The Supply and Demand of Marital Contracts: The Case of Same-Sex Marriage

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Abstract

Each state offers a standard marital contract and controls access to it. Married couples enjoy many benefits under U.S. federal and state laws, such as veteran and military pensions, immigration preference, Social Security payments, and tax deductions. Although many of these benefits were introduced for other purposes, we argue that the growth in welfare programs indirectly increased the value of the marital contract over time. In 2015, the Supreme Court ruled that same-sex couples could now access marital contracts—and consequently the benefits tied to marital status—in all fifty U.S. states. We view the legalization of same-sex marriage was the predictable supply response to an increase in the demand for access to the marital contract, which followed from an increase in its value over time. We test this hypothesis at both state and federal levels. Using cross-sectional data at the state level, we show that variation in state spending on benefits can explain variation in the length of years that same-sex marriage was legalized in a state prior to *Obergefell*. At the federal level, we show how federal expansions of benefits over time corresponded to increased expenditures on lobbying for same-sex marriage.

Keywords: Marital Contract, Family Economics, Same-Sex Marriage, Public Choice

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1 Introduction

Each state offers a standard marital contract and controls access to it. Until recently, a couple was considered legally eligible for marriage if they were eighteen or older, not closely related, neither currently married, and opposite-sex. Once married, couples enjoy a lengthy list of legal privileges. For example, they are exempt from estate and gift taxes under federal law, have an easier time navigating federal immigration or state adoption processes, can extend health insurance to their spouse and family, and are eligible to receive their spouse's Social Security or Medicare benefits even after their spouse's death. Divorce offers a formal process that can dissolve the marital contract and redistribute joint property. And not to mention, a favorite of Hollywood, that marital communication is confidential and spouses cannot be forced to testify in court against one another.¹

The benefits associated with marriage change both directly when federal and state governments try to promote marriage and indirectly as government programs ration benefits by marital status. In 1997, a report from the U.S. General Accounting Office identified a total of 1,049 federal statutory provisions "in which benefits, rights, and privileges are contingent on marital status or in which marital status is a factor." By 2004, this number was 1,138.²

Beginning in 2003 with Massachusetts, individual states began to expand access to same-sex couples, and by 2015, same-sex marriage was made legal in every state. Public approval for same-sex marriage in the United States underwent enormous change in the decades surrounding its legalization. In 2004, Americans opposed same-sex marriage by a margin of 60% to 31%, yet these numbers had reversed by 2019.³ Regardless of religious affiliation or political party membership, most Americans today say that they support same-sex marriage.⁴

A vast literature examines this change, usually focusing on whether legislation forms attitudes or whether attitudes form legislation (Hull, 2006; Badgett, 2009; Baunach, 2012). Research suggests that attitudes and legislation are mutually self-enforcing: the passage of pro-LGBT legislation promotes pro-LGBT attitudes (Flores and Barclay, 2016; Sansone, 2019; Aksoy et al., 2020), which corresponds with an increase of pro-LGBT political representatives (Reynolds, 2013), which then corresponds with the passage of new pro-LGBT legislation (Smith and Haider-Markel, 2002; Haider-Markel, 2010).⁵

https://www.americanbar.org/groups/litigation/publications/litigation_journal/2018-19/summer/ marital-privileges/

²https://www.gao.gov/assets/gao-04-353r.pdf.

³https://www.pewforum.org/fact-sheet/changing-attitudes-on-gay-marriage/

⁴These changes have spurred a series of debates over the social value of marriage (Posner, 1997; Girgis et al., 2011; Mercier, 2008; Badgett, 2009), its implications for children (Meezan and Rauch, 2005; Tasker, 2010), and religious commitments (Severino, 2006).

⁵Note that some research suggests that the legalization of same-sex marriage can also produce a backlash response

There is also a wide literature on marriage from the economic perspective (Becker, 1973, 1991; Lundberg and Pollak, 1996; Stevenson and Wolfers, 2007; Lafortune and Low, 2023), and more recently, economists have explored how access to the marital contract impacts same-sex couples (Allen, 2005; Allen and Price, 2020). For example, both Sansone (2019) and Isaac (2018) investigate how the legalization of same-sex marriage affected the labor force participation of same-sex couples. Delhommer and Hamermesh (2021) argues that the legalization of same-sex marriage prompts same-sex couples to make greater financial investments in their relationship, such as purchasing a home together. Finally, Carpenter et al. (2021) find that same-sex marriage increases both the likelihood of marriage and health insurance coverage amongst gay men.

This paper contributes a public choice perspective to the ongoing conversation, specifically by emphasizing the role of special interests in determining policy (Olson, 1965; Mitchell and Munger, 1991). We argue that growth over time in the benefits associated with marriage increased the demand for access to the marital contract, which eventually led to an increase in its supply. By "demand," we refer to the efforts of same-sex couples who wished to obtain access to the contract, and by "supply," we refer to the expansion of same-sex marriage. The approach of our paper comes closest to those emphasizing the role of efficiency forces and special-interest groups in laws governing marriage and divorce (Leeson and Pierson, 2017).

Because benefits to marriage arise from both federal and state policies, we provide evidence from both levels of government to validate our claims. At the state level, we test whether states with higher average levels of spending on transfers and subsidies (as a percentage of income) legalized same-sex marriage earlier. We find that a one percentage point increase in state spending of this kind is associated with 4.3 more years that same-sex marriage was legal in a state before Oberqefell, even when controlling for other factors that influence demand and supply. At the federal level, we discuss in detail the changes to benefits across five different categories: 1) veteran/military spousal and survivor benefits, 2) Social Security and Medicare/Medicaid spousal and survivor benefits, 3) standard, gift, and estate tax deductions, 4) immigration, and 5) health insurance. We then match the expansion of these benefits with the increasing demand over time for same-sex marriage, measured by lobbying spending. We find that as the benefits to marriage rose, so too did spending on lobbying for same-sex marriage. These efforts culminated in 2015 with Obergefell v. Hodges, which prohibited states from banning same-sex marriage. In the five years that followed Oberqefell, an estimated 293,000 same-sex couples were married (generating an estimated \$244,100,000 in total sales tax revenue for states from their weddings) (Mallory and Sears, 2020).6

that reinforces pre-existing negative attitudes towards same-sex marriage (Ofosu et al., 2019; Drydakis, 2021).

⁶It is worthwhile to note that the increased rates of same-sex marriage have not affected pre-existing rates of opposite-sex marriage (Dillender, 2014; Carpenter, 2020; Carpenter et al., 2021; Delhommer and Hamermesh, 2021).

2 Marriage and Law

Marriage was historically governed by religious and cultural institutions, which determined who, how, and when people could marry (Berman, 1985; Schulz et al., 2019). Over time, governments began to not only recognize these unions but issue laws to govern them as well. In the United States, Massachusetts was the first state to require marriage licenses in 1639. The federal government officially recognized marriages in 1913. Even as the governance of marriage has shifted away from religious authorities toward the secular sphere, it remains an efficient way to organize lifelong commitments (Matouschek and Rasul, 2008).

2.1 Why marital contracts?

There are at least two reasons why governments began to issue marital contracts: 1) greater tax revenues, and 2) an increased ability to monitor citizens.⁷

First, marriage is associated with many positive externalities (Ribar, 2004; Regier and Pardue, 2007). Married couples provide the primary source of labor (i.e., children) to society and invest heavily in the human capital of the next generation (Becker, 1973, 1991). Additionally, married couples spread risk by pooling their income and sharing assets (Wald, 2002). Risk-spreading creates a relatively stable economic environment for the couple (and any children) and lowers the probability that the family unit will draw from common resources. Marriage also promotes greater emotional well-being and increases societal stability (Hafen, 1983; West, 1998; Hall, 2014; Jace and Makridis, 2021). To the extent that these behaviors generate wealth and increase tax revenues, policymakers have an incentive to encourage marriage (Piano, 2022).

Second, the state issuance of marital contracts allows it to gather more data on its citizens and thus act upon different citizen groups (Scott, 2008). For example, states in the nineteenth century used antimiscegnation laws (laws which prevented interracial marriage) to enforce their own racial preferences, as seen in *Green v. State* (Fryer Jr., 2007). More recently, policymakers have sought to encourage marriage as a way to increase population growth. For example, countries such as Hungary, Poland, South Korea, and even China have offered financial rewards to married couples who have a certain number of children in order to encourage fertility as it drops below replacement (Stone, 2020).

⁷Although we do not examine it in detail, the question of why governments standardize the marital contract remains live (Allen, 1990). As Cohen (1987) points out in his contractual analysis of marriage, lifelong spousal investments vary in important ways, so standardization might be a way to curb male opportunism. This, of course, could be less relevant to same-sex relationships, but our project does highlight a different motivation for standardization, namely, to reduce transaction costs when pecuniary assets are distributed by the government. We thank an anonymous reviewer for drawing our attention to this question.

2.2 Marital contracts and their substitutes

Variations of the marital contract have developed over time as well. In the United States, two unrelated adults seeking legal recognition of their relationship have several contractual options that differ across state lines: marriage, common law marriage, civil unions, and domestic partnerships. While common law marriage, domestic partnerships, and civil unions have all been considered substitutes, their inability to provide the same benefits associated with marriage – along with their inconsistent treatment across state lines – indicates that they are lower quality.

To become legally married in the United States, a couple has to follow several steps:

- 1. obtain a marriage license from a local civil authority,
- 2. celebrate the marriage ceremony with an authorized officiant within the appointed time frame, and
- 3. request the marriage certificate.

After this, the couple enjoys the legal protection of marriage and its various benefits.

Before 2003, this contract was only available to opposite-sex couples of the legal age who had no current unions. In 2003, Massachusetts became the first state to legalize same-sex marriage. Over the next ten years, thirty-five other states followed suit. During this time, the 1996 Defense of Marriage Act (DOMA) allowed states to refuse to recognize same-sex marriages performed in other states or countries.⁸ Then in 2015, the *Obergefell v. Hodges* Supreme Court decision overturned part of DOMA and required all states to legalize same-sex marriage.

A common law marriage is a legally recognized marital union between two people who have not purchased a marriage license nor had their marriage solemnized by a ceremony but have fulfilled other requirements (such as living together for a certain length of time). Common law marriage enables the non-married couple access to some of the benefits associated with the marital contract. Only a select number of states contain provisions for this arrangement: Colorado, Iowa, Kansas, Montana, New Hampshire, South Carolina, Texas, and Utah. Same-sex couples were traditionally excluded from common law marriage.

Since the 1970s, civil unions or domestic partnerships have enabled a wider range of couples to access some of the benefits of marriage. Civil unions allow for legal recognition of a relation-

⁸The lack of recognition led to *U.S. v. Windsor*, a groundbreaking 2013 case that ruled in favor of a widow living in New York who had been denied the benefit of spousal deduction for federal estate taxes and left with a \$363,000 estate tax bill because the federal government did not recognize her deceased same-sex partner as a spouse, even though the couple had been legally married in Canada.

⁹Some scholars trace common law marriage back to the Catholic Church's influence over Western law (Berman, 1985).

 $^{^{10}}$ https://www.ncsl.org/research/human-services/common-law-marriage.aspx

ship, while domestic partnerships allow for limited additional rights, such as access to a partner's health insurance, but, for example, no eligibility for joint adoption. There were only a handful of states that offered civil unions or domestic partnerships with benefits close to those of marriage – California, Colorado, Hawaii, Illinois, Nevada, New Jersey, and Oregon – and since the legalization of same-sex marriage, most of these states have retired these provisions. These options were considered less desirable substitutes to marital contracts due to lack of uniform benefits across states (Badgett, 2009). They were also less likely to incentivize couples' financial investment into their relationships (Delhommer and Hamermesh, 2021).

Relatedly, another potential substitute for marital contracts is a *Marvin* suit. However, such a suit brings with it high transaction costs and also omits important benefits conferred by a full marital contract. In *Marvin v. Marvin*, a 1976 California Supreme Court case, it was determined that contract claims are enforceable in the context of a non-marital partnership. In other words, partners who were not married could still seek to enforce contracts (verbal or otherwise) over property rights.

It may seem that this provides sufficient legal protection so that non-married couples can contract around the same rights afforded to married couples. But, Marvin in practice applies only to property retroactively; that is, one can demand redress as a civil claim (not in court) for property after a dissolution of the relationship. Moreover, proving a Marvin claim is somewhat difficult: first, there must be an established agreement between partners "that defines the extent of financial sharing or support." And when a Marvin case is adjudicated, factors like the length of time of cohabitation, whether only one or both partners purchased property for the household, and whether one partner was the sole financial provider, must also be proven in court. Finally, Marvin suits have been lost (famously, McCall v. Frampton), so there is no guarantee that these significant expenditures will result in a marriage-like outcome. Because of these significant costs, Marvin does not approximate a marital contract. One must prove several claims in a civil suit, and it does not apply to many other areas that marital contracts do; for instance, being able to see a spouse in hospital and make life-and-death decisions for said spouse. Other areas not covered under a Marvin claim include: immigration benefits for partners of American citizens, the standard marital tax deduction, and gift and estate wealth transfers.

 $^{^{11} \}verb|https://rmolawyers.com/the-guide-to-marvin-claims-for-unwed-partners/$

¹²While other contractual options (e.g., living wills) could potentially fill some of these gaps, they are still unable to approximate the full extent of marital benefits (especially federal benefits). Attempts by states to pass domestic partnerships and civil unions highlight the fact that sufficient contractual remedies did not exist under the current system. While we do not explore this possibility in detail, our theory predicts that other countries with common law systems would follow similar pathways to same-sex marriage (as opposed to civil-law countries, which may involve better contractual options for same-sex couples).

2.3 Benefits of Marital Contracts

The list of benefits associated with marriage in the United States is lengthy. As of 2004, the U.S. General Accounting Office identified 1,138 federal statutes in which marital status was a factor, which is in addition to those that are determined by state and local governments. Since an individual's marital status is used in a wide variety of settings, we take care to document both pecuniary and nonpecuniary benefits associated with marriage.

2.3.1 Nonpecuniary benefits

We constrain ourselves here to mentioning the benefits that are difficult to quantify but no doubt differentiate marriage from other marital statuses. These include next-of-kin status, adoption preference, and lowered transaction costs more broadly.

Perhaps the oldest marital benefit is next-of-kin status. This is awarded automatically to spouses when they enter into a marital contract in the United States. Next-of-kin have the legal right to inherit property when a family member dies without a will, and in some states, they have the authority to make medical decisions should there be no power of attorney in place.

Before the legalization of same-sex marriage, a same-sex couple generally needed to take advantage of what some states called "designated agent" laws, which allowed individuals who are not next-of-kin to carry out the deceased person's wishes. Same-sex partners would have also needed to obtain a Durable Power of Attorney (DPOA) in order to execute legal and financial transactions on behalf of their partner, should he or she become legally incapacitated. Yet even with DPOA, same-sex partners could have been excluded from certain privileges. A website that gives advice to LGBT caregivers on legal issues notes:¹³

A Hospital Visitation Directive designates who may or may not visit someone in the hospital. Sometimes covered in the Durable Power of Attorney for Health Care or Advance Health Directive, it is best for LGBT patients to prepare a separate document clearly stating their desires.

A 1991 case heard by the Minnesota Court of Appeals drew attention to the fact that lifetime same-sex partners usually lacked next-of-kin status.¹⁴ The case examined the guardianship of Sharon Kowalski, who had been seriously injured in a car accident. Her partner, Karen Thompson, sued Kowalski's family (who were opposed to Kowalski's same-sex relationship) for guardianship. The Minnesota courts eventually sided with Thompson and granted her guardianship. In 2010, a federal mandate guaranteed visitation rights to LGBT partners in hospitals and care facilities

¹³https://www.caregiver.org/resource/legal-issues-lgbt-caregivers/

¹⁴https://www.nytimes.com/2019/06/19/us/legal-history-lgbtq-rights-timeline.html

that receive support from Medicare and Medicaid. In 2013, the Supreme Court overturned Section 3 of DOMA in *United States v. Windsor* to grant federal recognition of same-sex couples. The Court's decision enabled same-sex couples to be eligible for their partner's federal benefits, such as Social Security, immigration status, and medical leave. ¹⁵

Adoption is one of the primary ways for same-sex couples to grow their family. Although the laws governing adoption vary by state, they tend to favor married couples. Same-sex couples, who were usually considered legally single, were less likely to qualify for adoption. The near-exclusion of same-sex couples from adoption processes led to a Third District Court of Appeal case in 2010 that evaluated the Florida law that banned same-sex couples from adopting children. The ban ended after the court ruled that there was "no rational basis" for the law. Adoption rates amongst same-sex couples have increased drastically now that same-sex marriage has been legalized (Martin and Rodriguez, 2022), and the Census Bureau estimates that nearly fifteen percent of same-sex couples have children in their household and are four times as likely to have adopted a child as compared to opposite-sex couples. Potter and Font (2021) find that states with more same-sex couples and higher median household incomes have higher foster care adoption rates.

Although once thought that social recognition drives legal recognition, research has begun to identify ways that legal recognition also drives social attitudes (Flores and Barclay, 2016; Aksoy et al., 2020; Sansone, 2019). For that reason, legal marital contracts confer social recognition to the couples who obtain them. When a couple receives social recognition, both individuals enjoy reduced transaction costs in their exchanges. A man in a heterosexual marriage, for example, might have an easier time receiving recognition of his relationship (and the obligations it confers) in the workplace than a man in a same-sex marriage. Although transaction costs can be difficult to measure, they have a legitimate impact on the livelihoods of same-sex couples. Sansone (2019) for instance, demonstrates that the legalization of same-sex marriage caused workplace discrimination to fall to such an extent that same-sex couples had higher likelihoods of working both full-time and more hours per week. Moreover, since the marital contract acts as a nexus of benefits, the transaction costs of accessing each benefit individually (e.g., having to obtain a DPOA, writing a living will, etc.) falls once marriage is available.

 $^{^{15}} https://www.hrc.org/news/four-cases-that-paved-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-and-a-reminder-of-the-way-for-marriage-equality-a-reminder-of-the-way-for-marriage-equality-a-reminder-of-the-way-for-marriage-equality-a-reminder-of-the-way-for-marriage-equality-a-reminder-of-the-way-for-marriage-equality-a-reminder-of-the-way-for-marriage-equality-a-reminder-of-the-way-for-way$

¹⁶https://www.unmarried.org/parents-children/adoption/

¹⁷https://www.nytimes.com/2019/06/19/us/legal-history-lgbtq-rights-timeline.html

¹⁸https://www.census.gov/library/stories/2020/09/fifteen-percent-of-same-sex-couples-have-children-in-then html

2.3.2 Pecuniary benefits

Thousands of state and federal laws in the United States make reference to marital status. We organize those relating to pecuniary benefits into five categories:

- 1. Veteran and Military: The legal spouse (and/or dependent children) of a member of the U.S. military or veteran receives a variety of benefits under federal law. These include military spouses' eligibility for life insurance plans through the government, small business loans from the government, GI Bill benefits which can be transferred to spouses and children, and preferential spousal hiring for government jobs.¹⁹ These benefits also vary by state.
- 2. Taxation: From 1955 to 2015, the federal tax code and regulations grew from 1.4 million to over 10 million words in length, and many of the expansions include provisions that affect married couples.²⁰ For example, the Economic Recovery Tax Act of 1981 provided an unlimited deduction for gifts between spouses.
- 3. Social Security and Medicaid: The legal spouse (and/or dependent children) of an individual receiving Social Security can continue to access these benefits through a pension after their spouse's death. Medicaid includes numerous "spousal protections," including that one-half of the couple's assets are reserved for the non-applicant spouse, and any income earned by one's spouse is not counted in determining the Medicaid applicant's eligibility.²¹ These benefits also vary by state.
- 4. Immigration: The legal spouse (and/or dependent children) of a U.S. citizen receives special consideration or in some cases, automatic citizenship for immigration request. These benefits began in 1855 when immigrant women automatically received citizenship by marrying a U.S. citizen.
- 5. Health Insurance: The legal spouse (and/or dependent children) of an individual with employer-sponsored health insurance has access to reduced-cost plans. This benefit effectively began in 1942 with the Stabilization Act which limited the ability of employers to raise wages and thus encouraged employers to offer other benefits, such as health insurance, with employment. These benefits also vary by state.

Recent scholarship also demonstrates that same-sex couples find these benefits attractive and beneficial. For example, Delhommer and Hamermesh (2021) argues that exemption from estate and inheritance taxes enables same-sex couples to make greater investments in their relationships.

¹⁹https://militarybenefits.info/5-top-military-spouse-benefits/

²⁰https://taxfoundation.org/federal-tax-laws-and-regulations-are-now-over-10-million-words-long/.

²¹https://www.elderlawanswers.com/medicaid-protections-for-the-healthy-spouse-12019

Friedberg and Isaac (2022) show that same-sex couples are more likely to marry if they perceive marriage will decrease their income taxes, and Cheng et al. (2021) similarly demonstrate that same-sex couples are less likely to marry if it will increase their income taxes. Finally, Carpenter et al. (2021) find that gay men are more likely to have health insurance post-Obergefell.

3 Theory

We view the equilibrium quantity of marital contracts as an outcome of the interaction between demand and supply at a given point in time. On the demand side are the individuals who desire access to the marital contract and its attendant benefits. When the expected benefits of marriage outweigh the costs of organization, individuals who are currently excluded from access will form an interest group to coordinate their lobbying efforts (Buchanan and Tullock, 1962).²² Shifts to the demand curve may arise from changes in the value of the marital contract. The government can influence the value of marriage through the passage of new legislation. The value of marriage will increase if more benefits are tied to the marital contract, even if lawmakers had no direct intention of doing so. Of course, the group of currently married individuals may lobby for more benefits for their group as well.

The supply side is constituted by the jurisdictions that issue marital contracts to individual couples (in the United States, this occurs at the county level as directed by the states). The supply of marital contracts is responsive to interest group demand, in the words of Shughart and Tollison (1989): "each legislator/broker searches over his constituency, identifies those groups that are net demanders of wealth transfers and those that are net suppliers, and develops a legislative agenda—a level and pattern of wealth transfers that maximizes his political majority." Figure 1 illustrates this dynamic in the market for marital contracts. Over time, we argue that the value of the marital contract increased which shifted the demand curve outward $(D \to D')$. Holding the supply curve constant, this established a new equilibrium with a relatively higher level of marital contracts supplied (Q') than in previous time periods (Q).

[INSERT FIGURE 1 HERE]

In the context of the United States, we argue that the provision of marital contracts to same-sex couples can be understood in three phases:

1. The value of the marital contract increased over the 20th and 21st centuries both directly and indirectly through legislation,

²²Becker (1983) also shows that interest groups seeking a subsidy will be smaller than those taxed, or in common public choice parlance, benefits are concentrated and costs are dispersed.

- 2. Same-sex couples consequently increased their demand for access to marital contracts, and
- 3. State and federal governments eventually responded by increasing the quantity supplied of marital contracts through the legalization of same-sex marriage

We are ambivalent as to the underlying cause of the increasing value of marital contracts. This might be an instance of unintended consequences—that by using an intuitive and measurable attribute such as marital status to ration welfare benefits, politicians made marriage more desirable. There may also be a more direct channel, whereby couples who already had access to the marital contract lobbied for more benefits to accrue to themselves. What is evident, however, is that many of these benefits arose with the expansion of welfare programs over the 20th and 21st centuries.

The increasing demand of same-sex couples for access to marriage is a well-documented story. However, interest groups exist on both sides of the marriage debate. Our argument only requires that the same-sex marriage interest group was relatively more organized than the group against it (Becker, 1983).²³ There are a few reasons why this would be the case. First, as Fernández et al. (2019) show, the AIDS epidemic of the 1980-90s changed the incentives to "come out," thus lowering the costs of mobilizing for political change. They find that the change in public opinion favoring same-sex relationships was greater in states with higher AIDS rates (Fernández et al., 2019). Second, the interest group that opposed same-sex marriage was larger, more geographically distant (e.g., not concentrated in urban centers), and more diverse (e.g., encompassing many religious perspectives as well as legal opinions). There was also no obvious tax or cost associated with the expansion of access to marriage for these groups. While these features may seem like assets in a democratic process, they are hurdles when it comes to forming an effective interest group. Finally, as Becker (1983) argues, policies that increase efficiency are more likely to be adopted than policies that decrease efficiency, which is relevant to our discussion since the marital contract simplifies contracting between two individuals (reducing transaction costs).²⁴

The predictable supply response was an increase in the quantity of marital contracts supplied, that is, the decisions of thirty-six states to legalize same-sex marriage between 2003 and 2015, culminating with the Supreme Court's 2015 ruling in *Obergefell v. Hodges* that overturned same-sex marriage bans across the states. Even earlier, however, states were offering civil unions or domestic partnership arrangements to same-sex couples. While these established fewer benefits than full-fledged marriage, they indicate the increase in demand for access to these benefits and

²³A similar logic applies to same-sex marriage bans. While there was resistance to the rise of same-sex marriage in the form of state bans, eventually the interest group pressure for same-sex marriage at the federal level outweighed the interest group pressure against it at the state levels, leading to a federal protection of same-sex marriage. We thank an anonymous reviewer for raising this point.

²⁴Priest (1977) applied this logic to judicial cases, as may be the case with the repeated number of court cases over rights pertaining to marriage brought forth by same-sex couples against the states.

a precursor of the increase in quantity supplied. One important question concerns the fact that opposite-sex marriage has declined in recent decades, as the value of the marital contract has increased (so we claim). There are several reasons why the decline in opposite-sex marriage is consistent with an increase in the marginal value of the marital contract for same-sex couples. First, amongst those with assets and/or college degrees, marriage has not so much declined as has been delayed (thus constituting a lower share of households) (Goldstein and Kenney, 2001). For the group without assets and/or college degrees, the move from marriage to cohabitation has been influenced by other policy changes (e.g., child support enforcement) which have made nonmarital fertility more similar to marital fertility (Lafortune and Low, 2023). We would expect the latter to disproportionately affect the value of marriage to heterosexual couples, as these households are more likely to have children (37% vs. 15%). Most importantly, we must distinguish between marginal and average couples. For the average heterosexual couple in the U.S., the opportunity cost of marriage has grown faster than the value of marriage. However, there are many same-sex couples on the margin for whom the value of marriage has increased beyond the opportunity cost.

4 State-Level Evidence

Public choice views the influence of interest groups as a function of the potential benefits they face as a result of policy changes relative to the costs of organizing to effect this change (Olson, 1965). For this reason, we focus on the concentration of benefits to same-sex couples as well as their costs of organizing. We attempt to control for supply factors by including variables which capture the cost to a politician, usually viewed in terms of potential for re-election, of expanding access to the marital contract. To provide evidence for our public choice theory of marital contracts, we first test our hypothesis using cross-sectional data at the state level.

4.1 State-level data

Our dependent variable is the year that an individual state expanded access to the marital contract for same-sex couples (2003-2015). These data are widely available, and we use the specific list from https://www.lgbtmap.org to measure when the legal change took place in each state. As a robustness check, we also report the results of our regressions when we change the dependent variable's values to reflect when a state first offered a comprehensive civil union or domestic partnership (again taking the values from https://www.lgbtmap.org).

Our primary variable of interest is how much an individual state spends on benefits. To estimate this, we use the actual amount of state spending on transfers and subsidies as a percentage of income from the "Economic Freedom of North America" index (these values come from area

1B) (Stansel et al., 2014). The value of many state benefits varies by an individual's marital status.²⁵ To capture these benefits as a result of expanding welfare programs over time, we average the share of state spending on such programs from 1981 (when the index began) to the year when an individual state legalized same-sex marriage (or 2015 if the state's ban was overturned by *Obergefell*).²⁶ As a robustness check, we also report the results of our regressions when we substitute the values from area 1B for those of area 1A, which is the share of state spending on general consumption (usually not rationed by marital status).

To control for the costs of organizing as a same-sex lobby, we include two variables: the 1992 AIDS rate (CDC) per 100,000 people in each state and the urban density in 2000 of each state (Census Bureau). First, the AIDS epidemic was a shock that changed the relative payoff from being "in the closet," thus generating a new equilibrium fraction of people who were open about their same-sex status (Fernández et al., 2019). Moreover, "in the face of the greater political organization and mobilization of the gay community around AIDS, there was now a large group that could be actively courted by politicians... The Democratic party openly courted the gay vote, with all five of the leading Democratic contenders endorsing a repeal of the ban on same-sex individuals in the military" (Fernández et al., 2019, p. 3). For our purposes, a relatively higher exposure to AIDS would lower the opportunity cost of forming an interest group. Second, a more urban environment would also lower the costs to organizing interest group activities, due simply to physical proximity.

To control for the costs of the supply side, we include two variables: the share of votes received by Clinton in the 1992 presidential election and the year of the first same-sex marriage case in a state. We choose the Clinton share of votes as our control because many scholars (Rimmerman and Wilcox, 2007; Rosenfeld, 2017; Fernández et al., 2019) have established that his presidential campaign in 1992 had a large effect on the public approval of legal rights for same-sex relationships.²⁷ The presidential election of 1992 was also the first to explicitly debate same-sex issues, with Clinton being seen as more favorable to the same-sex lobby. We also try to capture court activity with respect to same-sex marriage by controlling for the year of the first same-sex marriage case in each state. Because many of these cases arose over issues concerning the legal rights of same-sex couples, an earlier case would indicate stronger demand (as well as a pathway

²⁵For example, the surviving spouse of a veteran does not have to pay property taxes in Tennessee (https://www.tn.gov/veteran/veteran-benefits/tn-state-benefits/homeowners/property-tax-relief-for-surviving-spouses.html), and Medicaid's spousal income allowances vary by state (https://www.medicaidplanningassistance.org/mmmna-definition/).

²⁶Because these numbers are already adjusted for income, and since we include a measure of urban density as a variable, we forego including median household income as a control variable across states to avoid multicolinearity.

²⁷Of course, this runs contrary to some conventional wisdom that simply views Clinton as the president who implemented "Don't Ask, Don't Tell" and signed the Defense of Marriage Act.

for legalization through the courts) to a politician.²⁸

We provide summary statistics for each of our main variables in Table 1. Divided by whether or not a state legalized marriage prior to *Obergefell*, we report the mean and standard deviations. While state spending on benefits, urbanization, and the year of the first same-sex marriage case seem to be noticeably different for before vs. after states, there is not much discernible difference between the means of 1992 AIDS rates and the 1992 Clinton share.

[INSERT TABLE 1 HERE]

4.2 State-level results and discussion

The results of our regression are given in Table 2.

[INSERT TABLE 2 HERE]

Starting in column (1), we find that the number of years a state has legalized same-sex marriage is positively associated with the state's spending on transfers and subsidies as a percentage of income. In particular, a one-percent increase in spending corresponds to more than five extra years of legalization – an effect that is significant at the one-percent level. In columns (2) and (3), we introduce our controls for the costs of organizing for interest group activity. This slightly decreases the magnitude of the coefficient on state spending (from 5.6 to 5.5), and while both the AIDS rate and urban share are positive, their coefficients are not statistically significant and so we cannot confidently say that their independent effect on legalization differs from zero. Finally, in column (4) and our preferred specification in column (5), we control for factors that influence the cost of increasing the supply of marital contracts. In particular, the share of the vote for Clinton in the 1992 presidential election is weakly associated with more years of legalization (statistically significant at the 20% confidence level). The coefficient on the year of a state's first same-sex marriage case also has the expected sign, with earlier years being associated with more years of same-sex marriage legalization, although the effect is not distinguishable from zero. The coefficient on state spending, while decreasing in magnitude and statistical significance once all controls are included, remains relatively large (4.3) and significant at the 10% level. Importantly, the Adjusted R² is largest in our final specification, indicating that our variables explain over 16% of variation in the years of same-sex marriage legalization.

²⁸We include Table A.1 in our Appendix which gives the dates and names of each of these cases, as well as the year of legalization of same-sex marriage (and/or comprehensive civil unions and domestic partnerships).

4.3 Robustness checks

We perform two robustness checks to validate our empirical findings. In the first, we introduce a different measure of the dependent variable, counting legalization years from when a state first offered (comprehensive) civil unions or domestic partnerships to same-sex couples as well, and for the second, we investigate a counterfactual by replacing our estimate of state government spending on transfers with state spending on general consumption. The results can be seen in Table 3 and Table 4.²⁹

[INSERT TABLE 3 HERE]

Starting in column (1) of Table 3, it is clear that state spending on benefits strongly predicts the number of years that a state offered marriage or a similar contract to same-sex couples. As we control for the AIDS rate and urban share of a state, the effect of a one percentage-point increase in state spending falls slightly from 7.6 to 6.7 years (statistically significant at the 5% level). The urban share of a state's population also is statistically significant—a one percentage-point increase in the urban share predicts 0.06 years (less than one month) more of marital or similar contracts offered to same-sex couples. Controlling for the supply-side through the Clinton share of votes in 1992 in column (4) reduces both the magnitude and significance of state spending, while the urban share remains significant and the Clinton share seems to explain some variation in legalization years. Finally, our preferred specification in column (5) introduces all of our controls. Here a one percentage-point increase in state spending on benefits is associated with 5.6 more years of marital or similar contractual options available to same-sex couples in a state (statistically significant at the 20% level). The most significant effects are associated with the urban share of the population and the share of votes for Clinton in the 1992 presidential election, predicting about 0.1 additional years (at the 5 and 10% levels respectively). Our Adjusted R² rises as we include more controls from 0.12 to 0.3 in column (1) to (5), which we take as an indication that the variables we identified have explanatory power even in such a small sample.

These findings are consistent with our previous stricter measure of the dependent variable, years of de jure legalization of same-sex marriage prior to Obergefell. By expanding our analysis to include states that offered comprehensive civil unions or domestic partnerships – but did not yet call them marriage – we are able to highlight how different factors on the demand and supply sides played a role. For instance, the role of physical proximity (urban share) in the mobilization effort seems to matter more when it came to securing legal recognition and rights for same-sex relationships that didn't necessarily afford the title of "marriage." This makes sense within our

²⁹Table A.2 gives similar results as our main table, Table 2, when we use an indicator for our dependent variable and run a logit.

theoretical framework because the up-front costs of organizing an interest group are typically larger in the initial phases of mobilization, and in the case of same-sex marriage, a push for domestic partnerships or civil unions usually came first.³⁰

Next, our second robustness check tests whether or not it was state spending on *benefits* that really mattered or state spending on *general consumption* (the benefits of which are not rationed by marital status). Using the same controls and dependent variable as in Table 2, we report our results below in Table 4.

[INSERT TABLE 4 HERE]

Starting in column (1), we find that a state government spending more on general consumption predicts fewer years of state legalization of same-sex marriage (statistically significant at the 5% level). As we include our demand and supply side controls from column (2) - (5), the magnitude of the coefficient and statistical significance of the effect decreases. In our final and preferred specification in column (5), we show that state spending on consumption, the AIDS rate, and urban share of the state population have no significant effect on how many years same-sex marriage has been legal in a state. On the other hand, supply-side factors like the share of votes for Clinton in the 1992 presidential election and first same-sex marriage court case are significant at the 10% level, indicating that a higher share of Clinton votes as well as an earlier year of a same-sex marriage court case are associated with an earlier legalization of same-sex marriage in a state. The relatively low Adjusted R² is a further sign that state spending on consumption does not help to explain much variation in the same-sex marriage legalization years of states.

We have shown that state spending on transfers and subsidies (as a percent of income) is positively and significantly associated with having legalized same-sex marriage for more years prior to *Obergefell*. We further established that state spending on benefits helps explain the offering of civil unions and domestic partnerships to same-sex couples as well, and that state spending on general consumption has a negative – rather than a positive – relationship to the years a state legalized same-sex marriage. However, the small sample size (n = 50) as well as the possibility of an omitted variable prevent us from making causal claims about our empirical analysis.

5 Federal-Level Evidence

To provide evidence for our public choice theory of marital contracts, we also test our hypothesis using time series data at the federal level.

 $^{^{30}}$ We thank an anonymous reviewer for making this point.

5.1 Federal-level data

More than a thousand U.S. federal laws depend on marital status, but this was not always the case. The majority of welfare programs that either directly or indirectly privilege marriage can be traced back to legislative acts passed during the 20th century. As described in Section 2, we organize those relating to pecuniary benefits into five categories:

- 1. Veteran and Military
- 2. Immigration
- 3. Taxation
- 4. Health Insurance
- 5. Social Security, Medicare, and Medicaid

We provide evidence of this growth in two ways. First, we discuss the expansion of benefits in each of these areas, providing qualitative evidence that the benefits associated with these laws increased the expected marginal value of the marital contract to same-sex couples.

Next, we quantify the increase in demand for access to the marital contract by tracking federal lobbying expenditures on "gay and lesbian rights and issues" from 1998 through 2022 and campaign contributions to senators and representatives (Open Secrets).³¹

It is important to remember that even if individual states allowed for same-sex marriage, most of the benefits discussed in this section apply mainly to federally-recognized marriages. Thus, the federal recognition and legalization of same-sex marriage (the *Windsor* and *Obergefell* decisions, respectively) count here as the supply response that increased the quantity of marital contracts.

5.1.1 Growth of veteran/military benefits

The oldest benefits program in America can be traced back to 1636, when the pilgrims of Plymouth Colony passed a law which stated that disabled soldiers (from conflicts with the American Indian tribes) would be supported by the colony.³² In 1776, the Continental Congress provided pensions for disabled soldiers, and in 1811, the federal government authorized the first medical facility specifically to care for veterans. It wasn't until the 19th century, however, that veterans' assistance programs were expanded to include benefits and pensions for their dependents.

³¹https://www.opensecrets.org/federal-lobbying/industries/summary?cycle=2022&id=J7300

³²For a collection of records on the history of the United States Veterans Administration, see https://archives.lib.umn.edu/repositories/11/resources/598.

The Civil War pension program, begun in 1862 and expanded until 1910, was the first veteran benefits program that explicitly took marital status into account, stating that the orphans and widows of Civil War veterans could receive benefits as well.³³ As the United States engaged in more wars during the 20th century – increasing the number of veterans – these benefits expanded to include other dependents, higher pensions, and peacetime veterans as well. A notable expansion was the Serviceman's Readjustment Act of 1944 (the "GI Bill"), which provided educational assistance to veterans and their dependents, as well as unemployment benefits and low interest loans for homes, farms, and small businesses. As described by the Veterans Benefits Administration Annual Benefits Report of 2000:

"The GI Bill transformed the economy and society of the United States. It contributed more than any other program in history to the welfare of veterans and their families, and to the growth of the nation's economy. When the program ended In 1956, 7.8 million veterans had received some kind of training, and VA had guaranteed 5.9 million home loans totaling \$50.1 billion" (p. 4).

After the wars in Korea, Vietnam, and the Gulf, new GI bills (1966, 1977, 1984, and 1987) were introduced to extend these benefits to the new veterans and their dependents. The number of veterans and dependents receiving benefits continues to climb, especially as technological advances in transportation and medical treatment allows more wounded and injured soldiers to survive. The elimination of the draft in 1976 also brought a greater focus on using veterans benefits to attract enlistees (Thompson, 2000).

Federal assistance for dependents of veterans spans centuries. As of 2000, 710 dependents of Civil War (1861-1865), Indian War (1817-1898), and Spanish-American War (1898-1902) veterans were receiving pension benefits (Thompson, 2000). In July 2000, the estimated veteran population was 24.4 million. About 70 million veterans, dependents or survivors of decreased veterans were potentially eligible for VA benefits and services, and the average annual amount received by beneficiaries for service-connected deaths was \$10,952 (Thompson, 2000). Figure 2 shows federal, state, and local government spending per capita on veterans over time. Even as the veteran population in the United States has been shrinking in recent years, spending continues to increase.

[INSERT FIGURE 2 HERE]

Today, military spouses are offered a variety of benefits, including the Basic Allowance for Subsistence (BAS), Basic Allowance for Housing (BAH), preferential hiring, and non-monetary

³³Surviving widows of Civil War veterans were still receiving Civil War pensions as late as 1999 (https://www.ssa.gov/history/briefhistory3.html).

compensation in the form of access to exchanges (a sort of "general store" on a military base) which typically have lower prices. Before *Windsor* in 2013, same-sex couples could not receive these benefits from the federal government, and the federal policy of "Don't Ask, Don't Tell" barred individuals who were open about their same-sex status from serving in the military until 2011.

5.1.2 Immigration benefits

Immigration benefits for spouses date back to the 1800s, when legislation was passed to provide automatic citizenship to immigrant women married to men who were U.S. citizens. By the early 1900s, marriage was the sole determinant of a woman's nationality, though this ended in 1922.³⁴ The Immigration and Nationality Act, passed in 1965, gave priority to naturalization for spouses and children.³⁵ In recent years, spouses and other dependents of pending U.S. citizens, as well as alien fiancees of U.S. citizens, are given priority access to visas. Figure 3 shows immigration by these types of visas over time.

[INSERT FIGURE 3 HERE]

This all, of course, excluded same-sex couples in which one partner was an immigrant, as this was not considered legal marriage. Additionally, there was a ban on the immigration of any lesbian and gay individuals through 1990, spouse or not (Titshaw, 2010).³⁶ In *Adams v. Howerton*, in 1982, a same-sex couple who had been married by a minister tried to receive federal immigration benefits (the partner seeking the benefits had previously been granted US citizenship, but that was revoked after his opposite-sex marriage ended). The case was ultimately struck down by the Ninth Circuit Court of Appeals because of Congress's exclusion of same-sex couples from the definition of marriage (Titshaw, 2010).³⁷

Prior to the Windsor ruling, as Titshaw (2010) details:

 $^{^{34} \}rm https://www.archives.gov/publications/prologue/1998/summer/women-and-naturalization-1.html <math display="inline">^{35} \rm https://www.uscis.gov/laws-and-policy/legislation/immigration-and-nationality-act$

³⁶The US has a riddled history of sexual minority immigration exclusions. The Immigration Act of 1917, for instance, restricted sexual minority immigration, or what they called, those who exhibit "constitutional psychopathic inferiority" (Carro, 1989). Up until 1963, homosexuality was labeled as a disease in the Diagnostic and Statistical Manual (DSM) (Drescher, 2015), which is what allowed for many immigration restrictions to be on the basis of 'psychopathy'. The Immigration Act of 1965 labeled sexual minorities as "sexual deviants" (Public Law 89-236), and up until 2010, individuals living with HIV/AIDS could not travel or emigrate to the United States (Winston and Beckwith, 2011). See (Carro, 1989) for a deeper history of the many laws against sexual minorities, especially with regards to their immigration status.

³⁷As Titshaw (2010) details, although states typically define what constitutes marriage, Congress has historically had the authority to override certain types of marriages. Specifically, marriage fraud, unconsummated proxy marriage, polygamy, and same-sex marriage (up until *Windsor*) were excluded.

...because of DOMA, the relationships of U.S. citizens or lawful permanent residents with foreign nationals of the same-sex are generally invisible under the INA, even if the couple is legally married in a U.S. state or a foreign country. These couples receive none of the benefits of "marriage" under the INA, including the right to remain together in the United States.³⁸

Even once some states allowed for same-sex marriages to take place, it was not until after the Windsor ruling that these same-sex couples could apply for spousal visas. Following the Windsor ruling, married same-sex couples in which one is a foreigner could apply for spousal green cards. Redpath (2022) finds that the impact of the Windsor ruling on marriages for "mixed-citizen" (one foreign partner, one domestic partner) same-sex couples is that it increased the relative incidence of mixed-citizenship same-sex couples by 36%. Moreover, the ruling also increased the incidence of mixed-citizenship same-sex marriages by 79%.³⁹

The evidence presented above illustrates a few points: first, immigration benefits for spouses grew over time, at least for those who could access them. Second, same-sex couples were excluded from such benefits, and they consequently tried to litigate in court in order to access them. Finally, once such benefits were achieved following the *Windsor* ruling, many same-sex, mixed-citizen couples reaped the benefits of such laws, illustrating pent-up demand for access to the marital contract and its many benefits.

5.1.3 Growth of tax benefits

When the federal income tax was ratified in 1913, tax rates were the same for all individuals whether they were single, married, or heads of households. Filing status was not introduced until 1948, with the classifications of single and joint filing, the latter of which was only available to married couples. The Revenue Act of 1948 also created the marital deduction for gifts between spouses, which was increased in 1976 and again in 1981 (when it became unlimited). Prior to 2003, the standard tax deduction available to joint filers was less than double (ranging 1 - 1.73) that of the single-filer deduction. Figure 4 shows the ratio of standard tax deductions available to single and joint filers over time.

³⁸Importantly, though, there were a couple rare exceptions: "Although same-sex relationships still are not recognized for the purpose of issuing most benefits under the INA, the USCIS and State Department now recognize non-marital life partnerships in two instances. First, if one of the partners has a visa to reside in the United States for temporary work or study, that personâs foreign partner may accompany him or her in B-2 visitor (tourist) status. Second, the State Department recently changed its regulations to allow it discretion in granting derivative status to the partners of U.S. diplomats, consular officers and some other foreign officials if the partnership is legally recognized in the sending country." See Titshaw (2010) for further details.

³⁹We thank an anonymous reviewer for pointing us to this research.

⁴⁰https://www.taxpolicycenter.org/statistics/standard-deduction

[INSERT FIGURE 4 HERE]

The early 2000s also saw the introduction of benefits to married couples who were first-time home buyers or sellers. For example, married couples won't face any tax on capital gains taxes up to \$500,000 when selling their primary residence, which is double the discount available to a single individual.

Today married couples have the option to file taxes jointly, though combining incomes only brings economic benefits under certain conditions. According to the Tax Foundation, the marriage bonus can run as high as 21% of total income, while penalties can mean losses of up to 12%⁴¹. If a couple files jointly, their standard deduction is exactly double (\$25,100 for 2021) what it would be if each individual was filing separately, regardless of income. Perhaps the most consequential tax benefit to marital contracts is the unlimited marital deduction (Surrey, 1947). Spouses are exempt from paying estate taxes, inheritance taxes, and the gift tax when exchanging property with one another. As of 2021, the combined exemption for the estate and gift tax was \$23.4 million. For reference, the amount that unmarried couples can give each other is capped at \$15,000.

5.1.4 Growth of insurance benefits

An unintended consequence of the Stabilization Act in 1942 – which prohibited wage increases in an effort to curb inflation – was that health insurance began to be widely provided by employers as a way to compete for workers without violating the new law. Since then, employer health insurance has become a major component of employee compensation packages. Importantly, health insurance plans typically include coverage for spouses and dependents– again, linking benefits to marital contracts. Furthermore, once married, spouses are automatically covered under a single renter's or homeowners insurance policy. A unifying auto insurance might also provide a multicar discount or lower rate for married individuals which is especially helpful since auto insurance became mandatory in most states during the 1970s.

Federal, state, and local governments also spend on healthcare by funding local hospitals, public health initiatives, and other activities. Figure 5 shows per capita spending by all levels of government on healthcare over time (excluding Medicare and Medicaid). The trend of increasing per capita spending on healthcare is evident.

[INSERT FIGURE 5 HERE]

With the rising costs of healthcare, scholars have increasingly pointed out that access to health insurance through family relationships increases the value of marriage, yielding a situation known as the "marriage lock" in which couples stay married for the sake of health insurance

⁴¹https://taxfoundation.org/tax-cuts-and-jobs-act-marriage-penalty/

coverage (Abramowitz, 2016; Chen, 2019; Hampton and Lenhart, 2022). The impact of marital dissolution on access to health insurance may be most detrimental for women and children (Zimmer, 2007; Peters et al., 2014). The majority of same-sex couples were prevented from adding a partner to an employer-sponsored healthcare plan before *Obergefell*. As Badgett (2009) points out, only 21 percent of companies offered healthcare coverage for employees' same-sex partners in 2009. Unsurprisingly, same-sex couples are more likely to be uninsured than opposite-sex couples: "National data from 1996 to 2003 showed 20% of people in same-sex couples were uninsured, compared to only 11.5% of married individuals" (Badgett, 2009, p. 1087).

5.1.5 Growth of Social Security, Medicaid, and Medicare benefits

Following the Great Depression, the Social Security Act was passed in 1935 by President Franklin Roosevelt. In addition to providing a supplemental income for retired workers over 65, it included unemployment insurance, aid to dependent children, and grants to the states for providing medical care. After assigning Social Security numbers to U.S. citizens, trust funds were created for these dedicated revenues from which the benefits would also be paid.

The 1939 Amendments to the Social Security Act changed the program into one that was based upon familial relationships, so that payments and survivors benefits were available for the spouse and children of a retired worker. From the perspective of the value of marital contracts, this was the point where Social Security began to add value. Over time, many adjustments were made to this program, including removing the cap on spousal benefits and the elimination of dependency requirements. According to the official Social Security website,

When a worker files for retirement benefits, the worker's spouse may be eligible for a benefit based on the worker's earnings...The spousal benefit can be as much as half of the worker's "primary insurance amount," depending on the spouse's age at retirement...If a spouse is eligible for a retirement benefit based on his or her own earnings, and if that benefit is higher than the spousal benefit, then we pay the retirement benefit. Otherwise we pay the spousal benefit.

As of April 2021, the average monthly benefit for spouses of retired workers was \$796.47. ⁴² About 12% of total benefits paid currently go to surviving spouses. ⁴³ The average survivor, making up 9.1% of total beneficiaries, received \$1,244.31 that month. Only since 2015 have the spousal, survivor, and death benefits of Social Security become available to same-sex partners. ⁴⁴

⁴²https://www.ssa.gov/policy/docs/quickfacts/stat_snapshot/

⁴³https://www.ssa.gov/news/press/factsheets/basicfact-alt.pdf

⁴⁴ https://www.aarp.org/retirement/social-security/questions-answers/same-sex-couples-social-security. html.

Medicaid (healthcare assistance for low-income individuals) and Medicare (healthcare assistance for elderly and disabled individuals) were born in 1965 as further Social Security amendments. Marital status often impacts eligibility for these programs, since personally ineligible individuals may access benefits if their spouse is eligible. Spousal income may also be divided in such a way that allows one spouse to be eligible at the other's expense (if his or her income remains too high). It is important to note that marriage is not always wealth-enhancing for individuals in these programs especially after the passage of the Affordable Care Act in 2010 (Abramowitz, 2016; Hampton and Lenhart, 2022).

Figure 6 shows per capita government spending on Social Security and Medicare from 1980-2015. There is clearly an increasing trend in spending of this kind over time.

[INSERT FIGURE 6 HERE]

5.2 Growth of lobbying for same-sex marriage over time

Given the expansion of benefits at the federal level that accrued to married couples, our theory predicts that the demand for access to the marital contract rose during this period as well. As we now outline, federal lobbying spending by same-sex marriage interest groups for access to the marital contract steadily increased during this period and remained high until the *Obergefell* ruling.

From 2010-2015, the pro-same-sex-marriage lobby was considered one of the strongest on K Street. Despite lobbying spending across most industries declining in the 2010s due to the fallout from the global recession, pro-same-sex-marriage lobbying spending increased and the number of lobbyists grew. As displayed in Figure 7, lobbying for gay and lesbian rights, including marriage most prominently, steadily increased over time. Moreover, the number of lobbying groups increased over time and then decreased following Obergefell. In 1998, there were 16 lobbyists working for gay and lesbian rights. By 2015, there were 45 lobbyists. These trends are consistent with our theory: As the marital contract increased in value, the benefit of lobbying for access to the contract also increased. We should expect more lobbying as the marginal value of the marital contract to same-sex couples increases. Notice also that after receiving access to the marital contract through Obergefell in 2015, amount spent on lobbying and number of lobbyists fell substantially as same-sex couples had gained access to the marital contract.

[INSERT FIGURE 7 HERE]

 $[\]frac{45}{\text{https://www.npr.org/2013/03/23/175119416/gay-lobbying-on-the-hill-has-short-yet-strong-history}}{46}{\text{https://www.politico.com/story/2013/03/lgbt-lobby-spends-in-off-years-089381}}$

Another area of note in Figure 7 is that there was a large spike in lobbying spending during 2004. This is likely due to the fact that the first state to legalize same-sex marriage, Massachusetts, did so in 2003. One final area to note in Figure 7 is the uptick in spending in recent years (2021-2022). This, too, is consistent with our theory. Many same-sex couples began to worry that their access to the marital contract was under threat, in part, from the recent rise of far-right populist movements. The subsequent uptick in lobbying efforts culminated in the "Respect for Marriage Act", passed into law in December 2022, which protected same-sex and interracial marriages.

The anti-same-sex-marriage lobby was nowhere near as powerful during this time period. The Family Research Center is one of the biggest lobbying organizations and often spends on anti-same-sex-marriage causes, and their spending on all lobbying causes has fallen from a peak in 1998 of \$180,000 to only \$30,000 today, far less than pro-LGBT lobbyists.⁴⁷ A closer look at the Family Research Center's PAC shows increased spending around election cycles to Republican candidates, but even their top PAC spending year in recent history (2010) was just under \$600,000. In 2022, they spent just over \$40,000.⁴⁸

5.3 Pent-Up Demand for Marriage

When sweeping legal changes occur, especially in the area of social policy (e.g., unilateral divorce), the data often reveal some form of "pent-up demand." For instance, there is evidence of pent-up demand amongst interracial couples after Loving v. Virginia legalized interracial marriage across all states. Per Fryer Jr. (2007): "Rates of interracial marriage between blacks and other racial groups remained flat from 1880 to 1970. Between 1970 and 2000, black men exhibit an almost six-fold increase in intermarriage with whites" (p. 77). Following the Supreme Court's Windsor v. United States decision in 2013, which led to federal recognition of all same-sex marriages, there was a large increase in same-sex marriages. Many benefits are rooted in federal law, such as exemptions and deductions within the U.S. tax code. Indeed, it was the spousal and estate-tax deduction that led to Windsor in the first place. Subsequent work has shown that the prevailing income tax code can influence decisions of marriage and labor force participation amongst same-sex couples (Isaac, 2018; Cheng et al., 2021; Friedberg and Isaac, 2022).

Badgett and Mallory (2014) find that, of the states offering same-sex marital contracts and those tracking marital data of same-sex couples prior to *Windsor*, the number of same-sex weddings jumped in all states measured (Connecticut, New Hampshire, Vermont, and New York),

⁴⁷https://www.opensecrets.org/orgs/family-research-council/lobbying?id=D000025756& lobbillscycle=2022

⁴⁸https://www.opensecrets.org/spending-section

as shown in Figure 8.⁴⁹ The analysis in Badgett and Mallory (2014) shows that in Connecticut, New Hampshire, and Vermont, nearly twice as many same-sex couples married in 2013 as did in 2012, prior to the ruling coming into effect (see also Gates and Brown (2015)). As an illustrative example, in Connecticut, 14 percent of all same-sex couples married from 2008-2013 married in the six-month period following the *Windsor* ruling. Importantly, this is exactly what we would expect if our theory of marital contract value predicting demand were true. *Windsor* unlocked a variety of federal-level benefits for same-sex couples, thus increasing the value of marriage and increasing the demand.⁵⁰ As time goes on, however, marriages of same-sex couples falls, indicating that such pent-up demand had been satisfied.

[INSERT FIGURE 8 HERE]

A similar story emerges post-Obergefell. Using American Community Survey data, Gates and Brown (2015) observe that there were approximately 96,000 marriages among same-sex couples, or 11.2% of all new marriages in the US during this period, in the four months following Obergefell. Gallup data (Jones, 2016) reveals, similarly that the proportion of cohabiting same-sex couples who are married increased from 38% to 49% since the U.S. Supreme Court legalized same-sex marriage.

When individual states legalized same-sex marriage, sharp increases in same-sex marriages occurred as well. As was the case after the *Windsor* and *Obergefell* rulings, same-sex marriages also decline after the one-to-two-year mark in states, once pent-up demand has been satisfied. Massachusetts, the first state to legalize in 2003, saw large demand for same-sex marriages following legalization. On the first day the law was in effect, over 900 couples showed up to courthouses to receive marriage licenses. In the first year alone, more than 6,200 same-sex couples married. In the following year, this fell to around 1,900 marriages. Connecticut legalized same-sex marriage in November 2008, as the second state to do so. According to Connecticut marriage registration data⁵², "There were 1,057 same-sex marriages in 2014, 1,357 in 2013, 668 in 2012, 1,262 in 2011, 1,791 in 2010, 2,706 in 2009, and 543 in 2008 [from Nov. 12-Dec. 31]..." These data show a couple different effects: first, there are clear increases in same-sex marriages after the 2008 legalization in Connecticut and after the *Windsor* ruling in 2013. It appears that numbers began to fall after around 2009, just a year past legalization in the state, then jumped again after *Windsor*. This

⁴⁹As Badgett and Mallory (2014) note, there is a 'Windsor' effect in which the amount of same-sex marriages increased post *Windsor* ruling. However, in New York, this effect is counteracted by the fact that New York had just legalized in 2011, so much of the pent-up demand had already been satisfied.

⁵⁰We thank any anonymous reviewer for making this point.

⁵¹ https://www.nytimes.com/2004/05/18/us/same-sex-marriage-the-overview-hundreds-of-same-sex-couples-wed-in html

⁵²https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/Vital-Statistics/ Registration-Reports/Reports/RR2015.pdf?la=en p. 41.

tracks with our theory of pent-up demand for the marital contract which can only be satisfied once same-sex marriage is legal.

6 Conclusion

Over the 20th and 21st centuries, the U.S. federal and state governments expanded their welfare programs substantially. One unintended consequence of this expansion was an increase in the benefits tied to the marital contract. Because of this increase in value, the demand for marriage grew amongst those who were not historically permitted access. By 2015, same-sex couples had formed special interest groups and successfully lobbied for the legalization of same-sex marriage at the state and federal levels. We analyze this recent historical episode from the public choice perspective, arguing that the eventual legalization of same-sex marriage at state and federal levels was the predictable supply response to an increase in demand, which itself was a natural result of the increasing value of the marital contract.

To substantiate our theory, we analyze evidence at both state and federal levels. First, we use cross-sectional data to predict how many years a state legalized same-sex marriage prior to *Obergefell* in 2015. Holding constant the costs on both the demand and supply side, we show that the share of a state government's budget spent on transfers and subsidy benefits significantly predicts how long a state legalized same-sex marriage. These findings are robust to a counterfactual case where we use state spending on general consumption to predict years of same-sex marriage and to using various measures of the dependent variable.

We also show that federal-level benefits tied to the marital contract increased substantially from 1900-2014, across five different categories: 1) veteran and military, 2) taxation, 3) Social Security and Medicaid/Medicare, 4) immigration, and 5) health insurance. We also document the increase in lobbying spending on gay and lesbian issues, spiking in 2004, the year after Massachusetts became the first state to legalize same-sex marriage, and in 2014, the year before Obergefell. We argue that these results are consistent with the public choice approach to the legalization of same-sex marriage.

Public choice analysis is important not only for understanding the case of the United States but also the current global context of same-sex marriage. Thirty-two other countries have legalized same-sex marriage, and it is notable that many of these nations also fit the pattern of a growing welfare state prior to the increase in quantity of marital contracts supplied.⁵³ We show that as

⁵³These countries are: Andorra, Argentina, Australia, Australia, Belgium, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Denmark, Ecuador, Finland, France, Germany, Iceland, Ireland, Luxembourg, Malta, Mexico, The Netherlands, New Zealand, Norway, Portugal, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, The United Kingdom, and Uruguay.

the benefits to marriage increase, the demand for access to marriage increases as well.

To conclude, our paper emphasizes how something as fundamental as family structure can vary in response to legal and economic change. As pro-family and pro-natal policies grow in popularity, understanding the unintended consequences of policy for family life will become increasingly important.⁵⁴

7 Acknowledgements

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 $[\]overline{^{54}} \text{https://ifstudies.org/blog/pro-natal-policies-work-but-they-come-with-a-hefty-price-tagolicies-work-but-they-work-but-tagolicies-work-but-tagolicies-work-but-tagolicies-work-but-tagolicies-work-but-tagolicies-work-but-tagolicies-work-but-tagolicies-work-but-tagolicies-$

Tables and Figures

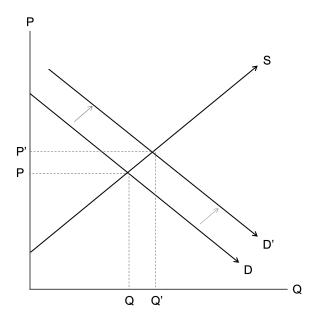


Figure 1: An exogenous increase in the value of marital contracts

	Not Legal before Obergefell		Legal before Obergefell		
Variable	Mean	SD	Mean	SD	
Years legal	0	0	2.44	2.40	
State spending on benefits	0.35	0.11	0.45	0.15	
AIDS rate	11.12	9.89	11.49	9.33	
Urban share	66.41	11.97	74.18	15.64	
Clinton share 1992	40.77	6.02	41.34	6.10	
First case year	2011	4	2003	12	

Table 1: Summary Statistics by Legalization Period

Table 2: Determinants of State Legalization of Same-Sex Marriage

	Years of Legal Marriage					
	(1)	(2)	(3)	(4)	(5)	
State spending on benefits	5.663*** (2.072)	5.501** (2.112)	5.480** (2.213)	4.512** (2.018)	4.337* (2.190)	
AIDS rate		0.020 (0.024)	0.002 (0.030)	-0.022 (0.040)	-0.026 (0.048)	
Urban share			0.019 (0.030)	0.026 (0.033)	0.036 (0.042)	
Clinton share 1992				0.073° (0.051)	0.084° (0.057)	
First case year					-0.029 (0.022)	
Observations Adjusted R^2	50 0.108	50 0.096	50 0.086	50 0.095	46 0.167	
Note:	op<0.2; *p<0.1; **p<0.05; ***p<0.01					

Sources: Stansel et al. (2014), the Centers for Disease Controls and Prevention (CDC), the Census Bureau, and UCSB's American Presidency Project. "Years Same-Sex Marriage Legal" is the number of years a state had legalized same-sex marriage before *Obergefell*. "State spending on benefits" refers to the average share of the state government budget spent on transfers and subsidies (1981-legalization year). "AIDS rate" refers to the annual rate of cases per 100,000 population in each state (1992). "Urban share" refers to the percentage of a state's population in urbanized areas and urban clusters (2000). "Clinton share 1992" refers to the share of the vote for Clinton in the 1992 presidential election. "First case year" refers to the year of the first same-sex marriage case in each state (DE, ME, NH, and RI are excluded, having not had a case). Standard errors are heteroskedasticity robust.

Table 3: Determinants of State Legalization of Same-Sex Marriage or Similarly Comprehensive Benefit Contracts

	Years of Legal Marriage, Civil Unions, or Domestic Partnership				
	(1)	(2)	(3)	(4)	(5)
State spending on benefits	7.627**	6.834**	6.707**	5.679°	5.649°
	(3.617)	(3.317)	(3.306)	(3.444)	(3.605)
AIDS rate		0.090°	0.026	-0.0001	-0.016
		(0.054)	(0.054)	(0.060)	(0.065)
Urban share			0.063*	0.071*	0.096**
			(0.035)	(0.037)	(0.047)
Clinton share 1992				0.082°	0.108*
				(0.059)	(0.061)
First case year					-0.018
V					(0.034)
Observations	50	50	50	50	46
Adjusted R ²	0.120	0.175	0.220	0.222	0.308

Note:

 $\circ p < 0.2; *p < 0.1; **p < 0.05; ***p < 0.01$

Sources: Stansel et al. (2014), the Centers for Disease Controls and Prevention (CDC), the Census Bureau, and UCSB's American Presidency Project. "Years of Marriage, Unions, or Domestic Partnerships" is the number of years a state had legalized same-sex marriage or comprehensive civil unions or domestic partnerships before *Obergefell*. "State spending on benefits" refers to the average share of the state government budget spent on transfers and subsidies (1981-legalization year). "AIDS rate" refers to the annual rate of cases per 100,000 population in each state (1992). "Urban share" refers to the percentage of a state's population in urbanized areas and urban clusters (2000). "Clinton share 1992" refers to the share of the vote for Clinton in the 1992 presidential election. "First case year" refers to the year of the first same-sex marriage case in each state (DE, ME, NH, and RI are excluded, having not had a case). Standard errors are heteroskedasticity robust.

Table 4: Investigating the Relationship Between Spending and State Legalization of Same-Sex Marriage

	Years of Legal Marriage				
	(1)	(2)	(3)	(4)	(5)
State spending on consumption	-0.130** (0.059)	-0.122^* (0.064)	-0.124^* (0.068)	-0.144^* (0.073)	-0.084 (0.070)
AIDS rate		0.028 (0.030)	0.007 (0.038)	-0.035 (0.048)	-0.031 (0.055)
Urban share			0.020 (0.035)	0.032 (0.036)	0.037 (0.045)
Clinton share 1992				0.120* (0.060)	0.121* (0.065)
First case year					-0.046^* (0.025)
Observations Adjusted R^2	50 0.004	50 -0.004	50 -0.015	50 0.051	46 0.115
Note:	op<0.2; *p<0.1; **p<0.05; ***p<0.01				

Sources: Stansel et al. (2014), the Centers for Disease Controls and Prevention (CDC), the Census Bureau, and UCSB's American Presidency Project. "Years of Marriage, Unions, or Domestic Partnerships" is the number of years a state had legalized same-sex marriage or comprehensive civil unions or domestic partnerships before *Obergefell*. "State spending on benefits" refers to the average share of the state government budget spent on transfers and subsidies (1981-legalization year). "AIDS rate" refers to the annual rate of cases per 100,000 population in each state (1992). "Urban share" refers to the percentage of a state's population in urbanized areas and urban clusters (2000). "Clinton share 1992" refers to the share of the vote for Clinton in the 1992 presidential election. "First case year" refers to the year of the first same-sex marriage case in each state (DE, ME, NH, and RI are excluded, having not had a case). Standard errors are heteroskedasticity robust.

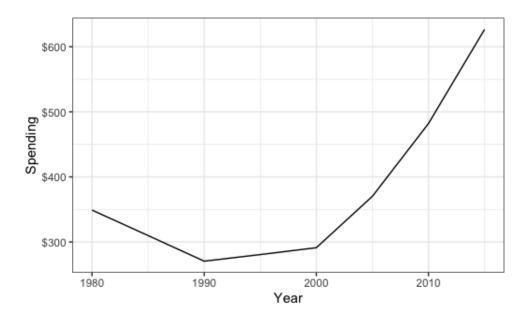


Figure 2: Government spending per capita on veterans

Source: USAFacts. Adjusted for inflation.

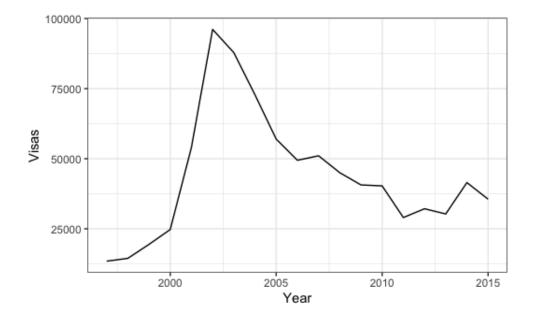


Figure 3: Immigration of spouses/other dependents of pending U.S. citizens and alien fiancees of U.S. citizens

Source: USAFacts.

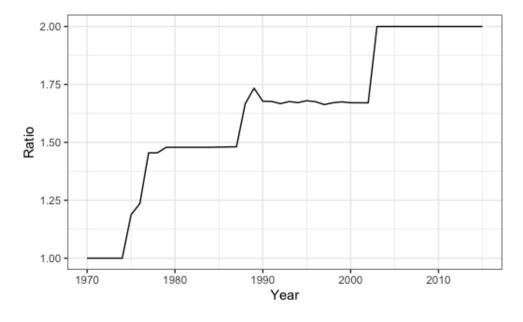


Figure 4: Ratio of the standard tax deduction available to joint filers relative to single filers

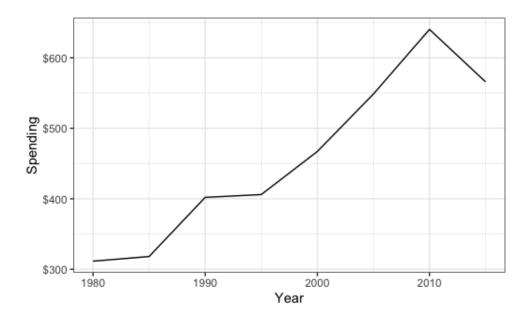


Figure 5: Government spending on healthcare

Source: USAFacts. Adjusted for inflation

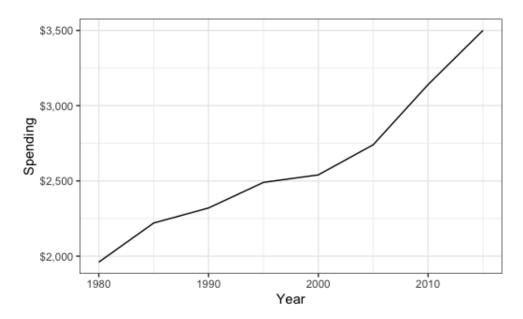


Figure 6: Government spending per capita on Social Security and Medicare Source: USAFacts. Adjusted for inflation.

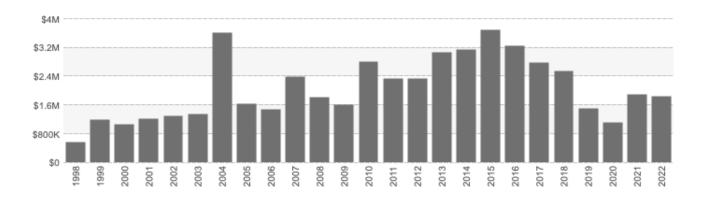


Figure 7: Annual lobbying on gay & lesbian rights & issues

Source: Open Secrets

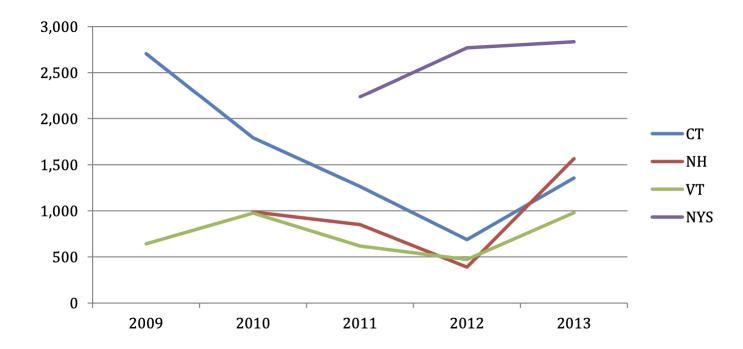


Figure 8: Weddings of Same-Sex Couples by State, pre- and post-Windsor Source: Badgett and Mallory (2014)

Appendix

Table A.1: State-Level Changes to the Marital Contract

State	${\bf First} {\bf Case}^{55}$	Same-Sex Marriage ⁵⁶	
Alabama	2014 (Hard v. Strange)	2015	
Alaska	1994 (Bess v. Ulmer)	2014	
Arizona	2014 (Connolly v. Roche)	2014	
Arkansas	2013 (Wright v. Arkansas)	2015	
California	1993 (Cable v. McCarthy)	2013 (2003)	
Colorado	1975 (Adams v. Howerton)	2014 (2013)	
Connecticut	2004 (Kerrigan v. Commissioner of Public Health)	2008	
Delaware	X	2013	
Florida	2001 (Frandsen v. County of Brevard)	2015	
Georgia	2014 (Inniss v. Aderhold)	2015	
Hawaii	1993 (Baehr v. Lewin)	2013 (2011)	
Idaho	2014 (Latta v. Otter)	2014	
Illinois	2012 (Lee v. Orr)	2013 (2011)	
Indiana	2002 (Morrison v. Sadler)	2014	
Iowa	2005 (Varnum v. Brien)	2009	
Kansas	2013 (Nelson v. Kansas)	2015	
Kentucky	2013 (Bourke v. Beshear)	2015	
Louisiana	2013 (Costanza v. Caldwell)	2015	
Maine	X	2012	
Maryland	2006 (Conaway v. Deane & Polyak)	2012	
Massachusetts	2001 (Goodridge v. Department of Public Health)	2003	
Michigan	2012 (DeBoer v. Snyder)	2015	
Minnesota	1971 (Baker v. Nelson)	2013	
Mississippi	2014 (Campaign for Southern Equality v. Bryant)	2015	
Missouri	2014 (Lawson v. Kelly)	2015	
Montana	2010 (Donaldson v. State of Montana)	2014	
Nebraska	2003 (Citizens for Equal Protection v. Bruning)	2015	
Nevada	2012 (Sevcik v. Sandoval)	2014 (2009)	

 $[\]overline{}^{55}$ The year each state had its first court case rights or benefits of marriage for same-sex couples.

⁵⁶The year of the state's official decision, rather than the actual same-sex marriages began in each state (usually soon after). The year in parentheses for some states refers to the year that civil unions or domestic parternships were offered to same sex couples.

New Hampshire	X	2009		
New Jersey	2006 (Lewis v. Harris)	2013 (2006)		
New Mexico	2013 (Griego v. Oliver)	2013		
New York	2004 (Hernandez v. Robles)	2011		
North Carolina	2012 (Fisher-Borne v. Smith)	2014		
North Dakota	2014 (Ramsay v. Dalrymple)	2015		
Ohio	2013 (Obergefell v. Wymyslo)	2015		
Oklahoma	2004 (Bishop v. United States)	2014		
Oregon	2014 (Geiger v. Kitzhaber)	2014 (2007)		
Pennsylvania	2013 (Whitewood v. Wolf)	2014		
Rhode Island	X	2013		
South Carolina	2013 (Condon v. Haley)	2014		
South Dakota	2014 (Rosenbrahn v. Daugaard)	2015		
Tennessee	2013 (Tanco v. Haslam)	2015		
Texas	2009 (In Re Marriage of J.B. and H.B)	2015		
Utah	2013 (Kitchen v. Herbert)	2014		
Vermont	1997 (Baker v. Vermont)	2009		
Virginia	2013 (Bostic v. Schaefer)	2014		
Washington	1971 (Singer v. Hara)	2012		
West Virginia	$2013 \; (McGee \; v. \; Cole)$	2014		
Wisconsin	2009 (McConkey v. Van Hollen)	2014		
Wyoming	2010 (Christiansen v. Christiansen)	2014		

Table A.2: Determinants of State Legalization before 2015

	Legal Before 2015						
	(1)	(2)	(3)	(4)	(5)		
State spending on benefits	0.817** (0.346)	0.829** (0.369)	0.768** (0.376)	0.779* (0.388)	0.589 (0.460)		
AIDS rate		-0.002 (0.006)	-0.013° (0.008)	-0.012° (0.008)	-0.013° (0.009)		
Urban share			0.011** (0.005)	0.011** (0.005)	0.012** (0.006)		
Clinton share 1992				-0.001 (0.010)	0.001 (0.011)		
First case year					-0.009° (0.005)		
Observations Adjusted \mathbb{R}^2	50 0.083	50 0.064	50 0.123	50 0.103	46 0.141		
Note: op<0.2; *p<0.1; **p<0.05; ***p<0.01							

Sources: Stansel et al. (2014), the Centers for Disease Controls and Prevention (CDC), the Census Bureau, and UCSB's American Presidency Project. "Legal Before 2015" indicates whether or not a state had legalized same-sex marriage before *Obergefell*. "State spending on benefits" refers to the average share of the state government budget spent on transfers and subsidies (1981-legalization year). "AIDS rate" refers to the annual rate of cases per 100,000 population in each state (1992). "Urban share" refers to the percentage of a state's population in urbanized areas and urban clusters (2000). "Clinton share 1992" refers to the share of the vote for Clinton in the 1992 presidential election. "First case year" refers to the year of the first same-sex marriage case in each state (DE, ME, NH, and RI are excluded, having not had a case). Standard errors are heteroskedasticity robust.

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