



Disentangling Trust and Perceived Trustworthiness

Towards a more distinguished analysis of trust

Anna Almakaeva

aalmakaeva@hse.ru

Nicolas Griesshaber

nicolas.griesshaber@hu-berlin.de

Key questions

1. Is there a difference between trust and trustworthiness across-countries?
2. Are trust and trustworthiness distinct constructs or they belong to the same dimension?
3. What are the determinants of trust and trustworthiness?

Definitions of trust (source: Stolle, 2002)

**Strategic or rational accounts
(Hardin, Yamagishi, Gambetta, Coleman)**

**Identity or group-based accounts
(Tajfel, Turner)**

**Norm-driven accounts
(Uslaner, Fukuyama, Mansbridge)**

- Rational accounts

Trust implies uncertainty, risk and prudence (Yamagishi, 2011).

“ Even those who believe that people are generally honest ... may well be aware that there exist bad people who are potentially harmful. Even if one believes that most people are trustworthy, it may still be a good idea to guard oneself against these “bad eggs...Only those who are prudent in situations in which prudence is required can safely enjoy a high level of general trust”.

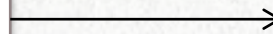
Norm-driven accounts

Trust is a moral value to treat people if they are trustworthy. (Uslaner, 2002).

“Trusting strangers means accepting them into our “moral community.” Strangers may look different from us, they may have different ideologies or religions. But we believe that there is an underlying commonality of values. So it is not quite so risky to place faith in others. If we share a common fate, it is unlikely that these strangers will try to exploit our positive attitudes”

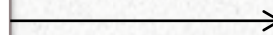
Combinations of trust and their relation to the definitions of trust

Trusting the trustworthy



Norm-driven trust

Trusting the non-trustworthy



Rational trust

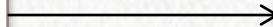
Question 1

Is there a difference between trust and trustworthiness
across-countries?

Traditional trust question

Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?

Most people can be trusted



Trustworthiness

You need to be very careful in dealing with people



Caution

Trust and caution among American and Japanese students

(Source: Miller & Mitamura, 2003)

	Japanese	Americans	A-J
Can you trust strangers	4	24	20
Do you feel that you need to be careful with strangers	57	69	12

Americans are more trusting

Americans are more cautious

Interpretation

- Cautious trusters are risk-avoiders
- Collectivist values common for Japan deter generalized trust
- Safe social conditions and severe sanctions for opportunistic behavior decreases the level of caution in Japan.

Trust questions in the 5th round of the World Values Study (2005-2008)

Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?

How much do you trust people meet for the first time?

Four combinations of trust and trustworthiness

1. Trusting the trustworthy (NDT)

*Most people can be trusted
Trust in strangers*

2. Not trusting the trustworthy (PT)

*Most people can be trusted
Distrust in strangers*

3. Trusting the non-trustworthy (RT)

*Careful in dealing with people
Trust in strangers*

4. Not trusting the non-trustworthy (D)

*Careful in dealing with people
Distrust in strangers*

Four combinations of trust and trustworthiness

**1. Trusting the
trustworthy
(NDT)**

11.6 %

**2. Not trusting the
trustworthy
(PT)**

14.0 %

**3. Trusting the
non-trustworthy
(RT)**

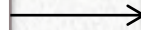
14.2 %

**4. Not trusting the non-
trustworthy
(D)**

60.2 %

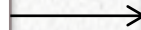
Combinations of trust and their relation to the definitions of trust

Trust + Trustworthiness



**Norm-driven
trust**

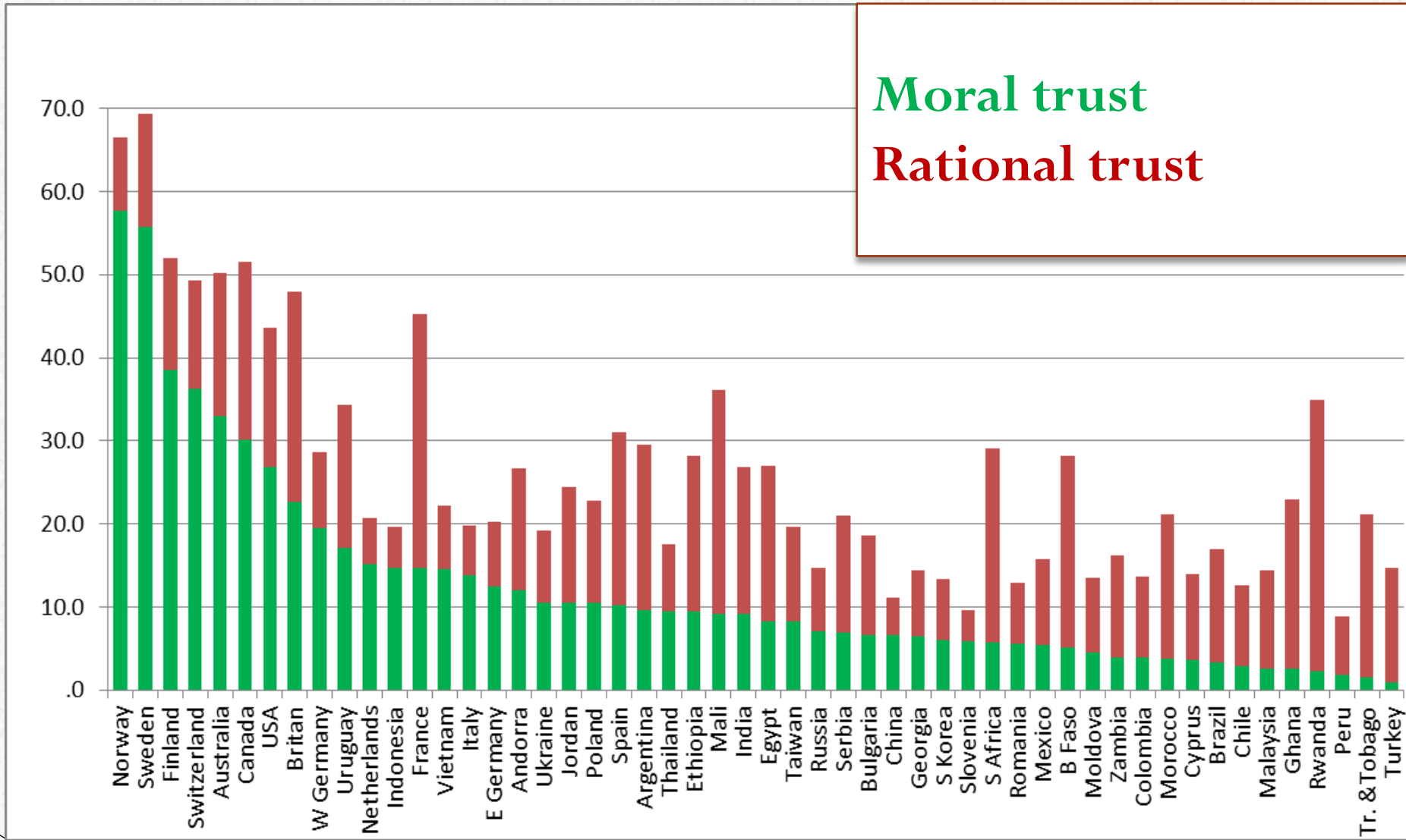
Trust + Caution



Rational trust

Distribution of Trust Types

(WVS 5, 2005-2008)



Countries with norm-driven trust

**Norm-driven
trust**

Rational trust

Norway

57.7

8.9

Sweden

55.8

13.5

Finland

38.5

13.5

Switzerland

36.3

13.0

Australia

32.9

17.2

W Germany

19.5

9.1

USA

26.9

16.8



Countries with rational trust

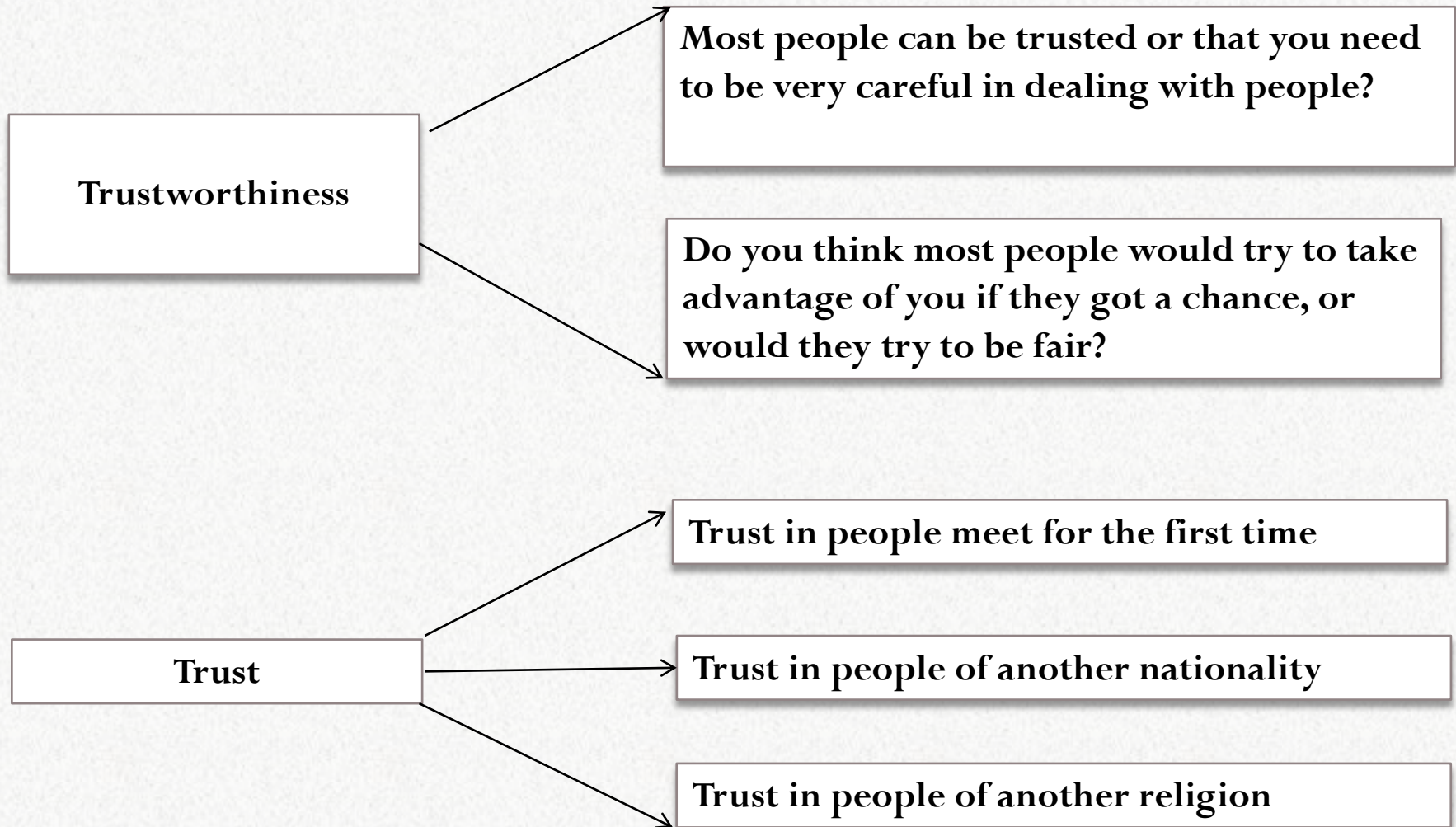
Norm driven trust **Rational trust**

Rwanda	2.2	32.7
France	14.6	30.6
Mali	9.2	26.9
UK	22.6	25.4
S Africa	5.7	23.4
Burkina Faso	5.2	23.1
Spain	10.2	20.8
Ghana	2.6	20.3

Question 2

Is trust and trustworthiness distinct constructs or they belong to the same dimension?

Trust and trustworthiness questions in WVS5



Justification 1

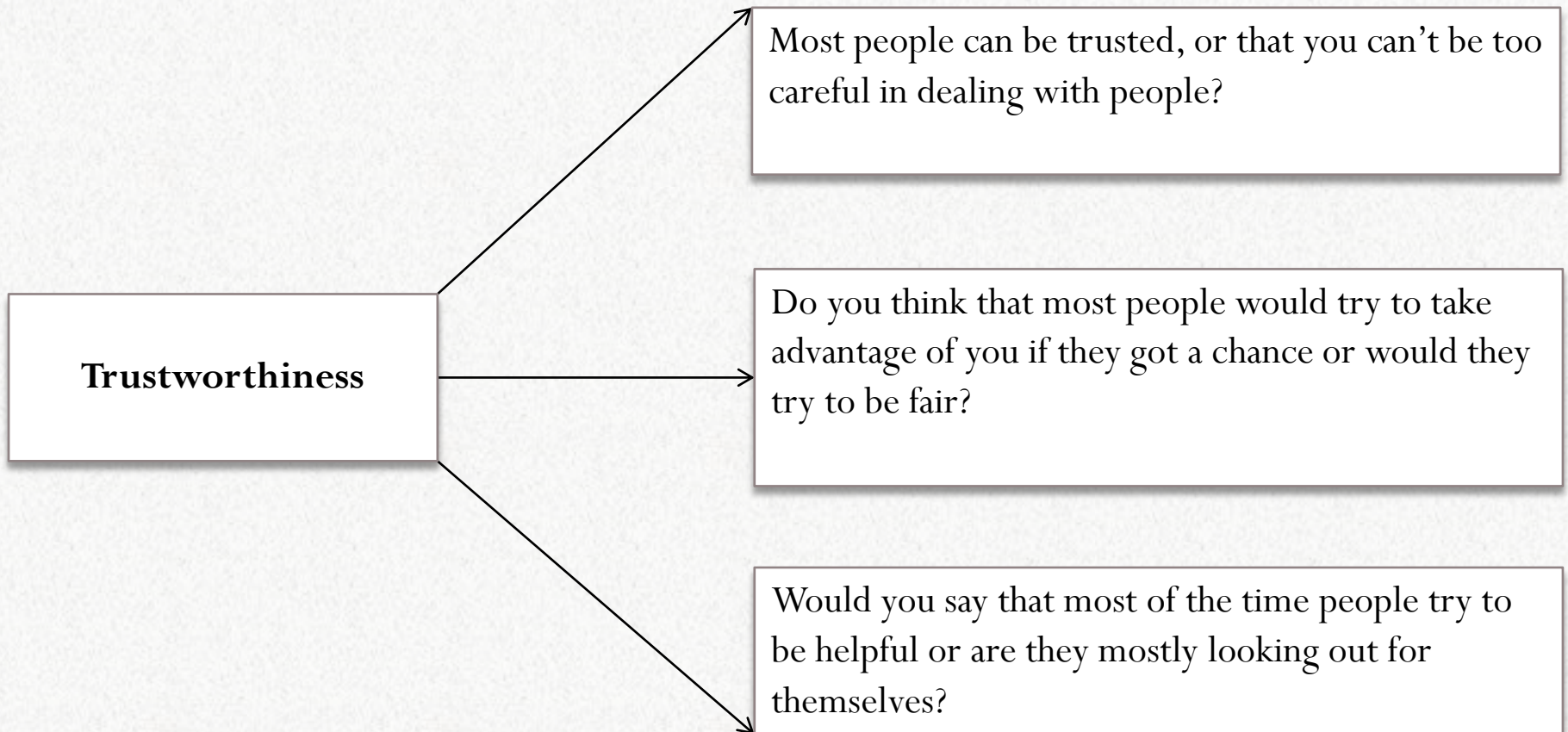
M. Rosenbergs` s “Faith in people scale”

- 1. Some people say that most people can be trusted. Others say you can't be too careful in your dealings with people. How do you feel about it?**
- 2. Would you say that most people are more inclined to help others, or more inclined to look out for themselves?**
- 3. If you don't watch yourself, people will take advantage of you.**
- 4. No one is going to care much what happens to you, when you get right down to it.**
- 5. Human nature is fundamentally co-operative.**

Justification 2

*Full metric invariance of trustworthiness indicators
in ESS1 and ESS2*

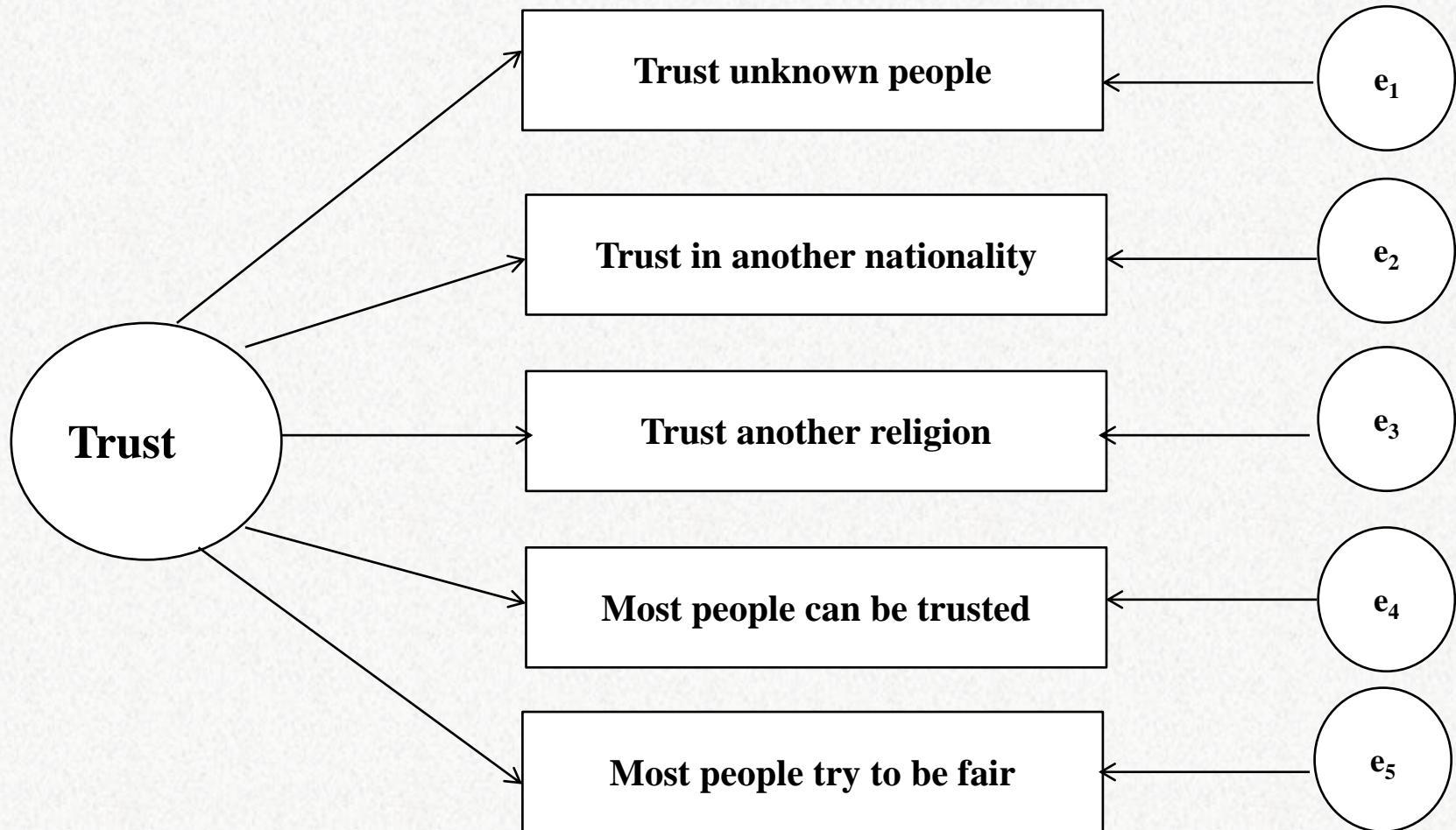
(Reeskens & Hooghe, 2008)



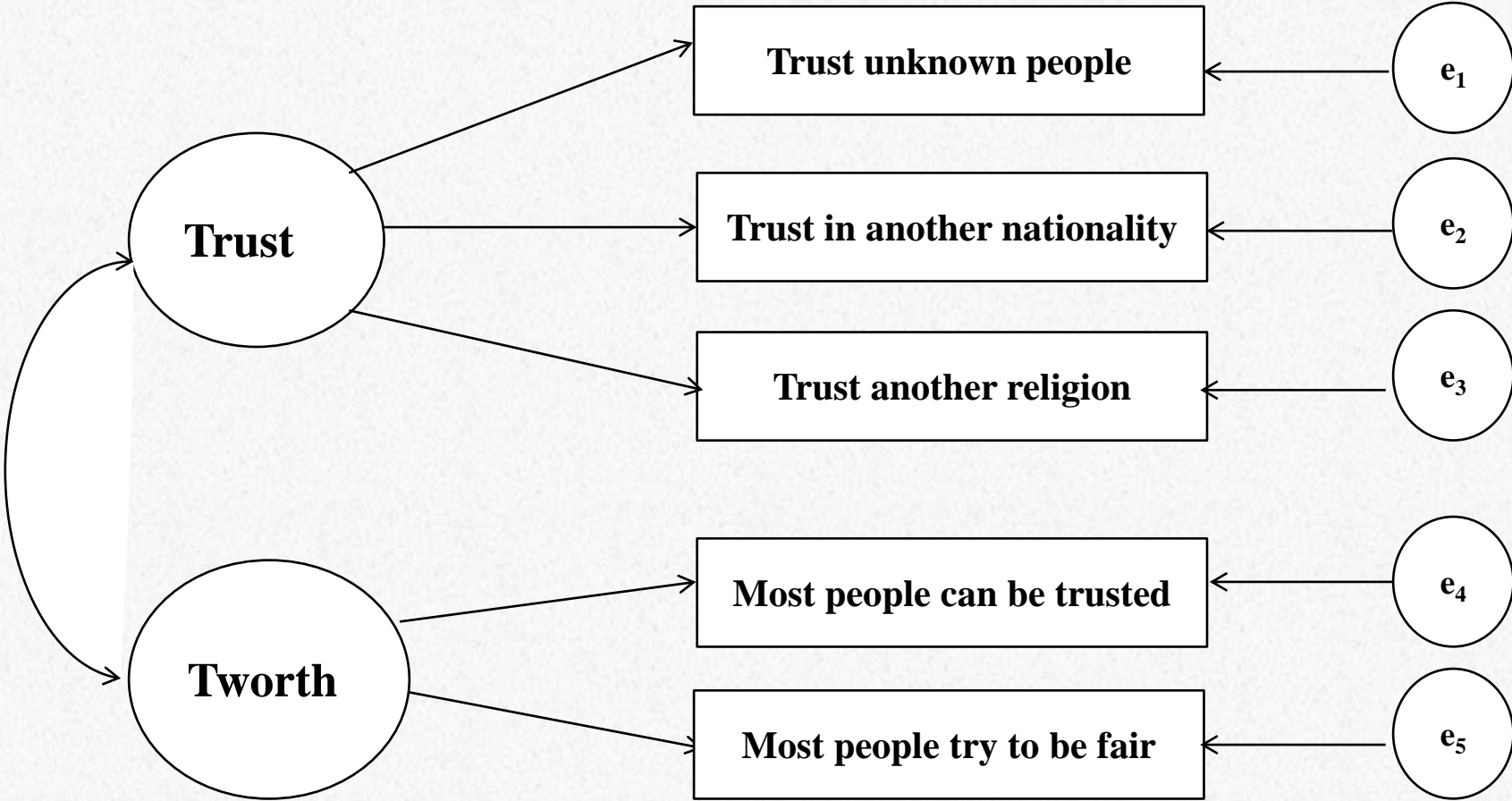
Method and Strategy

- Confirmatory factor analyses with WLS estimator and missing data
- Two-step strategy:
 - Test of one-dimensionality of trust and trustworthiness
 - Test of two-dimensionality of trust and trustworthiness

Model 1
One factor

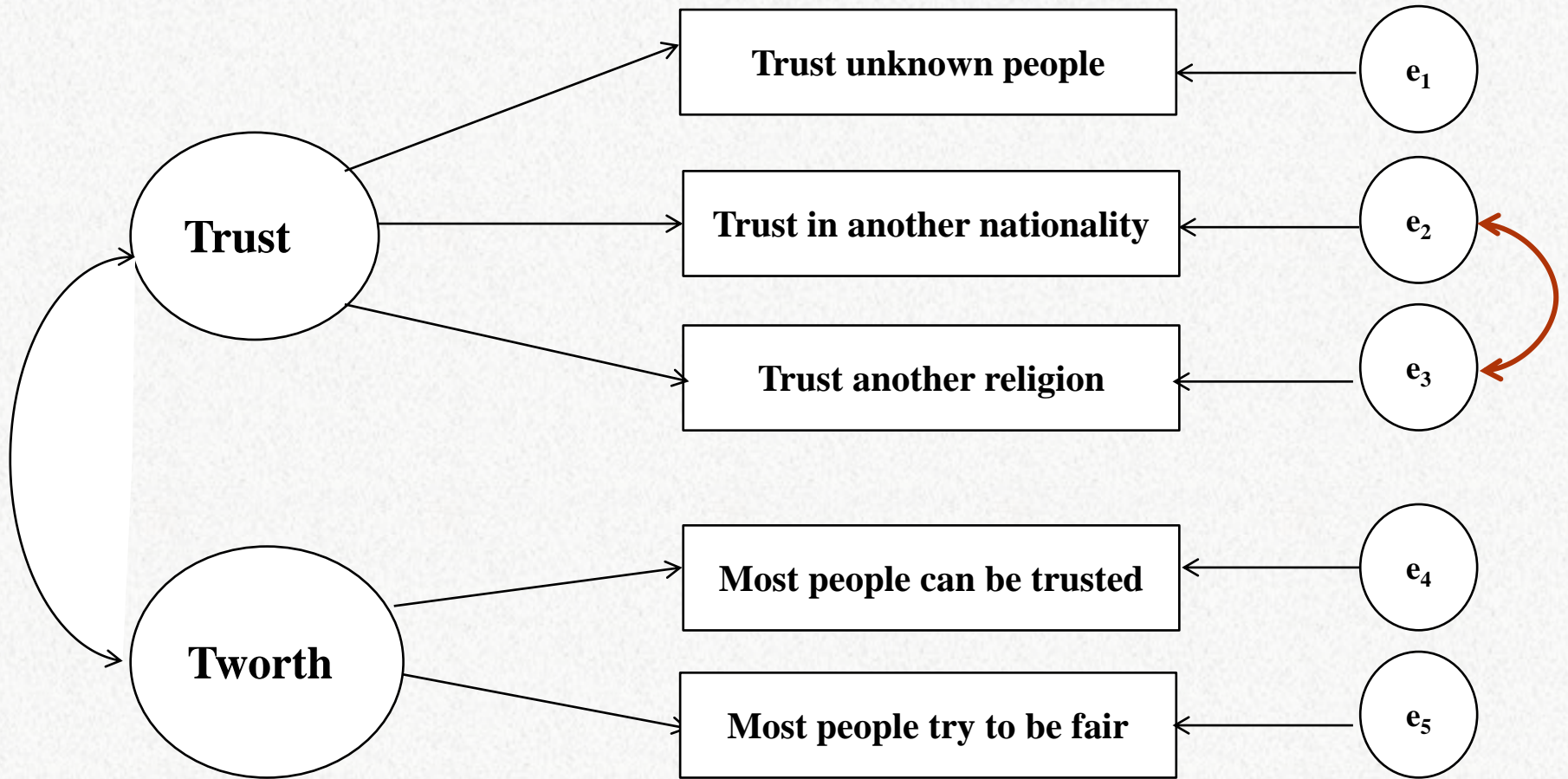


Model 2
Two factors



Model 3

Tree factors, correlated errors



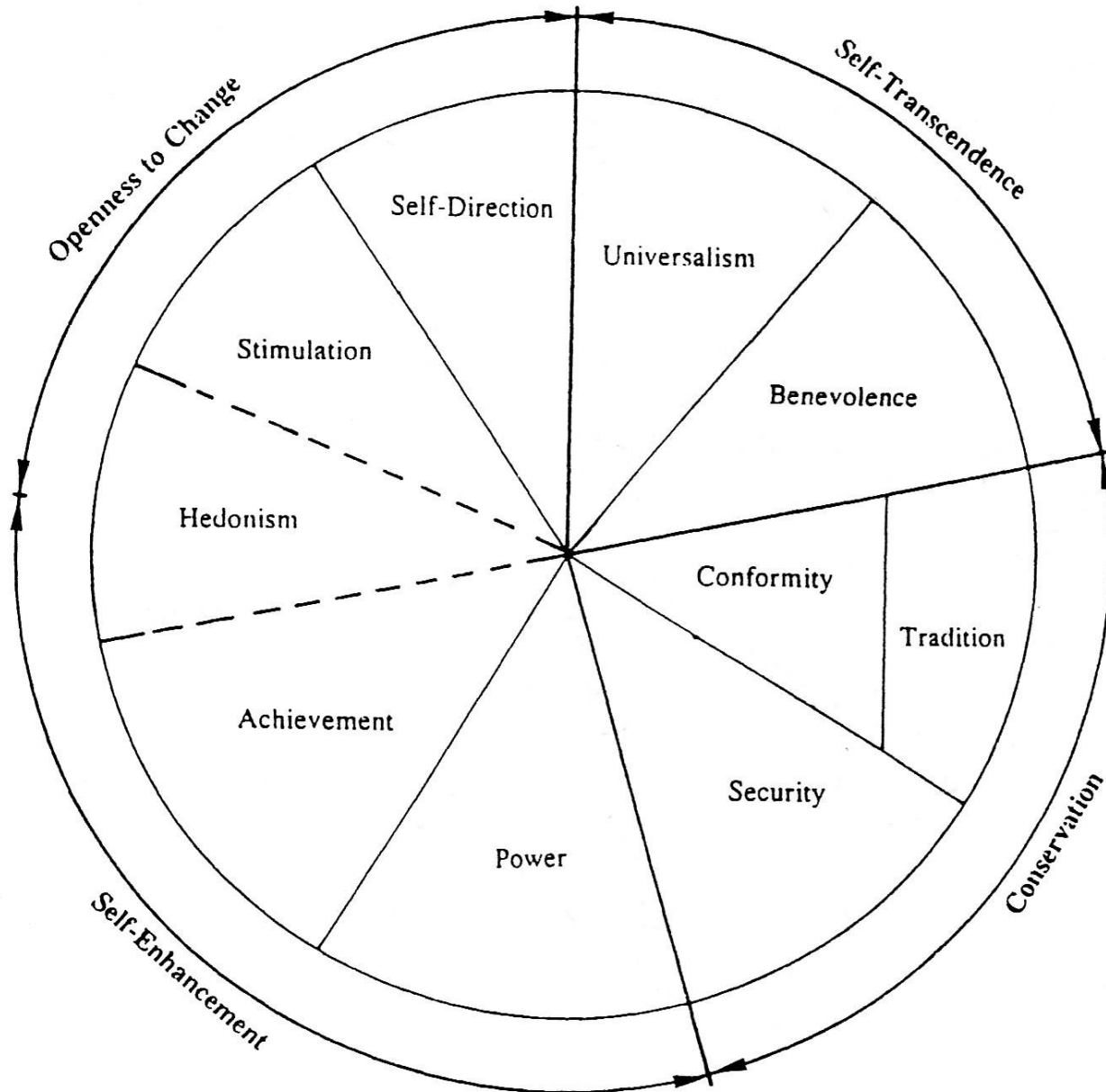
Results for pooled WVS5 data-set

	Model 1 (one factor)	Model 2 (two factors)	Model 3 (two factors, correlated errors)
Chi-Square	6118.372	3606.271	56.437
Degrees of freedom	5	4	3
P-value	0.000	0.000	0.000
Chi/df	1223.674	901.567	18.812
	0.129	0.111	0.016
RMSEA	(0.126-0.132)	(108-0.114)	(0.012-0.019)
CFI	0.981	0.989	1.000
TLI	0.963	0.973	0.999
WRMR	12.661	8.754	1.010

Question 3

What are the determinants and outcomes of trust and trustworthiness?

Schwartz Values



Schwartz Values

Power	It is important to this person to be rich; to have a lot of money and expensive things
Achievement	Being very successful is important to this person; to have people recognize one's achievements
Hedonism	It is important to this person to have a good time; to spoil oneself
Universalism	Looking after the environment is important to this person; to care for nature
Benevolence	It is important to this person to help the people nearby; to care for their well-being
Stimulation	Adventure and taking risks are important to this person; to have an exciting life
Self-direction	It is important to this person to think up new ideas and be creative; to do things one's own way
Tradition	Tradition is important to this person; to follow the customs handed down by one's religion or family
Conformity	It is important to this person to always behave properly; to avoid doing anything people would say is wrong
Security	Living in secure surroundings is important to this person; to avoid anything that might be dangerous

Determinants of Trust and Perceived Trustworthiness

Personal

Personality	⇒	Schwartz Values
Socio-Demographics	⇒	Gender Age Education Household Income (in income quintiles)
Well-Being	⇒	Life Satisfaction (from 1 = dissatisfied to 10 = satisfied)

Community

Civic Involvement	⇒	Association Membership Participation in Elite-Challenging Actions
Religious belonging	⇒	Religious Denomination

Societal

Institutional trust	⇒	Confidence (Police, Courts, Parties, Gov. and Parl.)
Societal Characteristics	⇒	Level of Development (Human Development Index) Level of Democracy (Average FH/Polity score) Ethnic Fractionalization (from Alesina et al. 2003)

Determinants of Trust and Perceived Trustworthiness

- Empirical Analysis
 - Pooled individual-level analysis across a sample of 52,068 individuals from 45 countries (using WVS5 data)
- Dependent Variable
 - Categorical variable capturing combination between perception about the trustworthiness of others and trust in unknown people
- Estimation: Multinomial Logistic Regression
 - *Allowing for country clustered error terms*
 - *Combination D – i.e. you cannot be too careful, low trust in unknown people – as base outcome*

Hypotheses

- H1. People with higher level of universalism, benevolence, and self-direction are more likely trust the trustworthy (norm-driven trust).
- H2. People who take part in elite-challenging actions and formal organizations are more likely to trust the trustworthy (norm-driven trust).
- H3. People who have higher level of institutional confidence are more likely to trust the trustworthy (norm-driven trust).
- H4. People with higher level of stimulation/risk taking are less likely to trust the untrustworthy (rational trust).
- H4a. People with higher level of stimulation/risk taking are more likely to trust the untrustworthy (rational trust).
- H5. People with higher level of conformity, tradition, achievement, power, security and hedonism are more likely not to trust the trustworthy (particularized trust).

Determinants of Trust and Perceived Trustworthiness (Multinomial Logistic Regression Results)

	Not trusting the trustworthy (most people can be trusted, distrust unknown) PT	Trusting the untrustworthy (cannot be too careful, trust unknown) RT	Trusting the trustworthy (most people can be trusted, trust unknown) NDT
Self-direction	0.945*	1.025	1.025
Security	0.838***	0.897**	0.783***
Achievement	0.913**	0.934**	0.837***
Stimulation	0.998	1.062**	1.059
Conformity	0.915**	0.979	0.882***
Universalism	0.970	1.016	1.092*

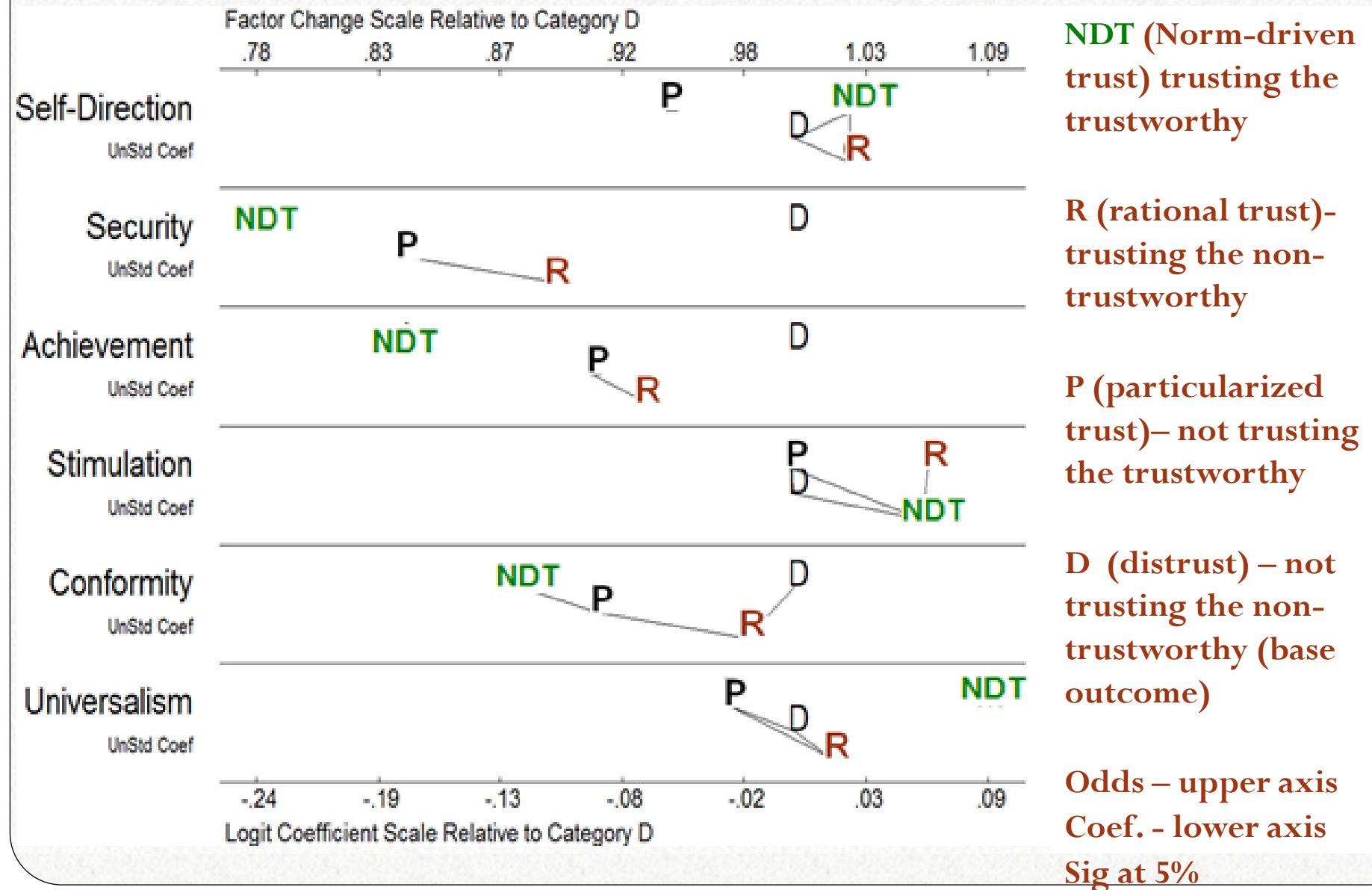
Levels of significance: *** < 0.001, ** < 0.01, * < 0.05. Calculation with centered values. Odds Ratios reported

Determinants of Trust and Perceived Trustworthiness (Multinomial Logistic Regression Results)

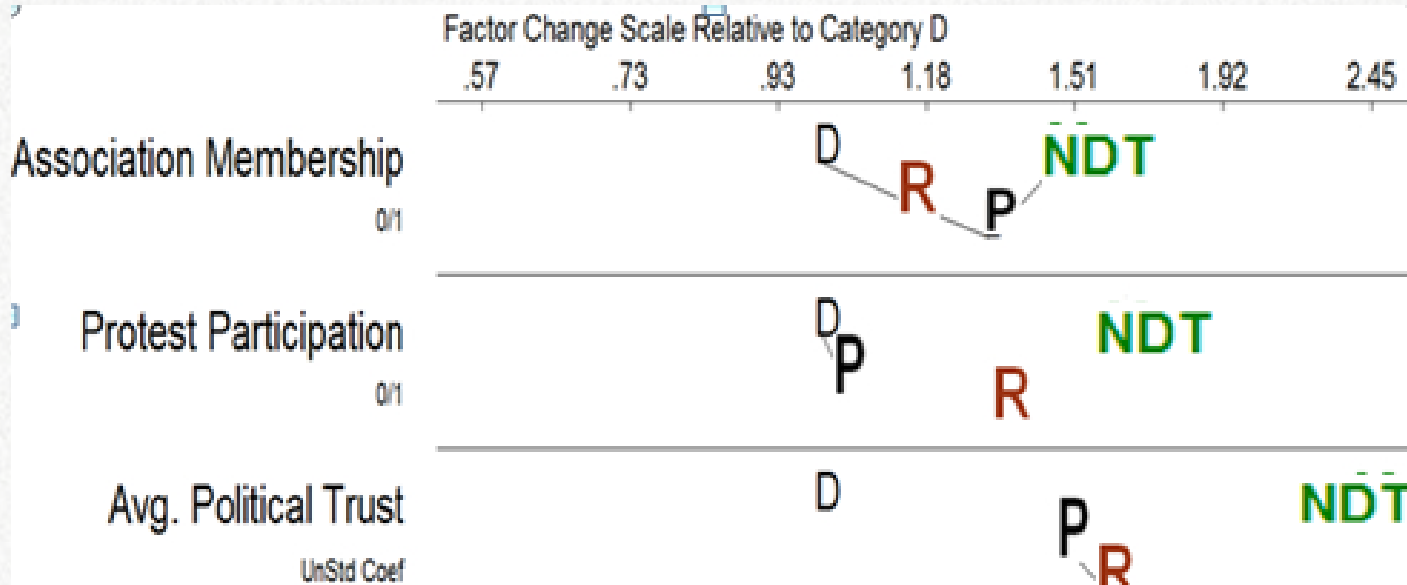
	Not trusting the trustworthy (most people can be trusted, distrust unknown) PT	Trusting the untrustworthy (cannot be too careful, trust unknown) RT	Trusting the trustworthy (most people can be trusted, trust unknown) NDT
Membership	1.311***	1.148	1.468***
Protest	1.028	1.345***	1.628***
Roman Catholic	0.572***	0.927	0.586***
Institutional Trust	1.490***	1.585***	2.452***
HDI	4.196	0.358	25.08**
Average FH/Polity	0.889**	1.065	1.010

Levels of significance: *** < 0.001, ** < 0.01, * < 0.05. Calculation with centered values. Odds Ratios reported

Determinants of Trust and Perceived Trustworthiness (Multinomial Logistic Regression Results)



Determinants of Trust and Perceived Trustworthiness (Multinomial Logistic Regression Results)



NDT (norm-driven trust) – trusting the trustworthy

R (rational trust)-trusting the non-trustworthy

P (particularized trust) – not trusting the trustworthy

D – not trusting the non-trustworthy (base outcome)

Odds – upper axis

Coef. - lower axis

Sig at 5%

Summary

- Main Findings
 - Perceived trustworthiness and trust in strangers do not match perfectly;
 - Benevolence, hedonism, power and tradition have no impact on trust types.
 - People who have higher level of universalism, trust in institutions, protest participation are more likely trust the trustworthy.
 - People who have lower levels of achievement, self-direction, security and conformity are more likely to trust the trustworthy.

Thank you for your attention



Disentangling Trust and Perceived Trustworthiness

Towards a more distinguished analysis of trust

Anna Almakaeva

aalmakaeva@hse.ru

Nicolas Griesshaber

nicolas.griesshaber@hu-berlin.de

Social psychology of economic and cultural change

Moscow

June 10-11, 2014

Results for pooled WVS5 data-set

	Model 3 (two factors, correlated errors)	Model 4 (one factor Correlated errors)	Model 4 (one factor Fairness dropped)	Model 5 (model 4 with correlated errors)
Chi-Square	56.437	2670.500	2749.553	86.440
Degrees of freedom	3	4	2	1
P-value	0.000	0.000	0.000	0.000
Chi/df	18.812	667.625	1374.776	86.440
RMSEA	0.016 (0.012-0.019)	0.095 (0.092-0.098)	0.137 (0.133-0.141)	0.034 (0.028-0.040)
CFI	1.000	0.992	0.992	1.000
TLI	0.999	0.980	0.975	0.998
WRMR	1.010	8.149	9.006	1.181

The share of trusting the non-trustworthy

	WVS5	WVS6
Rwanda	32.7%	31.8%
France	30.6%	
Mali	26.9%	
United Kingdom	25.4%	
S Africa	23.4%	29.8%
Burkina Faso	23.1%	
Canada	21.5%	
Spain	20.8%	23.3%
Ghana	20.3%	



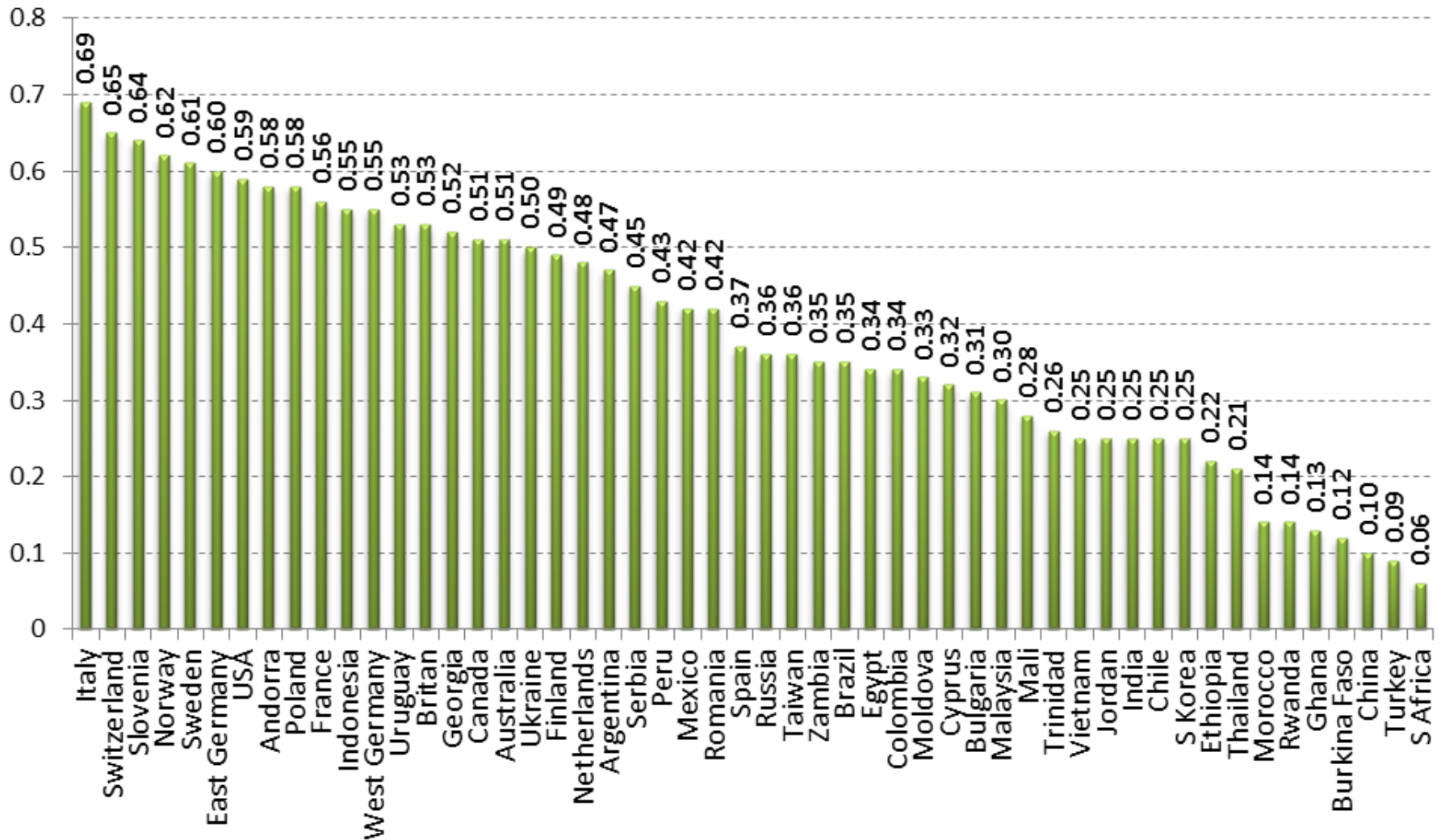
The share of trusting the non-trustworthy

Country	WVS5	WVS6
Rwanda	32.7	31.8
S Africa	23.4	29.8
Spain	20.8	23.3
Argentina	19.9	15.7
Trinidad and Tobago	19.6	17.5
Egypt	18.7	21.1
Australia	17.2	12.1
Uruguay	17.1	18.4
USA	16.8	14.6
Poland	12.3	12.8
Taiwan	11.4	13.1

The share of trusting the non-trustworthy

Qatar	23.0
Lebanon	22.5
Egypt	21.1
Chile	19.9

Correlations between trust in most people and trust in strangers, WVS5



Societal Relevance

- Societal Relevance of different combinations between trust in strangers and perceptions about trustworthiness of others
 - ➔ Phenomenon that attracted considerable attention - *Corruption*
- Expectations:
 - High levels of trust and honesty should lead to adherence to existing norms → *high trust*
combined with *high trustworthiness* is related to *lower corruption*
 - If perception of trustworthiness of others is expression of trust in close contacts instead of generalized others, people rather adhere to group obligations than universal norms → *low outward trust* is not related to *lower corruption*
 - If people are willing to *trust unknown* people despite *doubts about the integrity* of others, they might still adhere to existing norms → connected to *lower corruption*
- Analysis:
 - Cross-country OLS regressions across 48 countries
 - Transparency International's Corruption Perception Index as DV
 - Percentage of respondents in individual trust types as IVs
 - HDI and average Freedom House/Polity measure as controls

Societal Relevance

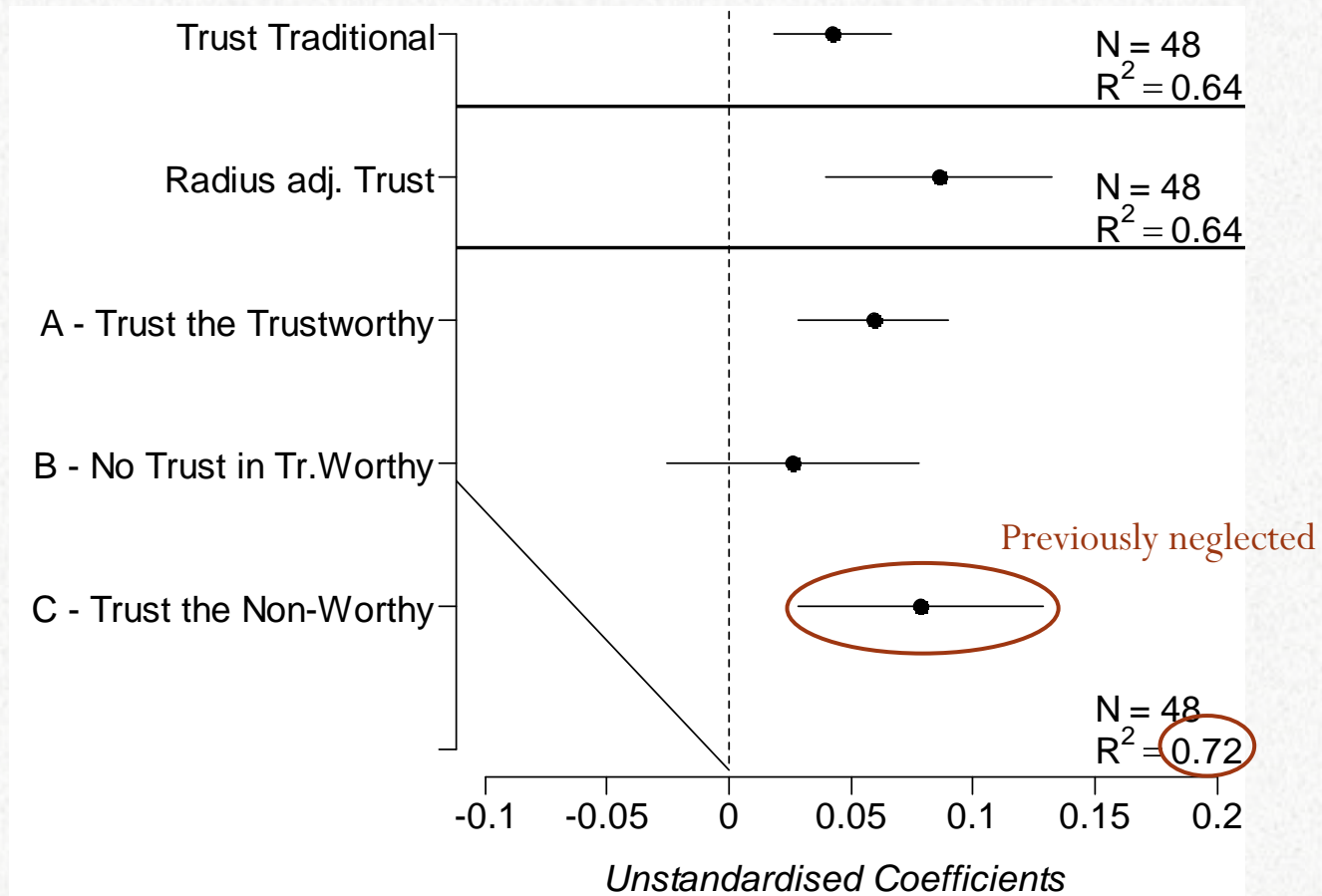
DV - CPI 2008	(1)	(2)	(3)	(4)
Traditional Trust Measure		0.0424** (0.0124)		
Radius Adjusted Gen. Trust (Delhey et al. 2011)			0.0862*** (0.0236)	
Not trusting trw				0.0261 (0.0263)
Trusting the n. trw				0.0786** (0.0257)
Trusting the trw				0.0592*** (0.0156)
HDI 2005	7.551*** (1.360)	5.057** (1.494)	4.925** (1.477)	6.351*** (1.274)
Average FH/Polity II 2005	0.203** (0.0700)	0.275** (0.0840)	0.271** (0.0828)	0.178* (0.0867)
Constant	-1.944* (0.859)	-1.879* (0.794)	-1.788* (0.784)	-3.097** (1.143)
Observations	48	48	48	48
Adjusted R ²	0.558	0.636	0.643	0.717
F	32.82	30.60	32.23	41.67

Table shows ols regression results using Transparency International's corruption perceptions index from 2008 as dependent. Non-standardized coefficients reported, robust standard errors in parentheses.

Significance Levels: *** p<0.001, ** p<0.01, * p<0.05

Societal Relevance

- Types of Trust and Corruption - Empirical Results



Graph shows OLS regression coefficients with 95% confidence intervals. All three models control for HDI and an average Freedom House/Polity score.