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# Interactions between Non-Discrimination Laws and Socioeconomic Status of Sexual Minorities 

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#### Abstract

At its core, this project analyzes the interactions between state non-discrimination laws and the socioeconomic status of same-sex households in the United States. There is a large body of work examining the earnings gap for sexual minorities, but there is a dearth in studies looking at the effect of such protective laws. Using annual American Community Survey (ACS) data from 2000 to 2016, we examine the personal total income, household income, and unemployment in the ten states experiencing relevant reform. This study has two main findings. First, we confirm that sexual minorities experience substantial earnings differences, finding that lesbian women experience an income premium of 32.2 percent and gay men face an income penalty of 21.4 percent. Second, we find that non-discrimination laws seem to be decreasing the pay gap in both directions, shrinking the lesbian premium by 6.7 percent and the gay penalty by 12.1 percent. While we are unable to say these effects are causal, in the context of a history of wage penalties for gay males and wage premiums for lesbian women, protective reforms are positively and strongly correlated with closing the lesbian and gay income gap. From these main findings we are left with additional questions including: why does the lesbian premium exist, and why do protective reforms seem to chip away at it? While we review some relevant theories and offer our own, in the end these findings remain a puzzle.


## Keywords

Discrimination, Sexuality, Gender, Same-Sex, LGBT, Gay, Lesbian, Anti-discrimination, U.S., Income, Unemployment, American Community Survey, ACS

## Disciplines

Demography, Population, and Ecology | Economic Policy | Gender and Sexuality | Income Distribution | Labor Economics |Lesbian, Gay, Bisexual, and Transgender Studies | Political Economy | Public Policy | Quantitative, Qualitative, Comparative, and Historical Methodologies | Social Policy | Social Statistics | Social Welfare | Urban Studies and Planning

# Interactions between Non-Discrimination Laws and Socioeconomic Status of Sexual Minorities 

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Submitted to the Philosophy, Politics and Economics Program at the University of Pennsylvania in partial fulfillment of the requirements for Honors.

Thesis Advisor: Janice Madden, Ph.D.
Date of Submission: May 3, 2018

# INTERACTIONS BETWEEN NON-DISCRIMINATION LAWS AND SOCIOECONOMIC STATUS OF SEXUAL MINORITIES 

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#### Abstract

At its core, this project analyzes the interactions between state non-discrimination laws and the socioeconomic status of same-sex households in the United States. There is a large body of work examining the earnings gap for sexual minorities, but there is a dearth in studies looking at the effect of such protective laws. Using annual American Community Survey (ACS) data from 2000 to 2016, we examine the personal total income, household income, and unemployment in the ten states experiencing relevant reform. This study has two main findings. First, we confirm that sexual minorities experience substantial earnings differences, finding that lesbian women experience an income premium of 32.2 percent and gay men face an income penalty of 21.4 percent. Second, we find that non-discrimination laws seem to be decreasing the pay gap in both directions, shrinking the lesbian premium by 6.7 percent and the gay penalty by 12.1 percent. While we are unable to say these effects are causal, in the context of a history of wage penalties for gay males and wage premiums for lesbian women, protective reforms are positively and strongly correlated with closing the lesbian and gay income gap. From these main findings we are left with additional questions including: why does the lesbian premium exist, and why do protective reforms seem to chip away at it? While we review some relevant theories and offer our own, in the end these findings remain a puzzle.


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## INTRODUCTION

With the passage of the Civil Rights Act in 1964, social scientists began to look at the impact that greater inclusion to society had on individuals and the collective system. These studies showed how discrimination and inclusivity affected the welfare of individuals as well as the larger economy. Similar studies showed the extent and implications of the gender pay gap, beginning in the 1970's. LGBT people are in a similar place of rapidly changing social status, and there is much to be learned from a closer examination. While there is sizable discourse about LGBT discrimination, the impact of anti-discrimination laws is less studied.

This study examines the ten states where legislative protections were added within the period of 2000 to 2016 . We use data from the ACS, which surveys roughly $1 \%$ of the population annually. The variables are the same as are available in the Census, and the ACS is publicly accessible through the ACS Public Use Microdata Sample (PUMS). It is by far the largest survey of its kind. While there is not a question which directly asks one's sexual orientation, those living in same-sex households can be identified. While this method comes with its own complications, it is the most widely used data set for analyzing the demographics of lesbian and gay (LG) Americans and allows researchers to study large numbers of an otherwise elusive population.

The goal of this research is to identify the effect of sexual orientation anti-discrimination legislation by comparing indicators of economic success for the LG population in ten states. For this paper, the factors most closely looked at are income and unemployment. This research adds to the discourse by examining discrepancies in pay and unemployment rates across a period of legislative change and controlling for socio-demographic factors.

Using their "global barometer of gay rights scorecard," Dicklitch, Thompson, and Yost (2016) describe five distinct relevant aspects to the status of sexual minorities: "constitutional protection of homosexuals, de facto (civil and political) persecution of homosexuals, level of gay rights advocacy,
protection of socioeconomic rights of homosexuals, and societal persecution of homosexuals." This research examines what Dicklitch, Thompson and Yost call socioeconomic rights of homosexuals.

The critical population for this study are same-sex partners, both married and unmarried. An "unmarried partner" can be of the same-sex or of the opposite sex of the householder and is an adult who is unrelated to the householder, but shares living quarters and has a close personal relationship with the householder (U.S. Census Bureau). This sample is compared to a population that is in an opposite-sex marriage or partnership controlling for exogenous demographic factors.

Income is an indicator of available resources and can be compared to those with otherwise similar qualifications. A similar comparison can be made with respect to unemployment. These are common measures of socioeconomic status, and the research literature generally finds a substantial earnings premium for lesbian women and penalty for gay men.

To date, there is no explicit federal protection for LGBT people against Sexual Orientation or Gender Identity (SOGI) discrimination in the U.S., and only 22 states and the District of Columbia maintain laws protecting individuals on the basis of sexual orientation. Using ACS data to examine policy changes in ten states throughout 17 years, this study aims to examine how these policies interact with lesbian and gay socioeconomic status. Overall, we find that such non-discrimination policies counteract the preexisting lesbian and gay earnings gaps. While we are able to offer a number of theories, we are unable to explain this effect.

## LITERATURE REVIEW

Acceptance of LGBT people has shifted dramatically in the last twenty-five years. Historical data from the General Social Survey show that 72 percent of adults in 1991 considered homosexual behavior as "always wrong," whereas in 2010 that share had fallen to 44 percent (Smith 2011). Conversely, the proportion of adults who support gay marriage grew from 37 percent in 2007 to 62 percent in 2017 (Pew Research Center 2017b).

## Earnings Gaps

Beginning with Lee Badgett's (1995) econometric study of the effects of sexual orientation on earnings, a growing body of research has attempted to explore sexual orientation earnings differences. Almost all studies have found a gay male penalty after controlling for other characteristics (Carpenter 2007; Klawitter 2011). Most studies have found a lesbian female premium (Jepsen 2007). Marieka Klawitter (2015) performs a meta-analysis of thirty-one studies finding an average earnings penalty of 11 percent for gay men and an earnings premium of 9 percent for lesbian women (Klawitter 2015). There is a wide range of estimates, though, with the endpoints of the range showing penalties for lesbians and no significant effect for gays. She also finds a strong relationship between the approaches and data in a study and its findings, suggesting that this is why we see such a large range of findings. In particular, choice of dataset, choice of controls, measure of income, measure of sexual orientation, and methods could explain the wide variation of findings.

One of the few studies to explicitly examine the interaction between law and discrimination is Baumle and Poston (2011). While they find an initial gay male penalty of 12.5 percent, in states with anti-discrimination laws the gap narrows to about 9.9 percent. They do not find such a shift for lesbian women but do find that lesbians earn a significant and large premium of 3.5 to 9 percent. Using 1990 census data instead of 2000, (Klawitter 1998) finds that an anti-discrimination law had no statistically significant effect on earnings.

In addition to their findings about the interaction between reform and income, Buamle and Poston find that the lesbian earnings premium persists even when controlling for part-time work and the presence of children. This is an important finding because it challenges prevailing theories that lesbian women earn more because they are less likely to have children or work part-time (Badgett 2001; Badgett 1995). Baumle (2009) suggests that it is possible, however, that employers perceive lesbians to have a greater labor force attainment than heterosexual women.

Baumle and Poston's study (2011), which to our knowledge is the first to assess state antidiscrimination policies across a multitude of states and years, suggests that an important factor in the socioeconomic status of sexual minorities is legal rights. In addition to the presence of an antidiscrimination law, their study also incorporates state level controls such as the presence of a sodomy law, concentration of same-sex couples, and religious beliefs. In using census 1990 and census 2000 data, however, they are unable to track changes before and after a law, as we do here.

This study argues that those living in states without an anti-discrimination law could choose to avoid disclosing their sexual orientation and thereby avoid discrimination in the workplace. They point to the findings of Badgett (2001) that gays and lesbians were more likely to disclose their sexual orientation in the workplace when an employer had a non-discrimination policy in place. This suggests that individuals are more likely to disclose sexual orientation in environments where they feel protected. Just as race and gender discrimination have their own respective set of intricacies and intersections, so too does sexual orientation discrimination. Klawitter (2015) points to these complexities as an explanation for the wide spread in findings. The variability of findings, in part, comes as a consequence of the complexities of the data. Sexual orientation is not as easily perceived as race or gender. This further leads to intricacies in the ways in which individuals identify themselves, but also the ways in which the Census identifies them. This will be discussed in more detail in the methods section.

It is often posited that changing attitudes towards sexual orientation have resulted in a reduction of discrimination (Clarke and Sevak 2013). Most recently, Carpenter and Eppink (2017) find that, along with lesbian women, gay men earn a 10 percent income premium over their heterosexual counterparts. They suggest a number of reasons that would explain this finding, but notably, reject the hypothesis that increasingly accepting attitudes towards sexual minorities are responsible for these findings.

First, they suggest it is not clear why improved attitudes towards LGBT would produce an earnings premium. Second, they find that gay men have significantly lower employment rates than comparable heterosexual men. This is inconsistent with a decrease in discrimination. Third, unlike their findings for males, Carpenter and Eppink find a lesbian earnings premium which remains in line with other studies' estimates. If improved attitudes of LGBT are responsible for increasing gay earnings, would they not do the same for lesbian earnings? Fourth, increased acceptance has not been universal, and many sexual minorities have faced backlash to the legislative gains sexual minorities have made. These findings suggest there is more to the socioeconomic progress of American sexual minorities than increased acceptance. Carpenter and Eppink argue that equality in the right to marriage accounts for these differences.

In line with Carpenter and Eppink's findings that gay males no longer face an earnings premium, there is reason to believe that the status of sexual minorities is changing. Klawitter (2015) finds that over time, these gaps-a penalty for males and premium for females-are converging towards zero. While she declines to say with certainty, she points to decreasing discrimination and study design as potential reasons for this.

Madden and Kyei (2013) suggest that gender norms, not discrimination, is the primary cause for the gay and lesbian earnings gaps. Using the gender composition of a worker's occupation as proxy for the gender "typicality" of his or her unmeasured characteristics, Madden and Kyei posit sexual minorities of different genders possess differing "unmeasured gender-linked characteristics" that ultimately affect earnings. This hypothesis conjectures that the labor market rewards stereotypically masculine traits such as strength and risk-willingness. If lesbian women possess more of these traits than do heterosexual women, they would be rewarded by the labor market. Conversely, if gay men possess less of these traits than do heterosexual men, they would be punished by the labor market.

Citing evidence that gay men are more likely to disclose their sexual orientation than lesbian women, and that they may face greater degrees of discrimination, Madden and Kyei suggest a second hypothesis of "greater bias against gay men." If biases against homosexuality are greater for gay men than they are lesbian women, then gay men would face an earnings penalty and lesbian women might have earnings more equivalent to their heterosexual counterparts. On its own, however, this theory cannot explain a lesbian earnings premium. Madden and Kyei suggest a third contributor is household gender roles amongst homosexual couples.

Most studies which examine the pay-gap between same-sex and different-sex couples have been unable to prove discrimination. While we observe gay male couples earning less than their heterosexual counterparts, for example, there are various factors involved. Although researchers attempt to control for those differences, most cannot directly examine an individual's experience with discrimination. Convincing accounts of sexual minorities' experience with discrimination are made by the few audit studies which exist on the matter.

## Audit Studies on Hiring Rates of Sexual Minorities

Weichselbaumer (2003) conducted a correspondence test in Austria's greater Vienna area of Austria, sending out 613 pairs of resumes with female names for open positions. One resume in each pair was assigned volunteer experience for a gay or lesbian rights organization, while the other was assigned volunteer experience for a non-profit or cultural center. Weichselbaumer found that, to a statistically significant level, signaling lesbian orientation reduces one's rate of invitation to be interviewed by 12 to 13 percentage points. This is to say that in a given pair of resumes, the one assigned lesbian was invited to interview 38 percent of the time, while the one assigned straight was invited back 50 percent of the time (Weichselbaumer 2003). These findings correspond to Adam's (1981) findings of an 11 percent reduction of invitation rates for lesbian females in the Toronto.

Drydakis (2009) follows suit of Weichselbaumer (2003) and Adam (1981), sending 1714 pairs of male resumes to job openings in Athens, Greece one marked with volunteer work for a gay
organization, the other marked with volunteer work for an environmental group. Of the 696 postings which sent out an invitation for interview, 230 invited both the gay and straight applicant, 457 invited just the straight applicant, and in just nine cases was only the gay applicant invited. This equates to a 64.3 percent rate of net discrimination ${ }^{1}$ against the gay resumes, despite coming three years after laws prohibiting discrimination on the grounds of sexual orientation went into effect under the European Union's Employment Equality Directive.

Drydakis also notes sexual minorities far too often live with the consequences of discrimination thinking that it is normal. Drydakis further notes that few employers understand what constitutes sexual orientation discrimination and underscores the importance of such research to policy and social science.

Tilcsik's 2011 study marks the first large-scale audit study in the U.S. and adds three major findings to the discourse, as well as a nuanced framework for understanding sexual orientation discrimination. First, the study provides direct evidence of discrimination against gay men, finding that in 3538 resumes to 1769 job postings, gay men were about 40 percent less likely to be given an interview than the heterosexual applicant. Tilcsik calls this result as being consistent with other indicators of discrimination against sexual minorities, and of a similar magnitude to the gap between black and white applicants (Bertrand and Mullainathan 2004; Badgett et al. 2009).

Moreover, conducting the study across seven states in distinct regions, Tilcsik finds regional differences. Employers in the South and Midwest show stronger discrimination than those in the West and Northeast. Perhaps most notable for our own work is the finding that those employers in states and counties with relevant anti-discrimination laws were significantly less likely to discriminate.

Lastly, Tilscik identifies employers who emphasize the importance of stereotypically masculine traits as being especially likely to discriminate against gay men. Tilcsik takes this finding to suggest that, discrimination "is partly rooted in specific stereotypes and cannot be completely

[^0]reduced to a general antipathy against gay employees" (2011, p. 616). Tilcsik further proposes that, viewed in the framework of Arrow's (1973) statistical discrimination, this finding shows that individuals have the practice of extrapolating beliefs about a group to the character of a member of that group. More specifically, Tilcsik suggests that if some employers believe masculine traits to be associated with better job performance, and if those same employers believe gay men are less masculine, then we would expect discrimination. This finding shows that discrimination against lesbians and gays does not live in its own realm of sexual orientation discrimination, but rather should be viewed in the same ecosystem as discrimination stemming from existing power hierarchies and cultural norms (such as those measured in gender). From the findings of his study Tilcsik pushes us to understand ascriptive inequality: how members of dominant groups perceive those in subordinate groups, especially those characteristics related to inequality-generating decisions.

## Policy Review

At the federal level, sexual orientation has only been considered a protected form of identity when interpreted as part of sex and gender. A major change occurred in 2014 when President Obama signed Executive Order 13672 expanding anti-discrimination policies for LGBT people serving as federal and federally contracted employees. A policy established in 2015 by the Equal Employment Opportunity Commission (EEOC), as well as a ruling in April 2017 by the Seventh Circuit Court of Appeals, label sexual orientation discrimination as part of sex discrimination, making it illegal as part of Title VII of the 1964 Civil Rights Act. However, EEOC rulings are not binding on private employers, and federal courts may rule differently.

Furthermore, the federal policy's future remains unclear. In the summer of 2017, the Justice department began to reverse the Obama era interpretation of Title VII. In February of 2018, the United States Court of Appeals for the Second Circuit rejected the Justice Department's argument and became the second appeals court to rule that the Civil Rights Act should be extended to include sexual orientation. However, a third appellate court in Atlanta has ruled differently, perhaps positioning an
appeal to be taken up by the Supreme Court which could make title VII a federal discrimination ban. Currently there is no legislation in the United States that explicitly bans discrimination on the basis of sexual orientation.

In lieu of a federal non-discrimination law, there exist many state laws which protect employees from unfair treatment based on their sexual orientation. At the conclusion of 2016, 19 states and the District of Columbia had laws protecting individuals form discrimination on the basis of sexual orientation and gender identity, while an additional three states had protections on the basis of sexual orientation only (Movement Advancement Project 2018). While the level of protection can vary substantially, employment non-discrimination laws protect LGBT people from being fired, not hired, or discriminated against in the workplace by private employers on the basis of sexual orientation or gender identity. Most large cities have at least some protections, and about 50 U.S. municipalities in 15 states have added LGBT non-discrimination measures since 2015, when samesex marriage was legalized nationwide. The Movement Advancement Project (2018) finds that 50 percent LGBT people live in states prohibiting employment discrimination based on sexual orientation. They also find that an additional portion of the population is protected by laws for state employees or by local ordinances. Twenty-eight states have no employment non-discrimination laws.

## METHOD

## Data Selection

This study uses data from the 1-year American Community Survey Public Use Microdata Sample. These data are composed of microdata, such that each record is an individual person. In our analysis we used structures of data which are organized by households, making it possible to study characteristics of people in the context of their families or other co-residents. Beginning in 2005, the ACS data represents 1 percent of the national population. From 2000 to 2004, there is some variance in the sample size, and the 2000 data are not the ACS but the 5 percent sample of the U.S. Census
(Table A1). We begin our analysis in 2000 because it marks the first year in which annual data are available and end at the last available dataset in 2016.

With our data set spanning 17 years, we chose to examine every state which had an applicable legislative change within that period except for Utah (Hasenbush et al. 2014). ${ }^{2}$ These represent the $12^{\text {th }}$ through $22^{\text {nd }}$ states to add sexual orientation non-discrimination laws. Because the remaining 28 states are likely to be less progressive, our sample is on the progressive side of the political spectrum.

We determine an individual's sexual orientation as most researchers have done, by examining the two questions pertaining to sex and relationship to head of household. We can assume that the relationship between two people is spouse/partner if a person chooses "husband/wife" or "unmarried partner." It is unlikely that roommates and housemates misidentify themselves as partners because there is a response choice for that type of relationship. Knowing who identify themselves as spouses/ partners, we can then use the sex of partners to distinguish between those in same-sex and differentsex marriages/partnerships. Beginning in Census 2000, we are able to discern four classes of unmarried cohabitating couples: same-sex male couples, same-sex female couples, unmarried different-sex couples, and married different-sex couples. Starting in 2013, the ACS data distinguish between married and unmarried same-sex couples, bringing the number of classes to six.

We limit our sample to those who fall into these four classes (or six beginning in 2013). We further limit our sample to match the properties of the measured labor force, including only civilians who are 16 years or older and are not in institutions such as prisons or mental hospitals. In the few cases in which income was negative or in which it was zero, income was set to equal 0.1. ${ }^{3}$ There were also a handful of respondents which were allocated as same-sex married-couple but missing valid responses for their sex or relationship to householder, so these cases were removed from the sample.

[^1]
## Challenges

The Census and its related surveys such as the ACS, collect information about the relationships of those living in households. On the ACS, a householder and others living in the home are identified, along with their relationship to the householder. Logically, if the householder marks that he or she lives with a partner or spouse of the same-sex, these two people can be considered to be a same-sex couple. This is how we derive our sample population of lesbian and gay Americans.

A more straightforward way to ascertain information regarding one's sexual orientation would be a question that asks directly. There are surveys in the U.S. such as the General Social Survey (GSS) which ask questions to individuals regarding a range of demographic factors, including their sexual orientation. Since 2008 when the GSS began asking about one's sexual orientation, ${ }^{4}$ the sample size has been around 2000 respondents per year. In general, this is a large enough sample to be considered nationally representative, but when considering a minority group, it is too small. In 2016, for example, 46 responded "gay lesbian or homosexual," 56 responded "bisexual", and 1641 responded "heterosexual or straight" (Smith et al. 2016). Given our interest in looking at policy changes within a state, these numbers easily become low single digits. While the GSS can provide valuable insights into LGB trends, a study of policy changes requires a much larger data set. The only nationally representative and substantial surveys containing a specific question on sexual orientation exist in the UK and Canada. In the U.S, we must infer sexual orientation through cohabitation properties in the ACS. This method comes with its challenges.

## Procedural Changes

First there is the challenge that procedural changes to the collection of data have significant impacts on data. In our data set ranging from 2000-2016, significant changes to the collection of data

[^2]took place in 2000, 2008 and again in 2013. It is important to understand these definitional intricacies to properly analyze the data.

In 1990 the Census added the category of unmarried partner to its question regarding relationship to householder. If the participant reported their relationship as same-sex, unmarried partners were allowed but married couples were edited in such a way that the sex of one individual reflected an opposite-sex arrangement (File 2016). In 2000, this practice was changed so that instead of changing the sex of one of the partners, the relationship would be changed from married to unmarried partner. While this change does not occur in the midst of our sample, it is important to understand the composition of our sample and its intricacies. For example, Gates and Steinberger (2010), find about .25 percent of different-sex married couples miscode the sex of a spouse, and 30 percent of identified same-sex couples in the ACS are in fact misclassified different-sex married couples. In using this data set, is important to heed caution due to its imperfections.

Between 2007 and 2008 two categories of change occurred: (1) processing and editing changes and (2) formatting changes to the questionnaire (O'Connell et al. 2008). In regard to processing and editing, the system of transcribing paper responses was somewhat automated and improved. Additionally, how surveys with multiple boxes checked for sex and relationship were also treated differently. Prior to 2008, multiple marks for sex would be edited to "male," and surveys with relationships marked as "husband/wife" as well as another response were marked as "husband/wife." Starting in 2008, these questions with multiple markings were changed to be considered left blank.

Perhaps the most impactful change that occurred between 2007 and 2008 was the format change from a grid-based questionnaire to a sequential ordering of questionnaire items. Beginning in 2008, all core demographic responses for a single person were in one vertical column with a distinct sequential numbering of questions. In 2007, these items were spread over two pages with less specific instructions and without a numbering system. A preliminary evaluation indicated significantly higher proportion of persons who reported themselves as male than as female in the grid format (O'Connell
et al. 2008). Additionally, the 2008 form instructed the respondent to mark only one box each for the relationship and the sex items, while prior space limitations prevented this instruction from being included.

While the estimate of same-sex unmarried partners does not change much between 2007 and 2008, the number of couples reporting themselves as same-sex spouses declined from 341,000 in 2007 to 150,000 in 2008, or 27 percent of all same-sex couples in 2008 . O'Connell et al. (2008) credit these changes for the dramatic drop and say that it marks an improvement in data collection and avoiding erroneous responses. In analyzing the data, again, it is important to note the method and changes to the procedure of data collection.

Lastly, in 2013 the ACS stopped recoding those who marked themselves as same-sex married couples from married to unmarried partners (U.S. Census Bureau 2014). Along with this change came the introduction of a Same-sex Married Couple variable "SSMC."

## Data Limitations

To begin, the Census cannot identify those who identify as LGB but rather those who cohabitate with someone of the same-sex. This means that our data only speaks to a portion of the population that is living in a partnership with someone-single people who identify as LGB cannot be discovered through the current means of the ACS. One can imagine that the partnered segment of the population differs from the segment of those who are single (non-partnered people account for $42 \%$ of the population) (Pew Research Center 2017a).

A statistical problem arises in the analysis of a relatively small critical population: a low rate of random error in a large group (opposite-sex married couples) creates large errors in the estimates for a small group (same-sex married couples). With 56 million opposite-sex married households, up to $0.5 \%$ have been found to misreport a spouse's sex—about 280,000 households (File 2016). Adding these 280,000 households in error to same-sex households is hugely significant considering the estimate of same-sex married couples is around 400,000 . Krieger et al (2017) compared the sex
reported in the 2010 ACS with the Social Security record and found that about 57 percent of those reported as same-sex couples in the 2010 ACS are likely opposite-sex in the Social Security data file (Kreider, Bates, and Mayol-Garcia 2017). They identify this primarily as a consequence of mismarks by the respondent.

Procedural changes to the Census and ACS have been proposed which would bring this number down. In testing of the 2016 ACS census, putting the survey online, adding automated formatting (such as referring to house members by their names), and prompting the respondent to check their answer, were found to reduce this number from .5 percent to .03 percent (Kreider, Bates, and Mayol-Garcia 2017). While the percentages are small, this reduction represents a substantial decrease in erroneous responses and would bring the number of misreported same-sex married couples down from approximately 280,000 to around 16,800 .

Despite the challenges unique to the data available in the U.S. and the presence of "better" data elsewhere such as the UK or Canada, this kind of policy-based analysis is uniquely compelling in the U.S. given states' abilities to serve as "laboratories of democracy." ${ }^{5}$ This nature of governance allows us to uniquely isolate state anti-discrimination legislation as a variable, and it allows us to observe multiple instances of legislative change across many states.

## MODELS

Our analysis focus on three related models of increasing complexity, each applied to three dependent variables: LogPersonalTotalIncome, LogHouseholdIncome, and Unemployment.
(1) DependentVariable $i=\eta+\alpha *$ SameSexHHi $+\varepsilon i$
(2) DependentVariable $i=\eta+\alpha^{*}$ SameSexHHi $+\lambda^{*}$ Reform $+\beta^{*}$ DemographicTraitsi $+\varepsilon i$
(3) DependentVariable $i=\eta+\alpha^{*}$ SameSexHHi $+\lambda *$ Reform $+\varphi^{*}$ SameSexHH*Reform +
$\beta^{*}$ DemographicTraitsi $+\varepsilon i$

[^3]SameSexHH is a dummy variable equaling one when the couple is identified as a same-sex couple, and zero if not. For any given state, Reform is a dummy variable equaling one for the years following the implementation of a state-wide sexual orientation anti-discrimination law. If a law was passed in 2007, for example, Reform will equal zero for the years 2000-2007, and one for years 20082016. The reason we apply this variable in the year following legislation as opposed to the actual year of legislation is because of time differences of implementation across states. Furthermore, it is unlikely that a given reform will have taken effect in the year of its passing. This equation is applied separately to men and women to highlight the gender-based differences in labor market outcomes.

DemographicTraits is a set of sociodemographic factors, including age, race and ethnicity, and educational attainment. Also included are a set of year and state dummy variables which control for differences measured over time and across states. There is also a control for unemployment, as well as one for reform. The last year and the last state dummy will be undefined because of singularities. Likewise, for each state, one control year will not be listed because it is captured in PostReform (Table A7). The first model of each dependent variable includes just the SameSexHH variable, the second adds DemographicTraits, and the third adds interaction terms between SameSexHH and Reform.

The models for LogPersonalTotalIncome and LogHouseholdIncome (columns (1) through (6) in Table 1 and Table 2) are estimated as ordinary least squares (OLS) models and vary only in the dependent variable. The models for Unemployment (columns (7) through (9) in Table 1 and Table 2) differ in that they are logistic regressions with the binomial unemployment as the dependent variable. This term is zero for those employed and one for those unemployed. The set of demographic traits remains identical across dependent variables except for the exclusion of unemployment as a control in the income analysis. For each of the three dependent variables, the independent variables of interest are the interaction terms between SameSexHH and Reform. The coefficients of $\alpha$ indicate the
perceived difference in income and unemployment for couples based on sexual orientation. The coefficients of $\varphi$ indicate the differences pertaining to same-sex couples in respect to reform.

## RESULTS

Tables 1 and 2 present the results for personal total income (columns 1 through 3), household income (columns 4 through 6), and unemployment (columns 7 through 9). Table 1 is based on females and Table 2 is based on males. Omitted are the dummies for states and years, but other sociodemographic factors are included to serve as points of comparison.

For ease in reading these results, all coefficients of columns (1) through (6) are described as percent effects using the standard formula: $\% \Delta y=\left(e^{\beta_{1}}-1\right) \cdot 100$ where $y$ is a given dependent variable and $\beta_{1}$ is the coefficient of an independent variable. Coefficients of columns (7) through (9) are described here as odds instead of log of odds.

## Personal Total Income

Before including the interaction term, in model (2) we find that lesbian women face a 32.2 percent earnings premium. In other words, from 2000 to 2016, we expect a woman in a same-sex household to earn 32.2 percent more than her heterosexual counterpart. Men living in a same-sex household from 2000-2016 are expected to face a 21.4 percent earnings penalty. Note that these data refer to annual income, so they reflect differences in both pay rates and total hours worked.

In model (3) we include the interaction between being in a same sex household and being protected by state anti-discrimination legislation. These findings show that lesbian women see their earnings premium decline by 6.7 percentage points in the years following reform, despite earning 38.3 percent more than their heterosexual counterparts in the years prior to reform. In the years following a reform, gay men earn an additional 12.1 percent while earning 26.5 percentage points less than their heterosexual counterpart prior to reform. This is to say that for those in same-sex households, women lose 6.7 percent of their premium given a reform, while men gain back 12.1
percent. All of the numbers reported above for personal total income are significant at the 1 percent level.

## Household Income

While lesbian women earn substantially more than heterosexual women, the household income for lesbians is 8.4 percent lower than that of heterosexual households. Lesbian households earn substantially less than heterosexual men.

Males in same-sex households have a household income that is 12.1 percent greater than that of heterosexual households. Although gay men individually earn less than their heterosexual counterparts, this premium is expected because women in different-sex households earn around half as much as their partners.

Before reform, household income for gay men is 7.1 percent higher than that of the heterosexual household, and in the years following reform that premium rises by another 7.4 percentage points. The lesbian household income in the period following reform increases by 2.0 percent (significant to the 5 percent level). Unless otherwise noted, all of the findings for household income reported above are significant at the 1 percent level.

## Unemployment

It appears that lesbian women have slightly greater odds at being unemployed while gay men have substantially greater odds. Overall, women in same-sex households are found to have odds of unemployment 5.7 percent greater than similar heterosexual women (significant at the 10 percent level). Prior to reform, we find that being in a lesbian household as compared to a heterosexual household, a woman's odds of being unemployed are 10.8 percent greater (significant at the 10 percent level). After reform, the odds for lesbian women decrease by 7.4 percent compared to before (statistically insignificant). Compared to their pre-reform odds, this is notable improvement.

For males in same-sex households, the odds of being unemployed are 34.6 percent greater than the odds of similar males in heterosexual households (significant at the 1 percent level). Prior to reform, gay males have odds $27.0 \%$ greater than heterosexual men (significant at the 1 percent level), while following reform the odds are $5.8 \%$ greater (statistically insignificant). These findings are noteworthy but should also be put into perspective: for example, the odds of being unemployed as a black male are 108 percent greater than those of a white male.

## State-Level Analysis

Looking at the trends across the sample of states gives us further insight into the results (Table 3). As it pertains to income, this table reports initial pre-reform gaps and overall gaps. The post reform column is to be considered in sum with the pre-reform column. For example, Females in Maryland experience a 34.5 percent personal total income premium in the pre-reform period, but that premium declines by 13.9 percent post reform. Overall, they experience a 26.0 percent earnings premium.

For female personal total income, all states show substantial and statistically significant prereform premiums for same-sex households. Furthermore, the spread for pre-reform premiums is large, with a range of 22.3 percent (Maine) to 59.5 percent (New Mexico). Overall, in the entire 2000-2016 period, the trend is similarly consistent for all states, with a range of at 23.6 percent (Iowa) to 39.4 percent (Washington and Delaware). While the results are less uniformly significant, the post reform column also adds insight. All states show the premium decreasing, with a range of -2.4 percent (New York) to -18.6 percent (New Mexico).

The results for personal total income for males are similar but in the opposite direction. Prereform, males experience statistically significant penalties between -22.9 percent (in Maryland) and -36.7 percent (New Mexico). Overall, in the period from 2000-2016, males face an earnings penalty between -17.0 percent (New York) and -29.1 percent (Iowa). The post reform column show less significant but fairly uniform increases in earnings from 6.2 percent (Colorado) to 39.0 percent
(Maine). Notably exceptions of this trend are Iowa and Maryland. These findings are statistically significant at a higher incidence than are the findings for females.

Household income tells a similar story, with lesbian pre-reform households earning between 7.1 percent and 11.0 percent less. Overall, in the period 2000-2016, this trend is the same with a slightly bigger range of -3.4 percent to -11.0 percent. The post reform column shows that same-sex female households in most states earn a little back, but the findings are mostly insignificant.

Same-sex male households experience less uniform penalties in pre-reform household income, but overall the trend is that these households earn a substantial income premium over different-sex couples. The post reform column is more uniformly significant than it is for women, and generally shows substantial increases in household income (again with the exception of Iowa and Maryland).

Unemployment is reported in odds, and while the first and last columns are to be taken in isolation, the post reform column is again to be taken in sum with pre-reform. This means that, in the example of Maryland females, odds of unemployment are 3.7 percent higher pre-reform, and 1.7 percent higher overall. In the period post reform, lesbian women have odds .97 times of those that they did prior to reform. The findings pertaining to unemployment are mostly statistically insignificant, but point to slightly higher odds for pre-reform lesbians, and generally decreased odds post reform. For males, the trend is similar, but effects seem to be larger.

## Check for Robustness

It is likely that other variables influence the results of these models. To test robustness of these models, we create a sample that has been edited to "fake" a change in sexual orientation nondiscrimination laws. Looking at neighboring states with laws enacted in different years (e.g. New Mexico, 2003; Colorado, 2007), we hope to test whether our measure Reform is picking up other economic factors. In particular, we can look to the interaction terms SameSexHH*Reform,

Female*Reform, and SameSexHH*Reform*Female (Table A3) ${ }^{6}$. If our variable Reform was truly isolated from various economic effects, we would expect to see the "faked" data to show small and insignificant effects of reform. In the example of New Mexico and Colorado (Table A3), looking at these three interaction terms we note that there is in fact a sizable and significant effect of reform for all three dependent variables in the "faked" dataset. The test in Maryland and Delaware is less conclusive, likely because reform in Maryland took place in 2001, leaving only two years of data prior to reform.

We also perform some checks to make sure our dataset composition seems reasonable. One such check is population sizes of same-sex households in our sample versus the 2010 census statelevel preferred estimates (Table A2). The estimates derived from our sample do not include weighting so are presented for rough comparisons only. Furthermore, the census preferred estimates are adjusted to account for those households that mismark the sex of their partner/spouse.

[^4]| Partnered Females Aged 16 and Above in 10 States 2000-2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dependent variable: |  |  |  |  |  |  |  |  |
|  | $\log$ (Personal Income) |  |  | $\log$ (Household Income) |  |  | Unemployment |  |  |
|  | (1) | (2) | (3) | (4) ${ }^{(11270 * * *}$ | $\begin{aligned} & \quad \text { OLS } \\ & (5) \\ & \hline \end{aligned}$ | (6) | (7) | logistic <br> (8) | (9) |
| (Intercept) | $\begin{gathered} 9.960^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} \hline 8.518^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} 8.517^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} 11.270^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} 9.241^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} 9.241^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -3.093^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.620^{* * *} \\ (.052) \end{gathered}$ | $\begin{gathered} -.620^{* * *} \\ (.052) \end{gathered}$ |
| Same Sex HH | $\begin{aligned} & .388^{* * *} \\ & (.012) \end{aligned}$ | $\begin{aligned} & .279^{* * *} \\ & (.011) \end{aligned}$ | $\begin{aligned} & .322^{* * *} \\ & (.018) \end{aligned}$ | $\begin{gathered} -.015^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.088^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.100^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} .013 \\ (.032) \end{gathered}$ | $\begin{aligned} & .055^{*} \\ & (.033) \end{aligned}$ | $\begin{aligned} & .103^{*} \\ & (.055) \end{aligned}$ |
| Age |  | $\begin{aligned} & .040^{* * *} \\ & (.001) \end{aligned}$ | $\begin{aligned} & .040^{* * *} \\ & (.001) \end{aligned}$ |  | $\begin{aligned} & .074^{* * *} \\ & (.0003) \end{aligned}$ | $\begin{aligned} & .074^{* * *} \\ & (.0003) \end{aligned}$ |  | $\begin{gathered} -.065^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.065^{* * *} \\ (.002) \end{gathered}$ |
| Age squared |  | $\begin{gathered} .0003^{* * *} \\ (.00001) \end{gathered}$ | $\begin{gathered} .0003^{* * *} \\ (.00001) \end{gathered}$ |  | $\begin{aligned} & -.001^{* * *} \\ & (.000003) \end{aligned}$ | $\begin{aligned} & -.001^{* * *} \\ & (.000003) \end{aligned}$ |  | $\begin{aligned} & .0005^{* *} \\ & (.00002) \end{aligned}$ | $\begin{aligned} & .0005^{* * *} \\ & (.00002) \end{aligned}$ |
| Black |  | $\begin{aligned} & .104^{* * *} \\ & (.006) \end{aligned}$ | $\begin{gathered} .104^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} -.141^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.141^{* * *} \\ (.002) \end{gathered}$ |  | $\begin{aligned} & .595^{* * *} \\ & (.014) \end{aligned}$ | $\begin{aligned} & .595^{* * *} \\ & (.014) \end{aligned}$ |
| Am. Indian / Alaska Native |  | -.052*** |  |  | -.221*** |  |  |  |  |
|  |  | (.016) | (.016) |  | (.007) | (.007) |  | (.034) | (.034) |
| Asian or Pacific Islander |  | $-.100^{* * *}$ | $-.100^{* * *}$ |  | -.042*** | $-.042^{* * *}$ |  |  |  |
|  |  | (.006) | (.006) |  | (.003) | (.003) |  | (.017) | (.017) |
| Other Race |  | $\begin{gathered} -.079^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.079^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} -.074^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.074^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .244^{* * *} \\ & (.018) \end{aligned}$ | $\begin{aligned} & .244^{* * *} \\ & (.018) \end{aligned}$ |
| Hispanic or Latinx |  | -.096*** | $-.096^{* * *}$ |  | -.058*** | -.058*** |  | .297*** | .297*** |
|  |  | (.006) | (.006) |  | (.003) | (.003) |  | (.015) | (.015) |
| Highschool |  | $\begin{aligned} & .384^{* * *} \\ & (.006) \end{aligned}$ | $\begin{aligned} & .384^{* * *} \\ & (.006) \end{aligned}$ |  | $\begin{aligned} & .223^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .223^{* * *} \\ & (.003) \end{aligned}$ |  | $\underset{(.014)}{-.578^{* * *}}$ | $\begin{gathered} -.578^{* * *} \\ (.014) \end{gathered}$ |
| Some College |  | $\begin{aligned} & .572^{* * *} \\ & (.006) \end{aligned}$ | $\begin{aligned} & .572^{* * *} \\ & (.006) \end{aligned}$ |  | $\begin{aligned} & .365^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .365^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.774^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -.774^{* * *} \\ (.014) \end{gathered}$ |
| Associates Degree |  | . $719^{* * *}$ | . $719^{* * *}$ |  |  |  |  | $-1.091^{* *}$ | $-1.091^{* * *}$ |
|  |  | (.007) | (.007) |  | (.003) | (.003) |  | (.018) | (.018) |
| Bachelor's Degree |  | .971*** | . 971 *** |  | . $689^{* * *}$ | . $689^{* * *}$ |  | $-1.226^{* * *}$ | $-1.226^{* * *}$ |
|  |  | (.006) | (.006) |  | (.003) | (.003) |  | (.015) | (.015) |
| Master's Degree |  | $1.218^{* * *}$ | $1.218^{* * *}$ |  |  |  |  | $-1.463^{* * *}$ | $-1.463^{* * *}$ |
|  |  | (.007) | (.007) |  | (.003) | (.003) |  | (.019) | (.019) |
| Professional Degree |  |  | 1.551*** |  |  | 1.100*** |  |  | $-1.572^{* * *}$ |
|  |  | (.010) | (.010) |  | (.004) | (.004) |  | (.038) | (.038) |
| Doctoral Degree |  |  |  |  |  |  |  |  | $-1.658^{* * *}$ |
|  |  | (.013) | (.013) |  | (.005) | (.005) |  | (.053) | (.053) |
| Unemployment |  | $\begin{gathered} -3.688^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -3.688^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} -.503^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.503^{* * *} \\ (.003) \end{gathered}$ |  |  |  |
| Post Reform |  | $\begin{gathered} .007 \\ (.007) \end{gathered}$ | $\begin{gathered} .008 \\ (.007) \end{gathered}$ |  | $\begin{aligned} & -.002 \\ & (.003) \end{aligned}$ | $\begin{aligned} & -.002 \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.098^{* * *} \\ (.020) \end{gathered}$ | $\begin{gathered} -.096^{* * *} \\ (.020) \end{gathered}$ |
| Same Sex |  |  |  |  |  |  |  |  |  |
| HH*Reform |  |  | $-.069^{* * *}$ |  |  | . 020 ** |  |  | -. 074 |
|  |  |  | (.023) |  |  | (.010) |  |  | (.068) |
| Observations | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 |
| $\mathrm{R}^{2}$ | . 001 | . 238 | . 238 | . 00001 | . 237 | . 237 |  |  |  |
| Adjusted $\mathrm{R}^{2}$ | . 001 | . 238 | . 238 | . 000004 | . 237 | . 237 |  |  |  |
| Akaike Inf. Crit. |  |  |  |  |  |  | 553,047.900 527,404.700 527,405.600 |  |  |
| F Statistic | $\begin{gathered} 957.387^{* * *} \\ (\mathrm{df}=1 ; \\ 1548462) \end{gathered}$ | $\begin{gathered} 11,507.140^{* * *} \\ (\mathrm{df}=42 ; \\ 1548421) \\ \hline \end{gathered}$ | $\begin{gathered} 11,239.810 * * * \\ (\mathrm{df}=43 ; \\ 1548420) \\ \hline \end{gathered}$ | $\begin{gathered} 7.844^{* * *} \\ (\mathrm{df}=1 ; \\ 1548462) \end{gathered}$ | $\begin{gathered} 11,482.550^{* *} \\ (\mathrm{df}=42 ; \\ 1548421) \\ \hline \end{gathered}$ | $\begin{gathered} 11,215.630 * * * \\ (\mathrm{df}=43 ; \\ 1548420) \\ \hline \end{gathered}$ |  |  |  |
| Note: |  |  |  |  |  |  | ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$ <br> Omitted: Dummies for years and states |  |  |

Table 2
Partnered Males Aged 16 and Above in 10 States 2000-2016

|  | Dependent variable: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal Income) |  |  | $\log$ (Household Income) |  |  | Unemployment |  |  |
|  | OLS |  |  | OLS |  |  | logistic |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| (Intercept) | $\begin{gathered} 10.653^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} 8.883^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} 8.884^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} 11.246^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} 9.351^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} 9.352^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -3.178^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} \hline-1.667^{* * *} \\ (.050) \end{gathered}$ | $\begin{gathered} \hline-1.666^{* * *} \\ (.050) \end{gathered}$ |
| Same Sex HH | $\begin{gathered} -.169^{* * *} \\ (.010) \end{gathered}$ | $\begin{gathered} -.255^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.337^{* * *} \\ (.015) \end{gathered}$ | $\begin{gathered} .196^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} .114^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} .069^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} .162^{* * *} \\ (.032) \end{gathered}$ | $\begin{gathered} .297^{* * *} \\ (.032) \end{gathered}$ | $\begin{gathered} .260^{* * *} \\ (.056) \end{gathered}$ |
| Age |  | $\begin{gathered} .058^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .058^{* * *} \\ (.001) \end{gathered}$ |  | $\begin{aligned} & .066^{* * *} \\ & (.0003) \end{aligned}$ | $\begin{aligned} & .066^{* * *} \\ & (.0003) \end{aligned}$ |  | $\begin{gathered} -.048^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.048^{* * *} \\ (.002) \end{gathered}$ |
| Age squared |  | $\begin{aligned} & -.001^{* * *} \\ & (.00001) \end{aligned}$ | $\begin{aligned} & -.001^{* * *} \\ & (.00001) \end{aligned}$ |  | $\begin{aligned} & -.001^{* * *} \\ & (.000003) \end{aligned}$ | $\begin{aligned} & -.001^{* * *} \\ & (.000003) \end{aligned}$ |  | $\begin{aligned} & .0005^{* * *} \\ & (.00002) \end{aligned}$ | $\begin{aligned} & .0005^{* * *} \\ & (.00002) \end{aligned}$ |
| Black |  | $\begin{gathered} -.391^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.391^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -.115^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.115^{* * *} \\ (.002) \end{gathered}$ |  | $\begin{gathered} .727^{* * *} \\ (.013) \end{gathered}$ | $\begin{aligned} & .727^{* * *} \\ & (.013) \end{aligned}$ |
| Am. Indian / Alaska Native |  | $\begin{gathered} -.346^{* * *} \\ (.012) \end{gathered}$ | $\begin{gathered} -.346^{* * *} \\ (.012) \end{gathered}$ |  | $\begin{gathered} -.199^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.199^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} .842^{* * *} \\ (.031) \end{gathered}$ | $\begin{gathered} .842^{* * *} \\ (.031) \end{gathered}$ |
| Asian or Pacific Islander |  | $\begin{gathered} -.301^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.301^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} -.188^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.188^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .135^{* * *} \\ & (.019) \end{aligned}$ | $\begin{gathered} .135^{* * *} \\ (.019) \end{gathered}$ |
| Other Race |  | $\begin{gathered} -.150^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.150^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} -.092^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.092^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .207^{* * *} \\ (.018) \end{gathered}$ | $\begin{gathered} .207^{* * *} \\ (.018) \end{gathered}$ |
| Hispanic or Latinx |  | $\begin{gathered} -.131^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.131^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -.122^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.122^{* * *} \\ (.002) \end{gathered}$ |  | $\begin{gathered} -.053^{* * *} \\ (.015) \end{gathered}$ | $\begin{gathered} -.053^{* * *} \\ (.015) \end{gathered}$ |
| Highschool |  | $\begin{gathered} .290^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} .290^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} .213^{* * *} \\ (.002) \end{gathered}$ | $\begin{aligned} & .213^{* * *} \\ & (.002) \end{aligned}$ |  | $\begin{gathered} -.466^{* * *} \\ (.012) \end{gathered}$ | $\begin{gathered} -.466^{* * *} \\ (.012) \end{gathered}$ |
| Some College |  | $\begin{gathered} .472^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} .472^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{aligned} & .380^{* * *} \\ & (.002) \end{aligned}$ | $\begin{aligned} & .380^{* * *} \\ & (.002) \end{aligned}$ |  | $\begin{gathered} -.680^{* * *} \\ (.013) \end{gathered}$ | $\begin{gathered} -.680^{* * *} \\ (.013) \end{gathered}$ |
| Associates <br> Degree |  | $\begin{aligned} & .523^{* * *} \\ & (.005) \end{aligned}$ | $\begin{aligned} & .523^{* * *} \\ & (.005) \end{aligned}$ |  | $\begin{aligned} & .421^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .421^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.890^{* * *} \\ (.017) \end{gathered}$ | $\begin{gathered} -.890^{* * *} \\ (.017) \end{gathered}$ |
| Bachelor's <br> Degree |  | $\begin{gathered} .861^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} .861^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{aligned} & .704^{* * *} \\ & (.002) \end{aligned}$ | $\begin{aligned} & .704^{* * *} \\ & (.002) \end{aligned}$ |  | $\begin{gathered} -1.159^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -1.160^{* * *} \\ (.014) \end{gathered}$ |
| Master's Degree |  | $\begin{gathered} 1.027^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} 1.026^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} .828^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} .828^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} -1.263^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} -1.263^{* * *} \\ (.019) \end{gathered}$ |
| Professional Degree |  | $\begin{gathered} 1.451^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} 1.451^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} 1.183^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 1.183^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -1.970^{* * *} \\ (.037) \end{gathered}$ | $\begin{gathered} -1.970^{* * *} \\ (.037) \end{gathered}$ |
| Doctoral Degree |  | $\begin{gathered} 1.165^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} 1.164^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{aligned} & .938^{* * *} \\ & (.004) \end{aligned}$ | $\begin{gathered} .938^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -1.674^{* * *} \\ (.042) \end{gathered}$ | $\begin{gathered} -1.674^{* * *} \\ (.042) \end{gathered}$ |
| Unemployment |  | $\begin{gathered} -2.327^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -2.327^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} -.609^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.609^{* * *} \\ (.003) \end{gathered}$ |  |  |  |
| Post Reform |  | $\begin{gathered} .017^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} .016^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{aligned} & -.0001 \\ & (.003) \end{aligned}$ | $\begin{aligned} & -.001 \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.010 \\ (.020) \end{gathered}$ | $\begin{aligned} & -.011 \\ & (.020) \end{aligned}$ |
| Same Sex HH*Reform |  |  | . $128^{* * *}$ |  |  | . $071^{* * *}$ |  |  | . 056 |
|  |  |  | (.019) |  |  | (.011) |  |  | (.068) |
| Observations | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 |
| $\mathrm{R}^{2}$ | . 0002 | . 208 | . 208 | . 001 | . 240 | . 240 |  |  |  |
| Adjusted $\mathrm{R}^{2}$ <br> Akaike Inf. Crit. | . 0002 | . 208 | . 208 | . 001 | . 240 | . 240 | 620,961.800 | 594,698.500 | 594,699.800 |
| F Statistic | $\begin{gathered} 284.523^{* * *} \\ (\mathrm{df}=1 ; \\ 1845670) \end{gathered}$ | $\begin{gathered} 11,518.870^{* *} \\ (\mathrm{df}=42 ; \\ 1845629) \end{gathered}$ | $\begin{gathered} 11,252.390^{* *} \\ (\mathrm{df}=43 ; \\ 1845628) \end{gathered}$ | $\begin{gathered} 1,097.858^{* *} \\ (\mathrm{df}=1 \\ 1845670) \end{gathered}$ | $\begin{gathered} 13,857.870^{*} \\ (\mathrm{df}=42 ; \\ 1845629) \end{gathered}$ | $\begin{array}{r} 13,536.910^{*} \\ (\mathrm{df}=43 ; \\ 1845628) \end{array}$ |  |  |  |

Note:
Table 3

| FEMALE |  | PERSONAL TOTAL INCOME |  |  | HOUSEHOLD INCOME |  |  | UNEMPLOYMENT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STATES | Reform Year | Pre-Reform | Post Reform | Overall | Pre-Reform | Post Reform | Overall | Pre-Reform | Post Reform | Overall |
| MARYLAND | 2001 | $34.5 * * *$ | -13.9** | 26.0*** | -11.0*** | 2.0 | -9.6*** | 1.037 | 0.977 | 1.017 |
| NEW YORK | 2002 | 36.3*** | -2.4 | 34.0*** | -8.9*** | 4.5** | -5.9*** | 1.137 | 0.837 | 1.002 |
| NEW MEXICO | 2003 | 59.5*** | -18.6 | 37.2*** | -10.5** | 2 | -8.7*** | 0.566 | 2.201* | 1.045 |
| ILLINOIS | 2005 | 33.1*** | -7.2 | 27.0*** | -8.5*** | -4.2* | -11.0*** | 1.264*** | 0.956 | 1.228*** |
| MAINE | 2005 | 22.3** | 7.7 | 28.4*** | -7.7** | 2.3 | -6.5*** | 0.979 | 1.231 | 1.113 |
| WASHINGTON | 2006 | 49.5*** | -11.3* | 39.4*** | -9.0*** | 1.2 | -8.3*** | 1.107 | 0.828 | 0.998 |
| COLORADO | 2007 | 41.2*** | -8.9 | 34.2*** | -9.6*** | 0.7 | -3.4** | 1.030 | 0.909 | 0.973 |
| IOWA | 2007 | 27.3 *** | -5.7 | 23.6*** | -8.7 *** | -1.2 | -9.3*** | 1.025 | 0.902 | 0.977 |
| OREGON | 2007 | 39.7*** | -6.7 | 34.6*** | -10.2*** | 5.75* | -7.5*** | 0.949 | 1.150 | 1.028 |
| DELAWARE | 2009 | 51.0*** | -18.4 | 39.4*** | -7.1* | 1.1 | -6.8** | 1.411 | 0.426 | 1.041 |
| 10 STATES | ---- | 38.3*** | -6.7*** | 32.2*** | -9.5*** | 2.0** | -8.4*** | 1.108* | . 926 | 1.057* |
| *p<0.1; **p<0.05; ***p<0.01 |  |  |  |  |  |  |  |  |  |  |
| MALE |  | PERSONAL TOTAL INCOME |  |  | HOUSEHOLD INCOME |  |  | UNEMPLOYMENT |  |  |
| STATES | Reform Year | Pre-Reform | Post Reform | Overall | Pre-Reform | Post Reform | Overall | Pre-Reform | Post Reform | Overall |
| MARYLAND | 2001 | -22.9*** | -2.3 | -24.1*** | 9.5*** | -5.8* | 4.7*** | 2.192*** | 0.840 | 1.197*** |
| NEW YORK | 2002 | -25.8*** | 16.4*** | -17.0*** | 14.8*** | 6.8*** | 20.6*** | $1.341^{* * *}$ | 1.029 | 1.370*** |
| NEW MEXICO | 2003 | -36.7*** | 31.1** | -23.4*** | -9.6 | 22.3*** | 4.2 | 1.551 | 0.694 | 1.229 |
| ILLINOIS | 2005 | -31.4*** | 13.4*** | -25.8*** | 7.5*** | 3.0 | 9.5*** | 1.305*** | 0.907 | 1.222*** |
| MAINE | 2005 | -32.3*** | 39.0*** | -18.6*** | . 9 | 13.5** | 8.3*** | 1.003 | 1.009 | 1.008 |
| WASHINGTON | 2006 | -31.5*** | 10.4** | -27.9*** | 5.4*** | 6.8** | 5.4*** | 1.177 | 1.221 | 1.313*** |
| COLORADO | 2007 | -28.8 *** | 6.2 | -26.3*** | 0.7 | 10.6*** | -9.6*** | 1.443** | 0.884 | 1.350** |
| IOWA | 2007 | -22.1*** | -23.3*** | -29.1*** | -3.53 | -19.7*** | -4.2 | 0.898 | 2.246* | 1.303 |
| OREGON | 2007 | $-28.2^{* * *}$ | 11.2 | -24.2*** | 5.1* | 5.5 | 8.0*** | 1.105 | 1.140 | 1.191 |
| DELAWARE | 2009 | -23.6*** | 15.7 | -19.0** | 8.5** | 4.6 | 10.5*** | 1.224 | 1.452 | 1.458* |
| 10 STATES | ---- | -28.6*** | 13.7*** | -22.5*** | 7.1 *** | 7.4*** | 12.1*** | 1.2697*** | 1.058 | 1.346*** |
| Personal Total Income and Household Income are reported above as percentages. Unemployment is reported as odds. Pre-Reform denotes an initial premium or penalty, while Post Reform is to be interpreted in sum with Post Reform. For example: Pre-Reform of 34.5 and Post Reform of -13.9 signify that $13.9 \%$ of an initial $34.5 \%$ premium was lost.${ }^{*} \mathrm{p}<0.1 ; * * \mathrm{p}<0.05 ; * *$ |  |  |  |  |  |  |  |  |  |  |

Personal Total Income and Household Income are reported above as percentages. Unemployment is reported as odds. $\quad{ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ; * * * \mathrm{p}<0.01$ Pre-Reform denotes an initial premium or penalty, while Post Reform is to be interpreted in sum with Post Reform. For example: Pre-Reform of 34.5 and Post Reform of -13.9 signify that $13.9 \%$ of an initial $34.5 \%$ premium was lost.
Income and Unemployment Before and After Reform By State (2000-2016)

## DISCUSSION

The findings of this study are consistent with prior research indicating that lesbian women experience an earnings premium while gay men experience a penalty. We find similar but smaller differences with unemployment. Furthermore, we hope to add to the discourse by shedding light on the interaction between protective legislation and these socioeconomic indicators, namely that antidiscrimination laws appear to be strongly correlated with a shrinking earnings gap. We contend that this illuminates the importance of equality not just in the eyes of society but also equality in the eyes of the law. Most generally, our findings include a number of puzzles; namely, why do homosexual women not face the same discrimination that homosexual men do, and why do homosexual women seem to be hurt by anti-discrimination laws?

First, the results of this study replicate others in that lesbian women experience an earnings premium while gay men experience an earnings penalty. Using 2000-2016 ACS data from ten states, we measure a lesbian earnings premium of 32.2 percent for personal total income, and a male penalty of 21.4 percent. There is also quite a substantial difference between states (Table 3). Compared to heterosexual households, the household income of gays is 12.1 percent greater, while for lesbians it is 8.4 percent lower. Household income results differ from personal income results by sexual orientation due to the pay gap between men and women.

We also find that those living in same-sex households have greater odds of being unemployed. Gay men face unemployment at odds 34.6 percent greater than heterosexual men, while lesbian women have odds that are 5.7 percent greater than heterosexual women. These findings are significant at the 1 percent level and 10 percent level, respectively.

Second, these findings show that the existence of legislative protections for sexual minorities is positively correlated to increased personal incomes for gay men and decreased personal incomes for lesbian women. We measure gay males to recover 12.1 percent of their earnings, while lesbian females lose 6.7 percent of their premium. The findings also show that household income for gay men
increases by 6.4 percent given reform, while lesbian women recover 2.0 percent of their household income penalty.

The correlation between reform and decreased rates of unemployment for lesbians and gays does not seem to be statistically significant, but it is of the same trend-odds of unemployment may be moving closer to levels of a comparable person in a heterosexual household.

While the results cannot be said to be isolated from other economic and social factors, they are large and significant. Taking what we understand to be a history of wage penalties for gay males and wage premiums for lesbian women, protective reforms are positively correlated with closing the lesbian and gay household income gap.

So, arises the question, why do protections for sexual-minorities seem to help gay men but hurt the personal income of lesbian women? This question is not a new one. Researchers have long used a human capital theory to explain the lesbian earnings premium-that is to say, because women are less likely to have children and less likely to work part time compared to full time, they are able to earn more (Badgett 2001; Badgett 1995). But Baumle and Poston (2011) found that even when controlling for these factors, the earnings premium persists. Baumle (2009) suggests that it is possible that employers perceive lesbians to have a greater labor force attainment than heterosexual women, but to us this seems inadequate in explain for the findings of such a large premium. Furthermore, there does not seem to be an obvious reason that legislative protection would reduce this falseperception effect. Like Carpenter and Eppink (2017), we are reluctant to accept that improving attitudes toward LGBT is the main cause of the diminishing gay male earnings gap. Most central to this claim of ours is that increasing attitudes towards LGBT does not seem to be in line with decreasing personal earnings for lesbian women. This finding in particular suggests that there is more to the socioeconomic progress of American sexual minorities than increased acceptance.

Thus, arises a second question of which we are also unable to answer: why does the lesbian earnings premium start to erode given protective legislation? In particular, we might look to the
emergence of legal protections and the emergence of equality in the eyes of the law. Carpenter and Eppink (2017) point to increasing access to same-sex marriage as plausibly affecting gay men more than lesbians. This claim is backed up by the finding that before same-sex marriage was legalized, lesbians were more likely to be in same-sex partnerships and formalized partnerships than gay men (Carpenter and Gates 2008). Just as they suggest marriage may have been more beneficial to gay men than lesbian women, it is plausible that anti-discrimination laws may benefit one gender of sexual minorities more than another. We can call this the "greater policy impact for gay men" hypothesis.

To us, the most plausible cause for females and males to experience anti-discrimination laws differently, is that females and males experience discrimination differently. There is some evidence in the literature to support this theory. Madden and Kyei (2013) propose a "greater bias against gay men" hypothesis, in which stronger biases against gay men than against lesbians account for all or some of the gender differential in the gay pay gap. If that were to be the case, then the decline in bias should have stronger effects on the gay pay gap than the lesbian gap. This effect differential is apparent in our findings as well. Still though, this theory does not readily explain the decline in lesbian pay.

Perhaps these legal protections lead to lesbian women feeling comfortable disclosing their identity to an employer when they were not comfortable before. If this were the case, by "coming out" in the workplace, lesbian women could be exposing themselves to pay discrimination that they did not face before. There is some data to support this theory. Badgett (2001) found that gays and lesbians were more likely to disclose their sexual orientation in the workplace when an employer had a non-discrimination policy in place. This suggests that individuals are more likely to disclose sexual orientation in environments where they feel protected. Thus, Baumle and Poston (2011) argue that those living in states without an anti-discrimination law could choose to avoid disclosing their sexual orientation and thereby avoid discrimination in the workplace. The decrease in lesbian pay following reform could feasibly be an effect of this dynamic. That being said, the evidence is yet to be
sufficiently convincing. This paradoxical relationship does convince us, however, that sexual orientation discrimination is a complex and at times nonintuitive subject matter.

Most generally, this study presents numerous puzzles to social scientists. We find that lesbian women earn a substantial premium compared to heterosexual women and that protective legislation reduces their relative earnings. The theory of improving attitudes towards LGBT is incapable of explaining numerous recent findings including these, and while a theory of a greater policy impact for gay men seems more plausible, it remains unproven.

It is important to consider a progressive understanding of gender norms in conjunction with attitudes towards LGBT. Tilcsik (2011) illustrated how conceptions of masculinity come into play with regards to hiring discrimination. It seems that if gender norms play a part in patterns of gay male discrimination, they are likely to play a part for lesbian females as well. This is further explored in the theory of unmeasured gender-linked characteristics (Madden and Kyei 2013; Klawitter and Flatt 1998; Black et al. 2003). This underscores the importance in considering gays and lesbians as separate populations in research, and also illustrates the need for more intersectional research. Not only do homosexual men and women experience opposite wage effects connected to their sexuality, but lesbian women experience the intersection of gender and sexuality in their labor market outcomes. More intersectional work would be valuable to the literature, but of course that requires new theoretical developments and more refineddata.

This study's findings may also be indicative of the kind of discrimination lesbian and gay people face, and the kind of discrimination successfully counteracted by legislative protections. Further research should be conducted on the various kinds of discrimination at play for gay and lesbian people. An audit study similar to that of Drydakis (2009) would be illuminating if conducted in the U.S. Tilcsik (2011) conducted the first major U.S. audit study of hiring discrimination for sexual-minorities, but its test sample was exclusively men.

## CONCLUSIONS

The study aims to contribute to two discourses within the literature of queer socioeconomics: 1) the effects of legislative protections for sexual minorities, and 2) the nature of the lesbian earnings premium. Overall, it seems as though anti-discrimination laws are reducing discrepancies in homosexual earnings, but we cannot clearly identify the reasons. Furthermore, we've learned a little bit more about the paradox(es) of the lesbian earnings gap.

Looking back to Tilcsik (2011) we can say that this study adds to the discourse by analyzing multiple regions with respect to the same measure of outcome. His study was one of the few that did that, by sending resumes of "straight" or "gay" applicants to employers in seven geographically dispersed states. Similarly, this study is one of the few studies which looks at differences across states and time. In all of these states, what we are measuring is income and unemployment, as garnered from a federally conducted survey. In this sense, we are able to get away from issues that might arise given cross-study differences. Furthermore, this study looks simply at income and unemployment over a period of time where the one variable is the presence of a protective law. Tilcsik underlines the importance of a multistate study (2011, p. 615).

That being said, the discrimination measure is not discrete-that is to say the measured impact of discrimination likely includes additional factors beyond the scope of employment. It is also worth emphasizing his point that discrimination in the hiring process is distinct and particularly hard to detect and prove in relation to discrimination occurring within the workplace. This point further extends to the idea that laws may have differing effects in reducing differing kinds of discrimination.

In conducting a study such as this one, there is a clear need for better data. The current method of determining sexual minorities in the census is fraught with problems. Adding the ability to directly determine one's sexual orientation and gender identity would surely clear up the arena of socioeconomic theories of sexual and gender minorities. ${ }^{7}$ Additionally, centralized resources like

[^5]UCLA's Williams Institute and the Movement Advancement Project create greater access to research. There does not seem to exist a public database for statewide or countywide attitudinal changes towards LGBT people, although the data does seem to be out there from centers like Pew and Gallup While better data should be available (from the census, for example), more data would not necessarily reveal the entire picture which embodies the complex relationship between laws, attitudes and discrimination. Tilscik raises the example that even if anti-discrimination laws had no direct effect on discrimination (i.e. in job applications), they may reduce discrimination by improving public opinion of LGBT people. That being said, there is likely a causal effect in the opposite direction: more tolerant views towards LGBT leads to more legislative protection for LGBT people. We would like to isolate these attitudes from discrimination and recommend that a future study take this into consideration.

Further studies like this one could incorporate attitudes of LGBT rights to further the analysis of the LGBT attitudes hypothesis. Additionally, there are many more indicators in many different geographies which can be examined. More than just income and unemployment, we can look at patterns of occupational segregation by gender and sexual orientation, location choices by sexual minorities, family patterns, or other broad economic indicators like access to healthcare, rent and housing prices, or even eviction rates. In addition to there being more indicators to look at, there are more levels to which we can look, as protective policies exist for people working in the federal government, certain counties and cities, as well as many large private employers. Especially ripe for study, one could examine how these indicators differ for people living in same-sex households in protective states versus nonprotective states. Finally, as said before, sexual orientation discrimination should be considered in respect to its intersections with gender and gender identity as well as race.

## REFERENCES

Adam, Barry D. 1981. "Stigma and Employability: Discrimination by Sex and Sexual Orientation in the Ontario Legal Profession." The Canadian Review of Sociology and Anthropology18(2):216 (https://search.proquest.com/docview/1295987759).

Arrow, Kenneth J. 1973. The Theory of Discrimination. Princeton, N.J: Princeton University Press (http://catalog.hathitrust.org/Record/010690782).

Badgett, M. V. L. 1995. "The Wage Effects of Sexual Orientation Discrimination." Industrial and Labor Relations Review 48(4):726-739 (https://www.jstor.org/stable/2524353). doi: 10.1177/001979399504800408.
------. 2001. Money, Myths, and Change. Chicago: University of Chicago Press.
Badgett, M. V. L., Brad Sears, Holning Lau and Deborah Ho. 2009. "Bias in the Workplace: Consistent Evidence of Sexual Orientation and Gender Identity Discrimination 1998-2008." Chicago-Kent Law Review 84(2):559.

Baumle, Amanda K., and Dudley L. Poston. 2011. "The Economic Cost of Homosexuality: Multilevel Analyses." Social Forces 89(3):1005-1031 (https://www.jstor.org/stable/41290098). doi: 10.1093/sf/89.3.1005.

Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable than Lakisha and Jamal: A Field Experiment on Labor Market Discrimination." The American Economic Review 94(4):991-1013 (http://gateway.proquest.com/openurl?url_ver=Z39.882004\&res_dat=xri:bsc:\&rft_dat=xri:bsc:ft:keyresource:SWEET_25). doi: 10.1257/0002828042002561.

Black, Dan A., Hoda R. Makar, Seth G. Sanders and Lowell J. Taylor. 2003. "The Earnings Effects of Sexual Orientation." Industrial and Labor Relations Review 56(3):449-469 (https://www.jstor.org/stable/3590918). doi: 10.1177/001979390305600305.

Black, Dan A., Seth G. Sanders and Lowell J. Taylor. 2007. "The Economics of Lesbian and Gay Families." The Journal of Economic Perspectives 21(2):53-70
(http://www.ingentaconnect.com/content/aea/jep/2007/00000021/00000002/art00003). doi: 10.1257/jep.21.2.53.
Carpenter, Christopher. 2007. "Revisiting the Income Penalty for Behaviorally Gay Men: Evidence from NHANES III." Labour Economics 14(1):25-34 (https://www.sciencedirect.com/science/article/pii/S0927537105000400). doi: 10.1016/j.labeco.2005.06.001.

Carpenter, Christopher, and Samuel Eppink. 2017. "Does it Get Better? Recent Estimates of Sexual Orientation and Earnings in the United States." Southern Economic Journal 84(2):426-441 (https://onlinelibrary.wiley.com/doi/abs/10.1002/soej.12233). doi: 10.1002/soej.12233.

Carpenter, Christopher, and Gary J. Gates. 2008. "Gay and Lesbian Partnership: Evidence from California." Demography 45(3):573-590 (https://www.jstor.org/stable/25475991). doi: 10.1353/dem.0.0014.

Clarke, Geoffrey, and Purvi Sevak. 2013. "The Disappearing Gay Income Penalty." Economics Letters 121(3):542-545 (http://www.sciencedirect.com/science/article/pii/S0165176513004655). doi: //doi.org/10.1016/j.econlet.2013.10.018.

Dicklitch, Susan, Scottie Thompson and Berwood Yost. 2016. Human Rights and the Global Barometer of Gay Rights (GBGR): A Multi-Year Analysis.

Drydakis, Nick. 2009. "Sexual Orientation Discrimination in the Labour Market." Labour Economics 16(4):364-372 (https://www.sciencedirect.com/science/article/pii/S0927537108001322). doi: 10.1016/j.labeco.2008.12.003.

Ellis, Greg F. 2018. "Ipumsr".
File, Thom. 2016. Measuring Same-Sex Couples, Sexual Orientation, and Gender Identity on Census Bureau and Federal Surveys: Webinar for the National LGBTQ Task Force.

Gates, Gary J., Steinberger, Michael D. "Same-Sex Unmarried Partner Couples in the American Community Survey: The Role of Misreporting, Miscoding and Misallocation." (May 2010), http://economicsfiles.pomona.edu/steinberger/research/Gates_Steinberger_ACS_Miscode_May2010.pdf.

Fox, John, and Sanford Weisberg. 2011. "An $\{R\}$ Companion to Applied Regression, Second Edition.".
Hasenbush, Amira, Andrew R. Flores, Angeliki Kastanis, Brad Sears and Gary J. Gates. 2014. The LGBT Divide: A Data Portrait of LGBT People in the Midwestern, Mountain \& Southern States.Williams Institute.

Hlavac, Marek. 2018. "Stargazer: Well-Formatted Regression and Summary Statistics Tables. R Package Version 5.2.1.".

Jencks, Christopher. 1992. Rethinking Social Policy.Cambridge, Mass. [u.a.]: Harvard Univ. Pr.
Jepsen, Christopher, and Lisa Jepsen. 2017. "Self-Employment, Earnings, and Sexual Orientation." Review of Economics of the Household 15(1):287-305 (https://search.proquest.com/docview/1871919681). doi: 10.1007/s11150-016-9351-z.

Jepsen, Lisa K. 2007. "Comparing the Earnings of Cohabiting Lesbians, Cohabiting Heterosexual Women, and Married Women: Evidence from the 2000 Census." Industrial Relations: A Journal of Economy and Society 46(4):699-727 (https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-232X.2007.00493.x). doi: 10.1111/j.1468232X.2007.00493.x.

Klawitter, Marieka. 1998. "The Determinants of Earnings for Women in Same-Sex and Different-Sex Couples.".
------. 2011. "Multilevel Analysis of the Effects of Antidiscrimination Policies on Earnings by Sexual Orientation." Journal of Policy Analysis and Management 30(2):334-358 (http://www.jstor.org/stable/23018986). doi: 10.1002/pam. 20563.
------. 2015. "Meta-Analysis of the Effects of Sexual Orientation on Earnings." Industrial Relations: A Journal of Economy and Society 54(1):4-32 (https://onlinelibrary.wiley.com/doi/abs/10.1111/irel.12075). doi: 10.1111/irel. 12075.

Klawitter, Marieka, and Victor Flatt. 1998. "The Effects of State and Local Antidiscrimination Policies on Earnings for Gays and Lesbians." Journal of Policy Analysis and Management17(4):658-686 (https://www.jstor.org/stable/3325718). doi: AID-PAM4>3.0.CO;2-P.

Kreider, Rose M., Nancy Bates and Yeriís Mayol-Garcia. 2017. Improving Measurement of Same-Sex Couple Households in Census Bureau Surveys: Results from Recent Tests.

Madden, Janice, and Pearl Kyei. 2013. "Gender Differences in the Gay Pay Gap: Unmeasured Gender-Linked Characteristics, Household Division of Labor, or Greater Bias against Gay Men\ ".

Movement Advancement Project. 2018. "Identity Document Laws and Policies MAP's Equality Maps: survey the landscape of laws affecting LGBT Americans.". (http://www.lgbtmap.org/equality-maps/identity_document_laws).

O'Connell, Martin, Daphne Lofquist, Tavia Simmons and Terry Lugaila. 2008. Changes to the American Community Survey between 2007 and 2008 and their Potential Effect on the Estimates of Same-Sex Couple Households.

Pager, Devah, Bruce Western and Bart Bonikowski. 2009. "Discrimination in a Low-Wage Labor Market." American Sociological Review 74(5):777-799 (http://www.fachportalpaedagogik.de/fis_bildung/suche/fis_set.html?FId=882676). doi: 10.1177/000312240907400505.

Petersen, Trond, and Ishak Saporta. 2004. "The Opportunity Structure for Discrimination." The American Journal of Sociology 109(4):852.

Pew Research Center. 2017a. Pew Research Center Analysis of 2007 and 2017 Current Population Survey, Annual Social and Economic Supplement.
------. 2017b. Support for Same-Sex Marriage Grows, Even Among Groups That Had Been Skeptical.
Ruggles, Steven, Katie Genadek, Ronald Goeken, Josiah Grover and Matthew Sobek. 2017. "Integrated Public use Microdata Series: Version 7.0 [Dataset].".

Simmons, Tavia, and Martin O'Connell. 2003. Married-Couple and Unmarried-Partner Households: 2000 : Census 2000 Special Reports; Washington, DC: .

Smith, Tom W. 2011. Public attitudes toward homosexuality, report of the national opinion research council.
Smith, Tom W., Michael Davern, Jeremy Freese and Michael Hout. 2016. General Social Surveys.Chicago: NORC, 2018: NORC at the University of Chicago.

Tilcsik, András. 2011a. "Pride and Prejudice: Employment Discrimination Against Openly Gay Men in the United States." AJS; American Journal of Sociology 117(2):586 (http://www.ncbi.nlm.nih.gov/pubmed/22268247).
------. 2011b. "Pride and Prejudice: Employment Discrimination Against Openly Gay Men in the United States." AJS; American Journal of Sociology 117(2):586 (http://www.ncbi.nlm.nih.gov/pubmed/22268247).
U.S. Census Bureau. "Census Bureau: ACS Data Definitions - Household Type and Relationships.". (http://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/4291881/FID1867/acs_html/html/meth_doc/datad ef/hhld_rel.htm).
------. 2014. "Same-Sex Married Couples Edit Change in 2013 ACS PUMS Files.". (https://www.census.gov/programs-surveys/acs/technical-documentation/user-notes/2013-10.html).

Weichselbaumer, Doris. 2003. "Sexual Orientation Discrimination in Hiring." Labour Economics 10(6):629-642 (https://www.sciencedirect.com/science/article/pii/S0927537103000745). doi: 10.1016/S0927-5371(03)00074-5.

## APPENDIX

Table A1: Dataset descriptions.

| DATASET | SAMPLING RATIO |
| :---: | :---: |
| 2000 5\% ${ }^{1}$ | 5.00\% |
| 2001 ACS | 0.43\% |
| 2002 ACS | 0.38\% |
| 2003 ACS | 0.42\% |
| 2004 ACS | 0.42\% |
| 2005 ACS | 1.00\% |
| 2006 ACS | 1.00\% |
| 2007 ACS | 1.00\% |
| 2008 ACS | 1.00\% |
| 2009 ACS | 1.00\% |
| 2010 ACS | 1.00\% |
| 2011 ACS | 1.00\% |
| 2012 ACS | 1.00\% |
| 2013 ACS | 1.00\% |
| 2014 ACS | 1.00\% |
| 2015 ACS | 1.00\% |
| 2016 ACS | 1.00\% |

Table A2: Total same-sex couples in sample vs census in $2010 .{ }^{8} \% \Delta=\frac{\text { sample-census }}{\text { census }}$
Sample $=($ Total same-sex households $) \cdot 100$

| STATE | SAMPLE | CENSUS | \% $\Delta$ |
| :--- | ---: | ---: | ---: |
| MARYLAND | 12,400 | 12,538 | $-1.1 \%$ |
| NEW YORK | 47,600 | 48,932 | $-2.7 \%$ |
| NEW MEXICO | 6,200 | 5,825 | $6.4 \%$ |
| ILLINOIS | 22,900 | 23,049 | $-0.6 \%$ |
| MAINE | 4,400 | 3,958 | $11.2 \%$ |
| WASHINGTON | 17,100 | 19,003 | $-10.0 \%$ |
| COLORADO | 12,300 | 12,424 | $-1.0 \%$ |
| IOWA | 4,200 | 4,093 | $2.6 \%$ |
| OREGON | 10,100 | 11,773 | $-14.2 \%$ |
| DELAWARE | 3,100 | 2,645 | $17.2 \%$ |

[^6]Table A3: Test for robustness - New Mexico and Colorado with Colorado "faked."

Testing the Reform Variable -- NM and CO (2000-2007)

|  | Dependent variable: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal INCOME) OLS |  | $\log$ (HH INCOME) OLS |  | Unemployment logistic |  |
|  | NM <br> (1) | CO <br> (2) | NM <br> (3) | CO <br> (4) | $\begin{gathered} \text { NM } \\ (5) \end{gathered}$ | CO <br> (6) |
| (Intercept) | $\begin{gathered} \hline 6.125^{* * *} \\ (0.076) \end{gathered}$ | $\begin{gathered} \hline 6.491^{* * *} \\ (0.043) \end{gathered}$ | $\begin{gathered} 10.507^{* * *} \\ (0.032) \end{gathered}$ | $\begin{gathered} 10.760^{* * *} \\ (0.020) \end{gathered}$ | $\begin{gathered} 0.146 \\ (0.143) \end{gathered}$ | $\begin{gathered} 0.325^{* * *} \\ (0.098) \end{gathered}$ |
| Same Sex HH | $\begin{gathered} -0.294 * * \\ (0.133) \end{gathered}$ | $\begin{gathered} -0.405^{* * *} \\ (0.071) \end{gathered}$ | $\begin{gathered} -0.178^{* * *} \\ (0.056) \end{gathered}$ | $\begin{gathered} -0.084^{* * *} \\ (0.032) \end{gathered}$ | $\begin{gathered} 0.237 \\ (0.263) \end{gathered}$ | $\begin{aligned} & 0.370^{* *} \\ & (0.182) \end{aligned}$ |
| Sex (female) | $\begin{gathered} -0.801^{* * *} \\ (0.021) \end{gathered}$ | $\begin{gathered} -0.752^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.044^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.040^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.069 \\ (0.044) \end{gathered}$ | $\begin{gathered} 0.112 * * * \\ (0.034) \end{gathered}$ |
| Age | $\begin{gathered} 0.151^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} 0.139^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.005^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} 0.010^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} -0.100^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.112^{* * *} \\ (0.005) \end{gathered}$ |
| Age squared | $\begin{aligned} & -0.001^{* * *} \\ & (0.00004) \end{aligned}$ | $\begin{aligned} & -0.001^{* * *} \\ & (0.00002) \end{aligned}$ | $\begin{gathered} -0.00002 \\ (0.00002) \end{gathered}$ | $\begin{gathered} -0.0001^{* * *} \\ (0.00001) \end{gathered}$ | $\begin{aligned} & 0.001^{* * *} \\ & (0.0001) \end{aligned}$ | $\begin{aligned} & 0.001^{* * *} \\ & (0.0001) \end{aligned}$ |
| Black | $\begin{gathered} -0.114 \\ (0.072) \end{gathered}$ | $\begin{gathered} -0.105^{* * *} \\ (0.030) \end{gathered}$ | $\begin{gathered} -0.166^{* * *} \\ (0.030) \end{gathered}$ | $\begin{gathered} -0.160^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.454^{* * *} \\ (0.146) \end{gathered}$ | $\begin{gathered} 0.783^{* * *} \\ (0.064) \end{gathered}$ |
| Am. Indian / Alaska Native | $-0.315^{* * *}$ | $-0.173^{* * *}$ | $-0.232^{* * *}$ | $-0.195^{* * *}$ | $0.900^{* * *}$ | $0.613^{* * *}$ |
| Asian or Pacific Islander | -0.118 | $-0.109^{* * *}$ | 0.035 | -0.087*** | 0.083 |  |
|  | (0.072) | (0.029) | (0.030) | (0.013) | (0.181) | (0.076) |
| Other Race | $\begin{gathered} -0.002 \\ (0.024) \end{gathered}$ | $\begin{aligned} & -0.035^{*} \\ & (0.020) \end{aligned}$ | $\begin{gathered} -0.032^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -0.045 * * * \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.173^{* * *} \\ (0.049) \end{gathered}$ | $\begin{gathered} 0.213^{* * *} \\ (0.048) \end{gathered}$ |
| Hispanic or Latinx | $\begin{gathered} -0.009 \\ (0.021) \end{gathered}$ | $\begin{gathered} -0.112^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.140^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.219^{* * *} \\ (0.007) \end{gathered}$ | $\begin{aligned} & 0.100^{* *} \\ & (0.046) \end{aligned}$ | $\begin{gathered} 0.170 * * * \\ (0.040) \end{gathered}$ |
| Highschool | $\begin{gathered} 0.572^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.676 * * * \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.196^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.051^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.549^{* * *} \\ (0.046) \end{gathered}$ | $\begin{gathered} -0.428^{* * *} \\ (0.037) \end{gathered}$ |
| Some College | $\begin{gathered} 0.770 * * * \\ (0.027) \end{gathered}$ | $\begin{gathered} 0.862^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.310^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.158^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.909^{* * *} \\ (0.052) \end{gathered}$ | $\begin{gathered} -0.713^{* * *} \\ (0.041) \end{gathered}$ |
| Associates Degree | $\begin{gathered} 0.948^{* * *} \\ (0.038) \end{gathered}$ | $\begin{gathered} 0.926 * * * \\ (0.022) \end{gathered}$ | $\begin{gathered} 0.398 * * * \\ (0.016) \end{gathered}$ | $\begin{gathered} 0.197^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -1.034^{* * *} \\ (0.090) \end{gathered}$ | $\begin{gathered} -0.772^{* * *} \\ (0.060) \end{gathered}$ |
| Bachelor's Degree | $\begin{gathered} 1.111^{* * *} \\ (0.031) \end{gathered}$ | $\begin{aligned} & 1.2022^{* * *} \\ & (0.018) \end{aligned}$ | $\begin{gathered} 0.555^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.396^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -1.202^{* * *} \\ (0.076) \end{gathered}$ | $\begin{gathered} -1.028^{* * *} \\ (0.047) \end{gathered}$ |
| Master's Degree | $\begin{gathered} 1.334^{* * *} \\ (0.038) \end{gathered}$ | $\begin{gathered} 1.368^{* * *} \\ (0.021) \end{gathered}$ | $\begin{gathered} 0.721^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} 0.526^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -1.480^{* * *} \\ (0.121) \end{gathered}$ | $\begin{gathered} -1.008^{* * *} \\ (0.066) \end{gathered}$ |
| Professional Degree | $\begin{gathered} 1.658^{* * *} \\ (0.064) \end{gathered}$ | $\begin{aligned} & 1.668^{* * *} \\ & (0.032) \end{aligned}$ | $\begin{gathered} 1.002^{* * *} \\ (0.027) \end{gathered}$ | $\begin{gathered} 0.776^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -1.332^{* * *} \\ (0.215) \end{gathered}$ | $\begin{gathered} -1.758^{* * *} \\ (0.163) \end{gathered}$ |
| Doctoral Degree | $\begin{gathered} 1.605^{* * *} \\ (0.065) \end{gathered}$ | $\begin{aligned} & 1.566^{* * *} \\ & (0.041) \end{aligned}$ | $\begin{gathered} 0.937^{* * *} \\ (0.027) \end{gathered}$ | $\begin{gathered} 0.684^{* * *} \\ (0.019) \end{gathered}$ | $\begin{gathered} -1.462^{* * *} \\ (0.242) \end{gathered}$ | $\begin{gathered} -1.266^{* * *} \\ (0.172) \end{gathered}$ |

Table A3 (continued)

| Unemployment | $\begin{gathered} -2.760^{\pi \approx \pi} \\ (0.035) \end{gathered}$ | $\begin{gathered} -2.609^{\pi \approx \pi} \\ (0.022) \end{gathered}$ | $\begin{gathered} -0.327^{\pi \approx \pi} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.273^{\pi \pi \pi} \\ (0.010) \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Post Reform | $\begin{gathered} -0.019 \\ (0.046) \end{gathered}$ | $\begin{gathered} 0.034 \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.155^{* * *} \\ (0.020) \end{gathered}$ | $\begin{gathered} 0.116^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.352^{* * *} \\ (0.108) \end{gathered}$ | $\begin{gathered} -0.374^{* * *} \\ (0.068) \end{gathered}$ |
| 2000 | $\begin{gathered} -0.385^{* * *} \\ (0.038) \end{gathered}$ | $\begin{gathered} -0.256^{* * *} \\ (0.022) \end{gathered}$ | $\begin{gathered} -0.136^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.116^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -0.034 \\ (0.084) \end{gathered}$ | $\begin{gathered} -0.752^{* * *} \\ (0.056) \end{gathered}$ |
| 2001 | $\begin{gathered} -0.134^{* * *} \\ (0.050) \end{gathered}$ | $\begin{gathered} -0.004 \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.080^{* * *} \\ (0.021) \end{gathered}$ | $\begin{gathered} -0.044^{* * *} \\ (0.014) \end{gathered}$ | $\begin{aligned} & -0.149 \\ & (0.114) \end{aligned}$ | $\begin{gathered} -0.394^{* * *} \\ (0.081) \end{gathered}$ |
| 2002 | $\begin{gathered} 0.013 \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.014 \\ (0.022) \end{gathered}$ | $\begin{aligned} & -0.015 \\ & (0.014) \end{aligned}$ | $\begin{gathered} 0.069 \\ (0.115) \end{gathered}$ | $\begin{aligned} & -0.100 \\ & (0.077) \end{aligned}$ |
|  |  |  |  |  |  |  |
| 2004 | $\begin{aligned} & -0.083^{*} \\ & (0.044) \end{aligned}$ | $\begin{gathered} -0.085^{* * *} \\ (0.025) \end{gathered}$ | $\begin{gathered} -0.133^{* * *} \\ (0.019) \end{gathered}$ | $\begin{gathered} -0.090^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.435^{* * *} \\ (0.098) \end{gathered}$ | $\begin{gathered} 0.284^{* * *} \\ (0.065) \end{gathered}$ |
| 2005 | $\begin{aligned} & -0.058 \\ & (0.035) \end{aligned}$ | $\begin{gathered} -0.125^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.099^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.091^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} 0.239^{* * *} \\ (0.084) \end{gathered}$ | $\begin{gathered} 0.185^{* * *} \\ (0.050) \end{gathered}$ |
| 2006 | $\begin{gathered} -0.021 \\ (0.035) \end{gathered}$ | $\begin{gathered} -0.054^{* * *} \\ (0.018) \end{gathered}$ | $\begin{aligned} & -0.027^{*} \\ & (0.015) \end{aligned}$ | $\begin{gathered} -0.040^{* * *} \\ (0.008) \end{gathered}$ | $\begin{aligned} & 0.170^{* *} \\ & (0.085) \end{aligned}$ | $\begin{aligned} & -0.003 \\ & (0.052) \end{aligned}$ |
| 2007 |  |  |  |  |  |  |
| Same Sex <br> HH*Female |  |  | 0.027 | -0.037 | -0.406 | -0.328 |
|  | (0.183) | (0.098) | (0.077) | (0.044) | (0.395) | (0.277) |
| Same Sex HH*Reform | 0.176 | $0.227^{* *}$ | $0.218^{* *}$ | $0.135^{* * *}$ | -0.041 | -0.360 |
|  | (0.205) | (0.111) | (0.087) | (0.050) | (0.442) | (0.311) |
| Female*Reform | $\begin{gathered} 0.224^{* * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} 0.092^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.002 \\ (0.014) \end{gathered}$ | $\begin{gathered} -0.019^{* *} \\ (0.008) \end{gathered}$ | $\begin{gathered} 0.201^{* * *} \\ (0.076) \end{gathered}$ | $\begin{gathered} 0.032 \\ (0.052) \end{gathered}$ |
| Same Sex <br> HH*Reform*Female |  |  | -0.217* | -0.098 | 0.173 | 0.342 |
|  | (0.280) | (0.155) | (0.118) | (0.070) | (0.638) | (0.437) |
| Observations | 59,116 | 161,367 | 59,116 | 161,367 | 59,116 | 161,367 |
| $\mathrm{R}^{2}$ | 0.268 | 0.252 | 0.148 | 0.107 |  |  |
| Adjusted R ${ }^{2}$ | 0.268 | 0.252 | 0.147 | 0.107 | 24,628.100 51,894.960 |  |
| Akaike Inf. Crit. |  |  |  |  |  |  |
| F Statistic | $\begin{aligned} & 773.745^{* * *}\left(\text { df } 1,943.547^{* * *}\left(\text { df } 3 6 5 . 5 7 4 ^ { * * * } \left(\text { df } 690.203^{* * *}(\text { df }\right.\right.\right. \\ & =28 ; 59087)=28 ; 161338)=28 ; 59087)=28 ; 161338) \end{aligned}$ |  |  |  |  |  |
| Note: |  |  |  |  | ; ** $\mathrm{p}<0.05$ | ${ }^{* * *} \mathrm{p}<0.01$ |

Table A4: Test for robustness - Maryland and Delaware with Delaware "faked."

Testing the Reform Variable -- MD and DE (2000-2009)

|  | Dependent variable: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal INCOME) OLS |  | $\log$ (HH INCOME) OLS |  | Unemployment logistic |  |
|  | MD <br> (1) | DE <br> (2) | MD <br> (3) | DE <br> (4) | MD <br> (5) | DE <br> (6) |
| (Intercept) | $\begin{gathered} 6.347^{* * *} \\ (0.033) \end{gathered}$ | $\begin{gathered} 6.420^{* * *} \\ (0.066) \end{gathered}$ | $\begin{gathered} 10.997^{* * *} \\ (0.014) \end{gathered}$ | $\begin{gathered} 10.834^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} -0.207^{* *} \\ (0.090) \end{gathered}$ | $\begin{gathered} -0.360^{* *} \\ (0.174) \end{gathered}$ |
| Same Sex HH | $\begin{gathered} -0.168^{* *} \\ (0.066) \end{gathered}$ | $\begin{aligned} & -0.208 \\ & (0.149) \end{aligned}$ | $\begin{gathered} 0.039 \\ (0.029) \end{gathered}$ | $\begin{aligned} & 0.117^{*} \\ & (0.065) \end{aligned}$ | $\begin{gathered} 0.554^{* * *} \\ (0.186) \end{gathered}$ | $\begin{gathered} 0.163 \\ (0.523) \end{gathered}$ |
| Sex (female) | $\begin{gathered} -0.613^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -0.618^{* * *} \\ (0.023) \end{gathered}$ | $\begin{gathered} 0.031^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.036^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} 0.088^{* *} \\ (0.035) \end{gathered}$ | $\begin{gathered} 0.040 \\ (0.084) \end{gathered}$ |
| Age | $\begin{gathered} 0.146^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} 0.144^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.001^{* *} \\ (0.001) \end{gathered}$ | $\begin{gathered} 0.005^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} -0.107^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.110^{* * *} \\ (0.008) \end{gathered}$ |
| Age squared | $\begin{aligned} & -0.001^{* * *} \\ & (0.00002) \end{aligned}$ | $\begin{aligned} & -0.001^{* * *} \\ & (0.00003) \end{aligned}$ | $\begin{gathered} 0.00004^{* * *} \\ (0.00001) \end{gathered}$ | $\begin{gathered} -0.00005^{* * *} \\ (0.00002) \end{gathered}$ | $\begin{aligned} & 0.001^{* * *} \\ & (0.00005) \end{aligned}$ | $\begin{aligned} & 0.001^{* * *} \\ & (0.0001) \end{aligned}$ |
| Black | $\begin{gathered} -0.102^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.201^{* * *} \\ (0.022) \end{gathered}$ | $\begin{gathered} -0.107^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.179^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} 0.805^{* * *} \\ (0.024) \end{gathered}$ | $\begin{gathered} 0.722^{* * *} \\ (0.059) \end{gathered}$ |
| Am. Indian / Alaska Native | $\begin{aligned} & -0.118^{*} \\ & (0.062) \end{aligned}$ | $\begin{gathered} -0.320^{* * *} \\ (0.118) \end{gathered}$ | $\begin{aligned} & -0.038 \\ & (0.027) \end{aligned}$ | $\begin{gathered} -0.417^{* * *} \\ (0.052) \end{gathered}$ | $\begin{gathered} 0.568^{* * *} \\ (0.162) \end{gathered}$ | $\begin{gathered} 0.104 \\ (0.368) \end{gathered}$ |
| Asian or Pacific Islander | $\begin{gathered} -0.314^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.247^{* * *} \\ (0.044) \end{gathered}$ | $\begin{gathered} -0.129^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.134^{* * *} \\ (0.019) \end{gathered}$ | $\begin{gathered} 0.381^{* * *} \\ (0.050) \end{gathered}$ | $\begin{gathered} 0.492^{* * *} \\ (0.141) \end{gathered}$ |
| Other Race | $\begin{gathered} -0.076^{* * *} \\ (0.021) \end{gathered}$ | $\begin{gathered} -0.106^{* *} \\ (0.051) \end{gathered}$ | $\begin{gathered} -0.071^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.150^{* * *} \\ (0.022) \end{gathered}$ | $\begin{gathered} 0.292^{* * *} \\ (0.058) \end{gathered}$ | $\begin{aligned} & 0.241^{*} \\ & (0.139) \end{aligned}$ |
| Hispanic or Latinx | $\begin{gathered} -0.124^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.095^{* *} \\ (0.043) \end{gathered}$ | $\begin{gathered} -0.110^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.207^{* * *} \\ (0.019) \end{gathered}$ | $\begin{aligned} & 0.097^{*} \\ & (0.051) \end{aligned}$ | $\begin{gathered} 0.046 \\ (0.117) \end{gathered}$ |
| Highschool | $\begin{gathered} 0.597^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.606^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.083^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.121^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} -0.488^{* * *} \\ (0.030) \end{gathered}$ | $\begin{gathered} -0.382^{* * *} \\ (0.066) \end{gathered}$ |
| Some College | $\begin{gathered} 0.806^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.748^{* * *} \\ (0.027) \end{gathered}$ | $\begin{gathered} 0.243^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.240^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.898^{* * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} -0.727^{* * *} \\ (0.075) \end{gathered}$ |
| Associates Degree | $\begin{gathered} 0.907 * * * \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.878^{* * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} 0.287^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} 0.325^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -1.090^{* * *} \\ (0.057) \end{gathered}$ | $\begin{gathered} -0.964^{* * *} \\ (0.118) \end{gathered}$ |
| Bachelor's Degree | $\begin{gathered} 1.181^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} 1.150^{* * *} \\ (0.028) \end{gathered}$ | $\begin{gathered} 0.486^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.491^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -1.193^{* * *} \\ (0.039) \end{gathered}$ | $\begin{gathered} -1.121^{* * *} \\ (0.091) \end{gathered}$ |
| Master's Degree | $\begin{gathered} 1.347^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} 1.289^{* * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} 0.614^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.625^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -1.320^{* * *} \\ (0.054) \end{gathered}$ | $\begin{gathered} -1.334^{* * *} \\ (0.136) \end{gathered}$ |
| Professional Degree | $\begin{gathered} 1.702^{* * *} \\ (0.020) \end{gathered}$ | $\begin{gathered} 1.619^{* * *} \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.908^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.889^{* * *} \\ (0.023) \end{gathered}$ | $\begin{gathered} -1.520^{* * *} \\ (0.093) \end{gathered}$ | $\begin{gathered} -1.360^{* * *} \\ (0.246) \end{gathered}$ |
| Doctoral Degree | $\begin{gathered} 1.488^{* * *} \\ (0.023) \end{gathered}$ | $\begin{gathered} 1.534^{* * *} \\ (0.059) \end{gathered}$ | $\begin{gathered} 0.709^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} 0.840^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} -1.482^{* * *} \\ (0.110) \end{gathered}$ | $\begin{gathered} -1.548^{* * *} \\ (0.299) \end{gathered}$ |

Table A4 (continued)

| Unemployment | $\begin{gathered} -3.200^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} -2.553^{* * *} \\ (0.035) \end{gathered}$ | $\begin{gathered} -0.339^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.303^{* * *} \\ (0.015) \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Post Reform | $\begin{gathered} 0.119^{* * *} \\ (0.021) \end{gathered}$ | $\begin{aligned} & 0.072^{*} \\ & (0.039) \end{aligned}$ | $\begin{gathered} 0.275 * * * \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.196^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.635^{* * *} \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.828^{* * *} \\ (0.121) \end{gathered}$ |
| 2000 | $\begin{gathered} -0.200^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.186^{* * *} \\ (0.028) \end{gathered}$ | $\begin{gathered} -0.041^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.075^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.198^{* * *} \\ (0.060) \end{gathered}$ | $\begin{aligned} & -0.179^{*} \\ & (0.099) \end{aligned}$ |
| 2001 |  |  |  |  |  |  |
| 2002 | $\begin{gathered} -0.148^{* * *} \\ (0.021) \end{gathered}$ | $\begin{aligned} & -0.035 \\ & (0.036) \end{aligned}$ | $\begin{gathered} -0.249^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.144^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.344^{* * *} \\ (0.061) \end{gathered}$ | $\begin{gathered} -0.493^{* * *} \\ (0.104) \end{gathered}$ |
| 2003 | $\begin{gathered} -0.153^{* * *} \\ (0.020) \end{gathered}$ | $\begin{aligned} & -0.059^{*} \\ & (0.036) \end{aligned}$ | $\begin{gathered} -0.207^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.113^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.303^{* * *} \\ (0.057) \end{gathered}$ | $\begin{gathered} -0.396^{* * *} \\ (0.101) \end{gathered}$ |
| 2004 | $\begin{gathered} -0.143^{* * *} \\ (0.020) \end{gathered}$ | $\begin{aligned} & -0.070^{*} \\ & (0.036) \end{aligned}$ | $\begin{gathered} -0.181^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.122^{* * *} \\ (0.016) \end{gathered}$ | $\begin{gathered} -0.414^{* * *} \\ (0.060) \end{gathered}$ | $\begin{gathered} -0.365^{* * *} \\ (0.101) \end{gathered}$ |
| 2005 | $\begin{gathered} -0.082^{* * *} \\ (0.015) \end{gathered}$ | $\begin{aligned} & -0.056 \\ & (0.038) \end{aligned}$ | $\begin{gathered} -0.119^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.089^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} -0.505^{* * *} \\ (0.046) \end{gathered}$ | $\begin{gathered} -0.550^{* * *} \\ (0.113) \end{gathered}$ |
| 2006 | $\begin{gathered} -0.050^{* * *} \\ (0.015) \end{gathered}$ | $\begin{aligned} & -0.006 \\ & (0.038) \end{aligned}$ | $\begin{gathered} -0.083^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.053^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} -0.569^{* * *} \\ (0.047) \end{gathered}$ | $\begin{gathered} -0.555^{* * *} \\ (0.114) \end{gathered}$ |
| 2007 | $\begin{aligned} & -0.014 \\ & (0.015) \end{aligned}$ | $\begin{aligned} & -0.033 \\ & (0.038) \end{aligned}$ | $\begin{gathered} -0.019^{* * *} \\ (0.007) \end{gathered}$ | $\begin{aligned} & -0.027^{*} \\ & (0.017) \end{aligned}$ | $\begin{gathered} -0.460^{* * *} \\ (0.045) \end{gathered}$ | $\begin{gathered} -0.605^{* * *} \\ (0.114) \end{gathered}$ |
| 2008 | $\begin{aligned} & -0.010 \\ & (0.015) \end{aligned}$ | $\begin{gathered} 0.023 \\ (0.038) \end{gathered}$ | $\begin{aligned} & -0.008 \\ & (0.007) \end{aligned}$ | $\begin{gathered} 0.013 \\ (0.017) \end{gathered}$ | $\begin{gathered} -0.565^{* * *} \\ (0.046) \end{gathered}$ | $\begin{gathered} -0.412^{* * *} \\ (0.109) \end{gathered}$ |
| 2009 |  |  |  |  |  |  |
| Same Sex HH*Female | $\begin{gathered} 0.374^{* * *} \\ (0.091) \end{gathered}$ | $\begin{gathered} 0.706^{* * *} \\ (0.217) \end{gathered}$ | $\begin{gathered} -0.179^{* * *} \\ (0.039) \end{gathered}$ | $\begin{aligned} & -0.209^{* *} \\ & (0.095) \end{aligned}$ | $\begin{gathered} -0.617^{* *} \\ (0.294) \end{gathered}$ | $\begin{gathered} 0.326 \\ (0.706) \end{gathered}$ |
| Same Sex HH*Reform | -0.031 | -0.024 | -0.001 | -0.065 | -0.081 | -0.274 |
|  | (0.088) | (0.182) | (0.038) | (0.080) | (0.245) | (0.653) |
| Female*Reform | $\begin{gathered} 0.067^{* * *} \\ (0.013) \end{gathered}$ | $\begin{aligned} & 0.048^{*} \\ & (0.029) \end{aligned}$ | $\begin{gathered} -0.014^{* *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.038^{* * *} \\ (0.013) \end{gathered}$ | $\begin{aligned} & -0.073^{*} \\ & (0.044) \end{aligned}$ | $\begin{aligned} & -0.124 \\ & (0.102) \end{aligned}$ |
| Same Sex <br> HH*Reform*Female | 0.107 | -0.177 | 0.039 | 0.080 | 0.157 | 0.048 |
|  | (0.121) | (0.268) | (0.052) | (0.118) | (0.379) | (0.888) |
| Observations | 239,793 | 43,963 | 239,793 | 43,963 | 239,793 | 43,963 |
| $\mathrm{R}^{2}$ | 0.317 | 0.300 | 0.166 | 0.157 |  |  |
| Adjusted R ${ }^{2}$ | 0.317 | 0.300 | 0.166 | 0.156 |  |  |
| Akaike Inf. Crit. |  |  |  |  | 73,853.770 | 15,229.260 |
| F Statistic | $\begin{aligned} & 3,717.771 * * * \\ & (\mathrm{df}=30 \\ & 239762) \end{aligned}$ | $\begin{gathered} 628.775^{* * *} \\ (\mathrm{df}=30 \\ 43932) \end{gathered}$ | $\begin{aligned} & 1,591.896^{* * *} \\ & (\mathrm{df}=30 \\ & 239762) \end{aligned}$ | $\begin{gathered} 272.098^{* * *}(\mathrm{df} \\ =30 ; 43932) \end{gathered}$ |  |  |

Note:

Table A5: Expanded female regression including state and year dummies.
Partnered Females Aged 16 and Above in 10 States 2000-2016

|  | Dependent variable: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal Income) OLS |  |  | $\log$ (Household Income) OLS |  |  | Unemployment |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| (Intercept) | $\begin{gathered} 9.960^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 8.518^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} \hline 8.517^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} 11.270^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} 9.241^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} 9.241^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -3.093^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} \hline .620^{* * *} \\ (.052) \end{gathered}$ | $\begin{gathered} \hline .620^{* * *} \\ (.052) \end{gathered}$ |
| Same Sex HH | $\begin{gathered} .386^{* * *} \\ (.012) \end{gathered}$ | $\begin{gathered} .279^{* * *} \\ (.011) \end{gathered}$ | $\begin{aligned} & .324^{* * *} \\ & (.018) \end{aligned}$ | $\begin{gathered} -.015^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.088^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.100^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} .013 \\ (.032) \end{gathered}$ | $\begin{gathered} .055^{*} \\ (.033) \end{gathered}$ | $\begin{aligned} & .103^{*} \\ & (.055) \end{aligned}$ |
| Age |  | $\begin{gathered} .040^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .040^{* * *} \\ (.001) \end{gathered}$ |  | $\begin{aligned} & .074^{* * *} \\ & (.0003) \end{aligned}$ | $\begin{aligned} & .074^{* * *} \\ & (.0003) \end{aligned}$ |  | $\begin{gathered} -.065^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.065^{* * *} \\ (.002) \end{gathered}$ |
| Age squared |  | $\begin{gathered} -.0003^{* * *} \\ (.00001) \end{gathered}$ | $\begin{gathered} -.0003^{* * *} \\ (.00001) \end{gathered}$ |  | $\begin{aligned} & -.001^{* * *} \\ & (0.00000) \end{aligned}$ | $\begin{gathered} -.001^{* * *} \\ (0.00000) \end{gathered}$ |  | $\begin{aligned} & .0005^{* * *} \\ & (.00002) \end{aligned}$ | $\begin{aligned} & .0005^{* * *} \\ & (.00002) \end{aligned}$ |
| Black |  | $\begin{gathered} .104^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} .104^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} -.141^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} -.141^{* * *} \\ (.002) \end{gathered}$ |  | $\begin{gathered} .595^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} .595^{* * *} \\ (.014) \end{gathered}$ |
| Am. Indian / Alaska Native |  | $\begin{gathered} -.052^{* * *} \\ (.016) \end{gathered}$ | $\begin{gathered} -.052^{* * *} \\ (.016) \end{gathered}$ |  | $\begin{gathered} -.221^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.220^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{aligned} & .670^{* * *} \\ & (.034) \end{aligned}$ | $\begin{aligned} & .670^{* * *} \\ & (.034) \end{aligned}$ |
| Asian or Pacific Islander |  | $\begin{gathered} -.100^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} -.100^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} -.042^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.042^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .305^{* * *} \\ & (.017) \end{aligned}$ | $\begin{aligned} & .305^{* * *} \\ & (.017) \end{aligned}$ |
| Other Race |  | $\begin{gathered} -.079^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.079^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} -.074^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.074^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .244^{* * *} \\ (.018) \end{gathered}$ | $\begin{gathered} .244^{* * *} \\ (.018) \end{gathered}$ |
| Hispanic or Latinx |  | $\begin{gathered} -.096^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} -.096^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} -.058^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.058^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .297^{* * *} \\ & (.015) \end{aligned}$ | $\begin{aligned} & .297^{* * *} \\ & (.015) \end{aligned}$ |
| Highschool |  | $\begin{aligned} & .384^{* * *} \\ & (.006) \end{aligned}$ | $\begin{aligned} & .384^{* * *} \\ & (.006) \end{aligned}$ |  | $\begin{aligned} & .223^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .223^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.578^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -.578^{* * *} \\ (.014) \end{gathered}$ |
| Some College |  | $\begin{gathered} .572^{* * *} \\ (.006) \end{gathered}$ | $\begin{aligned} & .572^{* * *} \\ & (.006) \end{aligned}$ |  | $\begin{aligned} & .365^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .365^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.774^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -.774^{* * *} \\ (.014) \end{gathered}$ |
| Associates Degree |  | $\begin{aligned} & .719^{* * *} \\ & (.007) \end{aligned}$ | $\begin{aligned} & .719^{* * *} \\ & (.007) \end{aligned}$ |  | $\begin{aligned} & .447^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .447^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -1.091^{* * *} \\ (.018) \end{gathered}$ | $\begin{gathered} -1.091^{* * *} \\ (.018) \end{gathered}$ |
| Bachelor's Degree |  | $\begin{aligned} & .971^{* * *} \\ & (.006) \end{aligned}$ | $\begin{aligned} & .971^{* * *} \\ & (.006) \end{aligned}$ |  | $\begin{aligned} & .689^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .689^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -1.226^{* * *} \\ (.015) \end{gathered}$ | $\begin{gathered} -1.226^{* * *} \\ (.015) \end{gathered}$ |
| Master's <br> Degree |  | $\begin{gathered} 1.218^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} 1.218^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{aligned} & .821^{* * *} \\ & (.003) \end{aligned}$ | $\begin{aligned} & .821^{* * *} \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -1.463^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} -1.463^{* * *} \\ (.019) \end{gathered}$ |
| Professional Degree |  | $\begin{gathered} 1.551^{* * *} \\ (.010) \end{gathered}$ | $\begin{gathered} 1.551^{* * *} \\ (.010) \end{gathered}$ |  | $\begin{gathered} 1.100^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 1.100^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -1.572^{* * *} \\ (.038) \end{gathered}$ | $\begin{gathered} -1.572^{* * *} \\ (.038) \end{gathered}$ |
| Doctoral <br> Degree |  | $\begin{gathered} 1.477^{* * *} \\ (.013) \end{gathered}$ | $\begin{gathered} 1.477^{* * *} \\ (.013) \end{gathered}$ |  | $\begin{gathered} 1.014^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} 1.014^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} -1.658^{* * *} \\ (.053) \end{gathered}$ | $\begin{gathered} -1.658^{* * *} \\ (.053) \end{gathered}$ |
| Unemployment |  | $\begin{gathered} -3.688^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -3.688^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} -.503^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.503^{* * *} \\ (.003) \end{gathered}$ |  |  |  |
| Post Reform |  | $\begin{gathered} .007 \\ (.007) \end{gathered}$ | $\begin{gathered} .008 \\ (.007) \end{gathered}$ |  | $\begin{aligned} & -.002 \\ & (.003) \end{aligned}$ | $\begin{aligned} & -.002 \\ & (.003) \end{aligned}$ |  | $\begin{gathered} -.098^{* * *} \\ (.020) \end{gathered}$ | $\begin{gathered} -.096^{* * *} \\ (.020) \end{gathered}$ |
| 2000 |  | $\begin{gathered} -.534^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.534^{* * *} \\ (.009) \end{gathered}$ |  | $\begin{gathered} -.342^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.342^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -.183^{* * *} \\ (.029) \end{gathered}$ | $\begin{gathered} -.183^{* * *} \\ (.029) \end{gathered}$ |
| 2001 |  | $\begin{gathered} -.267^{* * *} \\ (.012) \end{gathered}$ | $\begin{gathered} -.267^{* * *} \\ (.012) \end{gathered}$ |  | $\begin{gathered} -.280^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.280^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{aligned} & -.023 \\ & (.040) \end{aligned}$ | $\begin{aligned} & -.023 \\ & (.040) \end{aligned}$ |
| 2002 |  | $\begin{gathered} -.224^{* * *} \\ (.012) \end{gathered}$ | $\begin{gathered} -.225^{* * *} \\ (.012) \end{gathered}$ |  | $\begin{gathered} -.264^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.264^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} .254^{* * *} \\ (.038) \end{gathered}$ | $\begin{aligned} & .254^{* * *} \\ & (.038) \end{aligned}$ |
| 2003 |  | $\begin{gathered} -.219^{* * *} \\ (.011) \end{gathered}$ | $\begin{gathered} -.219^{* * *} \\ (.011) \end{gathered}$ |  | $\begin{gathered} -.250^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.250^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} .263^{* * *} \\ (.035) \end{gathered}$ | $\begin{gathered} .262^{* * *} \\ (.035) \end{gathered}$ |
| 2004 |  | $\begin{gathered} -.213^{* * *} \\ (.011) \end{gathered}$ | $\begin{gathered} -.213^{* * *} \\ (.011) \end{gathered}$ |  | $\begin{gathered} -.225^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.225^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} .278^{* * *} \\ (.035) \end{gathered}$ | $\begin{gathered} .277^{* * *} \\ (.035) \end{gathered}$ |

Table A5 (continued)

| 2005 |  | $\begin{gathered} -.206^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.207^{* * *} \\ (.009) \end{gathered}$ |  | $\begin{gathered} -.223^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.223^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} .197^{* * *} \\ (.029) \end{gathered}$ | $\begin{gathered} .197^{* * *} \\ (.029) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 |  | $\begin{gathered} -.177^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.177^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.186^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.186^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} .114^{* * *} \\ (.027) \end{gathered}$ | $\begin{gathered} .114^{* * *} \\ (.027) \end{gathered}$ |
| 2007 |  | $\begin{gathered} -.144^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.144^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.147^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.147^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .054^{* *} \\ & (.027) \end{aligned}$ | $\begin{aligned} & .054^{* *} \\ & (.027) \end{aligned}$ |
| 2008 |  | $\begin{gathered} -.118^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.118^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.119^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.119^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .003 \\ (.027) \end{gathered}$ | $\begin{gathered} .003 \\ (.027) \end{gathered}$ |
| 2009 |  | $\begin{gathered} -.080^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.080^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.119^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.119^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .525^{* * *} \\ & (.025) \end{aligned}$ | $\begin{aligned} & .525^{* * *} \\ & (.025) \end{aligned}$ |
| 2010 |  | $\begin{gathered} -.083^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.083^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.141^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.141^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .663^{* * *} \\ (.024) \end{gathered}$ | $\begin{gathered} .663^{* * *} \\ (.024) \end{gathered}$ |
| 2011 |  | $\begin{gathered} -.100^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.100^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.142^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.142^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{aligned} & .654^{* * *} \\ & (.024) \end{aligned}$ | $\begin{gathered} .654^{* * *} \\ (.024) \end{gathered}$ |
| 2012 |  | $\begin{gathered} -.101^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.101^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.118^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.118^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .543^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} .543^{* * *} \\ (.025) \end{gathered}$ |
| 2013 |  | $\begin{gathered} -.081^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.081^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.088^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.088^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .430^{* * *} \\ (.025) \end{gathered}$ | $\begin{aligned} & .429^{* * *} \\ & (.025) \end{aligned}$ |
| 2014 |  | $\begin{gathered} -.073^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.073^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.070^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.070^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .246^{* * *} \\ (.026) \end{gathered}$ | $\begin{gathered} .246^{* * *} \\ (.026) \end{gathered}$ |
| 2015 |  | $\begin{gathered} -.045^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.045^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} -.034^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.034^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .093^{* * *} \\ (.027) \end{gathered}$ | $\begin{gathered} .093^{* * *} \\ (.027) \end{gathered}$ |
| 2016 |  |  |  |  |  |  |  |  |  |
| Colorado |  | $\begin{gathered} -.033^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} -.033^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} -.009^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.009^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} -.156^{* * *} \\ (.018) \end{gathered}$ | $\begin{gathered} -.156^{* * *} \\ (.018) \end{gathered}$ |
| Illinois |  | $\begin{gathered} .114^{* * *} \\ (.011) \end{gathered}$ | $\begin{gathered} .114^{* * *} \\ (.011) \end{gathered}$ |  | $\begin{gathered} .057^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} .057^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} -.225^{* * *} \\ (.034) \end{gathered}$ | $\begin{gathered} -.225^{* * *} \\ (.034) \end{gathered}$ |
| Iowa |  | $\begin{gathered} -.018^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.018^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} .010^{* * *} \\ (.002) \end{gathered}$ | $\begin{aligned} & .010^{* * *} \\ & (.002) \end{aligned}$ |  | $\begin{gathered} -.029^{* *} \\ (.014) \end{gathered}$ | $\begin{gathered} -.029^{* *} \\ (.014) \end{gathered}$ |
| Maine |  | $\begin{gathered} -.085^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.085^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} -.153^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.153^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} -.538^{* * *} \\ (.023) \end{gathered}$ | $\begin{gathered} -.538^{* * *} \\ (.023) \end{gathered}$ |
| Maryland |  | $\begin{gathered} -.117^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.117^{* * *} \\ (.009) \end{gathered}$ |  | $\begin{gathered} -.209^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.209^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -.150^{* * *} \\ (.029) \end{gathered}$ | $\begin{gathered} -.150^{* * *} \\ (.029) \end{gathered}$ |
| New Mexico |  | $\begin{gathered} .157^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} .157^{* * *} \\ (.006) \end{gathered}$ |  | $\begin{gathered} .176^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} .176^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} -.286^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} -.286^{* * *} \\ (.019) \end{gathered}$ |
| New York |  | $\begin{gathered} -.140^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.140^{* * *} \\ (.009) \end{gathered}$ |  | $\begin{gathered} -.157^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.157^{* * *} \\ (.004) \end{gathered}$ |  | $\begin{gathered} -.128^{* * *} \\ (.026) \end{gathered}$ | $\begin{gathered} -.128^{* * *} \\ (.026) \end{gathered}$ |
| Oregon |  | $\begin{gathered} .041^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} .041^{* * *} \\ (.005) \end{gathered}$ |  | $\begin{gathered} .039^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .039^{* * *} \\ (.002) \end{gathered}$ |  | $\begin{aligned} & -.020 \\ & (.014) \end{aligned}$ | $\begin{aligned} & -.020 \\ & (.014) \end{aligned}$ |
| Washington |  | $\begin{gathered} -.082^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.082^{* * *} \\ (.007) \end{gathered}$ |  | $\begin{gathered} -.116^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} -.116^{* * *} \\ (.003) \end{gathered}$ |  | $\begin{gathered} .071^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} .071^{* * *} \\ (.019) \end{gathered}$ |
| Delaware |  |  |  |  |  |  |  |  |  |
| Same Sex HH*Reform |  |  | $\begin{gathered} -.069^{* * *} \\ (.023) \end{gathered}$ |  |  | $\begin{aligned} & .020^{* *} \\ & (.010) \end{aligned}$ |  |  | $\begin{aligned} & -.074 \\ & (.068) \end{aligned}$ |
| Observations | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 | 1,548,464 |
| $\mathrm{R}^{2}$ | . 001 | . 238 | . 238 | . 00001 | . 237 | . 237 | 553,047.900 527,404.700 527,405.600 |  |  |
| Adjusted $\mathrm{R}^{2}$ Akaike Inf. Crit. | . 001 | . 238 | . 238 | 0.00000 | . 237 | . 237 |  |  |  |
| F Statistic | $\begin{gathered} 957.387^{* * *} \\ (\mathrm{df}=1 ; \\ 1548462) \end{gathered}$ | $\begin{gathered} 11,507.140^{* * *} \\ (\mathrm{df}=42 \\ 1548421) \end{gathered}$ | $\begin{aligned} & 11,239.810 * * * \\ & (\mathrm{df}=43 ; \\ & 1548420) \end{aligned}$ | $\begin{gathered} 7.844^{* * *} \\ (\mathrm{df}=1 ; \\ 1548462) \end{gathered}$ | $\begin{gathered} 11,482.550 * * * \\ (\mathrm{df}=42 ; \\ 1548421) \end{gathered}$ | $\begin{gathered} 11,215.630^{* * *} \\ (\mathrm{df}=43 \\ 1548420) \end{gathered}$ |  |  |  |

Note:

Table A6: Expanded male regression including state and year dummies.

| Partnered Males Aged 16 and Above in 10 States 2000-2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dependent variable: |  |  |  |  |  |  |  |  |
|  | $\log$ (Personal Income) OLS |  |  | $\log ($ <br> (4) | Household In OLS <br> (5) | me) (6) | (7) | nemployme logistic (8) | (9) |
| (Intercept) | $\begin{gathered} 10.653^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} \hline 8.883^{* * *} \\ (0.014) \end{gathered}$ | $\begin{gathered} 8.884^{* * *} \\ (0.014) \end{gathered}$ | $\begin{gathered} 11.246^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} \hline 9.351^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} \hline 9.352^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} \hline-3.178^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} \hline-1.667^{* * *} \\ (0.050) \end{gathered}$ | $\begin{gathered} \hline-1.666^{* * *} \\ (0.050) \end{gathered}$ |
| Same Sex HH | $\begin{gathered} -0.169^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -0.255^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.337^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} 0.196^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.114^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.069^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.162^{* * *} \\ (0.032) \end{gathered}$ | $\begin{gathered} 0.297^{* * *} \\ (0.032) \end{gathered}$ | $\begin{gathered} 0.260^{* * *} \\ (0.056) \end{gathered}$ |
| Age |  | $\begin{gathered} 0.058^{* * *} \\ (0.001) \end{gathered}$ | $\begin{gathered} 0.058^{* * *} \\ (0.001) \end{gathered}$ |  | $\begin{aligned} & 0.066^{* * *} \\ & (0.0003) \end{aligned}$ | $\begin{aligned} & 0.066^{* * *} \\ & (0.0003) \end{aligned}$ |  | $\begin{gathered} -0.048^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.048^{* * *} \\ (0.002) \end{gathered}$ |
| Age squared |  | $\begin{aligned} & -0.001^{* * *} \\ & (0.00001) \end{aligned}$ | $\begin{aligned} & -0.001^{* * *} \\ & (0.00001) \end{aligned}$ |  | $\begin{aligned} & -0.001^{* * *} \\ & (0.00000) \end{aligned}$ | $\begin{aligned} & -0.001^{* * *} \\ & (0.00000) \end{aligned}$ |  | $\begin{aligned} & 0.0005^{* * *} \\ & (0.00002) \end{aligned}$ | $\begin{aligned} & 0.0005^{* * *} \\ & (0.00002) \end{aligned}$ |
| Black |  | $\begin{gathered} -0.391^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.391^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -0.115^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.115^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{gathered} 0.727^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.727^{* * *} \\ (0.013) \end{gathered}$ |
| Am. Indian / Alaska Native |  | $\begin{gathered} -0.346^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.346^{* * *} \\ (0.012) \end{gathered}$ |  | $\begin{gathered} -0.199^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.199^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} 0.842^{* * *} \\ (0.031) \end{gathered}$ | $\begin{gathered} 0.842^{* * *} \\ (0.031) \end{gathered}$ |
| Asian or Pacific Islander |  | $\begin{gathered} -0.301^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.301^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.188^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.188^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.135^{* * *} \\ (0.019) \end{gathered}$ | $\begin{gathered} 0.135^{* * *} \\ (0.019) \end{gathered}$ |
| Other Race |  | $\begin{gathered} -0.150^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.150^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.092^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.092^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.207^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} 0.207^{* * *} \\ (0.018) \end{gathered}$ |
| Hispanic or Latinx |  | $\begin{gathered} -0.131^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.131^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -0.122^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.122^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{gathered} -0.053^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.053^{* * *} \\ (0.015) \end{gathered}$ |
| Highschool |  | $\begin{gathered} 0.290^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.290^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} 0.213^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.213^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{gathered} -0.466^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.466^{* * *} \\ (0.012) \end{gathered}$ |
| Some College |  | $\begin{gathered} 0.472^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.472^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} 0.380^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.380^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{gathered} -0.680^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} -0.680^{* * *} \\ (0.013) \end{gathered}$ |
| Associates Degree |  | $\begin{gathered} 0.523^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.523^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} 0.421^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} 0.421^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} -0.890^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} -0.890^{* * *} \\ (0.017) \end{gathered}$ |
| Bachelor's Degree |  | $\begin{gathered} 0.861^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.861^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} 0.704^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.704^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{gathered} -1.159^{* * *} \\ (0.014) \end{gathered}$ | $\begin{gathered} -1.160^{* * *} \\ (0.014) \end{gathered}$ |
| Master's Degree |  | $\begin{gathered} 1.027^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 1.026^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} 0.828^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} 0.828^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} -1.263^{* * *} \\ (0.019) \end{gathered}$ | $\begin{gathered} -1.263^{* * *} \\ (0.019) \end{gathered}$ |
| Professional Degree |  | $\begin{gathered} 1.451^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 1.451^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} 1.183^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 1.183^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -1.970^{* * *} \\ (0.037) \end{gathered}$ | $\begin{gathered} -1.970^{* * *} \\ (0.037) \end{gathered}$ |
| Doctoral Degree |  | $\begin{gathered} 1.165^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} 1.164^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} 0.938^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.938^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -1.674^{* * *} \\ (0.042) \end{gathered}$ | $\begin{gathered} -1.674^{* * *} \\ (0.042) \end{gathered}$ |
| Unemployment |  | $\begin{gathered} -2.327^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -2.327^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.609^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.609^{* * *} \\ (0.003) \end{gathered}$ |  |  |  |
| Post Reform |  | $\begin{gathered} 0.017^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.016^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{aligned} & -0.0001 \\ & (0.003) \end{aligned}$ | $\begin{aligned} & -0.001 \\ & (0.003) \end{aligned}$ |  | $\begin{aligned} & -0.010 \\ & (0.020) \end{aligned}$ | $\begin{aligned} & -0.011 \\ & (0.020) \end{aligned}$ |
| 2000 |  | $\begin{gathered} -0.333^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.333^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} -0.389^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.389^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} 0.018 \\ (0.029) \end{gathered}$ | $\begin{gathered} 0.018 \\ (0.029) \end{gathered}$ |
| 2001 |  | $\begin{gathered} -0.201^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.201^{* * *} \\ (0.009) \end{gathered}$ |  | $\begin{gathered} -0.324^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.324^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} 0.147^{* * *} \\ (0.039) \end{gathered}$ | $\begin{gathered} 0.147^{* * *} \\ (0.039) \end{gathered}$ |
| 2002 |  | $\begin{gathered} -0.169^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.169^{* * *} \\ (0.009) \end{gathered}$ |  | $\begin{gathered} -0.294^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.294^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} 0.496^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} 0.496^{* * *} \\ (0.036) \end{gathered}$ |
| 2003 |  | $\begin{gathered} -0.184^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.184^{* * *} \\ (0.008) \end{gathered}$ |  | $\begin{gathered} -0.287^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.287^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} 0.494^{* * *} \\ (0.033) \end{gathered}$ | $\begin{gathered} 0.494^{* * *} \\ (0.033) \end{gathered}$ |
| 2004 |  | $\begin{gathered} -0.177^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.177^{* * *} \\ (0.008) \end{gathered}$ |  | $\begin{gathered} -0.266^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.266^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} 0.396^{* * *} \\ (0.033) \end{gathered}$ | $\begin{gathered} 0.396^{* * *} \\ (0.033) \end{gathered}$ |

Table A6 (continued)

| 2005 |  | $\begin{gathered} -0.160^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.160^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} -0.246^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.246^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} 0.236^{* * *} \\ (0.028) \end{gathered}$ | $\begin{gathered} 0.236^{* * *} \\ (0.028) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 |  | $\begin{gathered} -0.128^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.128^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.208^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.208 * * * \\ (0.004) \end{gathered}$ |  | $\begin{aligned} & 0.051^{*} \\ & (0.027) \end{aligned}$ | $\begin{aligned} & 0.051^{*} \\ & (0.027) \end{aligned}$ |
| 2007 |  | $\begin{gathered} -0.097^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.096^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.168^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.168^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.089^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.089^{* * *} \\ (0.026) \end{gathered}$ |
| 2008 |  | $\begin{gathered} -0.088^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.087^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.140 * * * \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.140^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.053^{* *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.053^{* *} \\ (0.026) \end{gathered}$ |
| 2009 |  | $\begin{gathered} -0.059^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.059^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.128^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.128^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.750^{* * *} \\ (0.023) \end{gathered}$ | $\begin{gathered} 0.750 * * \\ (0.023) \end{gathered}$ |
| 2010 |  | $\begin{gathered} -0.122^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.122^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.152^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.152^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.892^{* * *} \\ (0.023) \end{gathered}$ | $\begin{gathered} 0.892^{* * *} \\ (0.023) \end{gathered}$ |
| 2011 |  | $\begin{gathered} -0.140 * * * \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.140 * * * \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.152^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.152^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.757^{* * *} \\ (0.023) \end{gathered}$ | $\begin{gathered} 0.757^{* * *} \\ (0.023) \end{gathered}$ |
| 2012 |  | $\begin{gathered} -0.115^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.115^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.126^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.126^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.628^{* * *} \\ (0.024) \end{gathered}$ | $\begin{gathered} 0.628^{* * *} \\ (0.024) \end{gathered}$ |
| 2013 |  | $\begin{gathered} -0.085^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.085 * * * \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.095^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.095^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.491 * * * \\ (0.024) \end{gathered}$ | $\begin{gathered} 0.491 * * * \\ (0.024) \end{gathered}$ |
| 2014 |  | $\begin{gathered} -0.073^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.073^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.075^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.075 * * \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.262^{* * *} \\ (0.025) \end{gathered}$ | $\begin{gathered} 0.262^{* * *} \\ (0.025) \end{gathered}$ |
| 2015 |  | $\begin{gathered} -0.033^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.033^{* * *} \\ (0.006) \end{gathered}$ |  | $\begin{gathered} -0.033^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.033^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.094^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.094^{* * *} \\ (0.026) \end{gathered}$ |
| 2016 |  |  |  |  |  |  |  |  |  |
| Colorado |  | $\begin{gathered} -0.048^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.048^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -0.010^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.010^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} -0.197^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.197^{* * *} \\ (0.018) \end{gathered}$ |
| Illinois |  | $\begin{gathered} 0.037^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} 0.037^{* * *} \\ (0.008) \end{gathered}$ |  | $\begin{gathered} 0.077^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.077^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.275^{* * *} \\ (0.033) \end{gathered}$ | $\begin{gathered} -0.275 * * * \\ (0.033) \end{gathered}$ |
| Iowa |  | $\begin{aligned} & 0.008^{* *} \\ & (0.004) \end{aligned}$ | $\begin{aligned} & 0.008^{* *} \\ & (0.004) \end{aligned}$ |  | $\begin{gathered} 0.033^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.033^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{aligned} & 0.026^{*} \\ & (0.014) \end{aligned}$ | $\begin{aligned} & 0.026^{*} \\ & (0.014) \end{aligned}$ |
| Maine |  | $\begin{gathered} -0.187^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.187^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.124^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.125^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} -0.506^{* * *} \\ (0.022) \end{gathered}$ | $\begin{gathered} -0.506^{* * *} \\ (0.022) \end{gathered}$ |
| Maryland |  | $\begin{gathered} -0.233^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.233^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} -0.180^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.180^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -0.084^{* * *} \\ (0.027) \end{gathered}$ | $\begin{gathered} -0.084^{* * *} \\ (0.027) \end{gathered}$ |
| New Mexico |  | $\begin{gathered} 0.115 * * * \\ (0.004) \end{gathered}$ | $\begin{gathered} 0.115^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} 0.177^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} 0.177^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} -0.439^{* * *} \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.439^{* * *} \\ (0.018) \end{gathered}$ |
| New York |  | $\begin{gathered} -0.171 * * * \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.171^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} -0.148^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.148^{* * *} \\ (0.004) \end{gathered}$ |  | $\begin{gathered} -0.095^{* * *} \\ (0.025) \end{gathered}$ | $\begin{gathered} -0.095^{* * *} \\ (0.025) \end{gathered}$ |
| Oregon |  | $\begin{gathered} -0.013^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.013^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.060^{* * *} \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.060^{* * *} \\ (0.002) \end{gathered}$ |  | $\begin{gathered} -0.031^{* *} \\ (0.013) \end{gathered}$ | $\begin{gathered} -0.031^{* *} \\ (0.013) \end{gathered}$ |
| Washington |  | $\begin{gathered} -0.148^{* * *} \\ (0.005) \end{gathered}$ | $\begin{gathered} -0.148^{* * *} \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.114^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.114^{* * *} \\ (0.003) \end{gathered}$ |  | $\begin{gathered} 0.173^{* * *} \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.173^{* * *} \\ (0.017) \end{gathered}$ |
| Delaware |  |  |  |  |  |  |  |  |  |
| Same Sex HH*Reform |  |  | $\begin{gathered} 0.128^{* * *} \\ (0.019) \end{gathered}$ |  |  | $\begin{gathered} 0.071^{* * *} \\ (0.011) \end{gathered}$ |  |  | $\begin{gathered} 0.056 \\ (0.068) \end{gathered}$ |
| Observations | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 | 1,845,672 |
| $\mathrm{R}^{2}$ | 0.0002 | 0.208 | 0.208 | 0.001 | 0.240 | 0.240 | 620,961.800 594,698.500 594,699.800 |  |  |
| Adjusted $\mathrm{R}^{2}$ | 0.0002 | 0.208 | 0.208 | 0.001 | 0.240 | 0.240 |  |  |  |
| Akaike Inf. Crit. |  |  |  |  |  |  |  |  |  |
| F Statistic | $\begin{gathered} 284.523^{* * *} \\ (\mathrm{df}=1 ; \\ 1845670) \end{gathered}$ | $11,518.870^{* * *}$ $11,252.390^{* * *}$ $1,097.858^{* * *}$ $13,857.870^{* * *}$ $13,536.910^{* * *}$ <br> $(\mathrm{df}=42 ;$ $(\mathrm{df}=43 ;$ $(\mathrm{df}=1 ;$ $(\mathrm{df}=42 ;$ $(\mathrm{df}=43 ;$ <br> $1845629)$ $1845628)$ $1845670)$ $1845629)$ $1845628)$ |  |  | $13,857.870^{* * *}$ $13,536.910^{* *}$ <br> $(\mathrm{df}=42 ;$ $(\mathrm{df}=43 ;$ <br> $1845629)$ $1845628)$ |  |  |  |  |

Note:
${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$
Table A7: Condensed Models 1 through 3 by State. Males and Females in CO 2000-2016 (Reform in 2007)

|  | $\log$ (Personal Income) OLS |  |  |  |  |  | $\log$ (Household Income) |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | $\begin{aligned} & \text { Male } \\ & \text { (11) } \end{aligned}$ | (12) | (13) | Female <br> (14) | (15) | (16) | $\begin{aligned} & \text { Male } \\ & (17) \end{aligned}$ | (18) |
| (Intercept) | $\begin{gathered} 9.948^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} 8.149^{* * *} \\ (.060) \end{gathered}$ | $\begin{gathered} \hline 8.144^{* * *} \\ (.060) \end{gathered}$ | $\begin{gathered} 10.692^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} 8.711^{* * *} \\ (.041) \end{gathered}$ | $\begin{gathered} 8.716^{* * *} \\ (.041) \end{gathered}$ | $\begin{gathered} 11.277^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 9.024^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} 9.024^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} 11.253^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 9.108^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} \hline 9.109^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} -3.167^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -1.205^{* * *} \\ (.164) \end{gathered}$ | $\begin{gathered} \hline-1.206^{* * *} \\ (.164) \end{gathered}$ | $\begin{gathered} \hline-3.366^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} \hline-2.256^{* * *} \\ (.163) \end{gathered}$ | $\begin{gathered} \hline-2.258^{* * *} \\ (.163) \end{gathered}$ |
| Same Sex <br> HH | $\begin{aligned} & .403^{* * *} \\ & (.039) \end{aligned}$ | $\begin{aligned} & .294^{* * *} \\ & (.035) \end{aligned}$ | $\begin{aligned} & .345^{* * *} \\ & (.052) \end{aligned}$ | $\begin{gathered} -.316^{* * *} \\ (.033) \end{gathered}$ | $\begin{gathered} -.305^{* * *} \\ (.030) \end{gathered}$ | $\begin{gathered} -.340^{* * *} \\ (.042) \end{gathered}$ | $\begin{gathered} -.035^{* *} \\ (.016) \end{gathered}$ | $\begin{gathered} -.105^{* *} \\ (.015) \end{gathered}$ | $\begin{gathered} -.101^{* * *} \\ (.022) \end{gathered}$ | $\begin{aligned} & .055^{* * *} \\ & (.020) \end{aligned}$ | $\begin{gathered} .058^{* * *} \\ (.018) \end{gathered}$ | $\begin{aligned} & .007 \\ & (.025) \end{aligned}$ | $\begin{aligned} & -.076 \\ & (.110) \end{aligned}$ | $\begin{aligned} & -.027 \\ & (.111) \end{aligned}$ | $\begin{aligned} & .030 \\ & (.175) \end{aligned}$ | $\begin{aligned} & .224^{*} \\ & (.118) \end{aligned}$ | $\begin{aligned} & .300^{* *} \\ & (.119) \end{aligned}$ | $\begin{aligned} & .367^{* *} \\ & (.175) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{aligned} & -.093 \\ & (.071) \end{aligned}$ |  |  | $\begin{aligned} & .072 \\ & (.060) \end{aligned}$ |  |  | $\begin{aligned} & -.007 \\ & (.029) \end{aligned}$ |  |  | $\begin{gathered} .101^{* * *} \\ (.036) \end{gathered}$ |  |  | $\begin{aligned} & -.095 \\ & (.227) \end{aligned}$ |  |  | $\begin{aligned} & -.123 \\ & (.238) \end{aligned}$ |
| Observations | 132,873 | 132,873 | 132,873 | 161,887 | 161,887 | 161,887 | 132,873 | 132,873 | 132,873 | 161,887 | 161,887 | 161,887 | 132,873 | 132,873 | 132,873 | 161,887 | 161,887 | 161,887 |
| $\mathrm{R}^{2}$ | . 001 | . 207 | . 207 | . 001 | . 178 | . 178 | . 00003 | . 204 | . 204 | . 00005 | . 215 | . 215 |  |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ Akaike Inf. Crit. | . 001 | . 207 | . 207 | . 001 | . 178 | . 178 | . 00003 | . 204 | . 204 | . 00004 | . 215 | . 215 | 44,958.160 | 43,227.91 | 43,229.74 | 47,465.000 | 45,903.68 | ,905.410 |
| F Statistic | $\begin{gathered} 105.183^{* * *} \\ (\mathrm{df}=1 ; \\ 132871) \end{gathered}$ | $\begin{aligned} & 1,086.309^{* * *} \\ & (\mathrm{df}=32 ; \\ & 132840) \end{aligned}$ | $\begin{gathered} 1,053.449^{* *} \\ (\mathrm{df}=33 ; \\ 132839) \end{gathered}$ | $\begin{gathered} \text { *92.905*** } \\ (\mathrm{df}=1 ; \\ 161885) \end{gathered}$ | $\begin{gathered} 1,097.193^{* *} \\ (\mathrm{df}=32 ; \\ 161854) \end{gathered}$ | $\begin{gathered} \text { ",063.992*** } \\ (\mathrm{df}=33 ; \\ 161853) \end{gathered}$ | $\begin{aligned} & 4.506^{* *} \\ & (\mathrm{df}=1 ; \\ & 132871) \end{aligned}$ | $\begin{aligned} & 1,064.300 * * \\ & (\mathrm{df}=32 ; \\ & 132840) \end{aligned}$ | $\begin{gathered} 1,032.043^{* * *} \\ (\mathrm{df}=33 ; \\ 132839) \end{gathered}$ | $\begin{aligned} & 7.397^{* * *} \\ & (\mathrm{df}=1 ; \\ & 161885) \end{aligned}$ | $\begin{gathered} 1,388.497^{* * *} \\ (\mathrm{df}=32 ; \\ 161854) \end{gathered}$ | $\begin{gathered} 1,346.720^{* * *} \\ (\mathrm{df}=33 ; \\ 161853) \end{gathered}$ |  |  |  |  |  |  |


|  | Dependent variable: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log \text { (Personal Income) }$OLS |  |  |  |  |  | $\log$ (Household Income) OLS |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | Male <br> (11) | (12) | (13) | Female <br> (14) | (15) | (16) | Male <br> (17) | (18) |
| (Intercept) | $\begin{gathered} 10.078^{* * *} \\ (.010) \end{gathered}$ | $\begin{gathered} 8.497^{* * *} \\ (.123) \end{gathered}$ | $\begin{gathered} 8.498^{* * *} \\ (.123) \end{gathered}$ | $\begin{gathered} 10.687^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} 8.783^{* * *} \\ (.088) \end{gathered}$ | $\begin{gathered} 8.783^{* * *} \\ (.088) \end{gathered}$ | $\begin{gathered} 11.302^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 9.210^{* * *} \\ (.053) \end{gathered}$ | $\begin{gathered} 9.210^{* * *} \\ (.053) \end{gathered}$ | $\begin{gathered} 11.281^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 9.354^{* * *} \\ (.049) \end{gathered}$ | $\begin{gathered} 9.355^{* * *} \\ (.049) \end{gathered}$ | $\begin{gathered} -3.179^{* * *} \\ (.032) \end{gathered}$ | $\begin{aligned} & \hline-.560 \\ & (.370) \end{aligned}$ | $\begin{aligned} & -.556 \\ & (.370) \end{aligned}$ | $\begin{gathered} -3.280^{* * *} \\ (.031) \end{gathered}$ | $\begin{gathered} -1.046^{* * *} \\ (.353) \end{gathered}$ | $\begin{gathered} -1.046^{* * *} \\ (.353) \end{gathered}$ |
| Same Sex HH | $\begin{aligned} & .453^{* * *} \\ & (.084) \end{aligned}$ | $\begin{aligned} & .332^{* * *} \\ & (.074) \end{aligned}$ | $\begin{aligned} & .412^{* * *} \\ & .(095) \end{aligned}$ | $\begin{aligned} & -.059 \\ & . .061) \end{aligned}$ | $\begin{gathered} -.211^{* * *} \\ (.055) \end{gathered}$ | $\begin{gathered} -.269^{* * *} \\ (.070) \end{gathered}$ | $\begin{gathered} .020 \\ (.036) \end{gathered}$ | $\begin{gathered} -.070^{* *} \\ (.032) \end{gathered}$ | $\begin{gathered} -.074^{*} \\ (.041) \end{gathered}$ | $\begin{gathered} .240^{* * *} \\ (.035) \end{gathered}$ | $\begin{gathered} .100^{* * *} \\ (.030) \end{gathered}$ | $\begin{aligned} & .082^{* *} \\ & (.039) \end{aligned}$ | $\begin{aligned} & -.069 \\ & (.265) \end{aligned}$ | $\begin{gathered} .040 \\ (.267) \end{gathered}$ | $\begin{gathered} .344 \\ (.314) \end{gathered}$ | $\begin{aligned} & .224 \\ & (.225) \end{aligned}$ | $\begin{aligned} & .377^{*} \\ & (.229) \end{aligned}$ | $\begin{aligned} & .202 \\ & (.327) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{aligned} & -.203 \\ & (.151) \end{aligned}$ |  |  | $\begin{aligned} & .146 \\ & (.112) \end{aligned}$ |  |  | $\begin{gathered} .011 \\ (.065) \end{gathered}$ |  |  | $\begin{gathered} .045 \\ (.062) \end{gathered}$ |  |  | $\begin{aligned} & -.853 \\ & (.600) \end{aligned}$ |  |  | $\begin{gathered} .373 \\ (.458) \end{gathered}$ |
| Observations | 25,999 | 25,999 | 25,999 | 30,321 | 30,321 | 30,321 | 25,999 | 25,999 | 25,999 | 30,321 | 30,321 | 30,321 | 25,999 | 25,999 | 25,999 | 30,321 | 30,321 | 30,321 |
| $\mathrm{R}^{2}$ | . 001 | . 232 | . 232 | . 00003 | . 200 | . 200 | . 00001 | . 234 | . 234 | . 002 | . 252 | . 252 |  |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ <br> Akaike Inf. Crit. | . 001 | . 231 | . 231 | -. 000003 | . 199 | . 199 | -.00003 | . 233 | . 233 | . 002 | . 251 | . 251 | 8,724.229 | ,458.860 | 8,458.631 | 9,485.266 | 9,131.458 | ,132.793 |
| F Statistic | $\begin{gathered} 28.832^{* * *} \\ (\mathrm{df}=1 ; \\ 25997) \end{gathered}$ | $\begin{gathered} 245.596^{* * *} \\ (\mathrm{df}=32 ; \\ 25966) \end{gathered}$ | $\begin{gathered} 238.216^{* * *} \\ \left(\begin{array}{c} * f=33 ; \\ 25965) \end{array}\right. \end{gathered}$ | $\begin{gathered} .922(\mathrm{df} \\ =1 ; \\ 30319) \end{gathered}$ | $\begin{gathered} 236.246^{* * *} \\ (\mathrm{df}=32 ; \\ 30288) \end{gathered}$ | $\begin{gathered} 229.144^{* * *} \\ (\mathrm{dff}=33 ; \\ 30287) \end{gathered}$ | $\begin{gathered} .318(\mathrm{df} \\ =1 ; \\ 25997) \end{gathered}$ | $\begin{gathered} 247.935^{* * *} \\ (\mathrm{df}=32 ; \\ 25966) \end{gathered}$ | $\begin{gathered} 240.414^{* * *} \\ (\mathrm{df}=33 ; \\ 25965) \end{gathered}$ | $\begin{gathered} 46.720^{* *} \\ (\mathrm{df}=1 ; \\ 30319) \end{gathered}$ | $\begin{gathered} 318.102^{* * *} \\ (\mathrm{df}=32 ; \\ 30288) \end{gathered}$ | $\begin{gathered} 308.474^{* *}= \\ (\mathrm{df}=33 ; \\ 30287 \text { ) } \end{gathered}$ |  |  |  |  |  |  |

Males and Females in Delaware 2000-2016 (Reform in 2009)
Dependent variable:
Table A7 (continued)

|  | Dependent variable: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log (\text { Personal Income })$OLS |  |  |  |  |  | $\begin{gathered} \hline \log (\text { Household Income) } \\ \text { OLS } \end{gathered}$ |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | Male <br> (11) | (12) | (13) | Female <br> (14) | (15) | (16) | Male <br> (17) | (18) |
| (Intercept) | $\begin{gathered} 9.866^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} 8.226^{* * *} \\ (.054) \end{gathered}$ | $\begin{gathered} 8.226^{* * *} \\ (.054) \end{gathered}$ | $\begin{gathered} 10.484^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 8.942^{* * *} \\ (.045) \end{gathered}$ | $\begin{gathered} 8.943^{* * *} \\ (.045) \end{gathered}$ | $\begin{gathered} 11.074^{* * *} \\ (.002) \end{gathered}$ | $\begin{aligned} & 9.132^{* * *} \\ & (.025) \end{aligned}$ | $\begin{gathered} 9.132^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} 11.061^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 9.238^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} 9.239 * * * \\ (.025) \end{gathered}$ | $\begin{gathered} -3.585^{* * *} \\ (.020) \end{gathered}$ | $\begin{gathered} -.566^{* * *} \\ (.210) \end{gathered}$ | $\begin{gathered} -.566^{* * *} \\ (.210) \end{gathered}$ | $\begin{gathered} -3.595^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} -1.258^{* * *} \\ (.200) \end{gathered}$ | $\begin{gathered} -1.262^{* * *} \\ (.200) \end{gathered}$ |
| Same Sex <br> HH | $\begin{gathered} .275^{* * *} \\ (.054) \end{gathered}$ | $\begin{gathered} .212 * * * \\ (.049) \end{gathered}$ | $\begin{gathered} .241^{* * *} \\ (.068) \end{gathered}$ | $\begin{gathered} -.375^{* * * *} \\ (.052) \end{gathered}$ | $\begin{gathered} -.344^{* * *} \\ (.048) \end{gathered}$ | $\begin{gathered} -.250^{* * *} \\ (.060) \end{gathered}$ | $\begin{gathered} -.072^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} -.098^{* * *} \\ (.022) \end{gathered}$ | $\begin{gathered} -.091^{* * *} \\ (.031) \end{gathered}$ | $\begin{gathered} -.069^{* *} \\ (.030) \end{gathered}$ | $\begin{aligned} & -.043 \\ & (.027) \end{aligned}$ | $\begin{aligned} & .036 \\ & (.034) \end{aligned}$ | $\begin{gathered} .037 \\ (.217) \end{gathered}$ | $\begin{aligned} & -.023 \\ & (.220) \end{aligned}$ | $\begin{gathered} .025 \\ (.297) \end{gathered}$ | $\begin{aligned} & .285 \\ & (.213) \end{aligned}$ | $\begin{aligned} & .265 \\ & (.215) \end{aligned}$ | $\begin{aligned} & -.108 \\ & (.323) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{aligned} & -.059 \\ & (.098) \end{aligned}$ |  |  | $\begin{gathered} -.265^{* * *} \\ (.101) \end{gathered}$ |  |  | $\begin{aligned} & -.013 \\ & (.045) \end{aligned}$ |  |  | $\begin{gathered} -.220^{* * *} \boldsymbol{*} \\ (.056) \end{gathered}$ |  |  | $\begin{aligned} & -.103 \\ & (.441) \end{aligned}$ |  |  | $\begin{aligned} & .809^{*} \\ & (.436) \end{aligned}$ |
| Observations | 100,760 | 100,760 | 100,760 | 112,534 | 112,534 | 112,534 | 100,760 | 100,760 | 100,760 | 112,534 | 112,534 | 112,534 | 100,760 | 100,760 | 100,760 | 112,534 | 112,534 | 112,534 |
| $\mathrm{R}^{2}$ | . 0003 | . 171 | . 171 | . 0005 | . 130 | . 130 | . 0001 | . 193 | . 193 | . 00005 | . 189 | . 189 | 25,026.920 24,026.160 24,028.100 27,763.000 26,621.430 26,619.950 |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ | . 0003 | . 171 | . 171 | . 0005 | . 130 | . 130 | . 0001 | . 193 | . 193 | . 00004 | . 188 | . 189 |  |  |  |  |  |  |
| Akaike Inf. Crit. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| F Statistic | $\begin{gathered} 26.351^{* * *} \\ (\mathrm{df}=1 ; \\ 100758) \end{gathered}$ | $\begin{gathered} 651.140^{* * *} \\ (\mathrm{df}=32 ; \\ 100727) \end{gathered}$ | $\begin{aligned} & 631.415 * * * \\ & (\mathrm{df}=33 ; \\ & 100726) \end{aligned}$ | $\begin{gathered} 52.848^{* * *} \\ (\mathrm{df}=1 ; \\ 112532) \end{gathered}$ | $\begin{gathered} 526.664^{* * *} \\ (\mathrm{ff}=32 ; \\ 112501) \end{gathered}$ | $\begin{gathered} 510.941^{* * *} \\ (\mathrm{dff}=33 ; \\ 112500) \end{gathered}$ | $\begin{aligned} & 8.256^{* * *} \\ & (\mathrm{df}=1 ; \\ & 100758) \end{aligned}$ | $\begin{gathered} 752.901^{* * *} \\ (\mathrm{ff}=32 ; \\ 100727 \text { ) } \end{gathered}$ | $\begin{gathered} 730.082^{* * *}(\mathrm{df}=33 ; \\ (100726) \\ \end{gathered}$ | $\begin{aligned} & 5.385^{* *} \\ & (\mathrm{df}=1 ; \\ & 112532) \end{aligned}$ | $\begin{gathered} 817.605^{* * *} \\ (\mathrm{df}=32 ; \\ 112501) \end{gathered}$ | $\begin{aligned} & 793.393^{* * *} \\ & (\mathrm{df}=33 ; \\ & 112500) \end{aligned}$ |  |  |  |  |  |  |
| Note: | Omitted: Sociodemographics (age, race and ethnicity, educational attainment, and unemployment), Year dummies. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Males and Females in Illinois 2000-2016 (Refrom in 2005)

Table A7 (continued)

|  | Dependent variable: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal Income) OLS |  |  |  |  |  | $\log$ (Household Income) |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | $\begin{aligned} & \text { Male } \\ & \text { (11) } \end{aligned}$ | (12) | (13) | Female <br> (14) | (15) | (16) | $\begin{gathered} \text { Male } \\ \text { (17) } \end{gathered}$ | (18) |
| (Intercept) | $\begin{gathered} 10.220^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} 8.266^{* * *} \\ (.058) \end{gathered}$ | $\begin{gathered} 8.265^{* * *} \\ (.058) \end{gathered}$ | $\begin{gathered} 10.859^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} 8.792^{* * *} \\ (.041) \end{gathered}$ | $\begin{gathered} 8.792^{* * *} \\ (.041) \end{gathered}$ | $\begin{gathered} 11.481^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 9.053^{* * *} \\ (.024) \end{gathered}$ | $\begin{gathered} 9.053^{* * *} \\ (.024) \end{gathered}$ | $\begin{gathered} 11.467^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 9.149^{* * *} \\ (.023) \end{gathered}$ | $\begin{gathered} 9.148^{* * *} \\ (.023) \end{gathered}$ | $\begin{gathered} -3.293^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -.981^{* * *} \\ (.185) \end{gathered}$ | $\begin{gathered} -.981 * * \\ (.185) \end{gathered}$ | $\begin{gathered} -3.497^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -2.137^{* * *} \\ (.190) \end{gathered}$ | $\begin{gathered} -2.141^{* * *} \\ (.190) \end{gathered}$ |
| $\begin{aligned} & \text { Same Sex } \\ & \text { HH } \end{aligned}$ | $\begin{aligned} & .356^{* * *} \\ & (.037) \end{aligned}$ | $\begin{aligned} & .231^{* * *} \\ & (.032) \end{aligned}$ | $\begin{aligned} & .345^{* * *} \\ & (.065) \end{aligned}$ | $\begin{gathered} -.271^{* * *} \\ (.031) \end{gathered}$ | $\begin{gathered} -.276^{* * *} \\ (.027) \end{gathered}$ | $\begin{gathered} -.260^{* * *} \\ (.054) \end{gathered}$ | $\begin{aligned} & -.017 \\ & (.015) \end{aligned}$ | $\begin{gathered} -.101^{* * *} \\ (.013) \end{gathered}$ | $\begin{gathered} -.116^{* *} \\ (.027) \end{gathered}$ | $\begin{aligned} & .075^{* * *} \\ & (.018) \end{aligned}$ | $\begin{gathered} .046^{* * *} \\ (.015) \end{gathered}$ | $\begin{gathered} .091^{* * *} \\ (.030) \end{gathered}$ | $\begin{aligned} & -.047 \\ & (.113) \end{aligned}$ | $\begin{gathered} .017 \\ (.114) \end{gathered}$ | $\begin{gathered} .036 \\ (.257) \end{gathered}$ | $\begin{aligned} & .502^{* * *} \\ & (.107) \end{aligned}$ | $\begin{aligned} & .651^{* * *} \\ & (.108) \end{aligned}$ | $\begin{aligned} & .785^{* * *} \\ & (.218) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{gathered} -.150^{* *} \\ (.074) \end{gathered}$ |  |  | $\begin{aligned} & -.023 \\ & (.062) \end{aligned}$ |  |  | $\begin{gathered} .020 \\ (.031) \end{gathered}$ |  |  | $\begin{aligned} & -.060^{*} \\ & . .035) \end{aligned}$ |  |  | $\begin{aligned} & -.023 \\ & (.287) \end{aligned}$ |  |  | $\begin{aligned} & -.174 \\ & (.251) \end{aligned}$ |
| Observations | 153,814 | 153,814 | 153,814 | 179,080 | 179,080 | 179,080 | 153,814 | 153,814 | 153,814 | 179,080 | 179,080 | 179,080 | 153,814 | 153,814 | 153,814 | 179,080 | 179,080 | 179,080 |
| $\mathrm{R}^{2}$ | . 001 | . 259 | . 259 | . 0004 | . 248 | . 248 | . 00001 | . 270 | . 270 | . 0001 | . 269 | . 269 |  |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ Akaike Inf. Crit. | . 001 | . 259 | . 259 | . 0004 | . 248 | . 248 | . 000002 | . 270 | . 270 | . 0001 | . 269 | . 269 | 47,478.670 | 45,504.730 | 45,506.720 | 47,760.600 | 45,381.060 | 45,382.590 |
| F Statistic | $\begin{gathered} 94.722^{* * *} \\ (\mathrm{df}=1 ; \\ 153812) \end{gathered}$ | $\begin{aligned} & \text { 1,682.239*** } \\ & (\mathrm{dff}=32 ; \\ & 153781) \end{aligned}$ | $\begin{gathered} 1,631.419^{* * *} \\ (\mathrm{df}=33 ; \\ 153780) \end{gathered}$ | $\begin{gathered} 74.456 * * \\ (\mathrm{df}=1 ; \\ 179078) \end{gathered}$ | $\begin{gathered} 1,842.493 * * * \\ (\mathrm{df}=32 ; \\ 179047) \end{gathered}$ | $\begin{gathered} 1,786.656^{* * *} \\ (\mathrm{df}=33 ; \\ 179046) \end{gathered}$ | $\begin{gathered} 1.253(\mathrm{df} \\ =1 \mathrm{i} \\ 153812) \end{gathered}$ | $\begin{aligned} & , 781.407^{* * *} \\ & (\mathrm{df}=32 ; \\ & 153781) \end{aligned}$ | $\begin{aligned} & 1,727.433 * * * \\ & (\mathrm{df}=33 ; \\ & 153780) \end{aligned}$ | $\begin{gathered} 17.244^{* * *} \\ (\mathrm{df}=1 ; \\ 179078) \end{gathered}$ | $\begin{gathered} 2,063.074^{*} \\ (\mathrm{df}=32 ; \\ 179047) \end{gathered}$ | $\begin{gathered} 2,000.665^{* *} \\ (\mathrm{df}=33 ; \\ 179046) \end{gathered}$ |  |  |  |  |  |  |

Omitted: Sociodemographics (age, race and ethnicity, educational attainment, and unemployment), Year dummies.

|  | Dependent variable: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log \text { (Personal Income) }$OLS |  |  |  |  |  | $\log$ (Household Income) OLS |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | Male <br> (11) | (12) | (13) | Female <br> (14) | (15) | (16) | Male <br> (17) | (18) |
| (Intercept) | $\begin{gathered} 9.823^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} 8.215^{* * *} \\ (.100) \end{gathered}$ | $\begin{gathered} \hline 8.216^{* * *} \\ (.100) \end{gathered}$ | $\begin{gathered} 10.432^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} \hline 8.790^{* * *} \\ (.075) \end{gathered}$ | $\begin{gathered} 8.793^{* * *} \\ (.075) \end{gathered}$ | $\begin{gathered} 11.043^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 9.043^{* * *} \\ (.044) \end{gathered}$ | $\begin{gathered} 9.043^{* * *} \\ (.044) \end{gathered}$ | $\begin{gathered} 11.018^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 9.075^{* * *} \\ (.042) \end{gathered}$ | $\begin{gathered} 9.076^{* * * *} \\ (.042) \end{gathered}$ | $\begin{gathered} -3.253^{* * *} \\ (.026) \end{gathered}$ | $\begin{gathered} \hline .861^{* * *} \\ (.309) \end{gathered}$ | $\begin{gathered} \hline .855^{* * *} \\ (.309) \end{gathered}$ | $\begin{gathered} \hline-3.190^{* * *} \\ (.024) \end{gathered}$ | $\begin{gathered} \hline-.828^{* * *} \\ (.276) \end{gathered}$ | $\begin{gathered} \hline-.828^{* * *} \\ (.276) \end{gathered}$ |
| $\begin{aligned} & \text { Same Sex } \\ & \text { HH } \end{aligned}$ | $\begin{gathered} .405^{* * *} \\ (.063) \end{gathered}$ | $\begin{gathered} .250^{* * *} \\ (.057) \end{gathered}$ | $\begin{aligned} & .2077^{* *} \\ & (.089) \end{aligned}$ | $\begin{gathered} -.154^{* * *} \\ (.058) \end{gathered}$ | $\begin{gathered} -.2066^{* * *} \\ (.054) \end{gathered}$ | $\begin{gathered} -.391^{* * *} \\ (.081) \end{gathered}$ | $\begin{gathered} .039 \\ (.028) \end{gathered}$ | $\begin{gathered} -.067^{* * *} \\ (.025) \end{gathered}$ | $\begin{gathered} -.080^{* *} \\ (.039) \end{gathered}$ | $\begin{gathered} .125^{* * *} \\ (.034) \end{gathered}$ | $\begin{aligned} & .080^{* * * *} \\ & (.030) \end{aligned}$ | $\begin{gathered} .009 \\ (.046) \end{gathered}$ | $\begin{aligned} & -.019 \\ & (.205) \end{aligned}$ | $\begin{aligned} & .107 \\ & (.208) \end{aligned}$ | $\begin{aligned} & -.021 \\ & (.346) \end{aligned}$ | $\begin{aligned} & -.090 \\ & (.235) \end{aligned}$ | $\begin{gathered} .008 \\ (.237) \end{gathered}$ | $\begin{gathered} .003 \\ (.365) \end{gathered}$ |
| Same Sex HH*Reform |  |  | $\begin{gathered} .074 \\ (.116) \end{gathered}$ |  |  | $\begin{aligned} & .329^{* * *} \\ & (.109) \end{aligned}$ |  |  | $\begin{gathered} .023 \\ (.051) \end{gathered}$ |  |  | $\begin{aligned} & .127^{* *} \\ & (.061) \end{aligned}$ |  |  | $\begin{gathered} .208 \\ (.433) \end{gathered}$ |  |  | $\begin{aligned} & .009 \\ & (.480) \end{aligned}$ |
| Observations | 41,051 | 41,051 | 41,051 | 46,205 | 46,205 | 46,205 | 41,051 | 41,051 | 41,051 | 46,205 | 46,205 | 46,205 | 41,051 | 41,051 | 41,051 | 46,205 | 46,205 | 46,205 |
| $\mathrm{R}^{2}$ | . 001 | . 182 | . 182 | . 0002 | . 145 | . 145 | . 00005 | . 199 | . 199 | . 0003 | . 204 | . 204 | 13,059.250 12,580.250 12,582.020 15,382.180 14,763.150 14,765.150 |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ <br> Akaike Inf. Crit. | . 001 | . 182 | . 182 | . 0001 | . 144 | . 145 | . 00002 | . 198 | . 198 | . 0003 | . 203 | . 203 |  |  |  |  |  |  |
| F Statistic | $\begin{gathered} 41.302^{* * *} \\ (\mathrm{df}=1 ; \\ 41049) \end{gathered}$ | $\begin{gathered} 286.137^{* * *} \\ (\mathrm{ff}=32 ; \\ 41018) \end{gathered}$ | $\begin{gathered} 277.474^{* * *} \\ (\mathrm{df}=33 ; \\ 41017) \end{gathered}$ | $\begin{aligned} & 6.970^{* * *} \\ & (\mathrm{df}=1 ; \\ & 46203) \end{aligned}$ | $\begin{gathered} 244.687^{* * *}{ }^{* \prime \prime} \\ (\mathrm{df}=32 ; \\ 46172) \end{gathered}$ | $\begin{gathered} 237.593^{* * *} \\ (\mathrm{df}=33 ; \\ 46171) \end{gathered}$ | $\begin{gathered} 2.015(\mathrm{df} \\ =1 ; \\ 41049) \end{gathered}$ | $\begin{gathered} 318.551^{* * *} \\ (\mathrm{df}=32 ; \\ 41018) \end{gathered}$ | $\begin{array}{cccc} 308.899^{* * *} & 13.579^{* * *} & 369.129^{* * * *} & 358.101^{* *} \\ (\mathrm{df}=33 ; & (\mathrm{df}=1 ; & (\mathrm{df}=32 ; & (\mathrm{df}=33 ; \\ 41017) & 46203) & 46172) & 46171) \end{array}$ |  |  |  |  |  |  |  |  |  |
| Note: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$ |  |  |

Table A7 (continued)

|  | Dependent variable: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal Income) |  |  |  |  |  | $\log$ (Household Income)OLS |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
|  | OLS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | Female(7)$(8)$ |  | (9) | (10) | Male <br> (11) | (12) | (13)Female <br> $(14)$ |  | (15) | (16) | $\begin{gathered} \text { Male } \\ (17) \end{gathered}$ |  |
| (Intercept) | $\begin{gathered} 9.677^{* * *} \\ (.010) \end{gathered}$ | $\begin{gathered} \hline 7.676^{* * *} \\ (.115) \end{gathered}$ | $\begin{gathered} \hline 7.677^{* * *} \\ (.115) \end{gathered}$ | $\begin{gathered} 10.371^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} 8.678^{* * *} \\ (.079) \end{gathered}$ | $\begin{gathered} 8.681^{* * *} \\ (.079) \end{gathered}$ | $\begin{gathered} 11.021^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 8.716^{* * * *} \\ (.049) \end{gathered}$ | $\begin{gathered} 8.716^{* * *} \\ (.049) \end{gathered}$ | $\begin{gathered} \hline 10.961^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 8.785^{* * *} \\ (.047) \end{gathered}$ | $\begin{gathered} 8.788^{* * *} \\ (.047) \end{gathered}$ | $\begin{gathered} \hline-2.903^{* * *} \\ (.022) \end{gathered}$ | $\begin{aligned} & \hline-.265 \\ & (.269) \end{aligned}$ | $\begin{aligned} & \hline .245 \\ & (.269) \end{aligned}$ | $\begin{gathered} \hline-3.055^{* * *} \\ (.021) \end{gathered}$ | $\begin{gathered} \hline-1.461^{* * *} \\ (.247) \end{gathered}$ | $\begin{gathered} \hline-1.464^{* * *} \\ (.248) \end{gathered}$ |
| Same Sex HH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (.072) | (.063) | (.122) | (.063) | (.056) | (.104) | (.030) | (.027) | (.052) | (.038) | (.034) | (.062) | (.158) | (.162) | (.393) | (.182) | (.185) | (.295) |
| Same Sex HH*Reform |  |  | -. 206 |  |  | .271*** |  |  | . 020 |  |  | .201*** |  |  | .789** |  |  | -. 365 |
|  |  |  | (.142) |  |  | (.123) |  |  | (.060) |  |  | (.074) |  |  | (.431) |  |  | (.379) |
| Observations | 43,238 | 43,238 | 43,238 | 53,448 | 53,448 | 53,448 | 43,238 | 43,238 | 43,238 | 53,448 | 53,448 | 53,448 | 43,238 | 43,238 | 43,238 | 53,448 | 53,448 | 53,448 |
| $\mathrm{R}^{2}$ | . 001 | . 251 | . 251 | . 0002 | . 215 | . 215 | . 00004 | . 241 | . 241 | . 0002 | . 231 | . 231 |  |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ | . 001 | . 250 | . 250 | . 0001 | . 215 | . 215 | . 00002 | . 241 | . 241 | . 0002 | . 231 | . 231 |  |  |  |  |  |  |
| Akaike Inf. Crit. |  |  |  |  |  |  |  |  |  |  |  |  | 17,674.230 16,570.690 16,568.850 19,657.170 18,695.290 18,696.380 |  |  |  |  |  |
| F Statistic | $\begin{gathered} 53.586^{* * *} \\ (\mathrm{df}=1 ; \\ 43236) \end{gathered}$ | $\begin{gathered} 452.009^{* * *} \\ (\mathrm{df}=32 ; \\ 43205) \end{gathered}$ | $\begin{gathered} 438.386^{* * *} \\ (\mathrm{df}=33 ; \\ 43204) \end{gathered}$ | $\begin{aligned} & 8.141^{* * *} \\ & (\mathrm{df}=1 ; \\ & 53446) \end{aligned}$ | $\begin{gathered} 458.200^{* * *} \\ (\mathrm{dff}=32 ; \\ 53415) \end{gathered}$ | $\begin{gathered} 444.494^{* *} \\ (\mathrm{df}=33 ; \\ 53414) \end{gathered}$ | $\begin{gathered} 1.823(\mathrm{df} 4 \\ =1 ; \\ 43236) \end{gathered}$ | $\begin{gathered} 429.064^{* * *} \\ (\mathrm{df}=32 ; \\ 43205) \end{gathered}$ | $\begin{gathered} 416.057^{* * *} \\ (\mathrm{df}=33 ; \\ 43204) \end{gathered}$ | $\begin{gathered} 9.368^{* * *} \\ (\mathrm{df}=1 ; \\ 53446) \\ \hline \end{gathered}$ | $\begin{array}{cc} 501.987^{* * * *} & 487.055^{* * *} \\ (\mathrm{df}=32 ; & (\mathrm{df}=33 ; \\ 53415) & 53414) \end{array}$ |  |  |  |  |  |  |  |
| Note: |  |  |  |  |  |  |  |  | Omitted | Sociodemo | graphics | , race | thnicit | ation | nme |  | $\begin{aligned} & .1 ;{ }^{* *} \mathrm{p}<0.05 ; \\ & \text { yment), Year } \end{aligned}$ | $\begin{aligned} & * * * * 0.01 \\ & \text { dummies. } \end{aligned}$ |

Males and Females in New York 2000-2016 (Reform in 2002)

|  | $\begin{gathered} \hline \log \text { (Personal Income) } \\ O L S \end{gathered}$ |  |  |  |  |  | $\log$ (Household Income) |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | Female <br> (2) | (3) | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | Male <br> (11) | (12) | (13) | Female <br> (14) | (15) | (16) | Male <br> (17) | (18) |
| (Intercept) | $\begin{gathered} 10.014^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} 8.459^{* * *} \\ (.038) \end{gathered}$ | $\begin{gathered} 8.458^{* * *} \\ (.038) \end{gathered}$ | $\begin{gathered} 10.660^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 8.672^{* * *} \\ (.028) \end{gathered}$ | $\begin{gathered} 8.674^{* * *} \\ (.028) \end{gathered}$ | $\begin{gathered} 11.322^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} 9.016^{* * *} \\ (.017) \end{gathered}$ | $\begin{gathered} 9.017^{* * *} \\ (.017) \end{gathered}$ | $\begin{gathered} 11.299^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} 9.125^{* * *} \\ (.017) \end{gathered}$ | $\begin{gathered} 9.125^{* * *} \\ (.017) \end{gathered}$ | $\begin{gathered} \hline-3.046^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} \hline .206 * * \\ (.097) \end{gathered}$ | $\begin{aligned} & -.207^{* *} \\ & (.097) \end{aligned}$ | $\begin{gathered} \hline-3.118^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} \hline-.889^{* * *} \\ (.089) \end{gathered}$ | $\begin{gathered} \hline-.888^{* * *} \\ (.089) \end{gathered}$ |
| Same Sex <br> HH | $\begin{aligned} & .407^{* * *} \\ & (.024) \end{aligned}$ | $\begin{aligned} & .293^{* * *} \\ & (.020) \end{aligned}$ | $\begin{aligned} & .310^{* * *} \\ & (.038) \end{aligned}$ | $\begin{gathered} -.036^{* *} \\ (.018) \end{gathered}$ | $\begin{gathered} -.186^{* * *} \\ (.016) \end{gathered}$ | $\begin{gathered} -.299^{* * *} \\ (.031) \end{gathered}$ | $\begin{gathered} .014 \\ (.010) \end{gathered}$ | $\begin{gathered} -.061^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.093^{* * *} \\ (.017) \end{gathered}$ | $\begin{aligned} & .322^{* * *} \\ & (.011) \end{aligned}$ | $\begin{aligned} & .187^{* * * *} \\ & (.009) \end{aligned}$ | $\begin{gathered} .138^{* * *} \\ (.018) \end{gathered}$ | $\begin{aligned} & -.046 \\ & (.059) \end{aligned}$ | $\begin{aligned} & .002 \\ & (.060) \end{aligned}$ | $\begin{aligned} & .128 \\ & (.109) \end{aligned}$ | $\begin{aligned} & .126^{* *} \\ & (.054) \end{aligned}$ | $\begin{aligned} & .315^{* * *} \\ & (.054) \end{aligned}$ | $\begin{aligned} & .294 * * \\ & (.108) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{aligned} & -.024 \\ & (.045) \end{aligned}$ |  |  | $\begin{aligned} & .152^{* * *} \\ & (.036) \end{aligned}$ |  |  | $\begin{aligned} & .044^{* * *} \\ & (.020) \end{aligned}$ |  |  | $\begin{gathered} .066^{* * *} \\ (.021) \end{gathered}$ |  |  | $\begin{aligned} & -.178 \\ & (.130) \end{aligned}$ |  |  | $\begin{aligned} & .029 \\ & (.125) \end{aligned}$ |
| Observations | 453,341 | 453,341 | 453,341 | 539,883 | 539,883 | 539,883 | 453,341 | 453,341 | 453,341 | 539,883 | 539,883 | 539,883 | 453,341 | 453,341 | 453,341 | 539,883 | 539,883 | 539,883 |
| $\mathrm{R}^{2}$ | . 001 | . 268 | . 268 | . 00001 | . 225 | . 225 | . 000004 | . 235 | . 235 | . 002 | . 238 | . 238 |  |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ Akaike Inf. Crit. | . 001 | . 268 | . 268 | . 00001 | . 225 | . 225 | . 000002 | . 235 | . 235 | . 002 | . 238 | . 238 | 167,342.400 | 159,851.400 | 59,851.600 | 189,594.800 | 82,847.500 | 82,849.400 |
| F Statistic | $\begin{gathered} 295.139^{* * *} \\ (\mathrm{df}=1 ; \\ 453339) \end{gathered}$ | $\begin{gathered} 5,177.861^{* * *} \\ (\mathrm{dd=}=32 ; \\ 453308) \end{gathered}$ | $\begin{gathered} 5,020.957^{* * *} \\ (\mathrm{df}=33 ; \\ 453307) \end{gathered}$ | $\begin{aligned} & 3.964^{* *} \\ & (\mathrm{df}=1 ; \\ & 539881) \end{aligned}$ | $\begin{gathered} 4,895.807^{* * *} \\ (\mathrm{df}=32 ; \\ 539850) \end{gathered}$ | $\begin{gathered} 4,748.122^{* * *} \\ (\mathrm{df}=33 ; \\ 539849) \end{gathered}$ | $\begin{gathered} 1.844(\mathrm{df} \\ =1 ; \\ 453339) \end{gathered}$ | $\begin{gathered} 4,349.950^{* * *} \\ (\mathrm{ff}=32 ; \\ 453308) \end{gathered}$ | $\begin{aligned} & 4,218.319^{* * * *} \\ & \text { (df }=33 ; \\ & 45307 \text { ) } \end{aligned}$ | $\begin{gathered} * 909.113^{* * *} \\ (\mathrm{df}=1 ; \\ 539881) \end{gathered}$ | $\begin{aligned} & 5,263.292^{* * *} \\ & \text { (df = 32; } \\ & 539850) \end{aligned}$ | $\begin{aligned} & \text { 5,104.169*** } \\ & \text { (df } 33 ; \\ & 539849 \text { ) } \end{aligned}$ |  |  |  |  |  |  |

Table A7 (continued)

|  | Dependent variable: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\log$ (Personal Income) OLS |  |  |  |  |  | $\begin{gathered} \hline \log (\text { Household Income }) \\ O L S \end{gathered}$ |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
|  | (1) | Female <br> (2) |  | (4) | Male <br> (5) | (6) | (7) | Female <br> (8) | (9) | (10) | Male <br> (11) | (12) | (13) | Female <br> (14) | $\begin{aligned} & \quad \log \\ & (15) \end{aligned}$ | (16) | Male <br> (17) | (18) |
| (Intercept) | $\begin{gathered} \hline 9.808^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} \hline 8.275^{* * *} \\ (.071) \end{gathered}$ | $\begin{gathered} \hline 8.274^{* * *} \\ (.071) \end{gathered}$ | $\begin{gathered} 10.512^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} 8.667^{* * *} \\ (.051) \end{gathered}$ | $\begin{gathered} 8.668^{* * *} \\ (.051) \end{gathered}$ | $\begin{gathered} 11.128^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} \hline 8.979^{* * *} \\ (.029) \end{gathered}$ | $\begin{gathered} \hline 8.980^{* * *} \\ (.029) \end{gathered}$ | $\begin{gathered} 11.103^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} 9.080^{* * *} \\ (.029) \end{gathered}$ | $\begin{gathered} 9.081 * * * \\ (.029) \end{gathered}$ | $\begin{gathered} -2.924^{* * *} \\ (.015) \end{gathered}$ | $\begin{gathered} -.894^{* * *} \\ (.170) \end{gathered}$ | $\begin{gathered} \hline-.893^{* * *} \\ (.170) \end{gathered}$ | $\begin{gathered} -2.956^{* * *} \\ (.014) \end{gathered}$ | $\begin{gathered} -1.684^{* * * *} \\ (.160) \end{gathered}$ | $\begin{gathered} -1.683^{* * *} \\ (.160) \end{gathered}$ |
| Same Sex HH | $\begin{gathered} .459^{* * * *} \\ (.043) \end{gathered}$ | $\begin{aligned} & .297^{* * *} \\ & (.039) \end{aligned}$ | $\begin{gathered} .334^{* * *} \\ (.057) \end{gathered}$ | $\begin{gathered} -.215^{* * *} \\ (.039) \end{gathered}$ | $\begin{gathered} -.277^{* * *} \\ (.035) \end{gathered}$ | $\begin{gathered} -.331 * * * \\ (.050) \end{gathered}$ | $\begin{aligned} & .025 \\ & (.018) \end{aligned}$ | $\begin{gathered} -.078^{* * * *} \\ (.016) \end{gathered}$ | $\begin{gathered} -.108^{* * *} \\ (.024) \end{gathered}$ | $\begin{aligned} & .138^{* * * *} \\ & (.022) \end{aligned}$ | $\begin{gathered} .077^{* * *} \\ (.020) \end{gathered}$ | $\begin{aligned} & .050^{*} \\ & (.029) \end{aligned}$ | $\begin{aligned} & -.112 \\ & (.108) \end{aligned}$ | $\begin{gathered} .028 \\ (.110) \end{gathered}$ | $\begin{aligned} & -.052 \\ & (.171) \end{aligned}$ | $\begin{gathered} .068 \\ (.114) \end{gathered}$ | $\begin{aligned} & .175 \\ & (.116) \end{aligned}$ | $\begin{aligned} & .100 \\ & (.180) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{aligned} & -.069 \\ & . .078) \end{aligned}$ |  |  | $\begin{aligned} & .106 \\ & (.070) \end{aligned}$ |  |  | $\begin{aligned} & .056^{*} \\ & (.032) \end{aligned}$ |  |  | $\begin{gathered} .054 \\ (.040) \end{gathered}$ |  |  | $\begin{aligned} & .140 \\ & (.223) \end{aligned}$ |  |  | $\begin{aligned} & .131 \\ & (.235) \end{aligned}$ |
| Observations | 98,029 | 98,029 | 98,029 | 117,336 | 117,336 | 117,336 | 98,029 | 98,029 | 98,029 | 117,336 | 117,336 | 117,336 | 98,029 | 98,029 | 98,029 | 117,336 | 117,336 | 117,336 |
| $\mathrm{R}^{2}$ | . 001 | . 191 | . 191 | . 0003 | . 173 | . 173 | . 00002 | . 197 | . 197 | . 0003 | . 203 | . 203 | 39,413.920 37,828.130 37,829.730 46,236.820 44,412.650 44,414.330 |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ Akaike Inf. Crit. | . 001 | . 191 | . 191 | . 0003 | . 173 | . 173 | . 00001 | . 197 | . 197 | . 0003 | . 203 | . 203 |  |  |  |  |  |  |
| F Statistic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: |  |  |  |  |  |  |  |  |  |  | aphics | race | nicit | tio | nmen |  | $1 ;{ }^{* *} \mathrm{p}<0$ | $; * * * p<0.01$ |

Males and Females in Washington 2000-2016 (Reform in 2006)

|  | $\log$ (Personal Income) OLS |  |  |  |  |  | $\log$ (Household Income) OLS |  |  |  |  |  | Unemployment logistic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1) | Female <br> (2) | (3) | (4) | Male (5) | (6) | (7) | Female <br> (8) | (9) | (10) | Male (11) | (12) | (13) | Female <br> (14) | (15) | (16) | Male (17) | (18) |
| (Intercept) | $\begin{gathered} 9.923^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} 8.291^{* * *} \\ (.055) \end{gathered}$ | $\begin{gathered} \hline 8.291^{* * *} \\ (.055) \end{gathered}$ | $\begin{gathered} 10.692^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} 8.635^{* * *} \\ (.036) \end{gathered}$ | $\begin{gathered} 8.636^{* * *} \\ (.036) \end{gathered}$ | $\begin{gathered} 11.261^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 8.971^{* * *} \\ (.022) \end{gathered}$ | $\begin{gathered} 8.971^{* * *} \\ (.022) \end{gathered}$ | $\begin{gathered} \hline 11.237^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} 9.097^{* * *} \\ (.022) \end{gathered}$ | $\begin{gathered} 9.097^{7 * * *} \\ (.022) \end{gathered}$ | $\begin{gathered} \hline-2.996^{* * *} \\ (.011) \end{gathered}$ | $\begin{gathered} \hline-.619^{* * *} \\ (.134) \end{gathered}$ | $\begin{gathered} \hline-.620^{* * *} \\ (.134) \end{gathered}$ | $\begin{gathered} \hline-3.136^{* * *} \\ (.011) \end{gathered}$ | $\begin{gathered} \hline-2.060^{* * *} \\ (.133) \end{gathered}$ | $\begin{gathered} -2.057^{* * *} \\ (.133) \end{gathered}$ |
| Same Sex HH | $\begin{aligned} & .453^{* * *} \\ & (.034) \end{aligned}$ | $\begin{aligned} & .332^{* * *} \\ & (.030) \end{aligned}$ | $\begin{aligned} & .402^{* * * *} \\ & (.047) \end{aligned}$ | $\begin{gathered} -.276^{* * *} * \\ (.027) \end{gathered}$ | $\begin{gathered} -.327^{* * * *} \\ (.025) \end{gathered}$ | $\begin{gathered} -.379^{* * * *} \\ (.036) \end{gathered}$ | $\begin{aligned} & -.010 \\ & (.014) \end{aligned}$ | $\begin{gathered} -.087^{* * * *} \\ (.012) \end{gathered}$ | $\begin{gathered} -.094^{* * * * *} \\ (.019) \end{gathered}$ | $\begin{gathered} .134^{* * *} \\ (.016) \end{gathered}$ | $\begin{aligned} & .088^{* * * *} \\ & (.015) \end{aligned}$ | $\begin{aligned} & .053^{* *} \\ & (.021) \end{aligned}$ | $\begin{aligned} & -.115 \\ & (.088) \end{aligned}$ | $\begin{aligned} & -.002 \\ & (.089) \end{aligned}$ | $\begin{aligned} & .102 \\ & (.130) \end{aligned}$ | $\begin{aligned} & .130 \\ & (.091) \end{aligned}$ | $\begin{aligned} & .272^{* * *} \\ & (.092) \end{aligned}$ | $\begin{aligned} & .163 \\ & (.140) \end{aligned}$ |
| Same Sex HH*Reform |  |  | $\begin{aligned} & -.120^{*} \\ & (.062) \end{aligned}$ |  |  | $\begin{aligned} & .099^{* *} \\ & (.049) \end{aligned}$ |  |  | $\begin{aligned} & .012 \\ & (.025) \end{aligned}$ |  |  | $\begin{aligned} & .066^{* *} \\ & (.029) \end{aligned}$ |  |  | $\begin{aligned} & -.189 \\ & (.178) \end{aligned}$ |  |  | $\begin{gathered} .200 \\ (.186) \end{gathered}$ |
| Observations | 171,955 | 171,955 | 171,955 | 211,176 | 211,176 | 211,176 | 171,955 | 171,955 | 171,955 | 211,176 | 211,176 | 211,176 | 171,955 | 171,955 | 171,955 | 211,176 | 211,176 | 211,176 |
| $\mathrm{R}^{2}$ | . 001 | . 196 | . 196 | . 0005 | . 184 | . 184 | . 000003 | . 213 | . 213 | . 0003 | . 218 | . 218 |  |  |  |  |  |  |
| Adjusted $\mathrm{R}^{2}$ Akaike Inf. Crit. | . 001 | . 196 | . 196 | . 0005 | . 184 | . 184 | -.000003 | . 213 | . 213 | . 0003 | . 218 | . 218 | 65,743.880 | 62,815.420 | 62,816.300 | 73,212.050 | 70,442.5 | 0,443.350 |
| F Statistic | $\begin{gathered} 178.267^{* * *} \\ (\mathrm{df}=1 ; \\ 171953) \end{gathered}$ |  | $\begin{aligned} & 1,273.075^{* *} \\ & (\mathrm{df}=33 ; \end{aligned}$ 171921) | $\begin{gathered} 103.782^{* * *} \\ (\mathrm{df}=1 \\ 211174) \end{gathered}$ | $\begin{gathered} 1,491.561^{* * *} \\ (\mathrm{df}=32 ; \\ 211143) \end{gathered}$ | $\begin{gathered} 1,446.506^{* * *} \\ (\mathrm{dff}=33 ; \\ 211142) \end{gathered}$ | $\begin{gathered} .485(\mathrm{df} \\ =1 ; \\ 171953) \end{gathered}$ | $\begin{gathered} \text { 1,457.987*** } \\ \text { (df = 32; } \\ 171922) \end{gathered}$ | $\begin{gathered} 1,413.806^{* *} \\ (\mathrm{df}=33 ; \\ 171921) \end{gathered}$ | $\begin{gathered} * 6.517^{* * *} \\ (\mathrm{df}=1 ; \\ 211174) \end{gathered}$ | $\begin{gathered} 1,837.760^{* * *} \\ (\mathrm{df}=32 ; \\ 211143) \end{gathered}$ | $\begin{gathered} 1,782.261^{* *} \\ (\mathrm{df}=33 ; \\ 211142) \end{gathered}$ |  |  |  |  |  |  |


[^0]:    ${ }^{1}$ Calculated as the number of times a minority applicant was treated less favorably on a single type of firm behavior than the majority applicant. Then the number of times the majority applicant was treated less favorably was subtracted.

[^1]:    ${ }^{2}$ In March of 2015, Utah made it illegal to discriminate based on sexual-orientation. It was decided that this was too recent of a change to effectively measure in this study.
    ${ }^{3} 5,211$ of the $3,421,589$ observations had a personal total income of less than zero, or 0.15 percent. An additional 36,274 have a personal total income equal to zero, or 1.2 percent. 0.02 percent had a household income of less than zero, and 0.02 percent less than or equal to zero.

[^2]:    ${ }^{4}$ Prior to 2008 the General Social Survey asked questions about same-sex sexual behavior, but not explicitly about sexual orientation.

[^3]:    5 "Laboratories of democracy" is a phrase popularized by Justice Louis Brandeis in 1932 to describe how a "state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."

[^4]:    ${ }^{6}$ The sample used to test for robustness is not separated by gender. This means that the model includes a Sex (Female) independent variable and thus a triple interaction term SameSexHH*Reform*Female.

[^5]:    ${ }^{7}$ Census 2020 will not ask for sexual orientation, despite a push from researchers and policymakers.

[^6]:    ${ }^{8}$ This is a very rough estimate that does not include weighting. Census population is US Census Bureau's state-level preferred estimates for same-sex couples. The preferred estimates adjust original Census tabulations reported in the Census 2010 SF-1, PCT15 to account for the likelihood that a small portion of different-sex couples miscode the sex of a spouse or partner and are incorrectly counted as a same-sex couple.

