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# WHO'S ON (THE 1040) FIRST? DETERMINANTS AND CONSEQUENCES OF SPOUSES' NAME ORDER ON JOINT RETURNS 

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#### Abstract

Married couples filing a joint return put the male name first $88.1 \%$ of the time in tax year 2020, down from $97.3 \%$ in 1996. The man's name is more likely to go first the larger is the fraction of the couple's allocable income that goes to him, and the older is the couple. Based on state averages, putting the man's name first is strongly associated with conservative political attitudes, religiosity, and a survey-based measure of sexist attitudes. Risk-taking and tax noncompliance are both associated with the man's name going first.


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## 1. Introduction and Motivation

Discrimination against people of a certain gender or race can arise from attitudes or social norms. In addition, ostensibly gender- or race-neutral policies can implicitly discriminate if some groups tend to on average make choices or have characteristics that are treated relatively favorably by policy, or that the enforcement of apparently neutral policies generates group bias.

In this paper, we explore a heretofore unstudied aspect of the U.S. income tax system to untangle the role of social norms and policy in gender bias: the fact that, in an overwhelming fraction of different-sex married households in the U.S., the male spouse's name is listed first on the joint tax return. Whose name goes first has absolutely no impact on tax liability, so in one sense it does not matter at all. ${ }^{1}$ But the name order by gender is undeniably non-random. We report, for the first time here, that in tax year 2020 the male spouse was listed first on the Form 1040 on $88.1 \%$ of all joint returns filed by different-sex couples. In tax year 1996, the first year we can measure it, the man's name was listed first on the Form 1040 $97.3 \%$ of the time.

We argue that some of the disproportionate tendency for the man to be listed first is due to attitudes and social norms about gender. Across state averages, there is a very high correlation between the tendency for a married, different-sex couple to list the man's name first and political conservatism, religiosity, views on abortion and an index of sexist attitudes.

But other factors matter as well. It is natural that the spouse that takes a more active role in the couple's finances would also be more involved in tax record-keeping and filing, and would have their name listed first. Indeed, the

[^0]instructions for the Form 1040 are written as if the first-listed person in a jointly filed return should be the person who "does" the tax return. ${ }^{2}$ To the extent this impression is heeded, the name order will be correlated with whether the male or female takes the leading role in "doing" the couple's taxes. That it is the male who usually does the taxes would be consistent with the related literature on who in a household makes financial decisions, and the consequences of who has that control. For example, L'Esperance (2018) analyzes data from the Survey of Consumer Payment Choice, and concludes that higher income rank influences the assignment of both paying monthly bills and managing savings and investment, with women more likely to handle the bills and the men more likely to manage savings and investment. She concludes that who makes such decisions does not influence financial outcomes such as experiencing a financial difficulty, overdrawing on a credit card, or creditworthiness. The instructions for the Form 1040 also suggest that switching the order from what it was in the previous year might delay processing, suggesting that inertia might play a role.

The tax return name order may also reflect male dominance within the household, defined as unequal power relations between men and women as a group. In models of non-cooperative bargaining (surveyed in, e.g., Donni and Chiappori 2011), power is related to one's utility outside of marriage, which in turn is related to earnings potential. Although we cannot measure earnings potential, we can measure wages and salaries earned by each spouse while married, a measure widely used to indicate relative spousal power (Blundell et al., 2007; Chiappori et al., 2002; Lundberg and Pollak, 1993). Based on an analysis of

[^1]millions of joint income tax returns, we demonstrate that which name is listed first is positively associated with which spouse earns more money and the spouse's earning share, so that financial prominence in addition to gender norms matter. Additional analysis indicates that the association of name order with the spouse's financial prominence occurs via the spouse's involvement in tax filing, and the influence of financial prominence can be distinguished from the effect of tax or financial acumen. Tellingly, the association of name order and the fraction of the household's income earned is substantially larger among same-sex couples, suggesting that gender-related social norms constrain the importance of economic factors.

Finally, to understand better what name order signifies, we investigate the extent to which name order is associated with observed household behavior that earlier research has suggested varies by gender—risk-taking and law-abidingness. In both cases we find that, other things equal, households where the male name goes first have riskier portfolios and evade more taxes, which is consistent with the bulk of earlier research and suggests that the first-listed taxpayer has relatively more say in household decisions.

## 2. Data

Our primary sources of data are administrative tax records from the IRS, which contains information on individual income tax returns (such as the amount and sources of income, credits and deductions, and claimed dependents), and demographic variables from the Social Security Administration (such as gender assigned at birth and date of birth). These data encompass the population of tax filers each year who have valid Social Security Numbers (SSNs) or Individual Taxpayer Identification Numbers (ITINs). For our analyses, we draw a 1\% sample of individuals who claim married-filing-jointly status from each tax year, with selection based on the last four digits of the randomly assigned Taxpayer

Identification Number (TIN) for each taxpayer, resulting in an unbalanced panel of joint returns from each tax year. Under this sampling regime, individuals are included in the sample regardless of whether they are listed as the primary or secondary filer on a joint return. Our analysis focuses mainly on the name order of returns filed by different-sex couples, but we investigate the name order on same-sex joint returns for additional insights. For some analysis, we merge these records with audit records from the National Research Program of stratified random audits.

## 3. Who's on the $\mathbf{1 0 4 0}$ First?

### 3.1. The Answer

Probably in part because it has no implications for tax liability, the Treasury has never revealed the gender distribution of the name order on joint income tax returns filed by different-sex couples. Here's the answer. In tax year 2020, the latest year for which we have the requisite data, a man's name was listed first $88.1 \%$ of the time and a woman's name was listed first $11.9 \%$ of the time. It was $97.3 \%$ for men and $2.7 \%$ for women in tax year 1996. The rates have been changing steadily since then.

### 3.2. Change over Time and its Source

Table 1 shows that the female-name-first percentage among different-sex couples has been increasing monotonically since the first year we can answer the question, tax year 1996. The rate of increase accelerated in the second decade of our data, from 2006 to 2015.

The increase in the fraction of female-first-order joint returns can be decomposed to isolate the influence of the aspects of name-order dynamics. One issue is the extent to which couples who continued to file joint returns switched the name order. A second issue is whether new joint filers are more or less likely than continuing joint filers to list the female spouse first. Finally, are couples who
stop filing jointly more or less likely than average to have listed the male's name first?

As background to this exercise, Table 2 shows how the average demographics over the whole period differ between continuing filers and filers who transition into or out of joint filing, i.e., new joint filers and ending joint filers. The last column lists the average characteristics of those who continue to file jointly but switch the name order on the return, i.e., those who also contribute to the change in the female-name fraction over the period.

Compared to continuing filers, new filers are much younger, about 10 years younger for both the male and female spouses, but the two groups have similar within-couple relative earnings, measured by the mean share of the family's earnings received by the male spouse and the fraction of couples with a male higher earner. In this paper, we define earnings as the sum of wage and salary income from Form W-2 and the self-employment income reported on the individual's schedule SE. For both groups, the average male earning share is slightly above $60 \%$ and the fraction of the families in which the male spouse earns more than the female spouse is about $70 \%$.

For no-longer-filing spouses, while they are only slightly older than continuing filers, the male spouses receive a lower share of family earnings, by 4.8 points on average, and are less likely to be the family's higher earner, by 5.6 points, compared to the male spouses of continuing filers. For name-order switchers, they are about 6 years younger than continuing filers, and the male spouses in these families receive a much smaller share of the couple's total earnings and are much less likely to be the family's higher earner than the male spouses of continuing filers. In fact, the male spouses in the name-order-switching families receive less than half of the couple's total earnings on average, and are more likely to be the lower-earner in the family. Finally, all of those that change
status in some way—new filers, ending filers, and switching order—have much lower AGI than continuing filers, on average about $40 \%$ less.

To be precise, the change in the female-name-first fraction can be approximated as follows:
$\Delta f \approx$ fnew $*(f f n e w-f f a l l)-f$ stop $*(f f s t o p-f f a l l)+f s w i t c h *(f m t o f-f f t o m)$ where $\Delta f=$ change in the female-name-first fraction between years $t$ and $t+1$
fnew $=$ fraction of new filers in year $\mathrm{t}+1$
fstop $=$ fraction of stoppers in year t
$f$ switch $=$ fraction of year t filers who switch name order in year $\mathrm{t}+1$
ffnew $=$ female-name-first fraction of new filers in year $\mathrm{t}+1$
ffstop $=$ female-name-first fraction of stoppers in year t
ffall $=$ female-name-first fraction overall in year t
fintof $=$ fraction of switchers who switch from male-name-first in year t to female-name-first in year $\mathrm{t}+1$
fftom $=$ fraction of switchers who switch from female-name-first in year t to male-name-first in year $\mathrm{t}+1$

Table 1 provides the annual data that allows us to decompose the overall drop of the male-first fraction from 0.973 in 1996 to 0.881 in 2020 (so that the total change is +0.092 , or about 0.38 percentage points per year). It reveals that the decline was driven both by the change in the composition of joint filers and by continuing joint filers who switched their name order. Table 3 provides a summary table regarding the contribution of each component of the decomposition equation to the average annual increase of 0.38 percentage points in the female-first fraction.

Throughout the whole period, the female-name-first fraction was higher among new filers compared to the overall average, partly because on average both spouses are about ten years younger than continuing joint filers. The difference (ffnew - ffall) grew steadily throughout the period, beginning at 5.9 percentage
points in 1996-7, exceeding 10.0 percentage points in 2007-8, and peaking at 15.2 percentage points in 2018-2019. However, the fraction of all filers who were new filers, fnew, fell steadily, from just over 7\% at the beginning of the period to mid$5 \%$ by the end. ${ }^{3}$ As summarized in Table 3, on average, new filers comprise 6.3\% of total returns, have 10.1 percentage points more female-first returns than average, and thereby account for an annual increase in the female-first fraction of about 0.64 percentage points. Note, though, that while new joint filers are more likely than continuing joint filers to put the woman's name first, by the end of the period, they still put the man's name first about three-quarters of the time.

Perhaps surprisingly, those who stopped filing joint returns tended to reduce the female-first fraction, because they have an above-average female-first fraction the year before they stop filing jointly. Over the 25 -year period on average, they comprise about $5.8 \%$ of filers and have a higher female-first fraction of 6.4 percentage points before stopping, so they contribute to an annual decline of about 0.37 percentage points in the overall female-name-first fraction.

Finally, we consider the impact of joint-filing couples who continue to file as such but change the name order. Notably, the spouse name order is highly persistent over time. Among joint returns where the presence of both spouses stays the same, $98.6 \%$ chose the same order in consecutive years. As mentioned earlier, this behavior is encouraged by the tax form instructions and in tax preparation software packages. The Form 1040 instruction booklet says, in italics as a "tip": "If you filed a joint return for 2020 and you are filing a joint return for 2021 with the same spouse, be sure to enter your names and SSNs in the same

[^2]order as on your 2020 return", and elsewhere says that otherwise return processing might otherwise be delayed. Of those (1.4\%) who changed, the last column of Table 1 shows that, except in 1997-8, more couples switched from male-first to female-first than switched from female-first to male-first. This pattern accelerated in 2013, when $67 \%$ of the switchers switched from male-first to female-first. On net, as summarized in Table 3, switching results in an increase in the female-first fraction by 9.1 percentage points per year among those who change name order, accounting for an annual increase in the female-first fraction of about 0.12 percentage points.

## 4. Associations with Name Order: Gender Norms versus Relative <br> Financial Power and Acumen

We can learn more about the role of financial power and expertise, as opposed to gender norms, by analyzing which characteristics of a joint tax return and its filers are associated with name order. As mentioned above, we suspect that name order is correlated with gender norms as well as with who takes the lead in doing the taxes, but we do not have data to directly confirm these hypotheses.

### 4.1. Association with Indicators of Gender Norms

Because the tax data contain only very limited demographic, and no attitudinal information, we cannot on a micro basis relate household gender norms to name order. We do, however, know the address listed on the tax return, and thus can calculate the average name order tendency by state and relate that to aggregate state characteristics.

Such an exercise reveals large and persistent cross-state variation, in 2020 from a high of $90.7 \%$ in Iowa to a low of $79.7 \%$ in the District of Columbia. ${ }^{4}$ The

[^3]appendix shows the male-name-first tendency by state in the first and last years, as well as the average across all years, of our data. The male-name-first fraction declined in every state over the period, with the state-level decrease ranging from 7.1 to 12.0 percentage points. The ranking of states did not change much between 1996 and 2020. In both years, the District of Columbia had the lowest male-first percentage than any state. In 1996, North Dakota had the highest male-first percentage whereas in 2020, Iowa had the highest percentage.

The nature of the state variation strongly suggests that gender norms play a role in explaining name order. Descriptive analysis shows that the state averages of the male-name-first propensity are correlated with several state cultural attitudes. The correlation of the name order is 0.65 with the fraction of residents who identify their political ideology as conservative, is 0.61 with the fraction who self-identify as highly religious, and is 0.70 with the fraction who identify as Christian. The highest correlation of all is 0.73 with a self-professed opposition to abortion. ${ }^{5}$ It is 0.44 with a Google Trends-based measure of sexism constructed by Owen and Wei (2021).

### 4.2. Pooled Cross-Sectional Analysis of the Importance of Financial Aspects of Households

We investigate associations between name order and key economic and demographic variables by estimating a linear probability regression among different-sex couples where the dependent variable is equal to one when the male is listed first, and zero otherwise. Reflecting our earlier discussion, we explore the

[^4]association of name order with the share of total earnings received by the male, as well as a dummy variable for whether that share exceeds one-half, the potential importance of which was demonstrated by Bertrand, Kamenica, and Pan (2015). Because of data availability, the wage share can only be calculated beginning in tax year 1999, the regressions span tax years 1999 to 2020. We also hold constant the age of each spouse in the year of filing, an indicator that the male spouse is older than the female spouse, and 20 income bin dummy variables. In some of the specifications, we include a linear time trend, state dummy variables, or both.

Table 4 shows the results of four different variations of this regression, with or without a linear time trend and with or without state dummy variables. The most important aspect of Table 4 is the explanatory power in all specifications of the share of the couple's total earnings received by the man. In all four specifications, the higher is the share of family earnings received by the male, the higher is the likelihood his name is listed first. A variation of the male earnings share of 10 percentage points is associated with a change in the probability of the male name going first of about 1.80 percentage points, and varies very little across specifications. ${ }^{6}$ In addition, which spouse earns more money is associated with a change in the probability of the male name going first by about 0.3 percentage points. Because over this period the mean male earnings share decreased from $65 \%$ to $61 \%$ and the fraction of joint returns with higher male earnings decreased from $66 \%$ to $57 \%$, the changing gender earnings power could explain as much as 0.75 percentage points of the decline in the share of male-first returns of 8.9 percentage points between 1999 and 2020.

[^5]Column 2 reveals that allowing a linear time trend can explain nearly all the actual time variation in the male-name-first share. The estimated year coefficient is -0.0046 , so that a 22-year difference is associated with a decline in the male-first share of 10.1 points, compared to an actual decline of 8.9 points from 1999 to 2020. We interpret this as the effect of changing gender norms. If we had specified name order as a function of year born rather than age, we would have reached the same conclusion.

Several other aspects of Table 4 are worth noting. In all specifications, the probability of the male name going first is increasing in the age of either spouse, and in the indicator that the male spouse is older than the female spouse. In addition, in all specifications the estimated (positive) coefficient on age is substantially higher for men compared to women. Other things equal, couples with older male spouses are more likely to put his name first on their income tax form. The estimated coefficients of the income variables indicate that the male-name-first fractions increase gradually with the couple's income. Compared to couples in the bottom 5 percentiles of the AGI distribution, couples in the $15^{\text {th }}$ $20^{\text {th }}$ percentiles have a higher male-name-first fraction by 1.2 percentage points, couples in the $45^{\text {th }}-50^{\text {th }}$ percentiles have a higher male-name-first fraction by just under 3 percentage points, and couples in the top half of the AGI distribution have a higher male-name-first fraction by 3 to 4 percentage points.

### 4.3 The Role of Professional Tax Preparers

Up to now, we have proceeded as if all of the decisions reflected on the tax return are made by the household members, mediated by the relative power within the household. The finding that the male spouse's income is positively correlated with the probability that his name goes first is consistent with a scenario that the man asserts his power by taking control of the tax filing process, but also with the idea that, regardless of who in the couple actually does the couple's taxes, the higher earner is listed first. For example, a large fraction of
households pays a professional tax preparer to be part of the tax filing process. For such preparer-assisted returns, depending on the precise nature of the relationship between the preparer and the household members, the name order may reflect something about the preparer as well as the household.

For different-sex joint returns, the fraction of returns with a preparer's signature has been gradually declining over our sample period, from about 64 percent in 2004, the first year in which the data on return preparation methods are available, to about 61 percent by 2020. As Table 5 shows, those different-sex couples who use a paid preparer are systematically different from those who do not use a third-party preparer-they are older (by about two and a half years) and have higher income (by about $\$ 30,000$ ). In addition, their returns are much more likely to have the male spouse's name listed first than self-prepared returns, by about 8 percentage points.

To begin to better understand the role of the preparer versus taxpayers’ direct involvement in tax filing, we estimate regressions like those in Table 4 for couples who use a paid return preparer and separately for couples who do not use a paid or volunteer preparer and self-prepare the returns. Because couples who self-prepare returns presumably have more direct control of the return preparation and filing, the name order on their returns is arguably more likely to indicate which spouse does the taxes, takes the lead in the family's tax affairs, and/or simply decides which spouse's name is listed first.

Tables 6 and 7 show that the estimated effects of relative earnings are substantially higher when the return is self-prepared compared to when it is preparer-assisted, with the coefficients of the male earnings share being about 0.30 for self-prepared returns compared to 0.14 for preparer-assisted returns and the coefficients of having a male higher earner being about 0.02 for self-prepared returns versus -0.009 for preparer-assisted returns. Strikingly, the estimated importance of the male earnings being higher than the women's earnings is
positive only in the self-prepared returns, and is negative for returns listing a paid preparer. The estimated effects of age are also substantially magnified for selfprepared returns. These results support the argument that the male-first name order is positively correlated with the male's relative power via his involvement in the couple's tax process. Finally, the estimated coefficients of a linear time trend show a large annual decline in the male-name-first fraction for self-prepared returns, about 0.90 percentage points per year, compared to the annual decline of about 0.25 percentage points for returns prepared by a paid preparer.

### 4.4 The Role of Tax or Financial Acumen

One concern that arises when interpreting the positive correlation of name order with spouses' earnings as evidence of the higher-earning spouse's control of the family's tax affairs is that earnings can be related to tax knowledge or other factors that also increase the chance that the individual is responsible for the family's tax filing. Which spouse's name is listed first, therefore, may reflect the spouse's ability to handle the taxes in addition to his or her relative decisionmaking power. While it is difficult to measure an individual's tax acumen, we attempt to isolate the effect of the spouse's financial prominence from the influence of acumen factors by looking into the spouse's occupation reported on Form 1040 and the presence of business income. We proxy tax or financial acumen with an indicator that the individual is an accountant or receives selfemployment income, ${ }^{7}$ as having such income can indicate experience with bookkeeping and accounting practices.

The estimated relationship of the spouse's financial power with name order is not affected when we include in regressions measures of financial acumen. Table 8 shows the regression results for all couples and for couples by preparation method. The magnitudes of the five estimated coefficients for age and

[^6]earnings are nearly identical to those in the previous tables. Notably, though, financial ability also matters. The probability that a male's name is listed first increases when he is an accountant and when he receives self-employment income, and the probability decreases when the female spouse possesses such tax and financial acumen. When the male spouse is an accountant, the probability of having the male spouse's name listed first increases substantially, by 7.56 percentage points, when the return is self-prepared. This effect is in addition to the large estimated magnitudes of the male earnings coefficients for self-prepared returns.

### 4.5 Insights into Gender Norms from Same-Sex Couples

We can gain insight into the role of gender norms by studying this issue in a setting where gender influences on the name order within the household do not arise, that is in same-sex couples. For example, abstracting from gender norms, how does the predominance of one spouse's earnings affect the likelihood that his or her name is listed first?

We explore these and related questions by drawing a $1 \%$ random sample of the first-listed and second-listed taxpayers on same-sex couples' joint returns filed for tax years 2013 to $2020 .{ }^{8}$ We also get information about their spouses to determine the relative age and earnings within a couple. As background, note that, compared to different-sex joint filers in the same period, same-sex filers exhibit more change: a lower percentage file in the subsequent year, and a larger percentage of new filers appear each year. Same-sex couples who file in consecutive years are also more likely to switch the name order on the return; an average of $2.7 \%$ of same-sex couples switch the order each year, compared to

[^7]1.4\% of different-sex couples over the period from 1996 to 2020 and 1.9\% between 2013 and 2020.

We cannot simply repeat the regression specification used earlier, where the observation was a couple and the dependent variable was a 1-0 indicator reflecting whether the first-listed taxpayer was male or female. Instead, we consider a randomly chosen spouse of each couple as the unit of observation, and denote the dependent variable as equal to one if that person was listed first, and zero if that person was listed second. As independent variables, we include the fraction of the couple's earnings received by that person, whether that share exceeds $50 \%$, and analogous age variables as before.

The results of that regression are shown in Column 1 of Table 9. The findings regarding the spouses' relative power from the different-sex analyses reappear in the same-sex analysis. The probability that a taxpayer's name is listed first increases with age, and the name of the older spouse is more likely to be listed first. The higher the share of the couple's income received by a spouse, the more likely that spouse's name is listed first, and the spouse that earns more is more likely to be listed first.

Notably, the estimated impacts of age and earnings are substantially larger in same-sex couples than in different-sex couples. ${ }^{9}$ For spouses in same-sex marriages, an increase in age by one year increases the probability of being the primary filer by 0.96 percentage points, compared to a smaller effect of 0.20 percentage points for an increase in the age of the male spouses in opposite-sex marriages. Being the older spouse or the higher earner is associated with a higher probability of being the primary filer by 11 percentage points for individuals in same-sex marriages, but for male spouses in opposite-sex marriages, the estimated

[^8]effect is only 1.2 percentage points for being the older spouse and 0.2 percentage points for being the higher earner. As for the spouse's earnings share, an increase in the fraction of income received by 10 percentage points increases the probability of being the primary filer by 5.5 and 1.8 percentage points for, respectively, individuals in same-sex and oppositive-sex marriages. These differences in the estimated magnitudes suggest that, in the absence of social norms to list the male name first, the age and earnings factors are much stronger predictors for which spouse would handle the couple's tax affairs and have one's name listed first.

We further evaluate the implication of these estimates by applying the coefficients on age, earnings, time trend, and the constant for same-sex couples to the age and earnings of the sampled individuals in different-sex couples to predict the counterfactual name-first probabilities for individuals in different-sex marriages. Such probabilities indicate the likelihood that a spouse in a differentsex marriage would get his or her name listed first had the age and income's influences been gender-neutral as in the same-sex cases. Our calculation predicts an average name-first probability of about $63 \%$ for the male spouses and $37 \%$ for the female spouses in different-sex marriages. In comparison, during the period from 2013 to 2020, the male spouses in different-sex marriages were listed first about $90 \%$ of the time and female spouses were listed first about $10 \%$ of the time. The significant gap between the actual and predicted probabilities suggests that social norms regarding gender influences on the name order constrain the effects of the age and earnings factors, and are quantitatively very important.

In Column 2, we add independent variables that interact with the age and earnings share variables to indicate whether the same-sex couple has two female spouses or two male spouses. It shows that these associations appear for both female and male same-sex couples, with the earnings share mattering more for
female couples and age, relative age, and relative earnings mattering more for male couples.

### 4.6. Longitudinal Analysis

We next take a closer look at couples who switch the name order. To do so, we perform a longitudinal analysis, using a first-difference specification. This is equivalent to explaining why, in a jointly-filed return (with the same two spouses), the ordering of names would change, which we have established doesn't happen very often. Thus, effectively there are many fewer observations that pin down the regression coefficients.

Table 10 shows the results of such regressions. The specification of Column 1 shows the net change in name order from female-first to male-first. The dependent variable takes on a value of one if the primary filer switches from female to male, and a value of negative one if the name order switches from malefirst to female-first. The sign of the estimated coefficient for male earnings share shown in Column 1 is consistent with the sign shown in the comparable specification of the pooled cross-section regression in Table 4 (Column 4), although the estimated coefficients are substantially smaller in absolute value. In contrast, the sign of the coefficient for the male spouse receiving more than $50 \%$ of the family income is negative, inconsistent with the coefficient in the pooled cross-section regression.

Columns 2 and 3 look separately at switches from male-to-female name first and female-to-male name first, and show that an increase in the male fraction of household earnings both decreases the probability of a male-to-female name switch and increases the probability of a female-to-male name switch. A switch to the male earning a majority of household income increases the probability of changing name order from male-first to female-first and is not significantly associated with the probability of changing name order from female-first to malefirst. These results suggest that switches of spouses’ relative earnings status do
not necessarily lead to a concurrent reassignment of the couple's tax filing and decision-making to the higher income spouse, but a rise in a spouse's earnings share increases the possibility that tax filing is reassigned to that spouse.

## 5. Behavioral Associations with Tax Return Name Order

If the name order on the opposite-sex couples' income tax return is an indicator of who in the household is dominant in the sense of influencing decisions, we should see it reflected in certain tax return variables. In this section, we investigate two behaviors where research has addressed whether gender matters: risk-taking and law-abidingness. ${ }^{10}$ For each of these behaviors, we regress our measure of the behavior on our age and income indicators, a dummy variable for name order and the ratio of household income earned by the male spouse. We recognize that we cannot stake a strong claim as having established a causal link between name order and these behaviors, and seek rather to establish insightful associations. We do, though, doubt that there is much pollution of the results due to reverse causation of these behaviors on name order.

### 5.1 Portfolio Risk-Taking

A large literature addresses whether women are more or less risk-averse than men, and more or less likely to hold riskier portfolios, other things equal. The consensus, based on study of unmarried persons, is that women are more risk-averse and tend to hold less risky portfolios. Bernasek and Bajtelsmit (2002) offer a now somewhat outdated review of this literature. Barsky et al. (1997) find that, based on responses to risk-eliciting survey questions, men are more risk tolerant than women. Sunden and Surette (1998, p. 209), studying 1992 and 1995

[^9]Survey of Consumer Finances (SCF) data, find that single women are less likely than single men to put "mostly stocks" into their defined-contribution portfolios. Yilmazer and Lyons (2010) find that married women who have more control over the financial resources are less likely to invest their DC plan in risky assets. Some research demurs. Papke (1998), Schooley and Worden (1996) based on the 1989 SCF, and Schubert et al. (1999) report only insignificant differences in risk aversion by gender.

How households make decisions has been considered. Yilmazer and Lich (2015) examine how portfolio choice decisions are made in married couples, and find that households in which the husband has the final say on major financial decisions are more likely to own risky assets and have a higher share of stocks if they own risky assets. Jinakoplos and Bernasek (2008), however, find no support for women's share of income affecting the share of risky assets in a portfolio.

We measure risk-taking by looking at couples’ portfolio allocations, using the ratio of dividends received to the sum of dividends and interest receipts. The results are shown in the first two columns of Table 11. Using the same set of independent variables as above, we find that both male earnings share and a dummy variable for listing the male name first are significantly associated with a riskier portfolio. The estimated coefficients are 0.0308 and 0.0598 , respectively, in a pooled cross-section sample with state effects and a linear time trend, and are 0.0160 and 0.0131 in a specification model with a fixed couple effect. Thus, this analysis suggests that male name order and a measure of male economic power are significantly associated with more risk taking in household portfolios.

### 5.2 Tax Noncompliance

Finally, we look at law-abidingness in the tax context, i.e., tax noncompliance. There is a literature, largely using data from the World Values Survey, which studies how stated attitudes toward evasion vary by gender; see, for example, Torgler and Valev (2010) using data from eight Western European
countries and Orviska and Hudson (2003) analyzing data from British citizens. Both studies conclude that women are more likely to be tax-compliant.

Evasion itself, as opposed to attitudes about evasion, is notoriously difficult to measure. However, we have an informative indicator of evasion from audits conducted under the National Research Program (NRP), which comprises a stratified random sample of all tax returns. For each NRP return, we have a measure of the change in tax liability suggested by the auditor, as well as the change in each line item. Column 3 of Table 11 shows the results of a regression similar to the ones already discussed, where the dependent variable is the suggested adjustment to the tax liability after refundable credits. It shows that having the male name first is associated with a $\$ 272$ larger suggested adjustment in 2019 dollars. But, surprisingly, the male earnings share is associated negatively with the magnitude of NRP adjustments, and the indicator of the male earning more than $50 \%$ of household income is not statistically associated with tax adjustments. ${ }^{11}$

We also evaluate the dependent variable as an adjustment rate, defined as the ratio of the auditor's recommended tax adjustments to the amount of tax liability determined by the auditor. If the taxpayer has a negative audit-determined tax liability, we take the absolute value of the liability so that the tax adjustment rate is a positive value, measuring the extent to which refundable credits are overclaimed. The dependent variable therefore provides a measure of tax misreporting in the taxpayer's favor relative to their net tax liability, regardless of whether that liability is positive or negative. Column (4) shows that the male-name-first returns have a higher tax adjustment rate than female-name-first returns, by 4.17 percentage points. The male earning share is not associated with the tax adjustment rate, and having a male higher earner is negatively associated

[^10]with the tax adjustment rate, but the estimated coefficient is only marginally statistically significant.

Thus, in two cases where previous research has for the most part established that on average men behave differently than women, we observe that couples who put the male spouse's name first also behave differently than-and in the same direction as-couples that put the woman's name first. This is consistent with the idea that the person whose name goes first exercises relatively more sway in family decision-making.

## 6. Conclusions

Married couples filing a joint return in the United States must choose one of the spouse's names to be listed first on the tax return. The wording that accompanies the Form 1040 and its instructions implies, but in no way requires or even suggests, that the name of the person doing the couple's taxes should be listed first. The fact that this decision has absolutely no effect on tax liability might lead one to believe that the name order decision is made casually and, perhaps, randomly. This paper shows that this is far from the truth. The male name goes first in the vast majority of different-sex joint returns- $88.1 \%$ of the time in tax year 2020, and as high as $97.3 \%$ in 1996. The decline over this period has been monotonic, and is largely because newly-formed couples filing jointly are more likely to list the woman's name first, and to a lesser extent because married couples who switch name order result in a net increase in the female-first fraction. These increases are mitigated by the fact that couples who stop filing jointly are more likely than average to have listed the woman's name first.

Why is this proportion so high? Part of the story is gender norms. Although we have very limited demographic information about households, we observe that, based on state averages, putting the man's name first is strongly associated with conservative political attitudes, religiosity, and attitudes toward
abortion, and is highly correlated with a survey-based measure of sexist attitudes. Putting the man's name first is also positively associated with the ages of the couple in the year of filing, which is consistent with social norms that are changing gradually over time. The strong, negative time trend effect is also consistent with the hypothesis of changing social norms. Thus, this paper is one of the few that can shed light on the prevalence and influence of gender norms using administrative data. In addition, because a change in the name order from one year to the next might delay processing of the tax return in practice, taxpayers who continue to file jointly may be discouraged from switching the name order, which, in turn, contributes to the persistent high proportion of male-name-first returns.

Economic factors matter, as well. We observe that, holding income group and age group constant, the man's name is more likely to go first the larger is the fraction of the couple's allocable income earned by him and when he earns the majority of the family's income. We also present evidence that the positive association between earnings and name order occurs via the higher earner's involvement in the family's tax filing and that effect is distinguished from the influence of his or her tax acumen. This is consistent with a large previous literature that has linked the share of a couple's income received to measures of one's weight in household decisions.

The association of name order with greater earnings (and age) also appears in an analysis of same-sex joint filers-the spouse with more earnings (and who is older) is more likely to be listed as the "primary" taxpayer of the couple and, in addition, the likelihood of being the "primary" taxpayer increases with the share of income received by the person and the person's age, holding constant whether he or she is the higher earner or the older spouse in the couple. Indeed, the estimated impacts of earnings and age are substantially larger in the same-sex sample. Applying these coefficients in same-sex couples, the male (female)
spouses in opposite-sex marriage are predicted to get their names listed first only $63 \%$ (37\%) of the time, compared to $90 \%$ (10\%) in the actual data. This result suggests that the importance of economic factors is constrained by gender norms on name order among different-sex couples.

Although the name order does not affect tax liability, it is associated with certain behaviors that some previous literature has associated with gender. Risktaking and tax noncompliance each are associated with the man's name going first, holding spouses’ age and relative earnings consistent. This is consistent with the notion that name order is associated with decision-making power within the household, and therefore when the man's name goes first, the household is more likely to take more "male" actions.

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Table 1—Summary Statistics: Joint Filer Dynamics

| All Opposite-Sex Couples Filing Jointly |  | New Couples (not filing jointly in the previous year) |  | Exiting Couples (not filing jointly in the subsequent year) |  | Couples Continuing to File Jointly |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tax <br> Year | Share with <br> Female Primary <br> Filer | Share New | Share of New Couples with Male Primary Filer | Share <br> Exiting | Share of <br> Exiting Couples with Male Primary Filer | Share <br> Switching Primary Filer in the Subsequent Year | Share Switching from Male to Female Primary Filer |
| 1996 | 2.7\% | X | X | 5.8\% | 92.9\% | 0.8\% | 50.2\% |
| 1997 | 2.9\% | 7.1\% | 91.4\% | 5.9\% | 92.6\% | 1.0\% | 49.1\% |
| 1998 | 3.0\% | 7.0\% | 91.3\% | 10.1\% | 93.9\% | 0.9\% | 49.5\% |
| 1999 | 3.0\% | 6.9\% | 91.4\% | 5.6\% | 92.2\% | 0.9\% | 52.5\% |
| 2000 | 3.2\% | 12.4\% | 93.6\% | 5.4\% | 91.2\% | 0.9\% | 50.6\% |
| 2001 | 3.4\% | 6.7\% | 90.1\% | 5.5\% | 91.4\% | 1.0\% | 54.5\% |
| 2002 | 3.7\% | 6.2\% | 89.0\% | 5.6\% | 91.0\% | 1.1\% | 56.5\% |
| 2003 | 4.0\% | 6.3\% | 88.6\% | 5.4\% | 90.2\% | 1.2\% | 54.0\% |
| 2004 | 4.3\% | 6.2\% | 87.9\% | 5.3\% | 89.6\% | 1.3\% | 54.3\% |
| 2005 | 4.6\% | 6.5\% | 87.8\% | 5.1\% | 88.9\% | 1.4\% | 55.5\% |
| 2006 | 5.0\% | 7.3\% | 87.6\% | 4.7\% | 88.2\% | 1.3\% | 50.7\% |
| 2007 | 5.3\% | 8.3\% | 87.0\% | 8.2\% | 89.5\% | 1.2\% | 52.4\% |
| 2008 | 5.5\% | 5.3\% | 83.7\% | 5.7\% | 88.3\% | 1.2\% | 53.2\% |
| 2009 | 5.9\% | 5.5\% | 83.1\% | 5.6\% | 87.8\% | 1.2\% | 53.2\% |
| 2010 | 6.3\% | 5.4\% | 81.8\% | 5.7\% | 86.9\% | 1.2\% | 51.4\% |
| 2011 | 6.5\% | 5.4\% | 82.0\% | 5.5\% | 86.4\% | 1.3\% | 52.3\% |
| 2012 | 7.0\% | 5.9\% | 80.2\% | 5.7\% | 84.5\% | 1.3\% | 53.2\% |
| 2013 | 7.3\% | 5.6\% | 80.8\% | 5.4\% | 84.7\% | 1.9\% | 67.1\% |
| 2014 | 8.2\% | 5.6\% | 79.3\% | 5.3\% | 83.9\% | 1.9\% | 61.4\% |
| 2015 | 8.9\% | 5.6\% | 78.5\% | 5.3\% | 82.8\% | 2.0\% | 59.8\% |
| 2016 | 9.6\% | 5.6\% | 77.8\% | 5.2\% | 82.6\% | 1.9\% | 56.1\% |
| 2017 | 10.2\% | 5.5\% | 76.9\% | 5.2\% | 82.2\% | 1.8\% | 57.3\% |
| 2018 | 10.7\% | 5.4\% | 76.4\% | 5.5\% | 82.0\% | 1.9\% | 60.0\% |
| 2019 | 11.6\% | 5.8\% | 74.0\% | 6.4\% | 81.3\% | 1.8\% | 53.9\% |
| 2020 | 11.9\% | 5.1\% | 75.5\% | X | X | X | x |
| Total | 6.3\% | 6.3\% | 84.6\% | 5.8\% | 87.8\% | 1.4\% | 55.5\% |

Notes: The table shows joint-filing dynamics for a $1 \%$ random sample of married individuals filing jointly with a different-sex spouse from tax years 1996-2020. The sample includes 25,462,162 returns.

Table 2—Mean Taxpayer Characteristics by Name Order Transition Status

|  | New Joint <br> Filers | Continuing <br> Joint Filers | Ending Joint <br> Filers | Name <br> Order <br> Switchers |
| :--- | :---: | :---: | :---: | :---: |
| Male age | 40.65 | 50.75 | 52.12 | 44.60 |
| Female age | 38.13 | 48.38 | 49.44 | 42.28 |
| Male age higher (0/1) | 0.661 | 0.677 | 0.685 | 0.653 |
| Male earnings shares | 0.618 | 0.630 | 0.582 | 0.462 |
| Male earnings higher (0/1), <br> conditional on couple having earnings <br> Adjusted Gross Income (AGI, \$) | 0.689 | 0.706 | 0.651 | 0.480 |

Data: A 1\% random sample of married individuals filing jointly with a different-sex spouse from tax years 1996-2020. The sample includes $25,462,162$ returns.

Table 3—Decomposition of Annual Increase in the Female-Name-First Fraction

|  | New Joint Filers |  | Ending Joint Filers |  | Name-Order Switchers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average per year, 0.38 ppt | Share of returns joining (fnew) | Female-first fraction relative to the average female-first fraction (ffnew-ffall) | Share of returns stopping (fstop) | Female-first fraction relative to the average female-first fraction (ffstop-ffal) | Share of returns switching (fswitch) | Net switching fraction to female-name-first (fintof-fftom) |
|  | 6.32\% | 10.06 ppt | 5.78\% | 6.35 ppt | 1.28\% | 9.06 ppt |

Data: A $1 \%$ random sample of married individuals filing jointly with a different-sex spouse from tax years 1996-2020. The sample includes 25,462,162 returns.

Table 4—OLS Regressions on the Probability that Male Spouse's Name Is Listed First

|  | Specification 1 | Specification 2 | Specification 3 | Specification 4 |
| :---: | :---: | :---: | :---: | :---: |
| Time trend |  | x |  | x |
| State dummies |  |  | x | x |
| Male earnings share | 0.1807 | 0.1797 | 0.1814 | 0.1802 |
|  | (0.0007) | (0.0007) | (0.0008) | (0.0007) |
| Male earnings higher | 0.0036 | 0.0029 | 0.0029 | 0.0023 |
|  | (0.0004) | (0.0004) | (0.0004) | (0.0004) |
| Female age | 0.0006 | 0.0007 | 0.0005 | 0.0006 |
|  | (0.00004) | (0.00004) | (0.00004) | (0.00004) |
| Male age | 0.0019 | 0.0019 | 0.0019 | 0.0020 |
|  | (0.00004) | (0.00004) | (0.00004) | (0.00004) |
| Male age higher | 0.0134 | 0.0119 | 0.0130 | 0.0116 |
|  | (0.0004) | (0.0004) | (0.0004) | (0.0004) |
| 5\%-10\% AGI percentiles | -0.0070 | -0.0063 | -0.0069 | -0.0062 |
|  | (0.0005) | (0.0005) | (0.0005) | (0.0005) |
| 10\%-15\% AGI percentiles | 0.0031 | 0.0041 | 0.0032 | 0.0042 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 15\%-20\% AGI percentiles | 0.0124 | 0.0139 | 0.0125 | 0.0140 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 20\%-25\% AGI percentiles | 0.0170 | 0.0188 | 0.0170 | 0.0188 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 25\%-30\% AGI percentiles | 0.0196 | 0.0215 | 0.0195 | 0.0215 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 30\%-35\% AGI percentiles | 0.0221 | 0.0240 | 0.0219 | 0.0240 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 35\%-40\% AGI percentiles | 0.0242 | 0.0262 | 0.0240 | 0.0261 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 40\%-45\% AGI percentiles | 0.0255 | 0.0275 | 0.0253 | 0.0274 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 45\%-50\% AGI percentiles | 0.0277 | 0.0296 | 0.0275 | 0.0296 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 50\%-55\% AGI percentiles | 0.0288 | 0.0307 | 0.0288 | 0.0308 |
|  | (0.0006) | (0.0006) | $(0.0006)$ | $(0.0006)$ |
| 55\%-60\% AGI percentiles | 0.0308 | 0.0326 | 0.0309 | 0.0328 |
|  | (0.0006) | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ |
| 60\%-65\% AGI percentiles | 0.0328 | 0.0346 | 0.0330 | 0.0349 |
|  | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ |
| 65\%-70\% AGI percentiles | 0.0343 | 0.0361 | 0.0347 | 0.0366 |
|  | (0.0006) | (0.0006) | (0.0006) | (0.0006) |
| 70\%-75\% AGI percentiles | 0.0356 | 0.0374 |  | $0.0380$ |
|  | $(0.0006)$ |  | $(0.0006)$ | $(0.0006)$ |


| 75\%-80\% AGI percentiles | 0.0371 | 0.0388 | 0.0379 | 0.0397 |
| :--- | :---: | :---: | :---: | :---: |
|  | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ |
| 80\%-85\% AGI percentiles | 0.0379 | 0.0396 | 0.0390 | 0.0407 |
|  | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ |
| 85\%-90\% AGI percentiles | 0.0378 | 0.0394 | 0.0392 | 0.0409 |
|  | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ | $(0.0006)$ |
| 90\%-95\% AGI percentiles | 0.0362 | 0.0378 | 0.0377 | 0.0393 |
|  | $(0.0007)$ | $(0.0007)$ | $(0.0007)$ | $(0.0007)$ |
| 95\%-100\% AGI percentiles | 0.0316 | 0.0330 | 0.0332 | 0.0347 |
|  | $(0.0007)$ | $(0.0007)$ | $(0.0007)$ | $(0.0007)$ |
| Time trend |  | -0.0046 |  | -0.0046 |
|  |  | $(0.00002)$ |  | $(0.00002)$ |
| Intercept | 0.6620 | 0.7151 | 0.6710 | 0.7226 |
|  | $(0.0009)$ | $(0.0009)$ | $(0.0014)$ | $(0.0014)$ |
| N | $22,696,776$ | $22,696,776$ | $22,696,776$ | $22,696,776$ |
| R-squared | 0.0675 | 0.0805 | 0.0692 | 0.0821 |

Notes: The table shows the coefficient estimates and standard errors from OLS regressions where the dependent variable is an indicator of whether the male is listed as the primary filer on a joint return filed by an opposite-gender couple. The unit of observation is a tax return. The independent variables include, depending on the specification, linear time trends and/or state dummies. The specification of each regression is summarized at the top of the table. Coefficients are estimated using oppositesex joint returns filed by a $1 \%$ random sample of filers between tax years 1999-2020. Robust standard errors clustered at the couple level are in parentheses.

Table 5—Mean Taxpayer Characteristics by Return Preparation Method
$\left.\begin{array}{lccc}\hline & & \text { All } & \begin{array}{c}\text { Paid-Preparer- } \\ \text { Assisted } \\ \text { Returns } \\ (2)\end{array}\end{array} \begin{array}{c}\text { Self-Prepared } \\ \text { Returns } \\ (3)\end{array}\right]$

Data: A 1\% random sample of married individuals filing jointly with a different-sex spouse from tax years 2004-2020. A small fraction of returns was prepared by IRS's Volunteer Income Tax Assistance (VITA) and Tax Counseling for the Elderly (TCE) programs. These returns are in column (1) but not in column (2) or (3).

Table 6-OLS Regressions on the Probability that Male Spouse’s Name Is Listed First:
Self-Prepared Returns

|  | Specification 1 | Specification 2 | Specification 3 | Specification 4 |
| :--- | :---: | :---: | :---: | :---: |
| AGI bin dummies | x | x | x | x |
| Time trend |  | x |  | x |
| State dummies |  |  | x | x |
| Male earnings share | 0.2983 | 0.2960 | 0.2981 | 0.2956 |
|  | $(0.0016)$ | $(0.0016)$ | $(0.0016)$ | $(0.0016)$ |
| Male earnings higher | 0.0205 | 0.0204 | 0.0201 | 0.0202 |
|  | $(0.0010)$ | $(0.0010)$ | $(0.0010)$ | $(0.0010)$ |
| Female age | 0.0015 | 0.0016 | 0.0014 | 0.0016 |
|  | $(0.0001)$ | $(0.0001)$ | $(0.0001)$ | $(0.0001)$ |
| Male age | 0.0029 | 0.0029 | 0.0030 | 0.0030 |
|  | $(0.0001)$ | $(0.0001)$ | $(0.0001)$ | $(0.0001)$ |
| Male age higher | 0.0178 | 0.0161 | 0.0174 | 0.0158 |
|  | $(0.0009)$ | $(0.0009)$ | $(0.0009)$ | $(0.0009)$ |
| Time trend |  | -0.0089 |  | -0.0090 |
|  |  | $(0.00004)$ |  | $0.00004)$ |
| Intercept | 0.4101 | 0.5506 | 0.4161 | 0.5566 |
|  | $(0.0020)$ | $(0.0020)$ | $(0.0033)$ | $(0.0032)$ |
| N | $6,528,515$ | $6,528,515$ | $6,528,515$ | $6,528,515$ |
| R-squared | 0.1133 | 0.1305 | 0.1141 | 0.1313 |

Notes: The table shows the coefficient estimates and standard errors from OLS regressions where the dependent variable is an indicator of whether the male is listed as the primary filer on a joint return filed by an opposite-gender couple. The unit of observation is a tax return. The independent variables include AGI bin dummies and, depending on the specification, linear time trends and/or state dummies. The specification of each regression is summarized at the top of the table. Coefficients are estimated using opposite-sex joint returns filed by a $1 \%$ random sample of filers who self-prepared their tax returns without using a third-party preparer between tax years 2004-2020. Beginning in tax year 2004, data on return preparation methods, e.g., whether a return uses a preparer, became available. Robust standard errors clustered at the couple level are in parentheses.

Table 7-OLS Regressions on the Probability that Male Spouse's Name Is Listed First: Returns Prepared by Paid Preparers

|  | Specification 1 | Specification 2 | Specification 3 | Specification 4 |
| :--- | :---: | :---: | :---: | :---: |
| AGI bin dummies | x | x | x | x |
| Time trend |  | x |  | x |
| State dummies |  |  | x | x |
| Male earnings share | 0.1404 | 0.1402 | 0.1413 | 0.1410 |
|  | $(0.0009)$ | $(0.0009)$ | $(0.0009)$ | $(0.0009)$ |
| Male earnings higher | -0.0080 | -0.0080 | -0.0088 | -0.0087 |
|  | $(0.0005)$ | $(0.0005)$ | $(0.0005)$ | $(0.0005)$ |
| Female age | 0.0002 | 0.0002 | 0.0001 | 0.0001 |
|  | $(0.00005)$ | $(0.00005)$ | $(0.00005)$ | $(0.00005)$ |
| Male age | 0.0013 | 0.0014 | 0.0014 | 0.0014 |
|  | $(0.0001)$ | $(0.0001)$ | $(0.0001)$ | $(0.0001)$ |
| Male age higher | 0.0105 | 0.0101 | 0.0102 | 0.0097 |
|  | $(0.0005)$ | $(0.0005)$ | $(0.0005)$ | $(0.0005)$ |
| Time trend |  | -0.0026 |  | -0.0025 |
|  |  | $(0.00002)$ |  | $(0.00002)$ |
| Intercept | 0.7664 | 0.8024 | 0.7736 | 0.8088 |
|  | $(0.0011)$ | $(0.0010)$ | $(0.0016)$ | $(0.0015)$ |
| N | $11,072,171$ | $11,072,171$ | $11,072,171$ | $11,072,171$ |
| R-squared | 0.0517 | 0.0553 | 0.0541 | 0.0576 |

Notes: The table shows the coefficient estimates and standard errors from OLS regressions where the dependent variable is an indicator of whether the male is listed as the primary filer on a joint return filed by an opposite-gender couple. The unit of observation is a tax return. The independent variables include AGI bin dummies and, depending on the specification, linear time trends and/or state dummies. The specification of each regression is summarized at the top of the table. Coefficients are estimated using opposite-sex joint returns filed by a $1 \%$ random sample of filers who used a paid preparer to assist in return preparation between tax years 2004-2020. Beginning in tax year 2004, data on return preparation methods, e.g., whether a return uses a preparer, became available. Robust standard errors clustered at the couple level are in parentheses.

Table 8-OLS Regressions on the Probability that Male Spouse’s Name Is Listed First: Spouse Relative Power and Tax Acumen

|  | All <br> (1) | All <br> (2) | SelfPrepared <br> (3) | SelfPrepared <br> (4) | Paid-PreparerAssisted (5) | Paid- <br> Preparer- <br> Assisted <br> (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male earnings share | $\begin{gathered} 0.1799 \\ (0.0007) \end{gathered}$ | $\begin{gathered} 0.1787 \\ (0.0008) \end{gathered}$ | $\begin{gathered} 0.2950 \\ (0.0016) \end{gathered}$ | $\begin{gathered} 0.2945 \\ (0.0016) \end{gathered}$ | $\begin{gathered} 0.1409 \\ (0.0009) \end{gathered}$ | $\begin{gathered} 0.1371 \\ (0.0009) \end{gathered}$ |
| Male earnings higher | $\begin{gathered} 0.0024 \\ (0.0004) \end{gathered}$ | $\begin{gathered} 0.0016 \\ (0.0004) \end{gathered}$ | $\begin{gathered} 0.0201 \\ (0.0010) \end{gathered}$ | $\begin{gathered} 0.0199 \\ (0.0010) \end{gathered}$ | $\begin{aligned} & -0.0087 \\ & (0.0005) \end{aligned}$ | $\begin{gathered} -0.0079 \\ (0.0005) \end{gathered}$ |
| Female age | $\begin{gathered} 0.0006 \\ (0.00004) \end{gathered}$ | $\begin{gathered} 0.0007 \\ (0.00004) \end{gathered}$ | $\begin{gathered} 0.0016 \\ (0.0001) \end{gathered}$ | $\begin{gathered} 0.0016 \\ (0.0001) \end{gathered}$ | $\begin{gathered} 0.0001 \\ (0.00005) \end{gathered}$ | $\begin{gathered} 0.0001 \\ (0.00005) \end{gathered}$ |
| Male age | $\begin{gathered} 0.0020 \\ (0.00004) \end{gathered}$ | $\begin{gathered} 0.0020 \\ (0.00004) \end{gathered}$ | $\begin{gathered} 0.0030 \\ (0.0001) \end{gathered}$ | $\begin{gathered} 0.0030 \\ (0.0001) \end{gathered}$ | $\begin{gathered} 0.0014 \\ (0.00005) \end{gathered}$ | $\begin{gathered} 0.0014 \\ (0.00005) \end{gathered}$ |
| Male age higher | $\begin{gathered} 0.0116 \\ (0.0004) \end{gathered}$ | $\begin{gathered} 0.0116 \\ (0.0004) \end{gathered}$ | $\begin{gathered} 0.0159 \\ (0.0009) \end{gathered}$ | $\begin{gathered} 0.0159 \\ (0.0009) \end{gathered}$ | $\begin{gathered} 0.0097 \\ (0.0005) \end{gathered}$ | $\begin{gathered} 0.0097 \\ (0.0005) \end{gathered}$ |
| Time trend | $\begin{gathered} -0.0045 \\ (0.00002) \end{gathered}$ | $\begin{gathered} -0.0046 \\ (0.00002) \end{gathered}$ | $\begin{gathered} -0.0090 \\ (0.00002) \end{gathered}$ | $\begin{gathered} -0.0089 \\ (0.00002) \end{gathered}$ | $\begin{gathered} -0.0025 \\ (0.00002) \end{gathered}$ | $\begin{gathered} -0.0025 \\ (0.00002) \end{gathered}$ |
| Male accountant | $\begin{gathered} 0.0344 \\ (0.0020) \end{gathered}$ |  | $\begin{gathered} 0.0756 \\ (0.0026) \end{gathered}$ |  | $\begin{gathered} 0.0069 \\ (0.0031) \end{gathered}$ |  |
| Female accounts | $\begin{gathered} -0.0599 \\ (0.0036) \end{gathered}$ |  | $\begin{gathered} -0.0401 \\ (0.0050) \end{gathered}$ |  | $\begin{gathered} -0.0094 \\ (0.0041) \end{gathered}$ |  |
| Both accountants | $\begin{gathered} 0.0346 \\ (0.0110) \end{gathered}$ |  | $\begin{gathered} 0.0193 \\ (0.0143) \end{gathered}$ |  | $\begin{gathered} 0.0147 \\ (0.0137) \end{gathered}$ |  |
| Male SE income |  | $\begin{gathered} 0.0198 \\ (0.0003) \end{gathered}$ |  | $\begin{gathered} 0.0199 \\ (0.0009) \end{gathered}$ |  | $\begin{gathered} 0.0108 \\ (0.0003) \end{gathered}$ |
| Female SE income |  | $\begin{gathered} -0.0031 \\ (0.0006) \end{gathered}$ |  | $\begin{gathered} -0.0055 \\ (0.0013) \end{gathered}$ |  | $\begin{gathered} -0.0175 \\ (0.0007) \end{gathered}$ |
| Both SE income |  | $\begin{gathered} 0.0091 \\ (0.0009) \\ \hline \end{gathered}$ |  | $\begin{gathered} 0.0147 \\ (0.0024) \\ \hline \end{gathered}$ |  | $\begin{gathered} 0.0146 \\ (0.0010) \\ \hline \end{gathered}$ |
| Intercept | $\begin{gathered} 0.7228 \\ (0.0014) \end{gathered}$ | $\begin{gathered} 0.7200 \\ (0.0014) \end{gathered}$ | $\begin{gathered} 0.5574 \\ (0.0032) \end{gathered}$ | $\begin{gathered} 0.5549 \\ (0.0032) \end{gathered}$ | $\begin{gathered} 0.8088 \\ (0.0015) \end{gathered}$ | $\begin{gathered} 0.8094 \\ (0.0015) \end{gathered}$ |
| N | 22,696,776 | 22,696,776 | 6,528,515 | 6,528,515 | 11,072,171 | 11,072,171 |
| R-squared | 0.0822 | 0.0828 | 0.1315 | 0.1316 | 0.0576 | 0.0584 |

Notes: The table shows the coefficient estimates and standard errors from OLS regressions where the dependent variable is an indicator of whether the male is listed as the primary filer on a joint return filed by an opposite-gender couple. The unit of observation is a tax return. The independent variables include AGI bin dummies and state dummies. Results in columns (1) and (2) are estimated based on data from 1999 to 2020, and results in columns (3) through (6) are estimated based on data from 2004 to 2020. Beginning in tax year 2004, data on return preparation methods, e.g., whether a return uses a preparer, became available. Robust standard errors clustered at the couple level are in parentheses.

Table 9—OLS Regression Results on the Probability that the Taxpayer’s Name Is Listed First: Same-Gender Couples

| Specification 1 |  | Specification 2 |  |
| :---: | :---: | :---: | :---: |
| Controls | Estimates | Controls | Estimates |
| Age | $\begin{aligned} & 0.0096 \\ & (0.0006) \end{aligned}$ | Age x Female couple | $\begin{aligned} & 0.0066 \\ & (0.0010) \end{aligned}$ |
|  |  | Age x Male couple | $\begin{aligned} & 0.0109 \\ & (0.0008) \end{aligned}$ |
| Spouse age | $\begin{aligned} & -0.0093 \\ & (0.0006) \end{aligned}$ | Spouse age x Female couple | $\begin{aligned} & -0.0062 \\ & (0.0010) \end{aligned}$ |
|  |  | Spouse age x Male couple | $\begin{aligned} & -0.0106 \\ & (0.0008) \end{aligned}$ |
| Older than spouse | $\begin{aligned} & 0.1117 \\ & (0.0089) \end{aligned}$ | Older than spouse x Female couple | $\begin{aligned} & 0.1022 \\ & (0.0122) \end{aligned}$ |
|  |  | Older than spouse x Male couple | $\begin{aligned} & 0.1415 \\ & (0.0133) \end{aligned}$ |
| Earnings share | $\begin{aligned} & 0.5490 \\ & (0.0131) \end{aligned}$ | Earnings share x Female couple | $\begin{aligned} & 0.5808 \\ & (0.0175) \end{aligned}$ |
|  |  | Earnings share x Male couple | $\begin{aligned} & 0.5093 \\ & (0.0195) \end{aligned}$ |
| Earnings higher | $\begin{aligned} & 0.1068 \\ & (0.0093) \end{aligned}$ | Earnings higher x Female couple | $\begin{aligned} & 0.0982 \\ & (0.0123) \end{aligned}$ |
|  |  | Earnings higher x Male couple | $\begin{aligned} & 0.1170 \\ & (0.0142) \end{aligned}$ |
| Intercept | $\begin{aligned} & 0.1228 \\ & (0.0279) \end{aligned}$ | Intercept | $\begin{aligned} & 0.1170 \\ & (0.0279) \end{aligned}$ |
| N | 97,601 | N | 97,601 |
| R-squared | 0.2718 | R-squared | 0.2756 |

Notes: The table shows the coefficient estimates and standard errors from OLS regressions where the dependent variable is an indicator of whether a taxpayer is listed as the primary filer on a joint return filed by a same-gender couple. The unit of observation is an individual taxpayer. The independent variables include a linear time trend, state dummies and AGI bin dummies. Interaction of the gender of the couple with independent variables are used in specification 2 . Coefficients are estimated using same-sex joint returns filed by a $1 \%$ random sample of filers for tax years 20132020. Robust standard errors clustered at the couple level are in parentheses.

| All Filers: Net | Male-Primary Filers: | Female-Primary |
| :---: | :---: | :---: |
| Switches to | Switches to Female- | Filers: Switches |
| Male-Primary | Primary | to Male- |
| Filers | Filers | Primary Filers |
| (1) | (2) | (3) |


| Male earnings share | 0.0273 | -0.0144 | 0.1413 |
| :--- | :---: | :---: | :---: |
|  | $(0.0003)$ | $(0.0002)$ | $(0.0023)$ |
| Male earnings higher | -0.0011 | 0.0011 | 0.0004 |
|  | $(0.0002)$ | $(0.0001)$ | $(0.0011)$ |
|  |  |  |  |
| Intercept | -0.0016 | 0.0084 | 0.1007 |
|  | $(0.00002)$ | $(0.00002)$ | $(0.0003)$ |
| N | $20,436,362$ | $19,195,950$ | $1,240,412$ |
| R-squared | 0.0015 | 0.0007 | 0.0076 |

Notes: The table shows coefficient estimates and standard errors from first-differenced (FD) regressions where the dependent variable is whether a couple switched the primary filer on their joint return between tax years $t$ and $t+1$. The unit of observation in each regression is a tax return. Coefficients are estimated using opposite-sex joint returns filed by a 1\% random sample of filers for tax years 1999-2019 who continued to file jointly in the subsequent year. The columns include results for (1) whether a net switch to male-first occurred, where the dependent variable in FD equation is one if the primary filer switches from female to male and minus one if the primary filer switches from male to female, conditional on continuing to file a return between periods $t$ and $t+1$; (2) whether the primary filer switched from male to female, where the dependent variable in the FD equation is one for a male-to-female change, conditional on continuing to file a return between periods $t$ and $t+1$ and having a male primary filer in period $t$; and (3) whether the primary filer switched from female to male, where the dependent variable in the FD equation is one for a female-to-male change, conditional on continuing to file a return between periods t and $t+1$ and having a female primary filer in period $t$. Control variables not shown in the table include AGI bin dummies and state dummies.

Table 11 -- Regression Results on Behavioral Associations with Tax Return Name Order

|  | Risk-taking: <br> Dividends/(Dividends + Interest) |  | Audit Adjustments to Tax Less Credits | Audit Adjustments/ Absolute Value of Audit -Determined Tax Less Credits |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { OLS } \\ (1) \\ \hline \end{gathered}$ | $\qquad$ | $\begin{gathered} \text { OLS } \\ \text { (3) } \\ \hline \end{gathered}$ | OLS <br> (4) |
| Male name listed first | $\begin{gathered} 0.0308 \\ (0.0007) \end{gathered}$ | $\begin{gathered} 0.0160 \\ (0.0005) \end{gathered}$ | $\begin{aligned} & 272.4535 \\ & (70.9265) \end{aligned}$ | $\begin{gathered} 0.0417 \\ (0.0129) \end{gathered}$ |
| Male earnings share | $\begin{gathered} 0.0598 \\ (0.0009) \end{gathered}$ | $\begin{gathered} 0.0131 \\ (0.0006) \end{gathered}$ | $\begin{aligned} & -295.2698 \\ & (95.8275) \end{aligned}$ | $\begin{gathered} 0.0092 \\ (0.0159) \end{gathered}$ |
| Male earnings higher | $\begin{gathered} -0.0515 \\ (0.0006) \end{gathered}$ | $\begin{gathered} -0.0075 \\ (0.0004) \end{gathered}$ | $\begin{gathered} 84.6573 \\ (64.9227) \end{gathered}$ | $\begin{gathered} -0.0261 \\ (0.0117) \end{gathered}$ |
| Female age | $\begin{gathered} 0.0028 \\ (0.0001) \end{gathered}$ |  | $\begin{gathered} -18.3882 \\ (4.8530) \end{gathered}$ | $\begin{gathered} -0.0022 \\ (0.0008) \end{gathered}$ |
| Male age | $\begin{gathered} 0.0017 \\ (0.0001) \end{gathered}$ |  | $\begin{gathered} 9.2946 \\ (4.7703) \end{gathered}$ | $\begin{gathered} -0.0002 \\ (0.0008) \end{gathered}$ |
| Male age higher | $\begin{gathered} -0.0004 \\ (0.0006) \end{gathered}$ |  | $\begin{aligned} & -18.0705 \\ & (43.7402) \end{aligned}$ | $\begin{gathered} 0.0019 \\ (0.0075) \end{gathered}$ |
| Time trend | $\begin{gathered} 0.0017 \\ (0.00002) \end{gathered}$ | $\begin{gathered} 0.0052 \\ (0.00002) \end{gathered}$ | $\begin{gathered} 7.7163 \\ (6.6633) \end{gathered}$ | $\begin{gathered} -0.0078 \\ (0.0010) \end{gathered}$ |
| Intercept | $\begin{gathered} -0.2312 \\ (0.0019) \end{gathered}$ | $\begin{gathered} 0.0889 \\ (0.0030) \end{gathered}$ | $\begin{aligned} & 1293.0025 \\ & (195.0707) \end{aligned}$ | $\begin{gathered} 0.6589 \\ (0.0496) \end{gathered}$ |
| N | 22,696,776 | 22,696,776 | 63,358 | 61,005 |
| R-Squared | 0.1393 | 0.0167 | 0.0143 | 0.0885 |

Notes: Columns (1) and (2) show the coefficient estimates and standard errors from regressions where the dependent variable is the indicator of risk-taking (measured as dividends/(dividends+interest)). The unit of observation in each regression is a tax return. The independent variables include state and AGI bin dummies, and the regression results are estimated using opposite-sex joint returns filed by a $1 \%$ random sample of filers between tax years 1999-2020. Columns (3) and (4) show results for audit adjustments based on data from a stratified random sample of returns audited under the IRS National Research Program (NRP) from tax years 2006-2014. The amount of tax adjustments in column (3) is in 2019 dollars. The dependent variables in columns (3) and (4) are winsorized at the $1 \%$ level on the lower tail and at the $99 \%$ level on the upper tail of the distribution. The independent variables include state dummies and AGI bin dummies. Returns with zero tax liability as determined by the examiner are excluded from column (4). Robust standard errors clustered at the couple level are listed in columns (1). Robust standard errors are listed in columns (3) and (4).

Online Appendix: State-Level Male-Name-First Fraction
$\left.\begin{array}{|r|r|r|r|r|}\hline \text { State } & \text { All Years, } 1996- & \text { Tax Year } 1996 & \text { Tax Year 2020 } & \begin{array}{r}\text { Percentage Point } \\ \\ \end{array} \quad 9020\end{array}\right)$

| VT | $91.2 \%$ | $95.4 \%$ | $83.7 \%$ | -11.7 |
| ---: | ---: | ---: | ---: | ---: |
| WA | $91.7 \%$ | $96.1 \%$ | $85.0 \%$ | -11.1 |
| WI | $94.7 \%$ | $98.1 \%$ | $89.1 \%$ | -9.0 |
| WV | $93.5 \%$ | $97.4 \%$ | $86.7 \%$ | -10.7 |
| WY | $94.7 \%$ | $97.6 \%$ | $88.5 \%$ | -9.1 |

Data: Different-sex joint returns filed by a $1 \%$ random sample of filers each year.


[^0]:    ${ }^{1}$ When a joint return is filed, both spouses are generally responsible for the tax and interest or penalties due on the return except for limited situations. A spouse can request what is known as "innocent spouse relief" if the other spouse understated taxes due on the joint return and if the innocent spouse didn’t know about the errors.

[^1]:    ${ }^{2}$ The Form 1040 and accompanying instructions have not always been gender-neutral since the introduction of joint filing in tax year 1948. In 1948, the form asked for "your name" and below that asked for "wife's (or husband's) name", and referred to "wife (or husband)" in other places. The instruction booklet had a section entitled "Exemptions for You and Your Wife." The instructions retained the wife language until 1973, when both the instructions and form began to refer only to a "spouse".

[^2]:    ${ }^{3}$ There are missing returns for tax year 1999 in the IRS's population file of individual income tax returns, which led to a spuriously high exit rate for 1998 and a high entry rate for 2000, notable in Table 1. In addition, the entry rate is higher in 2007 and 2019 compared to their surrounding years due to the economic stimulus payment in 2007 and the economic impact payment in 2019, as some low-income individuals who were not required to file a tax return became tax filers to receive the benefits.

[^3]:    ${ }^{4}$ Some of the variation may be due to age and income differences across states. Additional analysis available from the authors shows that the state dummy variables in a linear probability

[^4]:    regression holding age and income indicators constant reveal very similar patterns. More importantly, gender norms may be associated with household decisions such as labor force participation that affect who in the household has more financial acumen and who then is more likely to "do" the couple's taxes.
    ${ }^{5}$ These measures of state-level attitudes come from the 2014 Religious Landscape Study by the Pew Research Center. The correlations are those of the state-level attitudes with the estimated coefficients of state dummy variables (using zero for the "left-out" state) in linear probability regressions that include indicators of taxpayer age and household income.

[^5]:    ${ }^{6}$ Controlling for the number of dependents claimed on the return and indicators of return preparation methods, such as whether the return is prepared by a paid return preparer or is selfprepared with the aid of software, results in similar estimated coefficients on the male earnings variable.

[^6]:    ${ }^{7}$ We use self-employment income reported on the individual's Schedule SE.

[^7]:    ${ }^{8}$ In 2013, Treasury ruled that same-sex couples legally married in jurisdictions that recognize their marriages would be treated as married for federal tax purposes, regardless of whether the couple lives in a jurisdiction that recognizes same-sex marriage. In 2015, the Supreme Court, in Obergefell v. Hodges, established the right to same-sex marriage in all states.

[^8]:    ${ }^{9}$ As with the different-sex joint filers, including a couple fixed effect reduces substantially the estimated magnitude of the earnings share coefficient, but it is still higher than the estimated coefficient of different-sex couples with a fixed effect.

[^9]:    ${ }^{10}$ This literature is controversial; see, for example, the feminist critique offered by Sent and van Staveren (2019).

[^10]:    ${ }^{11}$ The suggested adjustment to tax liability before refundable credits and the adjustment to refundable credits each are associated with male name first.

