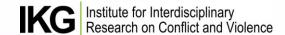


Institutions and marketized mentality A multilevel analysis of Institutional Anomie Theory assumptions

--- progress report ---

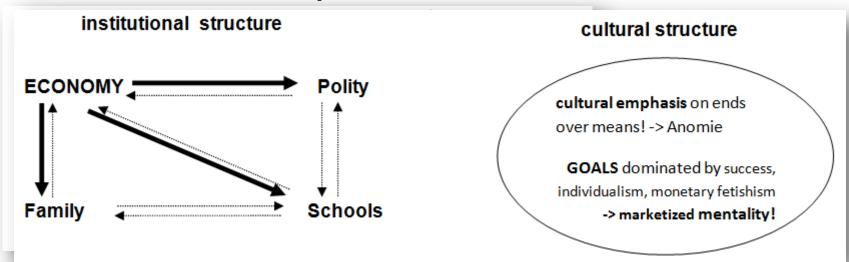
4th LCSR International Conference "Cultural and Economic Changes in Cross-National Perspective" St. Petersburg, November 11th, 2014

Andreas Hövermann and Eva Groß

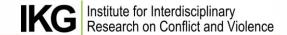


Introduction

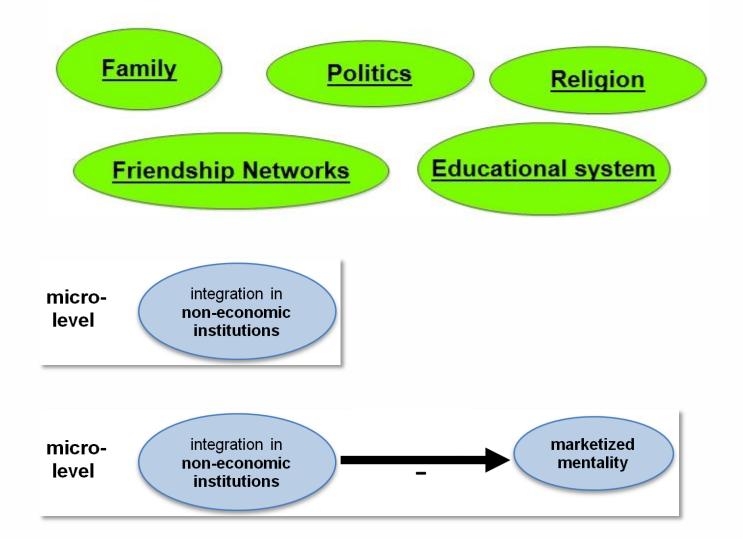
How do marketization processes affect institutions and cultures?



- Institutions and Culture of societies are dominated by economy and results in Anomie and high crime-rates (Messner & Rosenfeld, 1997)
- we have shown that economically dominated institutions and cultures can be transferred to the micro-level and to explain also prejudices
- Testing essential tenets of Institutional Anomie Theory by applying it to the micro-level and to a multi-level-design: the multi-level interplay of institutions and culture



Leading hypotheses



Leading hypotheses

macrolevel

H1

economic dominance in institutional structure

strong noneconomic institutions

> marketized mentality

H2

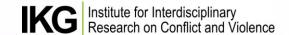
macrolevel

economic dominance in institutional structure

strong noneconomic institutions

integration in micronon-economic level institutions

marketized mentality



Data



- survey measures the attitudes, beliefs and behavior patterns of individuals in 26 European nations
- using the fifth (2010) round of the data
- n = ca. 50.000
- Further macro-indicator sources:





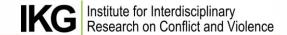




Intelligence Unit



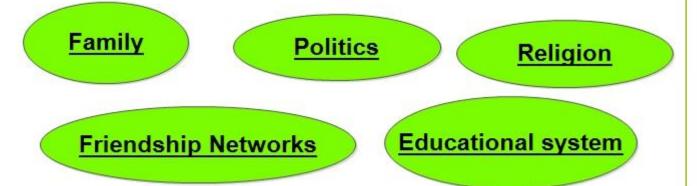


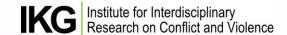


Operationalisations

macro-indicators







macro-indicator Economic Dominance

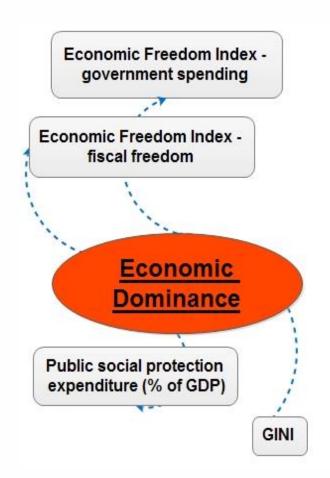
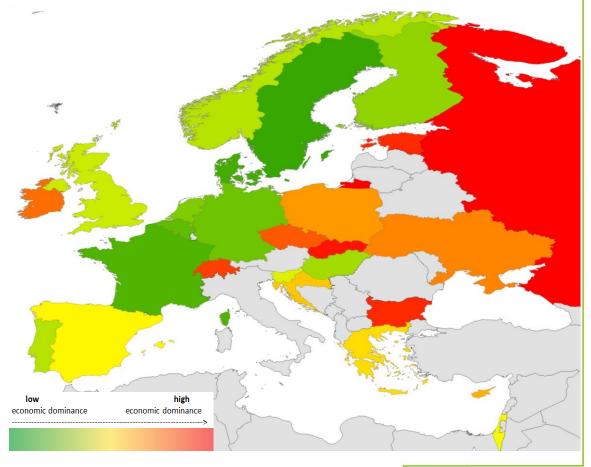
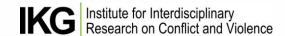


Table 1. Economic Dominance for the 26 considered European countries

RUS	SLK	EST	BUL	СН	CZ	IRE	UKR	POL	CYP	CRO	GRE	ESP
1,84	1,61	1,36	1,36	0,96	0,81	0,75	0,65	0,57	0,55	0,43	-0,07	-0,09
ISR	SLO	UK	POR	NOR	HU	FIN	NL	GER	BEL	F	DK	SWE
-0,12	-0,15	-0,22	-0,48	-0,48	-0,50	-0,72	-0,77	-0,85	-1,70	-1,84	-2,21	-2,38





macro-indicator Family institution

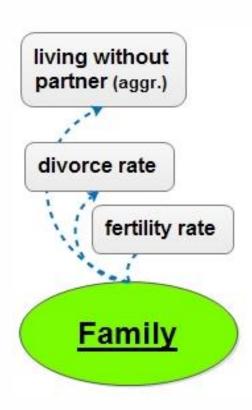
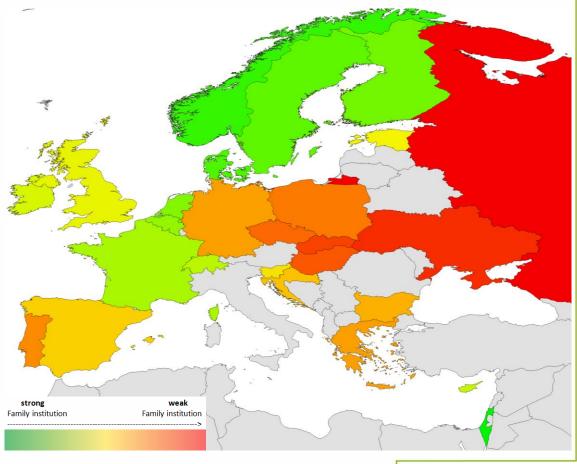
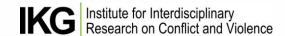


Table 2. Family institution for the 26 considered European countries

RUS	UKR	SLK	HU	CZ	POL	POR	GER	GRE	BUL	CRO	ESP	SLO
-3,92	-2,41	-1,60	-1,43	-1,32	-1,27	-1,08	-1,02	-1,02	-0,60	-0,54	-0,47	-0,32
EST	UK	IRE	CYP	СН	F	BEL	NL	FIN	SWE	DK	NOR	ISR
-0,25	0,04	0,37	0,52	0,54	0,66	1,07	1,08	1,24	1,57	1,91	2,32	5,93





macro-indicator Politics institution

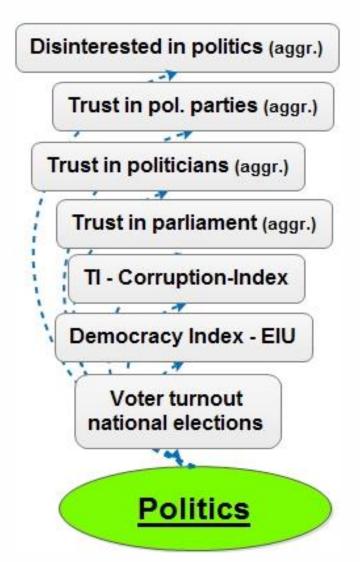
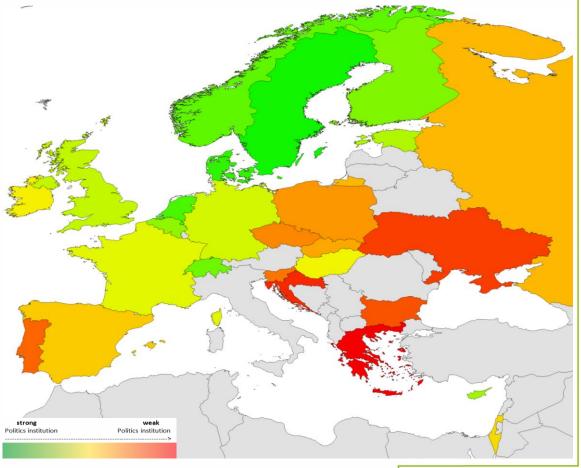
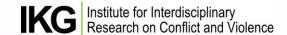


Table 3. Politics institution for the 26 considered European countries

GRE	CRO	UKR	BUL	POR	SLO	CZ	POL	SLK	RUS	ESP	ISR	IRE
-1,66	-1,43	-1,34	-1,20	-1,03	-0,83	-0,61	-0,58	-0,46	-0,40	-0,30	-0,27	-0,15
HU	F	GER	UK	EST	CYP	BEL	FIN	СН	NOR	NL	DK	SWE
0.43			0.40	0.40	0.07	0.40	4.44	4.46	4 55	1.60	4.67	1,72





macro-indicator Religion institution

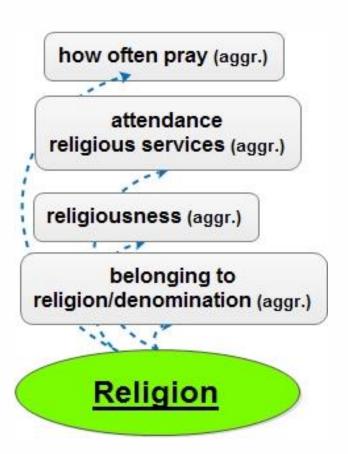
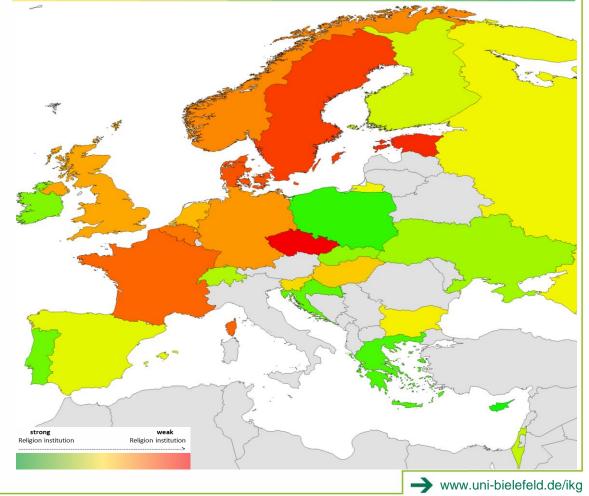
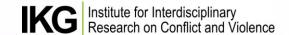


Table 4. Religion institution for the 26 considered European countries

CZ	EST	SWE	DK	F	BEL	NOR	GER	UK	NL	HU	SLO	BUL
-1,69	-1,35	-1,21	-0,99	-0,88	-0,81	-0,77	-0,63	-0,56	-0,45	-0,41	-0,37	-0,29
RUS	ESP	FIN	ISR	СН	UKR	SLK	IRE	POR	CRO	GRE	POL	CYP
-0,27	-0,09	-0,06	0,11	0,18	0,73	1,06	1,12	1,13	1,29	1,60	1,74	1,86





macro-indicator Friendship-Networks institution

Table 5. Friendship-networks institution for the 26 considered European countries

UKR	GRE	CZ	RUS	SLK	CYO	HU	CRO	BUL	EST	IRE	POL	SLO
-1,60	-1,42	-1,31	-1,25	-1,17	-1,01	-0,84	-0,83	-0,81	-0,52	-0,14	0,00	0,00
ISR	F	POR	ESP	UK	BEL	GER	FIN	SWE	СН	NL	NOR	DK
0,05	0,14	0,16	0,50	0,55	0,90	1,08	1,17	1,22	1,49	1,50	1,79	1,85

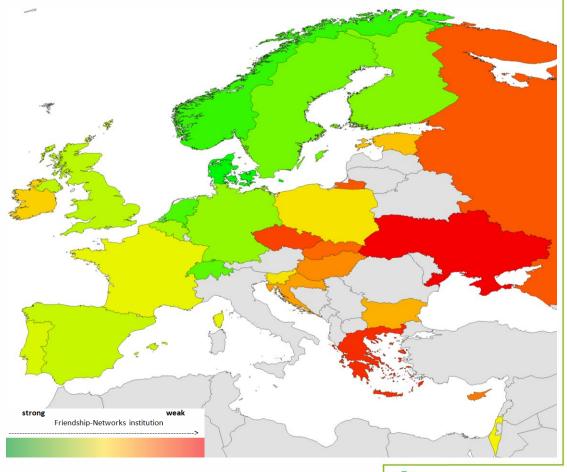
Friendship Networks

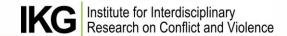
how often socially meet friends/colleagues (aggr.)

Noone to discuss intimate and personal matters (aggr.)

Taking part in soc. activities (aggr.)

how often lonely (aggr.)





macro-indicator Education institution

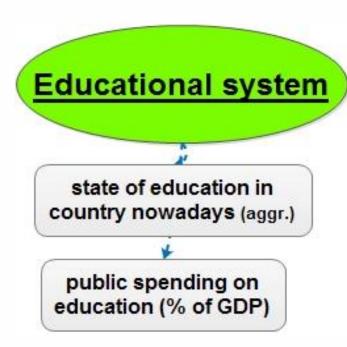
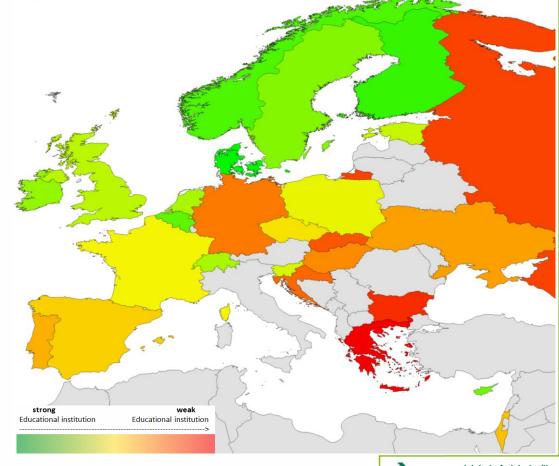
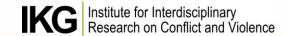


Table 6. Educational institution for the 26 considered European countries

GRE	BUL	RUS	SLK	CRO	GER	HU	UKR	POR	ISR	ESP	CZ	F
-2,25	-1,70	-1,55	-1,01	-0,87	-0,80	-0,71	-0,67	-0,56	-0,52	-0,50	-0,46	-0,33
POL	SLO	FST	ПК	СН	NI	IRF	SWE	CYP	BEI	NOR	FIN	DK
POL	SLO	EST	UK	СН	NL	IRE	SWE	CYP	BEL	NOR	FIN	DK





intercorrelation macro-indicators

Table 7. Pearson Correlation of Economic Dominance with non-economic Institutions on the macro-level

	Religion	Friends	Politics	Education	Family	marketized mentality (macro)
Economic Dominance	I .31***	67***	49***	49***	48***	.66***

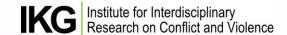
As expected: Economic Dominance is negatively correlated with non-economic institutions besides Religion

macro-indicators & GDP

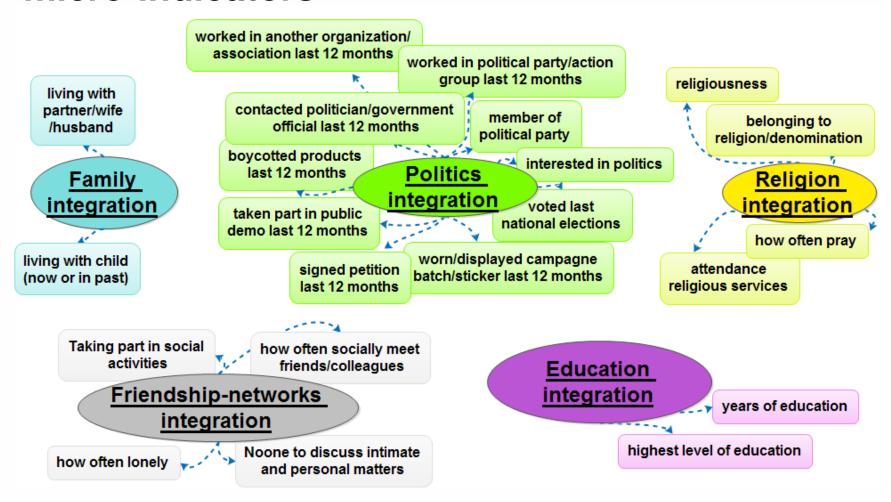
Table 8, Pearson Correlation of GDP with Economic Dominance and non-economic Institutions on the macro-level

	Economic Dominance	Religion	Friends	Politics	Education	Family	marketized mentality (macro)
GDP per capita PPP (\$)	52***	25***	.81***	.77***	.61***	.49***	63***

The richer the country, the stronger the politics, friends, education, family and the lesser the economic dominance – exception again Religion



micro-indicators



marketized mentality = (Power + Achievement) – (Benevolence + Universalism)

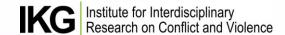


Table 9. Results from Multilevel analyses, mo

Marketized	mo	 del 1
Mentality (mm)	(HLM: I	Nullmodell)
	b (β)	P
Level 1 (N=49666		dents)
Integration politics		
Integration friends		
Integration religion		
Integration education	1	
Integration family		
Level 2 (N=26 cou	ntries)	
Politics		
Education		
Family		
Friends		
Religion		
Economic dominance		
Random slopes (v	ariance	es)
mm on politics		
mm on friends		
mm on religion		
mm on education		
mm on family		
Level 1 R ² (σ ²)	$\sigma^2 =$	4.37***
Level 2 R ² (τ(00))	τ	(00)=
	0.5	7/***
ICC (mm)		0.116
Chi ² (df)		
CFI		,000
RMSEA		0.000
SRMR within		0.000
SRMR between		0.000
Log Likelihood/AIC		177.492/
	214	360.985

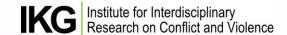
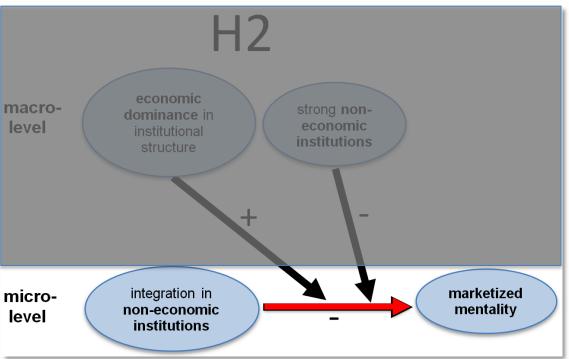


Table 9. Results from Multilevel analyses, models 1-6

Marketized Mentality (mm)		del 1 Nullmodell)	model	12		
	b (β)	P	b (β)	р		
Level 1 (N=49666	respon	dents)				
Integration politics			-0.11 (-0.06)	0.000		
Integration friends			0.06 (0.03)	0.010		
Integration religion			-0.24 (-0.12)	0.000		
Integration education	1		0.07 (0.04)	0.000		
Integration family			-0.14 (-0.09)	0.000		
Level 2 (N=26 cou	intries)					
Politics						
Education						
Family						
Friends						
Religion						
Economic dominance	,					
Random slopes (v	ariance	es)				
mm on politics						
mm on friends						
mm on religion						
mm on education						
mm on family						
Level 1 R ² (σ ²)	$\sigma^2 =$	4.37***	R ² =0.0	33		
Level 2 R ² (τ(00))		(00)= 574***	$\tau(00) = 0.6$	36***		
ICC (mm)	0	.116	0.127			
Chi ² (df)			206.54	(5)		
CFI	_	,000	1.000			
RMSEA		.000	0.000			
SRMR within		0.000	0.000			
SRMR between		0.000	0.000			
Log Likelihood/AIC		177.492/	-95377.725/			
	2143	360.985	190771.450			



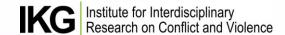
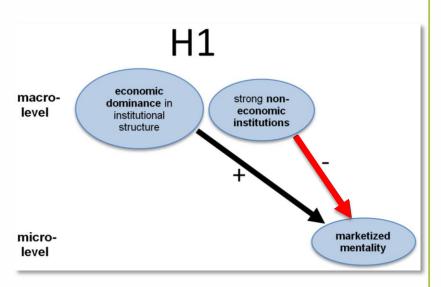


Table 9. Results from Multilevel analyses, models 1-6

Marketized		del 1	model	2	mod	lal 3
Mentality (mm)	(HLM: I	Vullmodell)	model		IIIOC	161 3
	b (β)	P	b (β)	p	b (β)	P
Level 1 (N=49666		dents)	-			
Integration politics			-0.11 (-0.06)	0.000		
Integration friends			0.06 (0.03)	0.010		
Integration religion			-0.24 (-0.12)	0.000		
Integration education	1		0.07 (0.04)	0.000		
Integration family			-0.14 (-0.09)	0.000		
Level 2 (N=26 cou	ntries)					
Politics					-0.15 (-0.19)	0.507
Education					-0.08 (-0.12)	0.544
Family					0.03 (0.06)	0.787
Friends					-0.33 (-0.46)	0.061
Religion					0.08 (0.10)	0.457
Economic dominance	,					
Random slopes (v	ariance	es)				
mm on politics						
mm on friends						
mm on religion						
mm on education						
mm on family						
Level 1 R ² (σ ²)	$\sigma^2 =$	4.37***	R ² =0.03	33	$\sigma^{2}=0$	4.37
Level 2 R ² (τ(00))	τ	(00)=	$\tau(00) = 0.63$	36***	R2=	τ(00)res=
	0.5	74***	.()		0.54***	0.46 ***
ICC (mm)	0	.116	0.127		0.1	16
Chi ² (df)			206.54 ((5)	17.55	55 (5)
CFI		,000	1.000			000
RMSEA		.000	0.000			000
SRMR within		.000	0.000			000
SRMR between		.000	0.000			000
Log Likelihood/AIC		177.492/			-107167.456 /	
	214	360.985	190771.4	450	21435	0.911



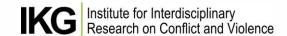
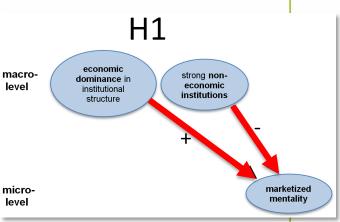


Table 9. Results from Multilevel analyses, models 1-6

Marketized Mentality (mm)		del 1 Vullmodell)	model	2	mod	lel 3	mod	el 4
interior (mini)	b (β)	P	b (β)	р	b (β)	P	b (β)	р
Level 1 (N=49666)		dents)					4/	
Integration politics			-0.11 (-0.06)	0.000				
Integration friends			0.06 (0.03)	0.010				
Integration religion			-0.24 (-0.12)	0.000				
Integration education			0.07 (0.04)	0.000				
Integration family			-0.14 (-0.09)	0.000				
Level 2 (N=26 cour	ntries)					_		
Politics					-0.15 (-0.19)	0.507	-0.24 (-0.32)	0.246
Education					-0.08 (-0.12)	0.544	-0.03 (-0.04)	0.812
Family					0.03 (0.06)	0.787	0.05 (0.12)	0.520
Friends					-0.33 (-0.46)	0.061	-0.17 (-0.24)	0.370
Religion					0.08 (0.10)	0.457	0.02 (0.03)	0.826
Economic dominance							0.24 (0.35)	0.039
Random slopes (va	riance	es)						
mm on politics								
mm on friends								
mm on religion								
mm on education								
mm on family								
Level 1 R ² (σ ²)	$\sigma^2 =$	4.37***	R ² =0.03	3	$\sigma^{2}=0$	4.37	$\sigma^2=4$.37
Level 2 R ² (τ(00))	τ((00)=	$\tau(00) = 0.63$	6***	R2=	τ(00)res=	R2=	τ(00)res
20101221 (0(00))		74***	(00) 0.02	· v	0.54***	0.46 ***	0.604***	=0.396
ICC (mm)	0	.116	0.127		0.1	16	0.1	16
Chi ² (df)			206.54 (5)	17.55	55 (5)	21.97	4 (6)
CFI	1	,000	1.000		1.0		1.00	
RMSEA	0	.000	0.000		0.0		0.00	
SRMR within	1	.000	0.000		0.0		0.00	
SRMR between	1	.000	0.000		0.000		0.000	
Log Likelihood/AIC	1	177.492/			-107167.456 /		-107165.544 /	
	2143	360.985	190771.4	150	21435	0.911	214349	9.087



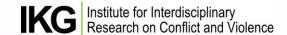


Table 9. Results from Multilevel analyses, models 1-6

Marketized Mentality (mm)	model 1 (HLM: Nullmodell)		model 2		mod	lel 3	mode	el 4	model 5		
• ` ′	b (β)	P	b (β)	р	b (β) P		b (β)	р	b (β)	р	
Level 1 (N=49666)	espon	dents)									
Integration politics			-0.11 (-0.06)	0.000					-0.11 (-0.00	6) 0.000	
Integration friends			0.06 (0.03)	0.010					0.06 (0.04	0.010	
Integration religion			-0.24 (-0.12)	0.000					-0.24 (-0.11	·	
Integration education			0.07 (0.04)	0.000					0.07 (0.04		
Integration family			-0.14 (-0.09)	0.000					-0.14 (-0.09	0.000	
Level 2 (N=26 cour	ntries)										
Politics					-0.15 (-0.19)	0.507	-0.24 (-0.32)	0.246	-0.22 (-0.2	8) 0.298	
Education					-0.08 (-0.12)	0.544	-0.03 (-0.04)	0.812	-0.06 (-0.0	9) 0.634	
Family					0.03 (0.06)	0.787	0.05 (0.12)	0.520	0.06 (0.14	0.465	
Friends					-0.33 (-0.46)	0.061	-0.17 (-0.24)	0.370	-0.18 (-0.24	1) 0.374	
Religion					0.08 (0.10)	0.457	0.02 (0.03)	0.826	0.02 (0.03	0.854	
Economic dominance							0.24 (0.35)	0.039	0.24 (0.35	0.046	
Random slopes (va	riance	s)									
mm on politics											
mm on friends											
mm on religion											
mm on education											
mm on family											
Level 1 R ² (σ ²)	$\sigma^2 = 4.37***$		R ² =0.033		σ²=4.37		σ²=4.37		R ² =0.030		
Level 2 R ² (τ(00))	$\tau(00)=0.574***$		τ(00)= 0.636***		R ² = 0.54***	τ(00)res= 0.46 ***	R ² = 0.604***	$\tau(00)$ res = 0.396	R ² =0.59 7***	τ(00)res= 0.403***	
ICC (mm)		.116	0.127		0.116		0.116		0.116		
Chi ² (df)	5.210		206.54 (5)		17.555 (5)		21.974 (6)		519.720 (16)		
CFI	0	,000	1.000		1.000		1.000		0.964		
RMSEA	0	.000	0.000		0.0	000	0.00	0	0.0	009	
SRMR within		.000	0.000		0.000		0.000		0.000		
SRMR between		.000	0.000		0.000		0.000		0.019		
Log Likelihood/AIC		177.492/	-95377.725/		-107167.456 /		-107165.544 /		-441386.625/		
	2143	360.985	190771.450		214350.911		214349	.087	882801.251		

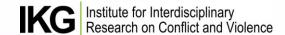
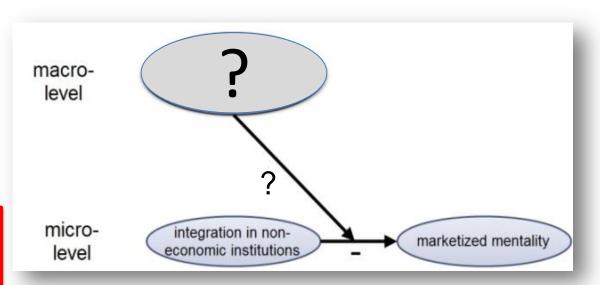


Table 10. Results from Multilevel analyses, models 7-11

Marketized Mentality (mm)	model 7			
	b	р		
Level 1 (N=49666 responden	ts)			
Integration politics	random			
Integration friends	random			
Integration religion	random			
Integrat. Education	random			
Integration family	random			
Level	2 (N=26 c	ountries)		
Politics	-0.43	0.027		
Education	-0.28	0.078		
Family	0.14	0.024		
Friends	0.19	0.407		
Religion	0.21	0.022		
Economic dominance	0.26	0.012		
Rand	n slopes (v	variances)		
mm on politics	0.008	0.002		
mm on friends	0.011	0.000		
mm on religion	0.014	0.019		
mm on education	0.011	0.006		
mm on family	0.004	0.001		
Randon	n slopes as	outcomes		
rs_politics on ecodo				
rs_friend on ecodo				
rs_religion on ecodo				
re aduc an acada				

-						
mm on education	0.01	0.006				
mm on family	0.00	4 0.001				
Rando	m slope	s as outcon	1es			
rs_politics on ecodo						
rs_friend on ecodo						
rs_religion on ecodo						
rs_educ on ecodo						
rs_family on ecodo						
rs_religion on education						
rs_educ on education						
rs_friend on family						
rs_educ on family						
rs_friend on friends						
rs_educ on friends						
Level 1 R ² (σ ²)	σ^2	σ²res=4.168				
Level 2 R ² (τ(00))	τ(0	0)= 0.344*				
ICC (Marketized mentality)		0.116				
Log Likelihood/AIC	-441156	.762/882361.52	4			



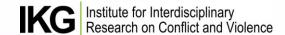
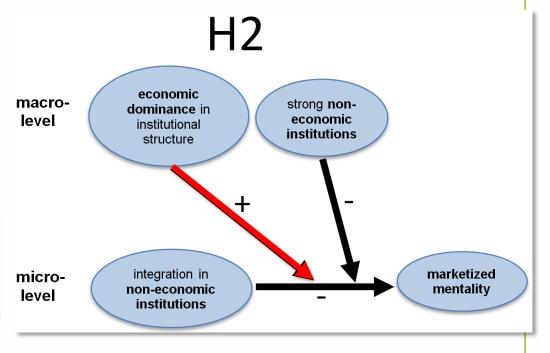


Table 10. Results from Multilevel analyses, models 7-11

Marketized Mentality (mm)	model 7		model 8			
* ` `	b p		b	р		
Level 1 (N=49666 respondent	ts)					
Integration politics	random		random			
Integration friends	random		random			
Integration religion	random		random			
Integrat. Education	random		random			
Integration family	random		random			
	2 (N=26 co					
Politics	-0.43	0.027	-0.44	0.025		
Education	-0.28	0.078	-0.28	0.083		
Family	0.14	0.024	0.14	0.023		
Friends	0.19	0.407	0.19	0.399		
Religion	0.21	0.022	0.21	0.025		
Economic dominance	0.26	0.012	0.28	0.042		
Randoi	n slopes (v	variances)				
mm on politics	0.008	0.002	res=0.006	0.015		
mm on friends	0.011	0.000	res=0.009	0.000		
mm on religion	0.014	0.019	res=0.013	0.016		
mm on education	0.011	0.006	res=0.009	0.001		
mm on family	0.004	0.001	res=0.004	0.001		
Randon	n slopes as	outcome				
rs_politics on ecodo			0.042	0.017		
rs_friend on ecodo			0.037	0.042		
rs_religion on ecodo			-0.015	0.456		
rs_educ on ecodo			0.041	0.044		
rs_family on ecodo			-0.008	0.469		
rs_religion on education						
rs_educ on education						
rs_friend on family						
rs_educ on family						
rs_friend on friends						
rs_educ on friends						
Level 1 R ² (σ ²)	σ²res=	4.168 $\sigma^2 \text{res} = 4.168$				
Level 2 R ² (τ(00))	τ(00)=	0.344*	$\tau(00) \text{ res} = 0.335*$			
ICC (Marketized mentality)	0.1	16	0.116			
Log Likelihood/AIC	-441156.762	/882361.524	-441149.518/8	82357.037		



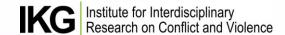
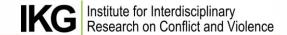


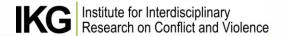
Table 10. Results from Multilevel analyses, models 7-11

Marketized Mentality (mm)	/		model 8		mode	model 9		model 10		model 11	
	b	p	b	p	b	р	b	р	b	р	
∠ev	112										
nteg	H2				random		random		random		
nteg					random		random		random		
iteg					random		random		random		
nteg					random		random		random		
macro- economic dominance i	n /	strong no	on-		random		random		random		
level institutional	'')(econom									
oliti structure		institutio	ns /		-0.44	0.025	-0.46	0.019	-0.44	0.023	
uc					-0.16	0.205	-0.27	0.095	-0.28	0.079	
mi					0.14	0.024	0.11	0.046	0.14	0.021	
ien					0.19	0.409	0.21	0.368	0.15	0.463	
elig	+		-		0.21	0.022	0.20	0.028	0.21	0.023	
on		1			0.27	0.012	0.27	0.013	0.26	0.012	
		1									
n (0.008	0.002	0.008	0.002	0.008	0.003	
m micro- integration in	n			marketized	0.011	0.000	res=0.009	0.000	res=0.009	0.001	
non-econom		_		mentality	res=0.011	0.027	0.014	0.021	0.014	0.019	
institutions	· /				res=0.010	0.009	res=0.006	0.033	res=0.008	0.001	
					0.004	0.001	0.004	0.001	0.004	0.001	
Random	slopes a	s outcomes	S								
olitics on ecodo			0.042	0.017							
riend on ecodo			0.037	0.042							
religion on ecodo			-0.015	0.456							
educ on ecodo			0.041	0.044							
family on ecodo			-0.008	0.469							
religion on education					-0.046	0.005					
educ on education					-0.030	0.129					
friend on family							-0.026	0.000			
_educ on family							-0.039	0.000			
_friend on friends									-0.043	0.002	
educ on friends									-0.057	0.004	
vel 1 R ² (σ ²)		=4.168	σ²res=4.168			σ^2 res=4.168		σ²res=4.168		σ^2 res=4.168	
evel 2 R ² (τ(00))		0.344*	τ(00) res		$\tau(00) \text{ res}=$		$\tau(00) \text{ res} = 0.335 \text{ n.s.}$		$\tau(00) \text{ res} = 0.341*$		
CC (Marketized mentality)	0.116		0.116		0.11	0.116		0.116		0.116	
ce (Marketized mentancy)				-441149.518/882357.037		-441153.397/882358.793		-441148.268/882348.536		/882352.552	



Conclusion

- better understanding of the interplay of institutions and culture on macro- and micro-level: state of institutions has an impact on culture of countries
- Economic dominance and weak non-economic institutions further marketized culture
- fruitful attempt to operationalize IAT (strength of Institutions, economic dominance, integration in institutions and marketized mentality)
- many tenets of IAT can be confirmed by multi-level modelling
- this research focuses on marketization processes with economic dominance as institutional imbalance since this is connected with crimes and prejudices, but other imbalances are conceivable



thank you very much for your attention!

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