

Comparison of Influence of the Financial Crisis of 2008 and the Political Events of 2014 on Political Trust in Belgium

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Abstract : The objective of this study is to understand the effect of the great recession of 2008 on political trust in Belgium as well as near term micro events on the political trust of Belgium. This study aims to compare and contrast the effect of the great recession of 2008 and the near term micro events on the political trust of Belgium. The political trust in Belgium for 2008 and 2014 has been compared with the political trust in Belgium for 2018 and influences of known factors on political trust of Belgium has been studied.

Keywords — European social survey, Federal election, Financial Crisis, Political Trust, MGCFA, Structural Equation

I. INTRODUCTION

Armingeon et al. (2014)[1] and Batels et al. (2014)[2] has argued that the financial crisis of 2007-2008 has shown significant effect on political trust in Europe. Just like most other countries in Europe Belgium's political landscape had also faced turmoil during 2007- 2008[3]. Just as landmark events like the financial crisis of 2007-2008 had left a mark on political trust, this study aims to understand if similar influence can be observed on political trust in Belgium due to near term political events of Belgium(2014-2018)[4]. After the elections of 2014, governments at all levels were established but the year 2018 was marked by some more political uncertainty. This study aims to measure and compare the effects of the political difficulties of 2018 with that of the great recession and aims to contrast the same with the political in Engi trust in Belgium in the year 2014.

The study is divided into five parts. The first part of the study aims to establish the research question and it's relevance. The second parts aims to show a theoretical basis of political trust as studied in Europe. The study primarily considers the models of political trust tested by Breustedt W. et al. (2017)[5]. The third part of the study tests the theoretically established models on European Social Survey data from 2008, 2014 and 2018. The deviations found has been reported in the third section and alternatives have been proposed. The fourth section of the study shows measurement invariance tests and compares the political trust of the three time periods. Multi-group confirmatory factor analysis has been used The fifth section comprises of discussion and conclusion of the tests for measurement invariance and comparison of political trust from section four. The objective of this research work is to extend the works of Arpino B. et.al. (2020)[6], Erkel Van et. al.

(2016)[7] which have explored the effect of macro world events on political trust and compare the same with effect of micro world events on political trust in Belgium. Data for each of the years have been collected from European Social Survey. This study has used data from 2008, 2014 and 2018. All data used in this study has been taken from European Social Survey Website and details about the source of data can be seen in the references [8].

II.TEST FOR THE THEORETICAL MODEL

Breustedt W. et al. (2017)[5]has primarily used different variants of the political trust model as tested for fit on European Social Survey Data by Ariely et al.[9] (2011) from different time periods. The same model for political trust has also been used by Poznyak et al. (2014)[10]for studying political trust in the United States Of America.

The variables used to construct confirmatory factor models by Ariely et al. (2011)[9] and Poznyak et al. (2014)[10] have differences but all models of political trust have defined the trust in representative political institutions and trust in implementing political institutions as separate latent variables. The model for political trust tested in the works of Breustedt W. et al. (2017)[5]is as follows:



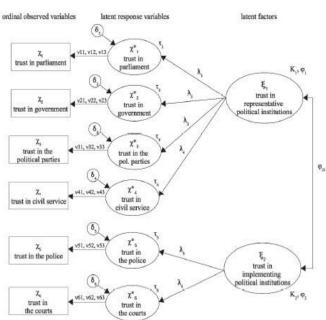


Figure 1[10]: Model for political trust adopted by Poznyak et al. (2014)[10] on European Social Survey data. (Model 1)

Breustedt W. et al. (2017) [10] has considered ordinal nature of the variables while estimating model 1. All the observed variables stated in model 1 have not been found in European Social Survey data of 2008,2014 and 2018 and this the following models have been considered in accordance to the concept of political trust in Europe as defined by model 1.

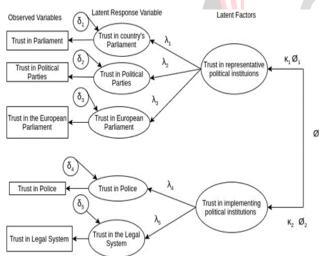


Figure 2: Proposed bi-factor model of political trust, in accordance to available observed variables in European Social Survey. (**Model 2**)

As model 2 has been constructed in accordance to the theoretical establishment of model 1, the observed variables have been considered as ordinal. Model 2 considers the variables available in European Social Survey of 2008,2014 and 2018. The variables "Trust in government" and "Trust in civil services" as used in model 1 has not be used in any other model proposed in this study. Though a clear evidence of measurement invariance between using trust in the courts and the trust in legal system could not be found for Europe, it must be noted that trust in legal system has been used by Allum et al.[12]

(2011) as one of the variables required to measure trust in political institutions. As such in this case interchangeability of trust in courts and trust in the legal system is assumed to be justified. All models in this study except for model 1 This study aims to develop upon the established model of political trust as adopted by Poznyak et al. (2014) [10] and the following alternative models are proposed to estimate political trust:

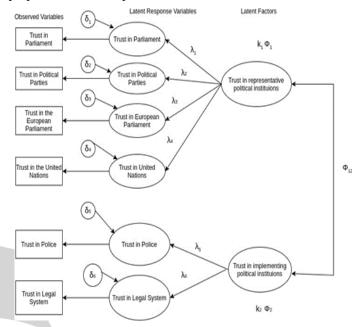


Figure 3: Proposed alternative model as created from modification of model 2 shown in figure 2 (Model 3)

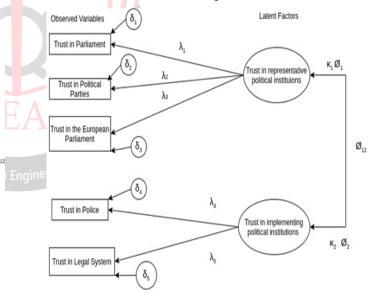
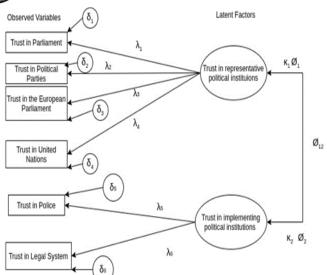


Figure 4: Proposed alternative model as created from modification of model 2 shown in figure 2 (Model 4)



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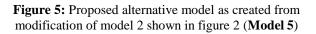


Figure 4 and 5 have been proposed in line with established model for political trust where the trust in representative political institutions and trust in implementing political institutions have been shown as separate latent variables.

Model 4 and model 5 attempts to simplify the bi-factor models shown in figure 2 and figure 3. Nardis Y.[13] (2014) has shown from his research about influence of media on trust in the European parliament, that trust in European parliament forms one of the components of trust in representing political institutions and the same has also been reflected in by Allum et al.[12](2011).

Torgler B. et al.[14] (2008) has shown the importance of united nations in political trust and the same has also been included in model 3 and model 5 to test for fit in European Social Survey data from Belgium.

TEST MODEL FOR FIT AND EXPERIMENTAL RESULTS

The results for model fit of each of the previously tested models are as follows:

models	are as f	follows:					^{-sear} ch i	n Engir
Model	Year	GFI	AGFI	Chi Sq.	P value	Degre es of freedo	Numb er of	
						m	obser	
							vation s	
Model 2	2014	0.985	0.975	2595	0.000	13	1682	
				.735				
Model 2	2018	0.984	0.974	4078	0.000	13	1713	
				.995				
Model 2	2008	0.92	0.876	3444	0.00	13	1666	
		3		9.821	0			
Model 3	2014	0.97	0.969	4751.	0.000	19	1682	
		9		068				
Model 3	2018	0.977	0.966	7400.	0.000	19	1713	
				332				
Model 3	2008	0.924	0.888	4138	0.000	19	1666	
				5.367				
Model 4	2014	0.995	0.980	424.4	0.000	4	1682	F
				36				

Model 4	2018	0.991	0.968	754.5	0.000	4	1713
				26			
Model 4	2008	0.984	0.946	1852. 989	0.000	4	1666
Model 5	2014	0.906	0.754	8915. 068	0.000	8	1682
Model 5	2018	0.916	0.780	9557. 263	0.000	8	1713
Model 5	2008	0.875	0.672	2010 2.039	0.000	8	1666

Table 1: Fit statistics of all tested models

The variables used to estimate model 2 and model 3 have been considered as categorical variables and as such in accordance to works of Suh Y [15] (2015), weighted least square mean and variance adjusted estimators have been used to estimate parameters for model 2 and model 3.

The same derives from the original proposed model by Poznyak et al. (2014) [10] where variables used to estimate the bi-factor model shown in figure 1 has been considered to be ordinal. It is to note that in the bi factor models 2 and 3 the covariance matrix of latent variables has been found not to be positive definite and thus estimates for parameters may not be reliable. Model 2 and 3 have AFGI values less than

0.90 for the year 2008 which would lead to elimination of the hierarchical factor models in further analysis. In the simpler models 4 and 5, the variables have been considered to be numerical. Hu W. et al. (2017) [16] has shown through simulation that 11 point scales can be treated as numerical variables, which fits the cases shown in model 4 and 5. It can be seen from table 1 that model 5 has GFI and AFGI that do not comply with respective criteria of being greater than 0.95 and 0.90 in all the cases and thus it must be rejected for further studies as well. Model 4 meets all the criteria for model fit and thus it would be considered as acceptable in this study. It must be noted that number of observations in each case is much greater than the theoretically recommended number of observations of 200 and thus though all the p values for tested models are significant which would indicate a bad fit, they may be ignored in this case.

The factor loadings for each observed variable (description of the variables used can be found in appendix I) for model 4 can be studied in the following table:

Year	Variable	Loading	Standard Error	Z Value	P Value
2014	trstprl	1.0			
2014	trstprt	0.94	0.022	42.04 7	0.000
2014	trstep	1.0	0.026	40.37 0	0.000
2014	trstlgl	1.0			

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2014	trstplc	0.686	0.032	21.17 0	0.000
2018	trstprl	1.0			
2018	trstprt	0.890	0.028	31.36 7	0.000
2018	trstep	1.0	0.026	40.34 7	0.000
2018	trstlgl	1.0			
2018	trstplc	0.727	0.030	24.06 9	0.000
2008	trstprl	1.0			
2008	trstprt	0.945	0.030	31.53 0	0.000
2008	trstep	0.996	0.033	29.91 1	0.000
2008	trstlgl	1.0			
2008	trstplc	0.728	0.032	23.07 2	0.000

Table 2: Factor loadings of observed variables (Model 4)

Year	Latent factors	Covaria nce	Standar d Error	Z Value	P Value
2014	Trust in represen tative political instituti ons & Trust in impleme nting political instituti ons	3.00	0.136	21.277	0.000
2018	Trust in represen tative political instituti ons & Trust in impleme nting political instituti ons	3.415	0.153	5 22.362	0.000 Research ir
2008	Trust in represen tative political instituti ons & Trust in implem nting political instituti ons	2.889	0.136	21.277	0.000

From table 2 it can be inferred that trust in political parties and trust in European parliament have very high influence on defining trust in representative political institutions in Belgium if the three individual years under study (2014,2018 and 2008) are considered separately. From table 2 it can also be inferred that trust in police has very high influence on trust in implementing political institutions if the three individual years under study (2014,2018 and 2008) are considered separately. As measurement invariance has not been established at this stage, comparison across years can not be conducted. In 2014,2018 and 2008 it can be concluded that trust in political parties have a greater influence on trust in representative political institutions than trust in police has on trust in implementing political institutions if the individual years are considered. From table 3 it can be concluded that trust in representative political institutions and trust in implementing political institutions are closely linked for Belgium in the years under study.

III. MULTI-GROUP CONFIRMATORY FACTOR ANALYSIS

Model 4 as shown in figure 4 has been fitted as a multi group confirmatory factor model to compare the constructs of political trust in two cases. The two cases of comparison and the fit indices can be observed in the following table:

Model	Years being compared	GFI	AFGI	Chi Sq.	P Value	Degree s of Freedo m
Model 4	2014- 2018	0.998	0.991	73.878	0.000	8
Model 4	2008- 10 2018 <i>g</i>	0.999	0.995	38.537	0.000	8

Table 4: Fit statistics for multi group confirmatory factor models

From table 4 it can be observed that GFI and AFGI fit statistics prove that both multi group confirmatory factor models fit well. The Chi-squared statistic points towards a improper fit but as the number of observations (table 1) in each case is much greater than the traditionally used number of 200 and thus the conclusion of the chi-squared test can be ignored in this case. The model fit statistics of all models with restrictions can be found in the appendix for reference.

A. Measurement invariance test for fitted model for comparing political trust of 2014 and 2018

In order to prove weak invariance model 4 has been fitted without any constraint and with equal loadings across the two groups, in this case which is data from 2014 and 2018. Anova has been used to compare the two model fits which can be observed as follows:

 Table 3: Covariance between latent factors (Model 4)



Mode	1 Restri	Degre	AIC	BIC	Chi	Chi Sq.	Р
	ctions	es of			Sq.	Differ	Value
		Freed				ence	
		om					
Cont	fi No	8	67273	67470	73.87		
gura	ti Restri				7		
ona	l ctions						
Meti	ri Equal	11	67272	67450	78.68	4.241	0.236
c	Loadi				9	9	5
	ngs						

Table 5: Anova comparison of configurational and metric

 model (2014-2018) for weak invariance

Model	Restrictions	Difference in CFI	Difference in scaled CFI
Configuratio nal	No Restrictions		
Metric	Equal Loadings	0	0

Table 6: CFI comparison of configurational and metric model for weak invariance

From table 5 it can be observed that adding constraints for equal loadings across groups does not significantly change the model fit. The same conclusion can be drawn from table 6 as well, as there is no difference in CFI between the two models. Thus weak measurement invariance between the two models can be confirmed in this case.

In order to prove strong invariance additional restrictions has been added in which both loadings and intercepts are equal across groups. The comparison of the model with equal loadings across groups and equal loadings, intercepts across groups can be observed as follows:

Mode 1	Restri	Degre	AIC	BIC	Chi	Chi Sq.	Р	HÌ.
	ctions	es of			Sq.	Differ	Value	11
		Freed				• ence		
		om				Or Ro		
						res	^{ear} ch in	Enc
Mode	Equal	11	67272	67450	78.68			LIIQ
14	Loadi				9			
	ngs							
Mode 1	Equal	14	65899	66058	129.7	49.16	1.202	
4	loadin				35	7	x10 ⁻¹⁰	
	gs							
	and							
	interc							
	epts							

Table 7: Anova comparison of configurational and metricmodel for strong invariance (2014-2018)

Model	Restrictions	Difference in CFI	Difference in scaled CFI
Model 4	Equal Loadings		
Model 4	Equal loadings and intercepts	0.007	0.008

Table 8: CFI comparison of configurational and metricmodel for strong invariance (2014-2018)

Table 7 shows that adding restrictions on intercepts in addition to loadings significantly changes the model fit. Similar conclusion can be drawn from table 8 as there is non-zero change in CFI between the two models. Thus in this case the assumption of strong measurement invariance has to rejected. As strong measurement invariance could not be proved, In accordance to Meredith W. (1993)[17], difference between modification indices across groups have been studied to find if the effect of freeing a parameter is substantially different across groups (details can be found in appendix IV). In accordance to greatest changes in modification indices, addition restrictions have been added to attempt to prove partial strong invariance. Greatest differences in modification indices have been prioritized. All comparisons have been made between the model with equal loadings across groups, equal loadings and intercepts with increasing additional restrictions. The comparisons can be found in the following tables :

Additi	Degree s	AIC	BIC	Chi Sq.	Chi Sq.	Р
onal	of Freedo				Differe	Value
Restric	m				nce	
tions						
Equal loadin gs	11	67272	67450	78.689		
trstep ~ 1	14	67301	67460	112.98 5	35.108	1.156x 10 ⁻⁰⁷
						10
trstep	14	67301	67460	112.98	35.108	1.156x
~	S. //.	E		5		10 ⁻⁰⁷
1,trstlg		nel				
1~1		ager				
trstep	14	67301	67460	112.98	35.108	1.156x
	\$ }			5		10 ⁻⁰⁷
1,trstlg	licatio					
94 000	6.					
e1,trstpl						
c ~ 1						

Table	9:	Comparison	of	models	with	additional
restricti	ons					

Additional Restrictions	Difference in CFI	Difference in scaled CFI
trstep ~ 1	4x10 ⁻⁰³	3x10 ⁻⁰³
trstep ~ 1,trstlgl ~ 1	4x10 ⁻⁰³	3x10 ⁻⁰³
trstep ~ 1,trstlgl ~ 1,trstplc ~ 1	4x10 ⁻⁰³	3x10 ⁻⁰³

Table 10: CFI comparison for models with additional restrictions with model with equal loadings across groups.

It is to be noted that all additional restrictions shown on table 9 and 10 are in additional to equal loadings and intercepts if not explicitly mentioned. From table 9 and 10



it can be observed that additional restrictions imposed, significantly changes the model fit from the base model which in this case has only equal loadings across the groups. Thus partial measurement invariance can not be established as well. It must be concluded that the concept of political trust in Belgium as defined by model 4 (figure 4) is not clearly comparable for the year 2014 and 2018.

B. Measurement invariance test for fitted model for comparing political trust of 2008 and 2018

In order to prove weak invariance between the construct of political trust in Belgium for the year 2008 and 2018, model 4 (figure 4) has been fitted without any restrictions and with equal loadings across groups. The difference model fits has been studied using anova and the details can be found in the following table:

Mode 1	Restri	Degre	AIC	BIC	Chi	Chi Sq.	Р
	ctions	es of			Sq.	Differ	Value
		Freed				ence	
		om					
Confi	No	8	67703	67899	38.53		
gurati	Restri				7		
onal	ctions						
Metri	Equal	11	67704	67881	45.32	5.927	0.115
с	Loadi				7	9	2
	ngs						

 Table 11: Anova comparison of configurational and metric model (2008-2018) for weak invariance

Model	Restrictions	Difference in CFI	
			scaled CFI
Configuratio nal	No	5	
	Restrictions	Inter	
		2	
Metric	Equal	0 🛬	0
	Loadings		

 Table 12: CFI comparison of configurational and metric

 model for weak invariance (2008-2018)

From table 11 it can be observed that addition of equal loadings constraints across the groups does not change the model fit significantly as the p value for difference in chisquared statistic is not significant. The same conclusion can be drawn from table 12 as there is no difference in CFI. Thus weak measurement invariance between the political construct in Belgium for the year 2008 and 2018 can be proven in this case.

Additional restrictions has been added in order to attempt to prove strong measurement invariance. Additional restrictions of equal intercepts across groups have been added with the equality constraints across groups. Anova has been used to compare the two models and it can be observed in the following table:

Mode 1	Restri ctions	Degre es of Freed om	AIC	BIC	Chi Sq.	Chi Sq. Differ ence	P Value
Confi gurati	Equal Loadi		67704	67881	45.32 7		

1		1		i.	i	i	i	1
	onal	ngs						
	Metri	Equal	14	67787	67946	134.6	94.99	2.2x1
	c	Loadi				27	7	0-16
		ngs						
		and						
		interc						
		epts						

Table 13: Anova comparison of configurational andmetric model for strong invariance (2008-2018)

Model	Restrictions	Difference in CFI	Difference in scaled CFI
Configuratio nal	Equal Loadings		
Metric	Equal Loadings and Intercepts	0.011	0.012

Table 14: CFI comparison of configurational and metricmodel for strong invariance (2008-2018)

From table 13 it can be inferred that addition of equality constraints for intercepts in addition with equality constraints for loadings across the groups introduces significant change to the model fit. Similar conclusion can be drawn from table 14 as difference between CFI between the two models is non-zero. Thus it can be concluded that the assumption strong measurement invariance can be rejected in this case.

In accordance to partial measurement invariance proof shown by Meredith W. (1993)^[17], modification indices have been studied and the restrictions that show changes modification indices across the groups have been added to the model in which already constraints for equal loadings and intercepts across groups have been applied. The model with additional restrictions have been compared with the model in which only the loadings are constrained. The details about modification indices can be found in the appendix. The difference in model fits has been conducted using anova and the details can be observed in the following table:

n eAdditi	Degree s	AIC	BIC	Chi	Chi Sq.	P Value
onal	of Freedo			Sq.	Differe	
Restric	m				nce	
tions						
Equal	11	67704	67881	45.327		
loadin						
gs						
trstep	14	67787	67946	134.62	94.997	2.2x10 ⁻¹⁶
~ 1				7		
trstep	14	67787	67946	134.62	94.997	2.2x10 ⁻¹⁶
~				7		
1,trstlg l						
~ 1	1.4	(7707	(704)	124 (2	04.007	2.2.10.16
trstep	14	67787	67946	134.62 7	94.997	2.2x10 ⁻¹⁶
~ 1,trstlg l				/		
~ 1,trstpl						
c ~ 1						
Table	15: Co	ompariso	on of	models	with	additional

Difference in CFI

restrictions

Additional Restrictions



trstep ~ 1	0.011	0.012
trstep ~ 1,trstlgl ~ 1	0.011	0.012
trstep ~ 1,trstlgl ~ 1,trstplc ~ 1	0.011	0.012

Table 16: CFI comparison for models with additional restrictions with model with equal loadings across groups.

It is to be noted that in table 15 and table 16, the restrictions are in addition to loadings and intercepts being constrained across the group unless explicitly mentioned. It can be inferred from table 15 that additional restrictions change the model fit significantly. Similarly, from table 16 it can be inferred that the fits of the models with additional restrictions are different from the model with just equal loadings and intercepts across the groups. Thus strong invariance could not be proven in this case and it has to be concluded that the construct of political trust in Belgium (as estimated using model 4) between the years 2008 and 2018 are not clearly comparable.

IV. CONCLUSIONS

The objective of this study was to understand the structure of political trust in Belgium and to compare the effect of micro and macro events on political trust. Macro in this case refers to the financial crisis of 2008 and micro in this case refers to the difficulties observed in formation of Belgian federal government post the election of 2014. From model 4 (figure 4) it can be concluded that the construct of political trust in Belgium can be expressed using separate constructs of trust in representative political institutions and trust in implementing political institutions. In each year under study (i.e. 2014,2018 and 2008) trust in political parties and trust in European parliament have strong influence on trust in representative political institutions. In each year under study, trust in police has strong influence on trust in implementing political institutions.

The influence that trust in police has on implementing political institutions is lower than the influence of trust in European union and trust in political parties on representative political institutions for each year under study. From section IV of the study it can be concluded that political trust in Belgium are not clearly comparable constructs when comparing the political trust between 2008-2018 and 2014-2018 and thus the differences in political trust between 2008-2018 and 2014-2018 and 2014-2018 can not be stated in this case as the same may lead to comparison of constructs that are not the same across the years under study.

It can be concluded from this study that the construct of political trust in Belgium has been a changing entity from 2008 to 2018 and due to the changing nature of the

construct of political trust, it has been concluded that it is not possible to understand if the political opinion of the general population has improved or deteriorated in this time period but it can be inferred that the diverse set of political events in Belgium has ensured that the general population has constantly re-evaluated their understanding and outlook of politics in the period under study.

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APPENDIX

I. DESCRIPTION OF VARIABLES

Name of variable	Description	Scale
trstprl	Trust in country's parliament	0-10
trstprt	Trust in political parties	0-10
trstlgl	Trust in legal system	0-10
trstplc	Trust in the police	0-10
trstun	Trust in the United Nations	0-10
trstep	Trust in the European parliament	0-10

Table 17: Description of variables used in the study

Each variable used in this study has values from 0 to 10, all other values available has been removed for this study. The following categories has been removed :

Response value	Description
77	Refusal
88	Don't know
99	No answer

Table 18: Removed values from all variables

In the variables seen in table 17 the value 0 represents the lowest agreement to a trust element and 10 represents absolute agreement to a trust element. The agreement to a trust construct is structred in increasing order from 0 to 10.

II. ESTIMATORS USED AND TEST FOR NORMALITY

In model 2 and model 3 the variables have been treated as ordinal and as such weighted least square mean and variance adjusted estimator has been used. In model 4 and model 5 the variables have been treated as numerical. As per assumption of confirmatory factor analysis, multivariate normality should exist in the variables used to estimate the models. As the four models tested in this study use two different combination of variables, separate test for multivariate normality for the variables in each model is warranted. Variables used in model 4 and model 5 have been tested. Results of multivariate normality test can be found in the following table:

[Year	Model	Test	Statistic	Р	Multiva
			statistic	Values	Value	riate
						Normali ty
Ē	2014	Model 4	Henze-	9.261834	0	No
			Zirkler			
Ē	2014	Model 4	Е	24.64456	0	No
			Statistic			
	2014	Model 5	Henze-	9.332276	0	No
			Zirkler			
Ē	2014	Model 5	Е	28.82509	0	No
			Statistic			
	Year	Model	Test	Statistic	Р	Multiva
Ī			Statistic	Values	Value	riate
						Normali ty
	2018	Model 4	Henze-	8.340047	0	No
			Zirkler			
	2018	Model 4	E	20.87165	0	No
			Statistic			
	2018	Model 5	Henze-	8.197119	0	No
			Zirkler			
	2018	Model 5	E	24.59548	0	No
			Statistic			
	2008	Model 4	Henze-	16.76151	0	No
			Zirkler			
	2008	Model 4	E	6.689054	0	No
	2000	en	Statistic	6 00 50 50		
	2008	Model 5	Henze-	6.887859	0	No
	2000	6	Zirkler	20.21052	0	N
	2008	Model 5	E Statistic	20.31953	0	No
			Statistic	1.		

Table 19: Test for multivariate normality

MVN package has been used to test for multivariate normality and the same can be seen in the implementation of the project. It can be observed from table 19 that multivariate normality could not be proved in any case but as the number of observations are greater than 1000 in each case, it can be assumed that deviations from multivariate normality are not quite substantial. To mitigate the effect of deviations from normality, robust maximum likelihood estimators (MLM) of lavaan package in R has been used for estimating model 4 and model 5 for each year.

III. FIT STATISTICS FOR MODELS WITH ADDITIONAL RESTRICTIONS

In section IV of the study, in-order to prove measurement invariance model 4 has been fitted with additional restrictions. The fit statistics of models with additional restrictions can be found in the following table:



requery between						
Restricti ons	Yea r	GFI	AFGI	Chi Sq. Statistic s	P Value	
Equal	201	0.998	0.993	78.689	0.000	
Loading	4- 201 8					
s	0					
Equal	201	0.997	0.992	112.985	0.000	
Loading	4- 201 8					
s & Intercep ts						
Equal	201 4-	0.997	0.992	112.985	0.000	
Loading	201 8					
s, Intercep ts, trstep ~ 1						
Equal	201 4-	0.997	0.992	112.985	0.000	
Loading s &	2018					
Intercep ts, trstep						
~ 1, trstlgl ~ 1						
Equal	2014-	0.997	0.992	112.985	0.000	
Loading	2018					
s & Intercep						
ts, trstep				-		
~ 1,				tern		
trstlgl ~ 1, trstplc				atio		
~ 1					TID	C
Equal	2008-	0.999	0.996	45.327	0.000	Ľ
Loading	2018			⁴¹¹ Fo	r P.	
S E sus 1	2008	0.007	0.991	124 (07	ne _{search} i	
Equal Loading	2008- 2018	0.997	0.991	134.627	0.000	
s &	2010					
Intercep						
ts Equal	2008-	0.997	0.991	134.627	0.000	
Loading	2008-	0.997	0.991	134.027	0.000	
s &	2010					
Intercep						
ts, trstep ~ 1						
Equal	2008-	0.997	0.991	134.627	0.000	
Loading	2018					
s &						
Intercep ts, trstep						
~ 1,						
trstlgl ~ 1						
Equal	2008-	0.997	0.991	134.627	0.000	
1						

Loading	2018			
s &				
Intercep				
ts, trstep				
~ 1,				
trstlgl ~				
1, trstplc				
~ 1				

Table 20: Fit statistics for all models with restrictions

Table 20 shows the fit statistics or all models that have been tested with additional restrictions. In each case GFI and AGFI show a good model fit. chi-squared test does not accept any of the models but as the number of observations are quite greater than 200, the chi-squared test result in this case may not be reliable.

V. MODIFICATION INDICES

Modification indeces have been used in section IV of the study in order to attempt to establish partial invariance. The modification indices are of model 4 with equal loadings and intercepts across groups . The greatest changes in across groups modification indices can be studied in the following tables :

Relation	Group	Modification Indices
f =~ trstlgl	1	3.044
f =~ trstlgl	2	0.240
f =~ trstplc	1	3.044
f =~ trstplc	2	0.240
f1 =~ trstep	1	3.136
f1 =~ trstep	2	1.258

Table 21 : Modification Indices for additionallyconstrained factors in the partial invariance test for2014 - 2018

Relation	Group	Modification Indices
f =~ trstlgl	1	1.135
f = - trstlgl	2	0.632
f =~ trstplc	1	1.135
f =~ trstplc	2	0.632
f1 =~ trstep	1	13.967
f1 =~ trstep	2	11.938

Table 22 : Modification Indices for additionallyconstrained factors in the partial invariance test for2008 - 2018

In table 21 and 22, the latent factors f and f1 represent trust in the representative political institutions and trust in implementing political institutions respectively. Additional modification indices have not been reported as the difference of the other modifications indices across groups are not substantially high.