

Norms and Reform: Legalizing Homosexuality Improves Attitudes

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Abstract

This analysis examines the relationship between legal reform and social norms surrounding homosexuality. We document three main findings. First, about a fifth of the variation in individual preferences can be explained at a country level. Second, using a difference-in-differences strategy, legalizing homosexuality improves how individuals view the tone of their communities. Third, we provide further evidence supporting a legal origins argument by examining former colonies. Countries that were colonized by the British Empire have significantly worse legal rights for same-sex couples than those under other colonial powers. We conclude that adopting legal reform can improve societal attitudes.

Keywords: Homosexuality, Legal Reform, Social Norms, Colonialism

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1 Introduction

Improving rights for homosexual individuals is a critical human rights issue that has played an increasingly larger role in policy debates around the world. In some countries, people are still imprisoned, flogged, and even killed simply because of their sexual orientation. Even where homosexuality is legal, gays and lesbians face violence, discrimination, and social stigma. Clearly a combination of legal reform and shifts in societal attitudes is necessary to achieve equality around the world.

This paper examines these issues from an institutional lens, seeking to understand the dynamic between norms towards homosexuality and legal rights. Attitudes and law are each in part dependent on the other, yet the exact relationship remains opaque. Governments in position to shape societal attitudes through reforming institutions may also in part be constrained by this same public opinion.

Most of the existing studies on this topic have focused on the United States and Europe (see [Mason and Barr \(2006\)](#) for a review of research in Western nations.) For instance, [Whitley Jr. \(2001\)](#) test the relationship between Americans' beliefs about gender roles and those about homosexuality, finding a strong relationship between attitudes towards homosexuality and sexism. [Fernandez and Lutter \(2013\)](#) and [Ayoub \(2015\)](#) explore variation in the timing of the legalization of same-sex unions across European countries to find that secular countries with stronger links to the 'global cultural order' and international advocacy organizations are more likely to adopt LGBT rights legislation. Using the European Social Survey, [van den Akker et al. \(2013\)](#) find that more religious people disapprove of homosexuality more and highly educated people disapprove less. In countries where same-sex marriage is legal, disapproval is lower. [Hooghe and Meeusen \(2013\)](#) also argue that countries where same-sex marriage is legal have less prejudice towards homosexuality.

While the bulk of research on attitudes towards gay rights has focused on rich countries, recently a strand of literature has emerged to include poorer countries as well. Analyzing the World Values Survey (WVS), [Anderson and Fetner \(2008\)](#) show that tolerance towards

homosexuality declines as income inequality rises—specifically arguing that economic development shifts attitudes only for the those citizens who benefit the most. [Adamczyk and Pitt \(2009\)](#) analyze the fourth wave of the WVS and argue that religion—and in particular, Islam—is strongly associated with attitudes about homosexuality. [Hadler \(2012\)](#) combines the WVS with the European Values Study and discuss individual and national determinants of attitudes. She finds that homophobia is influenced by the national political history and societal affluence, but global influences are also powerful. [Badgett et al. \(2014\)](#) and [Adamczyk \(2017\)](#) find that economic development, democracy levels, and religion can largely explain aggregate differences in attitudes. [Adamczyk et al. \(2017\)](#) analyze newspaper articles from Muslim and Protestant-majority nations and find that media coverage in Muslim countries is more likely to discuss homosexuality as a moral issue. Finally, [Asal et al. \(2013\)](#) analyze the evolution of legal systems across countries and highlight a legal path dependence in which those countries with systems based on English common law are those that are more likely to prohibit homosexual acts in the future.

We build on this literature by evaluating the evolution of norms in many countries around the world, focusing on the relationship between laws and societal attitudes. Using data from the World Values Survey and Gallup World Poll, we trace the development of values towards homosexuality over time. Specifically, we attempt to draw a causal relationship between legal reform and attitudes using a difference-in-differences framework. The remainder of this paper proceeds as follows. Section 2 reviews the data sources and empirical methods used in this analysis. Section 3 presents the main results, and section 4 discusses implications for policymakers.

2 Data on Attitudes and Empirical Strategy

The data in this analysis come from several main sources. Data on the legal status of countries comes from [Carroll and Mendos \(2017\)](#). Country-level data on the question “is

your city or area a good place or not a good place to live for gay and lesbian people” is from the Gallup World Poll, and GDP per capita in constant 2011 PPP comes from the World Bank’s World Development Indicators. Data on the colonial origins of countries comes from the Issue Correlates of War (ICOW) colonial history data set. Individual-level norm data comes from the World Values Survey. In the WVS, individuals are asked about their views on homosexuality in two questions.¹ In one, they are asked whether they think homosexuality can be justified and must choose a number between 1 and 10 (1 being never justifiable, 10 being always justifiable.) In another, they are asked whether they would not like to have homosexuals as neighbors. The responses for this second question are coded such that higher values correspond to more positive attitudes towards homosexuality. Tables 1 and 2 present summary statistics for these two main data sources.

To identify a causal relationship between societal attitudes and legal reform, we adopt a difference-in-differences strategy. We compare countries that legalize homosexuality with those that do not before and after the reform. Unfortunately, the World Values Survey data are not frequent enough nor cover enough countries to provide estimates with sufficiently tight standard errors to make precise estimates. Thus, we restrict our analysis to the Gallup World Poll data, evaluating legalization’s impact on changes in the beliefs about their communities. The ordinary least squares regression specification is defined according to Equation 1, incorporating non-parametric time trends and time-invariant country fixed effects. In order for β to be a true causal estimate, we assume that parallel trends between countries that do and do not experience legalization. In our preferred specification, we exclude all countries that never legalize homosexuality, creating a plausibly more comparable control group. All standard errors in the specifications are clustered at the country level.

$$Belief_i = \alpha + \beta * Legalization_i + Country_{F.E.} + Year_{F.E.} + \epsilon_i \quad (1)$$

¹The World Values Survey Wave 6 was conducted twice in India. We use the first round of 4,078 observations which, as recommended by the administrators of the WVS, is the more representative sample.

3 Results on the Evolution of Social Norms

As of May 2017, there were 124 countries without any legal penalties for homosexuality, compared to 72 countries that criminalize same-sex sexual activity, according to [Carroll and Mendos \(2017\)](#). This distribution marks dramatic progress over the past 50 years, as shown in figure 1. The bulk of the remaining states that criminalize homosexual activity are in Africa and Asia, as shown in figure 2. At the same time, even in the last decade, survey respondents worldwide report their communities have become better places for gay and lesbian people to live, as can be seen clearly in figures 3 and 4.

We begin by analyzing determinants of norms using simple regressions and corroborate much of the existing literature. Tables 3 and 4 show ordinary least squares results of individual values towards homosexuality using data from every wave of the World Values Survey that asks the relevant question. About a fifth of the variation in individual norms can be explained by country fixed effects, and there is little of the remaining variance that is reduced by adding in the legal environment, age, year, gender, income (measured on a 1 to 10 self-reported scale), and education level (grouped into three categories.) Women have better norms towards homosexuality than men, as do younger, richer, and more educated respondents. Even controlling for those individual characteristics, each additional year is associated with an improvement in norms. The positive coefficient on the illegality of homosexuality in the presence of a country dummy and linear time trend suggests either that countries which saw legalization were (*ceteris paribus*) more positive towards homosexuals prior to legalization or that legalization worsened attitudes towards homosexuals. Given the results of the existing literature, the first interpretation appears more plausible.

Turning to the country-level, the last columns of Tables 3 and 4 show country-level regressions of the World Values Survey for the last year with available data for each country and wave fixed effects. Countries with norms more positive to homosexuality also have higher incomes and legalize homosexuality. Using the Gallup data, Table 5 presents the difference-in-differences results according to the specification in Equation 1. The results show that

controlling for time-invariant country characteristics and non-parametric time trends that impact all countries through country and year fixed effects, the legal status of homosexuality is associated with significant impact on people’s beliefs about their communities in a given country—but only with respect to statements about their society being a “bad place” for homosexuals. While the point estimate for “good place” is positive, the standard errors are imprecise. This data only spans the period since 2006, which highlights that even in a very short time, a legal change can likely have a sizable impact on this variable. A visualization of the pre-trends assumption for the three countries which legalized homosexuality in 2008 is shown in Figure 5.²

For further evidence that legal institutions matter, we turn to legal origins. Figure 7 shows simple regression coefficients β_1 of a country’s legal position on homosexuality and its colonial status according to $Legal = \beta_0 + \beta_1 * Colonizer$. There seems to be a very strong association between being a former British colony and outlawing homosexuality. In fact, 56% of countries where homosexuality is illegal are former British colonies, and 71% of former British colonies criminalize homosexuality. Note that the results of Tables 3 and 4 suggest that attitudes towards homosexuality in former British colonies are weakly positive allowing for legal status and income, which may suggest that current legal status is itself driven (at least in part) by institutional persistence rather than current attitudes.

4 Policy Implications and Discussion

The coefficients in 3 suggest that in the last three decades the proportion of the world that do not want to live next to a homosexual has dropped by about ten percentage points—were the survey was globally representative, back-of-the-envelope calculations would suggest that 700 million fewer people worldwide would say they discriminate. Over the same period, there has been considerable progress towards legalization worldwide. The results we

²The six countries which legalize homosexuality during this period are Belize (2016), Lesotho (2010), Mozambique (2014), Nepal (2008), Nicaragua (2008), and Panama (2008).

present suggest both that attitudes inform legal change but also that policymakers can shift public opinion about beliefs through legal reform. The importance of legal origins similarly suggests that factors other than contemporary attitudes shape the legal environment, potentially suggesting greater freedom of action for policymakers to use law as a tool to reduce discriminatory attitudes as well as actions.

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Appendix

Table 1: World Values Survey Summary Statistics

Wave 2: 1989-1993		Wave 3: 1994-1998		Wave 4: 1999-2004		Wave 5: 2005-2009		Wave 6: 2010-2014	
Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Neighbors	0.40	0.49	0.50	0.49	0.50	0.55	0.50	0.47	0.50
Justifiable	2.47	2.63	3.32	2.39	2.53	3.92	3.34	3.14	3.00
Observations	18773	63414		45984		69950		78365	

∞

Table 2: Gallup World Poll Summary Statistics

2006		2008		2010		2012		2014		2016	
Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Good Place	0.25	0.18	0.28	0.23	0.29	0.23	0.30	0.24	0.32	0.32	0.28
Bad Place	0.53	0.21	0.53	0.26	0.53	0.25	0.53	0.27	0.52	0.53	0.26
Observations	84	105		108		118		123		116	

Note: Tables 1 and 2 present summary statistics by survey year for the World Values Survey and Gallup World Poll, respectively.

Figure 1: Spread of Legalization

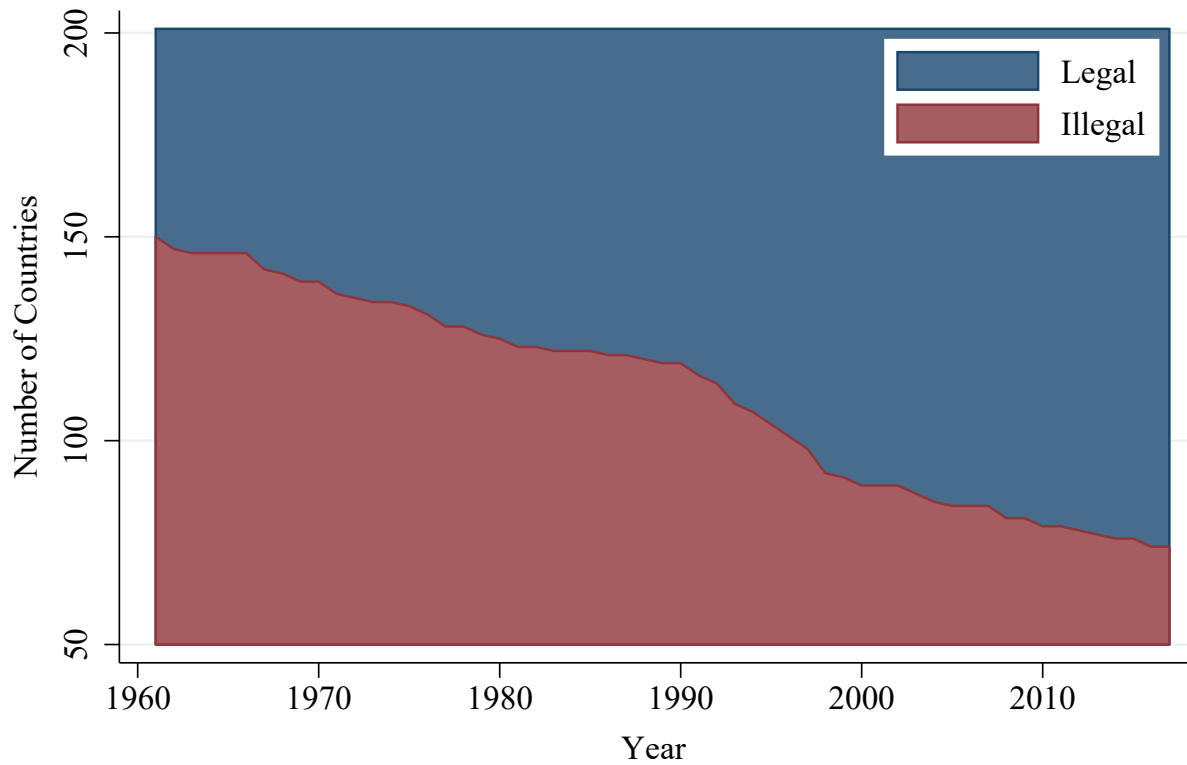
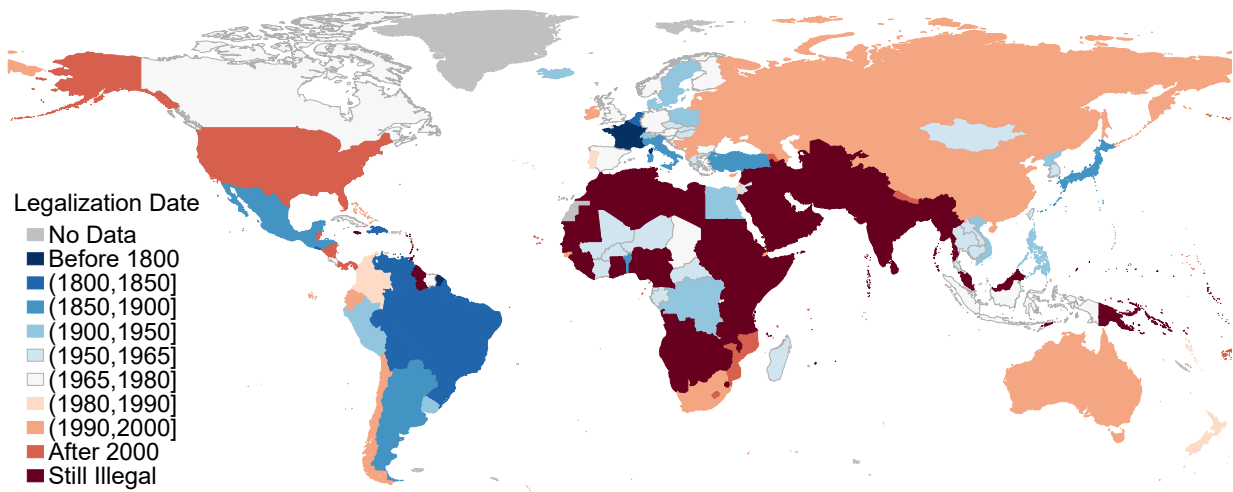


Figure 2: Where is homosexuality illegal?



Note: Figure 2 shows the year when same-sex sexual activity was decriminalized in each country. Figure 1 shows the portion of countries where homosexuality is legal from 1960 to today.

IS THE AREA WHERE YOU LIVE A GOOD PLACE TO LIVE FOR GAY OR LESBIAN PEOPLE?

Figure 3: Average Country Response in 2007

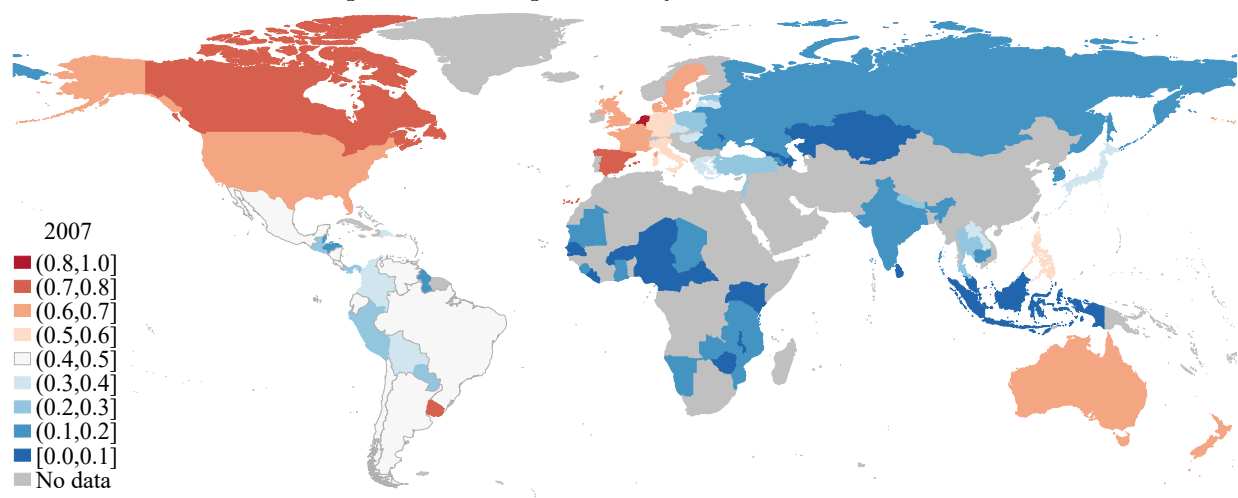
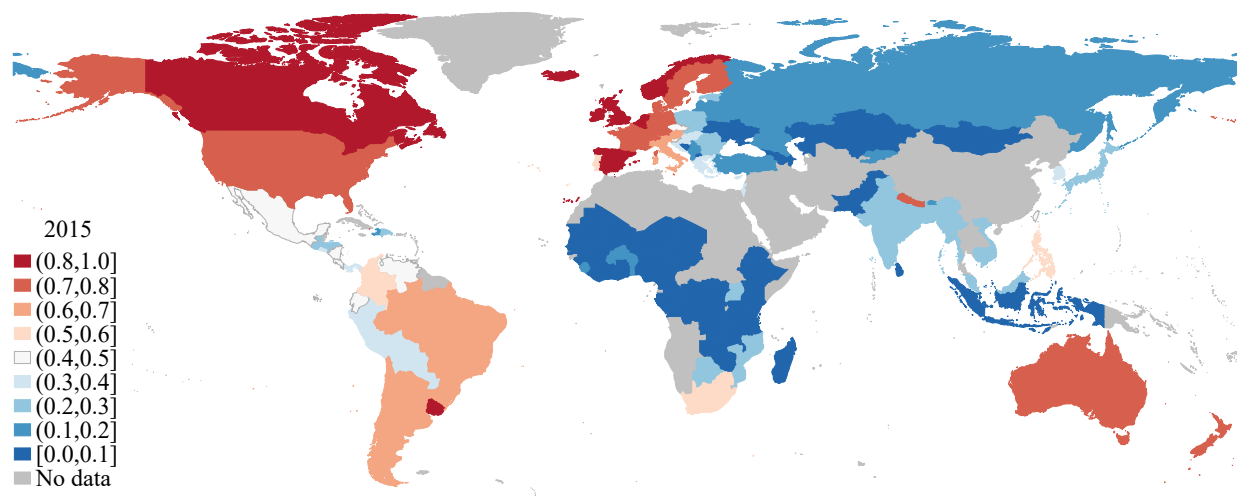


Figure 4: Average Country Response in 2015



Note: Figures 3 and 4 show the portion who respond “good place” to the question “Is the city or area where you live a good place or not a good place to live for gay or lesbian people?” using data from the Gallup World Poll.

Table 3: Homosexual Individuals as Neighbors

	(1)	(2)	(3)	(4)	(5)
Years Since 1990		0.00341** (24.73)	0.00376** (27.27)	0.00231** (13.64)	
Female			0.0398** (24.85)	0.0423** (25.20)	
Age			-0.00191** (-37.02)	-0.00165** (-29.02)	
Homosexuality Illegal				0.0108* (2.16)	-0.214** (-3.07)
Scale of incomes				0.00386** (12.26)	
Upper Ed.				0.0509** (23.44)	
Lower Ed.				-0.0265** (-12.43)	
Former British Colony					0.140* (2.09)
Log GDP per Capita Constant PPP					0.117** (4.55)
Observations	300989	300989	300361	269949	87
R^2	0.228	0.230	0.235	0.246	0.385

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$

Note: Table 3 shows determinants of whether or not respondents mention that they do not wish to have homosexuals as neighbors, with a dummy equal to 1 if the respondents do not mention it. Regressions in columns 1 through 4 include country fixed effects, and column 5 includes wave fixed effects.

Table 4: Is Homosexuality Justifiable?

	(1)	(2)	(3)	(4)	(5)
Years Since 1981		0.0696** (104.21)	0.0741** (108.27)	0.0662** (69.78)	
Female			0.246** (27.47)	0.302** (31.82)	
Age			-0.0275** (-94.83)	-0.0244** (-75.72)	
Homosexuality Illegal				0.129** (4.71)	-1.483** (-3.47)
Scale of incomes				0.0409** (23.03)	
Upper Ed.				0.537** (44.15)	
Lower Ed.				-0.239** (-19.72)	
Former British Colony					0.525 (1.25)
Log GDP per Capita Constant PPP					0.918** (5.90)
Observations	304067	304067	300239	264663	90
R^2	0.284	0.309	0.332	0.357	0.495

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$

Note: Table 4 shows determinants of whether or not respondents think homosexuality is justifiable on a 1 to 10 scale, (1 being never justifiable, 10 being always justifiable.) Regressions in columns 1 through 4 include country fixed effects, and column 5 includes wave fixed effects.

Table 5: Difference-in-Differences Estimates

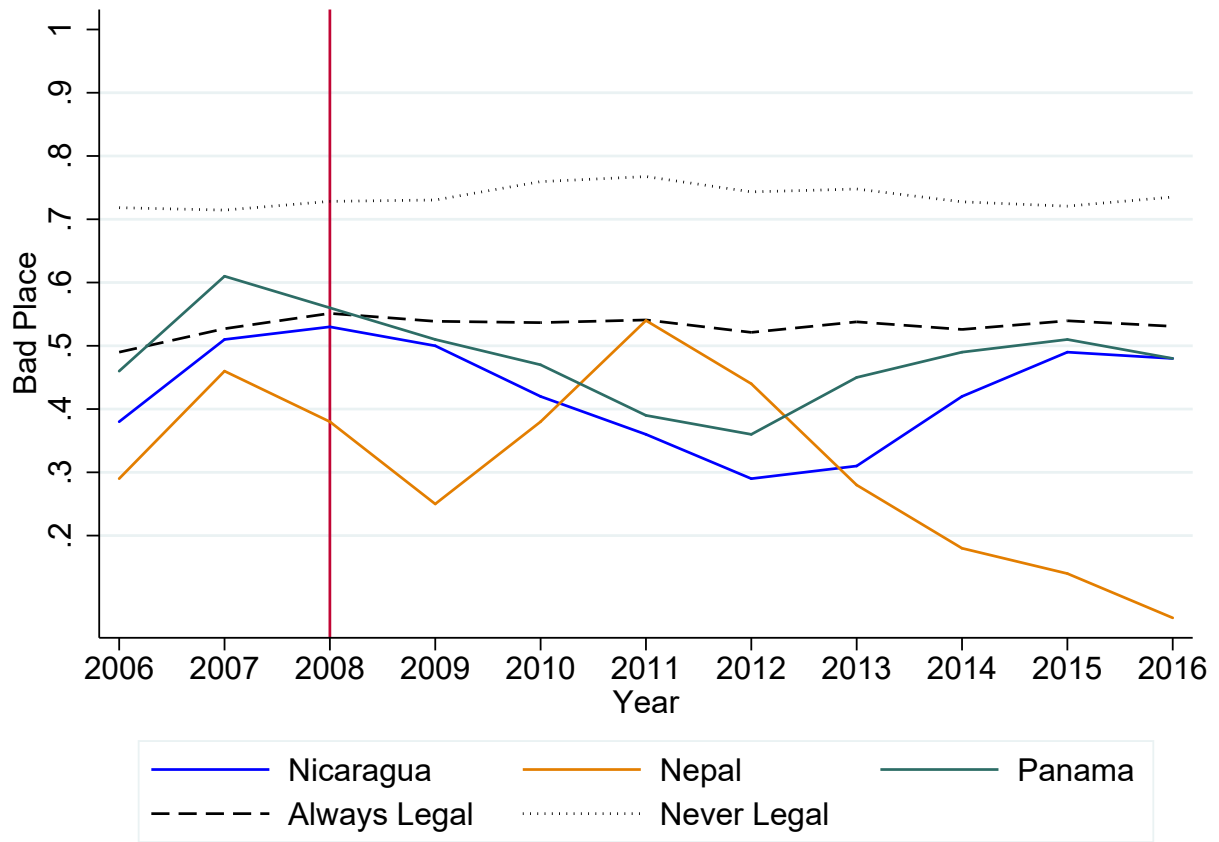
	(1)	(2)	(3)	(4)	(5)	(6)
	Good Place	Bad Place	Good Place	Bad Place	Good Place	Bad Place
Homosexuality Legal	0.0626 (1.45)	-0.0950** (-6.13)	0.0550 (1.25)	-0.0888** (-5.37)	0.0569 (1.31)	-0.0859** (-4.69)
Log GDP Per Capita					-0.0203 (-0.43)	-0.0296 (-0.48)
Observations	1176	1176	899	899	897	897
R^2	0.006	0.010	0.006	0.013	0.005	0.012

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$

Note: Table 5 shows OLS regressions of the average Gallup World Poll response on the legalization status of each country. All regressions include country and year fixed effects, and errors are clustered at the country level. Columns 3 through 6 restrict the specification from Equation 1 to only those countries that at some point legalized homosexuality.

Figure 5: Pre-trend Difference-in-Differences Visualization



Note: Figure 5 shows the three countries that legalized homosexuality in 2008 compared to the group means of fixed samples of countries with available Gallup poll data in which homosexuality was always legal or never legal during the time period.

Figure 6: Criminalization and Colonial History

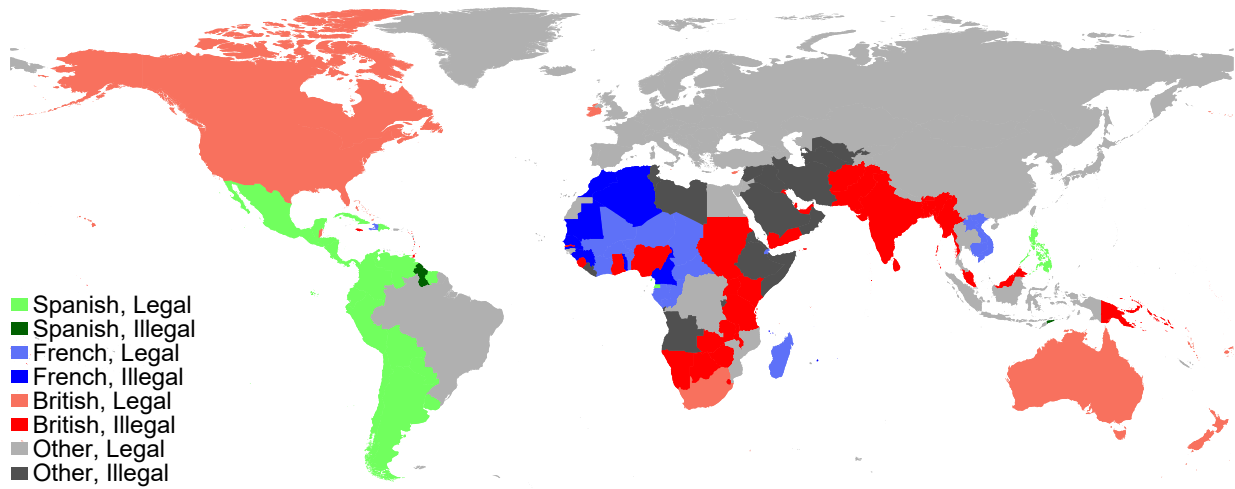
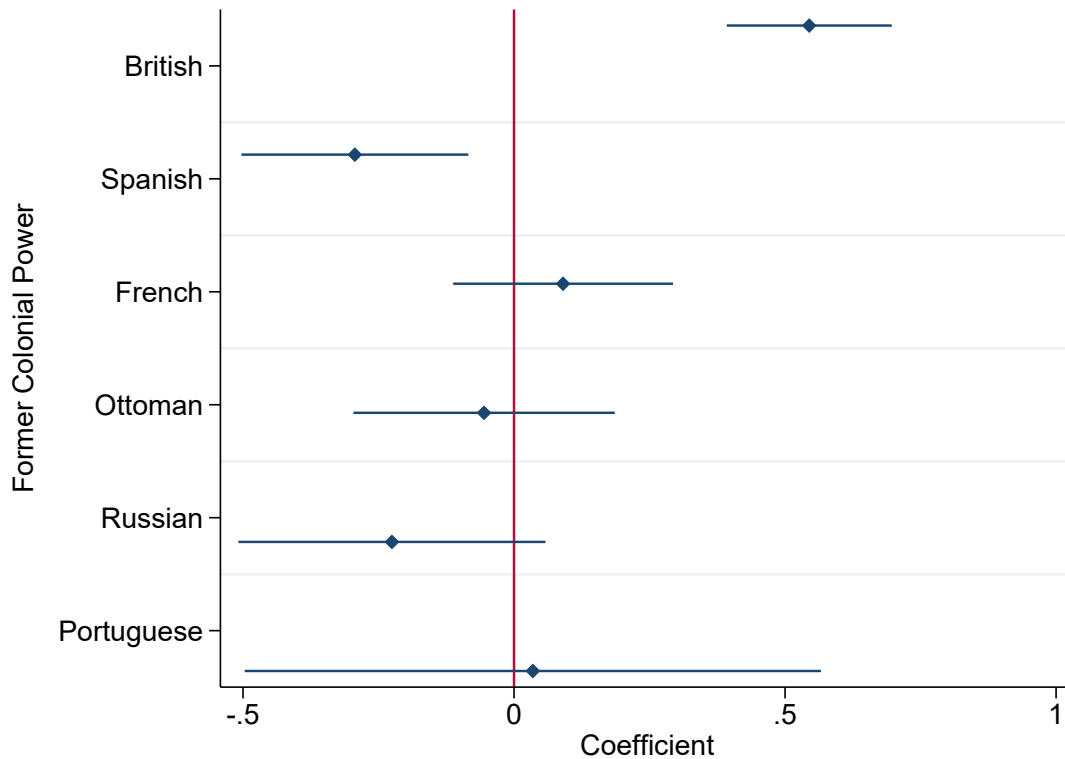


Figure 7: Association Between Norms and Former Colonizers



Note: Figure 6 shows colonial origins and legal status of homosexuality today. The category “Other” includes countries ruled by all other colonial parties and countries that were never colonized. Figure 7 shows the ordinary least squares coefficient of regressing whether or not homosexuality is illegal in a given country on its former colonial power.