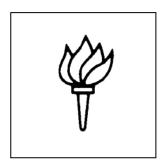
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Do Taxes Affect Marriage? Lessons From History

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## Do Taxes Affect Marriage? Lessons from History

# **Edward Fox**\* September 4, 2017

The question of how to tax married couples has remained controversial since the adoption of the federal income tax over a century ago. The appropriate answer to this question depends in part on how sensitive couples are to taxes when deciding to marry. Yet we know surprisingly little about how taxes shape couples' marriage choices. This Article begins to fill that gap using a natural experiment generated by the halting shift in how the income tax treated married couples in the mid-Twentieth Century. The system moved from taxing married couples as two individuals—in which case marriage largely did not affect taxes—to taxing married couples on their joint income. At the time of this shift, joint taxation lowered couples' taxes upon marriage. The change to joint taxation, however, came later to some states, creating a natural experiment to study its impact on marriage rates.

This Article shows that marriage rates increased in the relevant states after the introduction of joint taxation made marriage tax-advantaged. The data indicate that men affected by the adoption of joint taxation married 3 to 5 months sooner on average. This suggests that at any given time during this period there were tens or hundreds of thousands of married couples in the United States who would not have been married if not for the tax incentives. Couples appear to have been unexpectedly responsive to the tax changes given that unmarried cohabitation was not acceptable under the social mores of the day. If anything, Americans today are likely more sensitive to taxes when deciding whether and when to marry, suggesting that joint taxation continues to affect marriage decisions today. This in turn strengthens the case for returning to individual taxation of marriage if the goal is to avoid distorting people's marriage decisions. By contrast, if the government wishes to encourage marriage, the results imply that using the tax code may be effective under some circumstances, but further analysis suggests that joint taxation remains a poor choice for doing so.

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#### INTRODUCTION

"And to get to the point, if we were to file a joint return, it would seem to me that with the two exemptions, a joint return would not only be feasible, but economically sound. Indeed. Taxwise." Jack Lemon in *Phffft* (1954) (asking his girlfriend to marry him)

Policymakers face a fundamental choice in implementing a progressive income tax: treat married couples as two individuals, or as a unit taxing them on their joint income. There is an inherent tension in this decision. Treating married couples like any two individuals ensures that their income taxes will not change at marriage or divorce. This means that both marriage decisions and other important choices, like whether to work outside the home, will not be distorted by marriage taxation. Under individual taxation, however, married couples with the same total income may pay different taxes depending on how income is divided among the spouses. In addition, the government must prevent spouses from shifting income so as to reduce their taxes. Taxing couples

<sup>&</sup>lt;sup>1</sup> This study is concerned with income taxes, so when I refer to a "tax" I mean income tax, unless otherwise noted.

on their joint income solves these problems, but necessitates having couples' taxes change at marriage. Thus under joint taxation, policymakers must then decide whether couples' taxes will rise or fall at marriage, leading to either "marriage bonuses" or "marriage penalties." These bonuses and particularly penalties are perceived by many as inequitable and the tax changes at marriage may also distort marriage and employment choices.

There will always be a tension in deciding between individual and joint taxation because the advantages associated with each cannot be fully combined. It is impossible for an income tax to be (1) progressive, (2) marriage neutral, and (3) tax all couples with the equal income the same way ("couples neutrality"). To see this, consider two couples: W and X, who each earn \$50,000, and Y and Z, who earn \$100,000 and \$0, respectively. Prior to marriage, progressivity implies that Y's taxes exceed W and X's combined taxes. Marriage neutrality requires the total taxes of each couple not change at marriage, so Y and Z must pay more tax than W and X after each couple marries. This of course violates couples neutrality. Upholding couples neutrality instead requires either the taxes of W and X or Y and Z change at marriage, or both, violating marriage neutrality. Tax scholars frequently refer to the impossibility of meeting all three goals as the trilemma.

<sup>&</sup>lt;sup>2</sup> See, e.g., Tax Treatment of Single Persons and Married Persons Where Both Spouses Are Working: Hearings Before the H. Comm. on Ways and Means, 92d Cong. 78-79 (1972) (statement of Edwin S. Cohen, Ass't Sec'y for Tax Pol'y).

<sup>&</sup>lt;sup>3</sup> For a sample of the discussion of the appropriate tax treatment of marriage discussing the trilemma, see, e.g., Lily Kahng, One Is the Loneliest Number: The Single Taxpayer in a Joint Return World, 61 HASTINGS L.J. 651 (2010); Lawrence Zelenak, Marriage and the Income Tax, 67 S. Cal. L. Rev. 339

In theory and practice, progressivity has been seen as too important to give way before the other two principles. From the start of the modern income tax in 1913 to 1948, the United States (largely) chose marriage neutrality by employing individual taxation. Since 1948, it has prioritized couple's neutrality by using joint taxation, which has often led to large tax changes at marriage. Single-earner couples have consistently received marriage bonuses, with couples' total taxes falling at marriage. For example, a single-earner couple with income each year equivalent to \$100,000 in today's dollars would have seen their taxes fall on average by \$4,423 per year after marriage over the period 1948 to 2016.<sup>4</sup> By contrast, dual-earner couples have faced marriage penalties on average since a change in law in 1969, when marriage penalties were first made common.<sup>5</sup> Moreover, although Congress moved to reduce or eliminate marriage penalties as part of the Bush tax cuts,<sup>6</sup> recent estimates suggest that about 40% of

<sup>(1994);</sup> Edward McCaffery, TAXING WOMEN (1997); Michael J. McIntyre & Oliver Oldman, *Taxation of the Family in a Comprehensive and Simplified Income Tax*, 90 HARV. L. REV. 1572 (1977); Boris I. Bittker, *Federal Income Taxation and the Family*, 27 STAN. L. REV. 1389 (1975). *See also* Anne Alstott, *Updating the Welfare State: Marriage, the Income Tax, and Social Security in the Age of Individualism*, 66 TAX L. REV 695 (2014) (arguing that the trilemma should no longer be viewed as central to the taxation of the family given the "deinstitutionalization" of marriage). Yair Listokin in, *Taxation and Marriage: A Reappraisal*, 67 TAX L. REV. 185, 191 (2013), also quite rightly points out that although the trilemma is frequently framed as requiring picking *either* couples or marriage neutrality, violating both principles slightly might be better than upholding one neutrality completely while badly violating the other.

<sup>&</sup>lt;sup>4</sup> See infra, Appendix, Figure A-1 (assuming the standard deduction is taken by the single-earner prior to marriage and by the couple during marriage and the non-working spouse's personal exemption was used prior to marriage). The marriage bonus is on average 5.5% of after federal tax income from 1948-2016.

<sup>&</sup>lt;sup>5</sup> James Alm & J. Sebastian Leguizamon, *Whither The Marriage Tax?*, 68 NAT'L. TAX J. 251, 263 (2015). Marriage penalties were first technically imposed by the creation of head of household status in 1951. *See* Lawrence Zelenak, *Doing Something About Marriage Penalties: A Guide for the Perplexed*, 54 Tax L. Rev. 1, 70 (2000).

<sup>&</sup>lt;sup>6</sup> Pub. L. No. 107-16, §§ 101, 301-302, 115 Stat. 38, 41, 53-54 (codified as amended at I.R.C. §§ 1(f), 1(i), 63(c) (2012)); Lawrence Zelenak, For Better and Worse: The Differing Income Tax Treatments

married couples still face marriage penalties, averaging about \$1,500 per year (or \$28 billion total), while 55% enjoyed marriage bonuses averaging about \$2,300 per year (or \$60 billion total). The remaining roughly 5% of couples saw no change in taxes as a result of their marriage. Even these sizable figures probably understate the size of income tax changes resulting from marriage. The same authors estimate that returning fully to a system of individual taxation would have raised revenue by \$140 billion in 2009, or about 15% of total personal income tax revenue for that year.

Although these tax changes at marriage are longstanding, we know relatively little about how, if at all, they shape marriage decisions. This Article helps to fill that gap by using a natural experiment generated by what Judge Henry Friendly called marriage taxation's "long and stormy history." Specifically, under the federal income tax, the shift to joint taxation in the mid-20<sup>th</sup> century occurred at different times in different states. At the time, joint taxation created only marriage bonuses—whereas marriage had been largely tax neutral before—because it permitted "full income

of Marriage at Difference Income Levels, 93 N. CAROLINA L. REV. 783, 807 (2014).

<sup>&</sup>lt;sup>7</sup> See Alm & Leguizamon, supra note 5, at 261. The number of taxpayers facing marriage penalties is arguably inflated (and the number receiving bonuses is therefore likewise arguably too low) because the authors' baseline is the couple's most advantageous tax position if unmarried, including having the higher earner file as head of household if the couple has children. Some people would think of the marriage penalty calculation as being most naturally done relative to a system with only individual filing. This is particularly true because head of household status itself exists (at least originally) only to provide some of the tax benefits of marriage to single parents. See Jacob Goldin & Zachary D. Liscow, Beyond Head of Household: Rethinking the Taxation of Single Parents, TAX L. REV (forthcoming 2017).

<sup>&</sup>lt;sup>8</sup> See Alm & Leguizamon, supra note 5, at 273 (reform includes eliminating head of household status); OMB, BUDGET OF THE U. S. GOVERNMENT: FISCAL YEAR 2011 at 152 (listing 2009 personal income tax receipts), available at https://www.gpo.gov/fdsys/pkg/BUDGET-2011-BUD/pdf/BUDGET-2011-BUD.pdf

<sup>&</sup>lt;sup>9</sup> See Druker v. Commissioner, 697 F.2d 46, 48 (2d Cir. 1982) (upholding the constitutionality of marriage penalties).

splitting." Under full income splitting, spouses were taxed like two individuals, except that each was attributed 50% of the couple's joint income, regardless of the actual division of income between them. This lowered the taxes of couples with enough income to be taxed progressively.

As a formal matter, the 1948 Revenue Act was to work a nationwide change by adopting joint taxation with full income splitting. In practice, however, the Act's adoption of joint taxation only affected "common law" states, where each spouse owns her wages and income from assets in her name. Joint taxation with full income splitting had already come years before in the other states, which had laws providing that most income received during marriage becomes the "community property" of both spouses. This was because in 1930, the Supreme Court, in *Poe v. Seaborn*, <sup>10</sup> interpreted the tax code to allow each spouse in community property states to report half of the community income on her individual tax returns, using the rationale that each had an equal interest in the income. Also important for this study, the 1948 Act had no effect on couples in either type of state whose income was low enough that they did not pay income taxes or else were in the lowest bracket. This is an important additional feature of the natural experiment examined in the paper because it can help control for confounding factors which might affect common law and community property states differently and otherwise be confused for the effect of the Act.

The 1948 Revenue Act sets up a natural "difference-in-difference" design to

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<sup>&</sup>lt;sup>10</sup> 282 U.S. 101, 101 (1930).

measure the effect on marriage decisions of the marriage bonus that comes from joint taxation with full income splitting. The tax incentives to marry of residents of the community property states and lower income persons in both types of states did not change in 1948 and their behavior can be used as controls for what would have happened among affected individuals in the common law states without the Act. In particular, using the publicly available sample of the 1960 census, I construct a history of first marriages for Americans in the six years before, and six years after, passage of the Act (1942-1947 and 1948-1953). This allows me to calculate the likelihood a person who has never married weds in a given year (hereinafter simply "the marriage rate"). I then examine whether the marriage rate for higher income people in common law states (the "treated group") increased in the years following the Act, compared to changes in the control groups.

The evidence shows that after the 1948 Revenue Act was enacted, marriage rates of higher income people in common law states increased, both absolutely and,

<sup>&</sup>lt;sup>11</sup> Seaborn could also be used as a similar natural experiment, but, as discussed below, only the rich paid income taxes at the time. Only about 3% of American adults filed an income tax return in 1930, compared with about 60% in 1947. See infra, note 64. The small population affected by Seaborn, as well as data limitations in the 1940 census, limit our ability to study the effect of the case with sufficient precision.

<sup>&</sup>lt;sup>12</sup> The 1948 Revenue Act was enacted April 2, 1948 after Congress overrode President Truman's veto and became effective for the entire 1948 tax year. Pub. L. No. 471, 80th Cong., 2d Sess. Truman twice vetoed similar legislation in 1947. *See* Stanley S. Surrey, *Federal Taxation of the Family: The Revenue Act of 1948*, 61 HARV. L. REV. 1097 (1948). To the extent some couples in common law states married in 1947 in anticipation of joint taxation with income splitting, this will cut against my finding an effect from the 1948 Act because these marriages increase the baseline marriage rate in the period before the Act.

<sup>&</sup>lt;sup>13</sup> I will sometimes refer to higher income people in common law states as the "treated or treatment group" to remind the reader as simply as possible whose marriage incentives were changed by the 1948 Act. This language is common in economics and derives from randomized controlled trials in medicine in which there is a treatment and control (placebo) group.

more importantly, relative to the control groups. <sup>14</sup> For example, at the aggregate level, the marriage rate among treated men increased from an average of 8.9% in the six years before the Act to 10.1% in the six years after (or 1.2%), while the marriage rates of their higher income counterparts in the community property (control) states increased only from 9.7% to 10.2% (or 0.5%). By contrast, marriage rates among low income men showed the opposite pattern. Among those men, marriage rates rose faster in community property states (rising 1.4% compared to 1.0%). This rough cut of the data intuitively suggests that confounding factors were not driving the faster increase in the marriage rate among treated men in common law states because that pattern does not hold among the untreated, lower income men.

In the analysis below, I adjust for the behavior of the control groups and a variety of other individual factors in a difference in difference regression model. I estimate that treated men in common law states married 3 to 5 months sooner on average than absent the 1948 Act. This primarily represents men marrying sooner, rather than the Act inducing men who would not otherwise have married to wed. Given that unmarried cohabitation was socially unacceptable at the time—presumably adding to the underlying significance of a couple's decision to marry—couples appear to have been surprisingly sensitive to tax considerations in making this decision. <sup>15</sup>

The Act also appears to have indirectly caused other important changes in couples'

<sup>&</sup>lt;sup>14</sup> "Higher" and "lower" income are defined in the Data section, infra.

<sup>&</sup>lt;sup>15</sup> See, e.g., Lawrence Zelenak, For Better and Worse: The Differing Income Tax Treatments of Marriage at Difference Income Levels, 93 N. CAROLINA L. REV. 783, 792 (2014) (arguing that when cohabitation was socially unacceptable, we would not expect marriage bonuses to have large effects on marriage decisions).

lives, with treated couples having more children. On average 8 in 100 affected couples is estimated to have had an extra child as a result of the Act. This makes sense both because the Act seems to have caused couples to marry younger and reduced married women's financial incentives to participate in the labor force by effectively increasing their marginal tax rate. Both factors pushed couples toward having more children. Moreover, the 1948 Act increased the take-home income of couples at the beginning of the Baby Boom, which also likely allowed them to have more kids.

Understanding how couples reacted to marriage bonuses in the Post-War period reveals a previously unrecognized role for federal tax policy in increases in marriage and fertility during the Baby Boom. Moreover, it can also shed new light on the long running debate about the appropriate tax treatment of marriage. By maintaining joint taxation since 1948, the United States has broken with a global trend over the latter part of the 20<sup>th</sup> century of countries moving from joint to individual taxation of marriage. In 1970, just six of twenty-two developed countries used individual taxation, while the rest, like the United States, used joint taxation.<sup>17</sup> From 1970 to 1990, however, ten of those countries, including the United Kingdom and New Zealand, switched to some

<sup>&</sup>lt;sup>16</sup> During this period, the vast majority of married women earned less than their husbands if they worked outside the home. Under individual taxation, married women would therefore tend to be taxed in lower brackets, but under joint taxation women's marginal income would be taxed at a higher rate because their husband's income would drive up the couple's bracket. *See infra* note 30 and accompanying text.

<sup>&</sup>lt;sup>17</sup> See Congressional Budget Office, For Better or Worse: Marriage and the Federal Income Tax, 59 (1997) (discussing joint taxation among members of the Organization for Economic Development and Cooperation (OECD))

form of individual taxation.<sup>18</sup> No developed country switched from individual to joint taxation.

Scholars have strenuously debated whether the United States should join those other countries. The arguments for choosing either couples neutrality (and joint taxation) or marriage neutrality (and individual taxation) invoke more basic concepts of tax fairness and efficiency. The results of this Article strengthen the efficiency case for marriage neutrality, i.e., the case stemming from the view that the choice to marry should not be distorted by its tax effects. The more sensitive Americans are to taxes in making these decisions, the greater the efficiency cost from joint taxation. Thus, to the extent one puts any weight on the desirability of not having taxes directly shape whether a couple marries or not, these results augment the case for returning to individual taxation of married couples.

To the extent the government instead wishes to promote marriage, the results imply that using the tax code can be effective in doing so. Nevertheless, joint taxation

<sup>20</sup> See Listokin, supra note 3, at 191; see also Alm & Leguizamon, supra note 5 (noting the efficiency costs of distorting marriage decisions).

<sup>&</sup>lt;sup>18</sup> Most of these countries adopted individual taxation for wages and salary only, while pooling unearned income among the spouses, and then taxing it either to the higher earner or apportioning it to the spouses by formula. Thus these systems are to some extent a hybrid: individual taxation for wage and salary income and joint taxation for capital income. *See id*; *see also* Oliver Oldman & Ralph Temple, *Comparative Analysis of the Taxation of Married Persons*, 12 STANFORD L. REV. 585, 585-86 (1960) (discussing the tax systems of various countries before the trend towards individual taxation began).

<sup>&</sup>lt;sup>19</sup> See, supra note 3.

<sup>&</sup>lt;sup>21</sup> In economic models, it is often assumed that taxes have no impact on the decision to get married. For example, the most prominent theory article on joint taxation makes this assumption. *See* Henrik Jacobsen Kleven, Claus Thustrup Kreiner & Emmanuel Saez, *The Optimal Income Taxation of Couples*, 77 ECONOMETRICA 537 (2009). All modeling requires simplification, but my results suggest that this model omits a reasonably significant feature of the optimal tax problem. I thank Zach Liscow for pointing this out.

with full income splitting for all married taxpayers remains a poor tool for encouraging marriage relative to providing a credit of fixed size to all married taxpayers. The vast majority of the benefits from joint taxation with full income splitting accrue to the richest taxpayers, whom the evidence indicates are less sensitive, per dollar, to tax incentives to marry. Moreover, dual income couples, who now make up a substantial majority of all couples, receive little or no benefits. And joint taxation with income splitting causes a host of other problems. For example, it reinforces gender roles by discouraging married women, where they are the lower earning partner in a heterosexual relationship, from working outside the home and this distortion is also quite inefficient economically.<sup>22</sup>

The remainder of this paper is divided into six parts. The first reviews the literature on how the income tax affects marriage decisions. The second provides background on community property and gives the history of how community property income was taxed by the federal government, leading to *Seaborn* in 1930 and eventually the 1948 Act. The third discusses the census data used in this study. The fourth offers the primary results and analyzes the robustness of the result. The fifth discusses the main results and their implications for policy. The sixth briefly concludes.

#### LITERATURE

This paper contributes generally to a rich literature empirically estimating how

<sup>&</sup>lt;sup>22</sup> See, e.g., Zelenak, supra note 3, at 365.

economic factors affect marriage decisions, and more directly to a smaller literature on the role of U.S. taxes. The earliest attempt to empirically identify the impact of U.S. income taxes used aggregate data on the U.S. marriage rate and the size of the marriage penalties and bonuses through time.<sup>23</sup> It found a relationship between taxes and marriage, but the reliability of such aggregate analysis is low because it cannot control for unobserved underlying variables that over time correlate with changes in tax penalties/bonuses and also affect marriage rates. For example, the loosening of social attitudes toward marriage starting in the 1960s correlates with increases in marriage penalties through time, making it difficult to ascertain how important these penalties were in explaining the drop in marriage rates. Later papers are more convincing as they tried to estimate this relationship using data at the individual level. The papers which most convincingly identify a causal relationship between marriage and taxes showed that "notches" in the tax code (or transfer system) have an impact on the timing of marriage.<sup>24</sup> These notches are places where, by slightly adjusting timing of marriage, taxpayers can significantly change their taxes (or benefits). These studies are useful in

<sup>&</sup>lt;sup>23</sup> See, e.g., James Alm & Leslie A. Whittington, *Income Taxes and the Marriage Decision*, 27 APPLIED ECON. 25 (1995). For summaries of the literature, see James Alm, Stacy Dickert-Conlin & Leslie A. Whittington, *Policy Watch: The Marriage Penalty*, 13 J. ECON. PERSPECTIVES 251 (1999); Nancy Burstein, *Economic Influences On Marriage And Divorce*, 26 J. POLICY ANALYSIS AND MGM'T 387 (2007).

<sup>&</sup>lt;sup>24</sup> See James Alm & Leslie A. Whittington, *Income taxes and the Timing of Marital Decisions*, 64 J. PUBLIC ECON. 219 (1997) (finding that marriage penalties often cause couples to delay marriage until the next year (e.g., from November to January) to avoid being taxed as though they were married for the entire year); Michael J. Brien, Stacy Dickert-Conlin & David A. Weaver, *Widows waiting to wed?(Re) marriage and economic incentives in social security widow benefits*, 39 J. Human Resources 585 (2004) (Widows lose claims on their deceased husbands' social security spousal benefits if they remarry before 60 and the authors find this has a significant effect on the timing of remarriage around women's 60<sup>th</sup> birthday.).

showing that couples are paying attention to taxes when deciding when to marry within a short time frame, but the importance of these timing games is usually limited.

Scholars have also used data on individual marriage decisions to study the broader effect of marriage penalties and bonuses. This work finds that income tax incentives affect marriage rates, although the effects are of moderate size. For example, James Alm and Leslie Whittington estimated that increasing marriage penalties by 10% led to a 13% fall in the likelihood of first marriage in a year for women near the mean of their sample from 1968 to 1992. These studies are still hampered, however, by the lack of a natural experiment which makes it difficult to disentangle whether the estimates actually reflect the causal effect of income tax incentives or other factors.

Similarly, a number of studies have examined the effect of transfer programs embedded in the tax code (e.g., the Earned Income Tax Credit) and those outside it (e.g., welfare programs like AFDC and later TANF). Lower income people may face proportionally quite large marriage penalties (and sometimes bonuses) from the ways these programs treat the marriage of potential participants. Most of these studies find the programs affect marriage decisions, but do so in relatively modest ways.<sup>26</sup>

Non-tax economic factors have been shown to substantially affect marriage rates

<sup>&</sup>lt;sup>25</sup> See James Alm & Leslie A. Whittington, For Love or Money? The Impact of Income Taxes on Marriage, 66 Economica 297 (1999); see also Hector Chade & Gustavo Ventura, Income Taxation And Marital Decisions, 8 REV. ECON. DYNAMICS 251 (2005) (creating an analytical model of how marriage decisions are made and calibrating that model using data).

<sup>&</sup>lt;sup>26</sup> See Burstein, supra note 23, at 411-418 (summarizing the literature on the effect of AFDC/TANF, the EITC, food stamps, etc). The behavioral effects of these programs on marriage may be blunted in part by how difficult it is for participants (and researchers) to understand "byzantine interactions of the[m]" and what the ultimate effect of getting married will be on take home income. See id.

and so care must be taken to be sure any apparent relation between tax changes and marriage rates is not really the result of these other economic causes. Mathew Hill, using data similar to mine, has shown that marriage rates fell in areas hit harder by the Depression, as measured by retail sales activity. Hill attributes this to male unemployment and lack of disposable income.<sup>27</sup> A number of other studies also document the effect of wages and employment on marriage in the United States and elsewhere.<sup>28</sup> Therefore, I control for economic conditions at the state level in the analysis below. In addition, I estimate a "fixed effects model" that will control for the effect of any other relevant economic factors to the extent the factors do not change over the time period being studied.<sup>29</sup>

Prior literature also empirically confirms that the coming of joint taxation also

<sup>27</sup> See Matthew Hill, Love in the Time of Depression: The Effect of Economic Downturns on the Probability of Marriage, 75 J. Econ. History 163 (2015). See also Namkee Ahn & Pedro Mira, Job Bust, Baby Bust?: Evidence from Spain, 14 J. POPULATION ECON. 505 (2001) (finding male unemployment decreases the probability of marriage); Humphrey Southall & David Gilbert, A Good Time to Wed?:

Marriage and Economic Distress in England and Wales, 1839-1914, 49 ECON. HIST. REV. 35 (1996).

<sup>&</sup>lt;sup>28</sup> The literature is substantial. A few papers on the U.S. include: Michael C. Keely, *The Economics of Family Formation*, 15 ECON. INQUIRY 238 (1977) (finding all else equal in the 1960s men with higher wages married slightly sooner, while the opposite is true for women); Ted Bergstrom & Robert F. Schoeni, *Income Prospects and Age-at-Marriage*, 9 J. POPULATION ECON. 115 (1996) (evidence that the effect Keely finds is confined to men marrying under age 30, and the opposite effect for those who have not married by 30); Megan M. Sweeney & Maria Cancian, *The Changing Importance of White Women's Economic Prospects for Assortative Mating*, 66 J. MARRIAGE & FAMILY 1015 (2004) (showing an increasing correlation between a wife's pre-marriage income and her husband's income for U.S. marriages).

<sup>&</sup>lt;sup>29</sup> Intuitively, fixed effects allow one to compare only similar individuals in the model. For example, I use state, age, and income group fixed effects, which means that my estimates implicitly only compare persons from the same state, of the same age group, and same income group. Mechanically this is implemented by (in essence) including a separate "indicator" variable for each possible combination of state, age, and income group in the regressions below. Many factors which affect the marriage rate, say of high income men in Michigan aged 20-24, will presumably not change significantly over the twelve year period under study. Using fixed effects, those factors will be controlled for, even if they cannot be directly observed and will be represented in the indicator variable associated with that state, age, and income group combination.

altered work incentives. From 1930 to 1948, a working woman in a community property state would usually see her marginal tax rate increase if she married a high earning man, because her tax rate was driven up by her husband's income. Theory suggests this would reduce her incentives to continue working outside the home. In common law states during this period, where each member of a couple was taxed individually, this was not true; there taxation of a wife's income would start at the lowest bracket, no matter her husband's income. As noted, the 1948 Revenue Act extended joint taxation with income splitting to the common law states. Thus, in these states, suddenly, a wife earning less than her husband saw her marginal tax rate driven up by her husband's income. Using a study design similar to this one, Sara LaLumia examined the impact of the 1948 changes on labor force participation by women in higher income households in common law states, with similar women in community property states as a control.<sup>30</sup> She found that the 1948 changes reduced women's participation in the workforce in common law states.<sup>31</sup>

This study contributes to the literature along a couple of dimensions. First, the paper examines a clean natural experiment with multiple control groups. This provides

<sup>&</sup>lt;sup>30</sup>See Sara LaLumia, The Effects of Joint Taxation of Married Couples on Labor Supply and Non-Wage Income, 92 J. Pub. Econ. 1698 (2008).

<sup>&</sup>lt;sup>31</sup> It is worth noting that LaLumia's work shows that income splitting affects marriage incentives for at least two reasons. The first is the "bonus" that a married couple will reap if they do not change their work choices after the new tax system comes into place. One can (roughly) imagine this as the effect of keeping the unit of taxation on the individual, but having the government providing a credit equal to the amount the couple's taxes would decline under joint taxation if they do not change their labor decisions. Second, joint taxation will affect the menu of after tax wages a married couple may choose from usually by decreasing the husband's marginal rate and increasing the wife's. Some couples may find this new menu of after tax wages more appealing than the old menu and that could influence marriage incentives as well (although others, of course, could find the new menu less attractive). In addition, even the effect of the "bonus" itself can be decomposed into an income and substitution effect.

an unusually good opportunity to understand the effect of joint taxation with full income splitting on marriage during the Post War period and to be more confident that the estimates are not driven by confounding factors. The results suggest the role of federal tax policy in increases in marriage during this period (and in the Baby Boom) is greater than has been previously understood. This is a matter of intrinsic historic interest.

Second, the results may be informative about the effect of federal tax policy today on marriage decisions of some parts of the population. This exercise is admittedly more fraught. Inferring lessons for today from the results of this paper involves a tradeoff: the natural experiment provides clarity arguably unavailable using modern data, but requires one to make strong assumptions about how couples today compare to those many decades ago. Notwithstanding the passage of time, I argue below that the estimates can reasonably viewed as a floor on the effect of marriage bonuses for single-earner couples making \$50,000 to \$110,000. Again, this is because the marriage bonuses embedded in the tax code have significantly increased for this group and the rise of cohabitation is very likely to make couples more sensitive to tax considerations in marrying. Even taking a more modest view of our ability to quantitatively compare the past to today, my results qualitatively suggest that federal tax policy continues to exert an important influence on marriage decisions today.

#### LEGAL BACKGROUND AND HISTORY

## A. Community Property

Two marital property regimes prevail in the United States: community property and separate property, the latter being followed in common law states.<sup>32</sup> These regimes are quite different. In common law states, income earned by each spouse remains her own separate property. The same holds for income derived from property legally owned by one spouse, even if the property was bought with funds from a joint bank account.<sup>33</sup> In contrast, in community property states "spouses retain separate ownership of property brought to the marriage, but they own all earnings and acquisitions from earnings during the marriage in equal, undivided shares."<sup>34</sup>

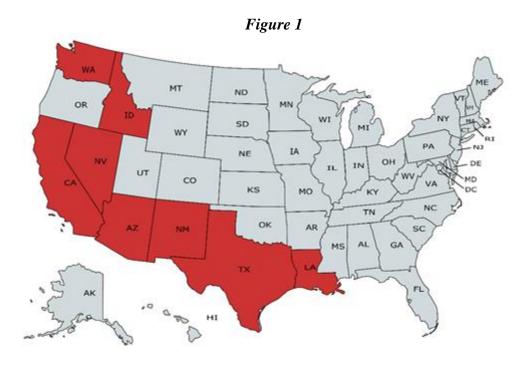
States have different marital property systems because of their differing legal origins. Community property exists in states with marriage law based in French and Spanish settlement, while common law states derive their marital rules from England. In 1930 at the time of *Seaborn*, Arizona, California, Idaho, Louisiana, Nevada, New

<sup>&</sup>lt;sup>32</sup> For basic background see JESSE DUKEMINIER & ROBERT SITKOFF, WILLS, TRUSTS, AND ESTATES 512-514 (9th ed. 2013). To avoid confusion I will use "common law states" rather than separate property to refer to this regime because separate property has its own meaning in the community property system.

<sup>&</sup>lt;sup>33</sup> Spouses can enter into various forms of joint ownership, e.g. joint tenancy, if they so choose. Since the 1960s even in common law states legal ownership plays a smaller role in the division of property after a divorce under "equitable distribution" statutes. Such statutes tend to give the judge wide latitude to divide the assets regardless of the nominal owner. During the period in question, though, community property states differed significantly from common law states in how property was divided at divorce. For example, *Newsweek* reported that "[i]n [common law] states, if a husband left his wife or if a wife went home to mother, the best she could hope for was a nominal support allowance. In any community property state, the woman automatically came out with half the family bankroll." *Community Dilemma*, Oct. 13, 1947, at 64-65.

<sup>&</sup>lt;sup>34</sup> DUKEMINIER & SITKOFF, *supra* note 32, at 512. It should be noted that within the community property states, laws vary some about narrower questions like how to characterize income received during marriage from separate property.

Mexico, Texas, and Washington a community property system. These states are highlighted in red in the map below.<sup>35</sup>



B. History of the Taxation of Marriage and the 1948 Revenue Act

The modern<sup>36</sup> federal income tax began its life "dominated by an individualistic approach" to family taxation.<sup>37</sup> Each spouse was taxed on the income she or he earned. This ensured marriage neutrality. However, marriage neutrality also meant that in a

<sup>&</sup>lt;sup>35</sup> In the 1980s Wisconsin adopted community property, but for all periods relevant to this paper it was a common law state. *See* Palma Maria Forte, *Wisconsin Marital Property Act: Sections in Need of Reform*, 79 MARQ. L. REV. 859 (1995). As discussed below, five states and Hawaii, which was then a territory, passed community property laws shortly before 1948 to try to obtain the tax advantages under *Seaborn*.

<sup>&</sup>lt;sup>36</sup> The United States also had an income tax during the Civil War (though it collected little revenue) and 1895, but the latter tax had to be abandoned after the Supreme Court ruled large parts of it unconstitutional in Pollock v. Farmers' Loan & Trust Company, 157 U.S. 429 (1895).

<sup>&</sup>lt;sup>37</sup> Bittker, *supra* note 3, at 1400.

progressive tax system, two married couples with the same total income could pay very different taxes. Two-earner couples would pay less tax than single-earner couples with the same income.

In 1913, Congress passed the first modern income tax under the newly approved 16<sup>th</sup> Amendment. The statute purported to tax "net income arising or accruing from all sources...to every citizen of the United States." The 1916 Revenue Act changed the language to tax "the net income of every individual." This language "of every individual" persisted in each revenue act enacted until *Seaborn* in 1930.<sup>40</sup>

The question of how for tax purposes to assign income to spouses in community property states proved thorny from the start. Until 1919 the Treasury held that the husband was taxable on all community income. In 1919 the Treasury adopted a compromise position. Income from what the Treasury thought of as genuinely belonging to the couple as a whole—e.g., bonds purchased after marriage—would be split 50:50 on each return. A higher earning husband's salary, however, would be taxed to him in community property states despite the fact that the wife had an identical property interest in the salary as in the income from bonds and other capital. This

<sup>&</sup>lt;sup>38</sup> Act of Oct.3, 1913, ch. 16, §II(A)(I), 38 Stat. 166.

<sup>&</sup>lt;sup>39</sup> Act of Sept.8, 1916, ch. 463, §I(A), 39 Stat. 463.

<sup>&</sup>lt;sup>40</sup>Poe v. Seaborn, 282 U.S. 101, 101 n. 1 (1930). *See also* Dennis J. Ventry Jr., *Saving Seaborn: Ownership Not Marriage as the Basis of Family Taxation*. 86 IND. L.J. 1459 (2011) for a quite complete history of the lead up to *Seaborn*.

<sup>&</sup>lt;sup>41</sup> See Douglas Blount Maggs, Community Property and the Federal Income Tax, 14 CAL. L. REV. 351, 354 (1926). Maggs reports that "[u]ntil the latter part of 1919 none of the Treasury rulings were made public; for that reason references to specific rulings made before that time cannot be given." *Id.* 

<sup>&</sup>lt;sup>42</sup> *Id.* at 355; Bittker, *supra* note 3, at 1406. Along with salaries and wages, income from separate property purchased before the marriage was to be taxed to the spouse that owned it. This interpretation

treatment of a husband's salary essentially mirrored what was allowed in common law states. In those states, salaries and wages could not be split between the spouses via intra-family gift or agreement, <sup>43</sup> but income from capital could be reapportioned using intra-spousal gifts. <sup>44</sup> This equivalence with the tax treatment of couples in common law states was short-lived, however. In 1920 and 1921 the Attorney General concluded that community property states, except California, gave the wife a vested interest in one half of all community income and thus required splitting *all* community income, including wages and salaries. <sup>45</sup>

In 1926 the Supreme Court upheld California's exclusion in *Robbins v. United States*. The Court, via Justice Holmes, agreed with the government that California's law gave the wife a "mere expectancy," thus validating California's exclusion from true community property treatment. But the Court went further and concluded that—even if the wife's interest were instead vested under California law—Congress could tax all community income to the husband "if it so minded." After reviewing the power of the

was tenuous in Idaho, Louisiana and Texas because in those states the income from separate property is (usually) community property. Maggs, *supra* note 41, at 353; *see also* IRS, PUBLICATION 555 at 4 n.1 (2014).

<sup>&</sup>lt;sup>43</sup> See Lucas v. Earl, 281 U.S. 111 (1930), although the law on splitting income through intra-family agreements was relatively unclear at the time Treasury made its 1919 ruling.

<sup>&</sup>lt;sup>44</sup> For example, a husband could use his after-tax salary to buy a bond in his wife's name. Such a gift would make the interest on the bond taxable to the wife rather than the husband. See Bittker, *supra* note 3, at 1401 and 1403. La Lumia finds a decline in women in common law states reporting non-wage income following the 1948 Act. This is consistent with couples previously shifting income to avoid taxes. However, even in relatively high income households, 90% of women reported (to the census) that they had less than \$50 of non-wage income, which suggests that the majority of high income couples did not make use of income shifting. La Lumia, *supra* note 30, at 1711.

<sup>&</sup>lt;sup>45</sup> See 32 Ops. Att'y Gen. 298; see also Maggs, supra note 41, at 355; Bittker, supra note 3, at 1406. In California, the Attorney General found that during her husband's life "the wife has no vested interest in the community property, her interest therein being a mere expectancy." 32 Ops. Att'y Gen. 435, 456.

<sup>&</sup>lt;sup>46</sup> 269 U.S. 315 (1926).

husband to manage the property,<sup>47</sup> the Court concluded that in fact "it was intended [by Congress] to tax him for the whole."<sup>48</sup> Contemporary commentators viewed the opinion as "in effect an invitation (or a command) to the Treasury to reconsider" its decision to allow income splitting in community property states other than California.<sup>49</sup>

Following *Robbins*, the Attorney General withdrew his 1920 and 1921 opinions and the Treasury moved to tax all community income to the husband. This led to *Seaborn*, in which a Washington couple challenged the Treasury's ruling that the husband had to include all community income. There the Supreme Court reversed course and held that all community income should be split by the spouses. The Court found that the "of" in "net income of every individual" must connote ownership<sup>50</sup> and that under the laws of Washington "the entire property and income of the community can no more be said to be that of the husband, than it could rightly be termed that of the wife." Taking a more formal approach, the Court found that the husband's broad managerial powers under the family law of the day were not relevant; the wife's *rights* in the property were equal to his. The opinion all but ignores *Robbins*, dismissing it as specific to California law and ignoring its conclusion that Congress intended to tax all

<sup>&</sup>lt;sup>47</sup> In Holmes' usual high rhetoric, the Court found that "he who has all the power [should] bear the burden and [thus]. . . the husband [is] the most obvious target for the shaft." *Id.* at 328. Moreover, the Court observed that if the wife was unable or unwilling to pay, the government would apparently be unable to seize community property. *Id.* ("[B]ut the [community] fund taxed, while liable to be taken for his debts, is not liable to be taken for the wife's . . . so that the remedy for her failure to pay might be hard to find.").

<sup>&</sup>lt;sup>48</sup> *Id.* at 327.

<sup>&</sup>lt;sup>49</sup> Maggs, *supra* note 41, at 362.

<sup>&</sup>lt;sup>50</sup> 282 U.S. at 109.

<sup>&</sup>lt;sup>51</sup> *Id.* at 113

California community income to the husband even if the wife had a vested interest in it.<sup>52</sup> It is difficult to explain the Court's seemingly abrupt reversal. It is true that Holmes' conclusion about Congress' intent was dicta, but it is still puzzling that five Justices, including Justice Holmes, joined both *Robbins* and *Seaborn* taking seemingly opposite interpretations of the same statutory language just four years later.<sup>53</sup>

In sister cases released the same day as *Seaborn*, the Court held that community income should also be split in Arizona, Texas, and Louisiana.<sup>54</sup> The Treasury quickly allowed the same treatment to Idaho, Nevada, and New Mexico. Following legislative changes to California's community property law, the Court allowed Californians to begin splitting community income starting in 1931.<sup>55</sup> Thus beginning in 1931 there was a sharp disparity in the tax treatment of married couples' incomes between the eight community property states and common law states. This led to a married couple in community property states usually having lower taxes than the same two persons if they were not married, a difference that largely did not exist in the common law states.<sup>56</sup>

The disparity between community property and common law states persisted

<sup>&</sup>lt;sup>52</sup> *Id.* at 116.

<sup>&</sup>lt;sup>53</sup> In *Robbins*, Justice Sutherland dissented (without opinion) and Justice Stone recused himself. Between the cases, Chief Justice Taft resigned, and Justice Roberts, who wrote the unanimous opinion in *Seaborn*, was appointed. In *Seaborn*, Chief Justice Hughes and Justice Stone (again) recused themselves.

<sup>&</sup>lt;sup>54</sup> See Bittker, supra note 3, at 1408.

<sup>&</sup>lt;sup>55</sup>See United States v. Malcolm, 282 U.S. 792 (1931).

<sup>&</sup>lt;sup>56</sup> As discussed in note 44, La Lumia's work suggests that the vast majority of higher income couples in common law states did not shift significant capital income to wives. However, many of the very wealthiest couples did so, and the Treasury at the time believed inter-spousal income shifting accounted for a quite substantial loss of tax revenue. *See* Ventry, *supra* note 33, at 1511 (citing for example *Tax Evasion and Avoidance: Hearings Before the Joint Committee on Tax Evasion and Avoidance*, 75th Cong. 310 (1937)).

until Congress enacted joint filing in 1948.<sup>57</sup> As enacted, joint filing extended community property-style income splitting to all of the common law states. There was considerable activity preceding the 1948 Act, however. Some in Congress had tried to reinstitute uniform income tax treatment for community property and common law states on a number of occasions, as early as 1920 and most notably during 1941,<sup>58</sup> but all attempts failed.<sup>59</sup> In 1939, Oklahoma enacted an optional community property system, attempting to get the same tax treatment as its neighbor Texas, to which Oklahoma claimed it was losing wealthy taxpayers.<sup>60</sup> The Treasury refused to recognize Oklahoma's law and was upheld by the Supreme Court in 1944 because Oklahoma's regime was optional.<sup>61</sup> Not to be deterred, Oklahoma enacted another community property regime in 1945, this one mandatory. The Treasury thus allowed

<sup>&</sup>lt;sup>57</sup> For a history of the 1948 Revenue Act and its impact on the taxation of the family see Stanley S. Surrey, *Federal Taxation of the Family: The Revenue Act of 1948*, 61 HARV. L. REV. 1097 (1948). Surrey called the enactment of joint filing the "one bright spot" in the Act. *Id.* at 1106. Technically we should say that the 1948 Act allowed for the first practical joint filing. Joint filing had been allowed since the early days of the income tax, but because the tax-rates for joint filers were the same as for individuals this made joint filing very unappealing since progressive rates ensured that a couple's taxes would almost always be higher with a joint return.

<sup>&</sup>lt;sup>58</sup> See Bittker, supra note 3, at 1409. The proposed bill in 1941 would have enacted mandatory joint filing, but with rates for joint income the same as for single taxpayers. This form of mandatory joint filing would have created uniform taxation across community property and common law states, but at the same time imposed a very substantial marriage penalty for two earner couples.

<sup>&</sup>lt;sup>59</sup> Congress found it very difficult to pass any legislation removing the favorable treatment from the community property states. In hearings on the 1948 bill Senator Edwin Johnson stated in hearings on the Act that "[y]ou cannot take it away from the [community property states]; we have tried that." (quoted in Surrey, *supra* note 57, at 1105). Likewise, Senator Eugene Milliken of Colorado stated to an expert testifying before the Senate who proposed overturning *Seaborn* legislatively: "The difficulty is that it is not a novel thought. It has been tossed in the hopper around here a number of times. But legislatively it has not been possible to do." *See id*.

<sup>&</sup>lt;sup>60</sup> Stephanie Hunter McMahon, *To Save State Residents: States' Use of Community Property for Federal Tax Reduction*, 27 L. & HIST. REV. 585, 593 (2009).

<sup>&</sup>lt;sup>61</sup> Commissioner v. Harmon, 323 U.S. 44 (1944).

married Oklahomans to begin splitting their income in 1946. It likewise recognized a similar law in Oregon in 1947. When Congress enacted the 1948 Revenue Act, Michigan, Nebraska and Hawaii had very recently passed community property statutes that were as yet unrecognized by the Treasury.<sup>62</sup> Indeed, joint taxation was passed in 1948 in large part to prevent the remainder of the states from simply opting into community property "impetuous[ly]" to get the tax benefits.<sup>63</sup>

It is important to note that the income tax changed substantially between the *Seaborn* decision in 1930 and the 1948 Revenue Act. In 1930 the income tax was paid only by the rich, as it had been since the tax's inception in 1913. About 2.4 million relatively wealthy Americans filed returns in 1930.<sup>64</sup> The nation's insatiable need for revenue to fight World War II, however, turned the income tax into a mass tax. In 1939 the government collected about \$1 billion through the individual income tax, in 1945 it raised more than \$19 billion, an increase of more than 14 fold after adjusting for inflation.<sup>65</sup> The government achieved this increase in revenue by both increasing the number of people paying the tax (through lower exemptions) and by substantially

<sup>&</sup>lt;sup>62</sup> Pennsylvania also passed a community property statute in 1947, but the state supreme court ruled that the statute violated the state constitution. See Note, *Epilogue to the Community Property Scramble: Problems of Repeal*, 50 Colum. L. R. 332, 334 (1950). The five states and Hawaii that had switched to community property quickly reverted after the 1948 Revenue Act. Carolyn Jones argues that concerns that community property gave women too many rights—undermining traditional gender roles—spurred the return to separate property. Carolyn C. Jones, *Split Income and Separate Spheres: Tax Law and Gender Roles in the 1940s*, 6 L. & Hist. Rev. 259 (1988).

<sup>&</sup>lt;sup>63</sup> S. Rep. No. 1013, 80<sup>th</sup> Cong. 2d Sess. 25 (1948).

<sup>&</sup>lt;sup>64</sup> See Annual Report of the Commissioner for Internal Revenue for 1930, 1931, 1932 (Tables displaying number of returns processed from each tax year).

<sup>&</sup>lt;sup>65</sup> Annual Report for the Commissioner for Internal Revenue 1946, 1 ("individual income tax and withholding), both figures are nominal. The cumulative inflation rate between 1939 and 1946 was about 29%.

increasing rates. By 1947, nearly 55 million Americans were filing returns. In 1930 the Code imposed a 1.5% tax on the first \$4,000 of ordinary taxable income after exemptions, and 3% on the next \$4,000. The comparable rates in 1948 were 23% and 33% respectively.<sup>66</sup>

# C. Size of Income-Splitting Tax Advantage

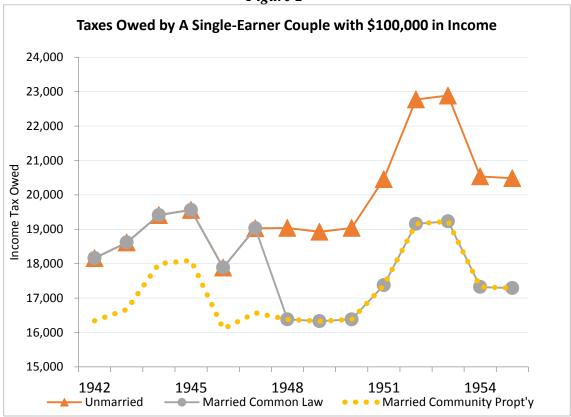
The Treasury rulings (1920-1926) and *Seaborn* (1930) made marriage tax-advantaged for higher income couples in community property states, but this advantage was small for all but the richest citizens until the run up to World War II. For example, even for a reasonably well off single-earner couple with today's equivalent of \$100,000 in income, the marriage bonus was moderate or zero (depending on the assumptions used concerning the couple's pre-marriage taxes) during the period from *Seaborn* until 1940.<sup>67</sup> This bonus increased substantially, however, starting in 1941, and averaged \$3,000 per year from 1948-1953 (or as high as \$5,000 on other assumptions).<sup>68</sup>

<sup>&</sup>lt;sup>66</sup> Based on 1948 rates and using the CPI to update for inflation http://data.bls.gov/

<sup>&</sup>lt;sup>67</sup> Assuming the husband could claim his future wife as a dependent before marriage, there would be no marriage bonus at all because with two personal exemptions, the husband would be taxed in the first bracket only. If the spouse's personal exemption was previously unused, the bonus from *Seaborn* until 1940 averaged \$1,100.

<sup>&</sup>lt;sup>68</sup> Figure 2 assumes the (future) husband or a family member of the future wife could claim the future spouse as a dependent prior to marriage. If not, then the average bonus from 1948-1953 was just over \$5,000.

Figure 2



In 1947, the Treasury estimated that extending income splitting to common law states would cost \$743.5 million (or \$8.2 billion in 2016 dollars).<sup>69</sup> This represented a 5% decline in the *total* individual income taxes collected from common law states.<sup>70</sup> Treasury's prediction appears to have been roughly accurate: after the 1948 Act, revenues from common law states declined 4 percentage points more than in community property states.<sup>71</sup> Full income splitting for married couples remained in

<sup>&</sup>lt;sup>69</sup> John D. Morris, *Inequities in Tax Cited by Treasury*, N.Y. TIMES, June 19, 1947 at 4.

<sup>&</sup>lt;sup>70</sup> See Annual Report of the Commissioner of Internal Revenue for Internal Revenue for Fiscal Year Ended June 1947.

<sup>&</sup>lt;sup>71</sup> See Annual Report of the Commissioner of Internal Revenue for Internal Revenue for Fiscal Year

place until 1969, when Congress moved toward the current system. The 1969 changes reduced marriage bonuses for single-earner couples, and introduced the first marriage penalties for dual-earner couples with similar incomes.<sup>72</sup>

The differences for married couples between individual taxation and joint taxation with income splitting were not just economically important; they also had salience in the popular press. The *Wall Street Journal* featured an article on the results of *Seaborn*. The *Los Angeles Times* featured a breathless front page story about *United States v. Malcolm*, which allowed married California couples to split incomes in 1931. Similarly, Oklahoma and other states' attempts to obtain income splitting for their residents by switching to community property focused attention on the issue, garnering articles in articles in *Business Week*, *Colliers*, *Harper's*, *Newsweek*, and *Time* among others. Not surprisingly, the 1948 extension of income splitting to all common law states garnered even more coverage because it affected a much greater portion of the

Ended June 1949. This figure is derived from comparing revenues collected from June 1948 to June 1949 relative to June 1947 to June 1948—the January to June portion of 1948 should have been largely unaffected the Revenue Act of 1948 since 1948 taxes would not be collected until 1949. Even withholding would not have been affected much since the Revenue Act was not passed until April 2, 1948.

<sup>&</sup>lt;sup>72</sup>See Druker v. Commissioner, 697 F.2d 46, 48 (2d Cir. 1982) (detailing a history of the legal challenges to the "singles penalty/marriage bonuses).

<sup>&</sup>lt;sup>73</sup> Taxes on Community Income, WALL St. J., Dec. 22, 1930 at 2; see also Income Tax Facts, WASH. Post, Feb. 4, 1931 at 11.

<sup>&</sup>lt;sup>74</sup> Community Tax Ruling Studied: Married Man's Salary Held Property of Both, L.A. TIMES, Jan. 21, 1931 at A1 (reporting the holding in *Malcolm* even before the full text of the decision had arrived on the West Coast).

<sup>&</sup>lt;sup>75</sup> See articles in Business Week, Colliers, Harper's, Newsweek, and Time among others cited in Carolyn C. Jones, Split Income and Separate Spheres: Tax Law and Gender Roles in the 1940s, 6 L. & HIST. REV. 259, 268 n.67 (1988). Stanley Surrey, writing in 1948, also noted that "[t]he preceding [history concerning income-splitting is] familiar even to non-tax experts, for this phase of federal taxation has been widely discussed." See Surrey, supra note 57, at 1104.

population and the Act created much larger savings for those couples than did *Seaborn*. During the first tax season when residents of common law states could split incomes, numerous papers featured stories about the tax savings allowed by joint filing.<sup>76</sup>

#### **DATA**

The data used in this study are drawn from the 1960 decennial census, available as part of the Integrated Public Use Microdata Series (IPUMS). The 1960 census asked 25% of the population about when they married for the first time. The publicly available sample is built solely from this portion of the population, which allows me to create a year-by-year record of first marriages from 1942 to 1953 for about 1 million people. Obtaining yearly data is important because it allows me to look at changes in marriage rates over this relatively short window around the 1948 Revenue Act, making my estimate of the impact of the tax change more reliable than looking at changes between one decennial census and another.

The See, e.g., Permit Marital Tax Split In All States In Filing: Results in Lower Levy in Most Cases, Chicago Tribune, Feb. 3, 1949 at C7; Tax Angles: Joint Returns Save Money for Many, Boston Globe, Feb. 4, 1949 at 18; Suggestions On Income Tax Returns: Joint Report Works Out Nearly Always Cheapest Procedure, Hartford Courant, Feb. 22, 1949 at 3; Joint Return Eases Family Income Taxes: Offers Privilege \$3,600 Starting Point One Return for Two, Christian Science Monitor, Dec 7, 1948 at 2. Interestingly, the instructions to the individual tax form from 1930 to 1947 do not appear to have discussed community property income splitting. Perhaps this was Treasury's small way of thumbing its nose at Seaborn.

<sup>&</sup>lt;sup>77</sup>The 1950 census only requested marriage dates from the 5% of citizens who received the long-form. Since the publicly available portion is only 1% of this 5%, there is not enough data to construct year-by-year measures for a large enough population. Moreover, the effect of the 1948 Revenue Act is likely to have extended beyond 1950.

<sup>&</sup>lt;sup>78</sup> Some individuals died between 1948 and 1960. However, this will primarily be a problem if there is differential mortality between common law and community property states and this differential mortality is correlated with changes in the marriage rate across income groups. I see no reason to think this is likely, especially because those most likely to be affected by the policy were in their 20s or early 30s around 1948 and therefore were quite likely to survive until 1960.

<sup>&</sup>lt;sup>79</sup> I can only observe year-by-year changes when people entered their first marriage, rather than all

Below, I run my analysis using each of three measures to proxy for those with enough income to be affected by the 1948 Act: education, 1960 income projected back to income around 1948 by adjusting for inflation and economic growth, and a prediction of income in the period around 1948 based on a person's occupation, education, age, and state of residence. All the measures produce fairly comparable results, but in my main specification I use education levels. This is in keeping with LaLumia's related work, which uses college education as an indicator for those affected by income splitting. Married men with at least two years of college education on average earned about \$5,000 in 1950, enough to generate important tax savings from income splitting with a spouse who did not work or who was paid significantly less. By contrast, the median education for married men in 1950 was having completed 9<sup>th</sup> grade. Men who completed 9<sup>th</sup> grade or less, earned \$2,500 per year on average with a substantial majority not making enough to benefit from income splitting. I use these education levels as the primary definition of high and low income.

I focus on the marriage rate of men because I can use various measures of

marriages.

<sup>&</sup>lt;sup>80</sup> See LaLumia, supra note 30.

<sup>81 1950</sup> Public Use Census Data (author's calculations).

<sup>&</sup>lt;sup>82</sup> This means that in the primary specification "middle" education men who completed 10<sup>th</sup> grade but less than two years of college are excluded as too likely to contain both a significant fraction of men who are affected by income splitting, and a large proportion who are not. Regardless, the results are not sensitive to other ways of defining high and low income to include those men in the analysis. As shown in the robustness section, the results are similar if high school graduates are considered higher income, and all those who did not complete high school are deemed lower income.

My measures of who was affected by the Act are imperfect, and will include some individuals who did not have enough income to be affected. This will "attenuate" my results toward 0. Put differently, this means that my results should be a lower bound on the actual effect of the Act.

income to confirm my primary results. That is not possible for women because the majority of women in higher income households were not in the labor force. The marriage behavior of women, however, closely tracks that of men. I examine marriage rates among women in the robustness section, using high-school graduates as a proxy for those women who are most likely to enter into a marriage where income splitting is valuable.<sup>83</sup>

### A. Summary Statistics and Graphs of Differences

Table 1 presents summary data on men in common law and community property states immediately before the 1948 Revenue Act. Overall residents of the two kinds of states look quite similar. It is true that men in community property states were somewhat better educated, having completed a bit less than half-a year of additional schooling on average. One should not be overly concerned that the education figures are not identical, however. To start with, the high income group looks very similar across the two types of states. Moreover, differences between the residents of the two types of states will not bias the estimates of the model run below if one fully controls for them in the regression. Indeed, even assuming that fully controlling for the differences between the residents of the two types of states in the regression is not possible, the model will still produce unbiased results so long as those differences are largely consistent through the twelve-year period of the study. Economists refer to this

<sup>&</sup>lt;sup>83</sup> In 1950 more than half of married female high-school graduates lived in a household which would benefit from income splitting, while far fewer of those who did not graduate from high school lived in such a household.

as a "common trend" requirement. There is good reason to believe in a common trend here: in the six years prior to the Act there was a 90% correlation between the marriage rates among high income men across the two types of states, and a 92% correlation<sup>84</sup> after adjusting for the marriage behavior of low income men.

 $<sup>^{84}</sup>$ =  $corr\left(\left(MR_{common,hi\ inc}-MR_{common,low\ inc}\right),\left(MR_{community,hi\ inc}-MR_{community,low\ inc}\right)\right)$  from 1942 to 1947 where  $MR_{i,j}$  represents the marriage rate in state type i (common or community) of men of income type j (high or low income).

Table 1 **Summary Statistics Adult Men in 1947** 

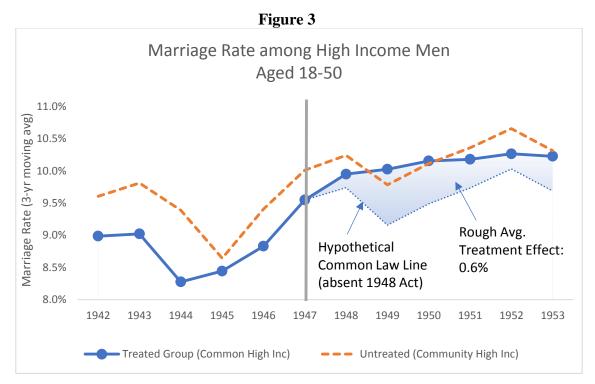
	Community Prop.	Common Law
All Adult Men		_
% White	90.6%	90.7%
% Aged 16-19	5.7%	5.2%
% Aged 20-24	14.3%	13.5%
% Aged 25-29	14.6%	13.7%
% Aged 30-34	13.2%	13.0%
% Aged 35-39	12.1%	12.0%
% Aged 40-49	19.6%	20.0%
% Aged 50-59	12.5%	14.1%
% Aged 60+	8.0%	8.6%
% Ever Married	73.7%	73.2%
Avg Years Education <sup>1</sup>	9.94	9.56
% 2 years of College +	18%	14%
% 10th Grade - 1 Yr College	38%	35%
% 9th Grade or less	44%	51%
Number of Men	79,452	342,435
<b>High Income Men<sup>2</sup></b>		
% White	95.8%	96.3%
% Aged 16-19	8.4%	8.1%
% Aged 20-24	20.9%	20.0%
% Aged 25-29	18.7%	17.9%
% Aged 30-34	14.2%	13.4%
% Aged 35-39	11.3%	11.3%
% Aged 40-49	14.8%	16.9%
% Aged 50-59	7.7%	8.4%
% Aged 60+	4.0%	4.0%
% Ever Married	62.5%	61.5%
Number of Men	14,013	47,079

Source: 1960 census iPUMs sample. Adults defined as persons 16 or older.

Counting 1st grade as the first year of education.

<sup>&</sup>lt;sup>2</sup> Defined as men who completed at least 2 years of college.

It is easier to verify or reject a common trend visually. Figure 3 plots the marriage rate among high income men aged 18-50.<sup>85</sup> The dashed orange line is the marriage rate in the untreated, community property states. The solid blue line (with circular markers) is the marriage rate in the treated, common law states.

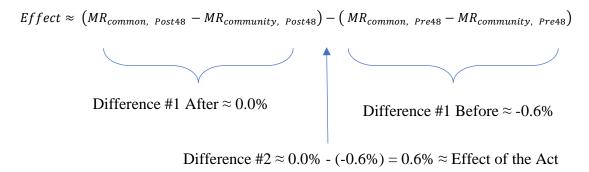


The rates evolve in roughly parallel fashion in the years before 1948, but the common law line sits about 0.6% below the community property line. The small blue dotted "hypothetical common law line" represents roughly what one would expect in the common law states absent the 1948 Act: to continue to be about 0.6% below the community property line. Instead, following the Act, the common law line quickly rises to about even with the dashed line in the period after the Act (1948-1953). The shaded

<sup>&</sup>lt;sup>85</sup> I take a running three year average to smooth the rates and make patterns easier to see by reducing noise.

blue area between the actual common law line and the hypothetical represents an approximate estimate of the effect of the Act, about 0.6%.

Figure 3 is a graphical depiction of a "difference in difference" model because it allows us to visually take the difference (subtract) the difference in marriage rates of high income men across the types of states before the Act, from that after the Act:



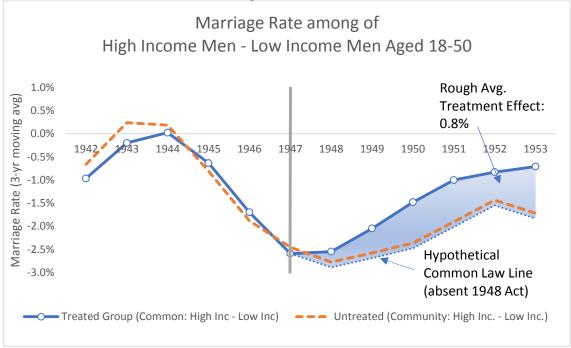
where  $MR_{common, Post48}$  stands for the marriage rate among high income men in common law states after the enactment of the 1948 Act, etc.

Although the common trend appears to roughly hold in Figure 3, one can use the data on marriage rates among lower income men to help control for any remaining confounding factors. Figure 4 therefore plots the marriage rate across the two types of states of *high income men relative to low income men*. Thus, the orange dotted line represents the community property states and is equal to

(Marriage Rate community, high inc men – Marriage Rate community, low inc men).

The solid blue line (with the circular markers) represents the comparable figure for common law states.





In Figure 4, the common law and community property lines track each other very closely in the pre-1948 period, with the common law line on average 0.1% below the community property line. They separate, however, starting in 1948 with the common law line rising faster from 1948-1953. Again, the small dotted blue line after 1948 represents approximately what one might have expected in common law states absent the Act: to continue to track the community property line almost exactly. Instead, the actual common law line rises after the Act, sitting on average 0.7% above the community property line. The shaded blue area again represents an estimate of the effect of the Act—about a 0.8% increase in the marriage rate among treated men (after controlling for the untreated states and behavior of lower income men).

Figure 4 represents a visual "difference in difference" (or triple

difference) model. In Figure 3 there were two "differences" in the marriage rate of high income men: (1) before and after the Act, and (2) common law and community property states. Figure 4 adds a third difference in marriage rates: (3) of high and low income men. Intuitively this can still be thought of as a difference in difference model as in Figure 3, except that instead of using the raw marriage rate among high income men, the triple difference model uses an adjusted measure of the marriage rate, which controls for confounding factors using the behavior of low income men.

Both Figures 3 and 4, while useful, use aggregated data. The formal model below implements the triple difference model implicit in Figure 4, but uses individual level data to control for a variety of other factors which might affect marriage rate.<sup>86</sup>

#### FORMAL MODEL AND RESULTS

I estimate a model which measures how quickly an unmarried man will marry for the first time after he turns 18.<sup>87</sup> For an unmarried individual i, living in state j, in age-group k, <sup>88</sup> in income group 1, <sup>89</sup> in year t (1942-1953), the probability of marrying is:

$$\Pr(\mathsf{Marr}_{i,j,k,l,t}) = \gamma_{j,k,l} + \kappa_t * I_{[t=year]} + \eta * I_{[Post'48*Hi\ Inc=1]} + \lambda * I_{[Post'48*Common=1]} + \beta * I_{[Post'48*HiInc*Common=1]} + \pi * X_{\Delta\ State-j\ Per\ Capita\ Inc} + \rho * X_{\Delta\ State-j\ Emp't} + \mu_i$$

<sup>&</sup>lt;sup>86</sup> Formally running the difference in difference model implicit in Figure 3 using individual level data yields comparable results to the ones presented below.

<sup>&</sup>lt;sup>87</sup> This model is closely related to what economists call a "proportional hazard" model, which is used to estimate the probability an event will occur during a given time period, where that event can occur at most one time for a given individual (e.g., death of an individual, or dissolution of a firm etc.).

<sup>&</sup>lt;sup>88</sup>The age-groups are 16-19, 20-24, 25-29, 30-34, 35-39, 40-49, 50-59, 60+

<sup>&</sup>lt;sup>89</sup> Divided into higher income (=1) (at least two years of college) and lower income (=0) (9<sup>th</sup> grade or less) as described in Table 1.

I use state-age-income group fixed effects ( $\gamma$ ). In practice, this restricts my analysis to *changes* in marriage rates following the 1948 Act within small groups that should be highly comparable (e.g., 20-24 year-old high income men in Michigan). Using these fixed effects reduces the likelihood of the results being driven by factors unrelated to the 1948 Act. To see this, assume, for example, that high income men in Michigan, marry especially early throughout the period of study, compared to those in other states. Let us also assume that for some demographic reason—i.e., a reason totally unrelated to the passage of the Act—there was a spike starting in 1948 in the number of high income young men in Michigan. Without the fixed effects, this demographic spike could bias the results: the spike in young high income Michiganders (who tend to marry especially early) would lead to an increase in the marriage rate after the Act among high income men in common law states as a whole and thus to the estimated treatment effect. Using fixed effects, however, the model looks only at changes in marriage rates within stateage-income groups, so the spike in young high income Michiganders would have no effect on my results. This is because there has been no change in the marriage behavior within any state-age-income group, (just a change in the number of young high income Michiganders, who married especially early both before and after the Act).

In addition,  $\pi_{\Delta}$  State-j Per Capita Inc and  $\rho_{\Delta}$  State-j Emp't control for yearly changes in state per-capita GDP and unemployment. This helps to control for economic changes which can affect marriage rates.<sup>90</sup>

<sup>&</sup>lt;sup>90</sup> In fact, the inclusion or exclusion of this set of controls ends up making relatively little difference, presumably because these factors largely affect high and low income men similarly and hence are

I also control for the national trend for each year ( $\kappa_t$ ). This soaks up the effect of any factor that uniformly affects the marriage rate of all men across the nation. <sup>91</sup> I likewise control for any national changes that uniformly influence high income men relative to low income men following the 1948 Revenue Act ( $\eta$ ). Similarly, I control for factors that affect uniformly all men in common law states differently than those in community property states following the Act ( $\lambda$ ).

Those three factors ( $\kappa_t$ ,  $\eta$ ,  $\lambda$ ) are implicitly already controlled for in Figure 4. Recall that in Figure 4 the lines for common law and community property states represent the *relative* marriage rates among higher and lower income individuals. Because the national trend  $\kappa_t$  is defined as affecting *all men uniformly* (including both high and lower income men), changes in the national trend will leave relative marriage rates unchanged in both types of states. Similarly, consider changes in factors which uniformly affect common law men after the 1948 Act ( $\lambda$ ). Because these factors, by definition, affect high and low income men in common law states the same way, the relative marriage rate will be unaffected. Last, consider factors that affect high income men identically across both types of states after the Act's passage ( $\eta$ ). These factors

controlled for by inclusion of low income men as well in the model.

<sup>&</sup>lt;sup>91</sup> Note that the national trend in marriage rates in a given year ( $\kappa_t$ ) is defined as having a "uniform" effect on all men somewhat tautologically. A factor—say a change in the average age at which men enter the work force—need not actually affect all men *identically* to contribute to the national trend  $\kappa_t$ . Instead (roughly) the average nationwide effect of the change in age of workforce entry on marriage rates will be reflected in the national trend. The remaining effect of this change in age of workforce entry on different men will appear elsewhere in the model. The same is true of the "uniform" effect of factors controlled for in  $\eta$  (factors uniformly affecting high income men relative to low income men after the Act) and  $\lambda$  (factors uniformly affecting common law men relative to community property men after the Act).

will change the relative marriage rates in both types of states because they affect high income men differently than low income men. These factors, however, will change relative marriage rates in exactly the same way in both types of states. Thus the difference between the two lines will stay the same.

Finally, we come to the coefficient of interest  $\beta_{Post'48*High\ Inc*Common}$ , which estimates the effect of the 1948 Revenue Act on marriage rates.  $\beta_{Post'48*High\ Inc*Common}$  formally measures the treatment effect shaded in Figure 4.

Table 2
Estimated Impact of 1948 Revenue Act on Marriage Rate: Men 18-50

Post 1948*High Income	-0.74%
	(0.27)***
Post 1948*Common Law State	-0.12%
	(0.37)
Post 1948*Common Law State*High Income	0.82%
	(0.31)**
$R^2$	0.03
N	695,348

\* *p*<0.1; \*\* *p*<0.05; \*\*\* *p*<0.01

Estimated year, state-age-income fixed effects, and state level economic controls not reported, standard errors clustered at the state level

This .82 percentage point increase in the likelihood a high income, nevermarried man in a common law state marries for the first time in a year corresponds to those individuals marrying on average about 5 months sooner. In all the robustness checks this figure is at least 3 months and every specification implies that tens or hundreds of thousands of Americans who were married at any given time during this period, who would not have been married if not for joint taxation with income splitting.

# A. Robustness of the Main Results

Table 3
Impact of 1948 Tax Change on Marriage Rates

	WWII Control	South & West Regions Only	High Income = HS Grad, Low Inc = Not	High and Low Inc based on 1960 Income <sup>1</sup>	High and Low Inc based on Predicted Income <sup>2</sup>	Women 18-50 Hi Inc = HS grad, Low Inc= Not
Post'48*High Income	-0.70% (0.26)**	-0.74% (0.27)**	-0.35% (0.19)*	1.52% (0.18)**	1.99% (0.20)***	-0.45% (0.32)
	(0.20)	(0.27)	(0.19)	*	(0.20)	(0.32)
Post'48*Common Law	-0.17%	-0.27%	0.04%	-0.03%	0.21%	-0.13%
	(0.33)	(0.39)	(0.39)	(0.24)	(0.43)	(0.29)
Post'48*CommonLaw*High Income	0.79%	1.05%	0.51%	0.69%	0.79%	0.74%
nicome	(0.31)**	(0.43)**	(0.22)**	(0.27)**	(0.48)*	(0.36)**
High Mobilization*Post'48	-0.21% (0.18)					
$R^2$ (excluding fixed effects)	0.03	0.03	0.03	0.04	0.03	0.04
N	695,348	338,696	1,252,964	927,873	886,726	966,312

Estimated year, state-age-income fixed effects, and state economic controls not reported, standard errors clustered at the state level.

Table 3 shows the results of various robustness checks. The first column deals with some of the potential problems raised by the fact that some states sent a higher percentage of men off to World War II than others.<sup>93</sup> We would expect marriage rates to rise faster in states with higher mobilization once the war was over.<sup>94</sup> Nevertheless, including this control does not significantly change the estimate of the impact of the

<sup>&</sup>lt;sup>1</sup> 1960 income is converted to income during the study period by deflating it and accounting for per-capita economic growth. High income is defined as making at least \$4,200 per year and low income less than \$3000 in 1948 dollars.

<sup>&</sup>lt;sup>2</sup> A person's predicted income is based on a regression of 1960 income on a variety of fixed effects: one for each level of education, each state, each census defined occupation, and each age (in years), for unmarried individuals. This gives a predicted income for each person in each year under study. High and low income are defined as described in note 1.

<sup>&</sup>lt;sup>93</sup> See LaLumia, supra, note 30.

 $<sup>^{94}</sup>$  High Mobilization states are defined as having had more than 50% of their men aged 18-44 register for the draft. See id.

1948 Revenue Act. This makes sense because state specific factors, like mobilization, are already controlled for in the main estimate as long as the factors affect high and low income individuals similarly. The closeness of the estimates with and without the World War II control also suggests that the GI Bill is unlikely to be driving the primary result. The second column shows that although the community property states are grouped in the South and West, the results are not driven by forces which are geographically focused and unrelated to the 1948 Act. Instead, when we look only at the difference between the community property and common law states located in the South and West regions of the country, the coefficients are actually slightly larger. The third, fourth and fifth columns show alternative ways of defining high and low income which all produce roughly comparable results. The sixth shows an estimate of the treatment effect for women in common law states, where the probability of benefitting from income splitting is based on whether a woman graduated from high school. The effect is similar to that on men in the primary results.

## B. Couples Married Younger, Had More Children

Table 4 shows the estimated effect of the 1948 tax change on the age at first marriage among men who marry at some point in the sample period.

<sup>&</sup>lt;sup>95</sup> In fact, I have also examined just the states of Texas, Oklahoma, Arkansas, Louisiana, Mississippi and Alabama which should be highly comparable and find similar, actually slightly larger results, albeit less precisely estimated due to the smaller sample size.

Table 4

	Age at first marriage
Post 1948*High Income	0.7047
C	(0.2017)***
Post 1948*Common Law State	0.3393
	(0.1463)**
Post 1948*Common Law State*High Income	-0.4353
	(0.2281)*
Percent Change in State Per Capita Real Income	0.5418
	(0.6403)
Percent Change in State Unemployment	-1.9384
	(3.1284)
$R^2$	0.03
N 67,737	

\* p<0.1; \*\* p<0.05; \*\*\* p<0.01

Estimated year, state-income fixed effects, and control for average age state population not reported,
Standard Errors clustered at the state level

As in the primary specification, the coefficient of -.43 years indicates that "treated" men married about 5 months sooner than we would have predicted without the tax change. This effect is large enough to explain almost the entire increase in the probability an unmarried man marries in a given year. Put differently, Table 4 suggests that the tax change induced men who would have married at some point to marry sooner, rather than inducing men who otherwise would not have ever married to marry.

In addition, higher income men in common law states appear to have had more children following the 1948 Act. The Act could cause couples to have more kids in at least three ways: (1) affected couples married younger thereby increasing the period of marriage during couples' childbearing years, (2) the tax change drove some married women out of the labor force by substantially raising their marginal tax rate, as La Lumia shows, and (3) it increased take-home pay for married couples during the Baby

Boom. <sup>96</sup> The estimated effect of the tax change is that men had .08 more children at home. <sup>97</sup> On average men affected by the tax change had 2.34 children at home in 1960, so an increase of .08 is about 3.5% increase, a small but important change in the number of children.

Table 5
Impact of 1948 Tax Change on Number of children

	Number of own children in the household
Post 1948*High Income	-0.0482 (0.0284)*
Post 1948*Common Law State	-0.1128 (0.0590)*
Post 1948*Common Law State*High Income	0.0806 (0.0424)*
$R^2$ (excluding fixed effects) $N$	0.02 67,737

\* p<0.1; \*\* p<0.05; \*\*\* p<0.01

Estimated year, state income fixed effects, and control for state average age of men not reported, Standard Errors clustered at the state level

### DISCUSSION AND POLICY IMPLICATIONS

The main estimate that the 1948 Act caused eligible men to marry three to five months sooner on average is surprisingly large given the social context. Nevertheless, the estimate is plausible in light of the size of the bonuses. A single-earner couple with

<sup>&</sup>lt;sup>96</sup> Although the effect of higher income on fertility is theoretically ambiguous, during the Baby Boom it seems likely that increasing income for a given higher income couple would increase the number of children born to that couple.

<sup>&</sup>lt;sup>97</sup> Note that I am using number of children in the house in 1960 as a proxy for children ever born. While a substantial fraction of children from marriages early in the period may have left the house by 1960, this should not bias the results unless the difference in the proportion of children who leave the house between higher and lower income households is different between common law and community property states.

\$100,000 in income in today's dollars would have received *each year* a marriage bonus about large enough to cover the entire down payment on a house in the new Levittown suburbs around in 1948 (after federal housing guarantees). Or, looked at differently, if that couple's saving rate matched the national average in 1950, the tax benefit of being married would represent about 40% of their annual savings if they did not change their consumption. Marriage bonuses of this size allowed couples who were waiting to marry until they could afford a home or to raise kids to marry significantly sooner. Moreover, contemporary observers believed that the tax code was pushing couples to wed as well. Even before the 1948 Act was passed, the Chicago Tribune reported that sociologists predicted joint filing with income splitting would "work for earlier marriages and against long engagements." After enactment, newspapers ran articles like "Wedlock Remains Best Tax Relief" and "Bachelors: Don't Forget Dowry Uncle Sam Gives Bride at Altar," observing that joint taxation induced marriage. Indeed,

 $<sup>^{98}</sup>$  See Edward Glaeser, Triumph of the City: How our Greatest Invention Makes us Richer, Smarter, Greener, Healthier, and Happier Ch. 7 (2011) (noting that a down payment, after FHA guarantees, in Levittown was \$400, although the suburb drew mostly residents with incomes lower than the hypothetical couple).

<sup>&</sup>lt;sup>99</sup> See BUREAU OF LABOR STATISTICS, 100 YEARS OF CONSUMER SPENDING 22 (showing an average savings rate of 10% in 1950), available at https://www.bls.gov/opub/uscs/1950.pdf.

<sup>&</sup>lt;sup>100</sup> One academic noted at the beginning of the study period: "'How much money does it take to get married?' is one of the questions which is most frequently asked by young men and women who are seriously contemplating marriage. What they really want to know is . . . on how small an income and with how little money in the bank they can safely establish a new family. . . . Most intelligent young couples, no matter how anxious they are to start their new families, are seriously concerned, lest they embark on this their most important life venture with economic resources which may prove to be inadequate." Howard Bigelow, *Money and Marriage* in MARRIAGE AND THE FAMILY (Howard Becker and Rueben Hill eds. 1942).

<sup>&</sup>lt;sup>101</sup> Believe Cupid Will Benefit by Tax Slash Bill, CHICAGO TRIBUNE, Jan 4. 1948 at 16.

<sup>&</sup>lt;sup>102</sup> See e.g., Malvina Lindsay, Wedlock Remains Best Tax Relief, WASHINGTON POST, July 19, 1954 ("the national trend to wedlock is being given continued reinforcement by the new tax bill [which

income splitting crept into popular culture, with a young Jack Lemon proposing to his girlfriend in the 1954 comedy *Phffft* by extoling the virtues of joint filing.<sup>103</sup>

As noted above, the results suggest that the role of federal tax policy in increases in marriage and fertility in the Post War period is greater than previously appreciated. The main estimate can also inform our understanding of the effect of marriage bonuses today on middle income single-earner couples because it can reasonably be viewed as a floor on the current effect. This is for two reasons. First, the increasing substitutability of marriage and unmarried cohabitation will likely make today's couples more sensitive to tax incentives when deciding whether or when to marry. Around 1948, unmarried cohabitation was quite uncommon among middle and upper income couples. As late as 1965-1974, less than 10% of all women cohabited prior to marriage. Now that figure is over 60%. Moreover, cohabitation has

reserved full income splitting for married couples]"); J. A. Livingston, *Bachelors: Don't Forget Dowry Uncle Sam Gives Bride at Altar*, WASHINGTON POST, Nov 14, 1952; *Investor's Guide: Marriage in December*, CHICAGO TRIBUNE, Dec. 11, 1948 at A6.

 $<sup>^{103}</sup>$  Edward Barry, *Movie Romeo Sings of Split in Income Tax: "PHFFFT"*, CHICAGO TRIBUNE, Dec 2, 1954 at C10.

<sup>&</sup>lt;sup>104</sup> To give the reader a sense of scale, from 1953 (the last year studied here) to 1975, a variety of cultural and economic factors (including increasing educational attainment and labor force participation by women, loosening attitudes toward pre-marital sex, and changing opinions of marriage itself) drove up the median age at first marriage for men, from 22.8 years to 23.5 years, or 0.7 years. *See* CENSUS DEPARTMENT, TABLE MS-2, ESTIMATED MEDIAN AGE AT FIRST MARRIAGE: 1890 TO PRESENT (2017). The estimated effect of joint taxation with income splitting on treated men is therefore about 35-60% the net effect of all the various forces active from 1953 and 1975 driving up median age at first marriage for men.

<sup>&</sup>lt;sup>105</sup> The natural experiment studied here is also promising as what economists term an "instrument" which can help untangle the causal effect of marrying earlier or having more children on health or economic outcomes. I plan to explore this possibility in a follow up paper.

 $<sup>^{106}</sup>$  Pamela Smock, Cohabitation in The United States: An Appraisal of Research Themes, Findings, and Implications, 26 Ann. Rev. Sociology 1, 3 (2000)

Wendy D. Manning, Trends in Cohabitation: Over Twenty Years of Change, 1987-2010,

moved slowly from being primarily "a short-term arrangement among childless young adults who . . . quickly break up or marry" to being "accepted [by many] as an alternative to marriage." As cohabitation has become a genuine alternative to marriage for many couples, they will have become more sensitive things like the tax consequences of marriage, which might have been secondary for many of them in the past. Indeed, many other authors have observed that the increase in cohabitation likely amplifies the effect of tax considerations on marriage. <sup>109</sup>

Second, the marriage bonuses today for single-earner couples making \$50,000-\$110,000 are larger than for couples making the inflation-adjusted equivalent amount in 1948. Indeed, the bonuses are at least twice as large now for couples in the \$50,000-\$80,000 range than in the period under study here. Of course, I should also note that there are now many fewer single-earner couples than there were in 1948. Still, they

available at <a href="https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-13-12.pdf">https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-13-12.pdf</a> (presenting data from the National Survey of Family Growth conducted by the CDC)

Andrew Cherlin, *The Deinstitutionalization of American Marriage*, 66 J. MARRIAGE & FAMILY 848, 849 (2004). For example, the number of cohabitations which end in marriage within three years dropped from 60% in the 1970s to 33% by the 1990s. *Id*.

<sup>&</sup>lt;sup>109</sup> See, e.g., Zelenak, supra note 15 at 792-795 (making the rise of cohabitation the central reason that we should be paying more attention to "tax marriage effects"); Chade and Ventura, supra note 25, (showing in a formal theoretical model that increasing the acceptability of cohabitation makes the "number of marriages become[] more sensitive to changes in differential tax treatment [of marriage])."

<sup>&</sup>lt;sup>110</sup> The Revenue Act of 1948 may have had particular salience due to widespread coverage of the benefits accruing to community property couples from income splitting and therefore had a larger effect than it otherwise would have. Thus, arguably, the effect of the 1948 Act may not be a floor for today's less salient marriage bonuses, but the rise in cohabitation and increasing size of the bonuses seems likely to outweigh this factor.

It is also worth observing that the effect of taxes on marriage today may be qualitatively different than it was during the study period. Nearly all higher income men in the study period married eventually. Today that is no longer true and the rise in cohabitation may mean that the effect of taxes on marriage will be as much about whether someone ever marries, as when.

remain a significant share of the population amounting to tens of millions of people.<sup>111</sup>

Americans' responsiveness to tax incentives in making marriage decisions modestly strengthens the case in favor of returning to individual taxation of all married couples. One of the problems with joint taxation is that it distorts individuals' incentives to marry. The greater their responsiveness to these incentives, the greater is the cost in terms of economic efficiency in terms of distorting couple's decisions to marry or not. These costs are in addition to the efficiency losses imposed by joint taxation's tendency to raise the marginal tax rate on the lower earning member of the couple, still more often a woman, who is more likely to drop out of the labor force in the face of high taxes than the higher earning member. It is of course true that the

<sup>&</sup>lt;sup>111</sup> Using census data, I calculate that in 1950 about 70% of married couples with total income of \$50,000 to \$110,000 (in 2016 dollars) were single-earner. Based on the 2015 ACS survey, about 35% of married couples with income between \$50,000 and \$110,000 were single-earner. Both figures exclude couples with no one in the work force (e.g., retirees). Note also that while today a lower percentage of married couples are single-earner, a higher percentage of single-earner couples earn enough to be eligible for sizeable marriage bonuses. These effects come close to offsetting in estimating the total proportion of couples affected by large marriage bonuses.

This would presumably require Congress to use statutory language that would clearly overrule *Seaborn*. It would also put increased pressure on preventing income shifting within couples. Congress could largely prevent income shifting by adopting a hybrid form of taxation with individual taxation of wages and salary and some form of joint taxation of capital income (e.g., capital income is pooled among spouses and then taxed on a separate schedule or at the marginal rate of the higher earner, etc.). This hybrid system would sacrifice full marriage neutrality, although the non-neutral effects of joint taxation of capital would be concentrated on the wealthy. As explained in note 18, this system would actually follow most of the other countries which have switched to "individual" taxation since 1970.

The problems of inter-spousal income shifting should not be taken lightly. Stephanie Hunter McMahon has argued that the U.K.'s difficulties containing inter-spousal income shifting may well have outweighed the benefits of its shift to individual taxation in 1990. See Stephanie Hunter McMahon, London Calling: Does the UK's Experience with Individual Taxation Clash with the US's Expectations, 55 St. Louis U.L.J. 159 (2010).

<sup>&</sup>lt;sup>113</sup> See Listokin, supra note 3.

<sup>&</sup>lt;sup>114</sup> See e.g., Zelenak, supra note 3, at 365-369. As discussed in note 112, observe, however, that joint taxation can also be cast as improving economic efficiency by reducing wasteful tax planning and avoidance in inter-spousal tax transfers and the need to police such transfers.

societal choice between individual and joint taxation of married couples turns on far more than just efficiency. Rather questions of equity are paramount and it is beyond the scope of this Article to restate those arguments here. Nevertheless, in the overall societal calculation as to how married couples should be taxed, it is important to learn that joint taxation's distortions on these choices are substantial.

Many people, of course, believe the government *should* encourage couples to marry. They might view my primary results as pushing for the U.S. to move back toward the 1948 to 1969 system with joint taxation with income splitting in all brackets. Yet I do not think that conclusion is warranted. Even putting aside the problems joint taxation creates by reinforcing gender roles, etc., the vast majority of the benefit from full income splitting in all income brackets accrues to the very rich. In unreported regressions, I find little evidence that the richest men, who enjoyed the largest marriage bonuses, reacted more strongly than middle class men who saw smaller bonuses. This is not terribly surprising: assuming the marginal utility of income declines as men grow richer, wealthy men should react less, per dollar, to changes in tax incentives for marriage. Thus for the richest men there are offsetting effects. They are less responsive per dollar of tax incentives, but get the largest marriage bonuses under joint

<sup>&</sup>lt;sup>115</sup> Although the sample of very rich is small, making statistical inference less precise, it is possible to rule out at the 95% level that the rich react as much, per dollar of tax incentive, as upper-middle income men.

<sup>&</sup>lt;sup>116</sup> In an economic model of marriage, a person will implicitly trade off the additional utility provided by the tax incentives in favor of marriage, with other factors which would otherwise cause her to marry later absent those tax incentives (e.g., waiting a bit longer to marry to better understand whether she is compatible with her potential spouse). Richer persons will get less additional utility, per dollar, from the tax incentives. By contrast, we would not expect the strength of the factors pushing toward later marriage to vary much by income.

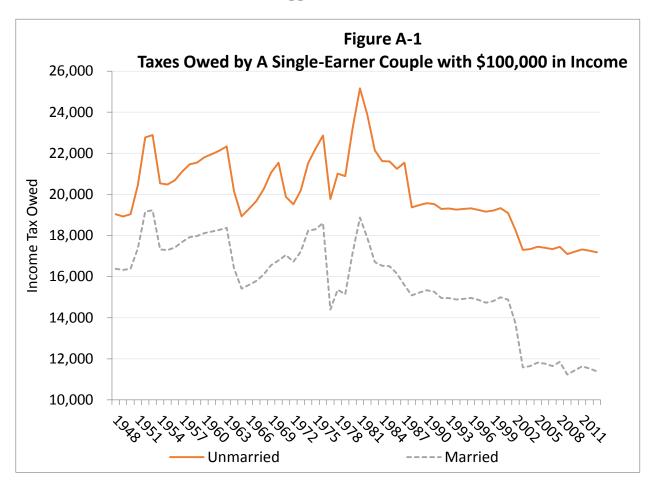
taxation with income splitting in all brackets. This leads to the rich reacting in about the same way as upper-middle income men to joint taxation with income splitting. In addition, dual-income couples get little or no tax benefit from marriage under joint taxation with income splitting. Assuming the government's goal is to encourage marriage in general—given a fixed cost to the fisc—it would be more effective to provide a fixed subsidy in the form of a credit to all Americans. This would provide equal incentives for dual income couples to marry and not focus so much of the subsidy on the very rich.<sup>117</sup>

#### CONCLUSION

This Article has detailed the history of how the federal government attempted to integrate a tax system based on the individual with state community property systems where the family represents the fundamental unit. The inherent tensions in this process created an unusual series of tax changes that provided for joint taxation with full income splitting for married couples in some states well ahead of others. An empirical examination of this natural experiment strongly indicates that tax incentives had an important effect on marriage rates and fertility. This suggests that the effect of taxes on marriage formation and fertility should be carefully accounted for in considering how we should tax families today.

<sup>&</sup>lt;sup>117</sup> The results of the paper actually provide some justification for the current structure of marriage bonuses in the income tax for single-earner couples, which provide full income splitting couples making up to around \$150,000 combined, with additional bonuses tapering off thereafter. Nevertheless, if encouraging marriage is the goal, it is unclear why we would use a system under which dual income couples receive little or no benefit (and above \$150,000 face marriage penalties). Moreover, there remain marriage penalties built into many programs designed to help lower income Americans, including those built into the tax code like the EITC.

# **Appendix**



Source: Author's calculations based on historical rates, personal exemptions and standard deduction. Inflation data based on the Consumer Price Index. The single-earner prior to marriage and the married couple are assumed to take the standard deduction. The non-working spouse's personal exemption is assumed to be used before marriage.