НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ

What Changes First, Institutions or Values?

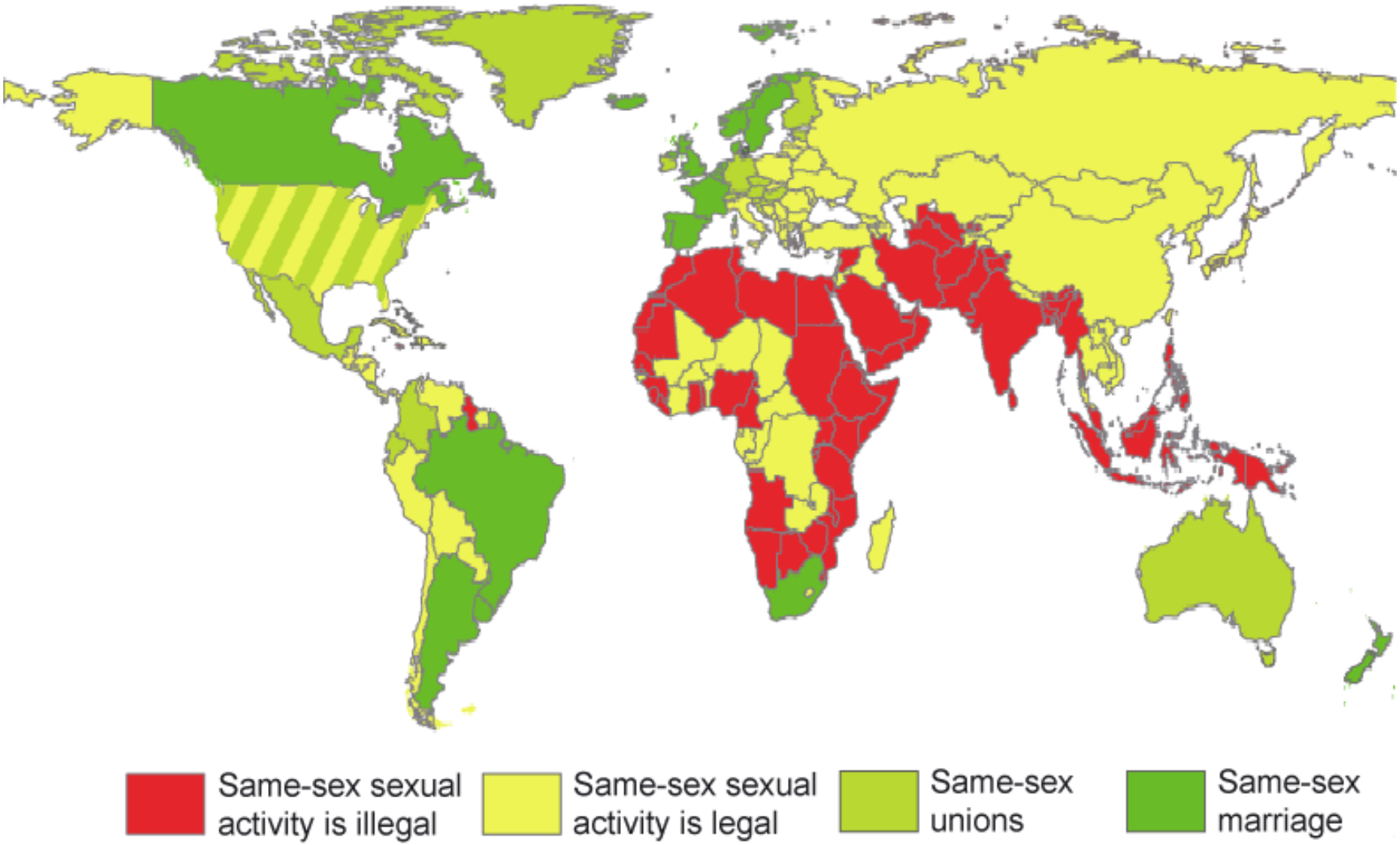
The Case of the Same-Sex Marriage (and Union) Laws. Progress Report.

Boris Sokolov, Veronica Kostenko, Olesya Volchenko

Laboratory for Comparative Social Research.
Higher School of Economics, Russia

April, 11, 2017

Legislation of Homosexuality in the World by 2014



Aim of the Project

To estimate the effect of institutional change on people's attitudes on the example of same-sex unions legalization.

Theoretical approaches

- Institutions matter most and change the world (Acemoglu and Robinson, 2009), institutional and legal barriers (quotas, elections). These structures lead to a historical path dependency that leads to more or less desirable institutional and value profile outcomes in future.
- Value shifts precede institutional changes. Culture in a broad sense matters more (values, practices, level of modernization, cultural zones) Human empowerment leads to ascending ladder of freedoms, and collective action results in changing institutions (Inglehart & Norris, 2003; Welzel, 2013)

Literature on Homosexuality Supporting *Institutions First*

- Theoretical mechanism behind that - wider coverage of the topic when the law is enacted leads to more consciousness about the issue (Avery et al., 2007).
- Slenders et al. (2014) found that countries with higher levels of tolerance towards homosexuality were more prone to implement laws on same-sex unions, but the reverse was also the case: introduction of legislation on same-sex marriages and recognized partnerships went hand in hand with people becoming more tolerant towards homosexuality.
- Hooghe and Meeusen (2013) using 5 waves of the ESS argue that the level of tolerance to gays in countries practicing SSM is much higher than in those recognizing civil unions only. They assume that same-sex marriage as an institution affects public opinion and policy towards the issue.

Literature on Homosexuality Supporting *Values First*

- Adamczyk and Pitt (2009) argue that survivalist orientation at the country level leads to lower probability of legal protection of gay rights compared to countries with a stronger self-expression orientation.
- Alexander, Inglehart, and Welzel (2016) develop the "utility ladder of freedoms"concept, showing that objective improvement of life conditions across the globe leads to all-encompassing tolerance towards sexual freedoms, including homosexuality. Religion is loosing its power, and those major value shifts gradually lead to changes in legal sphere
- Inglehart, Ponarin, and Inglehart (2017) focus particularly on the issue of the same-sex marriage adoption to show that up to 50 years of financial stability was needed for Western societies after World War II to develop the level of tolerance sufficient for legislature changes.

Previous Research. Country-level Predictors.

- Some cultural zones like Muslim and Orthodox accumulate populations that are more prejudiced towards gays and lesbians (Adamczyk and Pitt, 2009).
- Country level of religiosity (Whitley, 2009) and lack of affluence contribute to less justifying attitudes (Gerhards, 2010).
- Failure in legal protection of gay rights has a negative effect on attitudes (Fernandez and Lutter, 2013), as well as high levels of inequality (Andersen and Fetner, 2008).
- There still are some aspects of the problem that have been understudied. The majority of works is covers a limited number of countries within one region, most often Europe or USA. Another limitation is that the authors use the information about same-sex marriage legislation only, but do not take anti-discrimination laws and history of decriminalization into account.

Variables

Dependent variables:

- Justifiability of homosexual relations (10-point scale)
- Neighbors homosexual (binary)

Independent variables:

- Legalization of the same-sex civil unions (binary)
- Pro-Choice Values - Subdimension of Emancipative values, Justifiability of Abortion and Divorce

Controls (All at country-level):

- Same-sex relations legal (binary)
- GDP in 1960 and in 1980 (Maddison)
- GDP at the year of the last survey (World Bank)
- Polity IV in 1960, 1980 and the year of last survey
- Homosexuality Decriminalized in 1960, 1980 and in the Year of survey
- Religiosity, WVS data (Attendance and Importance of God)

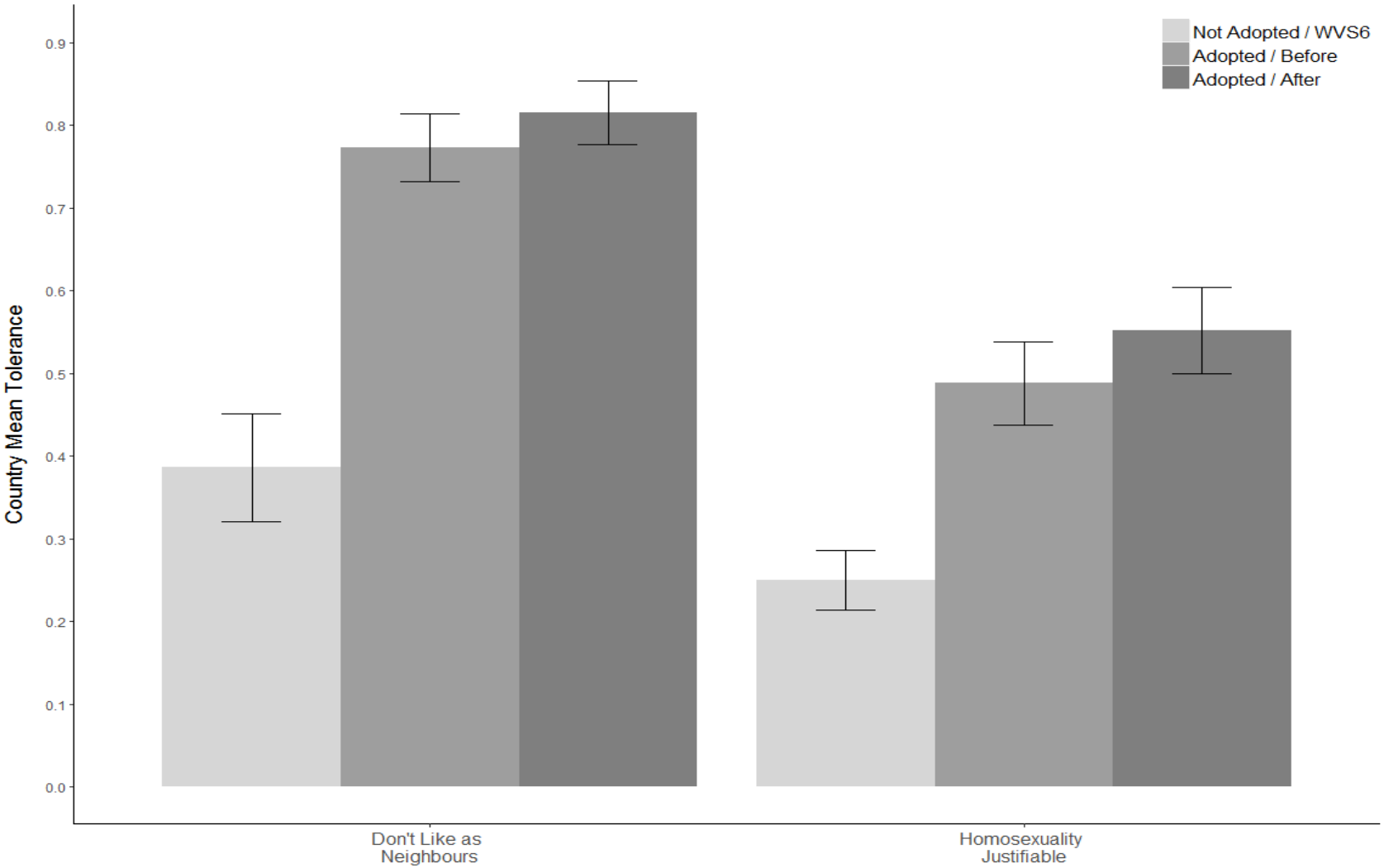
The Choice of Countries

- Same-sex civil union (CU) in this research is formulated as a legally recognized marriage performed in every part of the country with full package of rights between people of the same sex, both male and female, including various forms of legalized civil cohabitation.
- 25 out of 29 countries where CUs are legalized are included into analysis due to the fact that the enactment of the law happened after the last wave of the WVS was collected.
- USA are excluded due to different regulations in the states.

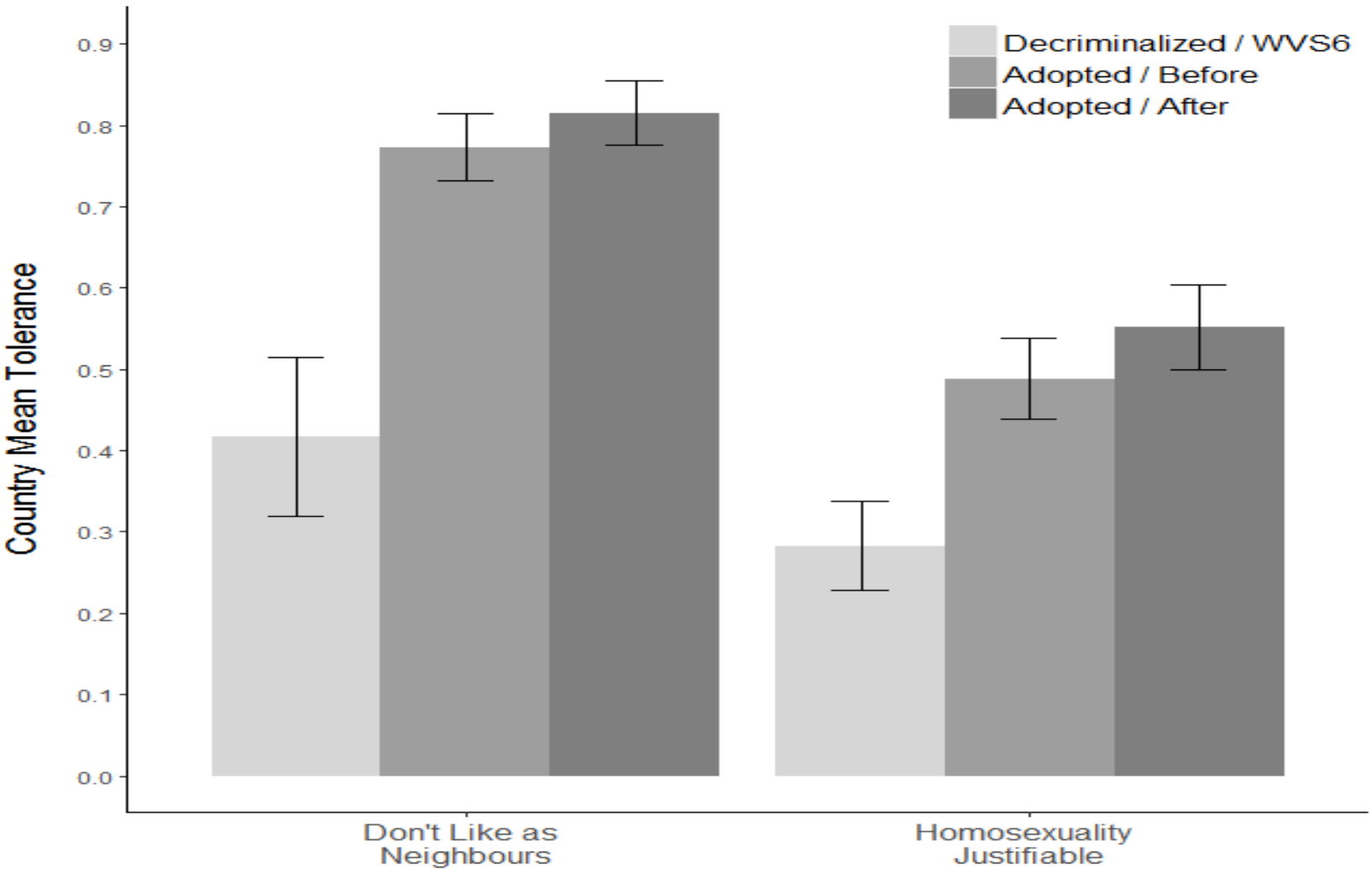
Methods

- Analysis I: Cross-sectional OLS (6th Wave of the WVS, 58 countries)
- Analysis II: Binary logistic regressions: if CUs are not legal - data from the 6th wave of the WVS; if CUs are legal - data from the last wave of the WVS before legalization
- Analysis III: Difference-in-Differences combined with matching
- Analysis IV: Within-country effects of law adoption, 25 countries

Mean
Tolerance in no regulation vs SSM adopted states



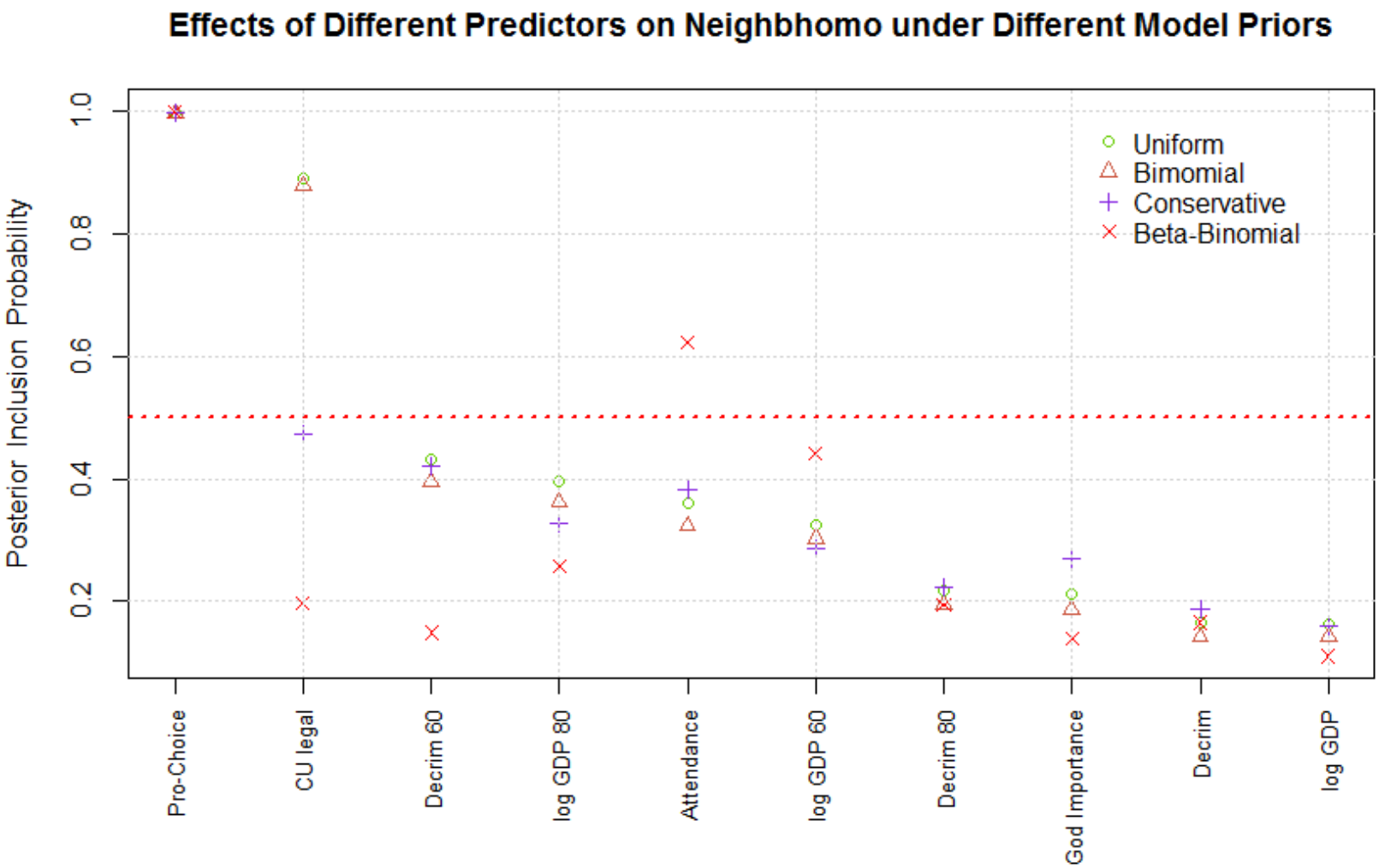
Mean Tolerance
in only decriminalized vs SSM adopted states



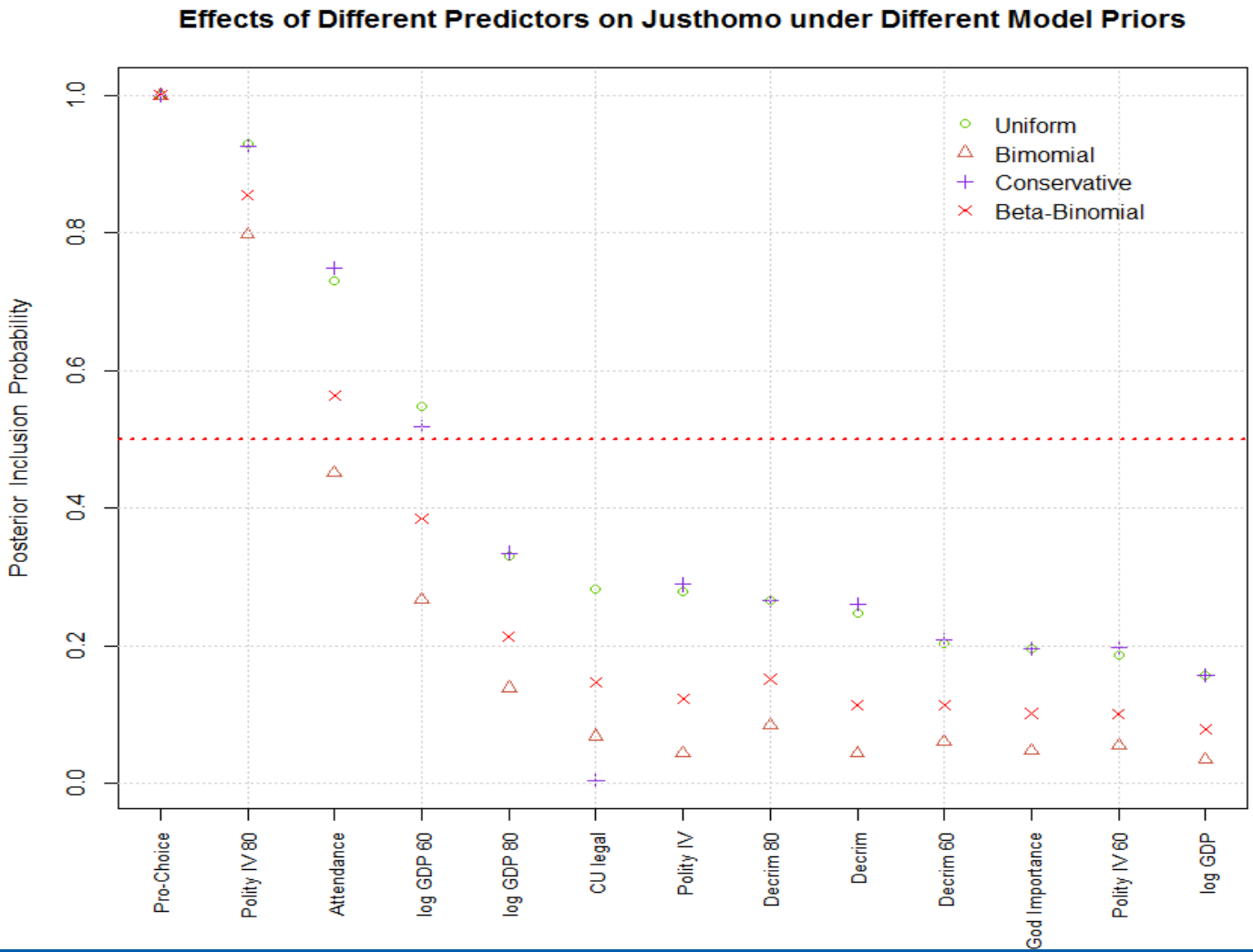
Results I. Comparing Countries with and within legal permission for CU, WVS 6th Wave

	Dependent variable:	
	Neighbours	log(Justifiable)
	(1)	(2)
Civil Unions Legal	0.427^{***}	0.876^{***}
	(0.058)	(0.131)
Constant	0.386^{***}	-1.489^{***}
	(0.029)	(0.065)
Observations	55	56
R^2	0.504	0.454
Adjusted R^2	0.495	0.443
Note:	*p<0.05; **p<0.01; ***p<0.005	

Effects of different predictors on Neighbors_homo under various model priors



Effects of different predictors on Justifiability_homo under various model priors



Results II. Predicting Legal Recognition of the Same-Sex Civil Unions by the Country-Average Level of Pro-Choice Values

Pro-Choice Values	17.045^{***}
	(3.843)
Constant	-7.747^{***}
	(1.740)
Percentage Correct Prediction	84.06
Observations	69
Log Likelihood	-24.823
Akaike Inf. Crit.	53.646
Note:	*p<0.05; **p<0.01; ***p<0.005

Wrong predictions

Not predicted, but accepted CU or SSM

- Brazil
- Colombia
- Hungary
- Portugal
- South Africa

Predicted, but haven't accepted CU or SSM by 2014

- Cyprus
- Chile
- Estonia
- Japan
- Egypt

Accepted, but haven't been predicted

Brazil, Colombia, Hungary, Portugal, and South Africa. We base our assumptions on pro-choice values, and one of them is justifiability of abortions.
This is a tough issue in many Catholic societies enlisted above, and the discrepancy between SSM support and societal (and religious) resistance against abortions might have resulted in non-predicting of the law enactments.

Haven't accepted by 2014, but predicted

- In Cyprus, Chile, and Estonia, the laws have been enacted in the two consecutive years.
- In Japan SSM became legal in some provinces.
- The only prediction which was far from reality was Egypt.
- Overall accuracy of the predicting power is around 84%.

Results III. Measuring causal effect of legalization

- Legalization of the same-sex civil unions (CU) may be considered as a form of quasi - natural experiment. Countries pursuing a pro-gay policy that have legalized CUs are ascribed to a treatment group in this analysis, and all others form a control group.
- We have data on tolerance before and after legalization, DiD can be considered as a promising and suitable identification strategy.
- Problems: a) in different countries same-sex CUs were legalized in different periods; b) it is unclear, how to define "before"and "after"periods for the countries from "control"group that have not adopted pro-gay legislation.
- We propose to construct an artificial sample by exact matching of countries from both treatment and control groups on the wave when data on tolerance has been collected last time before legalization of the same-sex CUs and then use DiD estimator.

Exact matching on time points - what do we do

- Portugal was last surveyed in 1999 (EVS Wave II) before the legalization in 2001. Post-legalization data collection occured in 2008.
- Italy was also surveyed in 1999, but it still have not legalized same-sex civil unions. However, after 1999, Italy was also surveyed in 2006.
- These two countries are considered a pair.

DiD Estimation

Let an individual i belong to the group $G_i \in \{0; 1\}$, and is observed in time period $T_i \in \{0; 1\}$, and $Y_i(0)$ is an outcome for this individual in the absence of treatment.

$$\begin{aligned} \tau_{DID} &= E[Y_i(1)] - E[Y_i(0)] = \\ &((E[Y_i|G_i = 1, T_i = 1] - E[Y_i|G_i = 1, T_i = 0])) \\ &- (E[Y_i|G_i = 0, T_i = 1] - E[Y_i|G_i = 0, T_i = 0]) \end{aligned} \tag{1}$$

Repeated cross-section:

$$Y_i = \alpha + \beta_1 T_i + y_1 G_i + \tau_{DID} W_i + \epsilon_i \tag{2}$$

where the treatment indicator W_i is equal to the interaction of the group and time indicators, $I_i = T_i G_(i)$.

DiD Estimation continued

Panel fixed effects:

$$Y_{it} = \nu_i + \beta_t + \tau_{DID} D_{it} + \epsilon_{it} \tag{3}$$

where ν_i is an individual fixed effect to control for any time-invariant unobserved factors, β_t is a period fixed effect to control for common trends, D_{it} is indicator variable which is equal to 1 when $G_i = 1$, $T_i = 1$, and zero otherwise, and $\epsilon_{it}\epsilon$ is an idiosyncratic error term assuming to be normally distributed and uncorrelated with other model parameters.

DID estimates of the effect of SSM law adoption

	Neighbours		log(Justifiable)		Neighbours	log(Justifiable)
	(1)	(2)	(3)	(4)	(5)	(6)
CU is legal	0.199***	0.127**	0.152***	0.035	0.176***	0.052
	(0.057)	(0.047)	(0.052)	(0.027)	(0.052)	(0.029)
Period: After	−0.040	0.003	−0.007	0.013	−0.042	−0.010
	(0.073)	(0.062)	(0.057)	(0.025)	(0.055)	(0.023)
ATT	0.071	−0.017	0.073	0.018	0.051	0.044
	(0.081)	(0.069)	(0.072)	(0.039)	(0.065)	(0.037)
Pro-Choice Values		0.135***		0.145***	0.085***	0.115***
		(0.041)		(0.011)	(0.027)	(0.012)
Log GDP		0.011		−0.014	−0.008	0.004
		(0.030)		(0.010)	(0.029)	(0.013)
Polity IV		−0.080		0.001	−0.006	0.013
		(0.142)		(0.020)	(0.059)	(0.014)
N	64	64	64	64	96	96

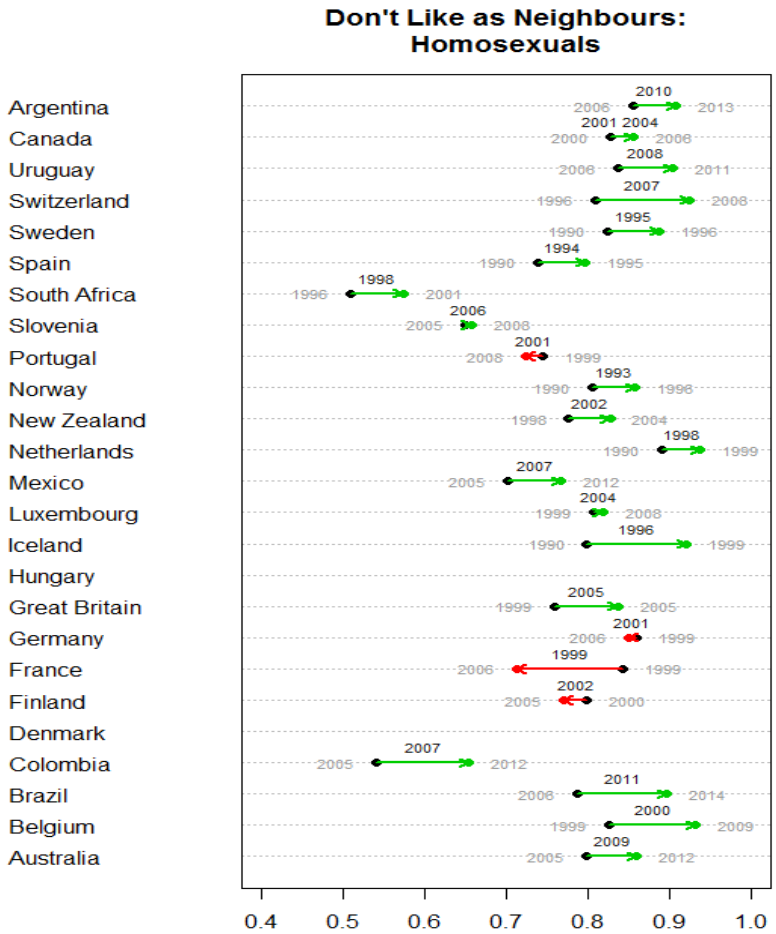
*p < .05; **p < .01; ***p < .005
Entries are OLS estimates with Huber-White robust standard errors in parentheses

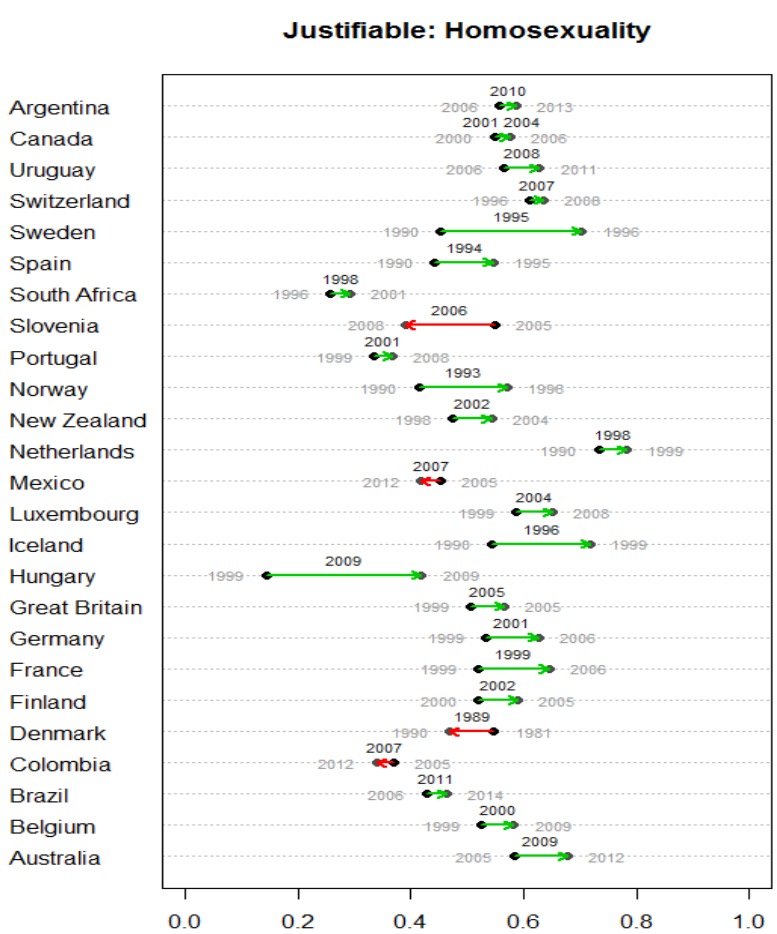
Fixed-Effects
DID Estimates of the Effect of CU Legalization

	Neighbours Placebo	Justifiable Placebo	Neighbours Pre/Post	Justifiable Pre/Post	Neighbours Pre/Post	Justifiable Pre/Post
	(1)	(2)	(3)	(4)	(5)	(6)
Period: after	−0.063	0.032	−0.040	−0.007	0.006	0.023
	(0.054)	(0.033)	(0.051)	(0.021)	(0.039)	(0.015)
Civil Unions legal	−0.025	−0.102*	0.071	0.073*	0.001	0.021
	(0.061)	(0.045)	(0.053)	(0.029)	(0.034)	(0.018)
Pro-Choice values					0.539	1.228***
					(0.358)	(0.118)
Log GDP					−0.001	−0.055***
					(0.040)	(0.019)
Polity IV					−0.098***	0.012***
					(0.012)	(0.003)
N	64	64	64	64	64	64
R^2	0.057	0.180	0.057	0.180	0.451	0.788
Adjusted R^2	−0.748	−0.520	−0.748	−0.520	−0.115	0.569

*p < .05; **p < .01; ***p < .005
Entries are OLS estimates with Huber-White robust standard errors in parentheses

Results IV.
Shift in Tolerance Levels after SSM Law Enactment





Results IV: Effects of Covariates Within the Treatment Group. Fixed-Effect Estimation

	neighbhomo	justhomo	neighbhomo	justhomo	neighbhomo	justhomo
	(1)	(2)	(3)	(4)	(5)	(6)
Pro-Choice Values	−0.023	1.737***				
	(0.425)	(0.364)				
log GDP			−0.053	−0.085		
			(0.065)	(0.090)		
Polity IV					−0.091	0.009
					(0.067)	(0.099)
Period: After	0.032	0.007	0.049	0.095*	0.026	0.066**
	(0.021)	(0.018)	(0.027)	(0.037)	(0.015)	(0.022)
N	32	32	32	32	32	32
R^2	0.222	0.772	0.257	0.438	0.312	0.402
Adjusted R^2	−0.723	0.496	−0.645	−0.245	−0.523	−0.324

*p < .05; **p < .01; ***p < .005

Effects of Lagged Values of Predictors on the Effect of CUs Legalization

	Homosexuality justifiable diff						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log GDP 1980	−0.043						
	(0.123)						
log GDP 1960		0.0002					
		(0.112)					
Polity IV 1980			0.016				
			(0.008)				
Polity IV 1960				0.006			
				(0.004)			
Decrim 1980					0.064		
					(0.126)		
Decrim 1960						−0.060	
						(0.101)	
Pro-Choice Before							−0.504
							(0.570)
Constant	0.527	0.128	−0.117	0.031	0.083	0.168*	0.398
	(1.140)	(0.969)	(0.089)	(0.035)	(0.113)	(0.076)	(0.303)
N	23	23	21	21	25	25	25
R^2	0.006	0.00000	0.186	0.085	0.011	0.015	0.033
Adjusted R^2	−0.042	−0.048	0.143	0.036	−0.032	−0.028	−0.009

*p < .05; **p < .01; ***p < .005

Effects of Lagged Values of Predictors on the Effect of CUs Legalization

	Neighbors homosexual diff						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log GDP 1980	−0.037						
	(0.028)						
log GDP 1960		−0.014					
		(0.026)					
Polity IV 1980			−0.005				
			(0.004)				
Polity IV 1960				0.001			
				(0.002)			
Decrim 1980					0.010		
					(0.030)		
Decrim 1960						0.028	
						(0.024)	
Pro-Choice Before							−0.247
							(0.139)
Constant	0.386	0.164	0.097*	0.036*	0.039	0.031	0.176*
	(0.256)	(0.223)	(0.043)	(0.017)	(0.026)	(0.018)	(0.073)
N	21	21	20	20	23	23	23
R^2	0.085	0.015	0.091	0.025	0.005	0.061	0.130
Adjusted R^2	0.037	−0.037	0.041	−0.029	−0.042	0.017	0.089

*p < .05; **p < .01; ***p < .005

Conclusions

- According to our results, modernization theory finds considerable support in the data. Values always keep significance in most models regardless of specification and show high explanatory power.
- We can trace certain path dependency: early decriminalization of homosexual relationships and long history of democratic rule have stronger effects on tolerance than the same controls in the present. So insitutions also matters, but in the long run. At the same time, the short-term effect of legalization on attitudes seems to be negligible

Thank you for your attention