Spousal Visa Policy and Mixed-Citizenship Couples: Evidence from the End of the Defense Of Marriage Act

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Motivation

- Marriage is a popular legal and social contract.
- Marriage policy benefits couples through tax and transfer, healthcare, immigration, and family policy.
- Marriage policy can contribute to marriage rates, couple formation, and assortative mating.
- In 2013, a Supreme Court ruling extended federal marriage benefits and policy to same-sex couples.
- Extending access to spousal visas to same-sex couples provides a unique opportunity to understand its effects.

Question

- Big picture questions:
  - Why do people get married?
  - Does marriage policy
    - incentivize marriage?
    - affect couple formation?
    - affect assortative mating?
- Specific question:
  - Does access to spousal visas increase the incidence rate of mixed-citizenship couples relative to same-citizenship couples?
  - (A mixed-citizenship couple has one citizen partner, one non-citizen partner, and they live together.)

Preview of Results

- Yes, access to spousal visas increases the incidence rate of mixed-citizenship same-sex couples relative to same-citizenship same-sex couples.
- The policy change does not increase the relative incidence rate of couples with transfer benefits or health insurance, or the relative incidence rate of mixed-citizenship same-sex roommates.
- This leads to a downstream increase in the incidence rate of couples with a foreign-born partner and a domestic-born partner relative to couples where both partners domestic- or foreign-born.

Contribution

- I show spousal visas are a meaningful benefit of marriage (Becker, 1991 JPE; Stevenson and Wolfers, 2007 JEP; Edlund, 2013 Economica; Lafortune and Low, 2020 NBER WP)
- I show this federal policy change increases marriage rates (Bitler et al., 2004 Demography; Francesconi and Klaauw, 2007 JHR; Abramowitz, 2016 JHR)
- I show spousal visa policy impacts assortative mating (Abramitzky, Delavande and Vasconcelos, 2011 AEJ: Applied; Mansour and McKinnish, 2014 ReStat; Chiappori, Salanié and Weiss, 2017 AER)

Background

Marriage Policy

- State Marriage Policy (not the focus of this paper)
- Federal Marriage Policy (the focus of this paper)
  - Does not change directly
  - Definition of spouse changes
- Insurance and Marriage

The Defense of Marriage Act

The Defense Of Marriage Act (DOMA, 1996) forbade the federal government from recognizing the marriages of same-sex couples.

- Non-permanent residents were effectively barred from marrying same-sex partners prior to the policy change because doing so would show an intent to remain in the country.
- This paper compares current immigration policy to a counterfactual immigration policy absent spousal visas, all else equal, which prevents non-permanent residents from marrying residents.

United States v. Windsor

In 2013, the Supreme Court struck down DOMA in *United States v. Windsor*.

- Effective immediately, the federal government recognized same-sex marriages, conferring all rights and benefits. There is no phase-in or phase-out of recognition.
- Non-permanent residents can finally marry a same-sex partner without consequences from immigration policy.
- Mixed-citizenship same-sex couples can finally apply for spousal visas: a tool that can prevent union dissolution caused by failed visa renewal or other immigration challenges.

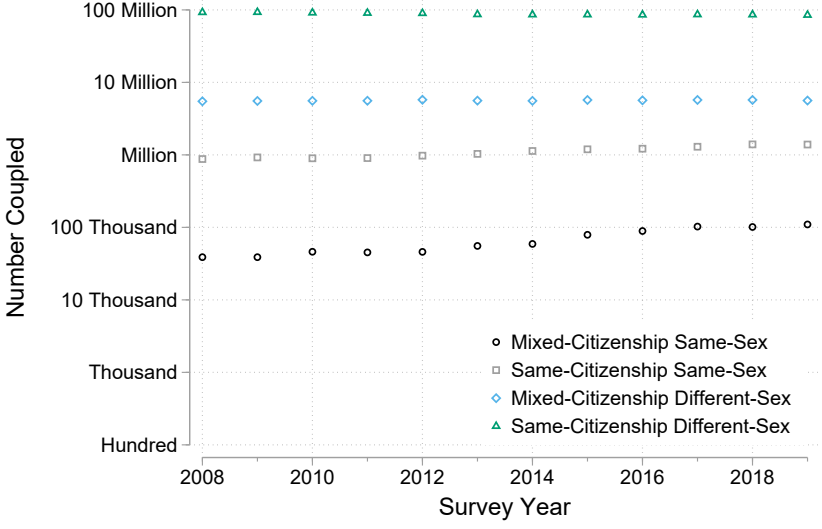
Data & Empirical Framework

American Community Survey

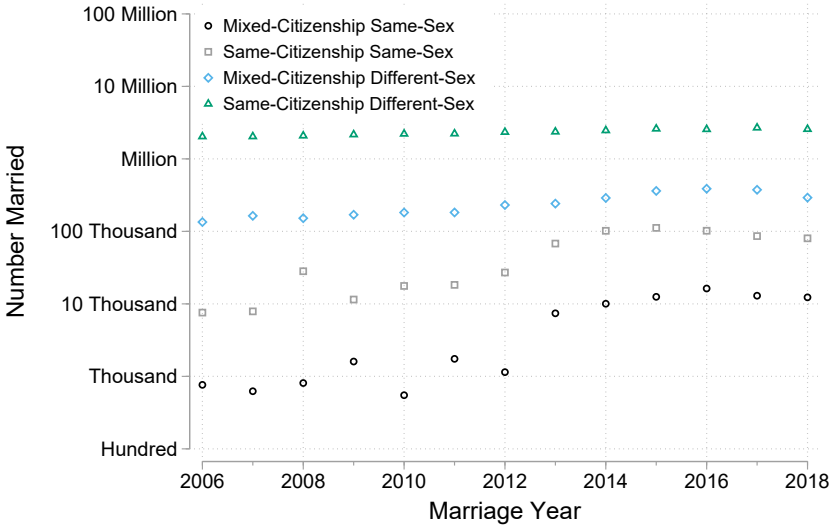
Data are from the American Community Survey (ACS), the largest dataset for studying same-sex couples in the United States. Couples include the "head-of-household" and the head's "spouse" or "unmarried romantic partner", aged 18-64. The ACS:

- surveys a representative sample of 1% of households throughout the year,
- collects data on:
  - citizenship,
  - marriage,
  - transfer receipt,
  - health insurance;
- does not observe sexual orientation or couples that are not cohabiting.

Couples by Survey Year



Married Couples by Marriage Year



Count Data and Log-Linear Model

Ideally, the sexual orientation of singles is observed. Then I could measure entry into couples directly. However, the sexual orientation of singles is unobserved, so I aggregate observations to the state$\times$year$\times$group-level. There are four groups:

1. mixed-citizenship same-sex coupled individuals,
2. same-citizenship same-sex coupled individuals,
3. mixed-citizenship different-sex coupled individuals, and
4. same-citizenship different-sex coupled individuals.

Counts naturally fit with a log-linear model and the log-linear relationship affords interpreting the coefficients as increases in rates. The logarithm allows a well-behaved denominator to drop out.

Regression Model

I use the Conditional Fixed Effects Poisson generalized linear model instead of a typical linear model because there are many state×years with zero same-sex couples.

$$\mathbb{E}[y_{gst}|\mathrm{x}] = \exp(\beta_0 + \beta_1 post_t + \beta_2 M_g \times post_t + \beta_3 SS_g \times post_t + \beta_4 M_g \times SS_g \times post_t + \sigma_{gs} + \tau_t).$$

This also means:

- Couple formation is within states, so states are implicit partnering markets.
- $\exp(\beta_4)$ represents the incidence rate ratio of:
  - mixed-citizenship same-sex coupled individuals relative to same-citizenship same-sex coupled individuals and net of the change in mixed-citizenship different-sex coupled individuals relative to same-citizenship different-sex coupled individuals
  - mixed-citizenship coupling in same-sex attracted individuals relative to same-citizenship coupling in same-sex attracted individuals and net of the change in mixed-citizenship coupling in different-sex attracted individuals relative to same-citizenship coupling in different-sex attracted individuals.

Survey Year vs Marriage Year

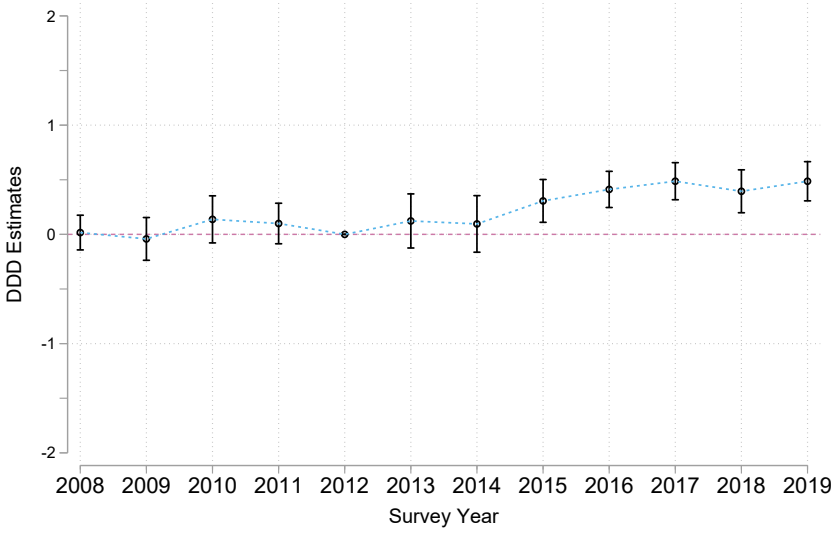
- The ACS recodes same-sex married couples as unmarried until 2012. So couple counts include married and unmarried individuals.
- When t is the year a household is surveyed, the number of couples represents the stock of couples.
- The ACS includes year of marriage for married couples. So it's possible to count newlyweds for each year, conditional on surviving until being surveyed.
- Whe t is the year of marriage, the number of couples represent the flow into marriage.

Results

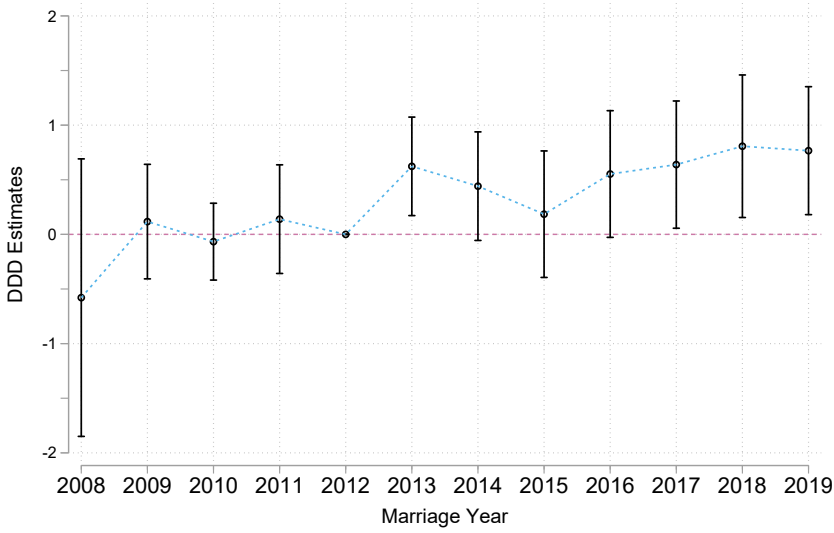
DDD Estimates - Main Result

	Coupled Individuals by Survey Year	Married Individuals by Marriage Year
post×SS×M	0.309	0.583
	(0.059)	(0.189)
post×SS	0.362	1.404
	(0.019)	(0.155)
post×M	0.074	0.144
	(0.016)	(0.017)
post	-0.061	-0.748
	(0.006)	(0.006)
Observations	2448	2404
Log_Likelihood	-670,138	-14,550,000
Relative_IRR	1.363	1.791
Relative_IRR_se	0.080	0.339
IRR_pvalue	0.000	0.019
χ^2 pre-trend test	5.274	1.246
p_value	0.260	0.870

Coupled Individuals, by Survey Year



Married Individuals, by Marriage Year



DDD Estimates - Assortativeness

	Birthplace	Race
post×SS×attribute	0.103	0.070
	(0.049)	(0.048)
post×SS	0.371	0.345
	(0.019)	(0.018)
post×attribute	0.116	0.180
	(0.011)	(0.017)
post	-0.062	-0.076
	(0.007)	(0.007)
Observations	2448	2448
Log_Likelihood	-572,271	-850,403
Relative_IRR	1.108	1.073
Relative_IRR_se	0.054	0.052
IRR_pvalue	0.047	0.160
Chi2_Stat	6.114	1.707
p_value	0.191	0.790

Standard errors in parentheses, clustered at the state×group level.

Alternative Hypotheses

- Couples form to access federal transfer benefits
- Couples form to access health insurance
- Couples were previously closeted and responded to the survey as "roommates" and now they respond as "spouses" or "unmarried romantic partners"
- Couples form when citizens sponsor new partners to move from abroad
- Couples form because unauthorized immigrants now have an easier time accessing spousal visas (separate policy)

Conclusion

Summary

- Questions:
  - Why do people get married?
  - Does marriage policy
    - incentivize marriage?
    - affect couple formation?
    - affect assortative mating?
- Identifying Variation: The change in federal recognition of same-sex marriage.
- Results:
  - Spousal visa policy provides a meaningful benefit to marriage and increases marriage rates compared to a regime absent spousal visas.
  - Spousal visa policy leads to more mixed-citizenship couples. This also increases disassortative mating by birth country.

Policy Implications

- The Defense of Marriage Act prevented a large share of mixed-citizenship same-sex couples from being together and getting married, destroying or preventing the creation of match surplus for many same-sex couples.
- Absent change in immigration policy, spousal visas are beneficial to mixed-citizenship couples, enabling ~ 1.5 million to stay together.
- A similar visa policy for citizen/non-citizen pairs (romantic or otherwise) could similarly benefit many people.

DDD Estimates - Federal Benefits

	Food Stamps	Welfare	Soc Sec	Supp Sec	Any Transfer
post×SS×transfer	-0.062	0.087	0.048	-0.138	-0.012
	(0.050)	(0.067)	(0.036)	(0.065)	(0.033)
post×SS	0.384	0.378	0.374	0.381	0.381
	(0.022)	(0.020)	(0.021)	(0.020)	(0.022)
post×transfer	0.050	-0.181	0.013	0.178	0.024
	(0.029)	(0.025)	(0.009)	(0.015)	(0.014)
post	-0.061	-0.054	-0.058	-0.061	-0.061
	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
Observations	2448	2448	2448	2448	2448
Log_Likelihood	-2,435,552	-855,344	-724,117	-906,925	-1,930,314
Relative_IRR	0.940	1.091	1.050	0.871	0.988
Relative_IRR_se	0.047	0.073	0.038	0.057	0.032
IRR_pvalue	0.199	0.210	0.194	0.023	0.703
Chi2_Stat	1.918	2.213	0.836	8.417	0.258
p_value	0.751	0.697	0.934	0.077	0.992

Standard errors in parentheses, clustered at the state×group level.

DDD Estimates - Health Insurance

	Employer	Private	Public	Purchased	Any Insurance
post×SS×insurance	-0.011	0.076	0.018	-0.082	0.114
	(0.033)	(0.046)	(0.042)	(0.038)	(0.099)
post×SS	0.387	0.306	0.370	0.391	0.261
	(0.024)	(0.040)	(0.026)	(0.019)	(0.097)
post×insurance	0.005	0.133	0.239	0.069	0.430
	(0.011)	(0.015)	(0.024)	(0.021)	(0.052)
post	-0.061	-0.170	-0.099	-0.067	-0.453
	(0.006)	(0.012)	(0.010)	(0.006)	(0.051)
Observations	2435	2412	2447	2448	2327
Log_Likelihood	-1,099,635	-1,478,041	-1,477,999	-1,209,871	-2,309,733
Relative_IRR	0.989	1.079	1.018	0.922	1.121
Relative_IRR_se	0.033	0.050	0.043	0.035	0.111
IRR_pvalue	0.749	0.114	0.681	0.026	0.278
Chi2_Stat	0.601	1.184	5.913	1.156	4.056
p_value	0.963	0.881	0.206	0.885	0.399

Standard errors in parentheses, clustered at the state×group level.

DDD Estimates - Roommates

	Roommates
post×SS×M	0.175
	(0.059)
post×SS	-0.046
	(0.025)
post×M	0.001
	(0.049)
post	-0.031
	(0.022)
Observations	2286
Log_Likelihood	-515,588
Relative_IRR	1.191
Relative_IRR_se	0.070
IRR_pvalue	0.006
Pre_Trend	10.499
p_value	0.033

Standard errors in parentheses, clustered at the state×group level.