Same-Sex Immigrant Couples

Analyses

November 29, 2020

Contents

1 Aggregate data by year of immigration (focus on origin effects)

This analysis focuses on origin effects: how does the proportion of immigrants from country x in year y vary by origin-country LGBT policy? For this analysis we pool all available years of ACS data, so we are unable to use survey weights. The proportion is multiplied by 100 to be interpretable as percentage points.

Table 1: 100*Proportion same-sex in a country-year of immigration

	Dependent variable:					
	prop_same_sex					
	(1)	(2)	(3)	(4)	(5)	(6)
origin_score	0.084***	0.085***	0.085***	0.053***	0.045***	0.046***
	(0.0003)	(0.0003)	(0.0003)	(0.0005)	(0.001)	(0.001)
yrimmig		−0.002***	−3.400***		−3.500***	
		(0.0001)	(0.054)		(0.051)	
I(yrimmig^2)			0.001***		0.001***	
			(0.00001)		(0.00001)	
Country FEs?	no	no	no	yes	yes	yes
Year of immigration FEs?	no	no	no	no	no	yes
Observations	1,319,103	1,319,103	1,319,103	1,319,103	1,319,103	1,319,103
R^2	0.068	0.069	0.072	0.170	0.170	0.180
Note:						*p<0.1; **p<0.05; ***p<0.01

Table 1 shows that countries with more pro-LGBT policies tend to send more immigrants who end up in same-sex couples. A one-point increase in the sending country policy scale is associated with a 0.04 to 0.08 percentage-point increase in proportion immigrants in same-sex couples who immigrated in that year.

Table 2: 100*Proportion different-sex in a country-year of immigration

	Dependent variable:					
	prop_dif_sex					
	(1)	(2)	(3)	(4)	(5)	(6)
origin_score	0.660***	1.400***	1.400***	−2.100***	0.015***	0.050***
	(0.004)	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)
yrimmig		−0.860***	120.000***		120.000***	
		(0.001)	(0.600)		(0.390)	
I(yrimmigˆ2)			−0.030***		−0.030***	
			(0.0002)		(0.0001)	
Country FEs?	no	no	no	yes	yes	yes
Year of immigration FEs?	no	no	no	no	no	yes
Observations	1,319,103	1,319,103	1,319,103	1,319,103	1,319,103	1,319,103
R^2	0.025	0.300	0.320	0.560	0.710	0.720
Note:						*p<0.1; **p<0.05; ***p<0.01

2 Dyadic data: by survey year (focus on state effects)

We reshape the data so that is yearly dyads: each observation is the proportion of immigrants that is in same-sex couples out of all those from country x in state y in survey year z (using survey weights). We multiply this proportion by 100 for interpretability as percentage points. We merge in the sending-country policy index for the average year of immigration for these immigrants.

Table 3: 100*Proportion same-sex in a country-state-year

	Dependent variable:					
	same_prop					
	(1)	(2)	(3)	(4)	(5)	(6)
origin_score	0.057***		0.053***	0.049***	0.041***	0.042***
	(0.012)		(0.011)	(0.011)	(0.011)	(0.011)
state_policy		0.027	0.033*	0.048*	−0.003	−0.004
		(0.017)	(0.017)	(0.026)	(0.027)	(0.027)
state_stock_year						−0.00000
						(0.00000)
State FEs?	no	no	no	yes	yes	yes
Year FEs?	no	no	no	no	yes	yes
Observations	45,810	44,431	44,431	44,431	44,431	44,431
R^2	0.001	0.0001	0.001	0.003	0.004	0.004
Note:						*p<0.1; **p<0.05; ***p<0.01

Table 3 shows a significant, positive effect for LGBT policy score of the host country, implying that an

Table 4: 100*Proportion different-sex in a country-state-year

	Dependent variable:					
	dif_prop					
	(1)	(2)	(3)	(4)	(5)	(6)
origin_score	−0.320***		−0.320***	−0.640***	−0.620***	−0.610***
	(0.070)		(0.070)	(0.068)	(0.069)	(0.068)
state_policy		−0.180*	−0.220**	0.770***	0.890***	0.870***
		(0.110)	(0.110)	(0.160)	(0.170)	(0.170)
state_stock_year						−0.00001***
						(0.00000)
State FEs?	no	no	no	yes	yes	yes
Year FEs?	no	no	no	no	yes	yes
Observations	45,810	44,431	44,431	44,431	44,431	44,431
R^2	0.0005	0.0001	0.001	0.083	0.084	0.085
Note:						*p<0.1; **p<0.05; ***p<0.01

increase in policy friendliness by 1 point in an origin country is associated with a 0.04 to 0.06 percentage point increase in proportion of immigrants from that country in same-sex couples. Since the proportion of immigrants in same-sex couples is only 0.23 percent, this constitutes a substantive effect. LGB immigrants tend to come from countries with more queer-friendly policies. The coefficient for state policy is insignificant in most models.

As a comparison, Table 4 fits the same models, but with proportion immigrants in different-sex couples as an outcome. Interestingly, here origin score is in the opposite direction, and state policy is now significant, and highly positive when fixed effects are included. This implies that immigrants in different-sex couples are more likely to come from countries with more oppressive LGBT laws and tend to live in more accepting areas in the U.S. This may be due to family-friendly policies, since this outcome variable mostly captures coupled immigrants as a proportion of all immigrants from a given country.

3 Individual analysis

For the individual analysis, we focus on U.S. state policies: conditional on migrating to the U.S., do immigrants in same-sex couples live in areas with more LGBT-friendly policies, compared to those in different-sex couples? The outcome variable is state policy, which is treated as continuous in OLS models and as three binned, ordered categories for ordered logit models.

Table 6 contains OLS estimates. Model 1, the simplest, shows that immigrants in same-sex couples live in states with on average 0.44 higher policy score (about half of one LGBT-friendly policy). This effect is Although including

Table 5: Individual OLS analysis of continuous state policy score

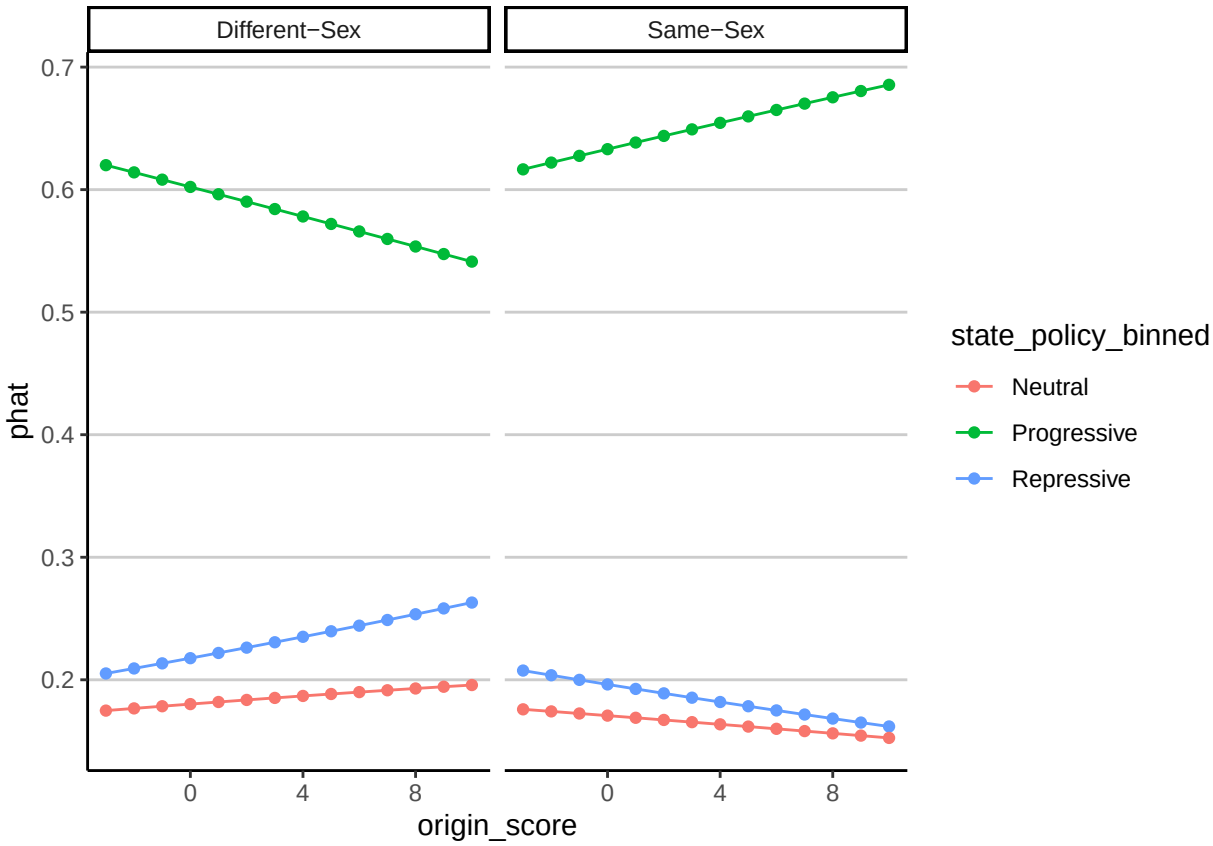
	Dependent variable:					
	state_policy					
	(1)	(2)	(3)	(4)	(5)	(6)
same_sex	0.440***	0.450***	0.013	17.000**	0.013	−0.120*
	(0.022)	(0.022)	(0.008)	(7.800)	(0.008)	(0.061)
sexMale		−0.150***		−0.160***		−0.0002
		(0.004)		(0.004)		(0.001)
age		0.024***		0.024***		−0.00000
		(0.0002)		(0.0002)		(0.00004)
educcollege		0.067***		0.008		−0.001
		(0.006)		(0.006)		(0.001)
educHS		−0.005		−0.014**		−0.002
		(0.005)		(0.006)		(0.001)
educsome col		−0.001		−0.022***		−0.001
		(0.006)		(0.007)		(0.002)
nchild		0.069***		0.068***		−0.003***
		(0.002)		(0.002)		(0.0004)
log_income		0.190***		0.190***		−0.0001
		(0.002)		(0.002)		(0.001)
no_income		1.700***		1.800***		−0.002
		(0.020)		(0.021)		(0.005)
yrimmig		0.028***		0.031***		
		(0.0003)		(0.0003)		
origin_score			−0.0002	−0.033***	−0.0002	−0.0002
			(0.0003)	(0.001)	(0.0003)	(0.0003)
same_sexTRUE:origin_score			−0.001	0.044***	−0.001	−0.0004
			(0.002)	(0.010)	(0.002)	(0.002)
same_sexTRUE:sexMale				0.170***		−0.019
				(0.048)		(0.012)
same_sexTRUE:age				−0.009***		0.0005
				(0.002)		(0.0004)
same_sexTRUE:educcollege				0.230***		−0.013
				(0.077)		(0.019)
same_sexTRUE:educHS				0.060		0.014
				(0.079)		(0.020)
same_sexTRUE:educsome col				0.150*		0.002
				(0.086)		(0.022)
same_sexTRUE:nchild				−0.120***		−0.001
				(0.025)		(0.006)
same_sexTRUE:log_income				0.008		0.011**
				(0.021)		(0.005)
same_sexTRUE:no_income				0.120		0.120**
				(0.230)		(0.057)
same_sexTRUE:yrimmig				−0.008**		
				(0.004)		
State FEs?	no	no	no	no	yes	yes
Year FEs?	no	no	no	no	yes	yes
Observations	1,632,727	1,632,727	1,496,325	1,496,325	1,496,325	1,496,325
R^2	0.0002	0.017	0.940	0.018	0.940	0.940

Note: *p<0.1; **p<0.05; ***p<0.01

Table 6: Individual ordered logit analysis of three-category state policy score

	Dependent variable:			
	state_policy_binned			
	(1)	(2)	(3)	(4)
same_sex	0.250^{***}	0.280^{***}	0.170^{***}	23.000^{***}
	(0.020)	(0.020)	(0.027)	(0.0002)
sexMale		0.003		-0.100^{***}
		(0.012)		(0.013)
age		0.008^{***}		0.011^{***}
		(0.001)		(0.001)
educcollege		0.210^{***}		0.041^{***}
		(0.010)		(0.010)
educHS		0.019^{*}		-0.026^{**}
		(0.011)		(0.011)
educsome col		0.060^{***}		-0.024^{**}
		(0.011)		(0.011)
nchild		0.050^{***}		0.057^{***}
		(0.006)		(0.006)
log_income				0.120^{***}
				(0.002)
no_income				1.100^{***}
				(0.001)
yrimmig		-0.002^{***}		0.004^{***}
		(0.00002)		(0.00002)
origin_score			-0.034^{***}	-0.025^{***}
			(0.003)	(0.003)
same_sexTRUE:origin_score			0.044^{***}	0.048^{***}
			(0.008)	(0.009)
same_sexTRUE:sexMale				0.092^{***}
				(0.002)
same_sexTRUE:age				-0.008^{***}
				(0.002)
same_sexTRUE:educcollege				0.160^{***}
				(0.003)
same_sexTRUE:educHS				0.018^{***}
				(0.002)
same_sexTRUE:educsome col				0.100^{***}
				(0.002)
same_sexTRUE:nchild				-0.061^{***}
				(0.021)
same_sexTRUE:log_income				0.015^{**}
				(0.006)
same_sexTRUE:no_income				0.200^{***}
				(0.001)
same_sexTRUE:yrimmig				-0.011^{***}
				(0.0001)
State FEs?	no	no	no	no
Year FEs?	no	no	no	no
Observations	111,880	111,880	102,697	102,697

Note: *p<0.1; **p<0.05; ***p<0.01


Different−Sex
Same−Sex
0.7
0.6
0.5
0.4
0.3
0.2
phat
0
4
8
origin_score
state_policy_binned
Neutral
Progressive
Repressive