

No Place Like Home? Same-sex Marriage Legislation and the Relocation Choice of Homosexual Partners[§]

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Abstract

This paper studies the interstate migration decisions of homosexual partners. I examine whether and to what extent the legalization of same-sex marriage in the states of birth of the householders in lesbian/gay partnerships will motivate these couples to move back to these states. Using data from the 2008–2021 American Community Survey (ACS), the study reveals that among couples who have moved to a different state in the past 12 months, lesbian and gay couples are approximately 10 percentage points more inclined to return to the home state of the householder when same-sex marriages are legally recognized in their birth state, in comparison to their heterosexual counterparts. Conversely, for heterosexual couples, there is no substantial evidence suggesting that their interstate migration decisions are affected by the presence of marriage equality in their home states. An exception occurs for heterosexual couples whose male householders were born in states that historically demonstrated intolerance towards homosexuality—they are 4.8 percentage points less likely to return to their home states, given that they had moved to another state in the previous year. The findings highlight that same-sex marriage legislations can serve as a motivating factor for homosexual individuals to re-establish familial connections, a prospect they might have deemed inconceivable in the absence of marriage equality in their home state.

JEL codes: J12; J13; J15; J10; K36

Keywords: Same-sex marriage · Interstate migration · State of birth · Family ties · Partnership · Identity · Social norms

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1. Introduction

In 2015, the U.S. Supreme Court, in the ruling of *Obergefell v. Hodges* (574 US 644 [2015]), determined that the Fourteenth Amendment mandates states to both license and acknowledge same-sex marriages. Prior to this landmark ruling, the decision to legalize same-sex marriage rested within the jurisdiction of individual states. The refusal of states to recognize same-sex marriages, including those performed outside their borders, significantly curtailed the interstate mobility of same-sex couples (see Koppelman 2006; Yarwood 2009). This limitation has important implications for the rights of same-sex spouses within the context of marriage and divorce.¹ Furthermore, the legalization of same-sex marriage has been shown to foster greater support and acceptance of homosexuality. Notably, Aksoy et al. (2020) observed that policies recognizing legal same-sex relationships substantially enhance attitudes toward sexual minorities. Consequently, same-sex couples often choose to reside in states that legally recognize same-sex marriage, where they experience a heightened sense of acceptance.²

Similarly, when same-sex marriage is legalized in the birth state of homosexual individuals, those with a strong attachment to their home state may choose to return, feeling more liberated to openly express their sexual identities now that marriage equality is established at home. However, at least in theory, the level of acceptance experienced by same-sex couples could vary depending on how same-sex marriage has been passed in their home states. Some legal scholars and political scientists express concerns that establishing civil rights through court decisions may be more likely to provoke societal backlashes (Ball 2005; Stoutenborough et al. 2006; Haider-Markel 2007; Klarman 2013). Consequently, the decision for homosexual individuals to return home may be influenced by whether same-sex marriage was implemented through legislative processes or judicial decisions.

This paper adds to the expanding body of literature concerning the interstate migration patterns of same-sex couples, building on studies such as Beaudin (2017) and Marcén and

¹Obtaining a divorce may pose challenges for same-sex couples in states that did not initially recognize their marriage. To address issues such as property division, couples may find it necessary to return to the states where they originally married. Complicating matters further, many states impose residency requirements before allowing individuals to file for divorce, as noted by Yarwood (2009).

²Controversial court trials can raise awareness and start public conversation on social issues that in turn could produce important cultural shifts in norms and attitudes that shape behaviors (see Beach and Hanlon (2023) for the impact of the famous Bradlaugh-Besant trial of 1877 on fertility in Britain).

Morales (2019). I find that the introduction of same-sex marriage in the birth state of the householder significantly influences home return migration trends. Lesbian and gay couples exhibit a higher propensity to relocate to their home states in comparison to other states, relative to their heterosexual counterparts.

Conversely, for heterosexual households with male householders originating from states with traditionally lower tolerance towards homosexuality, the implementation of same-sex marriage appears to act as a deterrent for them to return to their home states. This finding could imply that heterosexual individuals brought up in cultures with lower acceptance of homosexuality may maintain a relatively unfavorable stance towards the return of gay individuals, even in states where same-sex marriage has been legalized. This could potentially create a less-than-pleasant experience for gay couples returning home, deviating from their expectations, which could yield broader social implications.

Finally, contrary to what is expected from the backlash hypothesis, same-sex marriage legalization by state judicial ruling is found to produce the most robust positive impact on the return migration of homosexual couples, compared to when same-sex marriage is introduced by legislature.

2. Literature Review

The trend of legalization of same-sex marriage (and laws recognizing same-sex partnerships) in the Western world has garnered increasing scholarly attention. Yet the economics of homosexuality is still in its infancy due to the fact that same-sex marriage is a very recent phenomenon in human history, and reliable data on the homosexual population are still very limited. Economic studies on the impact of same-sex marriage typically focus on the effects of same-sex marriage legalization on the life choices and outcomes of homosexual couples, as well as social acceptance towards homosexuality (see Black et al. 2007 for an excellent review of homosexual families in the economics literature). Presently, empirical evidence predominantly suggests that marriage equality positively influences the well-being of same-sex couples. For instance, Hamermesh and Delhomme (2020) found that family income and the likelihood of home ownership increased gay couples residing in states that have legalized same-sex marriage.

Black et al. (2007) showed that same-sex partnerships are much less likely to live near the places of birth than their heterosexual counterparts. When it comes to migratory decision in

general, many socio-economic factors are at play that can motivate a household to relocate to another state. Some crucial ones that have been widely considered in the literature on interstate migration are economic opportunities and values of urban amenities (Greenwood 1997; Molly et al. 2011). Among same-sex partner households, their migration choices typically have additional considerations including the degree of support for (discrimination against) the LGBTQ population in the local community, and legal protection for their partnership.

Beaudin (2017) studied how same-sex marriage laws across states affect interstate migration prior to *Obergefell v. Hodges*. Her results indicate that heads of households as reported in the Census ACS are more likely to leave states without marriage equality, irrespective of whether the unions are homosexual or heterosexual, but the effect appears to be significantly larger for homosexual households. Marcén and Morales (2019) further estimated the dynamic effects of same-sex marriage on the migration decisions of homosexuals, and they found the law to have a positive and permanent effect on the interstate migration flow of homosexual individuals to states with same-sex marriage. My research complements their analysis by studying whether same-sex marriage might cause more homosexual partners to relocate to their home state when they make an inter-state move.

Cooke and Rapino (2007) offered evidence suggesting that younger homosexual individuals often relocate from small towns and less-tolerant rural areas, where there are fewer homosexuals, to gay and lesbian population clusters as a means of developing self-identity. Their study also identified significant differences in migration patterns between partnered gay and partnered lesbian couples from 1995 to 2005. Partnered gay couples tended to move towards medium-sized, highly amenitized urban areas without placing a strong emphasis on the tolerance towards gay lifestyles in the community. In contrast, partnered lesbian migration was oriented towards less populous areas, especially those with a large existing partnered lesbian population. Notably, both groups displayed a growing tendency to move to less populous regions over time. The findings in this paper suggest a potential connection between this evolving migration pattern and the observed trend of more homosexual couples returning to their birth states upon the introduction of same-sex marriage at home, making them geographically less concentrated in the long run.

This study also contributes to the literature examining the potential backlash following the enactment of same-sex marriage legislation, particularly through judicial rulings. Legal scholars and political scientists have argued that determining civil rights through court decisions may be more likely to trigger backlashes (Ball 2005; Stoutenborough et al. 2006; Haider-Markel 2007; Klarman 2013). Klarman (2013) suggested that more gradual changes in gay rights through legislative processes allow public opinion and politicians to adapt to the concept of marriage equality. Conversely, unpopular court decisions that deviate significantly from public opinion might result in a potent backlash, potentially leading to mass mobilization against gay rights. As a result, homosexual partners might be less inclined to relocate to states where same-sex marriage has been legalized through judicial rulings, as opposed to legislative action.

Aligning with this argument, Anderson et al. (2021) found that same-sex marriage legislation established through judicial rulings, rather than legislative action, is associated with higher rates of suicide planning and ideation among LGBT-identifying youths. This finding is consistent with the notion of a social backlash against same-sex marriage legislation, particularly in regions where support for same-sex marriage is weak. However, the findings of this study indicate that, in the context of the interstate migration decisions of homosexual couples, there is no evidence to suggest that their choices were negatively influenced by potential backlash against the LGBT community triggered by state court decisions.

3. A Brief History of the Path to Nationwide Same-Marriage in the US

Similar to many other countries, homosexuality faced substantial social stigma in the United States. Before 2004, all states had prohibited same-sex marriage. The protracted struggle for marriage equality in the United States encountered significant resistance, marked by considerable backlash, until the historic achievement of nationwide marriage equality through the U.S. Supreme Court's landmark ruling in *Obergefell v. Hodges*.

The inaugural legal challenge questioning the constitutionality of denying marriage licenses to same-sex couples unfolded in Hawaii. In 1993, the Hawaii Supreme Court, in the case of *Baehr v. Lewin* (74 Haw. 530, 852 P.2d 44 [1993]), declared "excluding same-sex couples from marriage was presumptively invalid under the Hawai'i Constitution because it discriminated on the basis of sex." This initial legal triumph for advocates of same-sex marriage

swiftly sparked significant political repercussions. In the subsequent general election in Hawaii, a constitutional amendment prohibiting gay marriage was presented to voters in 1998. The outcome saw Hawaiians voting by a margin of 69 percent to 31 percent in favor of allowing the state to restrict marriage to unions between one man and one woman, as documented by Klarman (2013).

Meanwhile in continental America, concerns among conservatives and religious groups grew as they feared that other states might follow Hawaii's lead, prompting widespread anti-gay mobilizations. In 1996, President Bill Clinton signed the Defense of Marriage Act (DOMA), which declared "no state shall be required to recognize a same-gender marriage performed in another state." Additionally, DOMA defined marriage exclusively as a union between a man and a woman for federal law purposes (Defense of Marriage Act, 1996). Between 1993 and 2004, 38 states introduced variations of state DOMAs, solidifying the prohibition of same-sex marriages by reasserting the definition of marriage as between one man and one woman (Eskridge and Riano 2020).

Despite the implementation of DOMA (and state DOMAs) aimed at undermining the legitimacy of same-sex marriage rights, the battle for marriage equality persisted vigorously throughout the United States. Massachusetts marked a historic milestone by becoming the first state to legalize same-sex marriage, a result of the Massachusetts Supreme Justice ruling in *Goodridge v. Department of Public Health* (798 N.E.2d 941 [2003]). In the ensuing years, additional states passed legislation or made court decisions to legalize same-sex marriage. The acceptance of homosexuality and the recognition of same-sex marriage continued to garner increasing national support, reaching a pivotal moment in 2010. According to a Gallup poll, for the first time ever, a majority of Americans (52 percent) considered sex between same-sex partners morally acceptable (Klarman, 2013). Public opinion trends across all states indicated a growing endorsement of same-sex marriage, with many states experiencing a rapid surge in support. Even in more conservative states such as Texas and Colorado, there was a smaller but notable increase in support. By the end of 2012, 12 states and the District of Columbia were actively performing marriages, civil unions, or domestic partnerships for same-sex couples, as documented by Flores and Barclay (2013).

In 2013, the U.S. Supreme Court struck down Section 3 of DOMA in *United States v. Windsor* (570 U.S. 744 [2013]), allowing same-sex couples to receive federal benefits. In 2015, the Supreme Court issued its landmark ruling in *Obergefell v. Hodges* (576 US 644 [2015]), and held that states must recognize marriages between same-sex couples. Since then, same-sex couples have been able to marry in all 50 states and the District of Columbia.

4. Theoretical Consideration

From an economic standpoint, one would expect couples to relocate to the place of birth of at least one partner if the net benefit of returning home is larger than that of moving to alternative states, and is larger than the benefit of remaining in the current state of residence. Homosexual individuals, much like their heterosexual counterparts, may have initially moved away from their state of birth in pursuit of enhanced job opportunities elsewhere. However, gay men and lesbian women encounter additional considerations when deciding on their place of residence. They tend to steer clear of locations with strong social stigma against homosexuality.

Moreover, the dating and marriage market for gays and lesbians tends to be concentrated in larger cities with a large LGBTQ community. Those originating from more conservative and religious states may have migrated due to the social pressures and hostility against their sexual orientation at home. While valuing family ties, some of them may have opted to move to places offering greater social acceptance and amenities better suited to their needs and preferences.

The legalization of same-sex marriage in the birthplace of these individuals may prompt them to consider returning to their home state. This is driven by the heightened legal protection afforded to married same-sex partners in their home state. Additionally, the legalization of same-sex marriages can significantly influence public opinion, leading to a shift in the general attitude towards homosexuality.

If these individuals perceive that prejudice and discrimination against homosexuality in their home state would be reduced due to the enactment of same-sex marriage, they may choose to return, particularly if they have strong family ties and value their peer and social network in that location. From an economic standpoint, the incentive to move back home has increased with the enhanced legal protection for homosexual couples.

Furthermore, the emotional cost associated with returning to their birth state has lowered, thanks to the broader societal acceptance that typically accompanies marriage equality. Supporting this notion, Sansone (2019) found that the legalization of same-sex marriage increased the probability of being employed and jointly employed for same-sex couples.

One important aspect of the relocation choice of partners is that it is a joint decision (see for instance, Lundberg and Pollak 2003; Compton and Pollak 2007; Løken et al. 2013). The bargaining power of partners in their relationship could determine who has a larger say in their relocation decision. Notably, Compton and Pollak (2007) observed that the economic opportunities of husbands play a more substantial role in shaping the relocation choices of spouses. This trend is often linked to the prevalent gender wage gap in America, leading wives to assume secondary earning roles and becoming "tied movers" (Løken et al. 2013).

In the context of same-sex couples, however, this dynamic differs significantly, as a same-sex relationship, by definition, involves individuals of the same sex, biologically at least. Despite the generally more egalitarian nature of same-sex partnerships (Weeks et al. 2001), there remains a possibility that decisions within these relationships are influenced by the relative bargaining power of the partners. For instance, partners with a significant age or educational advantage may have higher incomes and elevated socio-economic statuses. Consequently, partners in a stronger bargaining position may be more inclined to relocate back to the birth state of their partner. This paper also tests the validity of this bargaining hypothesis and explores the extent to which it applies to same-sex couples.

5. Data and Empirical Patterns

I utilize data from the 2008–2021 American Community Survey (ACS) of Integrated Public Use Microdata Series (IPUMS, Ruggles et al. 2023), which provides the most up-to-date data regarding same-sex unions. Importantly, the ACS contains information on the state or country of residence for the respondents one year ago since 2001. This variable allows for testing whether the mobility of same-sex couples is affected by same-sex marriage legislation.³ Data on the year

³ Ideally, we would want to have the information of a longer history of the residence of respondents, but unfortunately, data on state or country of residence 5 years ago are only available in the US Censuses before 2000.

of the introduction of same sex marriage by state, method of legislation come from Eskridge and Riano (2020).

Prior to 2008, misclassification in identifying same-sex couples was more pronounced, largely attributable to respondents frequently misreporting their gender due to questionnaire design. Given the substantially larger population of heterosexual couples compared to same-sex couples, even a small percentage of misreported genders among heterosexual partners could lead to an overestimation of the number of same-sex couples (Sansone 2019). Consequently, concerns arise regarding the reliability of utilizing ACS data to analyze the behaviors of same-sex couples prior to 2008.

To mitigate this issue, between 2007 and 2008, the U.S. Census Bureau implemented changes in the form layout of the ACS. These modifications were aimed at minimizing measurement errors associated with gender misreporting in couples by making it more difficult to accidentally mark both male and female in the form (O’Connell et al. 2010). As a result of these alterations, the estimated number of same-sex couples substantially decreased in 2008 (O’Connell et al. 2010; U.S. Census, 2013). In light of these considerations, the analysis focuses exclusively on data from 2008 onwards, ensuring a more accurate representation of same-sex couple dynamics in the subsequent years.

The ranking of states in the percentage of residents believing “homosexual sex is not wrong” from 1981–2004 (biennially) used in the heterogeneity analysis is provided in Lewis et al. (2014). The authors estimated the figures using the General Social Survey (GSS).⁴

The sample is confined to native born couples (married or partnered) who relocated to another state in the preceding year. The key estimates are interpreted as homosexual households drawn to relocate to the home state of the householder as opposed to other states with same-sex marriage in place in their birth state. Johnson and Kleiner (2020) employed a similar methodology in studying the impact of occupational licensing on interstate migration. Their main results are based on individuals who moved at least 50 miles in the last year. Landivar et al. (2021) also focused on mover households and found that mobile mothers with children under age 13 are less likely to be employed when they moved to a state with more expensive childcare. The limitation

⁴ This corresponds to a period before same-sex marriage was legalized in any state, except in Massachusetts, which performed the first same-sex marriage in the United States on May 17, 2004 (Eskridge and Riano 2020).

of focusing on the sample of households that had moved during the last year is that the estimates are more likely to apply to households with greater geographical mobility. We cannot tell how same-sex marriage laws affect the broader migration decision of households (i.e., the decision to move or stay) is not possible due to the conditional nature of the outcome variable, which is based on inter-state migration in the preceding 12 months.

Despite this limitation, the findings presented in this paper remain valuable, offering crucial insights into how the migration decisions of same-sex partners are influenced by the legal framework. It is noteworthy that same-sex couples tend to exhibit higher mobility rates, and as such, the outcomes of this study provide meaningful perspectives on the interplay between legal considerations and the migration choices of these couples within the studied time frame.

To provide a clearer picture why limiting the sample to the migratory population is more desirable, one can imagine that in the full sample, some homosexual households had already been drawn back to their states of birth *more* than a year ago when same-sex marriages were granted in these states. Unfortunately, due to the absence of comprehensive interstate migration history for households in the ACS data, these cases are categorized as non-movers. This would substantially bias the effect of same-sex marriage in state of birth on the home migration decision of same-sex couples downward.

Figure 1 illustrates that, up until 2012, the proportion of same-sex households and heterosexual households relocating to their state of birth exhibited a striking similarity. If any distinction existed, the return migration pattern among same-sex couples demonstrated a slight downward trend before 2010. In contrast, for heterosexual households, the return migration pattern remained consistently steady throughout the entire sample period.

Interestingly, the return migration pattern for same-sex households witnessed a notable surge from 2010 to 2013, particularly with a sharp increase between 2012 and 2013, followed by a rapid decline in 2014. The trend underwent a substantial acceleration after the landmark *Obergefell v. Hodges* decision. On the other hand, the return migration trend among heterosexual households did not show such pronounced fluctuations.

Figure 2 provides a visual representation of the frequency of the year of same-sex marriage legislation across states. Notably, there was a significant uptick in same-sex marriage legalization after 2012, mirroring the observed return migration pattern among same-sex households in Figure 1. It is crucial to highlight that such a connection is not evident among heterosexual couples, emphasizing the unique relationship between same-sex marriage legislation and the migration dynamics of same-sex households.

Table 1 reports the summary statistics of the sample based on partnership types. Notably, both lesbian and gay households exhibit a higher propensity to return to the home state of the householder, as opposed to relocating to other states, compared to their heterosexual counterparts throughout the sample period.⁵ Unsurprisingly, individuals in lesbian and gay partnerships who migrated in the past year are more likely to have been born in states where same-sex marriage laws are in effect, in contrast to their heterosexual counterparts. This pattern aligns with expectations, given the legal landscape and its influence on the migration decisions of individuals in same-sex partnerships.

For the household characteristics, partnership with male householders tend to be older than that with female households. Notably, when examining age sorting within partnerships, lesbian couples, on average, exhibit a substantially lower age difference than other partnership types. In terms of educational attainment, homosexual householders, on average, demonstrate higher levels of education. Compared to their heterosexual counterparts, homosexual householders are less likely to have a high school diploma or lower, and more likely to be college graduates or have completed at least some graduate school education.

⁵ The heterosexual counterparts for lesbian and gay households are opposite-sex household with female and male householders respectively. And according to Census, “The householder refers to the person (or one of the people) in whose name the housing unit is owned or rented (maintained) or, if there is no such person, any adult member, excluding roomers, boarders, or paid employees. If the house is owned or rented jointly by a married couple, the householder may be either the husband or the wife.” (<https://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html#householder>)

6. Econometric Strategy

To study the effect of same-sex marriage in birth state on the decision of relocating to the state of birth of same-sex couples, I estimate the following difference-in-difference-in-differences (DDD) model:

$$L_{isbt} = \beta_0 + \beta_1 \text{SameSex}_i + \beta_2 \text{SSML}_{bt} + \beta_3 \text{SameSex}_i * \text{SSML}_{bt} + \mathbf{X}'_{it} \gamma + \alpha_t + \alpha_b + \varepsilon_{ibt}, \quad (1)$$

where L_{ibt} is the outcome variable which is a binary variable taking the value 1 if union i (could be a marital or cohabiting union) residing in state s just returned to the home state of birth b of the householder in the past 12 months (so $s = b$ when the couple returns to the home state of the householder) in sample year t , and zero if they move elsewhere.

SameSex_i is a dummy variable that equals one if the union is same-sex and zero otherwise. SSML_{bt} is a dummy variable that takes 1 if state b has instituted same-sex marriage in year t (irrespective of how the law was passed), and zero otherwise.⁶ $\text{SameSex} * \text{SSML}$ is the interaction term between same-sex unions and same-sex marriage law in birth state, which is the primary variable of interest in this analysis.

The vector \mathbf{X}_{it} includes individual characteristics of the household head including age, age squared, education groups (less than high school, high school graduates, some college, college graduates, at least some graduate school) and racial dummy groups (white, black and others). Lastly, α_t , α_b and ε_{ist} stand for the year, state of birth (of the householder) fixed effects, and the error term. The coefficient β_3 captures the effect of same-sex marriage laws on the home migration decision of same sex couples.

Two crucial assumptions are essential for a causal interpretation of β_3 . Firstly, it is required that the legalization of same-sex marriage occurred to states exogenously. Secondly, an

⁶ The same-sex marriage variable in practice takes one in a state when a year after it has legalized same-sex marriage and onwards, and zero otherwise. This coding is more reasonable as it should take some months for couples to make their migration decision and prepare for the move. Note that the main results are unaffected by an alternative coding of same-sex marriage that sets SSML to 1 in any state that passed the same-sex marriage law in year t and onwards.

assumption is made that the annual home migration rates between same-sex couples and heterosexual couples share a common time trend. Figure 1 illustrates that, prior to 2012 when only seven states had legalized same-sex marriage, the home migration rates between heterosexual and homosexual households were notably similar. The home migration rate of same-sex couples experienced a modest drop of approximately two percentage points from 2008 to 2009, yet this variation could potentially be attributed to measurement errors arising from small sample sizes during that period. Moreover, this initial decline in the home migration rate of same-sex couples is considerably smaller in magnitude when compared to the subsequent drastic rise in later years. Between 2009 and 2011, the return migration rates exhibit minimal variation for both groups. Remarkably, the home migration rate among heterosexual couples displays very little fluctuation throughout the entire sample period.

Commonalities exist in the return migration decisions of both heterosexual and homosexual couples. Factors such as the evolving societal attitudes towards family values can impact the decision to return, affecting both groups similarly, albeit with potentially varying magnitudes across states. These nuanced differences are accounted for by the inclusion of state of birth and year fixed effects in the analysis. Additionally, certain states may implement policies that either facilitate or discourage inter-state moves, and trends in state economic performance may vary over time. These trends can at least be partially captured by the state of birth specific time trends, which are included in some specifications.

A major advantage of including the heterosexual couples in the sample is that it will substantially increase the sample size, and thus can improve the preciseness of the estimates. Additionally, this inclusion enables us to explore potential spillover effects of same-sex marriage laws on the home migration decisions of heterosexual couples. For instance, if the recognition of same-sex marriage weakens traditional family values of heterosexual households, the likelihood of heterosexual households to relocate home will be lower. And as such, β_1 will be negative. In contrast, if the recognition of same-sex marriage does not affect the family values of heterosexual couples, β_1 will be zero.

To further explore whether the impact of same-sex marriage legalization in the birth state of the householder would differ by the way the law is passed, I also perform the following regression:

$$L_{isbt} = \beta_0 + \beta_1 \text{SameSex}_i + \beta_2 \text{Legislative}_{bt} + \beta_3 \text{StateJudicial}_{bt} + \beta_4 \text{Obergefell}_{bt} + \beta_5 \text{Legislative}_{bt} * \text{SameSex}_i + \beta_6 \text{StateJudicial}_{bt} * \text{SameSex}_i + \beta_7 \text{Obergefell}_{bt} * \text{SameSex}_i + \mathbf{X}_{it}' \boldsymbol{\gamma} + \alpha_t + \alpha_b + \varepsilon_{ibt}, \quad (2)$$

where Legislative_{bt} , $\text{StateJudicial}_{bt}$ and Obergefell_{bt} represent dummy variables that take the value of one if state of birth b has instituted same sex marriage in year t by legislature, state-level judicial decision and the U.S. Supreme Court's ruling in *Obergefell v. Hodges* respectively, and zero otherwise.

Since the relocation choice of lesbian and gay couples could display very different patterns, all the regressions are performed separately by partnered household headed by woman and man. All the regressions are weighted by the household weights.

7. The Results

7.1 The Main Results

Panels A and B of Table 2 report the DDD estimates of equation (1) by female and male householders respectively. The results across specifications are very similar. Same-sex marriage law being introduced in the state of birth itself does not affect relocation behaviors (i.e. no direct impact on the return migration choice of couples), except in specifications 1 and 2 among partners with female householders. But the estimated effect is not robust across specifications, and is only marginally statistically significant. The home migration patterns of lesbian and gay couples are also not statistically different from that of heterosexual couples.

Turning to our primary variable of interest, the estimated co-efficient of the interaction term between same-sex marriage laws in state of birth and same-sex couples are found to increase the likelihood of lesbian partners' choice to move back to the home state of the householder by about 8.7–10.5 percentage points depending on specifications. This amounts to 12.3–14.9 percent of the sample mean for the lesbian households. Specification 1 only includes year and state fixed effects without controlling for individual characteristics. Specification 2 adds individual characteristics. We can observe that the estimate of the interaction effect between same-sex marriage and lesbian couples are largely unchanged when individual characteristics are added. Specifications 3 and 4 further include state-specific linear and quadratic time trends

respectively. The results show that the estimates of the interaction term between same-sex marriage and lesbian couples are robust across specifications.

Similar patterns are observed among gay partners from Panel B of Table 2. Across specifications, the estimates are about 10 percentage points and are all statistically significant at the 1 percent level. Like their lesbian counterparts, the increase is substantial, and corresponds to 14.6 percent of the sample mean of gay partners (the mean of the percentage of lesbian and gay partners returning to the home state of the householders is 70.5 and 68.1 respectively).

Table 3 presents the estimates of equation (2). If the backlash hypothesis holds, we should observe that same-sex couples would be less willing to move back to their home state if the laws were passed by judicial ruling, yet the main results provide no such evidence. For lesbian households, all the positive effects of same-sex marriage laws on their return migration of same-sex couples are concentrated in jurisdictions that passed same-sex marriage by court order or the Supreme Court's ruling.

For gay couples, the effects of same-sex marriage passed by state judicial rulings are very similar to their lesbian counterparts. But they respond very differently to same-sex marriage laws passed by legislature in their home state as opposed to by the *Obergefell v. Hodges* ruling. The point estimates of the interaction term between same-sex marriage law passed by legislature and gay couples are about 9 percentage points, which are very close to those in the main regression results.

However, the interaction terms between *Obergefell v. Hodges* and gay couples are statistically insignificant across specifications. Noticeably, from Table I1 in Appendix I, we can observe that all the states that legalized same-sex marriage by legislature are Democratic Party leaning states. These states tend to be more liberal and have greater acceptance for homosexuality, and thus might have made gay couples feel more welcome to move back prior to the same-sex marriage laws being passed by legislature. As argued by Sansone (2019), same-sex marriage legislations followed state or federal court decisions are less predictable than bills proposed by elected politicians. This also means that the key results for the impact of same-sex marriage passed by legislature on the return migration of gay couples should be interpreted with caution. Conceivably, for states that have greater acceptance for homosexuality, they might be more

likely to pass same-sex marriage laws by legislature.⁷ As such, the estimated coefficient can be bias upward. But at the same time, it can be the case that same-sex couples are more likely to reside in their states of birth if they have a higher level of acceptance for homosexuality, irrespective of same-sex marriage laws. As such, we might not observe more same-sex couples to *return* to their state of birth when same-sex marriage laws are present in these states. This could be the reason why we do not observe any statistically significant results among lesbian couples when same-sex marriages were passed by legislature in their home states.

Nonetheless it is reassuring to see that the effect of same-sex marriage obtained by state judicial rulings on the return migration of homosexual couples remain strongly positive. Arguably, judicial rulings are less affected by public acceptance for same-sex marriage.⁸ And our results show that the impact of same-sex marriage by state judicial rulings on return migration of homosexual couples are actually most robust compared to same-sex marriage laws that were passed by other methods.

7.2 Heterogeneity of the Same-Sex Marriage Effect

The previous results suggest that the home migration decision of gay couples could be more affected by public acceptance. To delve deeper into this question, I explore whether and how the effect of same-sex marriage on return migration of homosexual couples might vary depending on the tolerance for homosexuality of the state of birth of gay householders. I divide the sample by the state ranking of tolerance for homosexuality. States are considered as tolerant and intolerant if they are ranked “25 or below”, and “25 or higher” respectively⁹.

To mitigate the potential positive effect of same-sex marriage passage on public acceptance of homosexuality, I use the ranking of tolerance provided in Lewis et al. (2014), which was calculated using data from the General Social Survey from 1981–2004 (biennially) – a period before any same-sex marriage legislation was passed in the United States, except in

⁷ This is especially true for Maine, Maryland and Washington, which passed their same-sex marriage legislature by referendum.

⁸ For instance, Iowa, a relatively moderate state, was the third state that introduced same-sex marriage by judicial ruling (*Varnum v. Brien*, 763 N.W.2d 862 [2009]). This unanimous ruling came as a surprise even to advocates for marriage equality, who before the *Varnum* decision, would view same-sex marriage as “something potentially variable only on the liberal coasts.” (Witosky and Hansen 2015, 213)

⁹ District of Columbia is excluded from this analysis as data its’ residents’ attitude towards homosexuality is unavailable.

Massachusetts, which passed same-sex marriage by a judicial ruling on November 11, 2003 (*Goodridge v. Department of Public Health*).

Tables 4–5 report the results. For lesbian couples, the effect of the interaction term between same-sex marriage and lesbian couples become statistically insignificant or marginally significant irrespective of state level tolerance for homosexuality. But note that the point estimates across all specifications are very similar and are very close to those in Table 2. The lack of significance could come from the decrease in sample sizes when the sample is split. We can also observe that in intolerant states, same-sex marriage law is associated with a 4 percentage points increase in return migration for both heterosexual and lesbian couples, although the effect is only marginally statistically significant.

Table 5 illuminates the results for partnership with male householders. For the interaction term between same-sex marriage law and gay couples, the point estimates are very similar regardless of the state level tolerance for homosexuality, although the effects are statistically less significant in intolerant states. What is more striking in the intolerant states is that across specifications 1–3, same-sex marriage laws are consistently found to reduce return migration of partnership headed by male by about 5 percentage points. The results are strongly statistically significant.

To further explore further whether this reduction is related to the head of the heterosexual couples' intolerance for homosexuality born in intolerant states, specification 4 provides estimates of the differential impact of same-sex marriage laws on gay couples and same-sex couples by interacting the law with these two mutually exclusive partnership groups. The result shows clearly that the negative effect of same-sex marriage law on return migration of households with male householders are completely driven by the migration behaviors of heterosexual couples. In words, heterosexual couples headed by males became less motivated to move back to their state of birth relative to other states if they were born in intolerant states.¹⁰ The findings here are in line with the backlash hypothesis and could imply that gay couples

¹⁰ These states include Alabama, Arkansas, DC, Florida, Georgia, Idaho, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

might face more social obstacles and hostility than lesbian couples in gaining social acceptance in less tolerant states.

As relocation choice could be related to the bargaining power of partners (Lundberg Pollak 2003), Table 6 examines whether the impact of same-sex marriage on the return migration of the state of birth of the householders differs by age differences of couples. The sample includes only partners whose state of birth are different. Conceivably, a householder that is much older than his/her partner could be more dominant in decision making. The first two columns examine female householders that are more than 2 years older than their partners and less than or 2 years younger than their partners. No statistically significant results are detected.¹¹

For gay couples however, column 3 shows that when the householder is more than 4 years older than his partner, the legalization of same-sex marriage in his state of birth will increase the likelihood to relocate to the home state of the householders by 11 percentage points. The results indicate in a gay partnership with one partner being significantly older, he might have higher bargaining power, whereas lesbian partnerships appear to function on more egalitarian terms.¹²

Lastly, I examine whether the tendency to move return with same-sex marriage law might be related to caregiving concern by dividing the sample by whether children are present in the household. Table 7 shows that for lesbian couples with children, the effect of same-sex marriage laws on their tendency to move back to the state of birth of the householder is statistically insignificant.

For gay couples, as the number of gay households with children is very low, it is not surprising that the results in column 3 largely mimic the result in specification 4 in Panel B of Table 2. The estimated effect of the interaction term between same-sex marriage law and gay couples is very imprecise, possibly due to the low sample size of gay households with children. All these results indicate that caregiving reason is unlikely to play a key part in the home migration decision of homosexual couples with same-sex marriage in their home states.

¹¹ I have also tested other age difference thresholds, and results remain statistically insignificant.

¹² I also examine whether differences in educational achievements might produce similar effects, but all the results are statistically insignificant. These results are available upon request.

7.3 Event Study of Same-Sex Marriage Legislation

To investigate potential pre-treatment trends in the return migration to the state of birth for lesbian and gay couples before the enactment of same-sex marriage legislation, Figures 3 and 4 visually present the results of event study analyses augmented equation (1), but with the sample restricted to lesbian and gay partners exclusively. It is important to note that this restriction significantly reduces the sample size, leading to unavoidably noisier estimates. Figure 3 illustrates that, for lesbian couples, the likelihood of return migration in the years preceding the introduction of same-sex marriage laws was largely not statistically different from zero. However, following the implementation of same-sex marriage legislation, there is a discernible upward trend in the return migration among lesbian couples.

For gay couples, the event study analysis is not as informative. There is a slight downward trend in the return migration of gay couples in the years preceding the enactment of same-sex marriage legislation. However, the estimated dynamic effects of same-sex marriage on the return migration decisions of gay couples exhibit considerable noise, and no clear trend is discernible when the sample is limited to gay couples alone. Regardless, there is no observable upward trend in the return migration decision of homosexual couples before the introduction of same-sex marriage laws. This observation suggests that the positive home migration effects identified in the empirical analysis are highly unlikely to be driven by the endogeneity of same-sex marriage legislation.

8. Discussion and Conclusion

Traditionally, homosexual individuals tended to distance themselves from their families and gravitate towards larger cities such as San Francisco, New York, and Chicago (Weston 1995). The legalization of same-sex marriage has made sexual orientation a less important determinant of life choices of homosexual individuals, including where they want to live. Recognizing same-sex marriages not only provides crucial legal protection for same-sex couples but also plays a transformative role in shaping social norms, fostering greater acceptance of homosexuality within mainstream society. As Ghaziani (2010, 39) suggested, same-sex marriage facilitates homosexual assimilation, which “generates feelings of acceptance, comfort, and safety. It enables gays and lesbians to feel like they are a part of the mainstream.” Kreitzer et al. (2015)

argued that legalizing same-sex marriages signifies the establishment of new social norms, generating a legitimizing effect through the acknowledgment of marriage equality. Supporting evidence for this hypothesis emerged from a shift in public opinion in favor of gay marriage following the groundbreaking ruling in *Varnum v. Brien* (763 N.W.2d 862 [2009]), which legalized same-sex marriage in Iowa. Their hypothesis was supported by a shift in public opinion in favor of gay marriage following an unpopular ruling (*Varnum v. Brien*, 763 N.W.2d 862 [2009]) that established same-sex marriage in Iowa.

The findings in this paper further suggest that the availability of same-sex marriage in the home state of homosexual partners significantly increases the likelihood of them returning to their birthplace—a choice that might have seemed unattainable in the absence of same-sex marriage. This underscores the transformative impact of legal recognition on the mobility and life choices of same-sex couples.

One positive consequence of the legalization of same-sex marriage is its significant impact on the residential choices available to homosexual individuals. Marcén and Morales (2022) demonstrated that the introduction of same-sex marriage in a state led to an increase in the number of gay men (identified through same-sex partnerships) per 100 inhabitants, utilizing data from the 2001–2015 American Community Survey. However, the effects observed appeared to diminish approximately 5-6 years after the law's introduction.¹³ Combining the results of this study with theirs, it would imply that the number of gay couples returning to the birth state of the householders must have increased.

An essential implication of same-sex marriage laws is their potential to reestablish family ties among homosexual individuals who, in the pre-same-sex marriage era, often experienced feelings of isolation and non-acceptance. For many, the desire to reside in their home states and be closer to their families is strong, but this inclination might not have been realized in the absence of same-sex marriage. The prospect of relocation, made feasible by the legal recognition of same-sex marriage, has the capacity to significantly enhance the psychological well-being of homosexual individuals.

¹³ No statistically significant impact if found among lesbians.

While it is commendable that homosexual individuals now enjoy a greater degree of freedom in choosing where to live and can receive increased emotional support from their families, the growing presence of this population in numerous non-traditional LGBTQ communities raises pertinent policy questions regarding their acceptance within local social settings. Understanding and addressing the dynamics of acceptance and integration within these communities remain critical aspects to be explored for the comprehensive well-being of the LGBTQ population.

One finding from the heterogeneity test in this paper hints at that homosexual couples returning to states traditionally less tolerant of homosexuality might encounter cultural clashes in these states. An interesting contrast emerges when examining heterosexual couples, who exhibit less inclination to return home when same-sex marriages are legalized in their respective states.

As suggested in Grosjean and Khattar (2019) and Baranov et al. (2023), masculinity norms, once established are very persistent. Baranov et al. (2023) particularly highlighted that masculinity norms can produce repercussions for sexual minorities. In addition, Manning and Masella (2023) found a substantial increase in the coverage of anti-gay rights language when same-sex marriages were introduced, persisting for up to three years after the legal change. This suggests that, in states with deeply ingrained masculinity norms, disapproval of homosexuality may endure even after the legalization of same-sex marriage. Policymakers must critically evaluate the potential challenges faced by homosexual partners who return to these states, including heightened stigmatization and discriminatory behaviors such as housing discrimination (Levy et al. 2017), physical and verbal harassment (Hubach et al. 2019).

With the LGBTQ population in the United States steadily growing and legal barriers limiting their rights to marry being lifted nationwide, it is increasingly crucial for policymakers to implement measures that foster mutual understanding.

One limitation of this study is that it does not consider the potential influence of same-sex marriage on the selection of partners based on place of birth. It is conceivable that, over time, more homosexual individuals may meet their partners near their birthplaces. If this occurs, the impact of same-sex marriage on return migration could be more pronounced for homosexual couples formed before the marriage equality movement gained momentum. There is clearly still

a great deal of exciting research to be done on changes in migration and matching patterns of the LGBTQ population with same-sex marriage.

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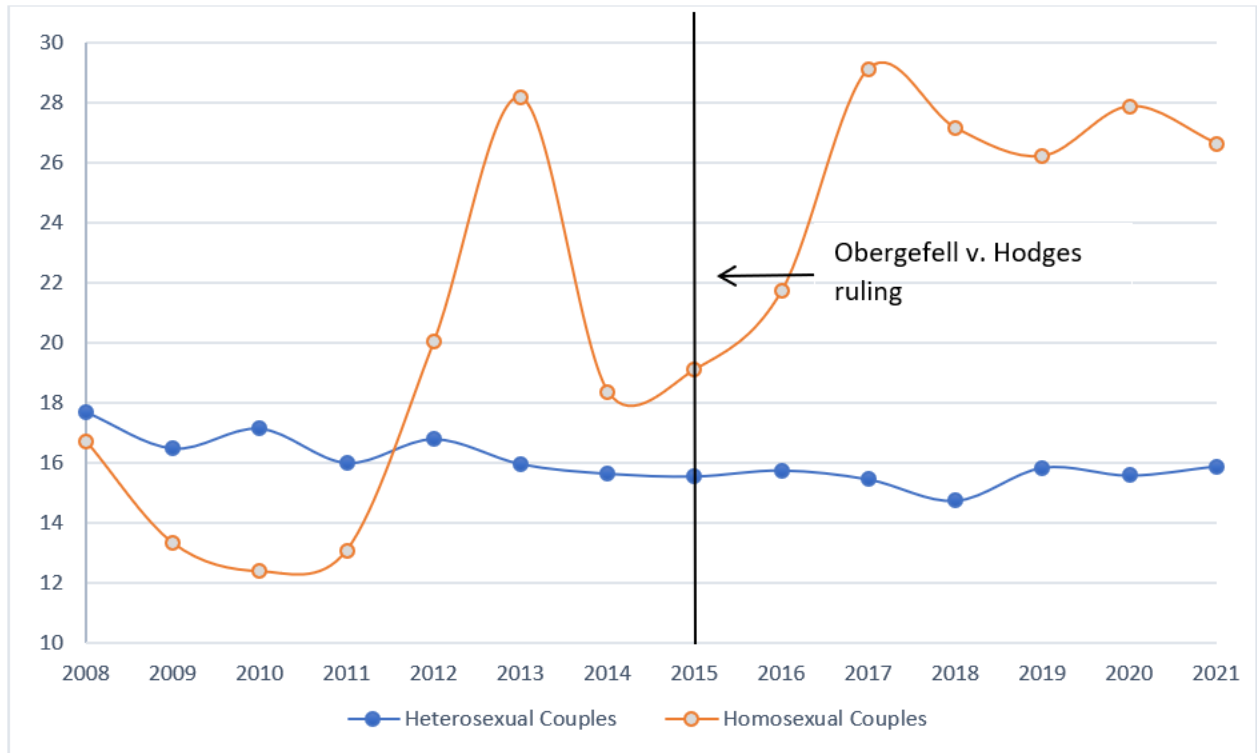
Goodridge v. Department of Public Health, 798 N.E.2d 941 (2003)

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United States v. Windsor, 570 U.S. 744 (2013)

Varnum v. Brien, 763 N.W.2d 862 (2009)

Figure 1: Percentage of Couples Returning to the State of Birth of Householders Conditional on Having Moved Inter-State Last Year by Sexual Orientation, 2008–2021



Data: American Community Survey of Integrated Public Use Microdata Series (2008–2021).

Figure 2: Year of Legalization of Same-sex Marriage

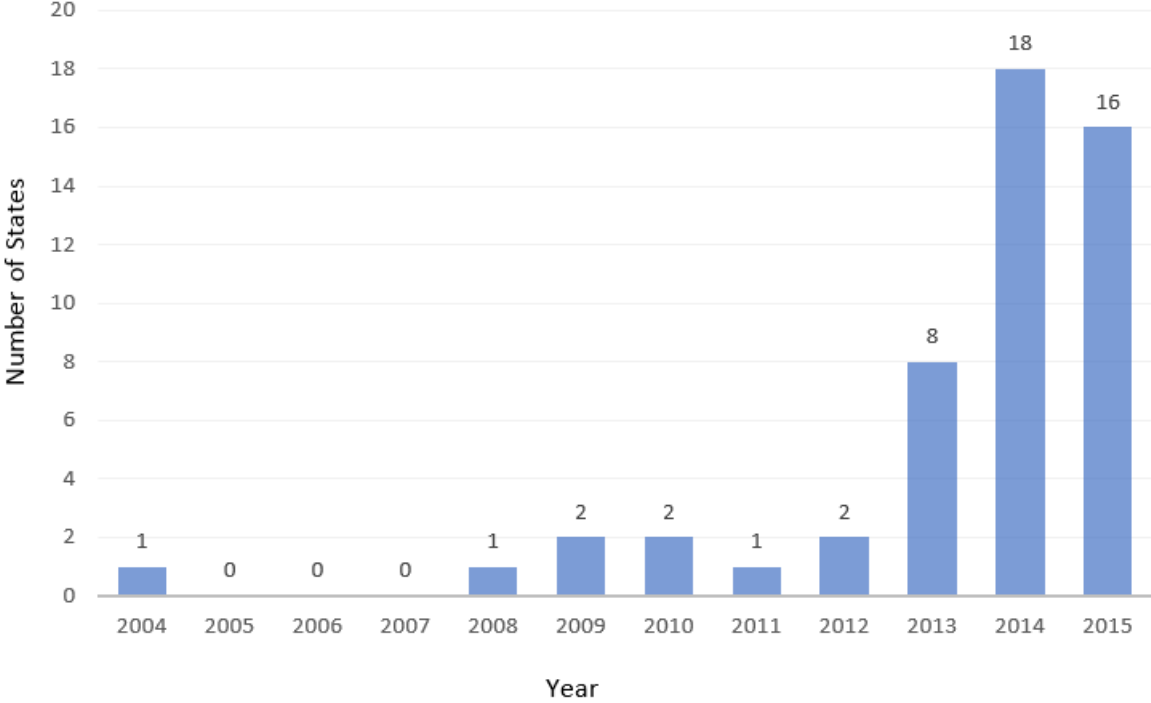


Figure 3: Event Study Graph of Same-sex Marriage and Lesbian Couples' Returning to the State of Birth of the Householder

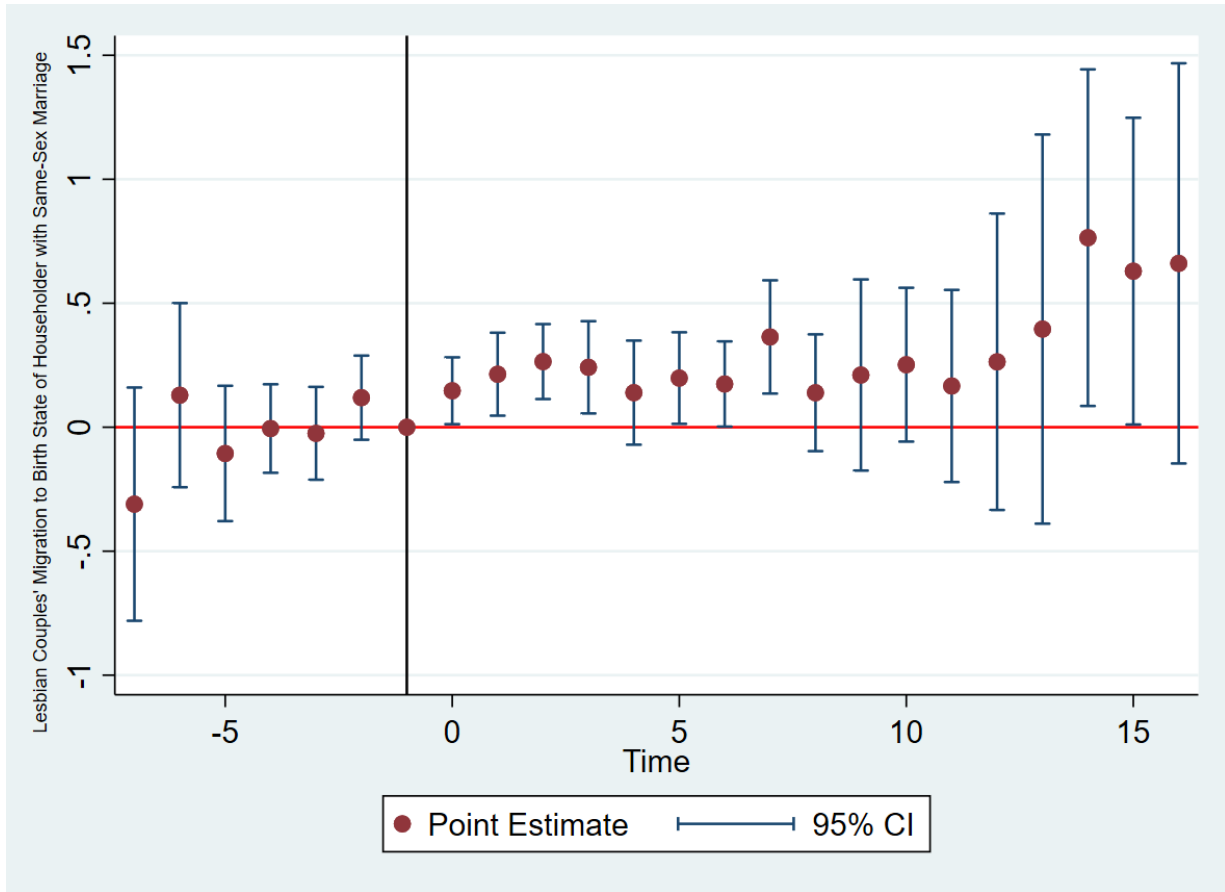


Figure 4: Event Study Graph of Same-sex Marriage and Gay Couples' Returning to the State of Birth of the Householder

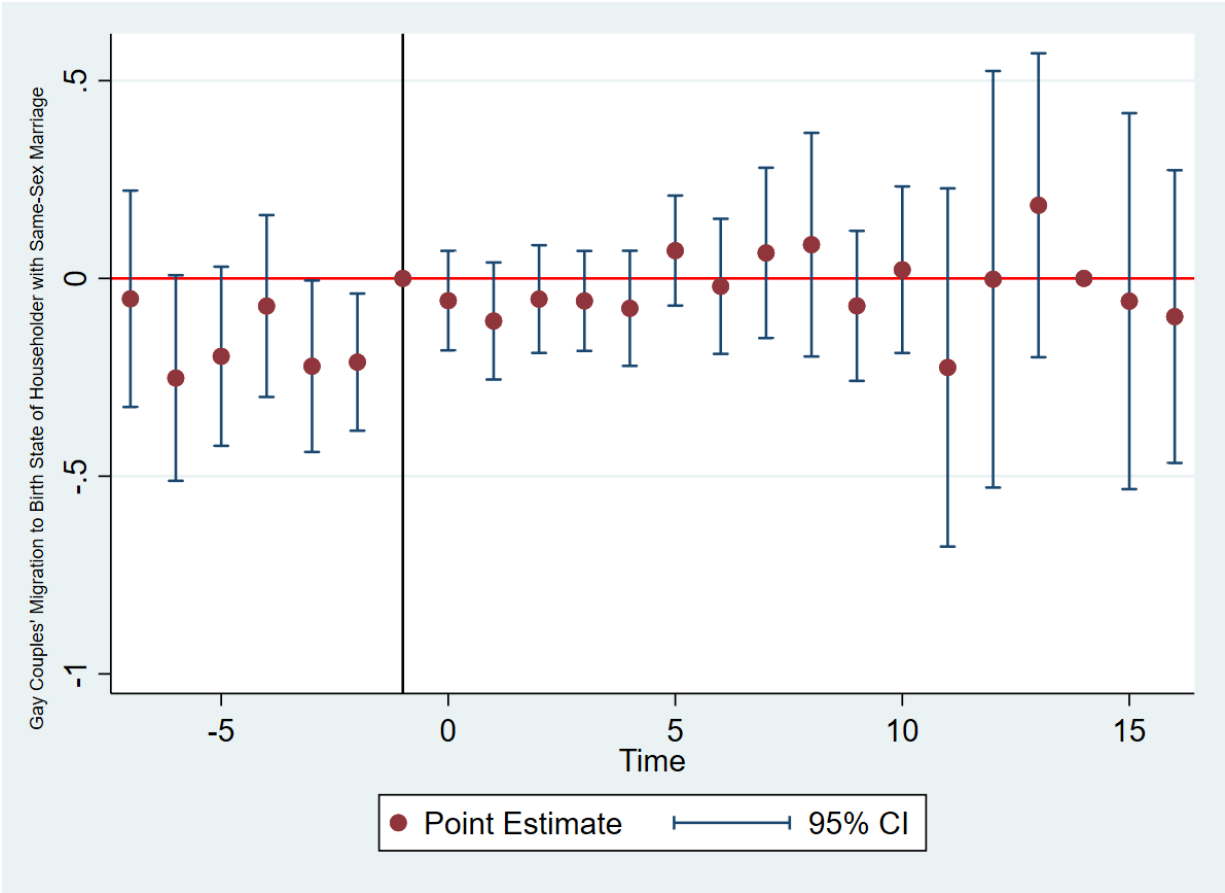


Table 1: Summary Statistics on Migration Households by Partnership Type, 2008–2021

Variables	Partnership with Male householders		Partnership with Female householders	
	Heterosexual	Gay	Heterosexual	Lesbian
Return to state of birth	0.184 (0.387)	0.229 (0.420)	0.203 (0.402)	0.284 (0.451)
States of birth with same-sex marriage law	0.549 (0.498)	0.681 (0.466)	0.596 (0.491)	0.705 (0.456)
States of birth with same-sex marriage law passed by legislature	0.147 (0.354)	0.154 (0.361)	0.156 (0.362)	0.173 (0.378)
States of birth with same-sex marriage law passed by judicial rulings (<i>non-Obergefell v. Hodges</i>)	0.285 (0.451)	0.352 (0.478)	0.317 (0.465)	0.352 (0.478)
States of birth with same-sex marriage law required by <i>Obergefell v. Hodges</i>	0.117 (0.322)	0.174 (0.379)	0.123 (0.328)	0.180 (0.384)

Notes: standard deviations in parentheses. Data: American Community Survey of Integrated Public Use Microdata Series (2008–2021).

Table 1 (Cont'd): Summary Statistics on Migration Households by Household Type, 2008–2021

Variables	Partnership with Male householders		Partnership with Female householders	
	Heterosexual	Gay	Heterosexual	Lesbian
Age of householder	43.69 (16.68)	42.22 (14.17)	39.65 (14.62)	38.82 (14.63)
Difference in age between householder and partner	1.869 (4.716)	1.128 (9.074)	-1.775 (4.819)	-0.197 (6.206)
Number of children in household	0.827 (1.161)	0.086 (0.435)	0.905 (1.200)	0.238 (0.665)
Racial category of household head				
Householder is white	0.880 (0.326)	0.868 (0.338)	0.864 (0.343)	0.805 (0.396)
Householder is black	0.062 (0.241)	0.049 (0.217)	0.066 (0.249)	0.106 (0.308)
Education category of household head				
Less than high school	0.028 (0.164)	0.026 (0.160)	0.030 (0.171)	0.018 (0.132)
High school graduates	0.233 (0.422)	0.168 (0.374)	0.222 (0.416)	0.203 (0.403)
Some college	0.237 (0.425)	0.223 (0.416)	0.257 (0.437)	0.264 (0.441)
College graduates	0.285 (0.452)	0.307 (0.462)	0.277 (0.448)	0.297 (0.457)
At least some graduate school	0.218 (0.413)	0.276 (0.447)	0.194 (0.395)	0.238 (0.426)
N	67,265	1,188	45,083	1,102

Notes: standard deviations in parentheses. Data: American Community Survey of Integrated Public Use Microdata Series (2008–2021).

Table 2: OLS Estimates of the Effect of Same-Sex Marriage Laws on Partners' Decision to Return to State of Birth of the Householder

A.	Partnership with female householders			
	(1)	(2)	(3)	(4)
Same-sex marriage law	0.021*	0.022*	0.016	0.017
	(0.011)	(0.011)	(0.014)	(0.013)
Lesbian couples	0.008	0.013	0.009	0.010
	(0.026)	(0.027)	(0.027)	(0.026)
Same-sex marriage law*lesbian couples	0.105**	0.098**	0.102**	0.087**
	(0.044)	(0.046)	(0.046)	(0.038)
Individual characteristics		X	X	X
State of birth fixed effects	X	X	X	X
Year fixed effects	X	X	X	X
State of birth specific linear time trends			X	
State of birth specific quadratic time trends				X
N	46,184	46,184	46,184	46,184
B.	Partnership with male householders			
	(1)	(2)	(3)	(4)
Same-sex marriage law	-0.006	-0.005	-0.005	-0.009
	(0.009)	(0.009)	(0.009)	(0.008)
Gay couples	-0.023	-0.023	-0.024	-0.025
	(0.023)	(0.023)	(0.024)	(0.024)
Same-sex marriage law*gay couples	0.099***	0.101***	0.102***	0.102***
	(0.033)	(0.033)	(0.033)	(0.033)
Individual characteristics		X	X	X
State of birth fixed effects	X	X	X	X
Year fixed effects	X	X	X	X
State of birth specific linear time trends			X	
State of birth specific quadratic time trends				X
N	68,453	68,453	68,453	68,453

Notes: ***variable is statistically significant at 1% level; **variable is statistically significant at 5% level; *variable is statistically significant at 10% level. Robust standard errors clustered at the state of birth of the householder are in parentheses.

Table 3: The Effect of Same-Sex Marriage Laws on Partners' Decision to Return to State of Birth of the Householder by Method of Legislation

	Partnership with female householders			Partnership with male householders		
	(1)	(2)	(3)	(1)	(2)	(3)
Legislature	0.011 (0.017)	0.011 (0.021)	0.009 (0.026)	-0.005 (0.014)	0.014 (0.012)	-0.001 (0.013)
Legislature*same-sex couples	-0.006 (0.046)	-0.002 (0.046)	-0.003 (0.046)	0.093** (0.037)	0.093** (0.037)	0.093** (0.038)
Judicial	0.028*** (0.011)	0.028 (0.019)	0.022 (0.018)	-0.003 (0.010)	-0.004 (0.011)	-0.005 (0.010)
Judicial*same-sex couples	0.120** (0.055)	0.125** (0.055)	0.126** (0.056)	0.113*** (0.037)	0.115*** (0.037)	0.115*** (0.037)
Obergefell	0.019 (0.014)	0.002 (0.024)	-0.001 (0.022)	-0.009 (0.010)	-0.028* (0.017)	-0.026 (0.018)
Obergefell*same-sex couples	0.153*** (0.048)	0.158*** (0.049)	0.158*** (0.049)	0.083 (0.058)	0.083 (0.058)	0.083 (0.058)
Individual characteristics	X	X	X	X	X	X
State of birth fixed effects	X	X	X	X	X	X
Year fixed effects	X	X	X	X	X	X
State of birth specific linear time trends		X		X	X	
State of birth specific quadratic time trends			X			X
N	46,184	46,184	46,184	68,453	68,453	68,453

Notes: ***variable is statistically significant at 1% level; **variable is statistically significant at 5% level; *variable is statistically significant at 10% level. Robust standard errors clustered at the state of birth of the householder are in parentheses.

Table 4: Heterogeneity Test: OLS Estimates of the Effect of Same-Sex Marriage Laws on Partners' Decision to Return to State of Birth of the Female Householder by State Ranking of Tolerance for Homosexuality and Sex

	Partnership with female householders					
	Tolerant States			Intolerant States		
	(1)	(2)	(3)	(1)	(2)	(3)
Same-sex marriage law	0.030*	0.026	0.032	0.039*	0.042*	0.042*
	(0.016)	(0.020)	(0.021)	(0.021)	(0.022)	(0.023)
Same-sex marriage law *lesbian couples	0.094	0.100*	0.101*	0.096	0.100	0.100
	(0.059)	(0.059)	(0.059)	(0.069)	(0.069)	(0.069)
Individual characteristics	X	X	X	X	X	X
State of birth fixed effects	X	X	X	X	X	X
Year fixed effects	X	X	X	X	X	X
State of birth specific linear time trends		X		X	X	
State of birth specific quadratic time trends			X			X
N	26,065	26,065	26,065	20,128	20,128	20,128

Notes: ***variable is statistically significant at 1% level; **variable is statistically significant at 5% level; *variable is statistically significant at 10% level. Robust standard errors clustered at the state of birth of the householder are in parentheses.

Table 5: Heterogeneity Test: The Effect of Same-Sex Marriage Laws on Partners' Decision to Return to State of Birth of the Male Householder by State Ranking of Tolerance for Homosexuality and Sex

	Partnership with male householders						
	Tolerant States			Intolerant States			
	(1)	(2)	(3)	(1)	(2)	(3)	(4)
Same-sex marriage law	-0.005 (0.009)	-0.001 (0.010)	0.004 (0.009)	-0.048*** (0.015)	-0.050*** (0.015)	-0.048*** (0.014)	-
Same-sex marriage law *gay couples	0.096** (0.046)	0.098** (0.046)	0.098** (0.047)	0.098* (0.051)	0.098* (0.052)	0.099* (0.051)	0.051 (0.052)
Same-sex marriage law *heterosexual couple	-	-	-	-	-	-	-0.048*** (0.014)
Individual characteristics	X	X	X	X	X	X	X
State of birth fixed effects	X	X	X	X	X	X	X
Year fixed effects	X	X	X	X	X	X	X
State of birth specific linear time trends		X		X	X		
State of birth specific quadratic time trends			X			X	X
N	37,794	37,794	37,794	30,659	30,659	30,659	30,659

Notes: ***variable is statistically significant at 1% level; **variable is statistically significant at 5% level; *variable is statistically significant at 10% level. Robust standard errors clustered at the state of birth of the householder are in parentheses.

Table 6: Heterogeneity Test: The Effect of Same-Sex Marriage Laws on Partners' Decision to Return to State of Birth of Householder by Age Difference between the Householder and the Partner

	Partnership with female householders		Partnership with male householders	
	> 2 years	≤ 2 years	> 4 years	≤ 4 years
Same-sex marriage law	-0.023 (0.032)	0.032 (0.021)	0.005 (0.022)	-0.001 (0.013)
Same-sex marriage law *same-sex couples	0.075 (0.071)	0.023 (0.054)	0.112** (0.053)	0.030 (0.042)
Individual characteristics	X	X	X	X
State of birth fixed effects	X	X	X	X
Year fixed effects	X	X	X	X
State of birth specific quadratic time trends	X	X	X	X
N	3,640	26,371	9,710	34,472

Notes: ***variable is statistically significant at 1% level; **variable is statistically significant at 5% level; *variable is statistically significant at 10% level. Robust standard errors clustered at the state of birth of the householder are in parentheses. These estimates only include partners whose state of birth are different.

Table 7: Heterogeneity Test: The Effect of Same-Sex Marriage Laws on Partners' Decision to Return to State of Birth of Householder by Presence of Children

	Partnership with female householders		Partnership with male householders	
	Childless	Number of children ≥ 1	Childless	Number of children ≥ 1
Same-sex marriage law	0.030** (0.014)	-0.006 (0.027)	-0.009 (0.015)	-0.006 (0.016)
Same-sex marriage law *same-sex couples	0.107** (0.043)	0.085 (0.131)	0.109*** (0.032)	-0.009 (0.177)
Individual characteristics	X	X	X	X
State of birth fixed effects	X	X	X	X
Year fixed effects	X	X	X	X
State of birth specific quadratic time trends	X	X	X	X
N	26,461	19,723	40,630	27,823

Notes: ***variable is statistically significant at 1% level; **variable is statistically significant at 5% level; *variable is statistically significant at 10% level. Robust standard errors clustered at the state of birth of the householder are in parentheses.

Appendix I:

Table I1: Year of Legalization of Same-Sex Marriage and Method of Legalization

State	Year of legalization of Same-sex Marriage	Method of Legislation
Alabama	2015	Judicial
Alaska	2014	Judicial
Arizona	2014	Judicial
Arkansas	2015	<i>Obergefell v. Hodges</i>
California	2013	Judicial
Colorado	2014	Judicial
Connecticut	2008	Judicial
Delaware	2013	Legislative
District of Columbia	2010	Legislative
Florida	2015	Judicial
Georgia	2015	<i>Obergefell v. Hodges</i>
Hawaii	2013	Legislative
Idaho	2014	Judicial
Illinois	2014	Legislative
Indiana	2014	Judicial
Iowa	2009	Judicial
Kansas	2015	Judicial
Kentucky	2015	<i>Obergefell v. Hodges</i>
Louisiana	2015	<i>Obergefell v. Hodges</i>
Maine	2012	Legislative*
Maryland	2013	Legislative*
Massachusetts	2004	Judicial
Michigan	2015	<i>Obergefell v. Hodges</i>
Minnesota	2013	Legislative
Mississippi	2015	<i>Obergefell v. Hodges</i>
Missouri	2015	<i>Obergefell v. Hodges</i>
Montana	2014	Judicial
Nebraska	2015	<i>Obergefell v. Hodges</i>
Nevada	2014	Judicial
New Hampshire	2010	Legislative
New Jersey	2013	Judicial
New Mexico	2013	Judicial

Appendix I:

Table I1 (Cont'd): Year of Legalization of Same-Sex Marriage and Method of Legalization

State	Year of legalization of Same-sex Marriage	Method of Legislation
New York	2011	Legislative
North Carolina	2014	Judicial
North Dakota	2015	<i>Obergefell v. Hodges</i>
Ohio	2015	<i>Obergefell v. Hodges</i>
Oklahoma	2014	Judicial
Oregon	2014	Judicial
Pennsylvania	2014	Judicial
Rhode Island	2013	Legislative
South Carolina	2014	Judicial
South Dakota	2015	<i>Obergefell v. Hodges</i>
Tennessee	2015	<i>Obergefell v. Hodges</i>
Texas	2015	<i>Obergefell v. Hodges</i>
Utah	2014	Judicial
Vermont	2009	Legislative
Virginia	2014	Judicial
Washington	2012	Legislative*
West Virginia	2014	Judicial
Wisconsin	2014	Judicial
Wyoming	2014	Judicial

Source: Data on the year of legislation of same-sex marriage by legislature and state judicial ruling come from (Eskridge and Riano 2020). *States approving same-sex marriage legislature by referendum.