by Gruber. For instance, the coefficient on the negative binomial count model with time trends suggests an increase of 0.09 female suicides, or 4% of the mean, versus Gruber's results of 0.11, or 5%. Likewise, replicated results from the same model indicate an increase of 0.089 male suicides; which is less than Gruber's results of 0.099. However, as discussed by Gruber, these changes are "relatively small in terms of implied additional suicide per additional divorce (p. 822)." Thus, the conclusion from the replication is like that drawn by Gruber: exposure to unilateral divorce as a youth increases suicide rates; however, the impact is likely to be small in terms of additional suicide per additional divorce.

4.5) Replication: Length of exposure to unilateral divorce laws

Gruber next turns to a slightly different question- how does length of exposure to unilateral divorce laws affect the effects that have been shown thus far?¹⁷ As discussed by Gruber, differing lengths of exposure to unilateral divorce laws could theoretically affect the earlier results in one of two ways. First, if longer exposure to unilateral divorce laws increases the probability a couple will divorce, then a child who has been exposed to such a regime for a longer period of time may be more likely to suffer the negative consequences found in previous analyses. On the other hand, following the logic of Wolfers (2003), if the effect of unilateral divorce is a short-term rather than a long-lasting effect, then there may not be an impact of the law beyond 8 or so years. Furthermore, if child outcome exposure effects do not mirror divorce exposure effects, then it may be the case that the unilateral divorce laws are operating through the indirect channels rather than the highly criticized direct channel.

To test the effect of length of exposure, Gruber divides *KIDUNI* and *UNILAT* into the following exposure categories: 1-4 years, 5-8 years, and 9+ years¹⁸. Dummy variables for these categories replace *KIDUNI* and *UNILAT* in the regressions described earlier. Additionally, all regressions include state-specific time trends.

¹⁷ This approach is similar to that used by Johnson & Mazingo (2000) who use cross sectional data on young adults from the 1990 census to look at the effect of exposure to unilateral divorce laws as a child on education, earnings and marital status later on in life. Their results indicate women who were exposed for a longer period of time have lower wages and less schooling while wages of men are not significantly affected by such laws. In addition, both sexes are more likely to be married and less likely to be divorced with more years of exposure to the laws.

¹⁸ Gruber notes that, by way of the variable construction, the age at which an individual was first exposed to the law can't be differentiated from the amount of time exposed. For instance, an individual with 4 years of exposure was by definition, first exposed at age $18-4=14$.

Replication results for adult exposure on divorce propensities are presented in Table 6 alongside Gruber's corresponding estimates from his Table 7¹⁹. While slightly smaller in magnitude, replicated results for the odds of female divorce and for the probability a child lives with a divorced mother demonstrate the same trend reported by Gruber. While there is a big jump between 1-4 years and 5-8 years of exposure, the added effect of increased exposure length is significantly smaller after 8 years. As noted by Gruber, this result supports Wolfers's (2003) findings that unilateral divorce laws have only a short term effect on divorce rates. Additionally, replicated results for odds of male divorce and for the probability a child lives with a divorced father support Gruber's conclusion that added exposure to unilateral divorce is more constant across the three time ranges.

Table 7 reports replication results for the effect of unilateral divorce exposure as a youth on selected adult outcomes²⁰. Gruber's estimates, taken from his Table 8, are listed next to the replicated results. Like the replication results in Table 6, for the most part, replicated results reveal the same trends reported by Gruber. For the odds of marriage and labor supply variables, the effects are fairly constant from 1-4 and 5-8 years, but increase sharply after 8 years. For males, a similar trend is seen with the odds of divorce. For females, the replication results show a different sign for the effects of 1-4 and 9+ years of exposure on divorce rates. In contrast to Gruber's coefficients which are positive, the replicated coefficients are negative. However, in both estimations, the coefficients on

¹⁹ As in section 4.2, I only focus on divorce propensities. For full replication of Gruber Table 7, see Appendix 2, Table A2.4.

²⁰ Per brevity, I choose to focus on a sub-group of the outcomes discussed in section 4.3. For full replication of Gruber Table 8, see Appendix 2, Tables A2.5 and A2.6.

divorce probabilities are not highly statistically significant²¹, so this discrepancy is not too alarming. Finally, while slightly smaller in magnitude, the replicated education trend mirrors that of Gruber, suggesting a constant effect across the three exposure categories.

Interestingly, Gruber points out that these results may offer credence to theories concerning the indirect channels through which unilateral divorce laws may affect child outcomes. If it is through divorce rates that unilateral divorce regulation affects child outcomes, then we would expect the child outcomes to follow the same pattern as divorce rates. Yet, we find the opposite. Whereas divorce impacts die out after 8 years, the impact on other outcomes such as marriage and labor supply variables increase sharply after 8 years. However, it is worth noting that these results should be interpreted with caution as many of the coefficients have relatively large corresponding standard errors, indicating low levels of statistical precision.

4.6) Replication: Age effects of unilateral divorce on marital status

In his final analysis, Gruber takes a closer look at the effect of unilateral divorce exposure as a youth on marital status. Pointing to the positive impact of exposure to unilateral divorce and the likelihood of marriage seen in earlier results, Gruber notes that this effect may be due to “the increased odds of marriage at every age or from a shift forward in the timing of marriage (p.826).” To investigate this point, in his regressions, he includes interactions between both unilateral divorce dummies and age. Again, focusing on unilateral divorce exposure as a youth, I discuss replication results of these variables²².

²¹ In fact, many of the results are not highly statistically significant, with some standard errors larger than their corresponding coefficient. This is true for Gruber’s estimates as well as many of the replicated results.

²² For full replication of Gruber Table 9, see Appendix 2, Table A2.7.

Table 8 presents the replication results along with Gruber's estimates (per his Table 9). In this analysis, replication of Gruber's estimates is quite successful. With the exception of the coefficient on the odds of being separated, all of the replicated coefficients are very close and the percentage impacts are nearly identical. Results suggest that exposure to unilateral divorce as a youth increases the odds of marriage at young ages, but this impact falls, and eventually even decreases the odds of marriage, as one gets older. For instance, replicated results suggest that for a 25 year-old female, having been exposed to unilateral divorce before age 18 has a 0.013 percentage point impact on her odds of marriage; while, for a 35 year-old female, the law *decreases* her odds of marriage by 0.002 percentage point impact. Similar results are seen for males.

Likewise, age seems to play a large role in the effect of unilateral divorce exposure on other marital statuses. Coefficients on unilateral/age interactions suggest the positive impact of unilateral divorce laws on the odds of being divorced or separated fall with age as do the negative impacts of the laws on the odds of being never married.

As noted by Gruber, these results support claims from literature on intergenerational effects of divorce which suggest that children growing up in regimes of easier divorce tend to marry at younger ages, but also tend to have less stable marriages²³.

5. Extensions

In this section, I extend Gruber's analysis. I do so by revisiting his major findings described above using datasets that include data from the 2000 census which was unavailable at the time of Gruber's paper. This is done to test the robustness of the earlier reported effects to the inclusion of more recent data.

²³ Contrary to this finding, Rasul (2005) finds that while unilateral divorce laws increase divorce rates among those already married, marriages formed under the new regime are actually better matched.

5.1) Extension: Sample means (updating Section 4.1)

To set the stage for the discussion, I first compare sample means across the two datasets. Sample means are presented in Table 9. Means for 1960-2000 marital status indicators vary slightly from their 1960-1990 counterparts²⁴. While the mean marriage rates for both sexes drop slightly once 2000 data is included, the average proportion of divorced and never married individuals is higher in the updated sample. The average proportion of separated individuals remains stable for both men and women. Similar trends are observed in the child dataset. Additionally, the average number of children is lower in the updated dataset for both men and women.

In the case of both men and women, the average level of education increases from the original to the updated dataset. A comparison of education groups mirrors this trend – the average proportion of high school dropouts and high school degree holders is smaller while that of those with some college and a college degree is higher in the updated data.

On average, income per capita is slightly higher in the updated dataset for females and lower for males. Likewise, in the updated data, a slightly smaller proportion of females are below the poverty level while a slightly higher proportion of men fall into the poverty category.

Finally, labor supply variables reveal the average proportion of women who worked in the previous year is higher in the updated dataset, while for men, the mean is lower. Likewise, on average, weeks worked increases for females and falls for males from the original to the updated dataset. Lastly, mean earnings jump quite significantly

²⁴ Per conciseness, in discussion that follows, I refer to the 1960-1990 datasets as the “original” data and the 1960-2000 datasets as the “updated” data. The “original” results discussed in the remainder of the paper are the replicated results discussed in Section 4. Thus, all comparisons compare my replication of Gruber using the 1960-1990 time period with an identical replication which includes 2000 data.

for females from the original to the updated dataset. Whereas mean earnings (in 1990 dollars) is roughly \$10,830 in the original dataset, the updated mean is nearly \$2,000 higher at about \$12,560. Mean earnings of men increases as well, albeit by a much smaller magnitude.

5.2) Extension: Unilateral divorce and divorce rates (updating section 4.2)

Table 10 presents updated results from the regressions of section 4.2 which look at the effect of unilateral divorce laws on divorce propensities. Replication results from section 4.2 (Table 3) are listed in the first and third columns. The updated results are in the second and fourth columns.

Updated results still reveal a statistically significant positive impact of current unilateral divorce exposure on the probability of divorce; however, the magnitude of the effects as a percent of the mean is smaller in every case. For instance, whereas the original results for females indicate exposure to a unilateral divorce regime increases the odds of divorce by 9.0 percent of the sample mean, in the updated model this effect drops to 8.1 percent. This drop is even greater in the model with state-specific time trends. In fact, the percentage impact falls by nearly one-third, from 9.4% to 6.6%. Results are similar for males, but the drop in impact is less than that seen in the female sample.

Updated results for the impact of unilateral divorce laws on the odds a child lives with a divorced parent are also qualitatively similar to those from the original sample. However, like the previous case, they reveal a slightly smaller percentage impact than the original estimates. For example, in the model with state time trends, the original results suggest unilateral divorce laws increase the odds a child lives with a divorced father by 11.2 percent of the sample mean, whereas the updated results suggest this impact is

lower, or only 10.2 percent of the sample mean. A similar trend is seen with the odds a child lives with a divorced mother.

Thus, while qualitatively alike, updated results are smaller in magnitude than Gruber's. These results lend credence to Wolfers (2003), as the inclusion of more recent data dampens the results from the original sample, suggesting the effect of laws is smaller in 2000 than it was in earlier decades. I return to this point in section 6.

5.3) Extension: Unilateral divorce exposure as a youth and later life outcomes (updating section 4.3)

Table 11 presents updated results from the regressions discussed in section 4.3 (Table 4) that look at the effect of unilateral divorce exposure as a youth on later life outcomes. With a few exceptions, the updated results qualitatively mirror those from section 4.3 and, like the results of the previous section; in most cases the coefficients are much smaller in magnitude. Additionally, in quite a few cases, the coefficients have a large drop in their level of precision. Results for each category are discussed below.

First, results for all marital status categories are smaller in magnitude than the original estimates. For instance, the coefficient on the odds of being married is nearly half of the original estimate. Furthermore, the only coefficient which is statistically significant at the 5% level is that on the odds of being separated and, whereas the original estimate is suggestive of an increase in odds equal to 9.4 percent of the sample mean, the updated impact is only 7.8 percent of the sample mean. Results on the odds of adult divorce mirror those from the original analysis, suggesting exposure to unilateral divorce as a youth does not have a statistically significant impact on the probability of divorce.

Finally, while still fairly statistically significant, the estimated impact of youth exposure to unilateral divorce on the number of children falls in the updated analysis.

Furthermore, while the original results suggest that exposure to unilateral divorce as a youth has a large, statistically significant impact on both the odds of being a high school graduate and on having a college degree, the updated results are smaller in magnitude and are no longer statistically significant at the 5% level. Thus, the inclusion of 2000 data suggests that, in contrast to Gruber's findings, exposure to unilateral divorce laws as a youth does *not* have a large, statistically significant negative impact on educational attainment.

Likewise, updated coefficients on living standard variables are a much smaller percentage of the sample mean and are not highly statistically significant. For instance, whereas the original estimates suggest female youth exposure to unilateral divorce laws leads to a fall in per capita income of \$397.84, or 2.6 percent of the sample mean, the updated estimate suggests a fall in per capita income of \$141.29, or 0.9% of the sample mean. Furthermore, the updated coefficient has a much lower level of statistical significance. Results on the odds of poverty mirror those found in the original sample, suggesting unilateral divorce exposure as a youth does not have a highly statistically significant impact on poverty status as an adult.

Finally, results on the odds of working in the previous year are nearly identical both qualitatively and quantitatively for both males and females; however, like the other results, they are less statistically precise. A similar trend is seen with weeks worked; and earnings variables also follow this pattern. Updated coefficients have a smaller percentage impact on earnings and are not statistically significant at the 5% level.

Thus, in contrast to the original estimates, results from the updated sample present a much less convincing argument for the negative effects of youth exposure to unilateral divorce. While the signs on most of the coefficients are the same as those presented in the original analysis, for the most part, the magnitude of these effects drops and the estimates are much less precise, even negligible in many cases. In fact, the only coefficients which are statistically significant at the 5% level are those on the odds of being separated for both males and females and, for females, on the number of children.

5.4) Extension: Length of exposure to unilateral divorce (updating Section 4.5)

Updated results from regressions that look at the effect of length of exposure to unilateral divorce laws are presented in Tables 12 and 13. Table 12 updates results presented in Table 6 which looks at the effect of the length of current exposure to unilateral divorce laws and divorce propensities. Table 13 looks at the effect of length of exposure to unilateral divorce exposure as a youth on adult outcomes, updating Table 7. In each table, the original results are presented in the first three columns and the updated results are in columns 3 through 6.

Similar to the results of the previous sections, the updated exposure trends presented in Table 12 are qualitatively similar to the original results; however, the magnitude of the effects is smaller in each case. Like earlier reported trends, for females, there is a large jump in the effect of unilateral divorce exposure on the odds of divorce from 1-4 to 5-8 years, but there is a much smaller jump after year 8. A similar trend is seen with the odds that a child lives with a divorced mother. However, as noted previously, in both cases, the magnitude of the effects is smaller than that seen in the original sample. For instance, whereas the original estimates suggest exposure to

unilateral divorce of 9 or more years leads to an increase in the odds of divorce by 15.3% of the sample mean, the corresponding estimate in the updated sample is 12.0%.

Results for males echo the trends reported earlier in section 4.5, suggesting the increase in the effect of unilateral divorce laws on the probability of divorce is much more monotonic. Similarly, the effect of unilateral divorce laws on the odds a child lives with a divorced father increase at a relatively constant rate. Again, however, the magnitude of the effects in the updated sample is smaller than that reported in section 4.5. For example, original estimates suggest 9 or more years of exposure to unilateral divorce laws increases the odds of divorce by 17.8% of the sample mean. In contrast, updated estimates suggest this impact is a smaller percent of the sample mean, at 11.6%.

Updated results for the effect of length of exposure to unilateral divorce as a youth on selected later life outcomes reflect similar patterns as the original estimates. As discussed in Section 4.5, results for the effect of exposure to unilateral divorce laws as a youth on the odds of marriage and on earnings suggest a relatively constant impact for years 1-4 and 5-8 with a corresponding large increase after 8 years. As before, similar results are seen for males on the odds of divorce and for females on the odds of working in the previous year. Again, while the reported trend does not change with the inclusion of 2000 data, the magnitude of the effects drops. For instance, while the original estimates suggest more than 8 years of exposure to unilateral divorce laws increases the odds of a female being married by 1.9% of the sample mean, the corresponding percentage impact from the updated sample is less than half of the original, at 0.8%. Likewise, whereas the original estimates suggest exposure of more than 8 years decreases

female earnings by 5.9% of the sample mean, the corresponding estimate with the updated data is smaller at just 1.6%.

Updated results for the effect of exposure length on educational attainment also mirror the original results, suggesting a fairly constant impact over the various exposure length categories; and like other outcomes, the updated results are smaller in magnitude. Similar results are seen with males on the odds of working.

One result that does not reflect the same trend as the original results is that on the probability of divorce for females. In contrast to the original estimates, all of the coefficients are positive and the magnitude of the effects as a percentage of the mean is larger across all exposure groups. However, as with the original results, the results are not highly statistically significant.

Thus, the pattern seen with previous analyses emerges once again with length of exposure effects. In large part, the trends are qualitatively similar to those reported with the original sample; however, the magnitudes of the effects are smaller. Since these analyses simply break *UNILAT* and *KIDUNI* into categories, this result is not particularly surprising. Additionally, as seen with the original sample, most of the estimated coefficients have fairly large corresponding standard errors. As such, most of the original and updated results from this analysis have relatively low levels of statistical precision and should consequently be interpreted with some caution.

5.5) Extension: Age effects of unilateral divorce on marital status (updating section 4.6)

Table 14 contains updated results of the analysis presented in section 4.6 which looks at the effect of age on the effects of unilateral divorce and marital status. Columns

1 and 3 present the earlier reported results (per Table 9) and the updated results are presented in columns 2 and 4. As before, results indicate that the positive effects of unilateral divorce exposure on the odds of being married, divorced, or separated fall with age. Similarly, the negative effects of unilateral divorce on the odds of being never married also decline with age. Once again, with a few exceptions, while the updated results are qualitatively similar to the original, the magnitude of the effects falls with the inclusion of 2000 data. A couple exceptions worth noting are as follows.

First, for females, the effect of unilateral divorce on the odds of being divorced actually increases as a percent of the sample mean from the original to the updated sample. Whereas the original estimate suggests exposure to unilateral divorce increases the probability of divorce by 3.5% of the sample mean, the updated impact is slightly higher at 3.8%. However, once again, the coefficients are smaller than their corresponding standard errors and so the primary conclusion doesn't change – exposure to unilateral divorce as a youth appears not to have a statistically significant impact on the odds of divorce.

Second, for males, the odds of being separated are more positively impacted by youth exposure to unilateral divorce in the updated sample. The updated estimate suggests exposure to unilateral divorce as a youth increases the odds of being separated by 16.4% of the sample mean, while the corresponding estimate from the original sample represents 14.7% of the mean.

6. Interpretation

The fact that Gruber's main results are not robust to the inclusion of 2000 data is an interesting finding. As seen in section 5, results which estimate the effect of current

exposure to unilateral divorce laws on divorce probabilities are weaker with the inclusion of the 2000 data. Additionally, results from section 5 also suggest that the large, significantly negative effects of unilateral divorce exposure as a youth on later life outcomes reported by Gruber and replicated in this paper in section 4 are weaker in magnitude and less statistically precise once 2000 data has been included. These findings are quite intriguing and suggest future research which attempts to decipher the channels through which these effects are being dampened. However, such an analysis is beyond the scope of this paper. Thus, in this section, I suggest a few possible explanations for these findings, leaving a more rigorous examination for a later date.

In the first set of models that look at the effect of current exposure to unilateral divorce on divorce rates, the results certainly seem to support the work of Wolfers (2003) who finds little effect of divorce laws after the first decade of their enactment. According to my research, no states moved to a system of unilateral divorce between 1990 and 2000. Thus, in these analyses, an additional decade of data has the effect of adding observations which are further removed from the dates of law changes. That is, it is likely that current exposure to unilateral divorce in the year 2000 may have a smaller effect on divorce rates than current exposure in 1990 since the laws were passed at a much earlier date. Following this theory presented by Wolfers, I would expect the inclusion of the 2000 data to dampen the effects reported earlier in section 4.2; and indeed, this is what I do find. These results are also consistent with the length of exposure models which find little additional impact of the laws after the first 8 years of exposure. Thus, these findings lend credence to Wolfers's research and support his claim that divorce laws have a short-term rather than long-lasting effect on divorce rates.

The updated results also suggest that exposure to unilateral divorce as a child does not have a large significant negative effect on adult outcomes. However, unlike the first set of analyses, the driving forces behind these results are not as easy to decipher.

While results that look at the length of exposure to unilateral divorce laws on divorce rates find the increase in the effect to be very small after the first 8 years of exposure, many of the trends seen on the impact of youth exposure lengths on later life outcomes suggest the opposite. Indeed, for many of the variables, the impact actually increases sharply after the first 8 years of exposure (see Tables 7 and 13). This would seem to suggest that the effects of unilateral divorce laws on child outcomes do not die out after the first decade of their presence. This appears to be inconsistent with the fact that the effects are dampened once 2000 data is included and suggests the logic used to explain differences in current exposure effects on divorce rates cannot explain the differences in youth exposure effects.

Furthermore, as noted by Gruber, in the length of youth exposure analyses, it is impossible to distinguish the length of exposure to unilateral divorce as a youth from the age at which an individual was first exposed to the law. For instance, an individual who has 4 years of exposure to unilateral divorce before age 18 is, by definition, first exposed at age 14. Thus, another potentially interesting avenue through which the results may be affected by the inclusion of 2000 data and which is not currently distinguishable, is the effect of age at first exposure to unilateral divorce laws.

To see this more clearly, consider an individual who is 25 in 1990. She would have turned 18 in 1983. In her case, there are a number of states that had unilateral divorce laws in place before the time she turned 18, but very few that were in place at the

time of her birth in 1965. In contrast, an individual who is 25 in 2000 was born in 1975 and has a much better chance of being born into a state that already has unilateral divorce laws in place. As such, she is more likely to have been exposed to a unilateral divorce regime at birth than her 1990 counterpart. Thus, to the degree that age at first exposure to a unilateral divorce regime impacts the outcomes, this may also play a part in the dampening of the effects found when 2000 data is included.

Following along with the previous point, is that it is also more likely that the parents of a 25 year-old in 2000 were married under a regime of unilateral divorce. Accordingly, to the extent that marriages are affected by unilateral divorce, these differences may cause children whose parents were married under such a regime to be impacted differently than children whose parents were married under a more traditional regime but saw that regime change over the course of their marriage.

Finally, unlike the first set of results, in these analyses adding an additional decade of data does not just add individuals who are exposed to unilateral divorce further away from the date of the law change. Given the age range of the sample, individuals aged 25-50 in 2000 would have been 18 between 1968 and 1993. Thus, compared to individuals from the 1990 census who would have been 18 between the years 1958 and 1983, many more individuals in the 2000 sample have been exposed to unilateral divorce laws before age 18 since most of the laws were enacted in the late 1960s and early 1970s. Indeed, in 1990 roughly 31% of the cells have been exposed to unilateral divorce as a youth, while in 2000; nearly 54% of the cells have been exposed to unilateral divorce as youth. This may suggest that the findings are simply a more accurate reflection of the true, underlying effects of unilateral divorce exposure as a youth on later life outcomes.

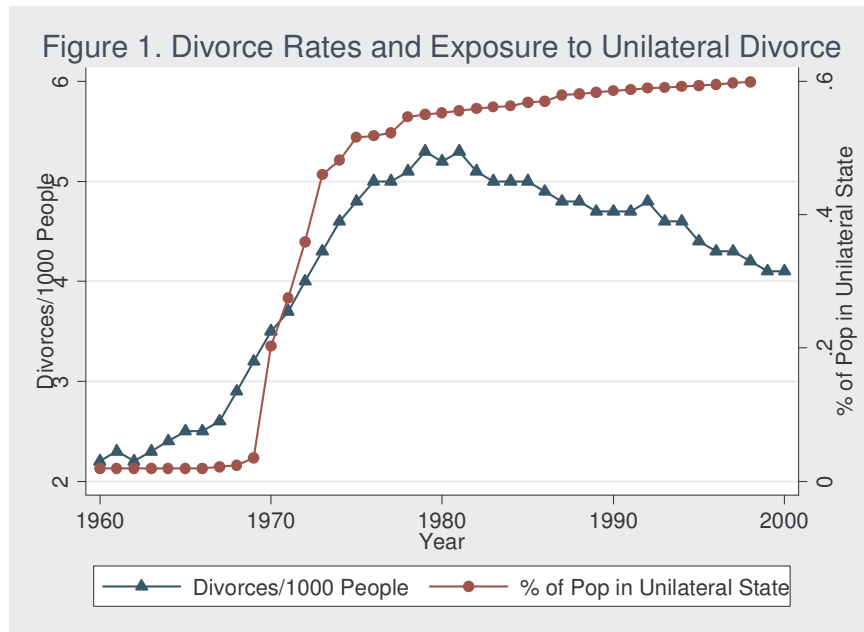
7. Conclusion

While divorce rates peaked in the 1980s, proposed divorce laws still spark controversy and continue to be a relevant issue for policymakers. Critics of unilateral divorce laws have called for the reversal of the legislation, claiming such laws lead to increased divorce rates and have a negative effect on children. In this paper, I have provided additional evidence on these two claims by revisiting the work of Gruber (2004). First, I replicate Gruber's analysis as accurately as possible. Then, taking advantage of the availability of the 2000 census data, I am able to update his analysis using an additional decade of data.

In large part, replication of Gruber's results is reasonably successful. Results reveal similar trends, namely the presence of unilateral divorce laws on one's state of residence leads to increased rates of divorce and exposure to unilateral divorce laws as a child leads to negative later-life outcomes. Interestingly, in the updated analyses which include data from 2000, the effects of unilateral divorce fall in magnitude and, in many instances, reveal low levels of statistical precision. Specifically, updated models looking at current exposure to unilateral divorce and divorce rates, suggest the laws do indeed increase the probability of divorce. However, the effects are smaller than estimates derived in the replication of Gruber's original analysis. Additionally, contrary to Gruber's results, the updated results show little evidence that exposure to unilateral divorce laws as a youth has a large, significant negative impact on later life outcomes.

Given the results of this study, I am inclined to side with Justin Wolfers in his debate with Katherine Spaht and argue that turning New York into a state with unilateral divorce would have little impact on divorce rates or child outcomes. However, the

driving forces behind the changes found in my updated analyses have yet to be fully examined and future research into the causal pathways is certainly warranted. In particular, future research should focus on explicitly modeling the channels through which children are affected by unilateral divorce legislation.



Notes: This figure updates Gruber's Figure 1; however, the divorce rate is divorces/1000 people rather than per 1000 adults. Divorce data is identical to that used in Friedberg (1998) and is taken from the Statistical Abstract of the United States: 2004-2005, Table 70 (p.60). Population data is taken from Justin Wolfers's website, see <http://bpp.wharton.upenn.edu/jwolfers/data.shtml>.

Table 1. Divorce Regulations Across States

State	No-Fault Date	Unilateral Date	State	No-Fault Date	Unilateral Date
Alabama	1971	1971	Montana	1973	1973
Alaska	1935	1935	Nebraska	1972	1972
Arkansas	1937		Nevada	1931	1967
Arizona	1931	1973	New Hampshire	1971	1971
California	1970	1970	New Jersey	1971	
Colorado	1972	1972	New Mexico	1933	1933
Connecticut	1973	1973	New York	1967	
District of Columbia	1966		North Carolina	1910	
Delaware	1957	1968	North Dakota	1971	1971
Florida	1971	1971	Ohio	1974	
Georgia	1973	1973	Oklahoma	1953	1953
Hawaii	1965	1972	Oregon	1971	1971
Idaho	1945	1971	Pennsylvania	1980	
Illinois	1984		Rhode Island	1910	1975
Indiana	1973	1973	South Carolina	1969	
Iowa	1970	1970	South Dakota	1985	1985
Kansas	1969	1969	Tennessee	1963	
Kentucky	1962	1972	Texas	pre-1910	1970
Louisiana	1916		Utah	1943	1987
Maine	1973	1973	Vermont	1969	
Maryland	1969		Virginia	1960	
Massachusetts	1975	1975	Washington	1921	1973
Michigan	1972	1972	West Virginia	1969	
Minnesota	1933	1974	Wisconsin	pre-1910	1978
Mississippi	1978		Wyoming	1977	1977
Missouri	1974				

Note: This table is an exact replication of Gruber's Table 2. Given the fact that my analysis extends the time period to 2000, I researched divorce laws for those states that Gruber coded as not having unilateral divorce laws in place in 1990. This was done to ensure that no new laws were passed between 1990 and 2000. Gruber graciously provided me with an appendix detailing his criteria for the coding of laws. Thus, I was able to ensure consistency in coding. Following Gruber's coding of unilateral divorce laws as being those unilateral divorce laws that don't require a separation period, I found no instances of law changes among the 17 states which were coded as not being a unilateral divorce state. The coding of these 17 states is also consistent with a recent working paper by Niko Matouschek and Imran Rasul, April 2006.

Table 2. Sample Means

	Female Adult		Male Adult		Child	
	Replication	Gruber	Replication	Gruber	Replication	Gruber
Mother divorced					0.0751	0.0664
Mother separated					0.0404	0.0349
Mother never married					0.0408	0.0370
Father divorced					0.0151	0.0099
Father separated					0.0054	0.0033
Father never married					0.0068	0.0036
<i>Number of observations</i>					3,876	3,876
Married	0.708	0.717	0.712	0.726		
Divorced	0.112	0.110	0.085	0.082		
Separated	0.036	0.034	0.024	0.023		
Never married	0.125	0.120	0.174	0.166		
Number of children	1.480	2.204	1.260	1.169		
Years of education	12.754	11.683	12.985	11.933		
High school dropout	0.190	0.189	0.198	0.195		
High school graduate	0.381	0.365	0.324	0.308		
Some college	0.242	0.216	0.237	0.216		
College graduate	0.187	0.231	0.241	0.281		
Income per capita (1990 \$)	15,573.04	13,513.41	25,574.97	15,159.06		
Below poverty	0.113	0.118	0.091	0.086		
Work last year	0.721	0.712	0.939	0.946		
Weeks worked	30.428	29.758	44.430	45.04		
Earnings (1990 \$)	10,827.85	10,682.10	26,110.82	26,222.66		
<i>Number of observations</i>	156,781	159,884	157,301	159,487		
Suicides per 100,000	7.2	6.3	25.5	22.1		
<i>Number of observations</i>	25,028	23,868	25,183	23,868		

Table 3. Unilateral Divorce Exposure and Divorce Rates

	No Trend		Trend	
	Replication	Gruber	Replication	Gruber
Adult Female is Divorced	1.005 (0.250) [.090]	1.277 (0.395) [.116]	1.050 (0.546) [.094]	1.396 (0.675) [.127]
Adult Male is Divorced	0.816 (0.290) [.096]	0.948 (0.377) [.116]	0.762 (0.530) [.090]	0.961 (0.661) [.117]
<i>Number of observations</i>	5,304	5,304	5,304	5,304
	No Trend		Trend	
	Replication	Gruber	Replication	Gruber
Child is Living with Divorced Mother	0.361 (0.219) [.048]	0.606 (0.244) [.091]	0.745 (0.343) [.100]	0.963 (0.409) [.145]
Child is Living with Divorced Father	0.168 (0.088) [.112]	0.192 (0.070) [.194]	0.089 (0.115) [.059]	0.110 (0.104) [.111]
<i>Number of observations</i>	3,876	3,876	3,876	3,876

Notes:

- (a) Regressions in top panel use adult dataset and represent the effect of current exposure to unilateral divorce on divorce propensities. Regressions in the bottom panel use the child dataset and represent the effect of current exposure to unilateral divorce on the probability a child lives with a divorced parent.
- (b) All regressions include race, state of residence dummies, age dummies, year dummies, and age*year interactions. Regressions in right panels include state specific time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (c) Standard errors are adjusted for clustering at the state of residence and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.

Table 4. Unilateral Divorce Exposure as Youth and Outcomes as Adults

	Females		Males	
	Replication	Gruber	Replication	Gruber
Family Structure:				
Married	0.612 (0.426) [.009]	0.664 (0.361) [.009]	0.598 (0.537) [.008]	0.625 (0.531) [.009]
Divorced	0.019 (0.430) [.002]	0.007 (0.350) [.001]	-0.100 (0.387) [-.012]	-0.107 (0.328) [-.013]
Separated	0.333 (0.130) [.094]	0.326 (0.092) [.096]	0.297 (0.090) [.122]	0.261 (0.067) [.113]
Never married	-1.216 (0.807) [-.097]	-1.222 (0.672) [-.102]	-0.866 (0.932) [-.050]	-0.839 (0.856) [-.051]
Number of children	0.089 (0.035) [.060]	0.021 (0.009) [.010]	0.060 (0.022) [.048]	0.046 (0.017) [.040]
Educational Attainment:				
Years of education	-0.057 (0.053) [-.004]	-0.065 (0.033) [-.006]	-0.059 (0.077) [-.005]	-0.072 (0.045) [-.006]
High school dropout	0.585 (0.769) [.031]	0.622 (0.509) [.033]	0.808 (0.749) [.041]	0.889 (0.433) [.046]
High school graduate	1.267 (0.668) [.033]	1.16 (0.553) [.032]	0.856 (0.488) [.026]	0.781 (0.377) [.025]
Some college	-0.478 (0.333) [-.020]	-0.284 (0.269) [-.013]	-0.582 (0.328) [-.025]	-0.335 (0.168) [-.016]
College graduate	-1.375 (0.542) [-.074]	-1.497 (0.443) [-.065]	-1.083 (0.742) [-.045]	-1.335 (0.546) [-.048]
Living Standards:				
Income per capita	-397.84 (209.484) [-.026]	-431.63 (148.360) [-.032]	-672.79 (582.755) [-.026]	-266.72 (155.870) [-.018]
Below poverty	0.074 (0.288) [.007]	0.091 (0.213) [.008]	-0.055 (0.228) [-.006]	0.057 (0.148) [.007]
Labor Supply:				
Work last year	-0.382 (0.252) [-.005]	-0.478 (0.222) [-.007]	0.232 (0.166) [.002]	0.161 (0.151) [.002]
Weeks worked	-0.253 (0.137) [-.008]	-0.139 (0.075) [-.005]	0.111 (0.123) [.002]	-0.009 (0.006) [-.000]
Earnings	-233.65 (143.184) [-.022]	-246.28 (108.010) [-.023]	441.5 (524.371) [.017]	418.8 (361.270) [.016]

Notes:

(a) All regressions include adult unilateral divorce, race, state of residence dummies, state of birth dummies, age dummies and year dummies, age*year interactions, and state specific time trends for both state of birth and state of residence. A dummy variable for current exposure, UNILAT, is also included. Regressions are weighted by cell size to replicate underlying micro-data.

(b) Standard errors are adjusted for clustering at the state of birth and are in parentheses.

Percentage impacts are in brackets.

(c) Coefficients on dummy variables have been multiplied by 100.

Table 5. Unilateral Divorce Exposure as Youth and Adult Suicide

	Females			
	Replication		Gruber	
	No Trend	Trend	No Trend	Trend
Number of suicides, negative binomial	11.320 (5.656) [.052]	9.420 (5.147) [.043]	13.054 (5.709) [.060]	11.189 (5.324) [.051]
Suicide Rate (per 100,000) OLS	0.367 (0.373) [.051]	0.426 (0.298) [.059]	0.678 (0.371) [.108]	0.643 (0.340) [.102]
<i>Number of observations</i>	25,028	25,028	23,868	23,868

	Males			
	Replication		Gruber	
	No Trend	Trend	No Trend	Trend
Number of suicides, negative binomial	10.005 (4.575) [.013]	8.921 (4.272) [.012]	10.988 (4.946) [.015]	9.877 (4.580) [.013]
Suicide Rate (per 100,000) OLS	0.803 (0.862) [.031]	1.014 (0.759) [.040]	1.144 (0.750) [.052]	1.189 (0.666) [.054]
<i>Number of observations</i>	25,183	25,183	23,868	23,868

Notes:

- (a) The first row in each panel shows results from negative binomial count models. Coefficients have been multiplied by 100. The bottom row in each panel shows results from the OLS model where the suicide rate is number of suicides normalized by the state of residence population.
- (b) All OLS regressions include race, state of birth dummies, age dummies, and year dummies, and age*year interactions. Regressions are weighted by cell size to replicate underlying micro-data. Regressions on the right panels include state of birth time trends. Negative binomial count models are not weighted.
- (c) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.

Table 6. Amount of Exposure to Unilateral Divorce Regulations and Divorce Rates

	Replication				Gruber			
	1-4 Years	5-8 Years	9+ Years	9+ Years	1-4 Years	5-8 Years	9+ Years	9+ Years
Adult Female is Divorced	0.349 (0.563) [.031]	1.302 (0.578) [.116]	1.710 (1.096) [.153]	1.710 (1.096) [.153]	0.568 (0.613) [.052]	1.677 (0.688) [.152]	2.08 (1.198) [.189]	2.08 (1.198) [.189]
Adult Male is Divorced	0.464 (0.523) [.055]	0.947 (0.531) [.111]	1.511 (0.997) [.178]	1.511 (0.997) [.178]	0.521 (0.567) [.064]	1.183 (0.659) [.144]	1.724 (1.112) [.210]	1.724 (1.112) [.210]

	Replication				Gruber			
	1-4 Years	5-8 Years	9+ Years	9+ Years	1-4 Years	5-8 Years	9+ Years	9+ Years
Child is Living with Divorced Mother	0.655 (0.205) [.087]	1.106 (0.290) [.147]	1.219 (0.526) [.162]	1.219 (0.526) [.162]	0.736 (0.222) [.111]	1.177 (0.278) [.177]	1.088 (0.399) [.164]	1.088 (0.399) [.164]
Child is Living with Divorced Father	-7E-05 (0.041) [0]	0.208 (0.064) [.138]	0.364 (0.138) [.241]	0.364 (0.138) [.241]	0.005 (0.035) [.005]	0.172 (0.049) [.174]	0.263 (0.081) [.266]	0.263 (0.081) [.266]

Notes:

- (a) Regressions in top panel use adult dataset and represent the effect of the amount of current exposure to unilateral divorce on divorce propensities. Regressions in the bottom panel use the child dataset and represent the effect of current exposure to unilateral divorce on the probability a child lives with a divorced parent.
- (b) All regressions include race, state of residence dummies, age dummies, year dummies, and age*year interactions. All regressions also include state specific time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (c) Standard errors are adjusted for clustering at the state of residence and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.
- (e) Each regression replaces UNILAT with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years.

Table 7. Amount of Exposure to Unilateral Divorce Regulation as a Youth and Selected Adult Outcomes

	Females					
	Replication			Gruber		
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years
Married	0.457 (0.339) [.006]	0.456 (0.468) [.006]	1.340 (0.751) [.019]	0.525 (0.324) [.007]	0.428 (0.336) [.006]	1.171 (0.633) [.016]
Divorced	-0.053 (0.382) [-.005]	0.027 (0.460) [.002]	-0.027 (0.712) [-.002]	0.031 (0.279) [.003]	0.051 (0.338) [.005]	0.046 (0.453) [.004]
Years of education	-0.039 (0.047) [-.003]	-0.037 (0.054) [-.003]	-0.057 (0.071) [-.004]	-0.052 (0.033) [-.005]	-0.062 (0.032) [-.005]	-0.088 (0.038) [-.008]
Work last year	-0.007 (0.236) [0]	-0.134 (0.266) [-.002]	-0.764 (0.409) [-.011]	-0.303 (0.220) [-.004]	-0.255 (0.244) [-.004]	-0.902 (0.314) [-.013]
Earnings	-57.36 (130.259) [-.005]	-227.77 (166.648) [-.021]	-638.21 (200.340) [-.059]	-45.17 (100.210) [-.042]	-238.17 (131.310) [-.022]	-616.32 (163.920) [-.058]

	Males					
	Replication			Gruber		
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years
Married	0.311 (0.414) [.004]	0.069 (0.611) [.001]	1.436 (0.951) [.020]	0.481 (0.404) [.007]	0.264 (0.563) [.004]	1.219 (0.981) [.017]
Divorced	-0.039 (0.303) [-.005]	-0.071 (0.404) [-.008]	-0.167 (0.623) [-.020]	-0.041 (0.264) [-.005]	-0.032 (0.272) [-.004]	-0.189 (0.471) [-.023]
Years of education	-0.042 (0.066) [-.003]	-0.041 (0.074) [-.003]	-0.052 (0.099) [-.003]	-0.058 (0.043) [-.005]	-0.064 (0.040) [-.005]	-0.092 (0.052) [-.008]
Work last year	0.121 (0.144) [.001]	0.274 (0.167) [.003]	0.179 (0.247) [.002]	0.127 (0.144) [.001]	0.231 (0.160) [.002]	0.102 (0.202) [.001]
Earnings	354.80 (449.599) [.014]	342.3644 (478.468) [.013]	678.8526 (753.822) [.026]	310.17 (280.430) [.012]	368.27 (293.690) [.014]	592.12 (489.560) [.023]

Notes:

- (a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.
- (c) Coefficients on dummy variables have been multiplied by 100.
- (d) Each regression replaces UNILAT and KIDUNI with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years. Results for UNILAT categories are not shown.

Table 8. Age Pattern of Effects of Unilateral Divorce Exposure as a Youth on Marital Status

	Unilateral as Youth		Unilateral as Youth*(Age-24)	
	Replication	Gruber	Replication	Gruber
Female:				
Married	1.461 (0.698) [.021]	1.496 (0.429) [.021]	-0.133 (0.066) [-.002]	-0.133 (0.042) [-.002]
Divorced	0.388 (0.471) [.035]	0.406 (0.188) [.037]	-0.034 (0.021) [-.003]	-0.037 (0.018) [-.003]
Separated	0.420 (0.155) [.118]	0.427 (0.081) [.126]	-0.027 (0.011) [-.008]	-0.026 (0.009) [-.008]
Never married	-2.212 (1.134) [-.177]	-2.260 (0.538) [-.188]	0.183 (0.085) [.015]	0.184 (0.051) [.015]
Male:				
Married	1.753 (0.850) [.025]	1.745 (-0.593) [.024]	-0.174 (0.079) [-.002]	-0.170 (0.057) [-.002]
Divorced	0.242 (0.457) [.028]	0.239 (0.237) [.029]	-0.018 (0.042) [-.002]	-0.019 (0.028) [-.002]
Separated	0.359 (0.122) [.147]	0.279 (0.076) [.121]	-0.022 (0.008) [-.009]	-0.014 (0.007) [-.006]
Never married	-2.359 (1.274) [-.135]	-2.256 (0.746) [-.136]	0.211 (0.095) [.012]	0.199 (0.066) [.012]

Notes:

(a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends.

Regressions are weighted by cell size to replicate underlying micro-data.

(b) Standard errors are adjusted for clustering at the state of birth and are in parentheses.

Percentage impacts are in brackets.

(c) Coefficients on dummy variables have been multiplied by 100.

(d) Each regression also includes UNILAT and UNILAT*(age-24)

Table 9. Sample Means 1960-1990 v. 1960-2000

	Female Adult		Male Adult		Child	
	1960-1990	1960-2000	1960-1990	1960-2000	1960-1990	1960-2000
Mother divorced					0.075	0.081
Mother separated					0.040	0.040
Mother never married					0.041	0.052
Father divorced					0.015	0.020
Father separated					0.005	0.006
Father never married					0.007	0.013
<i>Number of observations</i>					3,876	4,845
Married	0.708	0.681	0.712	0.680		
Divorced	0.112	0.122	0.085	0.095		
Separated	0.036	0.035	0.024	0.024		
Never married	0.125	0.145	0.174	0.196		
Number of children	1.480	1.395	1.260	1.169		
Years of education	12.754	13.071	12.985	13.166		
High school dropout	0.190	0.160	0.198	0.174		
High school graduate	0.381	0.347	0.324	0.316		
Some college	0.242	0.277	0.237	0.261		
College graduate	0.187	0.217	0.241	0.250		
Income per capita (1990 \$)	15,573.04	15,696.71	25,574.97	24,772.83		
Below poverty	0.113	0.110	0.091	0.094		
Work last year	0.721	0.753	0.939	0.930		
Weeks worked	30.428	32.515	44.430	43.968		
Earnings (1990 \$)	10,827.85	12,558.24	26,110.82	26,830.99		
<i>Number of observations</i>	156,781	212,272	157,301	212,326		

Table 10. Unilateral Divorce Exposure and Divorce Rates: 1960-1990 v. 1960-2000

	No Trend		Trend	
	1960-1990	1960-2000	1960-1990	1960-2000
Adult Female is Divorced	1.005 (0.250) [.090]	0.990 (0.298) [.081]	1.050 (0.546) [.094]	0.805 (0.213) [.066]
Adult Male is Divorced	0.816 (0.290) [.096]	0.832 (0.348) [.087]	0.872 (0.448) [.092]	0.762 (0.530) [.090]
<i>Number of observations</i>	5,304	6,630	5,304	6,630
	No Trend		Trend	
	1960-1990	1960-2000	1960-1990	1960-2000
Child is Living with Divorced Mother	0.361 (0.219) [.048]	0.188 (0.245) [.025]	0.745 (0.343) [.100]	0.733 (0.324) [.098]
Child is Living with Divorced Father	0.168 (0.088) [.112]	0.208 (0.114) [.102]	0.089 (0.115) [.059]	0.054 (0.117) [.026]
<i>Number of observations</i>	3,876	4,845	3,876	4,845

Notes:

- (a) Regressions in top panel use adult dataset and represent the effect of current exposure to unilateral divorce on divorce propensities. Regressions in the bottom panel use the child dataset and represent the effect of current exposure to unilateral divorce on the probability a child lives with a divorced parent.
- (b) All regressions include race, state of residence, and year dummies, and age*year interactions. Regressions in right panels include state specific time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (c) Standard errors are adjusted for clustering at the state of residence and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.

**Table 11. Unilateral Divorce Exposure as a Youth and Outcomes as Adults:
1960-1990 v. 1960-2000**

	Females		Males	
	1960-1990	1960-2000	1960-1990	1960-2000
Family Structure:				
Married	0.612 (0.426) [.009]	0.363 (0.353) [.005]	0.598 (0.537) [.008]	0.411 (0.469) [.006]
Divorced	0.019 (0.430) [.002]	0.181 (0.345) [.021]	-0.100 (0.387) [-.012]	0.244 (0.293) [.026]
Separated	0.333 (0.130) [.094]	0.273 (0.108) [.078]	0.297 (0.090) [.122]	0.263 (0.084) [.109]
Never married	-1.216 (0.807) [-.097]	-1.061 (0.663) [-.073]	-0.866 (0.932) [-.050]	-0.673 (0.763) [-.034]
Number of children	0.089 (0.035) [.060]	0.064 (0.033) [.046]	0.060 (0.022) [.048]	0.041 (0.023) [.035]
Educational Attainment:				
Years of education	-0.057 (0.053) [-.004]	-0.038 (0.043) [-.003]	-0.059 (0.077) [-.005]	-0.037 (0.060) [-.003]
High school dropout	0.585 (0.769) [.031]	0.443 (0.602) [.028]	0.808 (0.749) [.041]	0.651 (0.582) [.037]
High school graduate	1.267 (0.668) [.033]	0.870 (0.580) [.025]	0.856 (0.488) [.026]	0.387 (0.468) [.012]
Some college	-0.478 (0.333) [-.020]	-0.418 (0.269) [-.015]	-0.582 (0.328) [-.025]	-0.369 (0.293) [-.014]
College graduate	-1.375 (0.542) [-.074]	-0.895 (0.515) [-.041]	-1.083 (0.742) [-.045]	-0.669 (0.611) [-.027]
Living Standards:				
Income per capita	-397.84 (209.484) [-.026]	-141.29 (189.432) [-.009]	-672.79 (582.755) [.026]	-413.05 (516.165) [-.017]
Below poverty	0.074 (0.288) [.007]	-0.052 (0.251) [-.005]	-0.055 (0.228) [-.006]	-0.044 (0.204) [-.005]
Labor Supply:				
Work last year	-0.382 (0.252) [-.005]	-0.348 (0.271) [-.005]	0.232 (0.166) [.002]	0.123 (0.154) [.001]
Weeks worked	-0.253 (0.137) [-.008]	-0.196 (0.118) [-.006]	0.111 (0.123) [.002]	0.066 (0.096) [.002]
Earnings	-233.65 (143.184) [-.022]	-129.21 (106.208) [-.010]	441.5 (524.371) [.017]	342.4 (405.818) [.013]

Notes:

(a) All regressions include race, state of residence, state of birth, and year dummies, age*year interactions, and state specific time trends for both state of birth and state of residence. Regressions are weighted by cell size to replicate underlying micro-data.

(b) Standard errors are adjusted for clustering at the state of birth and are in parentheses.

Percentage impacts are in brackets.

(c) Coefficients on dummy variables have been multiplied by 100.

**Table 12. Amount of Exposure to Unilateral Divorce Regulations and Divorce Rates
1960-1990 v. 1960-2000**

	1960-1990				1960-2000			
	1-4	5-8	9+	Years	1-4	5-8	9+	Years
	Years	Years	Years	Years	Years	Years	Years	Years
Adult Female is Divorced	0.349 (0.563) [.031]	1.302 (0.578) [.116]	1.710 (1.096) [.153]		0.332 (0.448) [.027]	1.134 (0.401) [.093]	1.463 (0.754) [.120]	
Adult Male is Divorced	0.464 (0.523) [.055]	0.947 (0.531) [.111]	1.511 (0.997) [.178]		0.411 (0.410) [.034]	0.885 (0.387) [.073]	1.411 (0.703) [.116]	
	1960-1990				1960-2000			
	1-4	5-8	9+	Years	1-4	5-8	9+	Years
	Years	Years	Years	Years	Years	Years	Years	Years
Child is Living with Divorced Mother	0.655 (0.205) [.087]	1.106 (0.290) [.147]	1.219 (0.526) [.162]		0.558 (0.199) [.069]	1.030 (0.277) [.127]	1.069 (0.392) [.132]	
Child is Living with Divorced Father	-7E-05 (0.041) [0]	0.208 (0.064) [.138]	0.364 (0.138) [.241]		-0.010 (0.052) [-.005]	0.201 (0.065) [.098]	0.344 (0.123) [.168]	

Notes:

- (a) Regressions in top panel use adult dataset and represent the effect of the amount of current exposure to unilateral divorce on divorce propensities. Regressions in the bottom panel use the child dataset and represent the effect of current exposure to unilateral divorce on the probability a child lives with a divorced parent.
- (b) All regressions include race, state of residence dummies, age dummies, year dummies, and age*year interactions. All regressions also include state specific time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (c) Standard errors are adjusted for clustering at the state of residence and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.
- (e) Each regression replaces UNILAT with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years.

**Table 13. Amount of Exposure to Unilateral Divorce Regulation as a Youth and Selected Adult Outcomes
1960-1990 v. 1960-2000**

	Females					
	1960-1990			1960-2000		
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years
Married	0.457 (0.339) [.006]	0.456 (0.468) [.006]	1.340 (0.751) [.019]	0.278 (0.226) [.004]	0.105 (0.349) [.002]	0.532 (0.620) [.008]
Divorced	-0.053 (0.382) [-.005]	0.027 (0.460) [.002]	-0.027 (0.712) [-.002]	0.178 (0.286) [.015]	0.212 (0.361) [.017]	0.145 (0.553) [.012]
Years of education	-0.039 (0.047) [-.003]	-0.037 (0.054) [-.003]	-0.057 (0.071) [-.004]	-0.024 (0.035) [-.002]	-0.019 (0.045) [-.001]	-0.030 (0.051) [-.002]
Work last year	-0.007 (0.236) [0]	-0.134 (0.266) [-.002]	-0.7635 (0.409) [-.011]	-0.143 (0.225) [-.002]	-0.112 (0.327) [-.001]	-0.320 (0.382) [-.004]
Earnings	-57.36 (130.259) [-.005]	-227.77 (166.648) [-.021]	-638.21 (200.340) [-.059]	-33.01 (86.139) [-.003]	-47.72 (114.917) [-.004]	-203.55 (131.684) [-.016]
	Males					
	1960-1990			1960-2000		
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years
Married	0.311 (0.414) [.004]	0.069 (0.611) [.001]	1.436 (0.951) [.020]	0.115 (0.279) [.002]	0.008 (0.451) [0]	0.724 (0.876) [.011]
Divorced	-0.039 (0.303) [-.005]	-0.071 (0.404) [-.008]	-0.167 (0.623) [-.020]	0.104 (0.230) [.011]	-0.007 (0.304) [0]	-0.233 (0.415) [-.025]
Years of education	-0.042 (0.066) [-.003]	-0.041 (0.074) [-.003]	-0.052 (0.099) [-.003]	-0.025 (0.048) [-.002]	-0.015 (0.056) [-.001]	-0.027 (0.071) [-.002]
Work last year	0.121 (0.144) [.001]	0.274 (0.167) [.003]	0.179 (0.247) [.002]	0.053 (0.116) [.001]	0.130 (0.167) [.001]	0.079 (0.217) [.001]
Earnings	354.80 (449.599) [.014]	342.36 (478.468) [.013]	678.85 (753.822) [.026]	250.30 (298.410) [.009]	284.66 (321.370) [.011]	614.72 (577.295) [.023]

Notes:

- (a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.
- (c) Coefficients on dummy variables have been multiplied by 100.
- (d) Each regression replaces UNILAT and KIDUNI with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years. Results for UNILAT categories are not shown.

**Table 14. Age Pattern of Effects of Unilateral Divorce as a Youth on Marital Status
1960-1990 v. 1960-2000**

	Unilateral as Youth		Unilateral as Youth*(Age-24)	
	1960-1990	1960-2000	1960-1990	1960-2000
Female:				
Married	1.461 (0.698) [.021]	1.063 (0.689) [.016]	-0.133 (0.066) [-.002]	-0.087 (0.054) [-.001]
Divorced	0.388 (0.471) [.035]	0.463 (0.477) [.038]	-0.034 (0.021) [-.003]	-0.009 (0.024) [-.001]
Separated	0.420 (0.155) [.118]	0.407 (0.152) [.116]	-0.027 (0.011) [-.008]	-0.024 (0.009) [-.007]
Never married	-2.212 (1.134) [-.177]	-1.919 (1.126) [-.132]	0.183 (0.085) [.015]	0.112 (0.074) [.008]
Male:				
Married	1.753 (0.850) [.025]	1.530 (0.857) [.023]	-0.174 (0.079) [-.002]	-0.134 (0.065) [-.002]
Divorced	0.242 (0.457) [.028]	0.196 (0.364) [.021]	-0.018 (0.042) [-.002]	0.001 (0.018) [0]
Separated	0.359 (0.122) [.147]	0.398 (0.119) [.164]	-0.022 (0.008) [-.009]	-0.023 (0.007) [-.009]
Never married	-2.359 (1.274) [-.135]	-2.130 (1.225) [-.108]	0.211 (0.095) [.012]	0.153 (0.078) [.008]

Notes:

- (a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.
- (c) Coefficients on dummy variables have been multiplied by 100.
- (d) Each regression also includes UNILAT and UNILAT*(age-24)

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Appendix 1: Detailed Variable Construction Methodology and Assumptions

Coding for Dataset 1 & 2:

Marital status definitions in the IPUMS data are straightforward and constant across all census years. Thus, the coding of marital status dummies from the MARST variable requires no additional assumptions. Individuals with MARST equal to three are coded separated; those with MARST equal to four are coded divorced, while those with MARST equal to six are coded as never married.

Coding for Dataset 3:

First, as aforementioned, the marital status variables are straightforward and constant across all census years. The variables divorced, separated, and never married are coded as in the first two datasets. Additionally, an individual is coded as married if he is married with spouse present or married with spouse absent (MARST= 1 or 2).

For 1960, 1970, and 1980, years of education is determined from the variable HIGRADE. Individuals with HIGRADE less than three (kindergarten) are coded as having zero years of education. An individual with HIGRADE equal to four is coded as having one year of education (first grade), individuals with HIGRADE equal to five are coded as having two years of education, etc. Thus, years of education is set equal to $HIGRADE - 3$. An individual completing less than 12 years of education is coded as a high school dropout, an individual with exactly 12 years is coded as a high school graduate, an individual with more than 12 years but less than 16 is coded as having some college, and an individual with 16 or more years of education is coded as being a college graduate.

For 1990 and 2000, the variable EDUC99 is used to determine years of education. Individuals with EDUC99 less than 03 (kindergarten) are coded as having zero years of education. Individuals with EDUC99 equal to 04 or 05 (1st-4th or 5th-8th) are allocated the median number of years, 2.5 and 6.5, respectively. For those with a value of EDUC99 between 06 and 08 (9th – 11th), the number of years of education is set equal to EDUC99 + 2. Individuals with EDUC99 equal to 09 or 10 (12th grade, no diploma or 12th grade diploma) are given 12 years. Individuals with some college (EDUC99= 11, 12, or 13) are given 14 years of education. Those with a bachelor's degree are given 16 years, those with a master's degree are given 17 years, those with a professional degree are given 18 years, and those with a doctorate degree are given 20 years of education. The variable EDUC99 is defined in terms of degree attained, thus an individual with EDUC99 less than 10 are coded as a high school dropout, those with EDUC99 equal to 10 (high school graduate, or GED) are coded as a high school graduate, those with EDUC99 between 11 and 13 are coded as having some college, while those with EDUC99 greater or equal to 14 (bachelor's degree) are coded as a college graduate.

To be consistent across census years, the variable WKSWORK2 is used to construct the number of weeks worked. For each individual, the variable WKSWORK2 is a number between zero and six determined by the category of hours into which the individual falls. For instance, for those individuals who work between 27 and 39 weeks, WKSWORK2 equals three. In my variable construction, individuals with WKSWORK2 equal to 0 (N/A) are coded as working zero weeks. All other groups are allocated a number of weeks worked equal to the median number of weeks worked in the category.

For instance, individuals with WKSWORK2 equal to 1 fall into the category of working between 1 and 13 weeks. Thus, these individuals are assigned seven weeks worked.

The income per capita variable is constructed by dividing FTOTINC (total family income) by FAMSIZE (number of family members). Since I replicate Gruber's analysis which only goes up through 1990, for all analyses, this variable is adjusted to reflect 1990 dollars. Likewise, the earnings variable is constructed using INCWAGE (wage and salary income) and is adjusted in all years to reflect earnings in 1990 dollars. Poverty status is determined by the variable POVERTY. Individuals with POVERTY less than 100 are considered to be in poverty.

Appendix 2: Full Replication Results of Gruber's Tables 3-5 and 7-9

Table A2.1. The Impact of Unilateral Divorce on Marital Status (Replication of Gruber Table 3)

(a) Adult Female

Adult is...	No Trend		Trend	
	Replication	Gruber	Replication	Gruber
Divorced	1.005 (0.250) [.090]	1.277 (0.395) [.116]	1.050 (0.546) [.094]	1.396 (0.675) [.127]
Separated	0.242 (0.188) [.068]	0.216 (0.196) [.063]	-0.238 (0.335) [-.067]	-0.142 (0.325) [.042]
Never Married	-0.294 (0.887) [-.024]	-0.613 (0.703) [-.051]	0.183 (0.381) [.015]	-0.255 (0.474) [-.021]
Number of observations	5,304	5,304	5,304	5,304

(b) Adult Male

Adult is...	No Trend		Trend	
	Replication	Gruber	Replication	Gruber
Divorced	0.816 (0.290) [.096]	0.948 (0.377) [.116]	0.762 (0.530) [.090]	0.961 (0.661) [.117]
Separated	-0.013 (0.130) [-.005]	-0.057 (0.120) [-.025]	-0.193 (0.286) [-.079]	-0.097 (0.279) [-.042]
Never Married	0.138 (1.125) [.008]	-0.370 (0.840) [-.022]	0.528 (0.620) [.030]	-0.088 (0.608) [-.005]
Number of observations	5,304	5,304	5,304	5,304

(c) Child is Living with Mother

Parent that lives with child is...	No Trend		Trend	
	Replication	Gruber	Replication	Gruber
Divorced	0.361 (0.219) [.048]	0.606 (0.244) [.091]	0.745 (0.343) [.100]	0.963 (0.409) [.145]
Separated	0.139 (0.209) [.034]	0.003 (0.195) [0]	-0.339 (0.288) [-.084]	-0.251 (0.295) [-.072]
Never Married	-1.155 (0.354) [-.283]	-1.003 (0.340) [-.391]	-0.190 (0.284) [-.047]	-0.133 (0.290) [-.036]
Number of observations	3,876	3,876	3,876	3,876

(d) Child is Living with Father

Parent that lives with child is...	No Trend		Trend	
	Replication	Gruber	Replication	Gruber
Divorced	0.168 (0.088) [.112]	0.192 (0.070) [.194]	0.089 (0.115) [.059]	0.110 (0.104) [.111]
Separated	-0.047 (0.045) [-.087]	-0.016 (0.036) [-.048]	-0.011 (0.050) [-.020]	-0.001 (0.042) [-.003]
Never Married	-0.0939 (0.064) [-.137]	-0.088 (0.047) [-.244]	-0.055 (0.084) [-.080]	-0.097 (0.069) [-.269]
Number of observations	3,876	3,876	3,876	3,876

Notes:

- (a) Regressions in panels A and B use adult dataset and represent the effect of current exposure to unilateral divorce laws on current marital status propensities. Regressions in panels C and D use the child dataset and represent the effect of current exposure to unilateral divorce on the probability a child lives with a divorced, separated or never married parent.
- (b) All regressions include race, state of residence dummies, age dummies, year dummies, and age*year interactions. Regressions in right-most columns in each panel include state specific time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (c) Standard errors are adjusted for clustering at the state of residence and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.

Table A2.2. Unilateral Divorce and Outcomes as Adults, Females (Replication of Gruber Table 4)

	Unilateral as Youth				Unilateral as Adult			
	No Trend		Trend		No Trend		Trend	
	Replication	Gruber	Replication	Gruber	Replication	Gruber	Replication	Gruber
Family Structure:								
Married	0.524 (0.362) [.007]	0.591 (0.274) [.008]	0.612 (0.426) [.009]	0.664 (0.361) [.009]	-1.228 (0.347) [-.017]	-1.263 (0.808) [-.018]	-0.791 (0.538) [-.011]	-0.734 (1.079) [-.010]
Divorced	0.070 (0.435) [.006]	0.058 (0.370) [.005]	0.019 (0.430) [.002]	0.007 (0.350) [.001]	0.866 (0.168) [.077]	0.942 (0.262) [.086]	0.985 (0.201) [.088]	1.073 (0.517) [.098]
Separated	0.382 (0.153) [.108]	0.347 (0.110) [.102]	0.333 (0.130) [.094]	0.326 (0.092) [.096]	0.151 (0.121) [.043]	0.119 (0.163) [.035]	-0.150 (0.221) [-.042]	-0.166 (0.334) [-.049]
Never married	-1.207 (0.781) [-.096]	-1.198 (0.621) [-.1]	-1.216 (0.807) [-.097]	-1.222 (0.672) [-.102]	0.104 (0.264) [.008]	0.136 (0.602) [.011]	-0.075 (0.272) [-.006]	-0.16 (0.385) [-.013]
Number of children	0.076 (0.030) [.051]	0.011 (0.011) [.005]	0.089 (0.035) [.060]	0.021 (0.009) [.010]	-0.091 (0.023) [-.062]	-0.054 (0.029) [-.026]	-0.052 (0.020) [-.035]	-0.017 (0.017) [-.008]
Educational Attainment:								
Years of education	-0.075 (0.069) [-.006]	-0.076 (0.044) [-.006]	-0.057 (0.053) [-.004]	-0.065 (0.033) [-.006]	-0.113 (0.078) [-.009]	-0.132 (0.076) [-.011]	-0.054 (0.038) [-.004]	-0.025 (0.039) [-.002]
High school dropout	1.011 (1.106) [.053]	0.837 (0.726) [.044]	0.585 (0.769) [.031]	0.622 (0.509) [.033]	2.53 (1.035) [.133]	2.70 (0.962) [.142]	0.235 (0.501) [.012]	0.195 (0.516) [.010]
High school graduate	0.815 (1.032) [.021]	1.05 (0.806) [.029]	1.267 (0.668) [.033]	1.16 (0.553) [.032]	-4.10 (1.495) [-.108]	-4.26 (2.003) [-.117]	-0.047 (0.572) [-.001]	-1.28 (0.959) [.035]
Some college	-0.098 (0.349) [-.004]	-0.235 (0.415) [-.011]	-0.478 (0.333) [-.020]	-0.284 (0.269) [-.013]	1.844 (0.456) [.076]	0.932 (0.510) [.043]	0.178 (0.466) [.007]	2.46 (1.533) [.114]
College graduate	-1.728 (0.593) [-.092]	-1.656 (0.526) [-.072]	-1.375 (0.542) [-.074]	-1.497 (0.443) [.065]	-0.270 (0.677) [-.014]	0.633 (1.277) [.027]	-0.366 (0.255) [-.020]	-1.378 (0.764) [-.06]
Living Standards:								
Income per capita	-559.63 (306.215) [-.036]	-521.35 (197.010) [-.039]	-397.84 (209.484) [-.026]	-431.63 (148.360) [-.032]	760.62 (506.479) [.049]	213.45 (395.670) [.016]	842.77 (828.080) [.054]	54.21 (807.640) [.004]
Below poverty	0.058 (0.282) [.005]	0.026 (0.265) [.002]	0.074 (0.288) [.007]	0.091 (0.213) [.008]	0.316 (1.288) [.028]	0.557 (1.411) [.047]	0.473 (1.052) [.042]	0.343 (1.384) [.029]
Labor Supply:								
Work last year	-0.661 (0.368) [-.009]	-0.760 (0.296) [-.011]	-0.382 (0.252) [-.005]	-0.478 (0.222) [-.007]	1.136 (0.746) [.016]	1.284 (0.540) [.018]	2.143 (0.684) [.030]	2.197 (0.874) [.031]
Weeks worked	-0.361 (0.221) [-.012]	-0.099 (0.093) [-.003]	-0.253 (0.137) [-.008]	-0.139 (0.075) [-.005]	0.80 (0.321) [.026]	0.65 (0.167) [.022]	1.006 (0.314) [.033]	0.262 (0.166) [.009]
Earnings	-336.36 (205.458) [-.031]	-336.35 (145.030) [-.031]	-233.65 (143.184) [-.022]	-246.28 (108.010) [-.023]	158.83 (179.490) [.015]	198.77 (387.290) [.019]	147.16 (327.025) [.014]	91.01 (595.170) [.009]

Notes:

- (a) All regressions include adult unilateral divorce, race, state of residence dummies, state of birth dummies, age dummies and year dummies, age*year interactions, and right-most columns in each group include state specific time trends for both state of birth and state of residence. Regressions are weighted by cell size to replicate underlying micro-data.
- (b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.
- (c) Coefficients on dummy variables have been multiplied by 100.

Table A2.3. Unilateral Divorce and Outcomes as Adults, Males (Replication of Gruber Table 5)

	Unilateral as Youth				Unilateral as Adult			
	No Trend		Trend		No Trend		Trend	
	Replication	Gruber	Replication	Gruber	Replication	Gruber	Replication	Gruber
Family Structure:								
Married	0.521 (0.453) [.007]	0.555 (0.417) [.008]	0.598 (0.537) [.008]	0.625 (0.531) [.009]	-1.053 (0.416) [-.015]	-0.926 (0.945) [-.013]	-0.787 (0.742) [-.011]	-0.693 (1.292) [-.010]
Divorced	0.028 (0.410) [.003]	0.027 (0.349) [.003]	-0.100 (0.387) [-.012]	-0.107 (0.328) [-.013]	0.726 (0.194) [.085]	0.723 (0.276) [.088]	0.692 (0.256) [.081]	0.689 (0.481) [.084]
Separated	0.301 (0.104) [.123]	0.248 (0.078) [.108]	0.297 (0.090) [.122]	0.261 (0.067) [.113]	-0.095 (0.101) [-.039]	-0.116 (0.121) [-.050]	-0.119 (0.174) [-.049]	-0.065 (0.271) [-.028]
Never married	-0.925 (0.886) [-.053]	-0.897 (0.773) [-.054]	-0.866 (0.932) [-.051]	-0.839 (0.856) [-.051]	0.411 (0.353) [.024]	0.315 (0.802) [.019]	0.269 (0.460) [.015]	0.121 (0.672) [.007]
Number of children	0.051 (0.019) [.040]	0.037 (0.015) [.032]	0.060 (0.022) [.048]	0.046 (0.017) [.040]	-0.066 (0.018) [-.052]	-0.074 (0.024) [-.063]	-0.050 (0.018) [-.039]	-0.054 (0.022) [-.046]
Educational Attainment:								
Years of education	-0.080 (0.102) [-.006]	-0.079 (0.057) [-.007]	-0.059 (0.077) [-.005]	-0.072 (0.045) [-.006]	-0.075 (0.094) [-.006]	-0.076 (0.083) [-.006]	0.015 (0.046) [.001]	0.041 (0.059) [.003]
High school dropout	1.193 (1.061) [.060]	1.05 (0.625) [.054]	0.808 (0.749) [.041]	0.889 (0.433) [.046]	1.490 (0.951) [.075]	1.584 (0.834) [.081]	-0.178 (0.509) [-.009]	-0.272 (0.479) [-.014]
High school graduate	0.520 (0.689) [.016]	0.633 (0.558) [.021]	0.856 (0.488) [.026]	0.781 (0.377) [.025]	-3.598 (1.261) [-.111]	-3.627 (1.586) [-.118]	-0.828 (0.628) [-.026]	-1.329 (0.880) [-.043]
Some college	-0.210 (0.349) [-.009]	-0.364 (0.228) [-.017]	-0.582 (0.328) [-.025]	-0.335 (0.168) [-.016]	1.806 (0.411) [.076]	0.575 (0.422) [.027]	0.533 (0.406) [.023]	2.484 (1.183) [.115]
College graduate	-1.503 (0.700) [-.062]	-1.32 (0.465) [-.047]	-1.08269 (0.742) [-.045]	-1.335 (0.546) [-.048]	0.303 (0.637) [.013]	1.468 (1.128) [.052]	0.473 (0.310) [.020]	-0.883 (0.596) [-.031]
Living Standards:								
Income per capita	-886.87 (467.432) [.035]	-431.96 (206.800) [-.028]	-672.79 (582.755) [.026]	-266.72 (155.870) [-.018]	-1874.54 (3499.191) [-.073]	237.45 (450.460) [.016]	-250.96 (2530.590) [-.010]	255.44 (787.200) [.017]
Below poverty	-0.078 (0.257) [-.009]	-0.08 (0.202) [-.009]	-0.055 (0.228) [-.006]	0.057 (0.148) [.007]	0.377 (1.173) [.041]	0.398 (1.330) [.046]	0.693 (0.864) [.076]	0.502 (1.110) [.058]
Labor Supply:								
Work last year	0.129 (0.169) [.001]	0.083 (0.142) [.001]	0.232 (0.166) [.002]	0.161 (0.151) [.002]	0.287 (0.211) [.003]	0.301 (0.203) [.003]	0.223 (0.274) [.002]	0.259 (0.424) [.003]
Weeks worked	-0.034 (0.132) [-.001]	-0.093 (0.051) [-.002]	0.111 (0.123) [.002]	-0.009 (0.006) [-.000]	-0.034 (0.171) [-.001]	-0.166 (0.111) [-.004]	0.148 (0.256) [.003]	0.104 (0.219) [.002]
Earnings	59.7 (370.296) [.002]	93.65 (268.130) [.004]	441.5 (524.371) [.017]	418.8 (361.270) [.016]	-187.082 (245.109) [-.007]	-54.36 (414.360) [-.002]	368.8395 (945.790) [.014]	309.73 (1475.120) [.012]

Notes:

(a) All regressions include adult unilateral divorce, race, state of residence dummies, state of birth dummies, age dummies and year dummies, age*year interactions, and right-most columns in each group include state specific time trends for both state of birth and state of residence. Regressions are weighted by cell size to replicate underlying micro-data.

(b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.

(c) Coefficients on dummy variables have been multiplied by 100.

Table A2.4. Amount of Exposure to Unilateral Divorce Regulations and Marital Status (Replication of Gruber Table 7)

(a) Adult Respondent is Female

Adult respondent is:	Replication of Gruber			Gruber Results			
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years	Years
Divorced	0.349 (0.563) [.031]	1.302 (0.578) [.116]	1.710 (1.096) [.153]	0.568 (0.613) [.052]	1.677 (0.688) [.152]	2.08 (1.198) [.189]	
Separated	-0.299 (0.351) [-.084]	-0.269 (0.377) [-.076]	-0.501 (0.495) [-.141]	-0.190 (0.330) [-.056]	-0.161 (0.361) [-.047]	-0.330 (0.473) [-.097]	
Never Married	0.461 (0.359) [.037]	0.242 (0.344) [.019]	0.904 (0.529) [.072]	0.163 (0.409) [.014]	-0.245 (0.517) [-.020]	0.382 (0.628) [.032]	

(b) Adult Respondent is Male

Adult respondent is:	Replication of Gruber				Gruber Results			
	1-4 Years	5-8 Years	9+ Years	Years	1-4 Years	5-8 Years	9+ Years	Years
Divorced	0.464 (0.523) [.055]	0.947 (0.531) [.111]	1.511 (0.997) [.178]	0.521 (0.567) [.064]	1.183 (0.659) [.144]	1.724 (1.112) [.210]		
Separated	-0.238 (0.299) [-.098]	-0.214 (0.318) [-.087]	-0.381 (0.431) [-.156]	-0.179 (0.279) [-.078]	-0.107 (0.313) [-.047]	-0.271 (0.429) [-.118]		
Never Married	0.276 (0.355) [.016]	0.719 (0.579) [.041]	1.371 (0.434) [.079]	-0.02 (0.379) [-.001]	0.01 (0.652) [.001]	0.609 (0.592) [.037]		

(c) Child Lives with Mother

Parent is:	Replication of Gruber			Gruber Results			
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years	Years
Divorced	0.655 (0.205) [.087]	1.106 (0.290) [.147]	1.219 (0.526) [.162]	0.736 (0.222) [.111]	1.177 (0.278) [.177]	1.088 (0.399) [.164]	
Separated	-0.194 (0.194) [-.048]	-0.636 (0.323) [-.157]	-0.752 (0.341) [-.186]	-0.128 (0.205) [-.037]	-0.598 (0.306) [-.171]	-0.715 (0.300) [-.205]	
Never married	-0.303 (0.186) [-.074]	0.154 (0.270) [.038]	0.701 (0.313) [.172]	-0.196 (0.193) [-.053]	0.282 (0.291) [.076]	0.772 (0.320) [.209]	

(d) Child Lives with Father

Parent is:	Replication of Gruber				Gruber Results			
	1-4 Years	5-8 Years	9+ Years	Years	1-4 Years	5-8 Years	9+ Years	Years
Divorced	-7E-05 (0.041) [0]	0.208 (0.064) [.138]	0.364 (0.138) [.241]	0.005 (0.035) [.005]	0.172 (0.049) [.174]	0.263 (0.081) [.266]		
Separated	-0.009 (0.028) [-.167]	-0.049 (0.043) [-.090]	-0.078 (0.062) [-.143]	0.016 (0.025) [.048]	-0.021 (0.034) [-.063]	-0.045 (0.035) [-.135]		
Never married	-0.125 (0.058) [-.182]	-0.123 (0.120) [-.180]	-0.265 (0.213) [-.386]	-0.106 (0.056) [-.294]	-0.152 (0.097) [-.422]	-0.208 (0.124) [-.578]		

Notes:

- (a) Regressions in panels A and B use adult dataset and represent the effect of current exposure to unilateral divorce laws on current marital status propensities. Regressions in panels C and D use the child dataset and represent the effect of current exposure to unilateral divorce on the probability a child lives with a divorced, separated or never married parent.
- (b) All regressions include race, state of residence dummies, age dummies, year dummies, age*year interactions and state-specific time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (c) Standard errors are adjusted for clustering at the state of residence and are in parentheses. Percentage impacts are in brackets.
- (d) Coefficients on dummy variables have been multiplied by 100.
- (e) Each regression replaces UNILAT with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years.

**Table A2.5. Amount of Exposure to Unilateral Divorce Regulation and Adult Outcomes, Females
(Replication of Gruber Table 8)**

	Replication			Gruber		
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years
Family Structure:						
Married	0.457 (0.339) [.006]	0.456 (0.468) [.006]	1.340 (0.751) [.019]	0.525 (0.324) [.007]	0.428 (0.336) [.006]	1.171 (0.633) [.016]
Divorced	-0.053 (0.382) [-.005]	0.027 (0.460) [.002]	-0.027 (0.712) [-.002]	0.031 (0.279) [.003]	0.051 (0.338) [.005]	0.046 (0.453) [.004]
Separated	0.207 (0.096) [.058]	0.323 (0.156) [.091]	0.696 (0.215) [.196]	0.206 (0.086) [.061]	0.35 (0.101) [.103]	0.622 (0.162) [.183]
Never married	-0.800 (0.586) [-.064]	-1.091 (0.863) [-.087]	-2.358 (1.430) [-.188]	-0.93 (0.508) [-.078]	-1.092 (0.620) [-.091]	-2.158 (1.121) [-.18]
Number of children	0.057 (0.029) [.038]	0.088 (0.038) [.060]	0.164 (0.052) [.111]	0.008 (0.009) [.004]	0.021 (0.012) [.010]	0.056 (0.017) [.028]
Educational Attainment:						
Years of education	-0.039 (0.047) [-.003]	-0.037 (0.054) [-.003]	-0.057 (0.071) [-.004]	-0.052 (0.033) [-.005]	-0.062 (0.032) [-.005]	-0.088 (0.038) [-.008]
High school dropout	0.367 (0.649) [.019]	0.271 (0.777) [.014]	0.745 (1.077) [.039]	0.504 (0.480) [.027]	0.549 (0.501) [.029]	0.837 (0.659) [.044]
High school graduate	0.969 (0.562) [.025]	1.433 (0.640) [.038]	1.948 (0.915) [.051]	0.826 (0.519) [.023]	1.27 (0.572) [.0345]	1.815 (0.692) [.05]
Some college	-0.286 (0.217) [-.012]	-0.629 (0.411) [-.026]	-1.210 (0.884) [-.050]	-0.086 (0.213) [-.004]	-0.469 (0.335) [-.022]	-0.395 (0.471) [-.018]
College graduate	-1.050 (0.477) [-.056]	-1.075 (0.550) [-.058]	-1.483 (0.659) [-.079]	-1.244 (0.388) [-.054]	-1.35 (0.508) [-.058]	-2.257 (0.562) [-.098]
Living Standards:						
Income per capita	-380.79 (195.769) [-.024]	-410.03 (283.575) [-.026]	-943.38 (335.953) [-.061]	-189.69 (128.760) [-.014]	-461.46 (171.290) [-.034]	-724.26 (210.440) [-.053]
Below poverty	-0.198 (0.294) [-.018]	-0.007 (0.433) [-.001]	0.336 (0.541) [.030]	-0.016 (0.280) [-.001]	-0.006 (0.307) [-.001]	0.405 (0.404) [.034]
Labor Supply:						
Work last year	-0.007 (0.236) [0]	-0.134 (0.266) [-.002]	-0.7635 (0.409) [-.011]	-0.303 (0.220) [-.004]	-0.255 (0.244) [-.004]	-0.902 (0.314) [-.013]
Weeks worked	0.017 (0.115) [.001]	-0.110 (0.168) [-.004]	-0.643 (0.262) [-.021]	-0.06 (0.057) [-.002]	-0.056 (0.104) [-.002]	-0.385 (0.122) [-.013]
Earnings	-57.36 (130.259) [-.005]	-227.77 (166.648) [-.021]	-638.21 (200.340) [-.059]	-45.17 (100.210) [-.042]	-238.17 (131.310) [-.022]	-616.32 (163.920) [-.058]

Notes:

- (a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (b) Standard errors are adjusted for clustering at the state of birth and are in parentheses.
- Percentage impacts are in brackets.
- (c) Coefficients on dummy variables have been multiplied by 100.
- (d) Each regression replaces UNILAT and KIDUNI with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years.

**Table A2.6. Amount of Exposure to Unilateral Divorce Regulation and Adult Outcomes, Males
(Replication of Gruber Table 8)**

	Replication			Gruber		
	1-4 Years	5-8 Years	9+ Years	1-4 Years	5-8 Years	9+ Years
Family Structure:						
Married	0.311 (0.414) [.004]	0.069 (0.611) [.001]	1.436 (0.951) [.020]	0.481 (0.404) [.007]	0.264 (0.563) [.004]	1.219 (0.981) [.017]
Divorced	-0.039 (0.303) [-.005]	-0.071 (0.404) [-.008]	-0.167 (0.623) [-.020]	-0.041 (0.264) [-.005]	-0.032 (0.272) [-.004]	-0.189 (0.471) [-.023]
Separated	0.263 (0.061) [.108]	0.297 (0.120) [.121]	0.460 (0.188) [.188]	0.204 (0.053) [.089]	0.25 (0.077) [.109]	0.404 (0.120) [.176]
Never married	-0.602 (0.712) [-.035]	-0.359 (0.990) [-.021]	-1.827 (1.574) [-.105]	-0.699 (0.661) [-.042]	-0.541 (0.806) [-.033]	-1.51 (1.459) [-.091]
Number of children	0.040 (0.018) [.032]	0.057 (0.025) [.045]	0.102 (0.036) [.081]	0.034 (0.014) [.029]	0.042 (0.022) [.036]	0.08 (0.023) [.026]
Educational Attainment:						
Years of education	-0.042 (0.066) [-.003]	-0.041 (0.074) [-.003]	-0.052 (0.099) [-.003]	-0.058 (0.043) [-.005]	-0.064 (0.040) [-.005]	-0.092 (0.052) [-.008]
High school dropout	0.419 (0.594) [.021]	0.581 (0.707) [.029]	1.345 (1.106) [.068]	0.629 (0.401) [.032]	0.852 (0.413) [.044]	1.435 (0.581) [.074]
High school graduate	0.702 (0.413) [.022]	0.986 (0.502) [.030]	0.766 (0.702) [.024]	0.643 (0.341) [.021]	0.72 (0.453) [.023]	0.928 (0.469) [.030]
Some college	-0.308 (0.216) [-.013]	-0.847 (0.381) [-.036]	-1.067 (0.657) [-.045]	-0.089 (0.190) [-.004]	-0.561 (0.229) [-.026]	-0.44 (0.267) [-.020]
College graduate	-0.812 (0.640) [-.034]	-0.720 (0.814) [-.030]	-1.044 (0.997) [-.043]	-1.183 (0.473) [-.042]	-1.011 (0.556) [-.036]	-1.922 (0.733) [-.068]
Living Standards:						
Income per capita	-793.075 (649.851) [-.031]	-222.185 (718.224) [-.009]	-481.680 (882.993) [-.019]	-141.23 (133.880) [-.009]	-254.24 (190.610) [-.017]	-610.26 (222.280) [-.040]
Below poverty	-0.209 (0.208) [-.023]	0.023 (0.346) [.002]	0.275 (0.368) [.030]	-0.074 (0.160) [-.009]	0.085 (0.268) [.01]	0.317 (0.281) [.037]
Labor Supply:						
Work last year	0.121 (0.144) [.001]	0.274 (0.167) [.003]	0.179 (0.247) [.002]	0.127 (0.144) [.001]	0.231 (0.160) [.002]	0.102 (0.202) [.001]
Weeks worked	0.091 (0.130) [.002]	0.089 (0.116) [.002]	0.014 (0.200) [0]	0.005 (0.081) [.000]	-0.067 (0.061) [-.001]	-0.121 (0.089) [.003]
Earnings	354.80 (449.599) [.014]	342.3644 (478.468) [.013]	678.8526 (753.822) [.026]	310.17 (280.430) [.012]	368.27 (293.690) [.014]	592.12 (489.560) [.023]

Notes:

- (a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends. Regressions are weighted by cell size to replicate underlying micro-data.
- (b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.
- (c) Coefficients on dummy variables have been multiplied by 100.
- (d) Each regression replaces UNLAT and KIDUNI with dummies for exposure to unilateral divorce of 1-4 years, 5-8 years, and more than 9 years.

Table A2.7 Age Pattern of Effects of Unilateral Divorce on Marital Status (Replication of Gruber Table 9)

	Unilateral as Youth				Unilateral as Adult			
	Unilateral		Unilateral*(Age-24)		Unilateral		Unilateral*(Age-24)	
	Replication	Gruber	Replication	Gruber	Replication	Gruber	Replication	Gruber
Female:								
Married	1.461 (0.698) [.021]	1.496 (0.429) [.021]	-0.133 (0.066) [-.002]	-0.133 (0.042) [-.002]	-0.875 (0.654) [-.012]	-0.782 (0.148) [-.011]	-0.002 (0.025) [0]	-0.005 (0.051) [0]
Divorced	0.388 (0.471) [.035]	0.406 (0.188) [.037]	-0.034 (0.021) [-.003]	-0.037 (0.018) [-.003]	0.717 (0.210) [.064]	0.788 (0.303) [.072]	0.024 (0.018) [.002]	0.026 (0.038) [.002]
Separated	0.420 (0.155) [.118]	0.427 (0.081) [.126]	-0.027 (0.011) [-.008]	-0.026 (0.009) [-.008]	-0.027 (0.249) [-.008]	-0.073 (0.334) [-.021]	-0.014 (0.006) [-.004]	-0.011 (0.010) [-.003]
Never married	-2.212 (1.134) [-.177]	-2.260 (0.538) [-.188]	0.183 (0.085) [.015]	0.184 (0.051) [.015]	-0.229 (0.476) [-.018]	-0.280 (1.139) [-.023]	0.029 (0.031) [.002]	0.025 (0.084) [.002]
Male:								
Married	1.753 (0.850) [.025]	1.745 (-0.593) [.024]	-0.174 (0.079) [-.002]	-0.170 (0.057) [-.002]	-0.978 (0.923) [-.014]	-0.851 (1.793) [-.012]	0.006 (0.033) [0]	0.004 (-0.062) [0]
Divorced	0.242 (0.457) [.028]	0.239 (0.237) [.029]	-0.018 (0.042) [-.002]	-0.019 (0.028) [-.002]	0.315 (0.212) [.037]	0.306 (0.225) [.037]	0.037 (0.015) [.004]	0.037 (0.033) [.005]
Separated	0.359 (0.122) [.147]	0.279 (0.076) [.121]	-0.022 (0.008) [-.009]	-0.014 (0.007) [-.006]	-0.011 (0.187) [-.004]	0.043 (0.256) [.019]	-0.013 (0.004) [-.005]	-0.012 (0.007) [-.005]
Never married	-2.359 (1.274) [-.135]	-2.256 (0.746) [-.136]	0.211 (0.095) [.012]	0.199 (0.066) [.012]	0.651 (0.764) [.037]	0.479 (1.554) [.029]	-0.023 (0.042) [-.001]	-0.022 (0.096) [-.001]

Notes:

(a) All regressions include race, state of residence & state of birth dummies, age dummies, year dummies, and age*year interactions. All regressions also include state of residence and state of birth time trends. Regressions are weighted by cell size to replicate underlying micro-data.

(b) Standard errors are adjusted for clustering at the state of birth and are in parentheses. Percentage impacts are in brackets.

(c) Coefficients on dummy variables have been multiplied by 100.