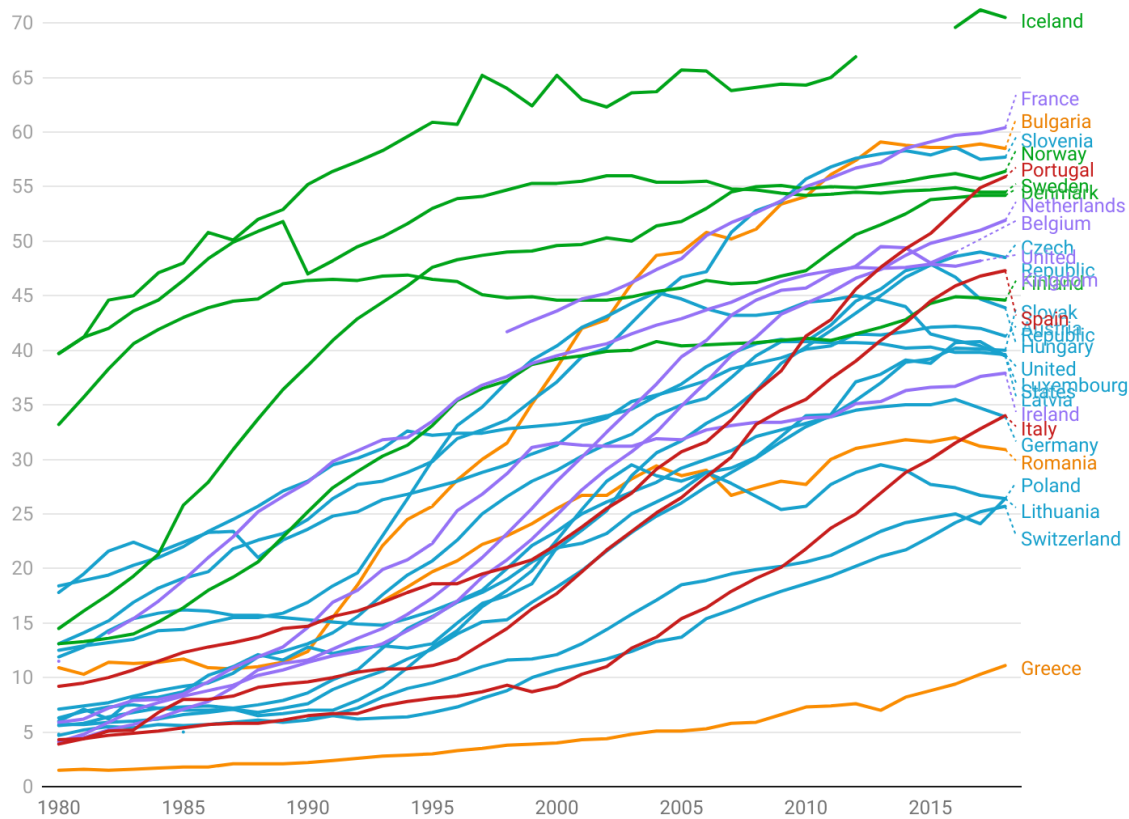


# Cultural Foundations of The Second Demographic Transition: The Role of Inherited Values

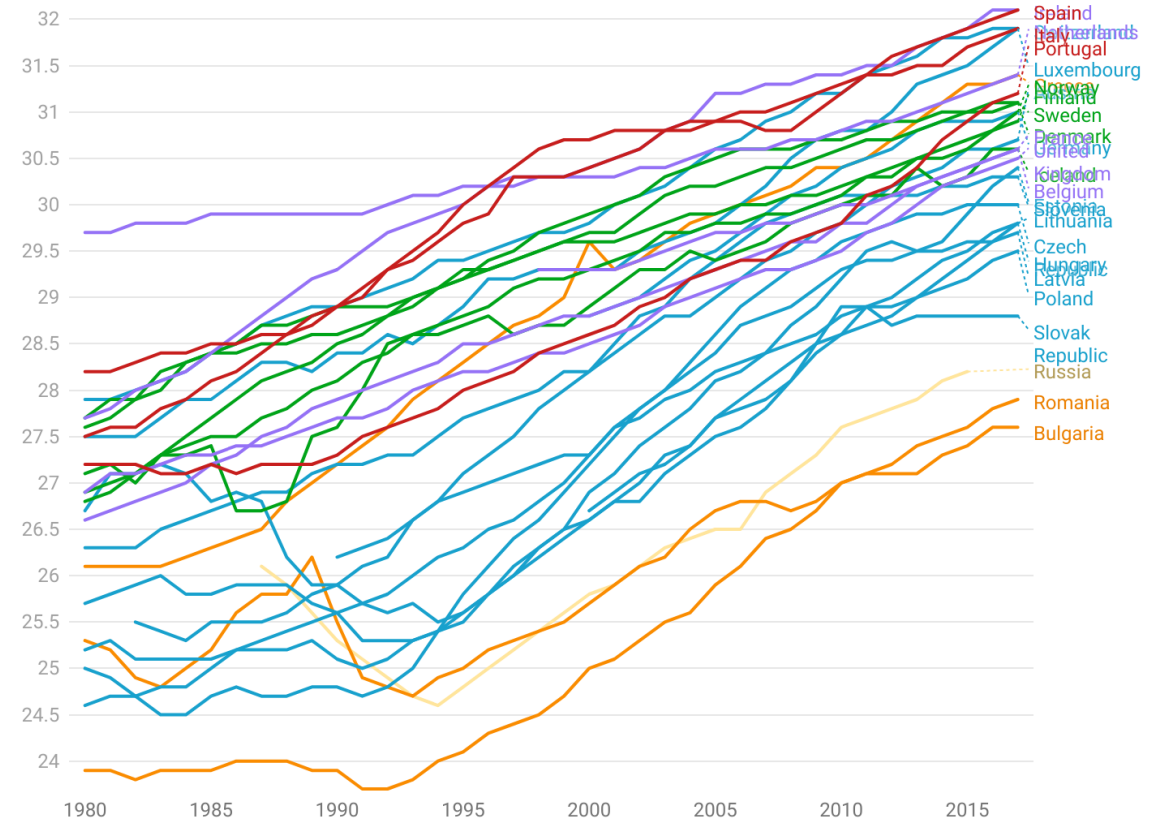
Hande Tugrul and Arnstein Aassve

# Cross-country variation in demographic behavior

## Births Outside Marriage



## Mean Age at Birth



# Is second demographic transition cultural?

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- Weakening of the centrality of the family as a global trend. Why?
  - The second demographic transition theory:
    - » Global ideational shift
    - » Structural change – rising female education
  - Western countries share a value shift, but the onset & intensity of the trends differ!
  
- Important questions to ask:
  - Besides global value change, what is the role of long-standing cultural history?
  - To what extent long-standing values matter as education expands?
  - Whether societies pre-exposed to specific values due to intergenerational transmission of culture are more likely to be the leaders of SDT?
  - Which values? In what direction?

# Empirical Approach

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## ➤ Aim

- study the impact of inherited traits on the unfolding of the second demographic transition as female education expands

## ➤ Epidemiological Approach

- Algan and Cahuc
- 2 forces of value formation:
  - » Contemporary environment
  - » Inheritance through intergenerational transmission
- Using the values of descendants of migrants
- Differentiate the inherited component = proxy of ancestors' values

# Two Staged Approach

## First Stage: Estimation of Inherited Values

$$V_{ict} = \beta_0 + \beta_1 D_c + \beta_2 \mathbf{X}_{ict} + \varepsilon_{ict}$$

$V_{ict}$  : value of individual  $i$  in year  $t$ , whose country-of-origin is  $c$

$\mathbf{X}_{ict}$  : set of individual controls

$D_c$  : country dummy for the country-of-origin

Sample Composition

Sample Distribution

Value Measurements

Validity Check

Predicted Values

# Two Staged Approach

## First Stage: Estimation of Inherited Values

$$V_{ict} = \beta_0 + \beta_1 D_c + \beta_2 \mathbf{X}_{ict} + \varepsilon_{ict}$$

## Second Stage: Estimation of Inherited Values

$$SDT_{ct} = \alpha_0 + \alpha_1 \widehat{\beta}_{1ct} * E_{ct} + \sum^k \alpha_k \mathbf{X}_{kct} + F_c + F_t + \eta_{ct}$$

$SDT_{ct}$  : non-marital birth rates

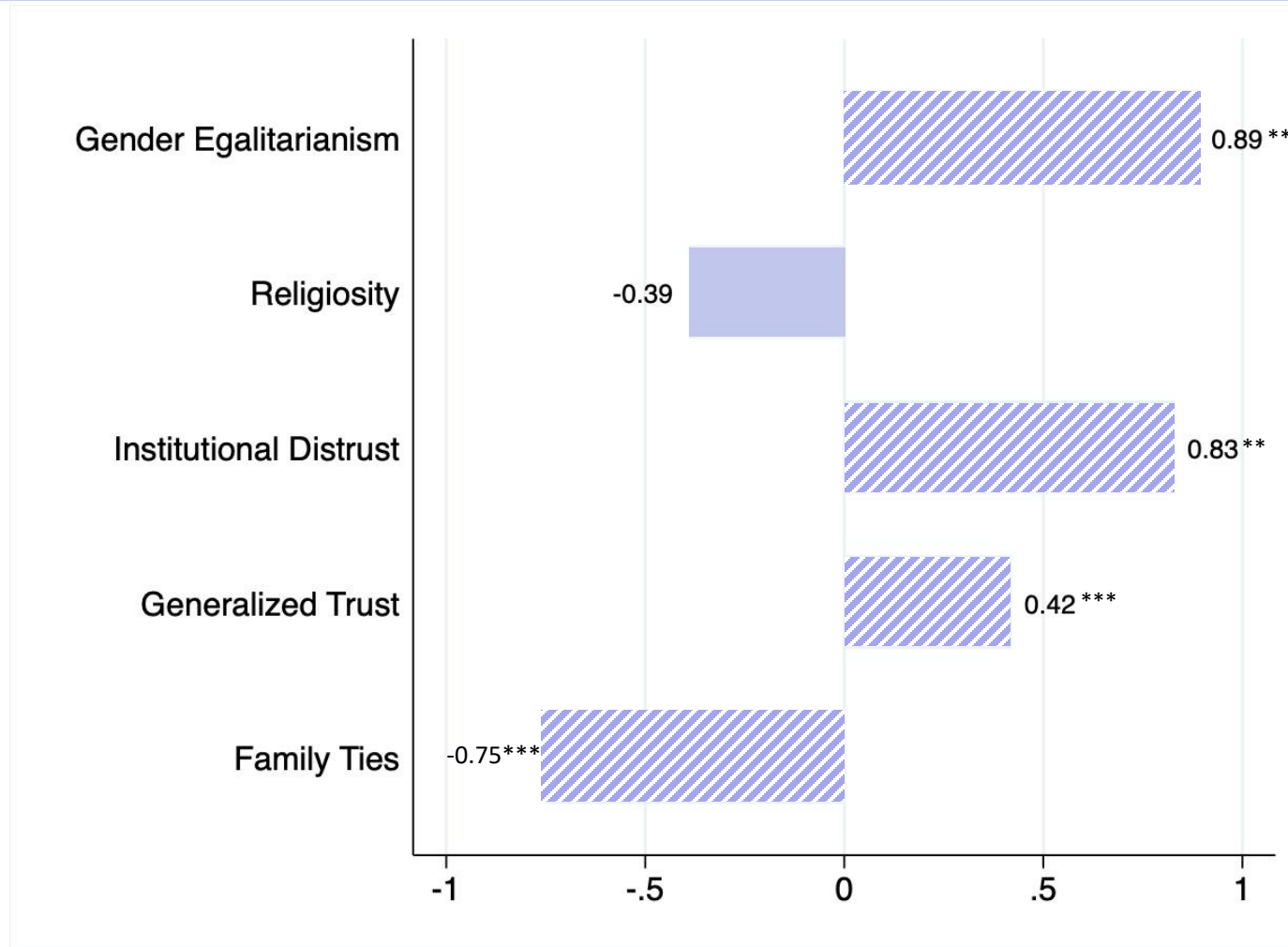
$\widehat{\beta}_{1ct}$  : av. level of value estimated at the 1<sup>st</sup> stage

$E_{ct}$  : av. tertiary education level of females

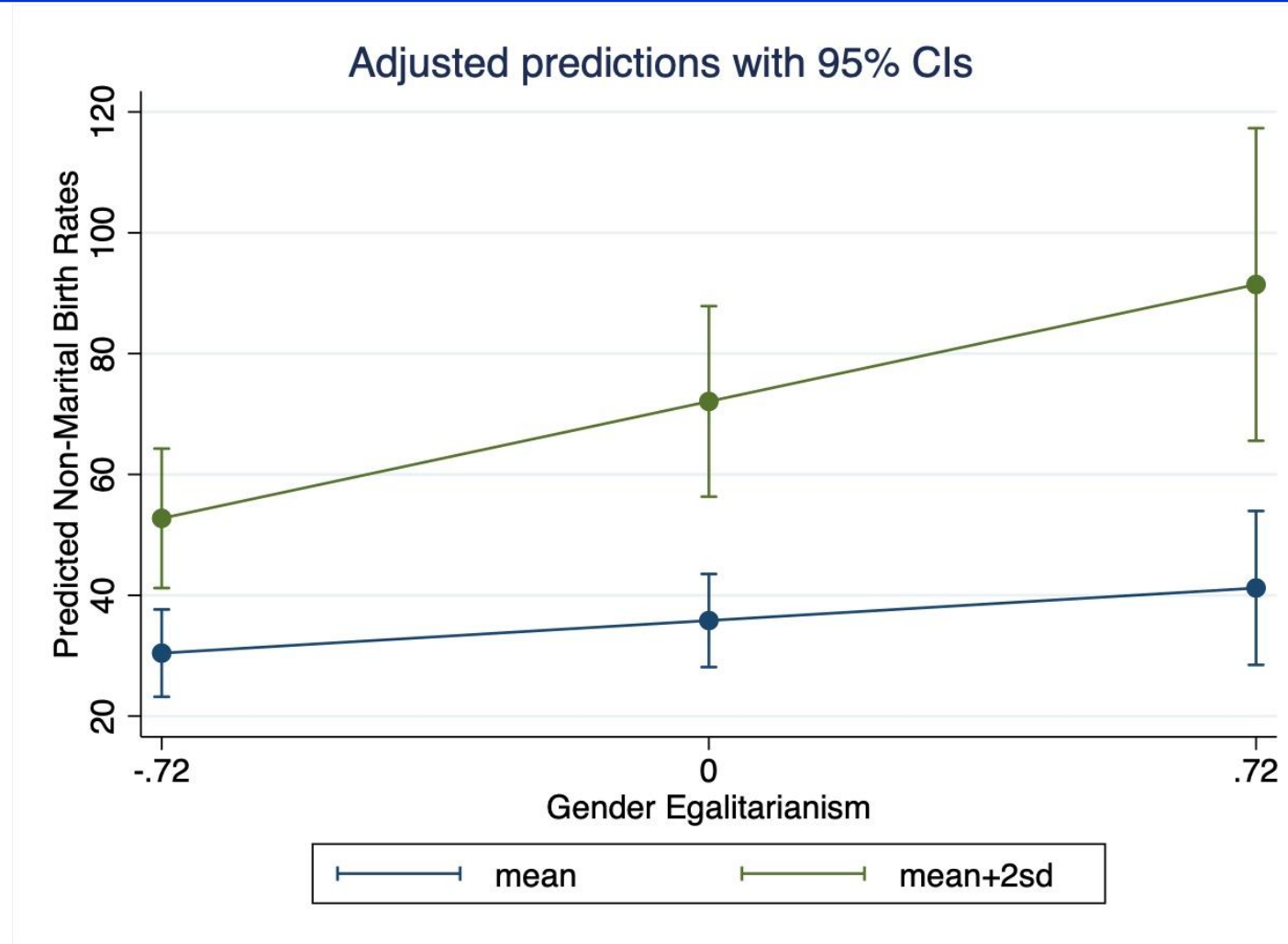
$\mathbf{X}_{kct}$  : time-varying covariates

SDT Index Selection

# Female Education and Inherited Values

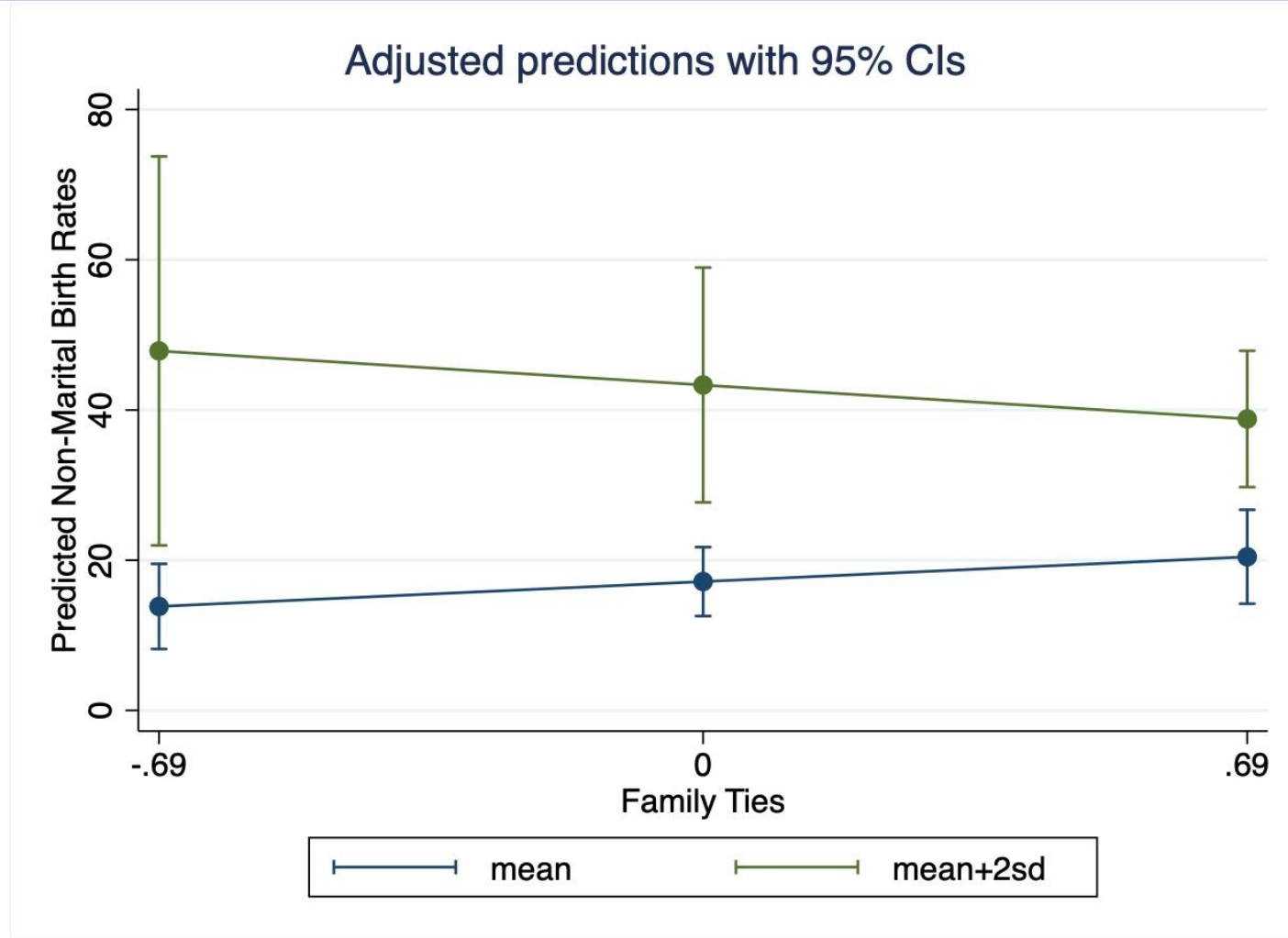


# Inherited Gender Egalitarianism





# Inherited Family Ties



# Conclusions

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- Long-standing cultural values may come to the forefront when other structural changes take place
  - Inherited family ties
    - » Countries scoring high, have slower diffusion of SDT as education expands
    - » The effect of education on the spread of SDT, is less powerful where inherited family ties are strong
  - Inherited gender egalitarianism, institutional distrust and generalized trust
    - » Countries scoring high, have a faster diffusion of SDT as education expands
    - » The effect of education on the spread of SDT, is more powerful where these inherited values are strong
- Necessity of a finer-tuned cultural approach acknowledging the importance of local values

# *Thank you!*

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Please don't hesitate to contact me via e-mail.

# Composition of the sample for the 1st stage

- Imposing two lags
  - 25 years before the measurement of SDT level
  - 25 years of generation lag
- All people alive contribute to “average values” for a certain period, for year T we measure:
  - 2nd generation Americans born before T-25
  - 3rd generation Americans born before T-25+25
  - 4th generation Americans born before T-25+50
- Apply it for 1960 & 2010 – distanced enough to avoid overlapping

1960	2010
2nd gen Americans born before 1935	2nd gen Americans born after 1935
3rd gen Americans born before 1960	3rd gen Americans born after 1960
4th gen Americans born before 1985	4th gen Americans born before after 1985



	Gender Egalitarianism		Religiosity		Institutional Distrust		Generalised Trust		Family Ties	
	1960	2010	1960	2010	1960	2010	1960	2010	1960	2010
Austria	42	3	25	6	94	11	85	12	82	13
Belgium	12	1	16	2	29	3	26	4	36	3
Canada	148	20	100	38	267	51	282	58	276	57
Czechoslovakia	110	16	87	22	215	37	232	37	226	41
Denmark	64	6	46	13	135	14	131	17	141	14
Finland	24	4	27	6	92	10	82	13	86	14
France	199	11	154	26	377	42	385	49	392	44
Germany	1630	76	1280	215	3368	280	3504	305	3395	296
Greece	17	13	22	16	46	26	45	32	46	33
Hungary	36	5	28	10	81	15	77	21	79	22
Ireland	1121	55	1115	154	2429	198	2595	216	2500	223
Italy	416	90	333	190	812	302	880	325	874	304
Japan	8	3	8	4	25	10	28	12	23	16
Mexico	124	79	112	207	236	274	276	305	246	327
Netherlands	149	11	98	16	261	30	273	32	263	38
Norway	187	6	133	21	324	32	355	32	349	32
Poland	234	36	174	65	469	109	471	115	480	114
Portugal	14	3	18	11	36	20	43	20	41	19
Romania	7	3	7	3	15	3	14	8	16	6
Spain	53	7	69	31	121	41	133	42	114	34
Sweden	152	9	132	21	330	28	335	33	329	34
Switzerland	36	2	44	2	88	3	95	4	89	3
United Kingdom	1639	50	1364	113	3332	169	3480	175	3413	150
United States	183	2	267	29	520	34	565	37	553	34
Yugoslavia	33	5	19	9	59	19	60	20	71	20

Source: Authors' calculation of from US General Social Survey Sample



# Value Measurements

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- US General Social Survey
- Gender Egalitarianism
  - “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work,” “It is more important for a wife to help her husband's career than to have one herself,” “A preschool child is likely to suffer if his or her mother works,” “It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family.”
- Generalized Trust
  - “Generally speaking, would you say that most people are trusted or that you can't be too careful in dealing with people?”
- Family Ties
  - “how often you do the following things... Spend a social evening with relatives?”



# Value Measurements

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## ➤ Institutional Distrust

- “As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?”
- All 13 institutions

## ➤ Religiosity

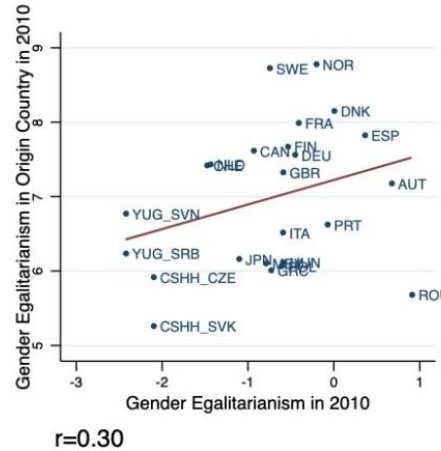
- “Would you call yourself a strong (preference named in religion) or a not very strong (preference named in religion)?” “Please look at this card and tell me which statement comes closest to expressing what you believe about God”, “How often do you attend religious services?” “As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in organized religion?”



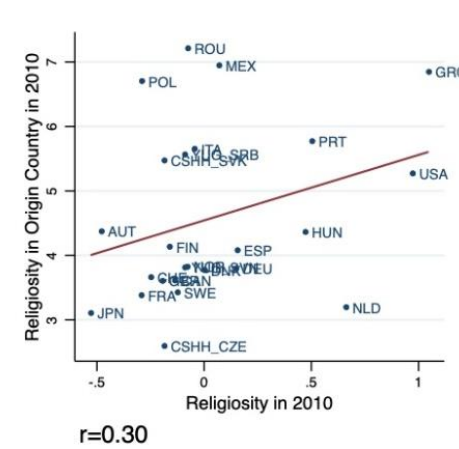
# Validity Check

- Are inherited values measured by ancestral country of origin representative of the contemporaneous values of residents of the corresponding country ?
  - Comparing inherited values in origin country for year 2010 with current values in origin country in 2017
  - GSS vs. Joint EVS/WVS database

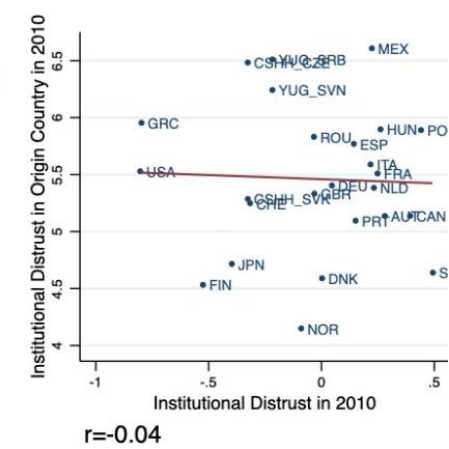
A. Gender Egalitarianism



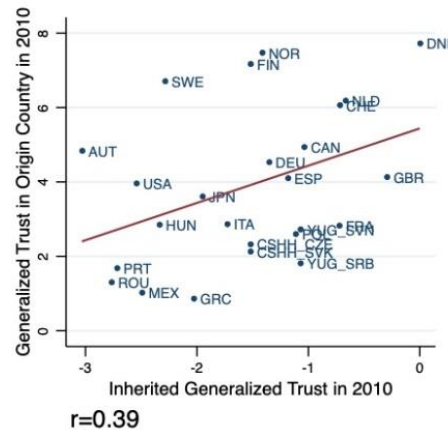
B. Religiosity



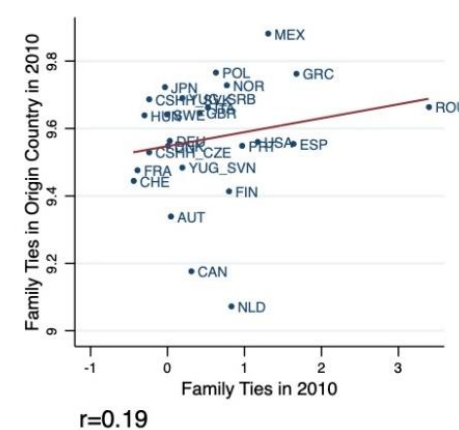
C. Institutional Distrust



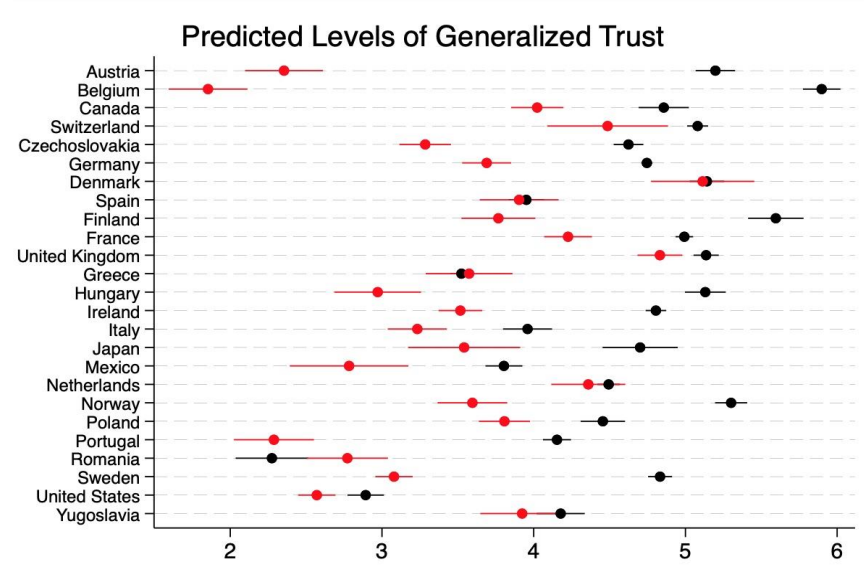
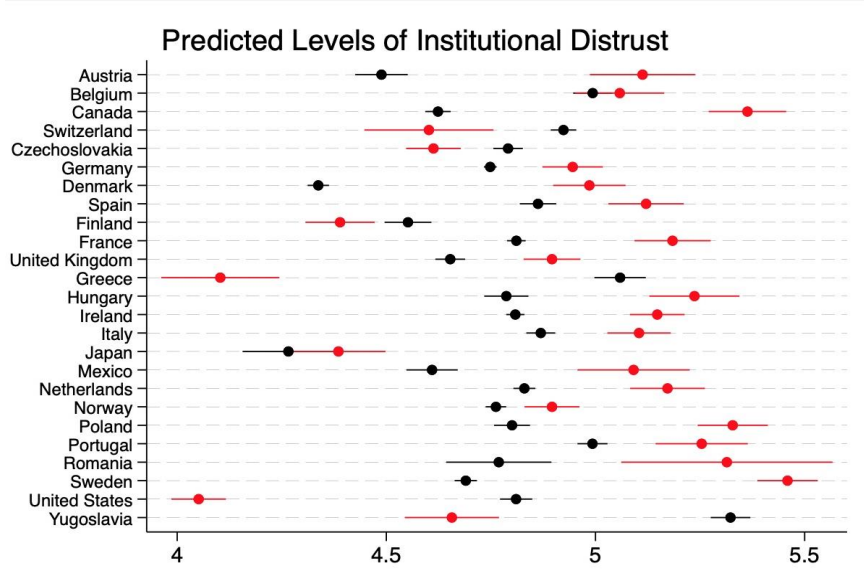
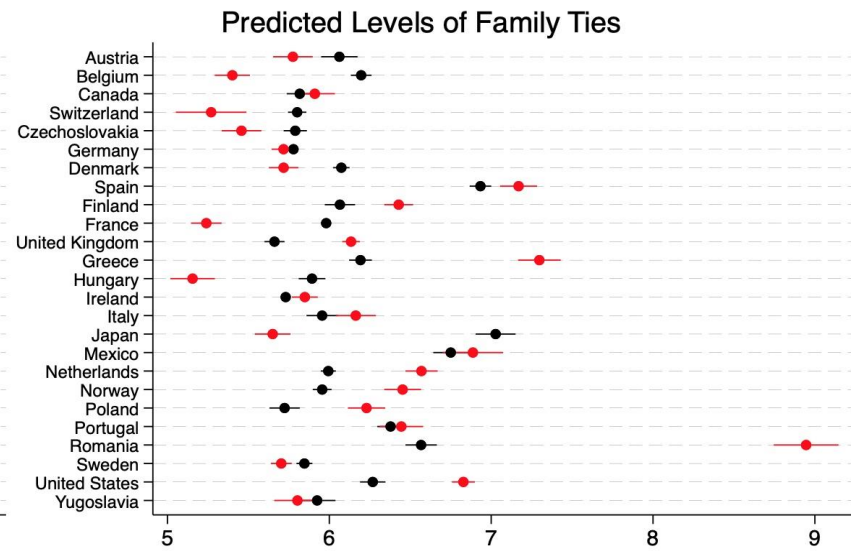
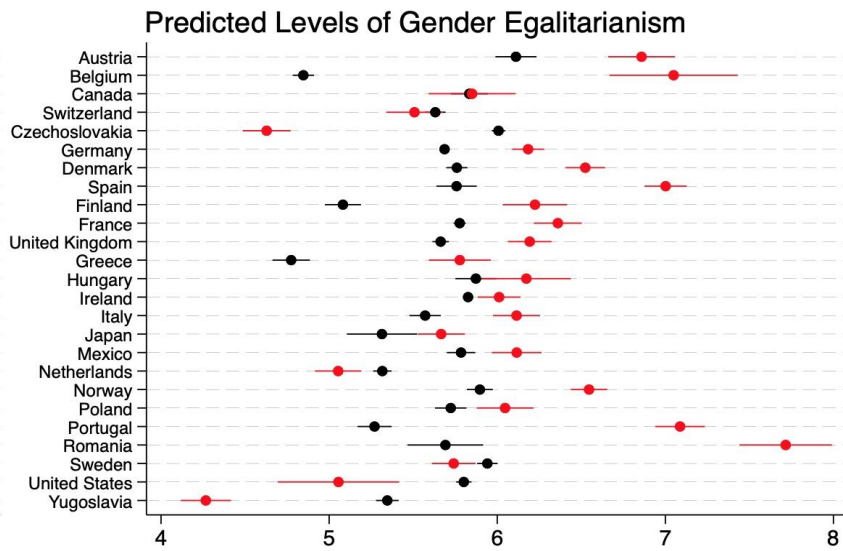
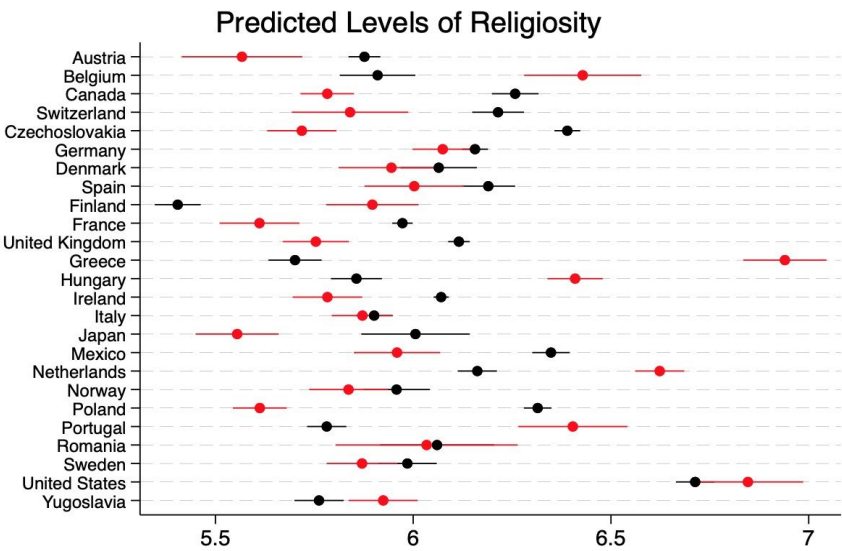
D. Generalized Trust



E. Family Ties







# SDT Index Selection

## Proportion of births outside marriage (%)

- OECD Family Database
- Single behavioral indicator
- Why?
  - Frequent citation in theoretical & empirical works
  - Availability of long-term past data
  - Relevance of SDT theory in explaining cross-country differences in non-marital birth shares

