Partnership Recognition Rights

and the Household Division of Labor

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Abstract

Individual states in the US started granting same-sex couples the right to marry as far

back as 2004; each year, more states extended that right to their inhabitants. In 2015,

nation-wide legislation was passed granting marriage rights to all remaining same-sex

couples. In some states, same-sex couples were given access to alimony rights and

the ability to file taxes jointly years before they could legally marry. The analysis in

this paper uses this quasi-experimental design of marriage, alimony, and joint taxation

rights in different years across states to study the effects of these policy changes on

couples' household division of labor (DoL). It employs annual data from the American

Community Survey from 2000-2016 and four measures of a division of labor to test

whether couples with access to alimony, joint taxation, or marriage are more likely to

engage in a DoL. The results show that in both male and female same-sex couples, the

implementation of partnership recognition rights led to an increase in the household

DoL.

JEL Classifications: H31; J22; J12

Key Words: household division of labor; policy analysis; joint labor supply

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1 Introduction

In 2004, Massachusetts became the first US state to legalize same-sex marriage. Over time, other states followed; more than half of the states had introduced their own same-sex marriage legislation before federal law granted all same-sex couples the right to marry in 2015. Even before some individual states gave the right to marry, many gave same-sex couples access to participate in other important legal institutions recognizing their partnership, often in the context of "civil unions" or "domestic partnerships." Two important institutions newly accessible to same-sex couples were the right of the individuals in the couple to file their income taxes jointly and the right of individuals in a couple to make claims to alimony payments from the other in case of the dissolution of the relationship. Table 1 shows the year in which the 50 states and the District of Columbia granted these three rights. New Jersey (NJ), for example, allowed people in same-sex couples to file their taxes jointly in 2004, extended the right to alimony in 2007, and granted the right to marry in 2013.

These legislative changes offer an ideal framework to study questions that are at the core of labor economics. In particular, using these legal changes, we can assess how policy affects household labor supply and the household division of labor (DoL). Empirically identifying the determinants of a household DoL is difficult, because it is hard to disentangle the role of legislation and economic circumstances from differences in biological sex in determining who does what in the household. The fact that the legal changes outlined above applied to same-sex couples means that we can use them to separate biology from policy as determinants of a household DoL. In same-sex couples, both people have the same biological sex. Thus, differences in labor supply between the people in a same-sex couples are related to something other than biology. In this paper, therefore, we look at how partnership recognition rights affect the DoL, while controlling for biological sex.

In an effort to understand work decisions of households, economists have modeled household labor supply in terms of either a unitary or collective models of household behavior. Early models of household labor supply relied on the former, which take as their starting

Table 1: Timing of legal changes in 50 states and Washington, DC

Year	Joint Tax Filing	Alimony	Marriage
2000		VT	
2001	VT		
2004	NJ	MA	MA
2005		CT, CA	
2006	CT	DC	
2007	CA, DC	NJ	
2008	OR	NH, OR, WA	CT
2009	IA	IA, NV	VT, IA
2010			NH, DC
2011	NY	IL, NY, RI	NY
2012	DE, HI, ME	DE, HI, ME	ME, WA
2013	MD, MN, MO, NM, RI	CO, MD, NM, MN	NJ, DE, HI, MD,
			MN, CA, NM, RI
2014	AZ, ID, MT, OK,	AK, AZ, ID, IN, MT, NC, OK,	AK, AZ, CO, ID, IL, IN,
	SC, VA, WV, WI	PA, SC, UT, VA, WV, WI, WY	MT, NV, NC, OK, OR, PA,
			SC, VA, WV, WI, WY, UT
2015	AL, AR, GA, KS, KY,	AL, AR, FL, GA, KS, KY,	AL, AR, FL, GA, KS, KY,
	LA, MS, NE, ND, OH	LA, MI, MS, MO, NE,	LA, MI, MS, MO, NE,
		ND, OH, SD, TN, TX	ND, OH, SD, TN, TX

Notes: States without state income taxes (AK, FL, NV, SD, TX, WA, WY) or separate tax rate schemes for couples (CO, IL, IN, MA, MI, NH, NC, PA, TN, UT) are not included in the joint tax filing column.

point the idea that households have a single utility function (Ashenfelter and Heckman, 1974; Rosen, 1978). This concept has been challenged on theoretical and empirical grounds since the 1980s, and it is now much more common to consider household labor supply a collective decision. Collective models of household labor supply, initially proposed by Chiappori (1988, 1992, 1997), take as a starting point that the individuals in a household can have differing preferences, and that the final labor supply decision will result in Pareto-efficient outcomes (Blundell and Macurdy, 1999).

The collective model thus allows us to consider various issues that impact a household DoL, such as comparative advantages, bargaining power, gender roles, and institutional circumstances. The existing literature on the economics of the household has addressed the sexual DoL in different-sex couples using these concepts rather extensively; to a large extent, these ideas can be extended to same-sex couples with some modification.² Classically, thinking on the household DoL takes Becker's (1973, 1991) framework of comparative advantages within the couple as a starting point. Couples decide which partner has the comparative advantage in household- and care-work and which has it in paid work; the individuals then specialize in their assigned task and trade with their partner to optimize household productivity and efficiency. Given that women can carry, bear, and nurse children, they have a comparative advantage in household production; Becker wrote that "households with only men or only women are less efficient because they are unable to profit from the sexual difference in comparative advantage" (Becker, 1991, pp. 38-9). Extending his model beyond biological differences between men and women, we can see that the lack of difference in biological sex alone does not exclude same-sex couples from gaining efficiency via specialization. In any couple in which one person has a comparative advantage in household/care work or

¹Assumptions about homogeneity, symmetry, and negative semi-definiteness of the Slutsky matrix in the unitary model have been rejected, as have assumptions about income pooling in the household (Blundell and Meghir, 1986; Blundell and Walker, 1986; Lundberg, 1988; Fortin and Lacroix, 1997).

²However, Badgett (1995, p. 123) warns that blindly applying the models built and mainly used to analyze different-sex couples to a study of same-sex couples can "overlook the important legal, political, and cultural differences that shape the economic position and behavior of families formed by lesbian, gay, and bisexual people."

labor market work vis-à-vis their partner, the couple can specialize in order to increase efficiency. Also, just as in heterosexual couples, same-sex couples with children may benefit from specialization. Particularly in same-sex female couples, in which one partner can carry and birth a child, the couple may have incentive to specialize. Indeed the presence of children has been shown to correlate with a household DoL in same-sex couples. Antecol and Steinberger (2013) analyze the labor supply of lesbian versus heterosexual women, dividing their sample into primary (higher) and secondary (lower) earner lesbians. They find that not only do the primary partners provide more labor than the secondary partners (who still provide more labor than heterosexual women), but further that motherhood has less of an effect on the labor supply of the higher earning lesbians than on the lower earner lesbians. Thus, in lesbian couples the presence of children in the household corresponds with one – and only one – partner reducing the time she spends in paid work. Moreover, Giddings et al. (2014) show that the degree of specialization in same-sex couples is, on average, lower than in different-sex married couples, and that this sexual orientation specialization gap narrowed between 1990 and 2010. However, the presence of children makes same-sex couples just as likely as different-sex couples to specialize.

Along with the comparative advantages framework, relative bargaining power within the household, sex role ideology, and institutional constraints are particularly salient ways to conceptualize a DoL in same-sex couples. The first, bargaining power, refers to one person's ability to impose their own desires onto their partner, typically because they have a higher fallback position outside of the relationship (Manser and Brown, 1980; Lundberg, 2005). To the extent that bargaining power depends on differences in personal characteristics such as race and ethnicity, bargaining power plays an important role in determining the household DoL in same-sex couples, since same-sex couples are more likely than different-sex couples to be interracial and mixed ethnicity. (Jepsen and Jepsen, 2002; Oreffice, 2011). Second, gender roles – the social prescriptions regarding how biological men and women "ought to" behave – can factor into couples' specialization decisions. Different kinds of work

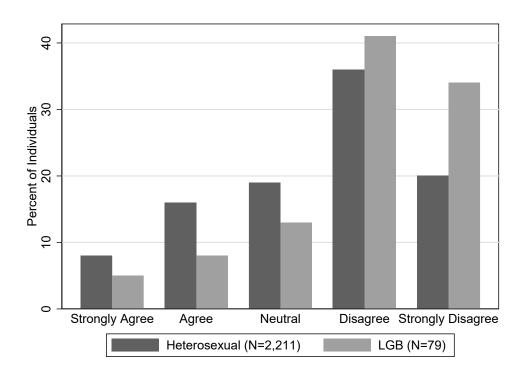


Figure 1: "A man's job is to earn money; a woman's job is to look after the home and family"

are "gendered" (prescribed normative gender roles): caring work, for example, is typically assigned to women. If people in same-sex couples behave according to the gender assigned to their biological sex, we should expect a lesser degree of specialization in these households compared to different-sex couple households. Figure 1 shows that compared to heterosexuals, those who identify as lesbian, gay, or bisexual (LGB) are more likely to disagree and less likely to agree with the statement that "a man's job is to earn money; a woman's job is to look after the home and family," suggesting that same-sex couples are more likely to reject the concept of traditional gender roles.³

Third, institutional constraints, or broad social norms, rules, or circumstances, can influence a couple's decision of how to distribute their working responsibilities. Women's systematic lower wages compared to men, for example, play an important role in women's greater engagement in household work in different-sex couples. Even the structure of a coun-

³The data in figure 1 come from the 2008 and 2012 General Social Survey. In 2008, the statement was "a husband's job is to earn money; a wife's job is to look after the home and family"; in 2012, the statement was about men and women, not husbands and wives.

try's economy in terms of the skill specificity demanded in its main outputs or the size of the public sector can influence the degree of a household DoL (Iversen and Rosenbluth, 2006). An important institutional setting that may have influenced same-sex couples' choices about labor supply and specialization is the legal setting surrounding the recognition of their partnerships. Whether or not these couples could marry, file their taxes jointly, or make claims to alimony upon the dissolution of their relationship could have affected their work choices.

What is special about these three institutions, and why might each have been a catalyst to impact a household DoL? The first, the right to joint income tax filing, allows a couple to benefit from laws that treat the couple as one tax entity. In all states that collect state income tax (seven do not) and that have a different tax scheme for couples (10 do not), couples can receive a "marriage bonus," based on the level of their income and, importantly, the difference in the two partners' incomes (a larger difference can lead to a larger tax bonus). This bonus is something of a tax break for couples who have a stronger household DoL. The right to file taxes jointly thus has an almost immediate impact on the couple: as soon as the next year they file their taxes, couples engaging in a household DoL can benefit from this right. Changes to the tax system have been shown to impact household labor supply (Guner et al., 2012), so changing a couple's access to particular parts of the tax system may do the same.

The second institution, alimony, instead gives economic protection to a couple upon a potential dissolution of the relationship in the future. With alimony rights, the member of the couple who spent less time in paid work (and who thus collected less income and savings for themselves over the course of the relationship) has the right to financial support from the other partner upon the break up of the couple. This right thus gives important protection to the member of a couple who prefers to specialize in unpaid household- and care-work in the long-term. Because it gives protection in the case of a potential future event with which most couples expect they will not be confronted, this law – while important – may be less of a catalyst to changes in present labor supply.

The last of the institutions to study here, marriage, is the only one without direct financial implications on the couple (aside, perhaps, from the cost of a wedding). However, marriage is an important social institution with many norms and expectations attached to it. The framework developed in Akerlof and Kranton (2000, 2011), which considers the role of identity in economic decisions and processes, can help explain why this social institution would have an impact on a couple's DoL. If social norms dictate that the economic interdependence implied by a household DoL is acceptable or even desirable in couples who are married, but less so or not at all in unmarried couples, then getting married can be associated with a trigger to engage in a DoL. Individuals and couples strive to match the ideal of the identity with which they prescribe themselves (here, "married") and if a household DoL is seen as a positive attribute of a "married couple," then there may be benefits to the couple's utility to engaging in a DoL.

The changes in the laws regarding the financial support, protection, and recognition of same-sex couples over the last 20 years offer an ideal experimental design to study how these three institutions may impact a household DoL while controlling for the biological sex of the people in the couple. The analysis in this paper follows in spirit the previous work that has shown how economic and social policy can affect the labor supply of individuals and their spouses, often as an unintended consequence. Policies such as no-fault divorce laws (Genadek et al., 2007), unemployment insurance (Cullen and Gruber, 2000), tax credits for workers (Blundell et al., 2000), and universal childcare (Gelbach, 2002; Cascio, 2009; Fitzpatrick, 2012; Fessler and Schneebaum, 2019) have all been shown to affect labor supply choices. Similar to these analyses, this paper uses the variation in the implementation of various policies at the state and year level.

The results show that access to these three partnership recognition rights increased the household DoL. The introduction of same-sex marriage, for example, decreased the probability that both people in a couple are employed and work full-time by 6.4 and 9.8 percentage points for male same-sex couples and 6.1 and 8.4 percentage points for female couples, re-

spectively. The results are not due to selection bias (in which couples wanting to specialize move to states with these laws); the results in the sample of people who moved into states with couples recognition rights do not suggest a greater household DoL, while the results for those who did not move remain robust. A further assessment of the effect of same-sex marriage legalization in the 15 states that did not themselves choose to have those rights confirm that the new policies incites a DoL even there, showing that the main results are not driven by endogeneity. The main results are also consistent with an analysis of the household DoL using time-use data on unpaid work. Finally, the analysis focusing on the role of children shows that both households with and without children increased their DoL in response to the law changes, and that the part of the law changes that allowed same-sex couples to have joint custody of a child did not drive the results. The introduction of couple recognition rights thus led to a greater household DoL for reasons independent of the presence of and potential for children.

2 Data and Methods

We use data from the 2000-2016 American Community Survey (ACS). The ACS is an annual survey with a sample size ranging from several hundred thousand to several million households in the United States each year. Among other things, the ACS collects information on demographic characteristics and labor market participation at the person level, as well as household size, location, and composition at the household level.

Each household specifies one person as the "householder"; information is collected about this and every other person in the household. Importantly, the survey contains information about each person's "relationship to householder" – self or something else (such as spouse, child, friend, or unmarried partner). Same-sex couples are identified as a householder and the householder's "unmarried partner" or "spouse" of the same sex. The existence of other non-romantic category choices, such as roommate or friend, suggest that the same-sex couples

 $^{^4\}mathrm{ACS}$ data processing procedure did not allow same-sex "spouses" until 2013. See details in Appendix A.

we identify in this study are indeed involved as romantic partners.

The survey methodology concerning the identification of same-sex couples in the ACS has evolved over time, just as the legislation regarding the legal rights and recognition of these couples have changed. Appendix A gives a thorough explanation of the changes made in the survey design and data processing steps that affected the recognition of same-sex couples in the ACS; this appendix contains all the information necessary regarding data processing for researchers studying same-sex couples. A brief summary here will suffice. Given the changes in data collection and editing procedure over time, it is possible or even likely that not all same-sex couples in the ACS data are truly same-sex couples (they could instead be miscoded different-sex couples) or that some same-sex couples are systematically missing. To the greatest extent possible, we clean the data to eliminate bias in the sample of same-sex couples we observe. In the main analyses in this paper, the sample is limited to only couples for which all information on the sex, relationship to householder, and marital status items is provided and not flagged as having been edited by the Census Bureau (the data processors). Thus, concretely, we do two things: first, we exclude couples with flagged values on either partner's sex or relationship status throughout all years of the survey. Second, we exclude couples in which one or both people's marital status was flagged if the data were from before 2005; starting in 2005, we keep couples with a flag on their marital status if they responded by CAPI/CAPI (and drop those with a flagged marital status who responded in another way).

Using the ACS data, we create four measures of the household DoL, as in Giddings et al. (2014): (1) the share of couples in which both members of the couple are employed (>0 hours/week); (2) the share of couples in which both members of the couple work full time (\geq 35 hours/week); (3) the ratio of hours worked by the people in the couple, such that the ratio is between 0 and 1; and (4) the difference in the number of hours worked by the people in the couple. The literature on household labor supply has debated the use of bivariate (discrete) versus continuous measures of labor supply (e.g. Thoresen and Vattø, 2015). Using four

different measures of the household DoL means that we do not have to rely on either of these ways of measuring household labor supply alone. Moreover, in section 3.4 below, we supplement the analysis of these four measures of the DoL with another source of data on time spent in household work.

For this study, we only look at households in which both partners are of working age (18-64) and further exclude households in which either partner is a verteran or on active military duty. Finally, couples living in group quarters are omitted. Table 2 shows that same-sex couples are more likely to be interracial or mixed-ethnicity; they are also slightly younger, much more educated, and a bit more likely to have a disability than different-sex couples. The average of the higher income across same-sex male couple households is significantly higher than that in either heterosexual or same-sex female households.

Table 3 gives the summary statistics for our four DoL measures, split by the institutional/legal framework in which the household existed. In almost all cases, the descriptive statistics suggest that exposure to couple recognition rights is associated with a higher rate and extent of a household DoL in same-sex couples. That is, the share of couples in which both people are employed or work full-time is lower; the ratio of hours worked by the people in the couple is lower; and the absolute difference in the number of hours worked is higher. The exception is same-sex male couples who are exposed to joint taxation and alimony rights together; these couples seem to have a lower DoL.

To identify the effect of the policy exposure on the household DoL, though, we control for important couple- and state/year-level characteristics that may impact couples' decision to engage in a DoL. To do so, we employ a generalized difference-in-differences estimation. Equation 1 expresses that the DoL depends on the exposure to the laws, a set of couple- and state/year-level control variables in X, and state and year fixed effects ($\beta_s I_s$ and $\beta_t I_t$, respectively). The controls in X include couple-level information about race (e.g. both white, both black, interracial, etc.), ethnicity, age, education, disability, and the highest income earned in the couple, all as listed in table 2. X further includes covariates with information

Table 2: Descriptive statistics, whole sample

	Same-Sex Male	Same-Sex Female	Different-Sex
Both White	77.95	79.76	79.31
	(0.002)	(0.002)	(0.000)
Both Black	2.30	4.66	5.01
	(0.001)	(0.001)	(0.000)
Both Other Race	4.18	4.58	9.53
	(0.001)	(0.001)	(0.000)
White-Black	3.58	2.49	1.02
	(0.001)	(0.001)	(0.000)
White-Other Race	11.53	7.70	4.77
	(0.002)	(0.002)	(0.000)
Black-Other Race	0.46	0.81	0.36
	(0.000)	(0.001)	(0.000)
Neither Hispanic	80.50	84.69	85.04
	(0.002)	(0.002)	(0.000)
One Hispanic	13.29	9.19	4.81
_	(0.002)	(0.002)	(0.000)
Both Hispanic	6.21	6.12	10.15
-	(0.001)	(0.001)	(0.000)
Age Householder	43.49	42.48	43.82
_	(0.001)	(0.001)	(0.000)
Age Spouse/Partner	41.49	41.33	43.08
,	(0.001)	(0.001)	(0.000)
Years Educ. Householder	14.70	14.43	12.78
	(0.000)	(0.000)	(0.000)
Years Educ. Spouse/Partner	13.79	13.86	12.32
	(0.000)	(0.000)	(0.000)
Neither Disabled	86.19	83.12	87.12
	(0.002)	(0.002)	(0.000)
One Disabled	11.52	13.50	10.68
	(0.002)	(0.002)	(0.000)
Both Disabled	2.29	3.38	2.20
	(0.001)	(0.001)	(0.000)
Highest Income in HH	93,381	$66,\!535$	71,642
	(5.848)	(3.880)	(0.321)
Number of Households	28,090	29,979	5,642,011

Notes: Author's calculations on ACS 2000-2016 data. The table shows the mean value for each of the couple-level control variables. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. The data presented here are at the household level.

Table 3: Descritive statistics on household DoL measures, whole sample

Panel A: Same-Sex Male	All couples	No rights	Joint taxation only	Alimony only	Taxation & Alimony	Marriage
Both Employed	80.7	80.9	77.0	78.6	81.5	80.4
	(0.002)	(0.003)	(0.031)	(0.011)	(0.008)	(0.004)
Both Full-time	63.6	65.2	62.8	62.2	61.9	61.9
	(0.003)	(0.004)	(0.035)	(0.013)	(0.010)	(0.005)
Ratio of Hours	29.0	0.69	0.65	99.0	0.67	99.0
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Absolute Difference Hours	15.0	14.5	16.9	15.8	15.3	15.4
	(0.001)	(0.001)	(0.014)	(0.005)	(0.004)	(0.002)
Number of Households	28,090	13,755	198	1,382	2,381	10,374
Panel B: Same-Sex Female	All Couples	No rights	Joint taxation only	Alimony only	Taxation & Alimony	Marriage
Both Employed	79.2	79.7	73.6	7.67	79.3	78.5
	(0.002)	(0.003)	(0.031)	(0.011)	(0.009)	(0.004)
Both Full-time	59.0	61.2	60.4	56.5	54.8	57.0
	(0.003)	(0.004)	(0.035)	(0.014)	(0.011)	(0.005)
Ratio of Hours	0.67	0.68	99.0	99.0	0.65	0.65
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Absolute Difference Hours	14.7	14.0	15.0	15.0	15.4	15.4
	(0.001)	(0.001)	(0.012)	(0.005)	(0.004)	(0.002)
Number of Households	29,979	15,359	202	1,306	2,162	10,950

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. The data are at the household level.

at the state/year level on the unemployment rate and GDP/capita.⁵ The specification in appendix table B2 shows the results when excluding the state and year fixed effects; the results are qualitatively the same.

$$Y_{ist} = \alpha + \beta_1 taxes_{st} + \beta_2 alimony_{st} + \beta_3 taxes_{st} * alimony_{st} + \beta_4 marriage_{st} +$$

$$\gamma_X X_{ist} + \beta_s I_s + \beta_t I_t + e_{ist}$$

$$(1)$$

Because the presence of children plays a major role in the household DoL, including in same-sex couples (Giddings et al., 2014), equation 2 makes explicit how the presence of children is included in the model. In particular, there are a set of three dummy variables indicating if the household has at least one child in it, broken down by the age of the youngest child present (0-1; 2-5; 6-17). These three dummy variables for the presence and age of children are further interacted with the dummy variable indicating whether the household had access to the partnership recognition rights. Table 4 shows that about twice as many different-sex couples than same-sex female couples have children (55% versus 28%, respectively), and more than twice as many same-sex female than same-sex male couples have children (28% versus 11%, respectively). The main results presented in the paper are based on the estimation of equation 2.

⁵The data on state/year (non-seasonally adjusted) unemployment rate and GDP/capita come from the Bureau of Labor Statistics (BLS 2019a; 2019b).

Table 4: Share of Households with Children

	Same-Sex Male	Same-Sex Female	Different-Sex
Any Children	11.16	28.26	55.14
	(0.002)	(0.003)	(0.000)
Youngest 0-1	2.30 (0.001)	4.91 (0.001)	10.77 (0.000)
Youngest 2-5	3.21	7.36	14.60
	(0.001)	(0.002)	(0.000)
Youngest 6-17	5.65	15.99	29.78
	(0.001)	(0.002)	(0.000)

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text.

$$Y_{ist} = \alpha + \beta_1 child(age)_{ist} +$$

$$\beta_2 taxes_{st} + \beta_3 taxes_{st} * child(age)_{ist} +$$

$$\beta_4 alimony_{st} + \beta_5 alimony_{st} * child(age)_{ist} +$$

$$\beta_6 taxes_{st} * alimony + \beta_7 taxes_{st} * alimony * child(age)_{ist} +$$

$$\beta_8 marriage_{st} + \beta_9 marriage_{st} * child(age)_{ist} +$$

$$\beta_X X_{ist} + \beta_s I_s + \beta_t I_t + e_{ist}$$

$$(2)$$

Note two final aspects of equations 1 and 2. First, each of the three laws (joint taxation, alimony, and marriage) are included separately – but there is also a term interacting joint taxation and alimony. This term serves to show the effect of each of the laws individually without any effect of either of the other laws contaminating the estimation of the effect. Recall from table 1 that some states gave access to joint taxation and alimony at the same time. Without the interaction term of these two laws in the equations above, the effects of the presence of both laws would be captured in the coefficient on alimony or joint taxation alone – though this interpretation of the effect of either of the laws individually would be

incorrect. The taxation*alimony variable therefore serves to keep the interpretation of the coefficient on alimony or taxation alone clear. Second, recall that the introduction of same-sex marriage always implies the implementation of the other two laws; same-sex marriage always occurred with alimony and joint taxation rights along with it. The tables presented throughout the paper show the effect of marriage "on its own" – though marriage never occurred without the other two laws as well. In the text discussing the results, we therefore additionally discuss the combined effect of alimony, joint taxation, taxation*alimony, and marriage, to get the total effect of marriage on the household DoL.

3 Empirical Results

3.1 Main results

Table 5 presents the main results based on the estimation of equation 2. In the first three columns, a negative coefficient implies a greater DoL; in the last column, a positive coefficient implies a greater DoL. The top panel of the table, panel A, analyzes same-sex male couples. In these couples, the sign of the coefficient in every specification indicates that access to each of the partnership recognition laws led to a greater household DoL. Two laws had a statistically significant effect on the couples' DoL: alimony and marriage rights. Access to alimony rights alone decreased the probability that both partners are in the labor force by 2.1 percentage points and that both partners work full-time by 2.3 percentage points. Correspondingly, access to alimony rights lowered the ratio of hours worked and increased the difference in the number of hours that the partners work by more than an hour. Taking the combined effect of alimony, joint taxation, taxation*alimony, and marriage to get the effect of marriage on the household DoL, we see that marriage had an effect on each of the four DoL measures. Access to same-sex marriage decreased the probability of both partners being in the labor force and both working full-time by six and 10 percentage points, respectively. Marriage decreased the ratio of hours worked by .07 and increased the

difference in the number of hours worked by 3.19. Each of these results are statistically significant at at least the 10-percent level.

Panel B shows the results for same-sex female couples. Here, the change in the household DoL comes for the couples who got access to same-sex marriage. Same-sex female couples in states which allowed same-sex marriage decreased the probability of both partners working full-time by eight percentage points. The signs on all other coefficients signal an increase in the household DoL, as well.

Table 5: Predicting the Household Division of Labor: Main Results

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.028	-0.030	-0.029	1.799
	(0.007)	(0.014)	(0.015)	(0.706)
Alimony Only	-0.021	-0.023	-0.021	1.039
	(0.006)	(0.010)	(0.007)	(0.271)
Tax and Alimony Only	-0.002	-0.017	-0.008	0.357
	(0.006)	(0.012)	(0.007)	(0.251)
Marriage	-0.014	-0.028	-0.010	-0.004
	(0.009)	(0.016)	(0.009)	(0.422)
N Households	28,090	28,090	27,266	28,090
\mathbb{R}^2	0.134	0.083	0.120	0.067

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

3.2 Selection into residence in a state with these laws

One concern that may arise with this analysis is that it can suffer from selection bias. Same-sex couples who preferred to engage in a stronger household DoL but would only do it with the financial benefit of joint tax filing, the protection of alimony, or the social and cultural recognition of marriage may have chosen to move to states that gave those rights to same-sex couples. In that case, the results presented in section 3.1 would suffer from selection bias. We therefore split the sample into two groups: those same-sex couples who

moved from states without these laws to states that did have them (that is, those who select into having access to the rights, or "movers"), and those who did not move.

The ACS provides information on whether a person moved within the last year, as well as the state (or foreign country) in which the person lived the year before. We use this information to identify the "movers" – those who went from a state without at least one of the three laws discussed throughout the paper to a state with such a law. The share of same-sex couples that moved to states with a law that they did not have in the state they lived a year ago is higher than the overall mobility rate for different-sex couples. Just 0.49% of different-sex couples moved from states without these laws to states with them, compared to 0.90% of same-sex female couples (N=270) and 1.09% of same-sex male couples (N=305). Almost one quarter of male same-sex couples who moved into state/years granting partnership recognition rights lived abroad in the year before their participation in the ACS (24.1%), compared to 14.2% of same-sex female couples and, interestingly, 40.5% of different-sex couples.

Table 6 shows the results of the model predicting a household DoL based on access to couple recognition rights for the sub-sample of "movers," or those who selected into having access to couple recognition rights. For same-sex male couples, there are no statistically significant results, though the sign of the coefficients suggest a *lower* DoL in these couples. In same-sex female couples as well, the results clearly point to a lower DoL. The effect of having access to same-sex marriage, for example, decreases the difference int he number of hours worked by the two partners by 29.9 hours. One explanation for these results may be that couples need to work more upon moving in order to make up for the costs of the move. Regardless of the reason, it is clear that the movers did not move in order to engage in a household DoL. Thus, the main results in section 3.1 are not driven by couples who selected into states with laws that would protect or support their household DoL.

Correspondingly, table 7 repeats the exercise with the sub-sample of couples that did not move. The results echo the main results in section 3.1. Most striking is the effect

Table 6: Predicting the Household Division of Labor, Movers

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples	1 0			
Joint Taxation Only	0.115	0.300	0.143	-4.404
	(0.102)	(0.138)	(0.098)	(4.130)
Alimony Only	-0.153	0.148	0.008	-1.300
	(0.112)	(0.121)	(0.103)	(4.772)
Tax and Alimony Only	-0.112	0.002	0.028	-2.429
	(0.087)	(0.082)	(0.088)	(5.139)
Marriage	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
N Households	305	305	295	305
\mathbb{R}^2	0.206	0.104	0.194	0.160
Panel B: Same-Sex Female Couples				
Joint Taxation Only	0.128	0.005	0.000	0.000
	(0.123)	(0.130)	(.)	(.)
Alimony Only	-0.026	-0.018	0.171	-10.803
	(0.094)	(0.121)	(0.090)	(5.045)
Tax and Alimony Only	0.050	0.101	0.222	-11.907
	(0.071)	(0.134)	(0.124)	(5.944)
Marriage	0.000	0.000	0.122	-7.235
	(.)	(.)	(0.082)	(4.579)
N Households	270	270	255	270
\mathbb{R}^2	0.141	0.114	0.162	0.131
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. This sub-sample comprises only households that moved from a state without recognition for these laws to a state with them in the last year. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

of same-sex marriage. For same-sex male couples, access to same-sex marriage decreased the probability of both being in the labor force and both forking full-time by 5.8 and 9.9 percentage points, respectively. Marriage decreased the ratio in hours worked by 4.8 and increased the difference in hours worked by 3.2. For same-sex female couples, same sex marriage decreased the probability of both being in the labor force by six percentage points and the probability of both working full-time by 10.2 percentage points.

Table 7: Predicting the Household Division of Labor, Non-movers

	(1) Both Employed	(2) Both FT	(3) Ratio Hours	(4) Diff. Hours
Panel A: Same-Sex Male Couples	Dotti Employed	DOMET	natio flours	Din. Hours
Joint Taxation Only	-0.034	-0.037	-0.038	2.185
J	(0.023)	(0.022)	(0.032)	(1.274)
Alimony Only	-0.017	-0.028	-0.022	$1.005^{'}$
	(0.007)	(0.008)	(0.006)	(0.257)
Tax and Alimony Only	$0.003^{'}$	-0.010	-0.003	$0.137^{'}$
Ç Ç	(0.006)	(0.012)	(0.007)	(0.261)
Marriage	-0.009	-0.023	-0.005	-0.311
_	(0.008)	(0.016)	(0.009)	(0.400)
N Households	27,785	27,785	26,971	27,785
\mathbb{R}^2	0.134	0.083	0.119	0.066
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.046	-0.009	-0.013	0.513
V	(0.016)	(0.014)	(0.005)	(0.231)
Alimony Only	$0.007^{'}$	-0.031	-0.006	$0.209^{'}$
	(0.007)	(0.015)	(0.006)	(0.318)
Tax and Alimony Only	-0.008	-0.042	-0.010	0.184
Ç Ç	(0.010)	(0.014)	(0.012)	(0.476)
Marriage	-0.012	-0.021	-0.003	0.110
<u> </u>	(0.008)	(0.012)	(0.006)	(0.238)
N Households	29,709	29,709	28,740	29,709
\mathbb{R}^2	0.132	0.077	0.121	0.068
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. This sum-sample comprises households that did not move from a state without recognition of these laws to a state with them in the last year. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

3.3 States with marriage rights imposed upon them

Another potential concern with the main analysis presented in section 3.1 is one of endogeneity. State legislators may have extended couple recognition rights to same-sex couples in states in which many same-sex couples live and demand such rights. In this case, the higher DoL in states with these rights is not in response to the legal changes, but was instead the impetus for the legal changes.

To address this issue, we look at states in which this could not have happened, namely, the states that had same-sex marriage rights imposed on them. These are the 15 states that had not passed legislation approving same-sex marriage by the time the Supreme Court decision in Obergefell v. Hodges applied same-sex marriage rights to all states in 2015.⁶ Given that these 15 states did not themselves choose to let same-sex marry, there are no concerns that the change in the household DoL in same-sex couples in these states was endogenous to the implementation of marriage rights.

The results are presented in table 8. In this table, only the coefficient on the marriage variable is presented, because none of the 15 states in the sample had granted joint taxation or alimony rights before same-sex marriage was "imposed" on the states in 2015.⁷ Therefore, there is, by definition, no effect of joint taxation or alimony rights in these states, since these rights did not exist prior to the legalization of same-sex marriage. Moreover, in the specification in table 8, we remove the state and year fixed effects, since the relevant change in policy happened for all states in the sample in the same two years.

When restricting the analysis to just these 15 states on which same-sex marriage rights were imposed, we still find that the implementation of same-sex marriage led to a higher household DoL. The sign of the coefficients are consistent with an increase in the household

⁶Along with these 15 states, Florida implemented same-sex marriage in 2015. However, Florida had changed their legislation around same-sex marriage earlier in the year, due to the Brenner v. Scott case in the U.S. District Court for the Northern District of Florida.

⁷The one exception is Missouri, which received an executive order in 2013 to implement joint taxation for same-sex couples who had married in other states and moved to Missouri. The analysis excluding Missouri is given in table B3; the results are the same.

Table 8: Predicting the Household Division of Labor, States with Marriage Imposed

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Marriage	-0.005	-0.042	-0.027	1.003
	(0.010)	(0.011)	(0.010)	(0.559)
N Households	6,798	6,798	$6,\!550$	6,798
\mathbb{R}^2	0.159	0.096	0.142	0.073
Panel B: Same-Sex Female Couples				
Marriage	-0.009	-0.045	-0.027	0.480
	(0.011)	(0.011)	(0.011)	(0.416)
N Households	$7,\!355$	7,355	7,073	$7,\!355$
\mathbb{R}^2	0.144	0.080	0.126	0.059
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	No	No	No	No
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. This subsample comprises only the 15 states which had same-sex marriage rights "imposed" on them by the federal Obergefell v. Hodges court case; these states are Alabama, Arkansas, Georgia, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, and Texas. The marriage rights apply in the 2015 and 2016 samples. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The \mathbb{R}^2 in columns (1) and (2) is the pseudo- \mathbb{R}^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

division of labor, though their magnitudes are lower than in the full sample. The effect of marriage on the probability of both partners working full-time, for example, is -9.8 and -8.4 percentage points for male and female same-sex couples in the main results, respectively, and it is just -4.2 and -4.5 percentage points, respectively, in this sub-sample. The magnitude of the coefficients could be smaller because same-sex couples in these states were less responsive to the law changes, but it could also be that the couples just have not *yet* responded. Recall that these changes were implemented in 2016 and we observe couples in 2015 and 2016. In the states that approved same-sex marriage (and other couple recognition rights) earlier on, couples have had more time to adapt their labor supply and household DoL decisions.

Though the effect is weaker for this sub-sample, there is still evidence that couple recognition rights increased the household DoL, even in states that did not themselves choose to implement these rights for same-sex couples. Endogeneity is thus not a concern in the main results.

3.4 Robustness: Data on unpaid work

One question that arises with the empirical set-up used throughout the paper is whether the four measures of a household DoL employed with the ACS data truly capture a DoL: the information used refers only to time spent in paid work on the labor market, but does not say anything explicit about time spent in unpaid work in the household. We therefore supplement our analysis with data from the American Time Use Survey (ATUS), which includes information on time spent in all activities, including unpaid household- and carework.

The two key drawbacks to using data from the ATUS are the small sample size, particularly for small groups such as same-sex couples, and the fact that data on time use is only collected for one person in the household. Nevertheless, given that the ATUS is linked to Current Population Survey (CPS) data and therefore includes a wide range of demographic and labor market characteristics on all people in the household, we can use these data to

impute predicted time in household- and care-work to the people in the ACS.

In particular, we predict the number of minutes spent in paid work, household work, and care work based on the same demographic information used in the ACS data: a person's sex, age, race, ethnicity, education, and disability status, along with the same information about the person's partner; the presence of children in the household; and the state and year in which the household lived. These estimated coefficients in the model predicting time spent in these activities are then applied to both partners in each household in the ACS data. In other words, this procedure gives a predicted number of minutes spent in paid and unpaid work for both members of the couple.

Using these predicted values of the time spent in labor market work (that is, paid work) and household- and care work (that is, unpaid work), we create three measures of a household DoL. The first is a simple difference in the number of minutes spent in unpaid work by the two people in the couple; an increase indicates a greater DoL. The second measure is the share of minutes of unpaid work done in the household performed by the person who does more of the unpaid work. An increase in this measure is associated with a higher DoL in the household. Finally, the third measure is the ratio of minutes spent in unpaid work by the two members of the couple, such that the ratio is always between 0 and 1. A greater household DoL is indicated by a decrease in this measure. We use these measures as the outcome variables in the models predicting a household DoL based on the change in partnership recognition rights for same-sex couples. Note that these specifications do not include the couple characteristics from the ACS (as the prediction of the number of minutes spent in paid and unpaid work in the ATUS uses this information) and the presence of children is only captured in interaction terms with the law changes (since the presence of children is also used in the equation predicting time use).

The results are presented in table 9. In column (1), most of the coefficients are positive,

⁸The presence of children in the household is specified as dummy variables indicating if the youngest child in the household (if any are there) is less than one year old, aged 1-2, 3-5, 6-12, or 13-17.

⁹Note that the ACS analysis only applies to 2003-2016, since the ATUS data are only available starting in 2003.

Table 9: Predicting the Household Division of Labor, Using Time-Use Data

	(1) Diff. Unpaid Work	(2) Share Unpaid	(3) Ratio Unpaid
Panel A: Same-Sex Male Couples	Din. Chpaid Work	Share Clipaid	ratio Onpaid
Joint Taxation Only	0.321	0.001	-0.004
v	(0.091)	(0.001)	(0.001)
Alimony Only	0.482	0.000	-0.004
	(0.290)	(0.000)	(0.003)
Tax and Alimony Only	0.200	-0.000	-0.001
	(0.071)	(0.000)	(0.001)
Marriage	-0.367	0.000	0.004
	(0.103)	(0.000)	(0.001)
N Households	28,090	26,912	28,090
\mathbb{R}^2	0.025	0.028	0.049
Panel B: Same-Sex Female Couples			
Joint Taxation Only	0.095	0.001	-0.004
	(0.263)	(0.000)	(0.002)
Alimony Only	0.376	0.001	-0.005
	(0.186)	(0.000)	(0.001)
Tax and Alimony Only	0.298	0.001	-0.004
	(0.124)	(0.000)	(0.001)
Marriage	-0.378	0.001	0.001
	(0.122)	(0.000)	(0.001)
N Households	29,979	28,777	29,979
\mathbb{R}^2	0.020	0.045	0.057
Couple Characteristics	No	No	No
State/Year Characteristics	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes
Children	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data, using imputed values for paid and unpaid work from 2003-2016 ATUS data. The ACS sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Robust standard errors clustered at the state level in parentheses.

suggesting a greater household DoL. Taking the joint effect of all laws together, we see, for example, that same-sex marriage increased the difference in the number of minutes spent in unpaid work by .6 for same-sex male couples ans .4 for same-sex female couples. In column (2), the results are close to zero. In column (3), most of the coefficients are negative, in line with a greater household DoL. The exception is the effect of marriage rights, though these estimates are very close to zero (0.001 for male couples and 0.003 for female couples). Using time use data to examine the impact of couple recognition rights overall supports the conclusions in the rest of the paper, namely, that couple recognition rights led to an increase in the household DoL.

3.5 Robustness: Households with and without children

Finally, this section considers the possibility that the results throughout the paper are driven by the role of children. In particular, we first study whether the results are different for household with and without children. We then also account for the fact that some states had laws allowing same-sex couples to adopt before others; perhaps the household DoL is higher in those states. We control for that possibility below.

First, table 10 gives the results for households with children present. Due to the lower sample size (recall from table 4 that only 11% of same-sex male couples and 28% of female same-sex couples have children, compared to 55% of different-sex couples), many of the coefficients are not statistically significant. For men, the one that is precisely estimated is in line with a decreased household DoL. Thus, for men, the main results throughout the paper, that couple recognition rights increase the household DoL, are certainly not driven by households with children.

For women, the effect of access to alimony rights increases the DoL in households with children, as does access to marriage rights. In particular, having access to same-sex marriage decreases the probability of both partners being employed and working full-time by 12.3 and 16.4 percentage points, respectively. Marriage rights further increase the difference in the

number of hours on the labor market by 4.8 hours for same-sex female couples with children.

Table 10: Predicting the Household Division of Labor, Households with Children

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.027	-0.024	-0.021	1.559
	(0.085)	(0.046)	(0.090)	(3.190)
Alimony Only	-0.020	-0.058	-0.026	0.374
	(0.033)	(0.019)	(0.020)	(1.288)
Tax and Alimony Only	0.017	0.022	0.030	-1.381
	(0.023)	(0.032)	(0.021)	(0.993)
Marriage	0.017	0.007	0.029	-2.389
	(0.024)	(0.023)	(0.018)	(0.966)
N Households	3,136	3,136	3,053	3,136
\mathbb{R}^2	0.049	0.043	0.048	0.025
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.085*	-0.055	-0.056	3.063
	(0.017)	(0.052)	(0.023)	(1.105)
Alimony Only	-0.025	-0.045	-0.029	0.961
	(0.019)	(0.028)	(0.023)	(1.088)
Tax and Alimony Only	0.006	-0.036	-0.003	-0.173
	(0.016)	(0.019)	(0.017)	(0.642)
Marriage	-0.019	-0.028	-0.015	0.973
	(0.016)	(0.019)	(0.014)	(0.559)
N Households	8,472	8,472	8,191	8,472
\mathbb{R}^2	0.093	0.056	0.083	0.047
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	No	No

Notes: Author's calculations on ACS 2000-2016 data. This subsample includes only household with children present. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R² in columns (1) and (2) is the pseudo-R² in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

The sub-sample of households without children (table 11) too gives consistent evidence for the effect of couple recognition rights increasing the household DoL in both male and female same-sex couples. Across the board, these rights led to a greater degree of household specialization in the households without children (the effect of gay marriage on same-sex male couples without children, for example, is a 5.9 and 9.7 percentage point decrease in the

probability of both partners being employed and both working full-time, respectively, and an eight percentage point decrease in the probability of both partners working full-time for same-sex female couples).

The gender-specific results of this analysis are interesting. For men, the effect of the couple recognition rights on the household DoL is stronger in childless households. For same-sex female couples, the results are more in line with existing theory: while partnership recognition rights incite a household DoL in households both with and without children, the size of the effect is larger in household with children. In same-sex female couple household with children, marriage rights increase the household DoL in each of the four measures of the DoL, but in same-sex female household without children, the effect of marriage is statistically significant in only two of the four measures. There is thus evidence that the household DoL is more strongly related to the presence of children for female versus male same-sex couples. Nevertheless, we do still see an effect of partnership recognition rights on the DoL in both same-sex male and same-sex female couples. These latter findings suggest that a household DoL is influenced not only by the presence of children, but also by social and economic policy that forms the institutional framework in which a couple lives.

Given that the couples recognition rights had a stronger effect on the household DoL in female couples with children, let us consider now the possibility that these recognition rights increased the probability of a couple having children, and thus positively impacting the DoL (at least in female couple households). To pursue this line of thinking, we control for whether or not the couple lived in a state and year that allowed same-sex couples to jointly adopt a child.

There are two main types of joint adoption for same-sex couples: either second-parent adoption, available to couples without any type of formal couple recognition, or step-parent and joint adoption, available to couples who have some formal partnership status, such as being in a registered domestic partnership, in a civil union, or married. Some states allowed same-sex couples to pursue second-parent adoption before they could access joint adoption.

Table 11: Predicting the Household Division of Labor, Households without Children

O	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.027	-0.032	-0.030	1.894
	(0.008)	(0.016)	(0.017)	(0.803)
Alimony Only	-0.019	-0.022	-0.021	1.023
	(0.006)	(0.009)	(0.007)	(0.273)
Tax and Alimony Only	0.000	-0.015	-0.007	0.248
	(0.006)	(0.012)	(0.006)	(0.242)
Marriage	-0.013	-0.028	-0.010	-0.005
	(0.009)	(0.017)	(0.010)	(0.428)
N Households	24,954	24,954	24,213	24,954
\mathbb{R}^2	0.144	0.084	0.124	0.067
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.040	0.002	-0.006	-0.117
	(0.015)	(0.009)	(0.010)	(0.317)
Alimony Only	0.016	-0.027	0.002	-0.065
	(0.007)	(0.017)	(0.009)	(0.518)
Tax and Alimony Only	-0.014	-0.043	-0.013	0.306
	(0.010)	(0.016)	(0.012)	(0.460)
Marriage	-0.011	-0.018	-0.000	-0.195
	(0.008)	(0.013)	(0.007)	(0.276)
N Households	21,507	21,507	20,804	21,507
\mathbb{R}^2	0.142	0.079	0.127	0.070
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	No	No

Notes: Author's calculations on ACS 2000-2016 data. This subsample includes only households without children. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

In this section of the analysis, we include a dummy variable in the model predicting the household DoL indicating whether the couple had access to second-parent or joint adoption (based on the state and year in which they were observed).

The results are presented in table 12. They do not differ substantially from the main results in table 5. Joint taxation and marriage rights increase the household DoL in both same-sex male and same-sex female couples. Even when separately controlling for access to second-parent adoption, access to marriage decreases the probability of both members of a same-sex male couple being employed by 4.4 percentage points, and increases the difference in the number of hours worked by the two people in the couple by two hours. In same-sex female couples, access to marriage rights decreases the probability of both members of the couple being employed by 6.6 percentage points and lowers the probability of both working full-time by 7.5 percentage points.

The main take-away point from the analyses in this section is thus that marriage rights incite a household DoL, and this result is not driven by children. Same-sex female couples with children react more strongly to couple recognition rights than same-sex female couples without children, but even those without children respond to the newly granted rights. Moreover, it is not the fact that second-parent adoption rights in many states come along with couple recognition rights which causes the recognition rights to incite a DoL. The DoL comes with the economic, financial, and social implications of joint taxation, alimony, and marriage rights above and beyond their relationship to having children in the household.

4 Discussion and Conclusions

The introduction of couple recognition rights for same-sex couples in the US was a major social and political change in the treatment and public acceptance of these couples. The change in the legislation around the recognition of these couples was dramatic and relatively fast – from no legal recognition to complete marriage equality within 15 years. Just as

Table 12: Predicting the Household Division of Labor: Controlling for Adoption Rights

Ç	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.027	-0.028	-0.028	1.755
	(0.006)	(0.012)	(0.008)	(0.432)
Alimony Only	-0.013	-0.006	-0.009	0.577
	(0.007)	(0.013)	(0.008)	(0.298)
Tax and Alimony Only	0.005	-0.001	0.003	-0.073
	(0.007)	(0.016)	(0.008)	(0.322)
Marriage	-0.009	-0.017	-0.002	-0.306
	(0.009)	(0.016)	(0.009)	(0.426)
N Households	28,090	28,090	$27,\!266$	28,090
\mathbb{R}^2	0.135	0.083	0.120	0.067
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.042	0.005	-0.005	-0.091
J	(0.013)	(0.015)	(0.014)	(0.456)
Alimony Only	$0.012^{'}$	-0.024	0.000	$0.025^{'}$
v	(0.008)	(0.017)	(0.009)	(0.546)
Tax and Alimony Only	-0.018	-0.038	-0.013	0.420
	(0.011)	(0.017)	(0.013)	(0.459)
Marriage	-0.018	-0.018	-0.004	$0.078^{'}$
	(0.008)	(0.012)	(0.007)	(0.257)
N Households	29,979	29,979	28,995	29,979
\mathbb{R}^2	0.131	0.077	0.121	0.069
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

interracial marriage is now a normal part of social life in the US (though it first became legal in 1967), the legal changes surrounding the recognition and acceptance of same-sex couples will impact how we understand equal rights for generations to come.

This paper has considered how the introduction of access to joint taxation, alimony, and marriage rights impacted the household DoL. The results show that the introduction of these laws increased the DoL in both male and female same-sex couples. The results are not driven by selection bias of couples preferring a DoL moving to states with these rights, nor is there a problem of endogeneity, in which legislation would be influenced by social norms and practices.

Aside from the main point that couple recognition rights incite a household DoL, there are three main take-away points raised by the paper. First, this is a clear example of a potentially unintended consequence of social and economic policy. The implementation of couple recognition rights has led to an increase in the extent of the household DoL, though that was not the goal of the policies. Instead, joint taxation and alimony are meant to protect couples who do engage in a DoL, not necessarily incentivize one. Thus, we have another example of how policy sometimes does more than it is meant to.

Relatedly, the second take-away point is that these unintended consequences of policy can be negative. While "marriage equality" for same-sex couples is broadly conceived as a progressive development, the results in this paper suggest that the reality is a bit more nuanced. On a larger scale, partnership recognition rights have meant that same-sex couples have more equality with different-sex couples. However, at a more micro-level, these laws have produced intra-household economic inequality. A household DoL means, by definition, that the two people in a couple have different economic roles – and thus differing levels of economic power and agency. The laws discussed in this paper are meant to counteract this intra-household inequality, but they cannot completely eliminate the economic vulnerability for the person in the couple who has less of an association with the labor market.

Third, the results in this paper show that a household DoL into paid and unpaid work

is often based not just on biological sex. The policies studied here affect a household DoL in same-sex couples, who do not have any biologically-specific predefined incentives to specialize. Nevertheless, a DoL occurs – including in same-sex male couples, where pregnancy and birth do not play a role in the calculation of comparative advantage in household and child-care work. This lesson can be applied to different-sex couples: it is not biology alone that assigns women to that work. Institutional settings and social norms play an important role in sorting groups of individuals into particular types of work.

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Appendix A Identifying Same-Sex Couples in the ACS

In 2000, its first year in production, the ACS collected information on about 150,000 households; already in 2001, it had 480,000. Since its full implementation in 2005, the survey sample includes over 1.1 million households each year and therefore represents 1% of the US household population.

For this analysis, it is particularly important to understand the development of the share of reported same-sex couples in the ACS over time. While legal changes as well as rising public acceptance of homosexuality could have potentially contributed to a rising share of same-sex couples reported, a more nuanced picture emerges from the data. Although there seems to be a rising trend in the share of couples who are same-sex throughout some distinct periods of time, figure A2 clearly shows that this trend is not constant and that the share of same-sex couples makes large jumps in certain years.

A sharp decline in both the percentage of male and female same-sex couples in 2008 and strong increases from 2013 onwards suggest that the handling of same-sex couples in the ACS might not have been constant over time. While the change in the representation of same-sex couples in the ACS in recent years might be partly caused by state- and nationwide legal changes, there were no major relevant changes in the law between 2007 and 2008, where we see a dramatic decline in the share of same-sex couples in the data. It is likely that the number of same-sex couples has been over-estimated in the early years of the ACS and that improvements in survey design and data processing are in part responsible for more reliable estimates of the presence of same-sex couples over time.

The ACS Editing Procedure

When the ACS started in 2000, same-sex marriage was not legal in any state of the US. However, even before Massachusetts became the first state to legalize same-sex marriage in 2004, there were individuals in the survey who reported being in a same-sex spousal

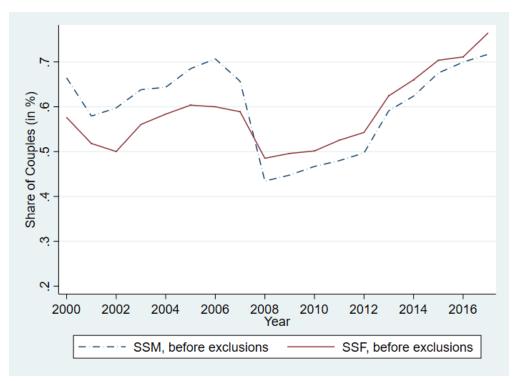


Figure A2: Share of same-sex couples in ACS

relationship. Indeed the number of reported same-sex married couples in the ACS largely exceeds the number of marriage licenses issued to same-sex couples in the United States, especially before 2008 (O'Connell and Lofquist, 2009). There are several explanations for why there are more married same-sex couples in the ACS data then there actually were in society:

- 1. Couples registered as domestic partners or living in a recognized civil union may have considered "spouse" as being the closest category from which to choose.
- 2. Couples married in a church or religious ceremonies whose "marriage" was not legally recognized by any state might still have considered themselves married.
- 3. Couples might have identified as spouses, less from a legal but rather from a social point of view, e.g. if they had been living together for a long time, or have "spousal-like" characteristics, such as living with children or co-owning a home.
- 4. Householders in opposite-sex couples who are legally married may have made an error

in the marking of their own or their spouse's sex on the questionnaire (O'Connell and Lofquist 2009).

The first three reasons only seem problematic to accurately identify the marital status of same-sex couples. The fourth issue, that the sample of same-sex couples could be contaminated with miscoded different-sex couples, is one of great concern for research on same-sex couples. O'Connell and Gooding (2006), Black et al. (2007), and Gates and Steinberger (2011) utilize different approaches to address this issue and find that miscoded different-sex couples could indeed account for a substantial share of same-sex couples in the data. We thus start with the question of how to clean the data of these falsely marked different-sex couples.

Reducing contamination by miscoded different-sex couples

There are three variables in the ACS data that can help users identify likely contamination of the same-sex couples sample by different-sex couples: marital status ("marst" in IPUMS), sex ("sex"), and relationship to householder ("relate," or more specifically, the detailed version "related").

Marital status. Although same-sex marriage had been legalized in some individual states since 2004, the US Census Bureau followed the guidelines of the 1996 Defense of Marriage Act (DOMA) that refused to recognize same-sex marriages under federal law, even if a same-sex couple had been married under the laws of a state, up through and including 2012. Therefore, any individuals who reported being the "spouse" of a householder of the same sex had their response to the "relationship to householder" item changed by the Census Bureau, to being instead the householder's "unmarried partner." Thus, both same-sex couples who reported being "spouses" and different-sex married couples who miscoded the sex of one of their members had their "relationship to householder" item changed. Unfortunately, since this procedure was considered a "logical" edit, the Census Bureau did not include an allocation flag (a variable indicating that an original response was altered) for this change

of the "relationship to householder" variable in the public use data. It is therefore not possible to explicitly identify same-sex couples who considered their relationship to each other as "spouses" and who subsequently had their relationship type changed to "unmarried partners" – this edit is only visible in the public-use data for the year 2012.¹⁰

However, it would be important to know which same-sex couples initially defined themselves as "spouses" instead of "unmarried partners" – not least because those who consider their relationship as "spousal" may be more likely to engage in a household division of labor. One way to identify those same-sex couples who most likely originally reported being spouses is through the use of the "marital status" question. Since the Census bureau did not allow individuals in an unmarried partnership to consider their marital status as "married," their marital status was changed to something other than "married" via a "hot-deck" procedure and assigned an allocation flag on the marital status variable. Same-sex couples (and different-sex couples who appeared to be same-sex couples because of a miscoded sex) who identified as married spouses therefore became "unmarried partners" with an allocation flag on their marital status. Census analyses showing a high correlation between the "relationship to householder" edit flag (only available in internal data) and the marital status allocation flag indicate that most unmarried same-sex partners with a flagged marital status did indeed report as spouses. 11 The marital status allocation flag therefore appears to serve as a good proxy for the identification of same-sex couples who called themselves spouses but who had their relationship changed to unmarried partner (Black et al., 2007). At the same time, this marital status allocation flag also signals all married different-sex couples with a miscoded sex. Therefore, to prevent the potential contamination of different-sex couples within the group of same-sex couples, Black et al. (2007) recommend excluding all couples where one or both partners had their marital status allocated.

While this restriction allows for a more reliable sample in terms of cleaning out the

 $^{^{10}}$ In 2012, these cases received a flag on their "relationship to househodler" variable (QRELATE = 9, "Same sex spouse changed to unmarried partner").

¹¹Another reason for this flag could have been a missing value on marital status.

miscoded different-sex couples, it excludes all same-sex couples that called their partner "spouse" (that is, husband or wife) on the survey. Since we drop these couples, the analysis in this paper is based only on couples who did not identify as spouses. Because of the legalization of same-sex marriage in an increasing number of states starting from 2004 and a possible upward trend in the use of the terms "husband" and "wife" among same-sex couples (Gates and Steinberger, 2011), the sample without same-sex couples who had considered themselves married could produce biased results in an analysis across years if the sample of same-sex couples who had considered themselves "spouses" differ in their socioeconomic characteristics or in their division of labor from other same-sex couples.

Sex and relationship to householder variable. Other variables that indicate a potential contamination of the sample of same-sex couples with miscoded different-sex couples are the "sex" and "relationship to householder" variables. If a person's value for the "sex" item (which is sequentially the first item to be edited) is missing, their first name will be used to allocate their sex if the probability of being either male or female is higher than 90 or 95 percent (depending on the year of data) based on an overall population index (Ruggles et al., 2019). If the sex is not clear from the first name, the person's sex will be assigned as female (male) if they live with a male (female) "spouse" or if the value for having had a child in the past year is non-missing.

The next item to be reviewed and potentially edited is the "relationship to householder" category. These edits include the "logical" edit from "spouse" to "unmarried partner" in the internal data files described above, as well as cases of hot-deck allocation in the public use files when (1) an unmarried partner or their householder's marital status is "married" or (2) a person's "relationship to householder" is missing.¹² In a final stage, the marital status variable will be changed if necessary to be consistent with the final edited relationship to householder variable, which includes the marital status allocation for same-sex spouses who

¹²There is one case in which the change goes in the other direction: a missing "relationship to householder" will be logically replaced with "husband/wife," namely if both partners report being married and they are of different sexes.

were changed to unmarried partners. Additionally, if a spouse's marital status is missing or reported as something other than "married," it will be replaced with "married" and marked with an allocation flag (before 2013, this was only applicable for different-sex spouses).

What do these procedures imply for how we can reduce contamination of the same-sex couple sample by miscoded different-sex couples? Using 2013 ACS data and the 2010 Census name index, Lofquist (2015) finds that couples reporting themselves as same-sex "married" couples who had missing data on the sex and/or relationship item are less likely to actually be same-sex spouses than same-sex married couples with complete information (and further, that these two groups differ in characteristics such as household income, education, race and ethnicity, and/or age). This evidence speaks in favor of excluding apparent same-sex couples with allocated values on either partner's sex and/or "relationship to householder," as these couples are likely different-sex couples with miscoded sex. Dropping this group of couples reduces the size of the sample of same-sex couples by 0.7 to 4.2 percent, depending on the year.

On top of these core issues in data collection and processing, the changes made to the ACS over time make the exclusion rules less straight forward. The information below is necessary to know how to handle flags on the "sex" and "relate" variable.

ACS Changes, 2000-2015

2005: Availability of Response Mode Information

Beginning in the ACS implementation phase in 2000, data were collected in three sequential phases in the following order: self-response (mailout/mailback with optional telephone questionnaire assistance (TQA)); computer assisted telephone interviews (CATI); and computer assisted personal interviews (CAPI). For CATI and CAPI respondents, the risk of sex miscoding was minimized, as the individuals' sex was verified in a follow-up question when a couple identified as both same-sex and married. This secondary check is not provided for mail-in respondents. Thus, Gates and Steinberger (2011) recommend excluding only those

couples with a flagged marital status who responded by mail (therefore overcoming potential bias caused by limiting the same-sex sample to only those who considered themselves unmarried partners instead of spouses). Although CATI/CAPI responses are not randomly selected either (these surveys are given only to households which did not respond to the mail-in questionnaire within a certain period of time), this selection bias does not necessarily differ by sexual orientation. Unfortunately, information on a household's response mode was not available until the ACS was fully implemented in 2005. It is useful to exploit this additional information and exclude all observations with a marital status allocation flag until 2004, but to follow Gates and Steinberger's 2011 recommendation to exclude couples with an allocation flag only if they responded by mail in the 2005 and later surveys.

2008: Design and Processing Changes

As explained in O'Connell et al. (2010), in 2008, the share of reported same-sex "spouses" dropped substantially (this information is only available in internal data), while the share of same-sex "unmarried partners" did not change significantly. (This drop in the share of same-sex couples in the data is present in figure A2.) O'Connell et al. (2010) suggest that this change was likely due to design and processing alterations made to the ACS that reduced the number of miscoded different-sex couples. Design modifications included the switch from a grid-based questionnaire design to a sequential ordering of questionnaire items; the re-ordering of items; the inclusion of item instructions; and the expansion of relationship categories for children and in-laws.

Relevant data processing improvements were made through two major changes. First, the shift from having staff members key in the responses from a paper form to recording data from an electronically captured image of the form might have reduced keying errors. Following this change, staff members keyed in only write-in values, while checkbox responses were read by optical mark recognition software. Second, the handling of multiple marks on the relationship to householder and sex variables changed. Before the transition, the first

¹³Indeed, in figure A3 below, which shows the share of same-sex couples after applying the exclusion restriction discussed above, the share of same-sex couples does not dramatically drop in 2008.

category with any marking was recorded as the response. As "male" and "husband/wife" were the first options in the "sex" and "relationship to householder" items, respectively, they were more often keyed as final responses. Beginning in June 2007, these responses were considered blank if there were multiple marks for these questions, and the variables were allocated and given a flag in the editing phase. This change might be responsible for a rising share of same-sex couples with flags on their sex and/or relationship item in 2008. Figure A2, which shows a higher share of same-sex male than same-sex female couples between 2000 and 2007 and a reverse in this relationship beginning in 2008, suggests that the previous editing procedure could have erroneously created (male) same-sex couples.

2012: Introduction of Flag for Same-Sex Spouses Changed to Unmarried Partners

In 2012, the ACS added a data quality flag on the "relationship to householder" variable that makes it possible to identify same-sex couples who reported being spouses but whose relationship was changed to unmarried partners in the public use data, namely, if QRELATE takes the value of 9. The 2012 data show that 89 percent of all same-sex couples with an allocation flag on marital status (but no flag on sex and relationship to householder) originally identified as spouses in the survey.

Although it is possible to directly identify these couples as reported same-sex spouses in 2012, we are not able to differentiate between spouses whose marital status was allocated because their relationship status was changed and those who would have received a marital status flag even if their relationship had not been changed (because of an invalid or missing response on the marital status question). To be consistent across years, we therefore continue to exclude all couples with flagged values on marital status, including those who we know received the flag because they had considered themselves married in the 2012 data.

2013: Identification of Same-Sex "Spouses" Becomes Possible

In 2013, when DOMA was ruled unconstitutional, a major change was made in the ACS editing procedure. Beginning with the 2013 data, the "relationship to householder" variable

in same-sex couples who reported being spouses has not been changed to "unmarried partner" and no marital status allocation flag has been assigned to them. Thus, the number of allocation flags on the marital status of same-sex couples strongly decreased. An additional variable, "same-sex married couple (SSMC)," which includes a flag for logically allocated same-sex married couples who were missing valid responses for "sex" or "relationship to householder," has been created. Moreover, the allocation rule of changing the marital status to "married" for couples who reported as spouses but whose marital status response is missing or something other than "married" was changed to apply to same-sex couples as well as different-sex couples (the latter had always received this treatment).

Furthermore, the ACS added another self-response option, the internet response mode, in 2013. Starting in 2013, households were first asked to respond via internet or TQA before being sent a paper questionnaire. This change led to a strong shift from mail-in to internet responses. The overall share of mail-in responses declined from about 70 percent in the preceding years to below 30 percent (there was also a small decline of CATI/CAPI responses), whereas internet responses have accounted for almost 50 percent from 2013 onwards at an increasing rate. Interestingly, the share of internet respondents varies by couple type. While over 65 percent of male same-sex couples respond via the internet, only 53 percent of same-sex female couples respond in this way. 49 and 42 percent of heterosexual married and unmarried couples, respectively, respond via the internet. While the causes for and potential biases due to these differences are not discussed here (Lofquist (2015) provides further information about these issues), the move toward using the internet response mode appears to deliver a more reliable sample of same-sex couples, as the rate of couples with missing or allocated values on sex, relationship, or marital status is lower among internet respondents than among mail-in respondents. However, since no built-in check for the verification of same-sex couples was available for the internet mode, it is safest to drop couples with invalid responses on these variables.

In versions of the ACS data released by IPUMS before June 2017, there was a strong

increase in the share of married couples (both different-sex and same-sex) with an allocation flag on their marital status. According to IPUMS, there was an error in their code that impacted the allocation flags in "all modern samples" that was fixed later in 2017.¹⁴ Analyses using the data from before the data update in the end of 2017 will have a different sample, if they dropped households with an allocated marital status.

Summary

Considering the variety of legal and social changes as well as changes to the ACS itself that might affect the composition of the relatively small group of same-sex male and female couples in the ACS between 2000 and 2016, it is difficult to define a sample of same-sex couples that allows for a consistent and reliable analysis across survey years. However, we consider it the most reasonable solution to limit our sample to only couples where all information on the sex, relationship to householder, and marital status item is provided and not flagged. We exclude all couples with either partner showing a flagged value on at least one of these items from 2000 to 2004. From 2005 onwards, we keep CATI/CAPI respondents with flagged values on marital status (as their answers are verified), but exclude the few CATI/CAPI respondents with flagged sex or relationship values. Beginning with the 2013 data, we are able to directly and "officially" identify same-sex spouses who did not have their marital status allocated, without changing our exclusion rules.

Figure A3 compares the share of same-sex couples over time before and after applying the exclusion rules so defined. First, the restricted sample (after exclusion) shows a more balanced proportion between male and female same-sex couples than the unrestricted (before exclusion) sample. Second, after an increase in 2005, which is partly caused by keeping CATI/CAPI respondents with a marital status flag, the share of same-sex couples remains fairly constant between 2005 and 2012. Third, the convergence between the two samples in 2013 (the share of same-sex couples in the restricted sample increased by almost 40 percent

¹⁴Link to user forum entry: http://answers.popdata.org/Why-strong-increase-number-data-quality-flags-marital-status-2015-ACS-q2313653.aspx)

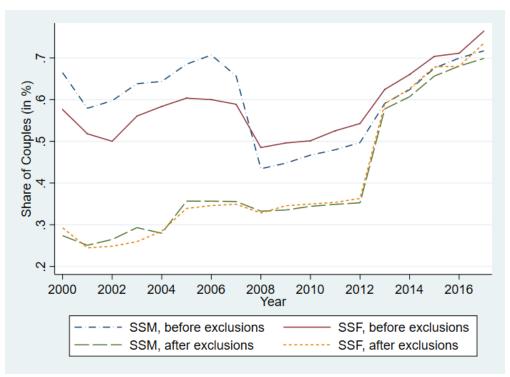


Figure A3: Share of same-sex couples in ACS, with and without sample exclusions

between 2012 and 2013) reflects the changed editing procedure in the ACS.

Furthermore, Lofquist's 2015 findings suggest that even in the 2013 ACS, the number of married same-sex couples is still over-estimated. She analyzes whether the edited sex of married same-sex couples matches the sex they would be assigned based on the 2010 Census name index and finds that 16 percent of all married same-sex couples in the sample are likely opposite-sex couples with a miscoded sex value. The share of couples in the same-sex sample which are likely miscoded different-sex couples is significantly lower for internet responses (8%) than for CATI/CAPI (17%) and mail-in (26%) responses. Considering that ACS respondents have been moving toward using the internet response mode since its implementation in 2013, the number of miscoded opposite-sex couples could potentially continue to decrease in future survey years.

To sum the implications of these changes: the analysis in this paper excludes couples with allocated values on either partner's sex or relationship status throughout all years of the survey. As for the marital status item, we exclude all flagged couples up to and including

2004, but to keep couples with a flag on their marital status if they responded by CAPI/CATI from 2005 onwards.

Empirical Checks

Given the discussion above, tables A1-A3 employ different sub-samples of the ACS data. Tables A1 and A2 show the results for the models using data stating in 2005 and 2013, respectively. Using the 2005+ sample, the results in table A1 echo those throughout the rest of the paper: exposure to couple recognition rights increases the household DoL. Same-sex marriage in particular has an effect on the DoL in same-sex male couples; marriage decreased the probability that both partners work full-time by 12.3 percentage points and increased the difference in hours worked by 4.2 hours. The results in table A2 are largely statistically insignificant, which is not surprising given the smaller sample size in this sub-sample. For the sample of male couples, the sign on most coefficients confirms the findings in the larger sample in the main part of the paper. For same-sex female couples, though, the results suggest that marriage rights have the opposite effect on the DoL: they are associated with a lower division of labor in terms of the difference in the number of hours worked. These results might arise due to the data processing issue discussed above, namely, that same-sex couples who identified as "spouses" are removed from the data when taking measures to clean the data of mis-coded different-sex couples. Eliminating "spouses" from the sample up through 2013 may under-count the DoL up until then if "spouses" are more likely to engage in a household DoL, overestimating an increase in the DoL observed in the rest of the analysis.

To address this concern, table A3 repeats the analysis using the sample of all samesex couples in the ACS data, including those who identified themselves as "spouses" (and, at the same time, potentially mis-coded different-sex couples; as described above, it is an unfortunate reality that it is impossible to separate these two groups). The results echo the results in the main part of the paper: access to alimony and joint taxation rights (the latter

Table A1: Predicting the Household Division of Labor, samples 2005+

	(1)	(2)	(3)	(4)
D IAC C MIC I	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.022	-0.047	-0.041	2.499
	(0.007)	(0.023)	(0.022)	(1.141)
Alimony Only	-0.025	-0.028	-0.023	1.088
	(0.008)	(0.011)	(0.008)	(0.294)
Tax and Alimony Only	-0.007	-0.023	-0.011	0.453
	(0.006)	(0.012)	(0.007)	(0.252)
Marriage	-0.009	-0.025	-0.012	0.132
	(0.009)	(0.015)	(0.009)	(0.443)
N Households	25,757	25,757	24,978	25,757
\mathbb{R}^2	0.138	0.082	0.118	0.065
Panel B: Same-Sex Female Couples	0.000	0.001	0.005	0.01
Joint Taxation Only	-0.030	0.031	0.005	-0.317
	(0.007)	(0.029)	(0.019)	(0.622)
Alimony Only	0.015	-0.028	-0.001	0.034
	(0.008)	(0.020)	(0.008)	(0.539)
Tax and Alimony Only	-0.014	-0.038	-0.012	0.349
	(0.010)	(0.016)	(0.012)	(0.454)
Marriage	-0.012	-0.018	-0.002	0.007
	(0.009)	(0.012)	(0.006)	(0.251)
N Households	$27,\!511$	$27,\!511$	$26,\!572$	27,511
\mathbb{R}^2	0.134	0.078	0.121	0.068
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2005-2016 data. Columns (1) and (2) show average marginal effects. The \mathbb{R}^2 in columns (1) and (2) is the pseudo- \mathbb{R}^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table A2: Predicting the Household Division of Labor, samples 2013+

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.017	-0.007	-0.008	0.560
	(0.008)	(0.007)	(0.006)	(0.410)
Alimony Only	-0.035	-0.015	-0.015	0.894
	(0.012)	(0.020)	(0.012)	(0.868)
Tax and Alimony Only	-0.055	-0.068	-0.050	1.414
	(0.009)	(0.014)	(0.010)	(0.501)
Marriage	0.005	-0.015	-0.004	-0.285
	(0.013)	(0.012)	(0.012)	(0.638)
N Households	11,902	11,899	11,514	11,903
\mathbb{R}^2	0.137	0.078	0.103	0.054
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.005	0.025	-0.005	-0.296
	(0.012)	(0.012)	(0.007)	(0.340)
Alimony Only	0.048	-0.034	-0.003	0.690
	(0.034)	(0.030)	(0.029)	(1.470)
Tax and Alimony Only	-0.018	0.014	-0.036	1.594
	(0.011)	(0.013)	(0.008)	(0.386)
Marriage	0.001	0.009	0.016	-0.921
	(0.014)	(0.016)	(0.011)	(0.495)
N Households	12,490	12,495	12,032	12,495
\mathbb{R}^2	0.136	0.076	0.119	0.071
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2013-2016 data. Columns (1) and (2) show average marginal effects. The \mathbb{R}^2 in columns (1) and (2) is the pseudo- \mathbb{R}^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

in combination with alimony rights) incite a household DoL, as does the right for a couple to marry. The latter increases the probability of both partners being employed and working full-time by 4.8 and 8.8 percentage points, respectively, for same-sex male couples, and by 6.1 and 9.4 percentage points for same-sex female couples. Therefore, the results throughout the paper are not the result of a selection bias of which couples are observed in the data.

Table A3: Predicting the Household Division of Labor, No Dropped Observations

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.008	-0.007	-0.017	1.107
	(0.010)	(0.016)	(0.009)	(0.327)
Alimony Only	-0.015	-0.020	-0.017	0.939
	(0.007)	(0.010)	(0.009)	(0.353)
Tax and Alimony Only	-0.009	-0.028	-0.018	0.729
	(0.008)	(0.009)	(0.008)	(0.304)
Marriage	-0.016	-0.032	-0.011	0.132
	(0.009)	(0.016)	(0.009)	(0.406)
N Households	$36,\!569$	$36,\!569$	35,408	$36,\!569$
\mathbb{R}^2	0.130	0.079	0.117	0.067
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.042	-0.009	-0.014	-0.287
	(0.013)	(0.008)	(0.006)	(0.387)
Alimony Only	0.020	-0.022	0.000	-0.110
	(0.006)	(0.012)	(0.008)	(0.495)
Tax and Alimony Only	-0.013	-0.030	-0.006	0.080
	(0.007)	(0.014)	(0.009)	(0.381)
Marriage	-0.026	-0.034	-0.016	0.500
	(0.008)	(0.011)	(0.006)	(0.239)
N Households	38,493	$38,\!493$	37,147	38,493
\mathbb{R}^2	0.127	0.073	0.118	0.068
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. No observations with flagged values for sex, relationship to householder, or marital status were dropped. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Appendix B Additional Specifications

In this appendix we present three additional specifications to those in the main paper. In table B1, the results based on equation 1 are shown; that is, this specification does not control for the presence and age of children in the household. The total effect of marriage (that is, the sum of all policies together) is statistically significant in almost all specifications, suggesting once again that it is not just the presence of children that drives the household DoL.

The model behind the results in table B2 excludes state and year fixed effects. Here the results are dramatically supportive of the idea that partnership recognition rights incite a household DoL.

Finally, table B3 gives the results of the model looking only at states that had same-sex marriage rights imposed upon them by the Obergefell v. Hodges Supreme Court case in 2015, but excluding Missouri, since Missouri had already given joint tax filing right to some same-sex couples beginning in 2013. The exclusion of this state makes the results for same-sex female couples statistically insignificant (which was not the case in table 8), suggesting that joint tax filing made a difference in the DoL in these couples.

Table B1: Predicting the Household Division of Labor: No Children in Model

	(1)	(2)	(3)	(4)
Panel A: Same-Sex Male Couples	Both Employed	Both FT	Ratio Hours	Diff. Hours
Joint Taxation Only	-0.031	-0.034	-0.035	2.130
John Taxadon Omy	(0.017)	(0.016)	(0.026)	(1.051)
Alimony Only	-0.020	-0.027	-0.023	1.034
Anniony Only	(0.006)	(0.009)	(0.007)	(0.280)
Tax and Alimony Only	0.002	-0.013	-0.004	0.144
Tax and Timiony Omy	(0.006)	(0.012)	(0.007)	(0.273)
Marriage	-0.009	-0.023	-0.004	-0.310
Wallage	(0.008)	(0.016)	(0.004)	(0.425)
N Households	28,090	28,090	27,266	28,090
R^2	0.125	0.077	0.110	0.058
10	0.120	0.011	0.110	0.000
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.052	-0.015	-0.022	0.872
Č	(0.012)	(0.014)	(0.005)	(0.194)
Alimony Only	0.001	-0.035	-0.010	0.340
	(0.007)	(0.015)	(0.007)	(0.303)
Tax and Alimony Only	-0.009	-0.042	-0.011	0.218
· ·	(0.009)	(0.015)	(0.012)	(0.473)
Marriage	-0.013	-0.021	-0.004	0.128
<u> </u>	(0.008)	(0.012)	(0.006)	(0.245)
N Households	29,979	29,979	28,995	29,979
\mathbb{R}^2	0.120	0.070	0.109	0.059
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	No	No	No	No

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table B2: Predicting the Household Division of Labor, excluding State and Year FEs

9		,	O	
	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.016	-0.024	-0.029*	1.820*
	(0.004)	(0.015)	(0.005)	(0.261)
Alimony Only	-0.030	-0.034	-0.026	1.217
	(0.010)	(0.010)	(0.007)	(0.256)
Tax and Alimony Only	-0.012	-0.031	-0.014	0.581
	(0.008)	(0.011)	(0.009)	(0.292)
Marriage	-0.010	-0.063*	-0.035	1.022
_	(0.009)	(0.014)	(0.008)	(0.304)
N Households	28,090	28,090	27,266	28,090
\mathbb{R}^2	0.134	0.081	0.119	0.066
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.034	0.007	-0.006	-0.202
	(0.008)	(0.030)	(0.025)	(0.802)
Alimony Only	0.005	-0.039	-0.006	0.245
	(0.008)	(0.017)	(0.009)	(0.513)
Tax and Alimony Only	-0.025	-0.053	-0.020	0.667
	(0.010)	(0.018)	(0.013)	(0.490)
Marriage	-0.018	-0.060*	-0.033*	0.752
_	(0.007)	(0.009)	(0.005)	(0.208)
N Households	29,979	29,979	28,995	29,979
\mathbb{R}^2	0.131	0.076	0.120	0.068
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	No	No	No	No
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the main text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table B3: Predicting the Household Division of Labor, Same-Sex Marriage Imposed, without Missouri

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Marriage	-0.007	-0.041	-0.027	1.049
	(0.010)	(0.012)	(0.011)	(0.590)
N Households	$6,\!381$	$6,\!381$	$6,\!152$	$6,\!381$
\mathbb{R}^2	0.159	0.093	0.140	0.072
Panel B: Same-Sex Female Couples				
Marriage	-0.007	-0.049	-0.028	0.538
	(0.013)	(0.012)	(0.012)	(0.451)
N Households	6,839	$6,\!839$	$6,\!573$	$6,\!839$
\mathbb{R}^2	0.143	0.077	0.125	0.059
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	No	No	No	No
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the main text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Appendix C Results using prime-age (25-54) workers

In this appendix, we repeat the empirical analyses conducted in the main text using a sub-sample of prime-age workers, that is, couples in which both people are aged 25-54. The main finding that couples recognition rights led to an increase in the household DoL remains the same, but there are several noteworthy ways in which these results differ.

First, this group of couples is more active in the labor market, and they have, on average, lower levels of a household DoL. As shown in table C1, 84.4% of same-sex male and 82.9% percent of same-sex female couples have both people employed, compared to 80.7 and 79.2%, respectively, in the main sample. They are also more likely to comprise two full-time employees. The ratio of hours worked of the two people in the couple is higher than in the main sample, and the difference in the number of hours worked by the two partners is smaller. The household DoL is thus smaller in the sample of prime-age workers, suggesting that age is a factor in determining the degree of a DoL.

Second, there is a clearer divide in the gender-specific effects of partnership recognition rights on the household DoL in this sample of prime-age workers. For same-sex male couples, the effect of these rights is stronger for the 25-54 year old couples. The effect of marriage legalization, for example, decreased the probability of both partners being employed and both working full-time by 11.3 and 14.8 percentage points, respectively (table C2). These rates are only 6.4 and 9.8 percentage points in the main sample. There are also larger coefficients on the estimates for same-sex male couples without children (table C7); for prime-age working men in same-sex couples, all of the partnership recognition rights increased the household DoL. Access to same-sex marriage decreased the probability of both people being employed and both working full-time by 10.8 and 14.8 percentage points, respectively; decreased the ratio of hours worked by .09 hours; and increased the difference int he number of hours worked by 3.6 hours. The coefficients in the sample of same-sex male couples with children are also much larger than in the main sample and suggest a greater DoL, but are imprecisely estimated.

The results for women, on the other hand, are almost completely the same as in the main analysis. The one exception is that the effect of the legalization of same-sex marriage only impacts the DoL in terms of whether both partners work full-time; all other estimates of the effect are statistically insignificant. This results suggests that the laws impact prime working-age lesbians more at the intensive margin of labor supply. One explanation for this finding is that lesbians face more difficult economic circumstances, such as a higher probability of living in poverty, and have less agency in the choice of whether to be employed or not (Schneebaum and Badgett, 2019).

Table C1: Descriptive statistics on household DoL measures, whole sample

Panel A: Same-Sex Male	All couples	No rights	Joint taxation only	Alimony only	Taxation & Alimony	Marriage
Both Employed	84.4	84.1	78.7	80.9	85.2	85.4
	(0.003)	(0.004)	(0.035)	(0.012)	(0.009)	(0.004)
Both Full-time	9.89	6.69	65.4	65.8	67.7	67.5
	(0.003)	(0.005)	(0.041)	(0.015)	(0.011)	(0.000)
Ratio of Hours	0.71	0.72	0.68	0.68	0.70	0.70
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Absolute Difference Hours	13.8	13.5	15.6	15.4	14.0	13.9
	(0.001)	(0.002)	(0.016)	(0.005)	(0.004)	(0.002)
Number of Households	19,896	10,073	139	1,045	1,747	6,892
Panel B: Same-Sex Female	All Couples	No rights	Joint taxation only	Alimony only	Taxation & Alimony	Marriage
Both Employed	82.9	83.1	79.0	83.1	82.8	82.6
	(0.003)	(0.004)	(0.035)	(0.013)	(0.010)	(0.005)
Both Full-time	64.2	9.99	8.89	61.0	59.4	62.0
	(0.003)	(0.005)	(0.040)	(0.017)	(0.013)	(0.006)
Ratio of Hours	0.70	0.71	0.72	69.0	89.0	89.0
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Absolute Difference Hours	13.6	13.1	12.8	14.2	14.3	14.3
	(0.001)	(0.002)	(0.013)	(0.006)	(0.004)	(0.002)
Number of Households	20,430	10,728	139	968	1,494	7,173

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. The data are at the household level.

Table C2: Predicting the Household Division of Labor: Main Results

	(1) Both Employed	(2) Both FT	(3) Ratio Hours	(4) Diff. Hours
Panel A: Same-Sex Male Couples	Dotti Employed	Domini	itatio ilouis	Din. Hours
Joint Taxation Only	-0.057	-0.065	-0.041	1.904
·	(0.008)	(0.019)	(0.009)	(0.447)
Alimony Only	-0.031	-0.029	-0.028	$1.268^{'}$
Ç Ç	(0.007)	(0.011)	(0.008)	(0.400)
Tax and Alimony Only	-0.008	-0.016	-0.009	0.301
	(0.007)	(0.013)	(0.007)	(0.313)
Marriage	-0.018	-0.038	-0.012	0.179
	(0.009)	(0.019)	(0.010)	(0.442)
N Households	19,896	19,896	19,546	19,896
\mathbb{R}^2	0.129	0.081	0.115	0.073
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.033	0.031	0.018	-1.325
	(0.028)	(0.012)	(0.011)	(0.379)
Alimony Only	0.019	-0.042	-0.005	-0.124
	(0.013)	(0.024)	(0.010)	(0.490)
Tax and Alimony Only	-0.020	-0.056	-0.020	0.460
	(0.008)	(0.014)	(0.009)	(0.406)
Marriage	-0.017	-0.028	-0.003	0.055
	(0.011)	(0.015)	(0.009)	(0.365)
N Households	20,421	20,430	20,014	20,430
\mathbb{R}^2	0.136	0.082	0.119	0.071
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table C3: Predicting the Household Division of Labor, Movers

<u> </u>	(1) Both Employed	(2) Both FT	(3) Ratio Hours	(4) Diff. Hours
Panel A: Same-Sex Male Couples	Dotti Employed	Domin	itatio ilouis	Din. Hours
Joint Taxation Only	0.088	0.136	0.000	-6.716
·	(0.123)	(0.197)	(.)	(5.426)
Alimony Only	-0.111	0.028	-0.165	$0.387^{'}$
, and the second	(0.132)	(0.159)	(0.102)	(5.900)
Tax and Alimony Only	$0.033^{'}$	-0.034	-0.106	-1.047
	(0.152)	(0.082)	(0.111)	(5.246)
Marriage	0.000	0.000	-0.122	0.000
	(.)	(.)	(0.124)	(.)
N Households	200	212	209	$2\overline{12}$
\mathbb{R}^2	0.164	0.125	0.194	0.201
Panel B: Same-Sex Female Couples				
Joint Taxation Only	0.065	-0.075	-0.341	18.323
	(0.195)	(0.181)	(0.201)	(8.879)
Alimony Only	0.077	0.159	0.000	0.000
	(0.116)	(0.121)	(.)	(.)
Tax and Alimony Only	0.021	0.307	0.039	-0.894
	(0.087)	(0.174)	(0.073)	(2.953)
Marriage	0.000	0.000	-0.154	8.411
	(.)	(.)	(0.091)	(3.868)
N Households	174	174	171	175
\mathbb{R}^2	0.184	0.160	0.223	0.197
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. This sub-sample comprises only households that moved from a state without recognition for these laws to a state with them in the last year. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table C4: Predicting the Household Division of Labor, Non-movers

O	(1)	(2)	(3)	(4)
Panel A: Same-Sex Male Couples	Both Employed	Both FT	Ratio Hours	Diff. Hours
Joint Taxation Only	-0.057	-0.063	-0.041	1.995
Joint Taxation Only	(0.015)	(0.021)	(0.014)	(0.628)
Alimony Only	-0.025	-0.037	-0.032*	1.455
Anniony Omy	(0.008)	(0.009)	(0.006)	(0.353)
Tax and Alimony Only	-0.005	-0.009	-0.002	0.004
Tax and Tinnony Only	(0.006)	(0.014)	(0.002)	(0.294)
Marriage	-0.016	-0.032	-0.007	-0.141
Wallage	(0.007)	(0.018)	(0.009)	(0.408)
N Households	19,684	19,684	19,337	19,684
R ²	0.130	0.081	0.114	0.072
10	0.100	0.001	0.114	0.012
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.038	0.020	0.009	-0.559
	(0.027)	(0.024)	(0.005)	(0.339)
Alimony Only	-0.001	-0.044	-0.015	0.311
	(0.011)	(0.016)	(0.010)	(0.409)
Tax and Alimony Only	-0.014	-0.055*	-0.017	0.292
ů ů	(0.007)	(0.011)	(0.009)	(0.424)
Marriage	-0.017	-0.031	-0.005	0.198
<u> </u>	(0.009)	(0.014)	(0.009)	(0.331)
N Households	$20,\!255$	$20,\!255$	19,843	$20,\!255$
\mathbb{R}^2	0.136	0.082	0.118	0.070
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. This sum-sample comprises households that did not move from a state without recognition of these laws to a state with them in the last year. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table C5: Predicting the Household Division of Labor, States with Marriage Imposed

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Marriage	0.002	-0.043	-0.030	1.053
	(0.014)	(0.014)	(0.013)	(0.693)
N Households	4,775	4,775	4,672	4,775
\mathbb{R}^2	0.151	0.099	0.140	0.076
Panel B: Same-Sex Female Couples				
Marriage	-0.003	-0.037	-0.023	0.711
	(0.015)	(0.014)	(0.012)	(0.570)
N Households	4,975	4,975	4,856	4,975
\mathbb{R}^2	0.144	0.087	0.123	0.064
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	No	No	No	No
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. This subsample comprises only the 15 states which had same-sex marriage rights "imposed" on them by the federal Obergefell v. Hodges court case; these states are Alabama, Arkansas, Georgia, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, and Texas. The marriage rights apply in the 2015 and 2016 samples. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R² in columns (1) and (2) is the pseudo-R² in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table C6: Predicting the Household Division of Labor, Using Time-Use Data

	(1)	(2)	(3)
	Diff. Unpaid Work	Share Unpaid	Ratio Unpaid
Panel A: Same-Sex Male Couples			
Joint Taxation Only	0.287	0.000	-0.003
	(0.202)	(0.001)	(0.002)
Alimony Only	0.696	0.001	-0.005
	(0.330)	(0.000)	(0.003)
Tax and Alimony Only	0.270	-0.000	-0.001
	(0.073)	(0.000)	(0.001)
Marriage	-0.475	0.000	0.005
	(0.162)	(0.000)	(0.001)
N Households	19,896	18,948	19,896
\mathbb{R}^2	0.031	0.031	0.054
Panel B: Same-Sex Female Couples			
Joint Taxation Only	0.307	0.001	-0.005
	(0.467)	(0.000)	(0.004)
Alimony Only	0.466	0.001	-0.005
	(0.235)	(0.000)	(0.002)
Tax and Alimony Only	0.339	0.001	-0.004
	(0.137)	(0.000)	(0.001)
Marriage	-0.531	0.001	0.002
	(0.147)	(0.000)	(0.001)
N Households	20,430	19,499	20,430
\mathbb{R}^2	0.023	0.047	0.059
Couple Characteristics	No	No	No
State/Year Characteristics	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes
Children	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data, using imputed values for paid and unpaid work from 2003-2016 ATUS data. The ACS sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Robust standard errors clustered at the state level in parentheses.

Table C7: Predicting the Household Division of Labor, Households with Children

<u> </u>	(1) Both Employed	(2) Both FT	(3) Ratio Hours	(4) Diff. Hours
Panel A: Same-Sex Male Couples	Dotti Employed	DOMET	itatio flours	Dill. Hours
Joint Taxation Only	-0.013	-0.012	0.022	-0.493
v	(0.065)	(0.033)	(0.048)	(1.337)
Alimony Only	-0.025	-0.092	-0.065	$2.950^{'}$
	(0.047)	(0.023)	(0.030)	(1.947)
Tax and Alimony Only	-0.007	0.026	0.039	-1.618
	(0.022)	(0.031)	(0.022)	(0.984)
Marriage	0.009	0.005	0.024	-1.976
	(0.025)	(0.024)	(0.018)	(0.973)
N Households	2,484	2,484	2,431	2,484
\mathbb{R}^2	0.047	0.040	0.047	0.027
Panel B: Same-Sex Female Couples				
	-0.082	-0.027	-0.042	2.271
Joint Taxation Only	(0.024)	(0.059)	(0.027)	
Alimony Only	(0.024) -0.045	(0.059) -0.050	-0.036	(1.460) 1.059
Annony Only				
Tarrand Alimany Only	(0.023) -0.009	(0.031) -0.041	(0.022) -0.010	(0.971) -0.097
Tax and Alimony Only	(0.013)			
Mamiaga	-0.034	(0.017) -0.034	(0.016) -0.020	$(0.634) \\ 1.063$
Marriage	(0.018)	(0.021)	(0.015)	(0.609)
N Households	` ,	,	,	,
N Households R^2	6,834 0.089	6,834 0.048	$6,650 \\ 0.076$	6,834 0.047
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	No	No

Notes: Author's calculations on ACS 2000-2016 data. This subsample includes only household with children present. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R² in columns (1) and (2) is the pseudo-R² in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table C8: Predicting the Household Division of Labor, Households without Children

	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.056*	-0.067	-0.043	1.994
	(0.008)	(0.021)	(0.010)	(0.508)
Alimony Only	-0.027	-0.027	-0.027	1.226
	(0.007)	(0.010)	(0.007)	(0.385)
Tax and Alimony Only	-0.004	-0.014	-0.007	0.185
	(0.006)	(0.014)	(0.007)	(0.288)
Marriage	-0.021	-0.040	-0.013	0.230
	(0.009)	(0.019)	(0.010)	(0.444)
N Households	17,412	17,412	17,115	17,412
\mathbb{R}^2	0.134	0.078	0.113	0.069
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.031	0.022	0.014	-1.171
	(0.029)	(0.015)	(0.008)	(0.270)
Alimony Only	0.019	-0.041	-0.004	-0.142
	(0.010)	(0.022)	(0.010)	(0.523)
Tax and Alimony Only	-0.017	-0.057	-0.020	0.414
	(0.008)	(0.013)	(0.009)	(0.411)
Marriage	-0.011	-0.032	-0.001	-0.146
	(0.010)	(0.015)	(0.009)	(0.381)
N Households	13,596	$13,\!596$	$13,\!364$	13,596
\mathbb{R}^2	0.141	0.079	0.114	0.063
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	No	No

Notes: Author's calculations on ACS 2000-2016 data. This subsample includes only households without children. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R² in columns (1) and (2) is the pseudo-R² in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.

Table C9: Predicting the Household Division of Labor: Controlling for Adoption Rights

Table Co. 1 realetting the frougen	(1)	(2)	(3)	(4)
	Both Employed	Both FT	Ratio Hours	Diff. Hours
Panel A: Same-Sex Male Couples				
Joint Taxation Only	-0.056*	-0.063	-0.040	1.852*
	(0.007)	(0.024)	(0.010)	(0.301)
Alimony Only	-0.027	-0.016	-0.020	0.923
	(0.008)	(0.014)	(0.009)	(0.417)
Tax and Alimony Only	-0.005	-0.005	-0.002	-0.015
	(0.009)	(0.019)	(0.010)	(0.389)
Marriage	-0.015	-0.030	-0.007	-0.039
	(0.010)	(0.019)	(0.010)	(0.448)
N Households	19,896	19,896	19,546	19,896
\mathbb{R}^2	0.129	0.081	0.115	0.073
Panel B: Same-Sex Female Couples				
Joint Taxation Only	-0.031	0.033	0.018	-1.331
	(0.026)	(0.011)	(0.012)	(0.387)
Alimony Only	0.023	-0.037	-0.003	-0.142
	(0.012)	(0.022)	(0.009)	(0.464)
Tax and Alimony Only	-0.016	-0.051	-0.018	0.443
	(0.009)	(0.014)	(0.009)	(0.400)
Marriage	-0.015	-0.025	-0.002	0.044
	(0.010)	(0.014)	(0.009)	(0.361)
N Households	20,421	20,430	20,014	20,430
\mathbb{R}^2	0.136	0.083	0.119	0.071
Couple Characteristics	Yes	Yes	Yes	Yes
State/Year Characteristics	Yes	Yes	Yes	Yes
State and Year FEs	Yes	Yes	Yes	Yes
Children	Yes	Yes	Yes	Yes

Notes: Author's calculations on ACS 2000-2016 data. The sample excludes households in which either person has an allocation flag on their marital status, sex, or relationship to householder variable as described in the text. Columns (1) and (2) show average marginal effects. The R^2 in columns (1) and (2) is the pseudo- R^2 in the underlying probit regression. Robust standard errors clustered at the state level in parentheses.