

## **Does trust associate with political regime?**

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## ABSTRACT

Since trust correlates with economic development and in turn economic development associates with political regime, we conjecture that there may be a relationship between trust and political regime. We investigate if trust aggregated on the country level correlates with the political regime. We do not find any significant association, with or without taking into account other factors (e.g. regional location, economic development, geographic conditions, culture) as well.

JEL codes: political regime, trust

Keywords: D02, D12

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# **Összefügg a bizalom a politikai berendezkedéssel?**

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## ÖSSZEFOGLALÓ

A bizalom együttmozog a gazdasági fejlettséggel, a gazdasági fejlettség pedig korrelál a politikai berendezkedéssel, így azt várhatjuk, hogy a bizalom összefügg a politikai berendezkedéssel. Ebben a tanulmányban azt vizsgáljuk, hogy országszinten fennáll-e ez az összefüggés. Nem találunk szignifikáns kapcsolatot, sem egyéb tényezők nélkül, sem a régióval, gazdasági fejlettséggel, földrajzi adottságokkal és kultúrával kapcsolatos változók figyelembe vétele mellett.

JEL: D02; D12

Kulcsszavak: Bizalom, Politikai berendezkedés.

# Does trust associate with political regime?

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## Abstract

Since trust correlates with economic development and in turn economic development associates with political regime, we conjecture that there may be a relationship between trust and political regime. We investigate if trust aggregated on the country level correlates with the political regime. We do not find any significant association, with or without taking into account other factors (e.g. regional location, economic development, geographic conditions, culture) as well.

*Keywords:* political regime, trust

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## 1. Introduction and literature

Simmel (1950) claims that "trust is one of the most important synthetic forces within society". A testament to this statement is the empirical finding that trust associates with economic development. Knack and Keefer (1997), Whiteley (2000), Dincer and Uslander

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(2010) and Beugelsdijk et al. (2004) provide evidence on the correlation between trust and national income (or economic growth), while Algan and Cahuc (2010) show that the relationship is causal. Regarding the mechanisms behind the previous findings, Zak and Knack (2001) offer a theoretical and empirical support that trust affects the rate of investment, while Bjørnskov (2012) documents the effect of trust on schooling and the rule of law.

On the other hand, Acemoglu et al. (2019) claim that democracy has a significant positive effect on income. Weede (1996) suggests that the variance in growth rates is larger among autocracies than among democracies. Leblang (1996) claims that the political regime affects economic development indirectly through its commitment to property right.

If trust associates positively with economic development and at the same time political regime has a relationship with national income, then one may suspect that on average trust is higher in more democratic countries. In fact, many scholars have argued that trust is one of the main elements of social capital that in turn is necessary to have social integration, economic efficiency and democratic stability (Arrow, 1972; Coleman, 1988; Gambetta et al., 1988; Ostrom, 1990; Fukuyama, 1995; Putnam et al., 2000; Newton, 2001). We examine empirically if democracies indeed exhibit higher levels of trust.

Rainer and Siedler (2009) is the study that is closest to ours. They show that shortly after reunification East Germans were significantly less trusting than their Western counterparts, suggesting that political regime and trust are associated. However, interestingly decades of democracy were not able to close the trust gap. They show that economic hardships explain why trust levels in the former East Germany did not converge to those in the West. We have data on trust, political regime and economic development for 76 countries that allow us to see i) if there is an association between political regime and trust, and ii) if economic development is behind the previous association (if there is any).

## 2. Data

Trust does not have a precise definition. It is often used as an umbrella term that includes a set of positive values as reciprocity, civility, respect, solidarity or empathy. However, in surveys standard questions emerged to measure trust. An example is Falk et al. (2018) who measured several preferences worldwide, among them trust. More concretely, in their Global Preferences Survey respondents were asked if they assume that other people only have the best intentions (Likert scale, 0-10). This trust measure was validated beforehand (Falk et al., 2016), predicting trusting behavior in incentivized trust games. We use this global trust survey and link it to measures of political regime.<sup>3</sup>

We take five widely used indices of political regime for 2012 (the year that the Global Preference Survey was executed) that are freely available. The Polity2 dataset (Marshall et al., 2016) assigns to each country a score ranging from -10 (hereditary monarchy) to 10 (consolidated democracy). The EIU Democracy Index (Kekic, 2007) considers five dimensions of political regime (e.g. civil liberties and political participation) and combines the

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<sup>3</sup>Trust data from the Global Preferences Survey are available at <https://www.briq-institute.org/global-preferences/home>.

scores in each dimension into a final one that ranges between 0 and 10. The Freedom House’s (FH) *Freedom in the World* index (FreedomHouse, 2012) assigns 0-4 points to 25 separate indicators (e.g. political rights, civil liberties), yielding an aggregate score per country ranging between 0 and 100. The MaxRange (MR) dataset (Rånge et al., 2015) is based on seven main criteria (e.g. political competition, electoral integrity and quality) resulting in an index that goes from 0 to 100. The Unified Democracy Score (UDS) (Pemstein et al., 2010) combines 10 existing indices using a Bayesian latent variable approach in a way that it is at least as reliable as the most reliable component measure. We use different political regime indices because there is no consensual list with all the desired features that a full-fledged democracy should have. Hence, there is no perfect political regime index and a way to deal with this issue is to consider several such indices.<sup>4</sup>

### 3. Findings

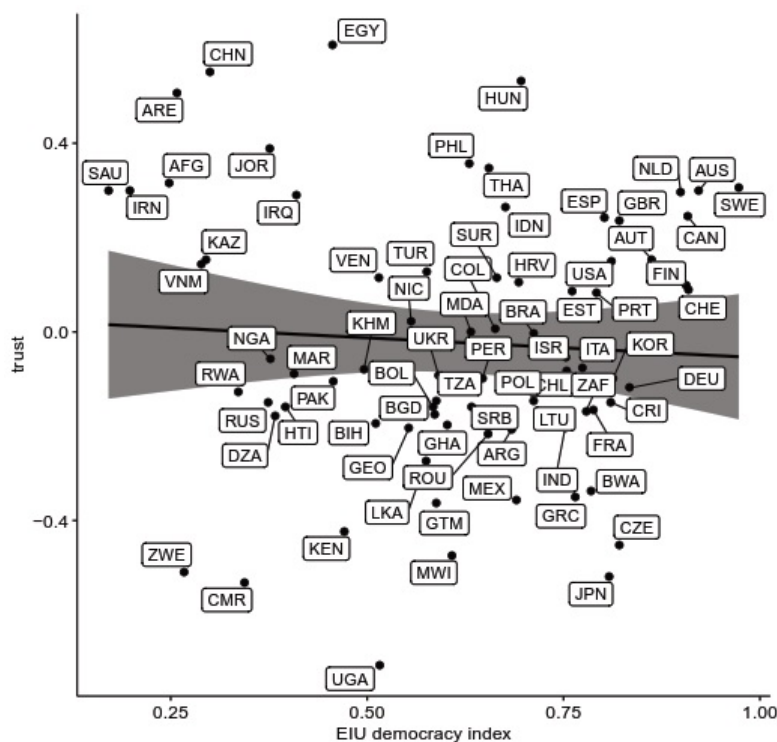


Figure 1: Trust and EIU democracy index, no additional controls

Figure 1 depicts the simple association between the Polity2 index and trust. Using other indices does not change the overall picture. The magnitude of correlation varies between -0.0297 (UDS) and -0.2286 (MR) and is significant only for MR at the 5% significance level.

<sup>4</sup>Pairwise correlation between the indices that we use ranges from 0.723 (MR vs. EIU) to 0.969 (EIU vs. UDS), all of them being significant at the 1% significance level.

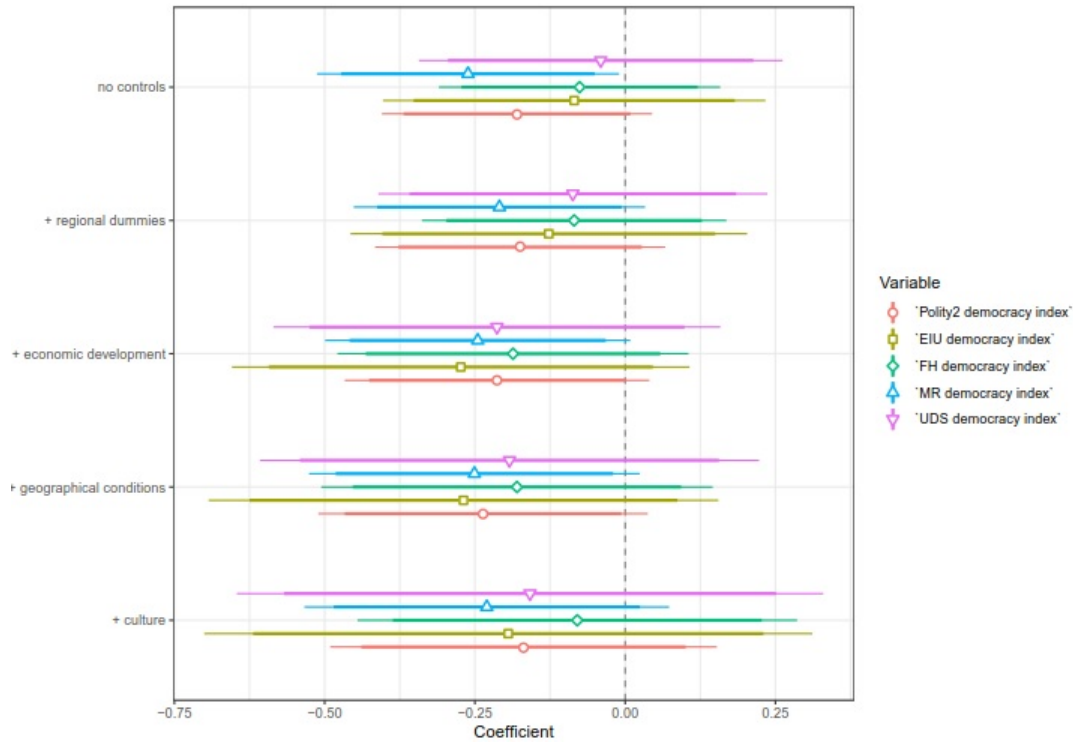


Figure 2: Association between trust and political regime without and with controls, coefficient plots

Hence, most of the correlations fail to be significant, moreover all of them have a negative sign, contrary to our expectation.<sup>5</sup>

To gain a better insight, we carry out an OLS regression analysis for each political regime index. The same regressions are run always and we use coefficient plots to represent the results in a parsimonious way. Thick / thin lines indicate effects at the 10 / 5% significance levels.

The dependent variable is always trust, aggregated on country level. Our first specification has only the political regime index (converted to a 0-1 scale, higher values indicating more democracy) as regressor. Next, we add regional dummies as Falk et al. (2018) document regional disparities in trust. Subsequently, we also control for economic performance using GDP per capita and unemployment rate, as economic development may be correlated both with trust and political regime. The fourth specification adds controls related to geographical conditions (average temperature, average precipitation and distance to Equator) taken from Falk et al. (2018) as that study reports an association between these factors and trust. For the same reason, we also include controls for culture in the last specification, captured by the share of different religions in the population.<sup>6</sup>

As Figure 2 indicates, contrary to our expectation all coefficients are negative and gener-

<sup>5</sup>In Appendix A we report the same figure with the other political regime indices.

<sup>6</sup>Data obtained from the Pew Research Center website (<https://www.pewforum.org/2012/12/18/table-religious-composition-by-country-in-percentages/>).

ally are insignificant. More concretely, 3 of our 5 indices (EIU, FH and UDS) fail to exhibit even marginal significance in any of the specifications, Polity2 is marginally significant in one specification, while the MaxRange score is at least marginally significant in 4 of our 5 specifications. Importantly, in the most comprehensive specification none of the indices proves to be significant.<sup>7</sup> Overall, the data that we study suggest that trust and political regime do not associate.<sup>8</sup>

#### 4. Conclusion

Even though the extant literature suggests a positive correlation between trust and the level of democracy, we fail to find such association using the worldwide trust survey by Falk et al. (2018) and well-known political regime indices. The result does not change even if we take into account a wide range of controls.

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<sup>7</sup>Section Appendix B contains the regressions that are represented in Figure 2. We carry out one more analysis. The EIU index has five categories (electoral process and pluralism, functioning of government, political participation, political culture, civil liberties) for which scores are published. We run the same regressions as before to see if any of those categories associates with trust, but we fail to see any consistent pattern. See Figure C.7 in Appendix C.

<sup>8</sup>In a companion paper (Khayouti et al., 2020), we document significant relationship between political regime and patience.



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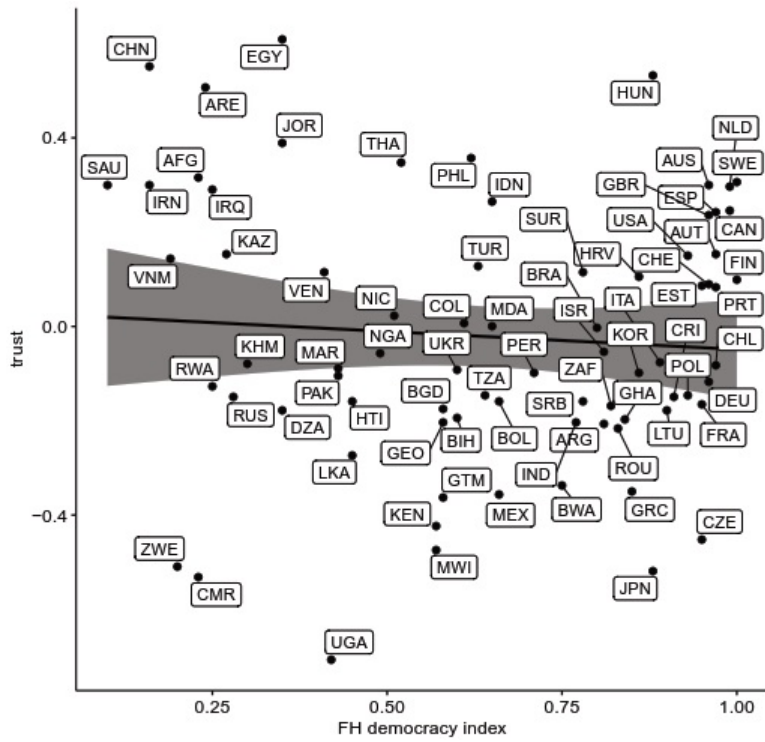


Figure A.4: Trust and the Freedom House index, no additional controls

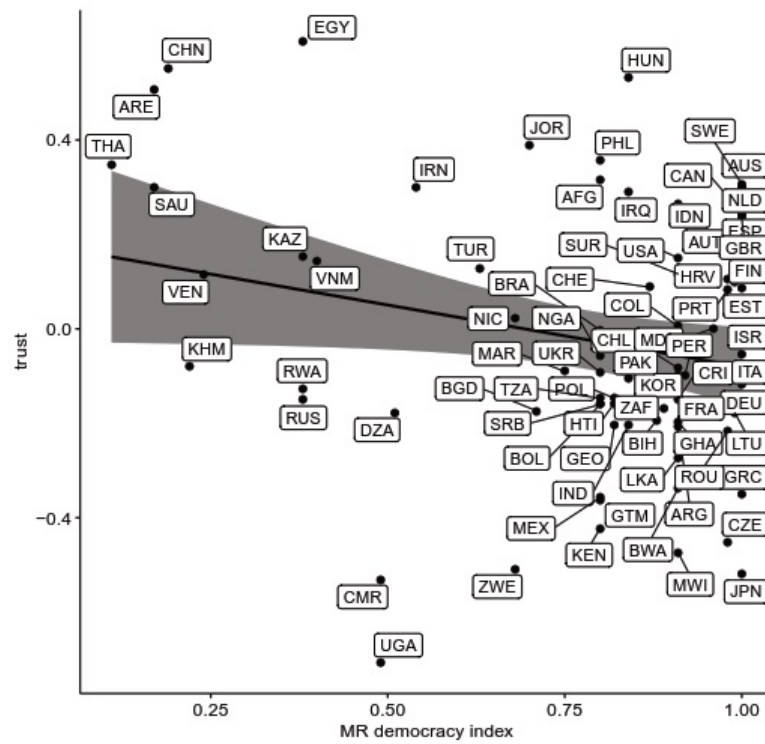


Figure A.5: Trust and the MaxRange index, no additional controls

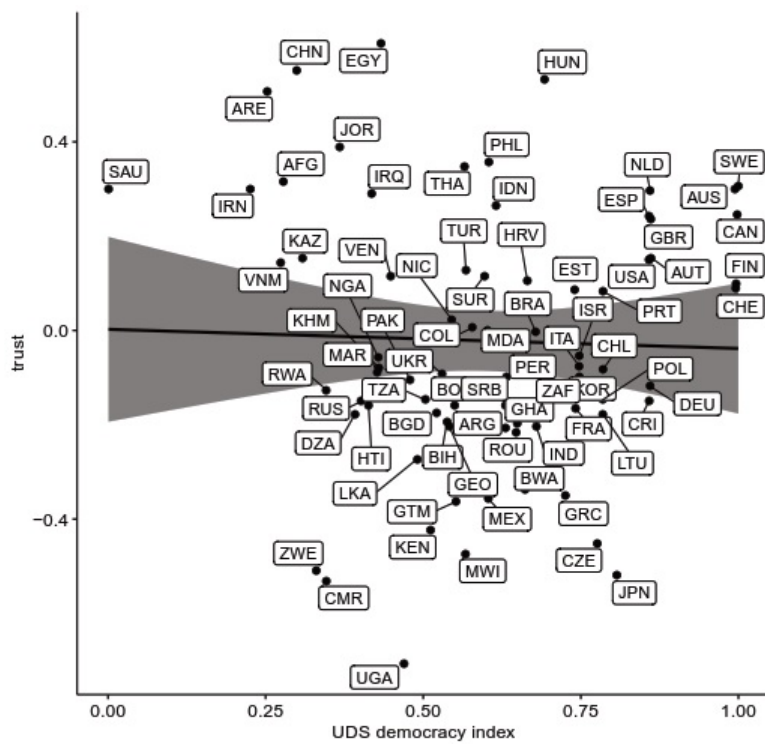


Figure A.6: Trust and the Unified Democracy Score, no additional controls

## Appendix B. Online appendix - regressions

Table B.1: Polity2 Score

	<i>Dependent variable:</i>				
	Trust				
	(1)	(2)	(3)	(4)	(5)
Polity2 Score	-0.180 (0.115)	-0.175 (0.123)	-0.213 (0.129)	-0.236* (0.140)	-0.169 (0.164)
Regional controls	no	yes	yes	yes	yes
Economic controls	no	no	yes	yes	yes
Geographical controls	no	no	no	yes	yes
Cultural controls	no	no	no	no	yes
Observations	74	74	74	73	73
R <sup>2</sup>	0.033	0.407	0.422	0.435	0.568
Adjusted R <sup>2</sup>	0.020	0.344	0.341	0.322	0.401
Residual Std. Error	0.275 (df = 72)	0.225 (df = 66)	0.226 (df = 64)	0.230 (df = 60)	0.216 (df = 52)
F Statistic	2.459 (df = 1; 72)	6.477*** (df = 7; 66)	5.195*** (df = 9; 64)	3.850*** (df = 12; 60)	3.412*** (df = 20; 52)

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table B.2: EIU Democracy Index

	<i>Dependent variable:</i>				
	Trust				
	(1)	(2)	(3)	(4)	(5)
EIU Democracy Index	-0.085 (0.162)	-0.127 (0.168)	-0.273 (0.194)	-0.269 (0.216)	-0.194 (0.258)
Regional controls	no	yes	yes	yes	yes
Economic controls	no	no	yes	yes	yes
Geographical controls	no	no	no	yes	yes
Cultural controls	no	no	no	no	yes
Observations	76	76	76	75	75
R <sup>2</sup>	0.004	0.368	0.390	0.395	0.538
Adjusted R <sup>2</sup>	-0.010	0.303	0.307	0.278	0.367
Residual Std. Error	0.279 (df = 74)	0.232 (df = 68)	0.231 (df = 66)	0.237 (df = 62)	0.222 (df = 54)
F Statistic	0.272 (df = 1; 74)	5.651*** (df = 7; 68)	4.696*** (df = 9; 66)	3.373*** (df = 12; 62)	3.149*** (df = 20; 54)

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table B.3: Freedom House Index

	<i>Dependent variable:</i>				
	Trust				
	(1)	(2)	(3)	(4)	(5)
FH index	-0.076 (0.119)	-0.085 (0.129)	-0.187 (0.149)	-0.180 (0.166)	-0.080 (0.187)
Regional controls	no	yes	yes	yes	yes
Economic controls	no	no	yes	yes	yes
Geographical controls	no	no	no	yes	yes
Cultural controls	no	no	no	no	yes
Observations	76	76	76	75	75
R <sup>2</sup>	0.005	0.366	0.387	0.391	0.535
Adjusted R <sup>2</sup>	-0.008	0.301	0.303	0.274	0.363
Residual Std. Error	0.279 (df = 74)	0.232 (df = 68)	0.232 (df = 66)	0.238 (df = 62)	0.223 (df = 54)
F Statistic	0.403 (df = 1; 74)	5.620*** (df = 7; 68)	4.623*** (df = 9; 66)	3.323*** (df = 12; 62)	3.107*** (df = 20; 54)

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

Table B.4: MaxRange Index

	<i>Dependent variable:</i>				
	Trust				
	(1)	(2)	(3)	(4)	(5)
MR index	-0.261** (0.128)	-0.209* (0.124)	-0.245* (0.130)	-0.251* (0.140)	-0.230 (0.155)
Regional controls	no	yes	yes	yes	yes
Economic controls	no	no	yes	yes	yes
Geographical controls	no	no	no	yes	yes
Cultural controls	no	no	no	no	yes
Observations	76	76	76	75	75
R <sup>2</sup>	0.053	0.388	0.404	0.410	0.552
Adjusted R <sup>2</sup>	0.040	0.325	0.323	0.296	0.386
Residual Std. Error	0.272 (df = 74)	0.228 (df = 68)	0.229 (df = 66)	0.234 (df = 62)	0.219 (df = 54)
F Statistic	4.154** (df = 1; 74)	6.164*** (df = 7; 68)	4.980*** (df = 9; 66)	3.594*** (df = 12; 62)	3.325*** (df = 20; 54)

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

Table B.5: Unified Democracy Score

<i>Dependent variable:</i>					
	Trust				
	(1)	(2)	(3)	(4)	(5)
UDS index	-0.041 (0.154)	-0.087 (0.165)	-0.213 (0.190)	-0.193 (0.212)	-0.158 (0.249)
Regional controls	no	yes	yes	yes	yes
Economic controls	no	no	yes	yes	yes
Geographical controls	no	no	no	yes	yes
Cultural controls	no	no	no	no	yes
Observations	76	76	76	75	75
R <sup>2</sup>	0.001	0.365	0.384	0.388	0.537
Adjusted R <sup>2</sup>	-0.013	0.300	0.300	0.270	0.365
Residual Std. Error	0.280 (df = 74)	0.232 (df = 68)	0.232 (df = 66)	0.239 (df = 62)	0.222 (df = 54)
F Statistic	0.069 (df = 1; 74)	5.585*** (df = 7; 68)	4.569*** (df = 9; 66)	3.276*** (df = 12; 62)	3.131*** (df = 20; 54)

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

### Appendix C. Online appendix - trust and components of EIU Democracy index

In Figure C.7 we run the same regressions as for Figure 2, but not for different political regime indices. Here our aim is to see if building blocks of the EIU Democracy index associates with trust.

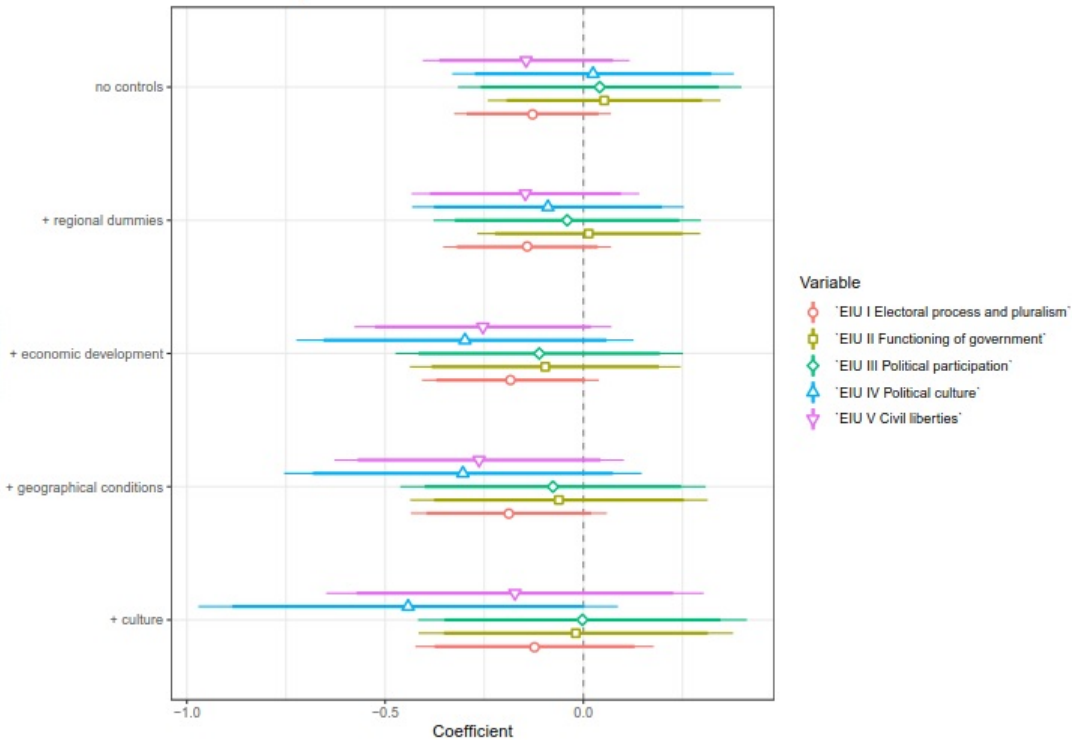


Figure C.7: Trust and the components of th EIU index, no additional controls