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# RACE, ETHNICITY, AND TAXATION OF THE FAMILY: THE MANY SHADES OF THE MARRIAGE PENALTY/BONUS

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## **Abstract**

Recent events have increased the focus on racial justice. One aspect of this attention is the realization that race interacts in important – but often not fully understood – ways with taxation, including taxation of the family. In this paper, we quantify the racial disparity in the magnitude of the “marriage penalty” or “marriage bonus”, using individual micro-level data from the Current Population Survey for the years 1992 to 2019. We find that Black married couples nearly always face a higher averaged marriage penalty (or a smaller averaged marriage bonus) compared to white married couples, even when we compare couples with similar family earnings. This occurs because the incomes of Black married couples tend to be more evenly split between spouses than the incomes of white married couples. The differences between white couples and Hispanic couples tend to be smaller, but nonetheless they are still present in many cases, with Hispanic couples also facing a marriage penalty. We conclude with suggestions for reform of the individual income tax that would reduce the disparate racial and ethnic treatments across families.

Keywords: Marriage, individual income tax, taxable unit, marriage penalty and bonus, race, ethnicity.

JEL codes: H24, J12, J16

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## **SUMMARY**

Recent events have increased the focus on racial justice. One aspect of this attention is the realization that race interacts in important – but often not fully understood – ways with taxation, including taxation of the family. Tax burdens depend of course on the tax code, but they are also sensitive to household composition, labor market decisions, and within-household earnings differentials, all of which may be different between Black and white households.

Indeed, in a series of papers Dorothy A. Brown discusses the broad effects by race of different patterns of labor force participation rates, different levels of household income and wealth, and different splits of household income between spouses on the potential likelihood of a marriage penalty/bonus. A marriage penalty (or tax) exists when a household pays more in income taxes when married and filing jointly than their combined income taxes as singles; a marriage bonus (or subsidy) can also arise, in which a household pays less in taxes as a married couple than as singles. Brown presents statistics illustrating that Black households are more likely to have relative spousal earning structures that increase the likelihood of their facing a marriage penalty relative to white households; that is, Black married women are more likely to work than white married women, and their incomes are more likely to be closer to their partners' incomes across the income distribution. These patterns suggest that there are disparate impacts on Black versus white households in the ways in which these couples are treated by the income tax.

In this paper we use individual micro-level data from the Current Population Survey for the years 1992 to 2019 to calculate the actual magnitudes of the marriage penalty/bonus incurred by individual households over an extended time period in order to demonstrate the disparate racial impacts of the tax code. Additionally, we extend the analysis beyond race to ethnicity, given that there are now more Hispanic married households than Black married households and that Hispanics also often experience lower wages and potentially smaller within household wage differences.

We find that Black married couples nearly always face a higher averaged marriage penalty (or a smaller averaged marriage bonus) compared to white married couples, even when we compare couples with similar family earnings. This occurs because the incomes of Black married couples tend to be more evenly split between spouses than the incomes of white married couples. The differences between white couples and Hispanic couples tend to be smaller, but nonetheless they are still present in many cases, with Hispanic couples also facing a marriage penalty. We also demonstrate that these disparate treatments are driven both by changes in the tax code and by changes in labor market outcomes. We conclude with suggestions for reform of the individual income tax that would reduce the disparate racial and ethnic treatments across families.

## I. INTRODUCTION

The events of spring 2020, especially the murder of George Floyd, have led to an increased focus on racial justice, in the United States and around the world. One aspect of this attention is the realization that race interacts in important – but often not fully understood – ways with taxation (Gale, 2021). Tax burdens depend of course on the tax code, but they are also sensitive to household composition, labor market decisions, and within-household earnings differentials, all of which may be different on average between Black and white households.

As one example, tax scholars recognize that the income tax code treats different households differently, with some households facing a “marriage penalty” (or “marriage tax”), in which the household pays more taxes when married and filing jointly than their combined taxes as singles. Other households may instead receive a “marriage bonus” (or “marriage subsidy”), paying lower taxes when filing jointly as a married household than as singles. These tax differences across families are well documented by Bittker (1975), Rosen (1987), Feenberg and Rosen (1995), Alm and Whittington (1996), and Alm and Leguizamon (2015), among many others, all of whom show that the relative earnings (or incomes) of married spouses are a primary driver of this differential, with one-earner married households typically seeing the largest bonus and equal-earning married households seeing the largest penalty.

While this differential treatment has received much attention in the tax literature, the events of spring 2020 have highlighted the importance of extending the analysis to the possible effects of differential treatment by race. The tax code is race-blind by design, and the U.S. Internal Revenue Service (IRS) resists any attempts to even collect racial information on tax returns (Bearer-Friend, 2019), limiting our ability to understand the impact across races. However, the effects of the tax code may still disproportionately penalize Black married

households relative to their white counterparts, given the ways in which the many features of the tax code interact with the existing and historical structures of economic institutions and also with the economic decisions of households. In a series of papers, Dorothy A. Brown (1997a, 1997b, 1999a, 1999b, 2007a) discusses the broad effects by race of different patterns of labor force participation rates, different levels of household income and wealth, and different splits of household income between spouses on the potential likelihood of a marriage penalty/bonus, all of which culminate in her recent book, *The Whiteness of Wealth: How the Tax System Impoverishes Black Americans – and How We Can Fix It* (Brown, 2021). Brown presents statistics illustrating that Black households are more likely to have relative spousal earning structures that increase the likelihood of their experiencing a marriage penalty, relative to white households; that is, Black married women are more likely to work than white married women, and their incomes are more likely to be closer to their partners' incomes across the income distribution. More broadly, scholars have identified many other areas of the tax code that may impose disparate impacts on minority households, given the interaction of the tax code with existing patterns of income, wealth, and family structure, via such features of the tax code as the tax treatment of pensions (Brown, 2004b, 2007b), tax provisions for children (Brown, 2005; Jurow Kleiman, Matsui, and Mitchell, 2019), and audit procedures and enforcement (Bearer-Friend, 2019, 2022; Dean, 2022, Elzayn et al., 2023).

However, these many disparate impacts are yet not fully understood, even for the marriage penalty/bonus, in part because many of the calculations of the marriage penalty/bonus are snapshots of a single year, based on aggregate patterns of labor force participation rates and household incomes along with different assumptions about the splits of household income between spouses. For example, Brown (1997a) uses different hypothetical income splits across

different family income levels to estimate the marriage penalty or bonus that a household in each category would face in 1993. Similarly, Brown (1997b) uses statistics from other studies and the Census to conclude that Black households are more likely to fall into income categories that generate calculated marriage penalties, while white households are more likely to fall into categories with calculated marriage bonuses. The resulting numbers are only a snapshot of 1993, they do not estimate the actual marriage penalties/bonuses at the micro level for all Black and white families in the Census sample, and they also do not show the evolution of these estimates over time, including the effects of the major tax changes in the Clinton, Bush, Obama, and Trump Administrations. Indeed, while her many papers obviously contain many calculations of the marriage penalty/bonus, Brown (2004a) has also emphasized the power of “narratives”, or the use of personal stories, as an important feature of critical race theory, in part as a counterargument to “...the notion that numbers are neutral and objective”, and her work is powerful through her use of these narratives.

Without disputing the power of narrative, we believe that calculating the *actual* magnitudes of the marriage penalty/bonus incurred by *individual* households and making these calculations over an *extended time period* are essential in demonstrating the disparate racial impacts of the tax code. Additionally, we also believe that extending the analysis beyond race to *ethnicity* is important, as argued also by Brown (1997a), given that there are now more Hispanic married households than Black married households and that Hispanics also often experience lower wages and potentially smaller within household wage differences.<sup>1</sup>

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<sup>1</sup> As Brown (1997a) wrote: “My analysis is limited to an investigation of the differences between black and white households. Without question, a richer, more complete examination ultimately must include Hispanic, Asian, Native American, and other racial or ethnic groups.”

In this paper we provide these new analyses. We use detailed individual-level data from the Current Population Survey (CPS) over the extended period 1992 to 2019 to calculate the marriage penalty/bonus for all Black and white married households in our sample for the tax years 1991 to 2018.<sup>2</sup> CPS data allow us to identify the race of the individual or household (Black versus white), according to individuals' self-identification. CPS data also describe the labor market experiences of the individual or household, including earnings. We employ a methodology similar to previous research to compute the size and scope of the marriage penalty/bonus and its changes over roughly the last three decades.

We find that Black married households experience a higher averaged marriage penalty (or lower marriage bonus) than white households for all time periods in our sample.<sup>3</sup> This difference is largely driven by households earning more than \$100,000. The differential in the estimated marriage penalty by race increases significantly after the Tax Cuts and Jobs Act (TCJA) of 2017 because these tax cuts mostly affected the highest earners, or those who already exhibited the largest within-couple earning differential.<sup>4</sup> We also find that Hispanic households (like Black households) experience a higher averaged marriage penalty (or lower marriage bonus) than non-Hispanic households. Throughout, we document some of the difficulties that

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<sup>2</sup> To be consistent with the language used in other related work, we refer to married couples in the data and analysis as “households”, although on occasion we also use the word “couples” for text clarity. Under the Census (and thus the CPS) definition, a household includes all individuals living in the same housing unit. Depending on income levels, some households in the CPS may include more than one married couple, all of whom would file taxes separately. As such, our reference to households is slightly different from what is considered a household in the CPS, as CPS use refers to married couples only.

<sup>3</sup> All estimates of marriage penalties/bonuses presented here are averages across households within each race category. For simplicity, we refer to these averages across households as “averaged” marriage penalty/bonus estimates for the remainder of the paper. We are grateful to the editors for this suggestion.

<sup>4</sup> Our results are largely consistent with a recently released working paper by Holtzblatt et al. (2022), who use a different data set (Survey of Consumer Finances) and a somewhat different time period. As they write, “Our results are similar in many ways to those in Alm et al.” Note that Holtzblatt et al. (2022) do not examine the impact of ethnicity on the marriage penalty/bonus.

arise from using CPS data because of a lack of clear and consistent definitions and its use of self-identification of race and ethnicity.

## **II. SOURCES OF THE MARRIAGE PENALTY/BONUS**

The presence of a marriage penalty or bonus arises from the interaction of the individual income tax code with individual behavioral choices related to earnings, family structure, and labor force participation.

In choosing the structure of the individual income tax, countries pursue a variety of goals. A basic goal of any tax is to achieve “equity” in taxation. This principle is often operationalized by introducing two additional criteria: “horizontal equity”, which relates to the income tax treatment of taxpayers with equal incomes, and “vertical equity”, which refers to the treatment of taxpayers with different levels of income.

Horizontal equity requires that taxpayers who are equal in all relevant respects pay equal amounts of taxes. The difficulty lies in defining “equals”. Equals can be thought of as married households with equal family income (and identical characteristics), in which case horizontal equity requires that such families pay equal amounts of income taxes (or *Horizontal Equity Across Married Households*). However, equals can also be considered as any kind of “household” with equal income, such as a married couple, a single individual, an unmarried cohabiting couple, an extended family, or even a group of unrelated individuals living together. If the goal is horizontal equity across all such households, achieving horizontal equity requires that all of these household types pay equal taxes if their incomes are equal.

Vertical equity requires that taxpayers with greater ability to pay should pay greater amounts of taxes, and so it relates to the rate structure of the income tax. This is typically



operationalized using a progressive rate structure, even though the theoretical case for this *Progressivity* goal of taxation is not always clear (Musgrave, 1959, 1976; Kaplow, 1989, 2008).

“Efficiency” is also a common goal of taxation, often viewed from the perspective of the taxable unit in the individual income tax as the goal of *Marriage Neutrality*. This goal requires that a household’s combined tax liability remain unchanged with marriage, neither rising with marriage nor falling with marriage; that is, the income tax should neither discourage nor encourage marriage. In fact, previous empirical work demonstrates that the presence and the size of the marriage penalty/bonus is one of many factors in the decision to marry, divorce, or cohabit (Dickert-Conlin, 1999; Alm and Whittington, 1997a, 1997b, 1999, 2003). This finding persists for lower-income households facing a marriage penalty (Micheltore, 2018), same-sex couples at different income levels (Friedberg and Isaac, 2023), and couples facing a \$1000 or larger incentive (Fisher, 2013). In other work, Roeder and Ullmann (2019) find evidence that couples choose to marry earlier in their relationship (and divorce later) to capture tax benefits associated with being married at the end of a calendar year.

In the United States, the tax treatment of the family has changed significantly since the establishment of the individual income tax in 1913. Table 1 summarizes the most relevant U.S. tax code changes over time. Originally, the unit of taxation was the individual, and so the U.S. tax code achieved *Marriage Neutrality*. However, after World War II a growing number of states instituted community property laws, which allowed married households in these states to divide their income equally and file separate tax returns. As a result, average (and marginal) tax rates were lower for households living in community property states (particularly for those households with a single earner) than for those in common law states. In response to this geographical inequity, the Revenue Act of 1948 changed the unit of taxation from the individual to the family.

This allowed families to “split” their income equally to minimize their tax burden. A household with a single earner could now divide their income, with each spouse claiming half the income. Due to the progressive nature of the tax code, each spouse could then be taxed at a potentially lower rate than one spouse claiming all the income.

With the adoption of income splitting for married households, couples with equal incomes paid equal taxes; that is, the income tax became consistent with the goal of *Horizontal Equity Across Married Households*. However, because of *Progressivity* of tax rates in the income tax, the change also meant that a couple's joint tax liability could fall when they married, so that the income tax was no longer characterized by *Marriage Neutrality*. The federal government was effectively subsidizing marriage.

This marriage bonus grew over the next two decades, and public pressure to remedy this disparity led to the adoption of the Tax Reform Act of 1969, which established a new, separate tax schedule for single individuals that ensured that single persons would incur a maximum tax liability of 120 percent of a married couple with equal income. However, a side effect of the Tax Reform Act of 1969 was the creation, for the first time, of a widespread and significant marriage penalty for many married couples, even though a potential marriage bonus still existed for some couples. Since then, various tax and demographic changes have markedly affected the potential for a marriage penalty or bonus, as well as their magnitudes (Rosen, 1987; Feenberg and Rosen, 1995; U.S. General Accounting Office, 1996; Alm and Whittington, 1996; Congressional Budget Office, 1997; Bull et al., 1998; Dickert-Conlin and Houser, 1998; Eissa and Hoynes, 2000; Holtzblatt and Rebelein, 2000; Whittington and Alm, 2001; Alm, Whittington, and Fletcher, 2002; Carasso and Steuerle, 2005; Gillette, Holtzblatt, and Lin, 2005, 2006; Steuerle, 2006;

Feucht, Smith, and Strawser, 2009; Lin and Tong, 2012; Alm, Leguizamon, and Leguizamon, 2014; Alm and Leguizamon, 2015).

It is well-known that no individual income tax can achieve the simultaneous goals of *Horizontal Equity Across Married Households*, *Progressivity*, and *Marriage Neutrality* (Berliant and Rothstein, 2003; Alm and Melnik, 2005). To illustrate these difficulties, consider a simple progressive tax structure (roughly comparable to the tax code in the U.S. at the start of our analysis in the 1990s), where single individuals are taxed 15 percent on the first \$30,000 of earned income, 25 percent on income between \$30,000 and \$60,000, and 35 percent on income above \$60,000; married households are taxed 15 percent on the first \$40,000 of combined income, 25 percent on income between \$40,000 and \$80,000, and 35 percent on income above \$80,000. This tax structure results in higher earners bearing a higher tax burden, satisfying *Progressivity*.

Now consider two hypothetical families with the same *total* household income, \$100,000, but different *relative* spousal earnings. In Household A, each spouse earns \$50,000; in Household B, one spouse earns \$100,000 with the other spouse earning \$0. Filing jointly as a married household, each household faces the same tax liability of \$23,000 ( $= 0.15 \times \$40,000 + 0.25 \times \$40,000 + 0.35 \times \$20,000$ ), satisfying *Horizontal Equity Across Married Households*. However, Household A faces a marriage penalty of \$4000 because taxes as a married household (\$23,000) are greater than combined taxes as singles ( $\$19,000 = 2 \times [0.15 \times \$30,000 + 0.25 \times \$20,000]$ ). In contrast, Household B receives a marriage bonus of \$3000 because taxes as a married household (\$23,000) are less than combined taxes as singles ( $\$26,000 = \$0 + [0.15 \times \$30,000 + 0.25 \times \$30,000 + 0.35 \times \$40,000]$ ). The goal of *Marriage Neutrality* is no longer

achieved because marriage generates either a penalty or a bonus, depending on relative household incomes.

Indeed, this simple example illustrates how different features of the system affect the goals of income taxation. If there was only a single tax rate for all income, then taxes would not change with marriage, achieving *Marriage Neutrality*. However, this change would obviously violate the goal of *Progressivity*. Changing the marriage tax brackets to double the single tax brackets would largely eliminate the marriage penalty because the effects of higher marginal tax rates on singles (or lower marginal tax rates on married households) would be eliminated. However, doubling the marriage tax brackets would not eliminate the marriage bonus because married households would benefit from the resulting lower marginal tax rates on married income. Notably, the steeper the progressive tax system, the more beneficial would income splitting be for higher income married couples with single earners (or very disproportionate relative spousal incomes), while households with equal earners and lower incomes would face the lowest bonus (or highest marriage penalty), so *Marriage Neutrality* would be violated. Making the individual the unit of taxation would achieve *Marriage Neutrality* but at the cost of violating *Horizontal Equity Across Married Households*. Note finally that many other features of the tax and transfer system also affect the goals of taxation, such as those in the Earned Income Tax Credit (EITC) and in most other means-tested transfer programs.<sup>5</sup> Again, achieving all three goals of taxation is not possible. Indeed, as emphasized by Steuerle (2006), the marriage

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<sup>5</sup> As only one example, the qualifying income brackets for married and single individuals in the EITC prior to 2001 were the same, creating large marriage penalties, particularly for couples in the phase-out portion of the EITC. In 2002, the beginning income of the phase-out range for married couples was changed to \$1000 greater than the beginning income of the phase-out range for someone filing as a single or head of household. This difference has increased over time, eventually reaching \$5690 in 2018, but this difference has remained less than twice the singles' beginning income of the phase-out range.

penalty/bonus will exist as long as tax rates vary with income and taxes are imposed on joint household income.

How do these features of the income tax code lead to disparate tax treatment of Black, white, and Hispanic households? Again, the tax code is race-blind. Any observed differential in taxes by race or ethnicity is a result of differences in labor market outcomes and their interactions with the tax code.

Brown (1997a, 1997b, 1999a, 1999b) identifies two main labor market outcomes that generate disparate treatment. A first factor is that *relative household earning structures* within Black households indeed differ in ways that likely result in a persistent average marriage penalty for Black households relative to the average marriage penalty experienced by white households. In particular, Brown presents data that, on average, show that Black households are more likely to have a smaller within-couple earning differential than white household, and she suggests that the source of the smaller within-couple earning differential may arise from Black women earning a higher share of household income than white women and/or Black men earning a lower share of household income than white men. These patterns are likely due to differences in labor market outcomes, both at the extensive and intensive margins.

A second factor identified by Brown that contributes to disparate tax treatment is the *absolute earnings* of Black men and women relative to white men and women. Black men and women typically have lower earnings, a factor that contributes to a smaller marriage bonus (a higher penalty); that is, higher income households are more likely to experience a larger marriage bonus (a smaller penalty) because income shifted at the highest marginal tax rate of a higher earning spouse to lower marginal tax rates of a lower earning spouse increases the marriage bonus relative to couples in lower income tax brackets.

Although our discussion primarily focuses on the *relative* earnings of spouses in Black households and the *absolute* levels of these spousal earnings as sources of disparate racial impacts of the tax code, there are of course other dimensions of households that may affect the observed marriage penalty/bonus. These include any household characteristics that may influence tax liabilities, including the number and age of children, deductions (e.g., child care expenses, mortgage deductions, charitable contributions), property taxes paid, other sources of income (e.g. transfer and disability payments, dividends, pensions). Although the implications for disparate treatment of Black households in the tax code has received more attention, Hispanic households face similar dynamics. The wage gap between Hispanic women and men is smaller than between white women and men while the overall wages of Hispanics are lower than those of whites (Bureau of Labor Statistics (henceforth BLS), 2021). Both factors likely contribute to a higher marriage tax (a smaller marriage bonus) for Hispanic households than for white households. Of note, there are considerably more married Hispanic households in our data than Black households (13.5 percent versus 7 percent).

### **III. DATA AND METHODOLOGY**

Estimating the marriage bonus or penalty requires comparing the tax liability of a couple assuming that they are married versus the combined tax liabilities of the couple assuming that they are unmarried. If the couple faces a higher tax liability when married, then they are classified as having a marriage penalty; if a couple faces a lower combined tax liability when married, then they are classified as having a marriage bonus.

#### **A. Data**

We employ data from the Current Population Survey (CPS), produced by the U.S. Census and facilitated by the Integrated Public Use Microdata (IPUMS, CPS). Following Eissa and Hoynes (2000), we calculate the marriage penalty/bonus using a representative sample of coupled households in the CPS. While some studies use actual tax return data, these studies obviously omit non-filers, and they do not include race or the distribution of earnings within the married couple, which are relevant to the calculation of marriage penalties/bonuses. The CPS provides these data, along with other demographic and labor-market variables that are essential for our calculations, such as information on marital status, working status, and the number of children.<sup>6</sup> After selecting all married couples for whom we have information on earnings and demographics for both partners, our sample includes over 1 million individual household observations for the 1992 to 2019 calendar years, an average of about 37,000 married households couples per year.<sup>7 8</sup>

Because the information collected by the CPS for any given year relates to the previous year's earnings, we then use the tax codes for, say, 1991 to estimate the tax liabilities for 1992 CPS data, which means that our calculations of marriage penalties/bonuses relate to the 1991 to 2018 tax years.<sup>9</sup> Since earnings are from the previous year and the marital status is for the current year, we assume that the marital status is unchanged for both years.

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<sup>6</sup> Note that the CPS lacks consistent information of mortgage payments, childcare payments, and rent payments, which are important determinants of the household's decision to itemize. Mortgage payments are available but only since 2010, and payments are coded only in intervals.

<sup>7</sup> Beginning in the year 2013, the IRS recognizes same-sex marriages, provided the couple was married in a state where same-sex marriage is legal. We opt to include all married couples, including same-sex married couples, in our sample. Same-sex couples comprise only 0.51 percent of our sample, and their exclusion does not significantly alter our findings. Estimations obtained when we omit same-sex married couples are available upon request.

<sup>8</sup> We include all married couples who report combined earnings greater than zero and are 16 years of age or older. Again, note that we use "households" throughout the analysis to refer to married couples in the sample. On occasion, we use the word "couples" for text clarity, but the two mean the same thing.

<sup>9</sup> We follow Feenberg and Coutts (1993) in the use of TAXSIM's micro-data simulator, and we rely on James Ziliak's Stata code to estimate individual and families' tax liabilities using CPS data, published on the NBER TAXSIM's website. We are grateful to Daniel Feenberg of the NBER for his help with the TAXSIM calculations.

The categorization of households across race is based on respondents' choice of how to self-identify. This categorization is not straightforward. While the Census continues to improve its methodologies, the identification and racial classification of some individuals, in particular descendants of multiple races, is still a complicated issue for demographers (Parker, et al., 2015, Bernstein, 2022). Beginning in 2003, the census provided the option to responders of identifying as more than one race; prior to this, people could select only one racial category (e.g., white, Black, American Indian/Eskimo/Aleut, Asian or Pacific Islander, and other). For example, our CPS sample codifies multiple races in 2003 with people identifying themselves as Black-Asian or white-Black. Although not as common, some individuals in the sample self-identify themselves with as many as three races, such as white-Black-American Indian.

Because individuals are allowed to self-identify as more than one race, and because this choice of self-identification can be different for the two spouses, classifying households is even harder, and there is no standard classification by race in the literature.<sup>10</sup> We attempt to establish consistent treatment of households with either different race spouses and/or with spouses who report more than one race.

In categorizing households as Black or white, we classify household race in three different ways. Our main estimation requires that both spouses choose to self-identify as only one race: Black or white. We call this the *Strict* Definition of race. For robustness, we consider two additional definitions. In our *Broad* Definition of race, we classify a household as a Black household if at least 75 percent of the couple chooses to self-identify as Black (e.g., one spouse

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<sup>10</sup> Demographers continue to grapple with the complications surrounding the classification of race and ethnicity in Census statistics. As Parker et al. (2015) note, the Census has changed its questionnaire many times to try to get more accurate statistics. Still, none of the approaches yield perfect statistics. For example, a great majority of multi-racial individuals only list one race. Additionally, depending on the precise way that individuals are asked, many Hispanics select "Other Race" when provided with the options for race, perhaps confused by the differences between race and ethnicity.



self-identifies as Black and one spouse self-identifies as at least 50 percent Black, meaning that the spouse identifies as two races one of which is Black) and similarly for white households. We also use a definition in which both partners choose to self-identify as mixed race with at least 50 percent Black or one partner chooses to self-identify as Black and one chooses to self-identify as a different race, which we call a *Relaxed* definition of race. At the start of our sample in 1992, 6.73 percent to 7.07 percent of households were comprised of couples designated as Black, depending on our classification criterion for race. This percentage steadily rises, reaching 7.87-9.18 percent at the end of our sample in 2019.

Recall that one factor that contributes to disparate tax treatment by race is *relative* household earning structures. During the time period that we examine, the CPS sample of married households using the *Strict* definition of race shows that the percent of two-earner couples decreased for both whites and Blacks (Figure 1), but overall Black households had a higher percentage of two-earner couples for much of the period. In fact, the only time when the percent of two-earner Black households was below white households' percent was right around and after the economic collapse of 2008. By 2015 this percentage was again above the percent of two-earner white households, although still lower than in 1992. The share of two-earner households in both groups went down from around 70 percent at the beginning of the period in 1992 to around 65 percent by 2019.

As for the resulting *relative* earnings differentials, Table 2 provides the earnings distribution by race for the most recent year (2019) in our CPS sample. Decomposing earnings within the households indicates that the average Black married household had a within-household earnings differential of \$28,746 (with the lower earner contributing \$20,235 on average and the higher earner contributing \$48,981 on average). Married white households on

average reported higher average earnings for both the lower earner (\$22,284) and the higher earner (\$63,756), resulting in an average earnings differential of \$41,472. Although these magnitudes differ through time, the broad trend of this Black-white differential persists.

We illustrate these *relative* earnings differences in Figure 2, where we decompose the earnings of the lower-earner spouse relative to the higher earning spouse from 1992 to 2019 using CPS data. A ratio of 0 implies a one-earner household, while a ratio of 1 implies equal-earning spouses. Among married households, Black households have a higher earnings ratio than white households for all time periods.

However, this average varies by *absolute* earning levels, the second aspect of Black/white labor market differences that contributes to the disparate tax treatment by race. Table 3 illustrates the within-couple earning differential in Figure 2 by earnings category for the 2019 CPS sample.<sup>11</sup> Among Black households with earnings lower than \$20,000 (but greater than \$0), 92 percent have within-couple ratios less than 0.2. Among white households in this earnings category, 83 percent have a within-couple earnings ratios of less than 0.2. In this earnings category, there is a slightly higher percent of Black households with the lowest-earning spouse earning 20 percent or less than the highest-earning spouse, compared to white households. Among households that earn between \$20,000 and \$40,000 per year, most have within-couple earnings ratios between 0 and 0.2, suggesting that at this earnings level most households, either Black or white, also have very unequal within-household earnings. Accordingly, one would expect that Black and white households in this earnings level should not only experience an averaged marriage bonus, but also a similar one. These same patterns are present for other CPS years.

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<sup>11</sup> For each race category, percentages add up to 100 percent across rows.

Further, as household earnings increase, the share of Black households having the highest within-couple earning differential (i.e. an earnings ratio of 0.2 or less) decreases, and the share of Black households with the lowest within-couple earnings differential (i.e. an earnings ratio between 0.8 and 1) increases. The opposite patterns are seen for white households. The result is that the proportion of households with similar earnings is greater for Black households than for white households, while the proportion of households with greater within-couple earnings differentials is greater for white households than for white households. The result is that white households in the higher earnings brackets have earnings ratios that likely generate a marriage bonus, while Black households in these earnings brackets have earnings ratios that create a marriage penalty. As we discuss later, our marriage penalty/bonus calculations demonstrate these patterns.

Of particular importance is whether there are differences in labor market outcomes that affect whether a household will experience a marriage bonus or marriage penalty. While Black and white women had similar participation rates in 1991, the participation rates of Black women increased over time, and the participation rates of white women declined over time (BLS, 2021). In 1991 (2018), data from the Bureau of Labor Statistics (BLS, 2021) indicate that the labor force participation rate of Black women was 57.53 percent (60.23 percent), while the participation rate of white women was 57.40 percent (56.43 percent). The comparable 1991 versus 2018 labor force participation rates of Hispanic women were 52.35 percent versus 56.98 percent. For white, Black, and Hispanic men, the participation rates declined over time, with rates in 2018 of 69.50 percent (white men), 64.80 percent (Black men), and 75.70 percent (Hispanic men), all of which fell by about 5 percentage points since 1991 (BLS, 2021).

## **B. Methodology**

We calculate the marriage penalty/bonus for married households in three steps, consistent with much of the literature (Rosen, 1987; Feenberg and Rosen, 1995; Alm and Whittington, 1996; Eissa and Hoynes, 2000; Alm and Leguizamon, 2015). First, we calculate the married couple's tax liability. Second, we calculate the tax liabilities of each person in the household as if the couple was "divorced", and we then add these two individual tax liabilities to get their combined tax liabilities as "singles". Third, the difference in tax liability for the married couple when filing jointly versus the combined tax liabilities when filing as individual persons (either single or head of household when claiming dependents) constitutes each couple's marriage penalty (if positive) or marriage bonus (if negative).

These steps require that we make a number of assumptions. In all of our calculations, we assume that a couple claims all possible deductions and credits relating to earnings and family size. Simulating divorce is standard in the literature, but it provides challenges. In households with only one earner, we assume that individuals file as head of household if there are eligible dependents, and single otherwise. We assume that couples without any eligible dependents file as single individuals when calculating their separate liabilities. When assumed to be filing separately, we allocate dependents to a spouse by assuming households maximize the value of deductions. Consequently, we assign children who belong to both spouses to the higher earning spouse, in which case the person claiming the dependents is assumed to file as a head of household and the other is assumed to file as a single individual.<sup>12</sup> If the children belong to only one spouse, then they are allocated to that person regardless of earnings. We include children as dependents if they are 19 years old or younger and also if they are 24 years old or younger and are enrolled in college full time. We also categorize adult children living in the same dwelling as

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<sup>12</sup> Note that the sample includes same-sex marriages, whenever identified by the CPS.

dependents if they receive disability benefits.<sup>13</sup> In addition, we assume that individuals itemize their deductions when doing so reduces their liabilities.<sup>14</sup> Because total deductions available to a married couple must be split for the purposes of estimating tax liabilities as two singles, we assume that any available deductions go to the higher earner when filing as unmarried, while equal-earner spouses equally split deductions, a standard practice in these calculations (Rosen, 1987; Feenberg and Rosen, 1995, Alm and Whittington, 1996; Eissa and Hoynes, 2000; Alm and Leguizamon, 2015). Similar to most all of this literature, we assume that there are no labor supply responses to couples being married.

We simulate all tax liabilities using the National Bureau of Economic Research (NBER) TAXSIM model. All dollar values are adjusted for inflation to 2020 dollars using the CPI index. We drop all households with combined real annual earnings greater than one million dollars. Most of such outliers are white couples that could bias any differences at the mean. In addition, all households who end up with a marriage penalty or bonus of \$10 or less (after adjusted for inflation) are coded as having no penalty/bonus. To generate aggregate estimates for each year, we adjust the estimates using the household weights in the CPS.

## **IV. RESULTS**

### **A. Main Results: Black versus White Marriage Penalty/Bonus Differentials**

Over the tax years 1991 to 2018 and averaged across households with each race, our calculations demonstrate that Black households have a statistically significant and larger

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<sup>13</sup> Any grandchildren under the age of 18 without a parent within the family unit are also considered dependents.

<sup>14</sup> As a robustness test, we also estimate the marriage penalty/bonus assuming that all individuals take the relevant standard deduction. These results are largely the same as the results that we report, and they are available upon request.

marriage penalty (or a smaller bonus) than white households for all time periods in our sample period, with an estimated averaged penalty/bonus that fluctuates significantly during this time.<sup>15</sup> Figure 3 displays the averaged marriage penalty/bonus for Black and white households while Figure 4 depicts the difference between those estimates (i.e. Black - white averaged marriage penalty/bonus). Positive values of the averaged marriage penalty/bonus imply an increased tax liability if married (a marriage penalty) while negative values imply a marriage bonus (reduced tax liability). Both Black and white households experienced an averaged marriage penalty from 1992 to 2003, but the penalty was smaller for white households.

The averaged penalty peaked in 2000, with a \$1030 averaged penalty for Black households and an averaged penalty of \$816 for white households. The difference (Figure 4) of \$204 implies that white households faced an averaged penalty \$204 less than that for Black households. The largest averaged marriage bonus occurred in 2018, with white households enjoying an averaged reduced tax liability of \$1141, while Black households experienced an averaged reduced tax liability of \$354. The year 2018 also marks the greatest differential in the averaged marriage bonus received by Black and white married households, with white households experiencing a \$787 larger averaged marriage bonus. The exact estimated averaged marriage bonus/penalty for all households in our sample for all sample years is presented in an online Appendix.

These results are consistent with the main factors generating differences by race in the averaged marriage penalty/bonus over our sample period: household absolute earnings levels and relative household earnings composition, both interacting with the tax laws.

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<sup>15</sup> As noted earlier, all estimates of marriage penalties/bonuses presented here are averages across households within each race category. We refer to these averages across households as “averaged” marriage penalty/bonus estimates.

The estimates in Figures 3 and 4 suggest that two of the tax reforms over this period significantly influenced the estimates. Before the 2001-2003 Bush tax cuts via the Economic Growth and Tax Relief Reconciliation Act (EGTRRA), both Black and white households experienced an averaged marriage penalty, and Black households experienced an averaged marriage penalty that was approximately \$200 greater than the one experienced by white households. The EGTRRA tax cuts doubled the standard deduction for married households filing jointly. After the EGTRRA tax cuts the magnitude of the averaged marriage penalty decreased significantly for both groups, with white households starting to experience averaged marriage bonuses and Black households experiencing reduced but still large averaged marriage penalties. These changes are consistent with our earlier numerical example, in which doubling the married tax brackets effectively reduced the marginal tax rates facing married couples. Over the next decade or so, white households generally experienced an averaged marriage bonus (with some variations), while Black households continued to experience an averaged marriage penalty. The differential between the averaged marriage penalty for Black households compared to the averaged marriage bonus for white households often exceeded \$300. Regardless of the exact differential, Black households always paid more than white households over this period.

More recently, the 2017 Tax Cuts and Jobs Act (TCJA) equalized the tax brackets for married households filing jointly to double the singles tax bracket on incomes up to \$600,000; however, the income bracket eligibility for the EITC did not increase for married couples to double the income bracket eligibility of single individuals. These changes resulted in a significant decrease in the averaged marriage penalty for both Black and white married households, but this decrease benefited white households much more. White households

experienced an averaged marriage bonus of \$1141 in 2018 compared to an averaged bonus of \$354 for Black households, a difference of \$787.

As for household earning levels and household earnings composition, these factors also affected the averaged marriage penalty/bonus over time and its differential by race. Figure 5 provides the estimated averaged marriage penalty/bonus by household earnings levels. These estimates are obtained by decomposing the tax liability difference by race and by household earnings in increments of \$20,000 (inflated to 2020 dollars).

Although all earnings brackets show a larger averaged marriage penalty for Black households for most time periods, there are significant differences in the averaged marriage penalty/bonus between higher- and lower-earnings households. For both Black and white households, those earning more than \$160,000 experienced the highest averaged marriage penalty, with a \$4453 averaged marriage penalty for Black households (year 2001) and a \$3221 averaged marriage penalty for white households (year 2000). The highest-earning households also experienced the highest averaged marriage bonus after the TCJA tax cuts, with Black households experiencing an averaged marriage bonus of \$1196 in 2018 while white households experienced an even higher averaged marriage bonus \$3177 in 2018.

In contrast, the difference in the averaged marriage penalty/bonus for the lowest-earning households is significantly smaller and statistically insignificant. For households earning less than \$20,000, both Black and white households experienced an averaged marriage bonus for all time periods, with increased averaged bonuses after the 2001 tax cuts, which then decreased after the 2017 tax cuts. This averaged bonus is lowest for Black households in 1997 (\$189) and highest in 2009 (\$688), while the averaged bonus for white households is lowest in 1999 (\$190) and highest in 2010 (\$619). Couples in the lowest-earning categories often qualify for the EITC,



which penalizes equal earning households. However, since the vast majority of these households are also one-earner households or households with significant within-household earnings differentials, the net effect is an averaged marriage bonus.

While Figure 5 shows the averaged marriage penalty/bonus by race, Figure 6 shows the estimated differences in these averaged marriage penalty/bonus between Black and white households by earnings categories, also including 95 percent confidence intervals. These differences vary somewhat by earnings. Black households in the lowest two earnings ranges (up to \$40,000) consistently experience a higher averaged penalty than white households, but these differences are small and generally statistically insignificant, hovering around \$0. In contrast, as household earnings increase above \$40,000, the differences between Black and white households show consistently that Black households pay a higher marriage penalty or receive a lower marriage bonus, differences that are often statistically significant.

For example, the difference of the averaged marriage penalty/bonus across race for households earning between \$100,000-\$120,000 is highest in 2008 (\$1190), with Black households experiencing an averaged marriage *penalty* of \$558 and white households experiencing an averaged marriage *bonus* of \$632. The peak difference in the averaged marriage penalty/bonus is even higher for households earning \$120,000-\$140,000 (\$1859 in 2002), with Black households experiencing an averaged marriage penalty of \$3276 and white households experiencing an averaged marriage penalty of \$1417. The largest difference of the averaged marriage penalty/bonus between Black and white households occurs in 2002 (\$2237) for those earning between \$140,000-\$160,000. The highest earning households (households with earnings greater than \$160,000) have a similar peak difference (\$2032 in year 2018) between the averaged marriage penalty/bonus between Black and white households. For these households, both Black

and white households experienced an averaged marriage *bonus* of \$1144 for Black households and \$3176 for white households.

Given the significant effect of the 2017 TCJA on the difference in the averaged marriage tax between Black and white households, we summarize the averaged difference before and after implementation for all household earnings levels (Table 4). With the exception of the lowest earnings households, both Black and white households experienced a reduction in taxes from the TCJA. However, across nearly all household earnings categories, white households received a higher marriage bonus or paid a lower marriage tax than Black households from the TCJA. The greatest differences between Black and white households occurs among couples earning more than \$160,000. Post-TCJA, the averaged marriage penalty for Black households in this earnings range dropped from an averaged marriage penalty of \$1718 in 2017 to an averaged marriage bonus of \$1144 in 2018, a change of \$2862. For white households, the average dropped even more by \$4328, from a penalty of \$1152 in 2017 to a bonus of \$3176 in 2018.

## **B. Isolating the Influence of Changes in the Tax Code from Changes in Households**

### **Earnings**

We attempt to separate the influence of changes in the tax code from changes in household earnings and other characteristics by re-estimating the marriage penalty/bonus in two different ways, following the approaches used by Alm and Whittington (1996), Eissa and Hoynes (2000), and Alm and Leguizamon (2015). In the first approach, we keep the tax code constant at the 2018 level (the last year in our sample period), and we then estimate the marriage penalty/bonus for all couples in our sample for all time periods, while allowing the household composition to change over time. In the second approach, we estimate the marriage

penalty/bonus for the couples in the 2019 CPS sample using the tax codes for all the other years, thereby holding family earnings and earnings composition constant at their 2019 levels and so observing the influence of the changing tax code only.

Figure 7 provides the estimated averaged marriage penalty/bonus when we hold the tax code constant for the 2018 tax year and we allow the household composition to vary.<sup>16</sup>

Figure 7 indicates that in most years both Black and white households receive a marriage bonus when the tax code is held constant at its post-TCJA level, and that this marriage bonus generally increases over time for both Black and white households. Importantly, however, Black households once again are treated less favorably by the tax code than white households, either paying an averaged larger penalty or receiving a smaller bonus for all years. The estimated differences are statistically significant, and, given the changes in the tax code in 2017, the differences are markedly larger than the main estimates in Figures 3 and 4 obtained when the tax code varied by year. For example, in the year 2000, the estimated Black/white difference using the year 2000 tax code is a little over \$200 (Figure 4), but using the 2018 tax code this difference jumps to over \$1000 (Figure 7). Because the marriage penalty/bonus is heavily influenced by the within-couple earnings differential, the variation in the averaged marriage bonus/penalty is not surprising given the variation in the earnings ratios of Black and white households through time (as seen in Figures 1 and 2).

When we allow the tax code to vary but the sample to remain at its 2019 household composition (Figure 8), our estimated differences are reduced relative to our main estimates (Figures 3 and 4), highlighting the smaller impact of year-to-year changes in the tax code. Prior to the 2001-2003 EGTRRA tax cuts, there is no statistically significant difference between the

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<sup>16</sup> We choose 2018 in order to use the most recent and updated tax code. However, this exercise can be performed holding any tax code year constant.

marriage penalty of Black households and white households. After 2003, the estimated averaged difference is persistent and ranges from approximately \$250 to \$800. This trend mirrors the trend from our main results, which implies that, even if average household characteristics had remained the same, the 2001-2003 tax code changes generated significant changes to the estimated racial difference in the averaged marriage penalty/bonus most all of which disproportionately penalized marriage for Black households. The Black/white averaged marriage bonus/penalty differential jumped again dramatically after the 2017 TJCA tax changes, a result that is consistent with our conclusion that recent tax reforms in general, and the TCJA in particular, significantly exacerbated the differential in the averaged marriage penalty/bonus between Black and white households.

### **C. Extending the Analysis to Hispanic Versus non-Hispanic Households**

The ability of individuals to self-identify both as a race and an ethnicity requires consideration when constructing these households in our sample. Since each respondent may self-identify two or more races in addition to their ethnicity, the classification of households with two individuals each having their own race and ethnicity classification yields a large number of combinations with many combinations having very few observations. For simplicity, we limit our analysis to the comparison of Hispanic and non-Hispanic using the ethnicity classification as coded by IPUMS CPS (Flood et al., 2020). Note that the comparison group in the Hispanic/non-Hispanic analysis (or non-Hispanic households) is not necessarily the same as the comparison group in the Black/white analysis (or white households) because non-Hispanics could include Blacks.

We only consider two classification criteria here: a *Strict* classification, which occurs when both partners identify as Hispanic; and a *Broad* classification, which requires that at least one partner identifies as Hispanic. At the beginning of our CPS sample in 1992, 6.2 percent of households in the sample are Hispanic under the *Strict* condition, and 8.3 percent are Hispanic under the *Broad* condition. By the end of our sample in 2019, these percentages rise to 12.1 percent and 18.0 percent, respectively.

In 2019, the lower earning spouse in Hispanic households earned \$13,758 on average while the higher earning spouse earned on average \$43,711, resulting in a within-couple average differential of \$29,953. This is almost identical to the within-couple average differential for Black married couples (\$28,746), and it is significantly lower than the differential for white married couples (\$48,981).

Using the *Strict* classification, we present the averaged marriage penalty/bonus for Hispanic households in Figure 9.<sup>17</sup> With the exception of some specific tax years (2003, 2010, 2012, and 2018), Hispanic households faced an averaged marriage penalty, one that was typically smaller than the averaged marriage penalty faced by Black households. Prior to 2001, Hispanic households faced a lower averaged marriage penalty (a larger averaged marriage bonus) than non-Hispanic households; after 2001 and until 2018, this trend reversed with Hispanic households facing a larger averaged marriage penalty (a smaller averaged marriage bonus). The 2017 tax cuts resulted in the highest differential between Hispanic and non-Hispanic households.

Holding the tax code constant at 2018 and allowing the sample of households to vary (Figure 10) results in much larger and variable estimates of Hispanic versus non-Hispanic

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<sup>17</sup> Estimations by year are presented in the online Appendix.

differences in the averaged marriage penalties. Prior to 2000, married Hispanic households faced an estimated averaged penalty over \$200 more than non-Hispanic households. In the 2000s, the estimated averaged difference increases rapidly to roughly \$800. Since then, the differential has fluctuated between \$600 and \$800, partially mirroring the estimates using current taxes and current household composition. This suggests that changes in household composition significantly affected the observed Hispanic versus non-Hispanic differential, especially at the beginning of the period.

Holding the household sample constant for the year 2019 and allowing the tax code to change (Figure 11) reveals once again the striking impact of the EGTRRA and TCJA tax reforms. Prior to 2001-2003, Hispanic households faced a smaller averaged marriage penalty (or a larger bonus) than non-Hispanic households. Post-2003 until 2018, there was no statistically significant difference. After the TCJA tax changes, we estimate that Hispanic households face a larger averaged marriage penalty or a smaller bonus of approximately \$600 more than non-Hispanic households. Put differently, the same Hispanic household in 1992 faced a \$500 lower averaged marriage penalty (or a higher bonus) than a non-Hispanic household, but this same household faced in 2018 a \$600 higher averaged marriage penalty (or a smaller bonus).

## **V. CONCLUSIONS**

The disparate treatment of individuals and families by race – and ethnicity – has finally emerged as a fundamental crisis of modern American life, one that many institutions are starting to address in systematic, if somewhat halting ways. Although the income tax code in the United States is written in a race-blind manner, disparities across race and ethnicity, particularly

regarding labor market outcomes, significantly affect the ways by which Black and Hispanic households pay income taxes compared to the tax treatment of white households.

In this paper, we estimate the racial differences in the marriage penalty/bonus embedded in the U.S. federal income tax using individual micro-level data from the CPS data. We quantify the differential treatment of Black and white households at a level of detail not previously considered and make these calculations over an extended period of time (1992 to 2019, corresponding to tax years 1991 to 2018). Hispanic households represent a growing proportion of married couples, so we also extend our calculations of the marriage penalty/bonus by ethnicity.

It may be easy to get lost in our many calculations. However, our basic result is a simple one: the individual income tax is not neutral by race. As first suggested by Dorothy A. Brown, the smaller spousal earnings differential among Black households relative to white households leads to consistent and large disparate impacts by race. We find similar if somewhat smaller disparate impacts for Hispanic households relative to non-Hispanic households. Indeed, the income tax code is not marriage neutral for any of these groups. Black households nearly always face a higher estimated marriage penalty than white households, sometimes even among couples with similar family earnings. Although not as striking, similar forces generate the Hispanic/non-Hispanic differences.

Our findings have important implications for how we as a society attempt to reduce racial disparities. One policy that would reduce racial disparities, at least those generated by the tax code, would be to make the tax code marriage neutral by changing the unit of taxation from the family back to the individual, which would also redefine horizontal equity in terms of individuals, not married households. This recommendation can be inferred from the works of such analysts as Bittker (1975), Rosen (1987), Alm and Whittington (1996), Congressional

Budget Office (1997), Alm and Leguizamon (2015), and Brown (2021). It is also consistent with world-wide trends in individual income taxation that have seen a general move by countries toward taxing the individual, not the family.<sup>18</sup> Such a change would eliminate the racial and ethnic differences in the income tax treatment of Black, Hispanic, and white married households. It would also likely increase overall income tax collections, since our estimates currently find an overall and large averaged marriage bonus, at least post-TCJA.

However, this reform would not affect the marriage penalties and bonuses throughout other parts of the tax and transfer system. Moreover, such a reform would bring back some of the problems that drove the initial adoption of the family as the unit of taxation: families with equal incomes would pay unequal taxes; administrative decisions would need to be made on allocating incomes, deductions, and credits across partners; compliance costs for individuals would likely increase; and enforcement problems would no doubt arise in verifying any reported items. Some of these additional administrative and compliance costs would also likely affect minority groups disproportionately.

More importantly, any reform of the individual income tax is admittedly only a small, piecemeal step toward addressing the far larger presence of racial disparities throughout our society. Recall that the disparate treatment of Blacks and Hispanics is due to the interaction of the income tax code with labor market outcomes. More fundamental – and more difficult – reforms would attempt to address these differential labor market outcomes directly largely by reducing the earnings gaps between Black and white men and women via such policies as educational, regulatory, and legal reforms, including perhaps reparations.

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<sup>18</sup> For example, see the Organisation for Economic Co-operation and Development (OECD) family database, at <https://www.oecd.org/els/family/database.htm><https://www.oecd.org/els/family/database.htm>, which presents detailed information on the tax (and transfer) systems of OECD countries and their effects on families and individuals.



There are no easy choices here. Addressing disparities that the income tax treatment of the family generates is only a small part of confronting our current racial crisis. There is much more to be done.

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### **CONFLICT OF INTEREST DISCLOSURE**

The authors have no financial arrangements that might give rise to conflicts of interest with respect to the research reported in this paper.

### **REFERENCES**

- Alm, James, Stacy Dickert-Conlin, and Leslie A. Whittington, 1999. "Policy Watch: The Marriage Penalty." *The Journal of Economic Perspectives* 13 (3), 193-204.
- Alm, James, and J. Sebastian Leguizamon, 2015. "Whither the Marriage Penalty?" *National Tax Journal* 68 (2), 251-280.
- Alm, James, J. Sebastian Leguizamon, and Susane Leguizamon, 2014. "Revisiting the Income Tax Consequences of Legalizing Same-sex Marriage." *Journal of Policy Analysis and Management* 33 (2), 263-289.
- Alm, James, and Mikhail I. Melnik, 2005. "Taxing the 'Family' in the Individual Income Tax – An International Perspective." *Public Finance and Management* 5 (1), 67-109.
- Alm, James, and Leslie A. Whittington, 1996. "The Rise and Fall and Rise...of the Marriage penalty." *National Tax Journal* 49 (4), 571-589.
- Alm, James, and Leslie A. Whittington, 1997a. "'Til Death or Taxes Do Us Part: The Effect of Income Taxes on Divorce." *Journal of Human Resources* 32 (2), 388-412.
- Alm, James, and Leslie A. Whittington, 1997b. "Income Taxes and the Timing of Marital Decisions." *Journal of Public Economics* 64 (2), 219-240.
- Alm, James, and Leslie A. Whittington, 1999. "For Love or Money? The Impact of Income Taxes on Marriage." *Economica* 66 (4), 297-316.
- Alm, James, and Leslie A. Whittington, 2003. "Shacking Up or Shelling Out: Income Taxes, Marriage, and Cohabitation." *Review of Economics of the Household* 1 (3), 169-186.

- Alm, James, Leslie A. Whittington, and Jason Fletcher, 2002. "Is There a 'Singles Tax'? The Relative Income Tax Treatment of Single Households." *Public Budgeting & Finance* 22 (2), 69-86.
- Bakija, Jon, and C. Eugene Steuerle, 1991. "Individual Income Taxation since 1948." *National Tax Journal* 44 (4), 451-475.
- Bearer-Friend, Jeremy, 2019. "Should *the IRS Know Your Race? The Challenge of Colorblind Tax Data.*" *Tax Law Review* 73 (1), 1-68.
- Bearer-Friend, Jeremy, 2022. "Colorblind Tax Enforcement." *New York University Law Review* 97 (1), 1-57.
- Berliant, Marcus, and Paul Rothstein, 2003. "Possibility, Impossibility, and History in the Origins of the Marriage penalty." *National Tax Journal* 56 (2), 303-317.
- Bernstein, David E., 2022. *Classified: The Untold Story of Racial Classification in America.* New York, NY: Bombardier Books and Simon & Schuster, Inc.
- Bittker, Boris I., 1975. "Federal Income Taxation and the Family." *Stanford Law Review* 27 (4), 1388-1463.
- Borella, Margherita and Mariacristina De Nard and Michael Pak and Nicolo Russe and Fang Yang, 2022 "The Importance of Modeling Income Taxes Over time. US Reforms and Outcomes." (No w30725) *National Bureau of Economic Research*
- Brown, Dorothy A., 1997a. "The Marriage Bonus/Penalty in Black and White." *University of Cincinnati Law Review* 65 (3), 787-798.
- Brown, Dorothy A., 1997b. "Race, Class, and Gender Essentialism in Tax Literature: The Joint Return." *Washington & Lee Law Review* 54 (4), 1469-1512.
- Brown, Dorothy A., 1999a. "Racial Equality in the Twenty-first Century: What's Tax Policy Got To Do With It?" *University of Arkansas at Little Rock Law Review* 21 (4), 759-768.
- Brown, Dorothy A., 1999b. "The Marriage Penalty/Bonus Debate: Legislative Issues in Black and White." *New York Law School Journal of Human Rights* 16 (1), 287-302.
- Brown, Dorothy A., 2004a. "Fighting Racism in the Twenty-first Century." *Washington & Lee Law Review* 61 (4), 1485-1499.
- Brown, Dorothy A., 2004b. "Pensions, Risk, and Race." *Washington & Lee Law Review* 61 (4), 1501-1539.
- Brown, Dorothy A., 2005. "Tax Treatment of Children: Separate But Unequal." *Emory Law Journal* 54 (2), 755-842.
- Brown, Dorothy A., 2007a. "Race and Class Matters in Tax Policy." *Columbia Law Review* 107 (3), 790-831.
- Brown, Dorothy A., 2007b. "Pensions and Risk Aversion: The Influence of Race, Ethnicity, and Class on Investor Behavior." *Lewis & Clark Law Review* 11 (2), 385-406.
- Brown, Dorothy A., 2009. "Shades of the American Dream." *Washington University Law Review* 87 (2), 329-378.
- Brown, Dorothy A., 2021. *The Whiteness of Wealth: How the Tax System Impoverishes Black Americans – and How We Can Fix It.* New York, NY: Crown Publishing.
- Bull, Nicholas, Janet Holtzblatt, James R. Nunns, and Robert Rebelein, 1998. "Defining and Measuring Penalties and Bonuses." Office of Tax Analysis Working Paper 82. Washington, D.C.: U.S. Department of the Treasury.
- Bureau of Labor Statistics (BLS), 2021. *Databases, Tables & Calculators by Subject.* Washington, D.C.: Bureau of Labor Statistics.

- Burstein, Nancy R., 2007. "Economic Influences on Marriage and Divorce." *Journal of Policy Analysis and Management* 26 (2), 387-429.
- Carasso, Adam, and C. Eugene Steuerle, 2005. "The Hefty Tax on Marriage Facing Many Households with Children." *The Future of Children* 15 (2), 157-175.
- Chade, Hector, and Gustavo Ventura, 2005. "Income Taxation and Marital Decisions." *Review of Economic Dynamics* 8 (3), 565-599.
- Congressional Budget Office, 1997. *For Better or For Worse: Marriage and the Federal Income Tax*. Washington, D.C.: Congress of the United States.
- Dean, Steven A., 2022. "Filing While Black: The Casual Racism of the Tax Law." Brooklyn Law School Legal Studies Research Paper No. 709. Brooklyn, NY: Brooklyn Law School.
- Dickert-Conlin, Stacy, 1999. "Taxes and Transfers: Their Effects on the Decision to End a Marriage." *Journal of Public Economics* 73 (2), 217-240.
- Dickert-Conlin, Stacy, and Scott Houser, 2002. "EITC and Marriage." *National Tax Journal* 55 (1), 25-40.
- Eissa, Nada, and Hilary Williamson Hoynes, 2000. "Explaining the Fall and Rise in the Tax Cost of Marriage: The Effect of Tax Laws and Demographic Trends, 1984-97." *National Tax Journal* 53 (3, Part 2), 683-711.
- Elzayn, Hadi, Evelyn Smith, Thomas Hertz, Arun Ramesh, Robin Fisher, Daniel E. Ho, and Jacob Goldin, 2023. "Measuring and Mitigating Racial Disparities in Tax Audits." Stanford Institute for Economic Policy Research (SIEPR) Working Paper. Stanford, CA: SIEPR.
- Fisher, Hayley. 2013. "The Effect of Marriage Tax Penalties and Subsidies on Marital Status." *Fiscal Studies* 34 (4): 437-465.
- Feenberg, Daniel R. and Elizabeth Coutts, 1993. "An Introduction to the TAXSIM Model." *Journal of Policy Analysis and Management* 12 (1), 189-194.
- Feenberg, Daniel R., and Harvey S. Rosen, 1995. "Recent Developments in the Marriage penalty." *National Tax Journal* 48 (1), 91-101.
- Feucht, Frederick J., Murphy Smith, and Robert Strawser, 2009. "The Negative Effect of the Marriage Penalty Tax on American Society." *Academy of Accounting and Financial Studies Journal* 13 (1), 103-125.
- Flood, Sarah, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren, 2020. *Integrated Public Use Microdata Series, Current Population Survey: Version 7.0* [dataset]. Minneapolis, MN: IPUMS.
- Friedberg, Leora, and Elliott Isaac, 2023. "Same-Sex Marriage Recognition and Taxes: New Evidence About the Impact of Household Taxation." *The Review of Economics and Statistics* forthcoming.
- Gale, William, 2021. "Public Finance and Racism." *National Tax Journal* 74 (4), 953-974.
- Gillette, Robert, Janet Holtzblatt, and Emily Y. Lin, 2005. "Marriage Penalties and Bonuses: A Longer Term Perspective." *National Tax Association Proceedings of the Ninety-seventh Annual Conference on Taxation* (Minneapolis, MN), 468-478.
- Gillette, Robert, Janet Holtzblatt, and Emily Y. Lin, 2006. "What Gives Rise to Changes in Marriage Penalties and Bonuses: A Panel Model Approach." *National Tax Association Proceedings of the Ninety-eighth Annual Conference on Taxation* (Miami, FL), 452-463.

- Holtzblatt, Janet, Swati Joshi, Nora Cahill, and William Gale, 2022. “Racial Disparities in the Income Tax Treatment of Marriage.” Urban-Brookings Tax Policy Center Working Paper. Washington, D.C.: Urban-Brookings Tax Policy Center.
- Holtzblatt, Janet, and Robert Rebelein, 2000. “Measuring the Effect of the EITC on Marriage Penalties and Bonuses.” *National Tax Journal* 53 (4), 1107-1133.
- Jurow Kleiman, Ariel, Amy K. Matsui, and Estelle Mitchell, 2019. “The Faulty Foundations of the Tax Code: Gender and Racial Bias in Our Tax Laws.” San Diego Legal Studies Paper No. 19-423. San Diego, CA: University of San Diego School of Law.
- Kaplow, Louis, 1989. “Horizontal Equity: Measures in Search of a Principle.” *National Tax Journal* 36 (4), 139-154.
- Kaplow, Louis, 2008. *The Theory of Taxation and Public Economics*. Princeton, NJ: Princeton University Press.
- Kleven, Henrik Jacobsen, Claus Thustrup Kreiner, and Emmanuel Saez, 2009. “The Optimal Income Taxation of Couples.” *Econometrica* 77 (2), 537-560.
- Laurin, Alexandre, and Jonathan Rhys Kesselman, 2011. “Income Splitting for Two-Parent Families: Who Gains, Who Doesn’t, and at What Cost?” C.D. Howe Commentary Working Paper 335. Toronto, Canada: C.D. Howe Institute.
- Lin, Emily Y., and Patricia K. Tong, 2012. “Marriage and Taxes: What Can We Learn from Tax Returns Filed by Cohabiting Couples?” *National Tax Journal* 65 (4), 807-826.
- Micheltore, Katherine. 2018. “The Earned Income Tax Credit and Union Formation: The Impact of Expected Spouse Earnings.” *Review of Economics of the Household* 16 (2), 377-406.
- Musgrave, Richard A., 1959. *The Theory of Public Finance: A Study in Public Economy*. New York, NY: McGraw-Hill Book Company.
- Musgrave, Richard A., 1976. “ET, OT, and SBT.” *Journal of Public Economics* 6 (1), 3-16.
- Rosen, Harvey S., 1987. “The Marriage penalty Is Down But Not Out.” *National Tax Journal* 40 (4), 567-576.
- Parker, Kim, Juliana Manasce Horowitz, Rich Morin, and Mark Hugo Lopez, 2015. “Chapter 2: Counting Multiracial Americans.” In *Multiracial in America. Proud, Diverse and Growing in Numbers*. Washington, D.C.: Pew Research Center.
- Roeder, Kerstin, and Robert Ullmann. 2019. “‘Will You Marry Me...In December?’ – Tax-induced Wedding Date Shifting and Mismatching in Long-Term Relationships.” NHH Norwegian School of Economics Working Paper. Bergen, Norway. Available at SSRN: <https://ssrn.com/abstract=3354630>.
- Steuerle, C. Eugene, 1999. “Valuing Marital Commitment: The Radical Restructuring of our Tax and Transfer Systems.” *The Responsive Community* 9 (2), 35-45.
- Steuerle, C. Eugene, 2006. “The Widespread Prevalence of Marriage Penalties.” Washington, D.C.: The Urban Institute/Brookings Institution Tax Policy Center.
- U.S. General Accounting Office, 1996. *Income Tax Treatment of Married and Single Individuals* (GAO/GGD-96-175). Washington, D.C.

**Table 1. Major Tax Changes and Potential Impacts on the Marriage Penalty/Bonus**

<b>Tax Act</b>	<b>Description</b>	<b>Impact on Marriage Penalty/Bonus?</b>
1913 – Establishment of Individual Income Tax	Imposed income tax at the individual level with progressive rates	Was marriage neutral given choice of individual as unit of taxation
1930 Tax Provision	Allowed income splitting between spouses in community property states	Created a marriage bonus for couples in community property states
Revenue Act of 1948	Allowed couples in all states to split income between spouses	Increased the marriage bonus for most couples
Tax Reform Act of 1969	Created new tax schedules for singles and created separate income tax brackets of married couples	Decreased the marriage bonus for some couples and created a marriage penalty for some couples
Tax Reduction Act of 1975	Created the EITC	Changed marriage penalty for some couples and marriage bonus for other couples
Tax Reform Act of 1986 (TRA)	Reduced progressivity of income tax	Decreased the marriage penalty
Tax Act of 1990	Extended the EITC and increased progressivity	Increased (decreased) the marriage penalty (bonus)
1993 Omnibus Budget Reconciliation Act (OBRA)	Extended the EITC and increased progressivity	Increased (decreased) the marriage penalty (bonus)
Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA)	Doubled the standard deduction for married couples and reduced marginal income tax rates for most brackets	Decreased the marriage penalty
Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA)	Accelerated the phase-in of many of the 2001 tax cut provisions	Decreased the marriage penalty
Tax Cuts and Jobs Act of 2017 (TCJA)	Increased the standard deduction to married couples to twice the level for singles, except for those at the 35% marginal tax rate	Decreased the marriage penalty

Notes: See Borella et al. (2022) for a detailed discussion of these reforms and their implications for the marriage tax.

**Table 2. Earning Distribution of Married Households by Earnings and Race, 2019 CPS Sample**

<u>Earnings Group</u>	<u>Married Households</u>	
	<u>Black</u>	<u>White</u>
Less than \$20,000	7.7%	6.5%
\$20,000 - \$40,000	14.3%	11.1%
\$40,000 - \$60,000	16.3%	13.5%
\$60,000 - \$80,000	15.2%	13.2%
\$80,000 - \$100,000	11.7%	12.4%
\$100,000 - \$120,000	11.1%	10.4%
\$120,000 - \$140,000	6.6%	8.0%
\$140,000 - \$160,000	4.8%	6.1%
Greater than \$160,000	12.3%	18.8%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Notes: Earnings categories are constructed using total household earnings. Percentages in this table are calculated using the Current Population Survey (2019 ASEC sample). The information on earnings refers to the previous year's earnings. White/Black couples in this table are those that meet the *Strict* definition, or those in which both individuals identify only one race and the race is the same for both individuals. The unweighted sample size for Black households is 1873, and the weighted sample size is 3,590,802; the unweighted sample size for white households is 26,112, and the weighted sample size is 45,559,623. The weights are ASEC-CPS household weights.

**Table 3. Earnings Distribution of Married Couples by Earnings Ratio, 2019 CPS Sample**

<u>Earnings Ratio</u>	<u>Less than 0.2</u>		<u>0.2-0.4</u>		<u>0.4-0.6</u>		<u>0.6-0.8</u>		<u>0.8-1</u>	
<u>Earnings Group</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>
Less than \$20,000	92%	83%	4%	4%	0%	4%	4%	4%	0%	4%
\$20,000-\$40,000	78%	78%	4%	7%	8%	5%	5%	4%	3%	6%
\$40,000-\$60,000	54%	61%	7%	9%	11%	8%	14%	9%	15%	13%
\$60,000-\$80,000	34%	45%	11%	12%	18%	13%	18%	14%	19%	16%
\$80,000-\$100,000	24%	32%	16%	13%	15%	18%	24%	18%	21%	19%
\$100,000-\$120,000	18%	30%	14%	13%	19%	16%	17%	17%	32%	23%
\$120,000-\$140,000	14%	26%	17%	16%	17%	17%	28%	20%	24%	21%
\$140,000-\$160,000	16%	29%	23%	14%	18%	21%	17%	16%	26%	19%
Greater than \$160,000	16%	30%	20%	19%	15%	20%	21%	16%	28%	16%

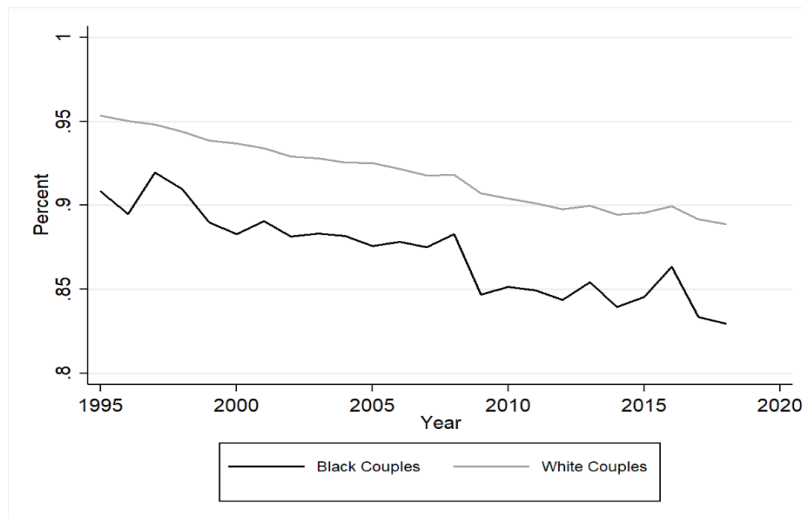
Notes: Percentages in this table are calculated using the Current Population Survey (2019 ASEC sample). Black/white couples in this table are those that meet the *Strict* definition, or those in which both individuals identify only one race and the race is the same for both individuals. Couples' earnings are classified according to their total annual earnings (the first earnings group does not include couples with no earnings). The earnings ratio is defined as the ratio of the lower earner's annual earnings to the higher earner's annual earnings.

**Table 4. Averaged Marriage Penalty/Bonus by Earnings Group and Race, 2017-2018 Tax Years**

Earnings Group	Black Couples			White Couples		
	2017	2018	Tax Liability Increase	2017	2018	Tax Liability Increase
Less than \$20,000	-477.0	-245.1	232.0	-502.3	-367.1	135.1
\$20,000-\$40,000	-800.0	-757.6	42.5	-715.8	-845.7	-129.9
\$40,000-\$60,000	110.1	-96.3	-206.4	97.6	-279.0	-376.6
\$60,000-\$80,000	590.9	61.6	-529.3	106.1	-494.3	-600.4
\$80,000-\$100,000	170.0	-576.8	-746.8	-309.7	-946.3	-636.6
\$100,000-\$120,000	-49.8	-439.1	-389.4	-696.0	-1110.0	-414.0
\$120,000-\$140,000	1258.0	236.5	-1021.5	23.5	-610.8	-634.3
\$140,000-\$160,000	1121.6	438.1	-683.5	97.7	-675.2	-772.8
Greater than \$160,000	1718.1	-1144.3	-2862.4	1152.1	-3176.2	-4328.3

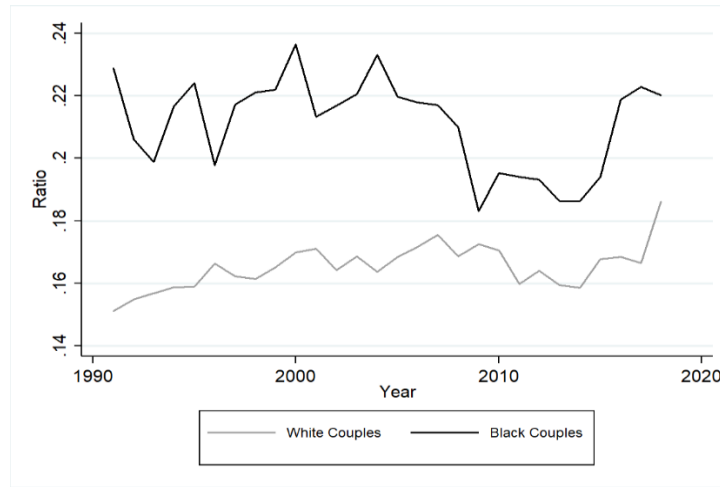
Notes: Estimates are calculated using the Current Population Survey (2018-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year’s earnings, we use the previous year for the tax analysis. Black/white couples in this table are those that meet the *Strict* definition, or those in which both individuals identify only one race and the race is the same for both individuals. A positive value suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. Numbers are adjusted for inflation and reported in 2020 dollars.

**Figure 1. Percent of Households with Two Earners by Race**



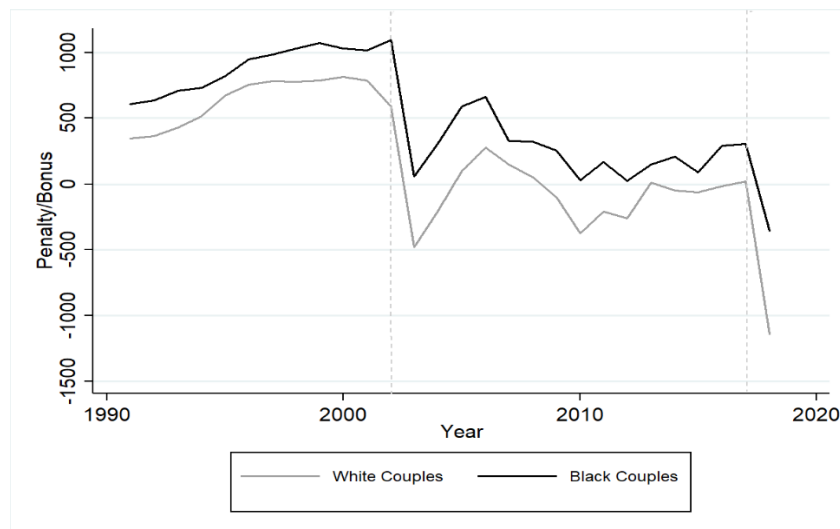
Notes: Data are obtained from the Current Population Survey (1992-2019 ASEC samples). These calculations are conditional on being married and having earnings. Although some couples have other sources of income that are subject to federal taxes, the percentages here are based on earnings, not total income. The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

**Figure 2. Average Earnings Ratio of Married Households by Race**



Notes: The earnings ratios are calculated by dividing the earnings of the lowest earner by the earnings of the highest earner. Couples with zero earnings would show up with an earnings ratio of 1 and hence are excluded. Data are obtained from the Current Population Survey (1992-2019 ASEC samples). The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

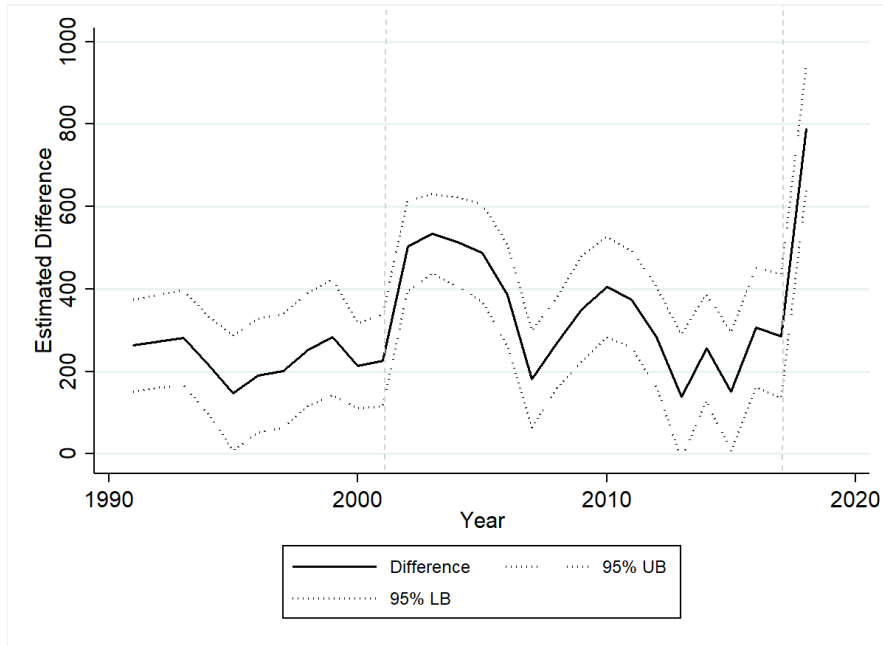
**Figure 3. Averaged Marriage Penalty/Bonus by Race**



Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Dollar amounts are all adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.



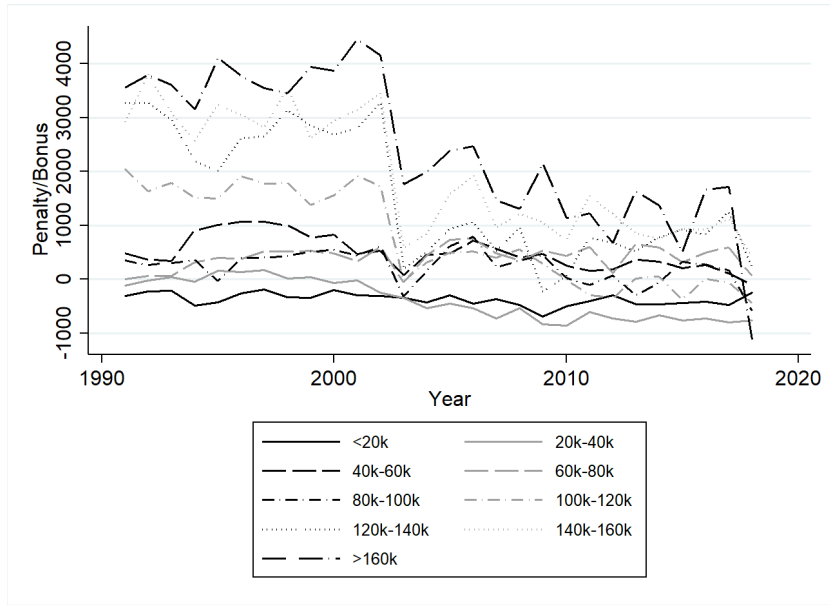
**Figure 4. Difference in Averaged Marriage Penalty/Bonus Between Black and white Couples**



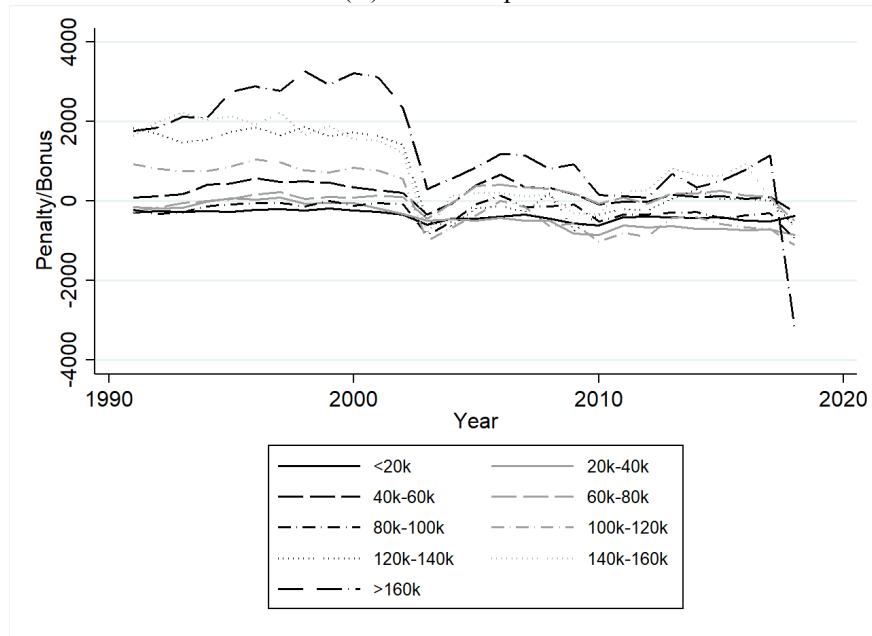
Difference in Averages (Black – White)

Notes: Differences are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year’s earnings, we use the previous year for the tax analysis. The solid line is estimated by subtracting the average estimated penalty/bonus for white couples from the average estimated penalty/bonus for Black couples (black line – gray line in Figure 4), while the dotted lines are the 95 percent confidence intervals. Dollar amounts are all adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

**Figure 5. Averaged Marriage Penalty/Bonus by Race and Earnings**



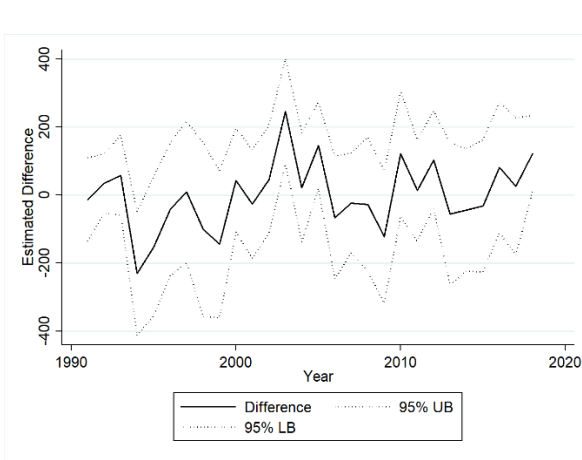
(A) Black Couples



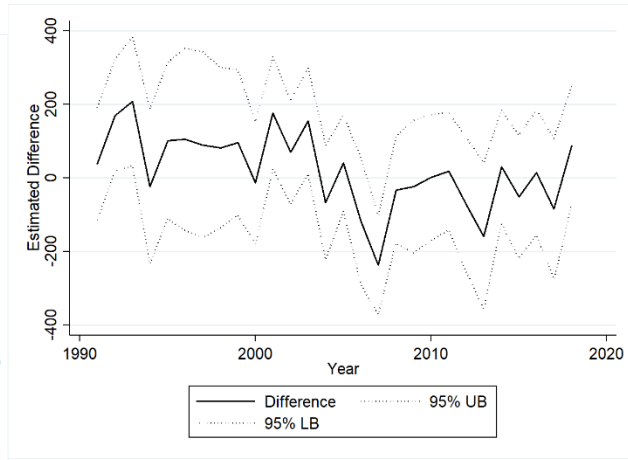
(B) White Couples

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Dollar amounts are adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

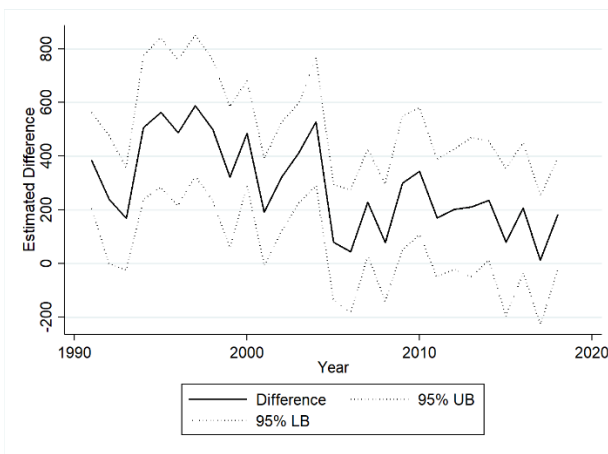
**Figure 6. Racial Difference in Averaged Marriage Penalty/Bonus by Earnings (Black – White)**



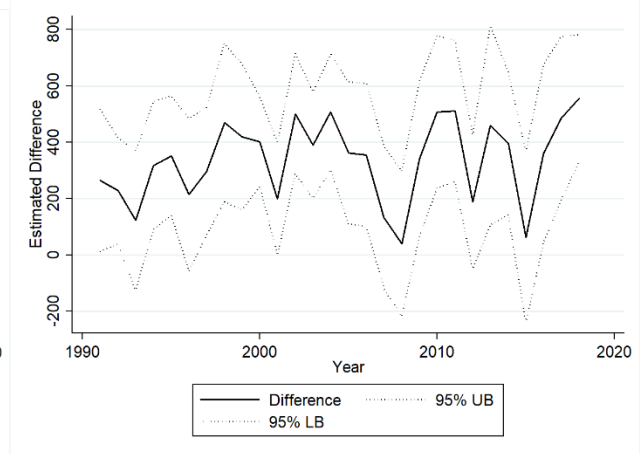
(A) Less than \$20,000



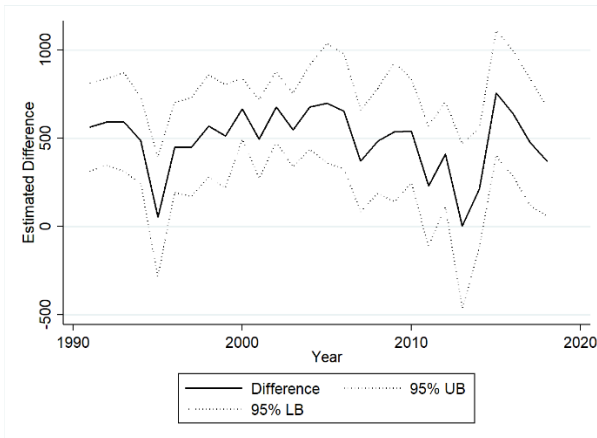
(B) Between \$20,000 and \$40,000



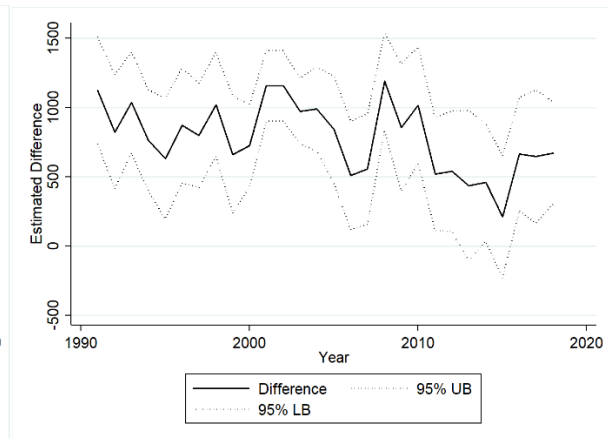
(C) Between \$40,000 and \$60,000



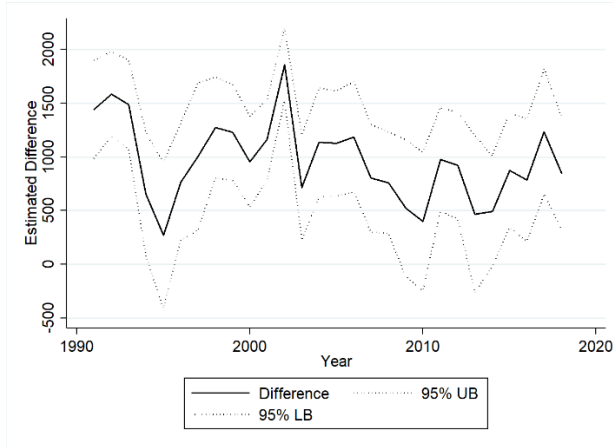
(D) Between \$60,000 and \$80,000



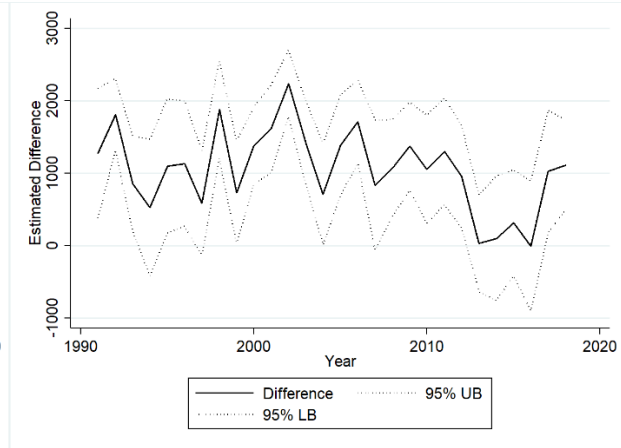
(E) Between \$80,000 and \$100,000



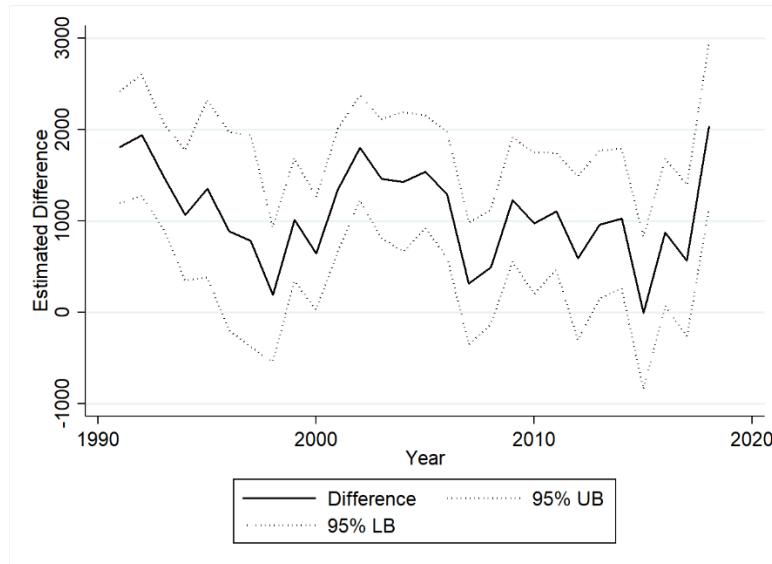
(F) Between \$100,000 and \$120,000



(G) Between \$120,000 and \$140,000



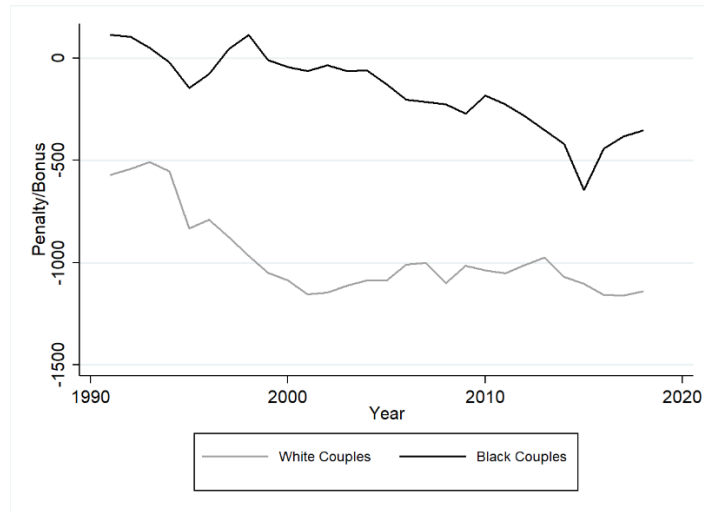
(H) Between \$140,000 and \$160,000



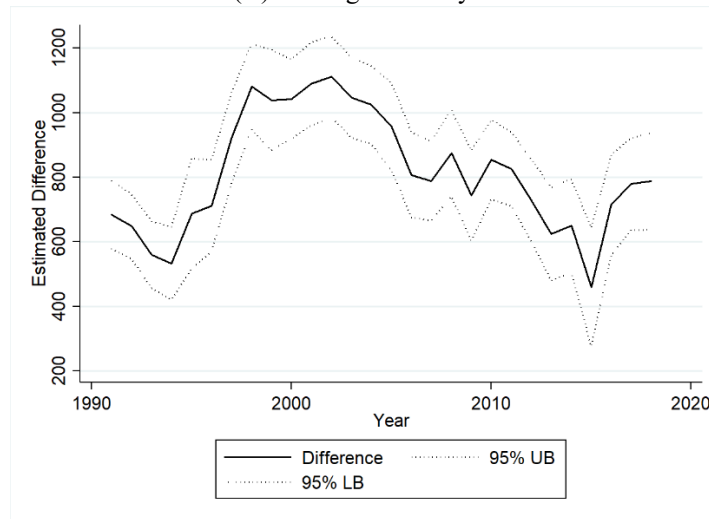
(I) Greater than \$160,000

Notes: Differences are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. The solid line is estimated by subtracting the average estimated penalty/bonus for white couples from the average estimated penalty/bonus for Black, while the dotted lines are the 95 percent confidence intervals. Dollar amounts are adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded.

**Figure 7. Averaged Marriage Penalty/Bonus Keeping the Tax Code Year Constant (2018)**



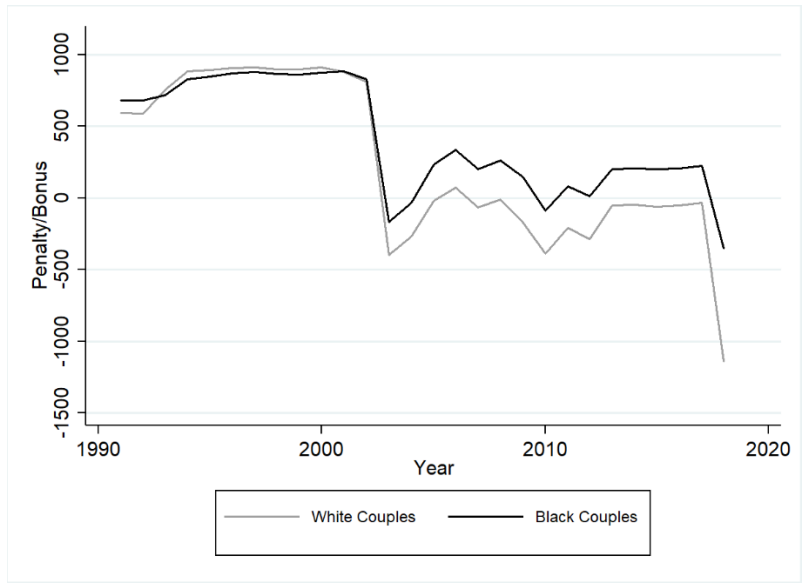
**(A) Averaged Penalty/Bonus**



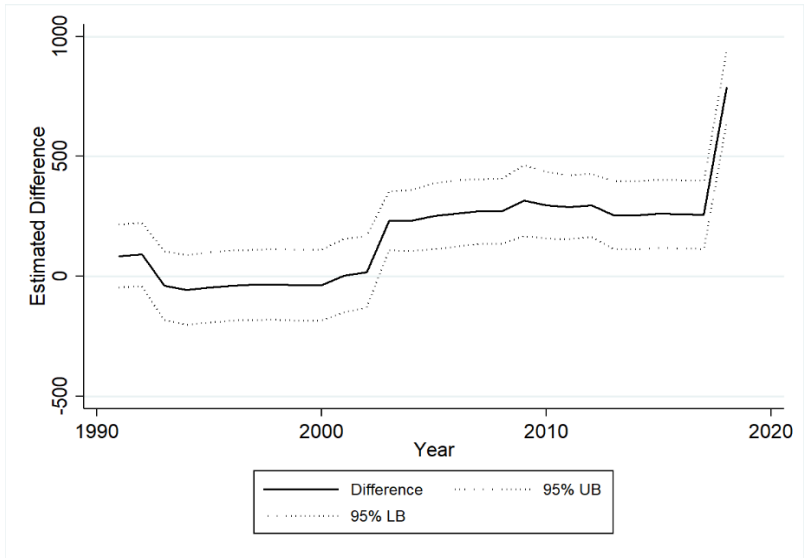
**(B) Differences in Average (Black-White)**

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Dollar values for each sample year are inflated to 2018 dollars to calculate the tax liabilities using the 2018 tax code for all years. Once calculated, average penalties/bonuses are adjusted again and reported in 2020 dollars. A positive value in Panel A suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value in Panel A suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Panel B presents the differences between Black and white couples. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race or ethnicity and the race/ethnicity is the same for both individuals.

**Figure 8. Averaged Marriage Penalty/Bonus Keeping the Sample Constant (CPS 2019)**



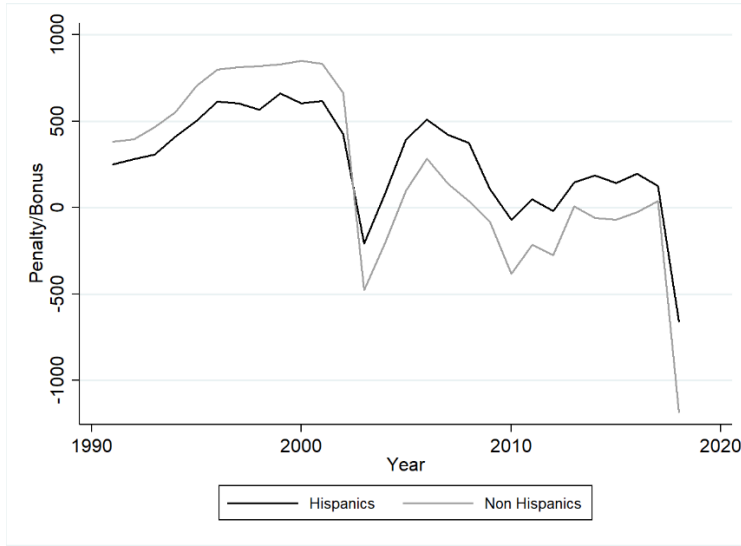
(A) Averaged Penalty/Bonus



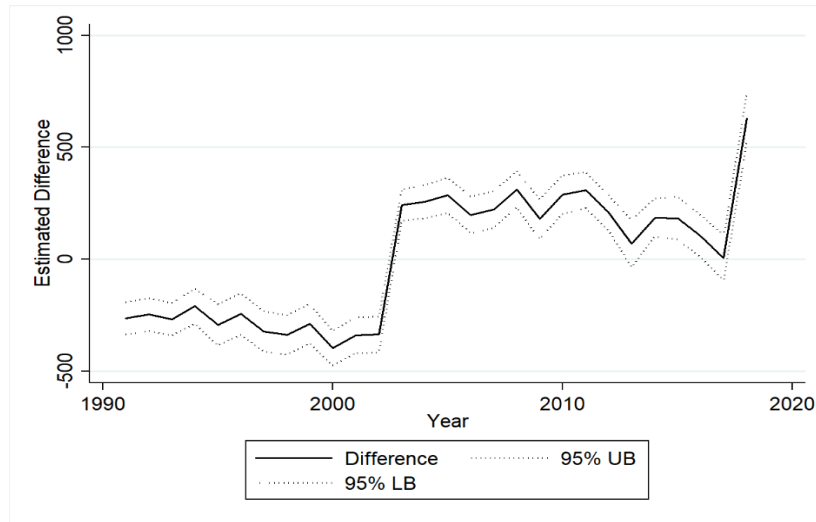
(B) Differences in Average (Black-White)

Notes: Estimates are calculated using the Current Population Survey (2019 ASEC sample) and the NBER TAXSIM simulator. Dollar values are deflated to calculate the tax liabilities using the current tax year code. Once calculated, average penalties/bonuses are adjusted again and reported in 2020 dollars. A positive value in Panel A suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value in Panel A suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Panel B presents the differences between Black and white couples. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. The estimates include only couples under the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

**Figure 9. Averaged Marriage Penalty/Bonus by Hispanic Ethnicity**



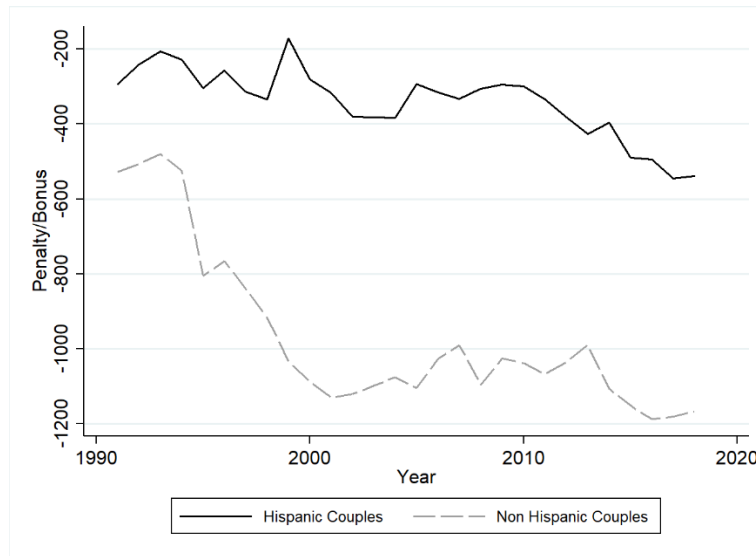
(A) Averaged Marriage Penalty/Bonus



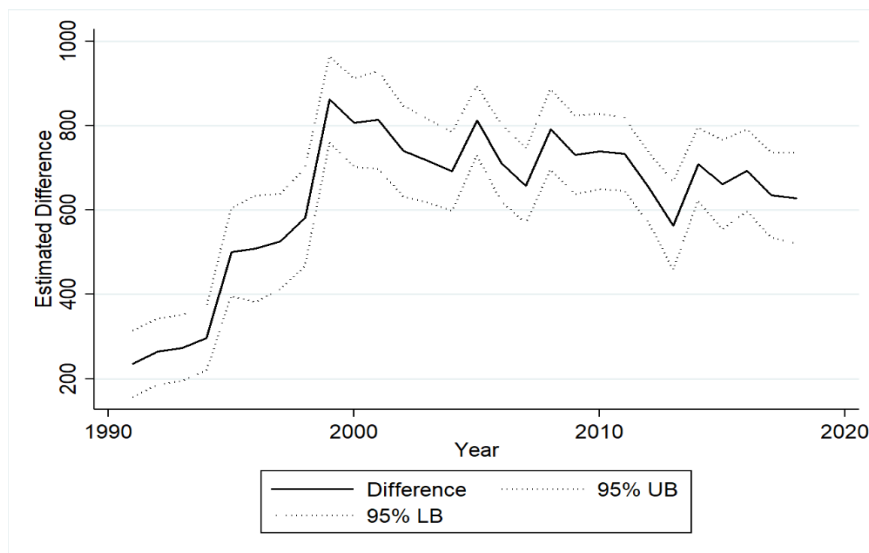
(B) Differences in Averages (Hispanic - Non-Hispanic)

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value in Panel A suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value in Panel A suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Panel B presents the differences between Hispanic and non-Hispanic couples. Dollar amounts are all adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. Hispanic couples are selected using the *Strict* definition, or those in which both individuals identify only one ethnicity and the ethnicity is the same for both individuals.

**Figure 10. Averaged Marriage Penalty/Bonus Keeping the Tax Code Year Constant (2018)  
by Hispanic Ethnicity**



(A) Averaged Marriage Penalty/Bonus

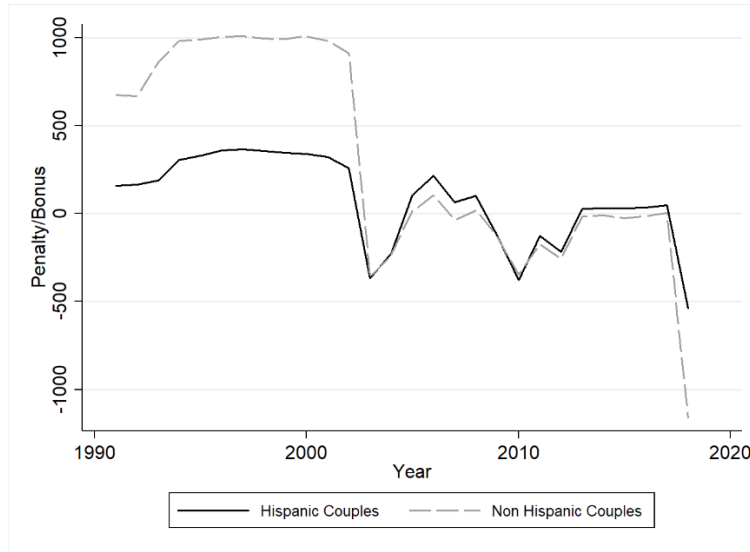


(B) Differences in Averages (Hispanic - Non-Hispanic)

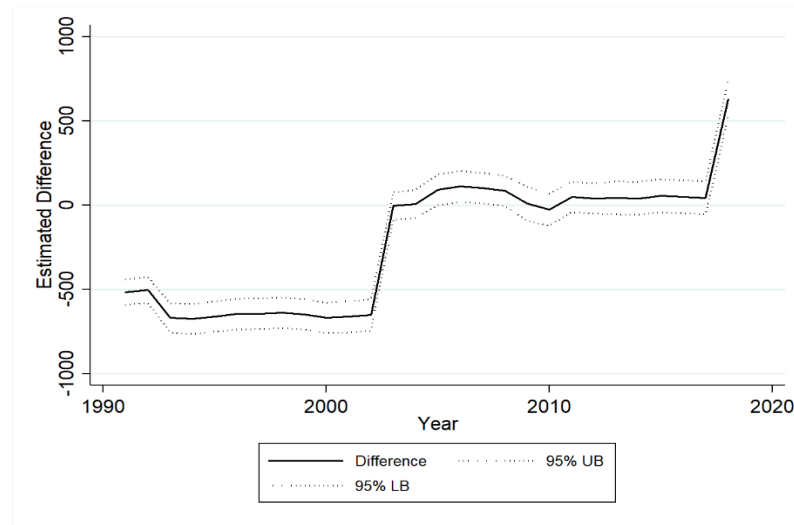
Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Dollar values for each sample year are inflated to 2018 dollars to calculate the tax liabilities using the 2018 tax code for all years. Once calculated, average penalties/bonuses are adjusted again and reported in 2020 dollars. A positive value in Panel A suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value in Panel A suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Panel B presents the differences between Hispanic and non-Hispanic. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. Hispanic couples are selected using the *Strict* definition, or those in which both individuals identify only one ethnicity and the ethnicity is the same for both individuals.



**Figure 11. Averaged Marriage Penalty/Bonus Keeping Sample Year Constant (CPS 2019) by Hispanic Ethnicity**



(A) Averaged Marriage Penalty/Bonus



(B) Differences in Average (Hispanic - Non-Hispanic)

Notes: Estimates are calculated using the Current Population Survey (2019 ASEC sample) and the NBER TAXSIM simulator. Dollar values are deflated to calculate the tax liabilities using the current tax year code. Once calculated, average penalties/bonuses are adjusted again and reported in 2020 dollars. A positive value in Panel A suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value in Panel A suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Panel B presents the differences between Hispanic and non-Hispanic couples. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality. Couples with earnings greater than \$1 million are excluded. Hispanic couples are selected using the *Strict* definition, or those in which both individuals identify only one ethnicity and the ethnicity is the same for both individuals.

ONLINE APPENDIX

**Table A1. Averaged Marriage Penalty/Bonus for All Married Couples**

Tax Code Year	All		With Penalty		With Bonus	
	Number of Households	Averaged Marriage Penalty/Bonus (\$)	Percent	Averaged Marriage Penalty (\$)	Percent	Averaged Marriage Bonus (\$)
1991	28,355	369.69	57%	1753.30	39%	-1606.44
1992	28,247	385.07	56%	1796.80	39%	-1608.48
1993	27,149	450.33	56%	1887.70	38%	-1600.27
1994	27,007	491.13	58%	1944.77	37%	-1699.61
1995	23,386	683.30	61%	2091.75	36%	-1703.17
1996	23,441	777.26	62%	2162.51	34%	-1665.27
1997	23,481	786.92	62%	2224.35	34%	-1768.37
1998	23,629	788.20	61%	2310.03	36%	-1779.37
1999	23,935	806.87	62%	2373.36	35%	-1884.23
2000	39,085	818.64	62%	2401.71	35%	-1954.76
2001	38,719	803.11	60%	2532.04	36%	-2025.85
2002	38,395	630.00	59%	2388.39	38%	-2046.42
2003	37,895	-440.36	40%	1708.47	51%	-2229.75
2004	37,250	-161.83	42%	2068.05	51%	-2168.38
2005	36,689	142.46	47%	2423.48	50%	-2258.87
2006	36,645	317.40	58%	2139.53	49%	-2183.14
2007	36,261	182.63	47%	2406.24	49%	-2163.34
2008	36,588	88.97	45%	2360.18	55%	-1943.94
2009	35,740	-52.21	44%	2495.61	56%	-2198.47
2010	34,790	-335.44	42%	2159.70	53%	-2464.28
2011	33,882	-172.80	42%	2187.50	51%	-2294.76
2012	34,063	-232.42	42%	2106.74	51%	-2313.49
2013	33,415	31.13	44%	2466.93	51%	-2317.79
2014	33,074	-18.00	44%	2436.53	51%	-2344.83
2015	30,814	-31.48	44%	2518.91	51%	-2418.41
2016	31,096	16.31	44%	2614.18	51%	-2433.63
2017	29,811	53.74	45%	2659.42	51%	-2471.14
2018	30,077	-1085.32	34%	1626.81	56%	-2975.49

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value in the third column suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Dollar amounts are adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality, which is why the percent of couples with a tax plus the percent of couples with a penalty does not always add to 100 percent. Couples with earnings greater than \$1 million are excluded.

**Table A2. Averaged Marriage Penalty/Bonus for White Married Couples**

Tax Code Year	All		With Penalty		With Bonus	
	Number of Households	Averaged Marriage Penalty/Bonus (\$)	Percent	Averaged Marriage Penalty (\$)	Percent	Averaged Marriage Bonus (\$)
1991	25,968	346.95	56%	1758.21	39%	-1629.97
1992	25,792	362.63	56%	1797.58	39%	-1637.53
1993	24,706	427.15	56%	1887.20	39%	-1630.80
1994	24,344	473.00	58%	1949.94	38%	-1734.01
1995	21,427	670.30	61%	2092.67	35%	-1737.18
1996	21,411	756.22	62%	2158.41	34%	-1693.87
1997	21,380	780.88	62%	2245.73	34%	-1787.95
1998	21,560	778.23	61%	2333.58	36%	-1810.21
1999	21,745	787.88	61%	2375.39	35%	-1896.98
2000	34,621	816.10	61%	2424.67	34%	-1976.97
2001	34,357	788.90	60%	2544.54	36%	-2062.96
2002	34,357	591.63	59%	2387.33	38%	-2100.16
2003	33,832	-478.54	39%	1721.77	51%	-2268.38
2004	33,268	-203.01	42%	2064.35	48%	-2212.93
2005	32,768	100.13	46%	2415.23	44%	-2311.48
2006	32,515	278.96	57%	2126.03	42%	-2224.20
2007	32,113	147.70	46%	2404.34	44%	-2209.99
2008	32,349	53.59	44%	2358.35	50%	-1985.60
2009	31,477	-99.14	44%	2473.31	53%	-2232.78
2010	30,604	-374.65	42%	2153.49	51%	-2507.68
2011	29,603	-207.22	42%	2187.07	49%	-2325.01
2012	29,831	-256.85	42%	2083.05	48%	-2339.84
2013	29,281	11.69	44%	2478.30	46%	-2337.66
2014	28,823	-48.84	44%	2428.48	47%	-2385.67
2015	26,753	-59.75	43%	2491.66	47%	-2431.72
2016	26,936	-16.57	44%	2614.99	47%	-2456.55
2017	25,818	20.17	45%	2639.36	46%	-2505.93
2018	26,112	-1141.40	33%	1595.92	56%	-3013.05

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Dollar amounts are adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality, which is why the percent of couples with a tax plus the percent of couples with a penalty does not always add to 100 percent. Couples with earnings greater than \$1 million are excluded. White couples are selected using the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

**Table A3. Averaged Marriage Penalty/Bonus for Black Married Households**

Tax Code Year	All		With Penalty		With Bonus	
	Number of Households	Averaged Marriage Penalty/Bonus (\$)	Percent	Averaged Marriage Penalty (\$)	Percent	Averaged Marriage Bonus (\$)
1991	1,557	609.79	62%	1623.21	31%	-1261.38
1992	1,536	635.72	61%	1704.06	32%	-1246.35
1993	1,436	709.37	61%	1801.50	31%	-1268.45
1994	1,447	638.14	62%	1833.97	33%	-1542.58
1995	1,250	817.77	64%	1975.37	31%	-1418.34
1996	1,285	946.47	65%	2072.35	31%	-1271.21
1997	1,283	982.10	69%	1978.80	26%	-1456.69
1998	1,310	1031.22	67%	2116.91	28%	-1376.23
1999	1,368	1071.09	68%	2146.93	27%	-1415.82
2000	2,616	1030.18	68%	2080.05	27%	-1436.45
2001	2,605	1015.28	65%	2217.16	29%	-1462.85
2002	2,402	1095.31	66%	2265.56	31%	-1315.20
2003	2,308	55.70	46%	1498.73	42%	-1517.44
2004	2,222	311.54	48%	1906.19	40%	-1494.10
2005	2,202	587.97	51%	2288.14	37%	-1553.33
2006	2,301	665.20	61%	2078.72	38%	-1595.44
2007	2,291	329.08	48%	2137.25	41%	-1729.67
2008	2,279	322.24	46%	2149.56	46%	-1449.75
2009	2,284	252.66	46%	2364.03	49%	-1707.61
2010	2,140	30.30	46%	1897.79	46%	-1820.35
2011	2,120	168.15	46%	1912.76	42%	-1731.00
2012	2,134	26.80	44%	1880.43	45%	-1789.62
2013	2,054	150.25	45%	2173.94	44%	-1893.29
2014	2,110	208.34	44%	2198.59	45%	-1688.09
2015	1,981	91.40	44%	2228.65	45%	-1956.00
2016	1,979	290.72	45%	2369.09	43%	-1784.27
2017	1,897	306.10	44%	2485.60	43%	-1842.84
2018	1,873	-353.81	38%	1584.42	49%	-1950.30

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Dollar amounts are adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality, which is why the percent of couples with a tax plus the percent of couples with a penalty does not always add to 100 percent. Couples with earnings greater than \$1 million are excluded. Black couples are selected using the *Strict* definition of race, or those in which both individuals identify only one race and the race is the same for both individuals.

**Table A4. Averaged Marriage Penalty/Bonus for Hispanic Married Households**

Tax Code Year	All		With Penalty		With Bonus	
	Number of Households	Averaged Marriage Penalty/Bonus (\$)	Percent	Averaged Marriage Penalty (\$)	Percent	Averaged Marriage Bonus (\$)
1991	2,655	122.67	44%	1377.79	42%	-1141.78
1992	2,656	154.56	44%	1430.43	42%	-1114.88
1993	2,518	201.68	43%	1473.51	40%	-1068.79
1994	2,572	335.43	48%	1614.44	38%	-1152.11
1995	2,502	412.23	46%	1815.51	39%	-1082.95
1996	2,590	551.98	50%	1894.11	39%	-1020.77
1997	2,732	490.98	49%	1909.24	38%	-1195.19
1998	2,824	478.83	50%	1788.23	40%	-1056.36
1999	3,093	544.55	51%	1882.63	38%	-1087.49
2000	3,594	457.95	52%	1725.03	32%	-1354.85
2001	3,759	495.98	51%	1866.13	35%	-1279.10
2002	4,043	328.33	49%	1839.71	45%	-1266.93
2003	3,976	-222.62	37%	1267.14	52%	-1313.84
2004	3,955	68.42	39%	1645.08	49%	-1168.87
2005	4,328	397.30	46%	2033.50	43%	-1251.80
2006	4,369	493.98	58%	1790.97	42%	-1308.60
2007	4,406	380.03	45%	2092.80	44%	-1293.25
2008	4,359	366.89	45%	2070.97	44%	-1292.65
2009	4,353	108.55	42%	2189.60	54%	-1498.10
2010	4,300	-78.25	39%	2041.31	55%	-1610.75
2011	4,289	100.29	40%	1929.19	47%	-1439.74
2012	4,398	-50.27	37%	1905.77	50%	-1511.64
2013	4,368	92.74	40%	2049.83	48%	-1516.54
2014	4,425	145.18	40%	2116.43	48%	-1469.94
2015	4,323	128.79	41%	2172.88	47%	-1622.57
2016	4,379	107.34	41%	2191.73	48%	-1655.58
2017	4,204	59.48	42%	2113.05	48%	-1739.98
2018	4,258	-538.62	33%	1463.28	56%	-1818.17

Notes: Estimates are calculated using the Current Population Survey (1992-2019 ASEC samples) and the NBER TAXSIM simulator. Because information collected by the CPS relates to the previous year's earnings, we use the previous year for the tax analysis. A positive value suggests that on average couples have a higher federal tax liability when married (marriage penalty). A negative value suggests that on average couples face a higher federal tax liability if they were cohabitating (marriage bonus). Dollar amounts are adjusted for inflation and reported in 2020 dollars. Some couples do not experience either a penalty or a bonus, and couples with penalties/bonuses less than or equal to \$10 are assumed to experience marriage neutrality, which is why the percent of couples with a tax plus the percent of couples with a penalty does not always add to 100 percent. Couples with earnings greater than \$1 million are excluded. Hispanic couples are selected using the *Strict* definition of race, or those in which both individuals identify only one ethnicity and the ethnicity is the same for both individuals.