Intrinsic Honesty and the Prevalence of Rule Violations across Societies

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Jonathan Schulz
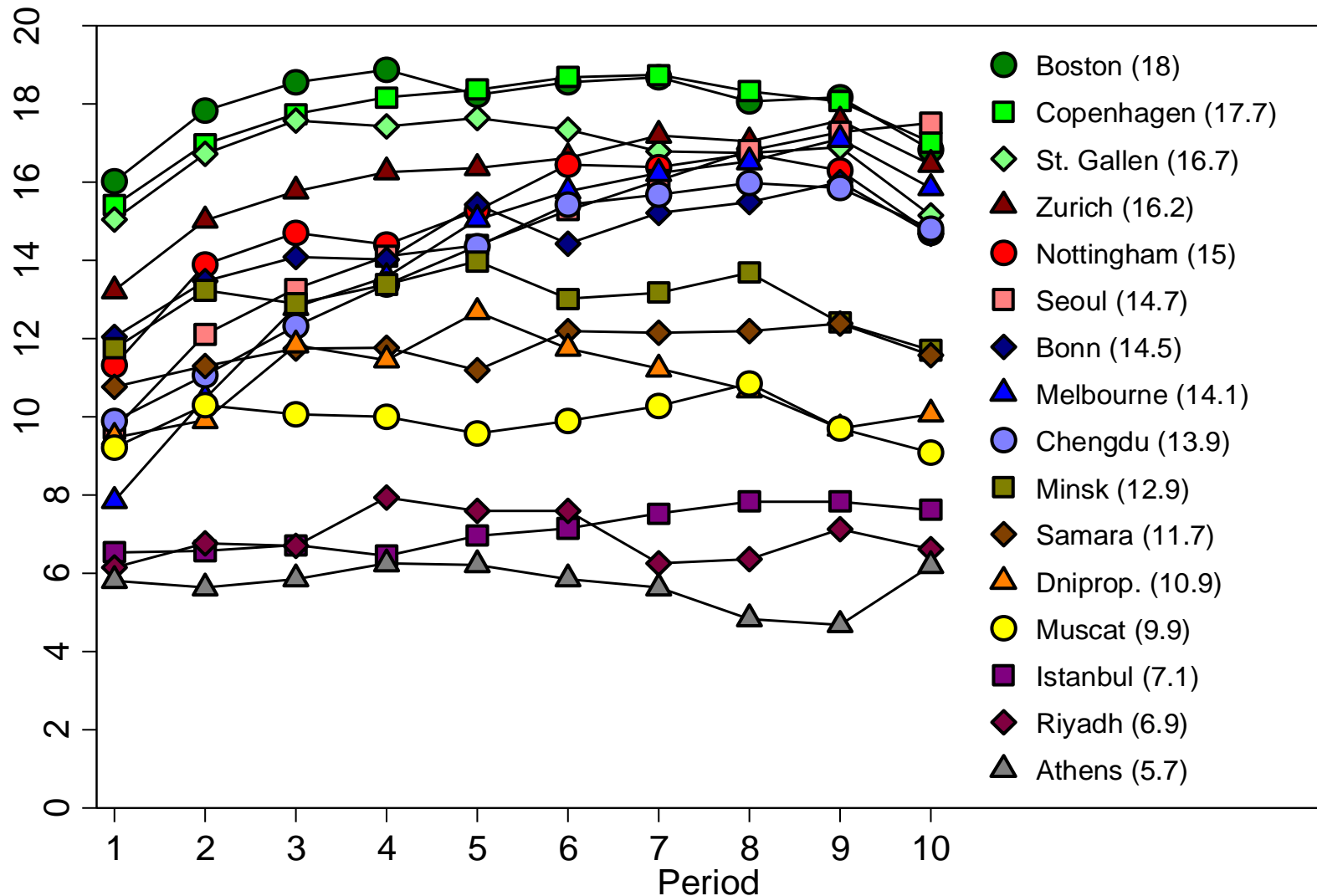
Yale University

World Bank, February 6, 2016

Understanding institutions and cultural differences is important

- Experimental economics approach: control rules of the game (= incentives).

- Comparing two countries ➔ "close-up" comparison

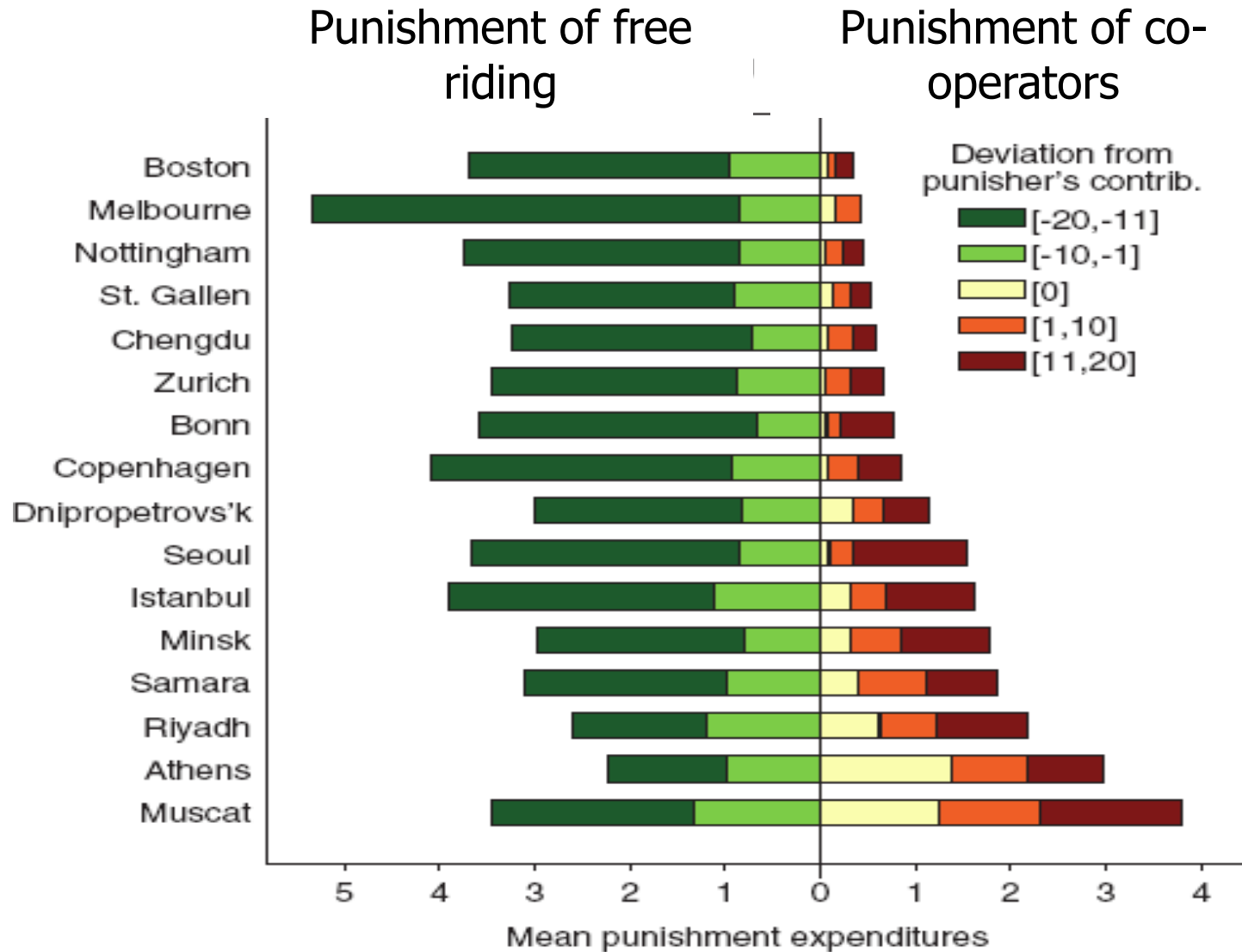- Comparing many countries ➔ get the "big picture"

Cooperation when punishment is possible

Herrmann, Thöni & Gächter, Science 2008

Antisocial Punishment Across Societies

Herrmann, Thöni & Gächter, *Science* 2008

$\chi^2(14)=23.1$, p=0.06 $\chi^2(14)=64.9$, p=0.000[4]

Motivation for this paper

- Good institutions that limit cheating (corruption, tax evasion, political fraud) are important for development and economic prosperity.

- But even very strong institutions cannot control all aspects of life. People's intrinsic honesty is also needed.

- But the quality of institutions and intrinsic honesty might be complements.
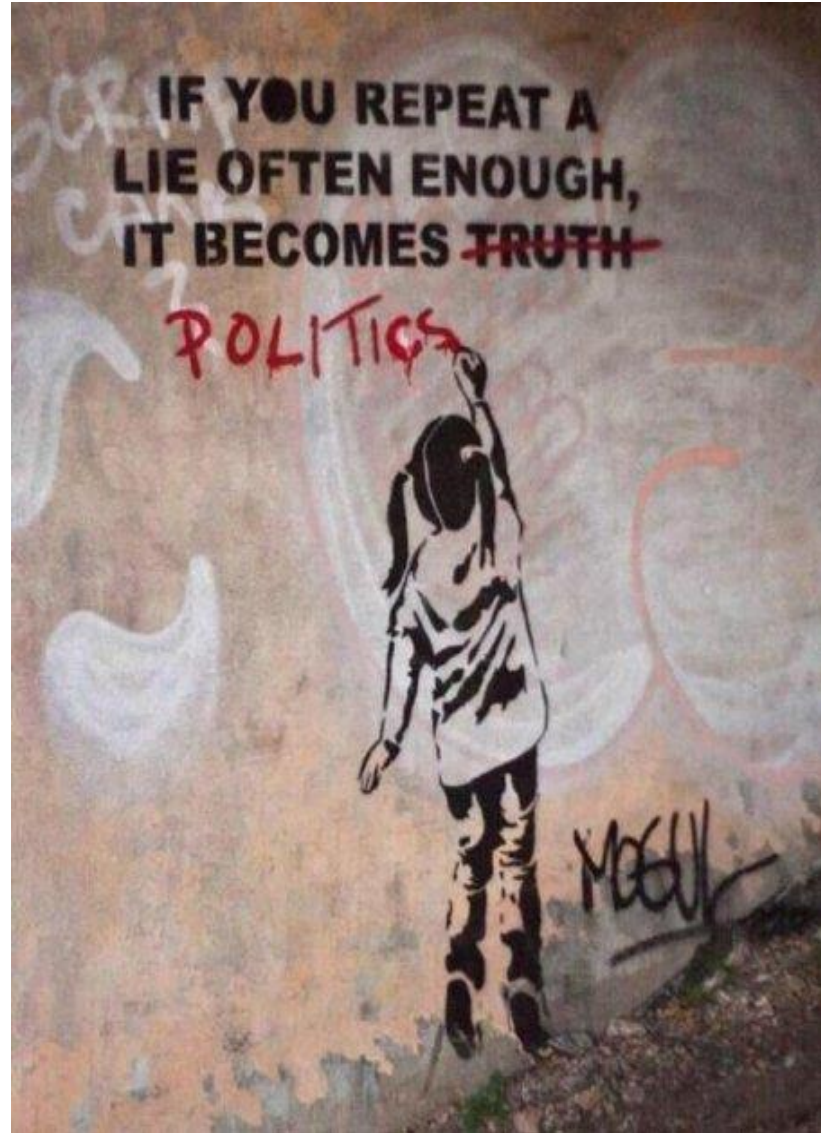
Why the Prevalence of Rule Violations in people's societal environment may matter for intrinsic honesty

- Rule Violations: fraudulent politics, tax evasion, corruption. Impact on honesty?

- People follow "descriptive norms" (what most other people do) (Cialdini et al, 1991; Keizer et al, 2008).

- Economic systems, institutions, and business cultures can shape people's moral values (Alesina & Fuchs-Schündeln 2007; Falk & Szech 2013; Cohn et al 2014).

- Politicians setting bad examples (Che et al 2013).

- Peer effects (Lefvebre et al, 2015)

- Parental transmission of honesty norms (Hauk & Saez-Marti 2001; Tabellini 2008).
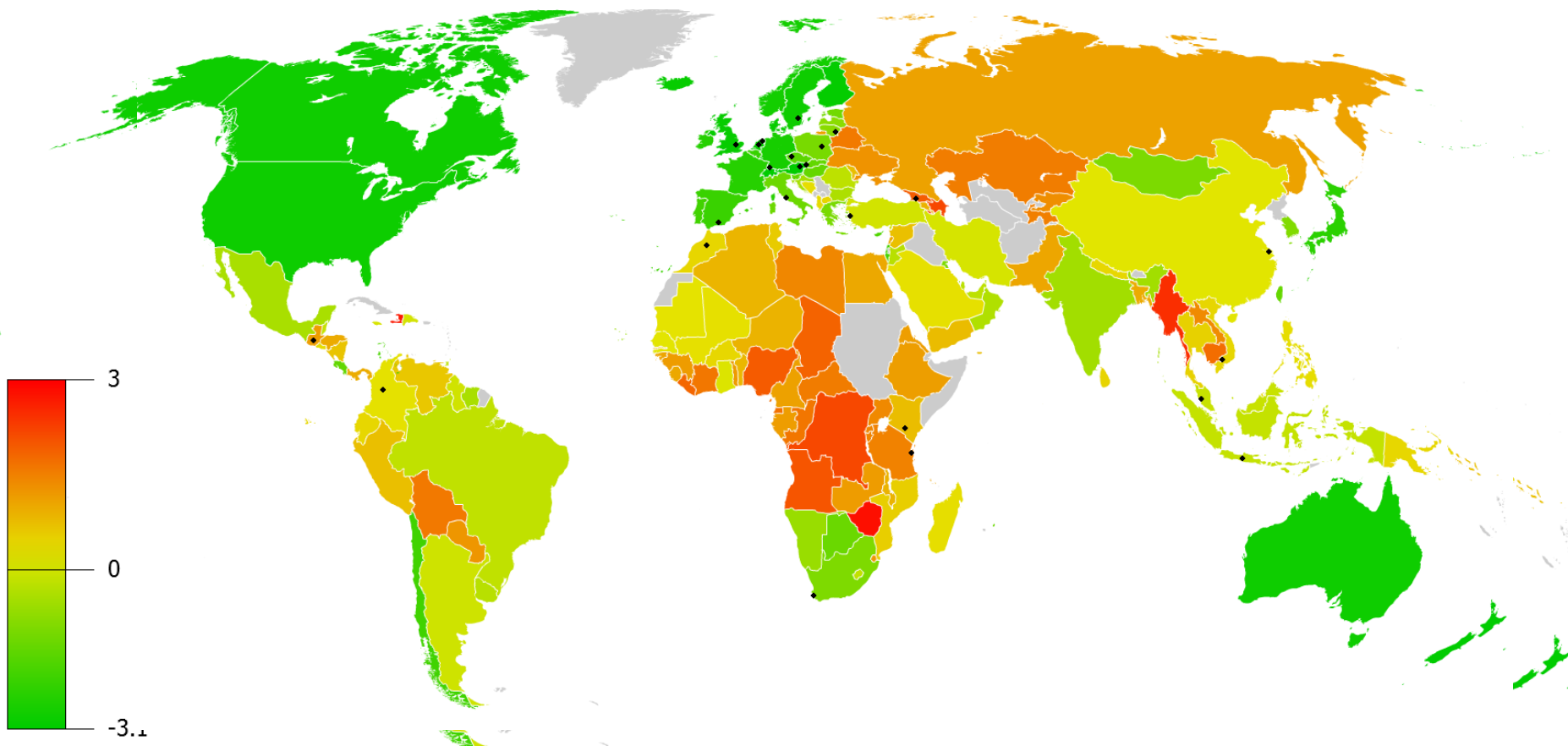
Measuring the Prevalence of Rule Violations in a Society

- We run experiments in 23 countries around the world
- Our subjects (n=2568) are students, mean age 21 years.
- Use country-level indicators:
  - Perception of corruption (World Bank)
  - Shadow economy (Buehn & Schneider 2012)
  - Quality of Politics (Freedom House)
- We use the earliest possible year, 2003.
- ➔ In 2003, our subjects were only 12 years old.
- ➔ PRV is not influenced by our subjects.

# Measuring the Prevalence of Rule Violations

- The country-level indicators are correlated.
- Perform a Principal Component Analysis to extract the common underlying correlation.
- ➔ "Prevalence of Rule Violations" (PRV)
- We calculate PRV for all 159 countries where data are available on all indicators.

Prevalence of Rule Violations around the World (n=159 countries)

- World sample: mean: 0; sd: 1.46; range -3.1 to 2.8.
- Our sample: mean: -0.7, sd: 1.52; range: -3.1 to 2.0.

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Prevalence of Rule Violations and Government Effectiveness
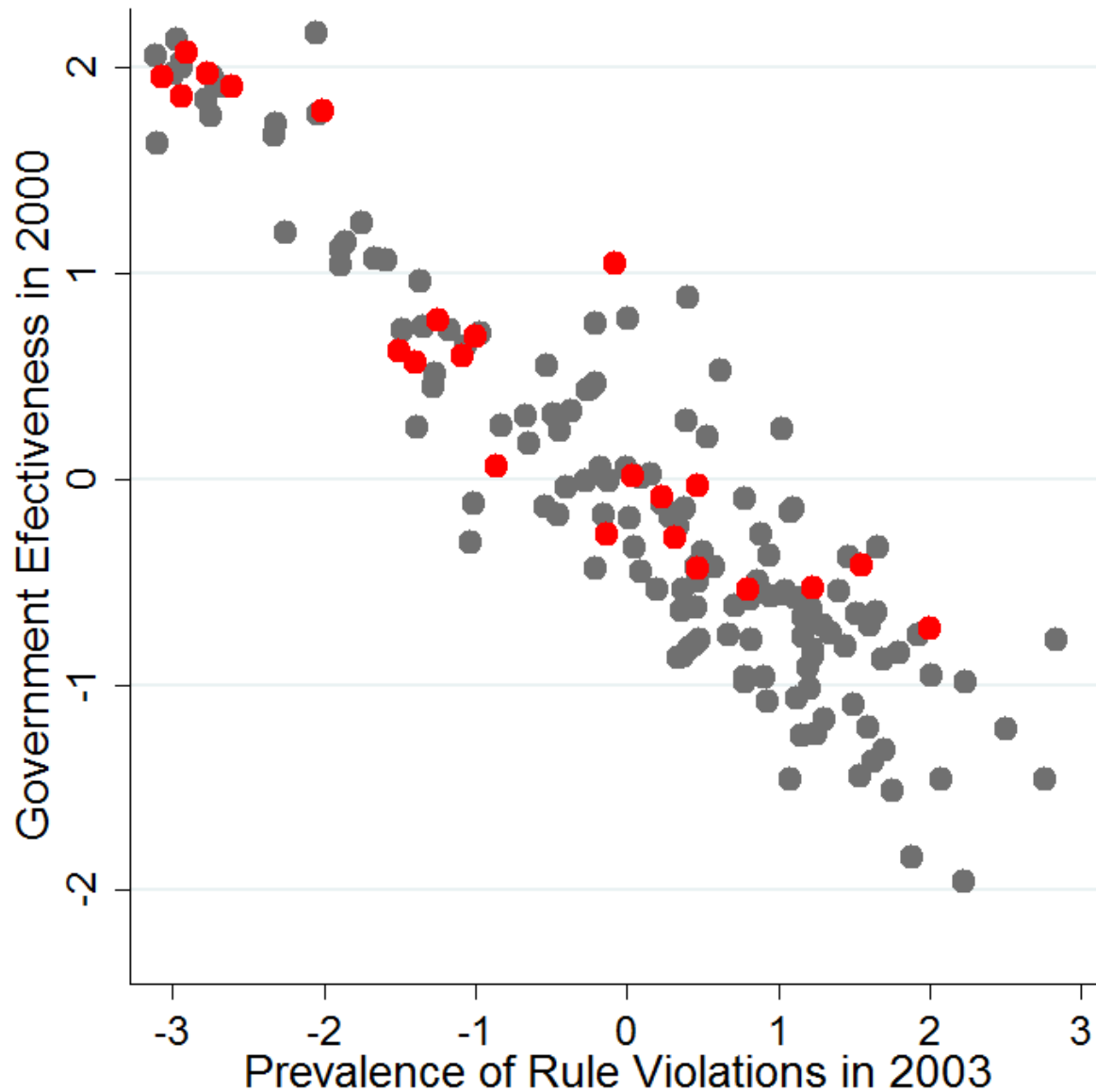
Cross-cultural experimental economics
Pioneered by Roth, Prasnikar, Okuno-Fujiwara, & Zamir (AER 1991)

Same experiment

Same experimenter

Same software (z-Tree)

Same (translated) instructions.

Similar subject pools (university undergrads, same age, (upper) middle class
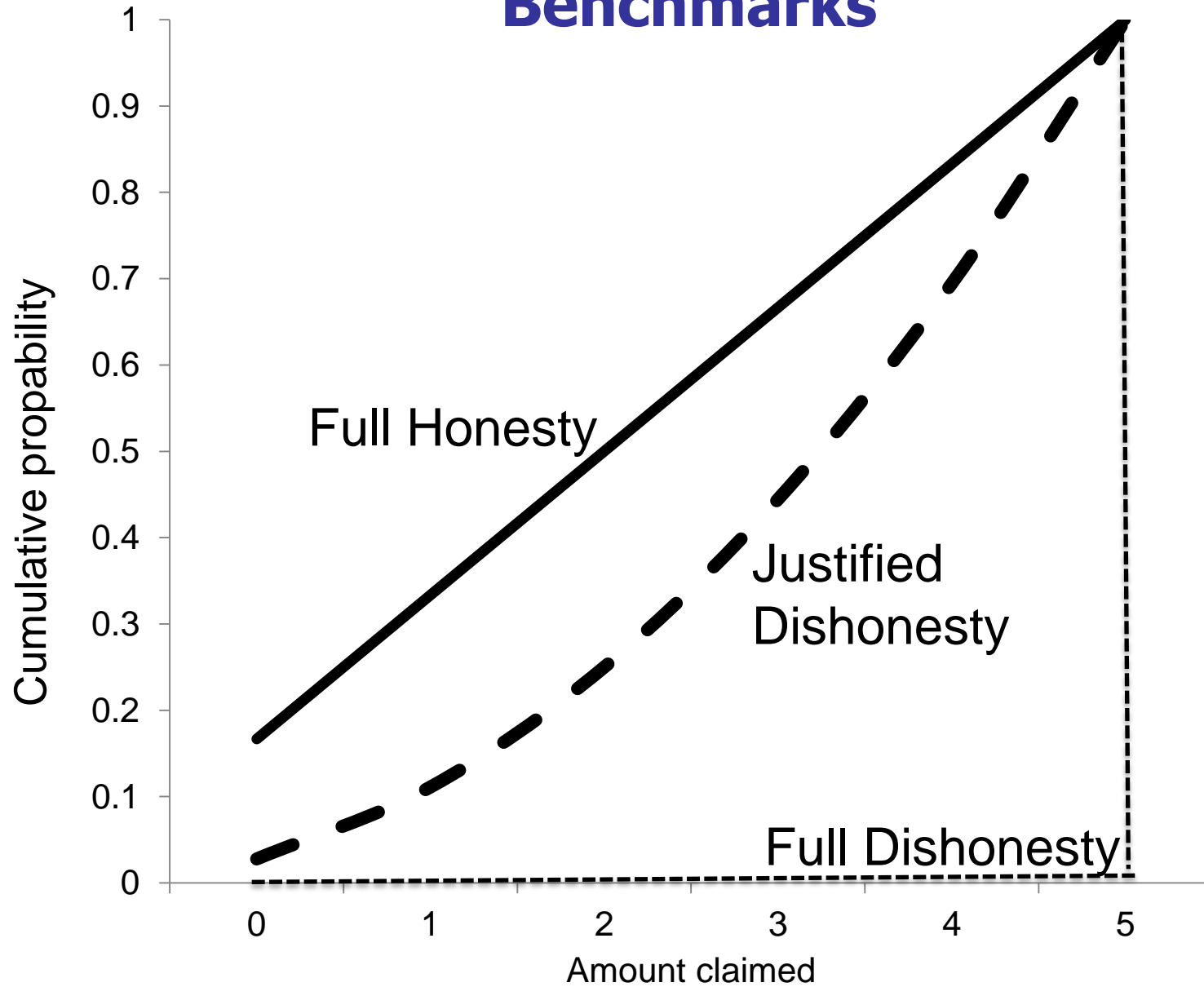
Measuring intrinsic honesty:
The die-in-a-cup task
Fischbacher & Heusi-Föllmi (JEEA 2013)

- Receive money for answering questions.
- Determine your own payoff.
- Throw a die <u>twice</u>.
- Report the <u>first</u> roll.
- Get paid according to report:
  - Get 1€ if 1
  - Get 2€ if 2
  - …
  - Get 5€ if 5
 - Get 0€ if 6

Benchmarks

Cumulative propability (y-axis: 0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1)

Amount claimed (x-axis: 0, 1, 2, 3, 4, 5)

Full Honesty

Justified Dishonesty

Full Dishonesty

Justified Dishonesty
Shalvi et al, Org Behav Hum Dec Proc 2011

- People want to maintain a self-image of being an honest person

- ➔ many people will not report a number they have not rolled.

- But: rules stipulate to roll the die twice and to report the *first* roll.

- Reporting the *higher* of two rolls does not imply reporting a counter-factual roll.

- Shalvi et al report experimental evidence for this reasoning ("Justified Dishonesty").

- Claims of 0 after 6-6 (1/36 ≈ 2.8%); claims of 1 after 1-6, 6-1, 1-1 (3/36 ≈ 8.3%); claims of 2,3,4,5 in 13.9%, 19.4%, 25%, 30.6% of cases.
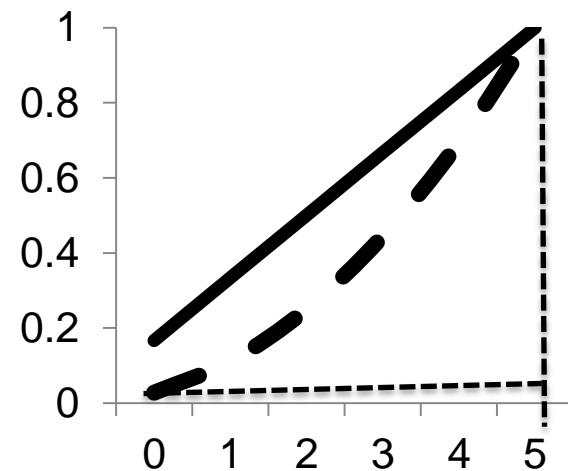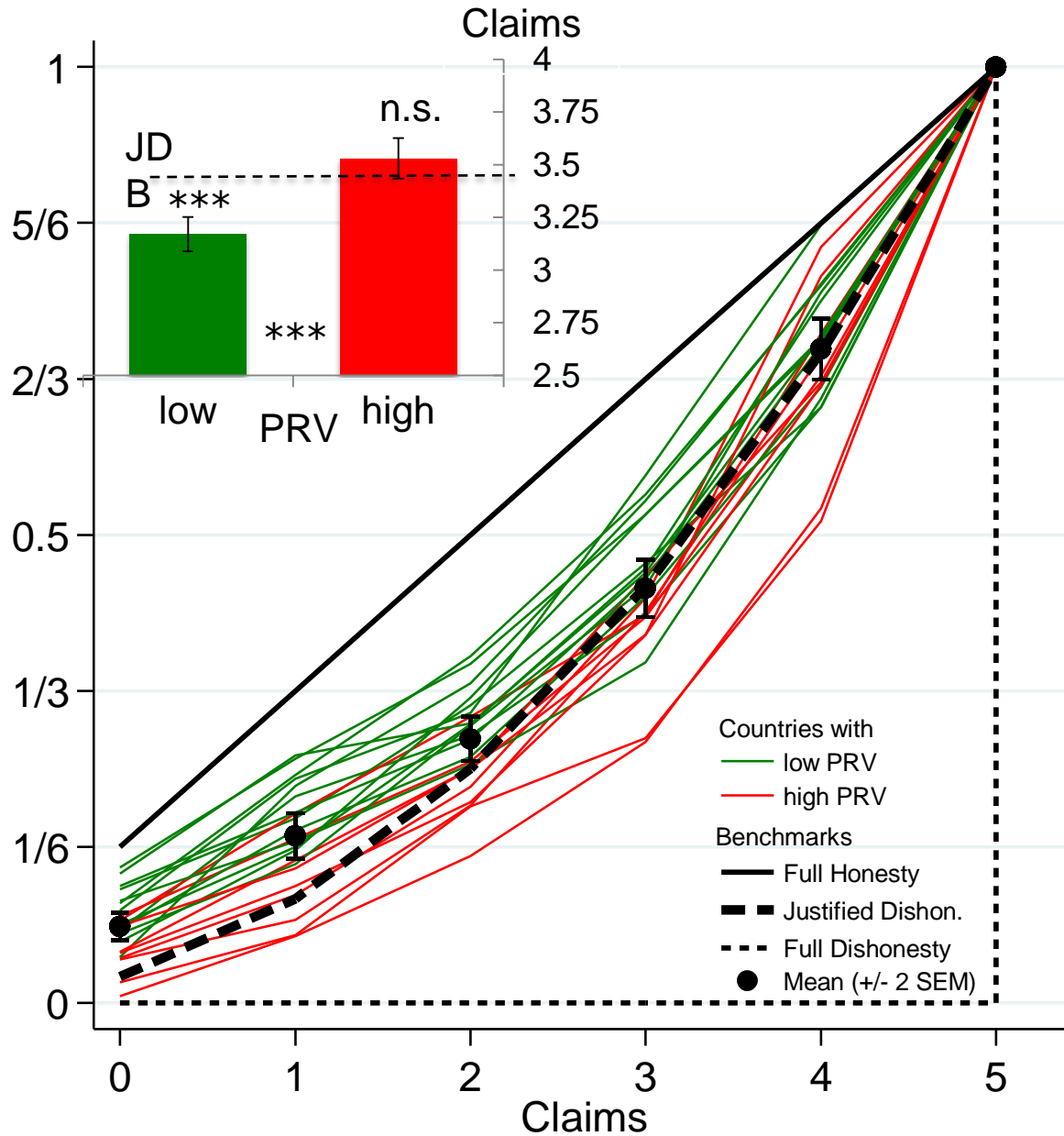
Dishonesty in low and high PRV countries
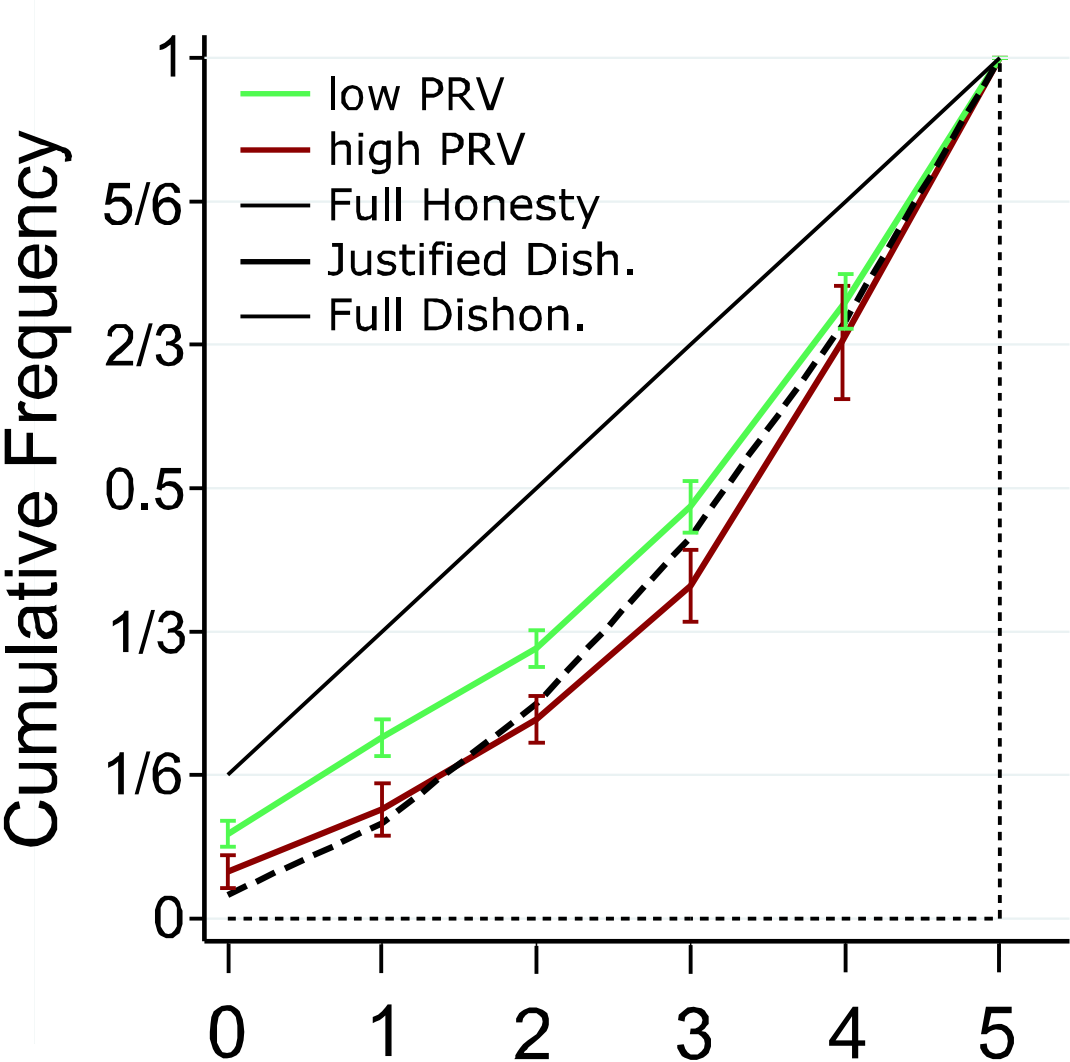
Mean claim
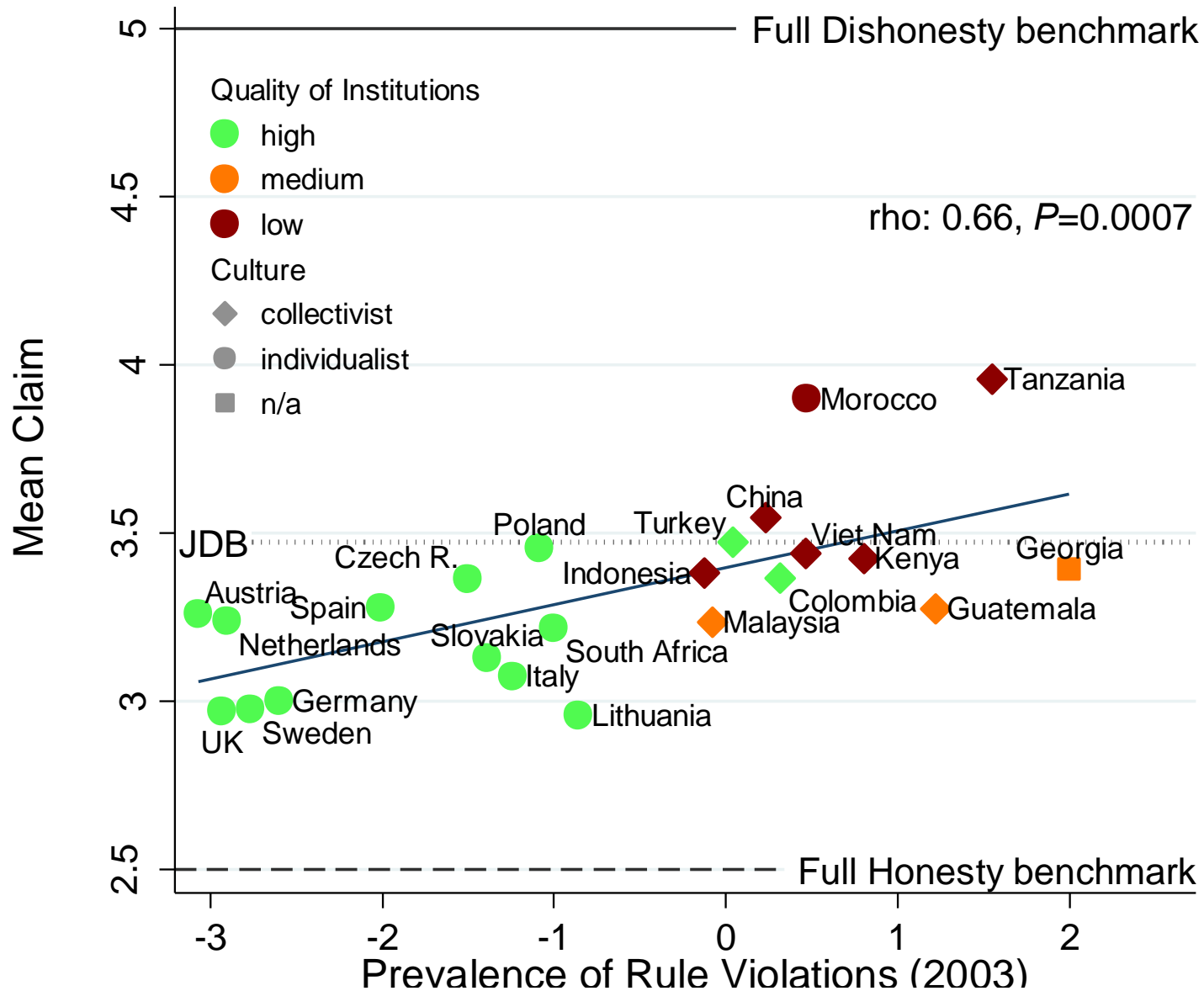
Fraction High Claims (reporting numbers 3, 4, 5)
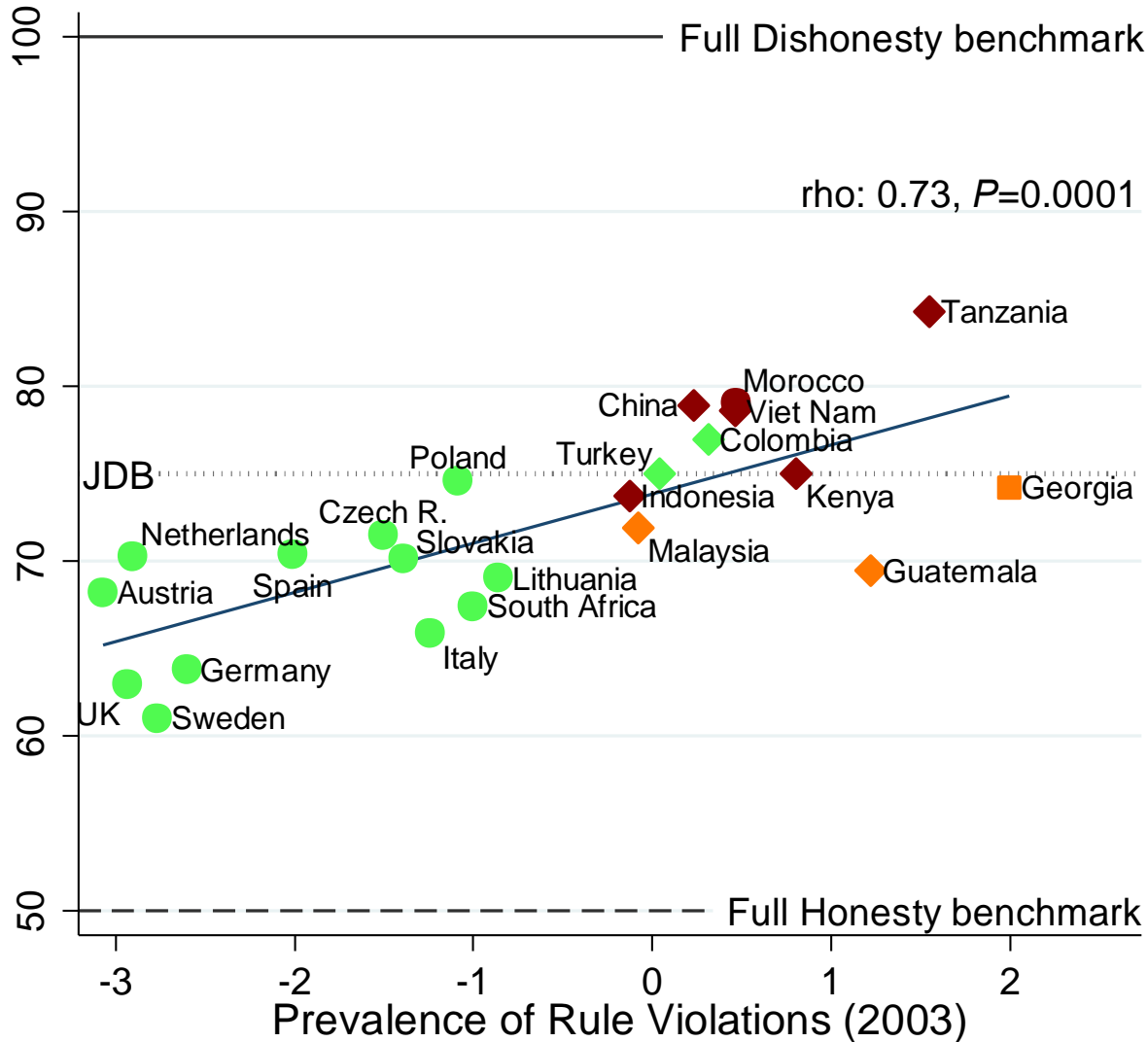
Estimated fraction of Income Maximizers
Estimated from those claiming 5
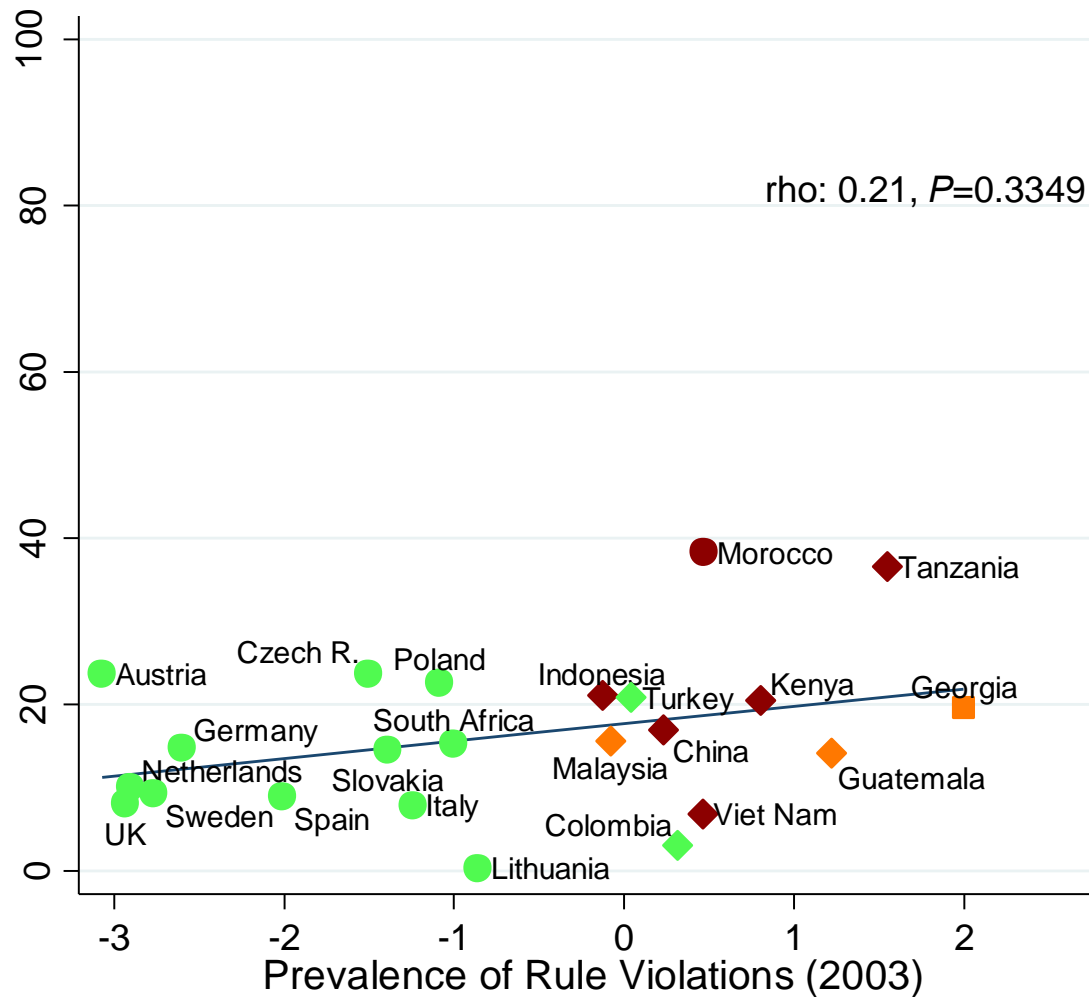
Estimated fraction of Fully Honest People
Estimated from those with No Claim (report 6)
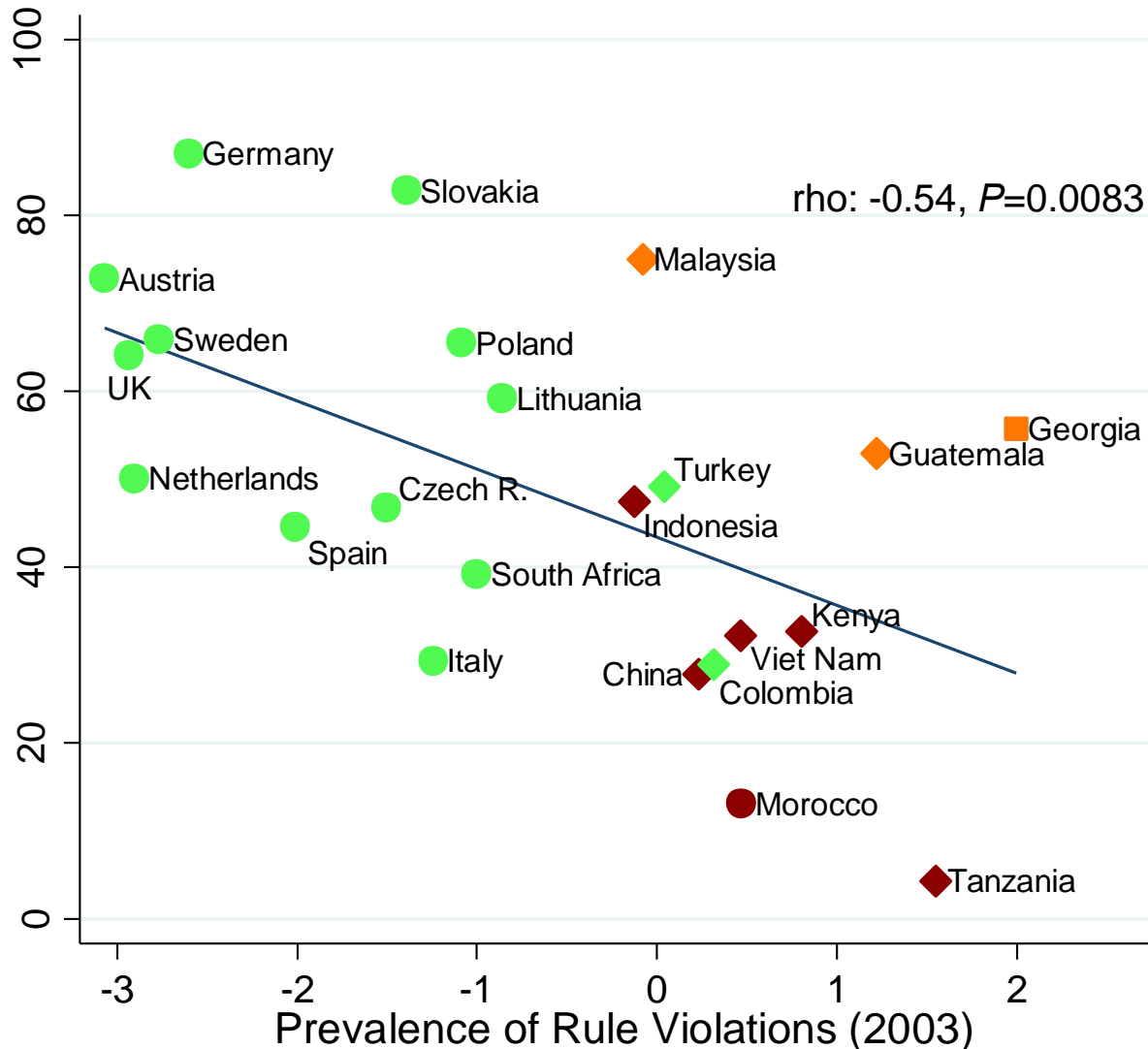
Robustness with measures of institutional quality
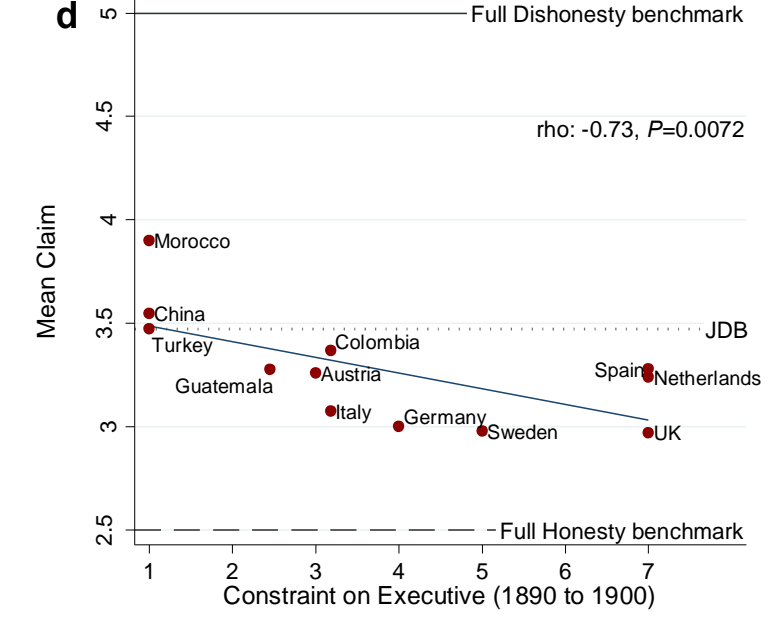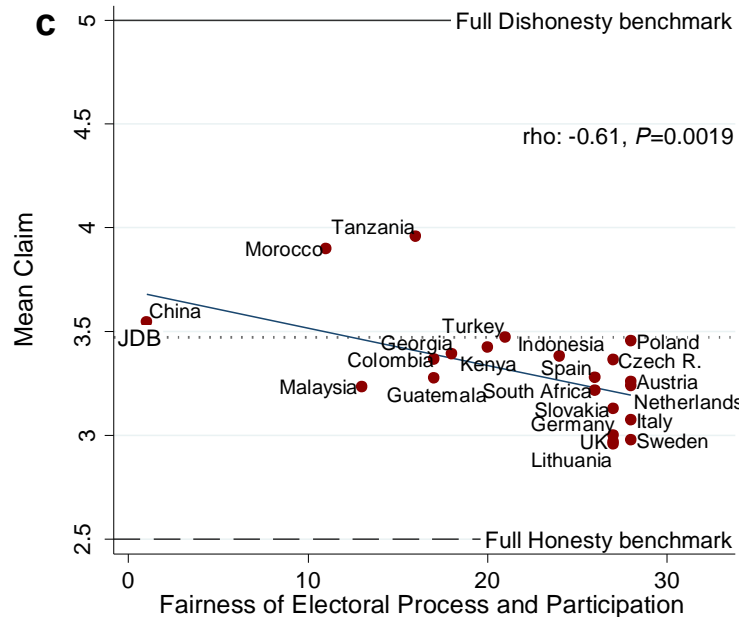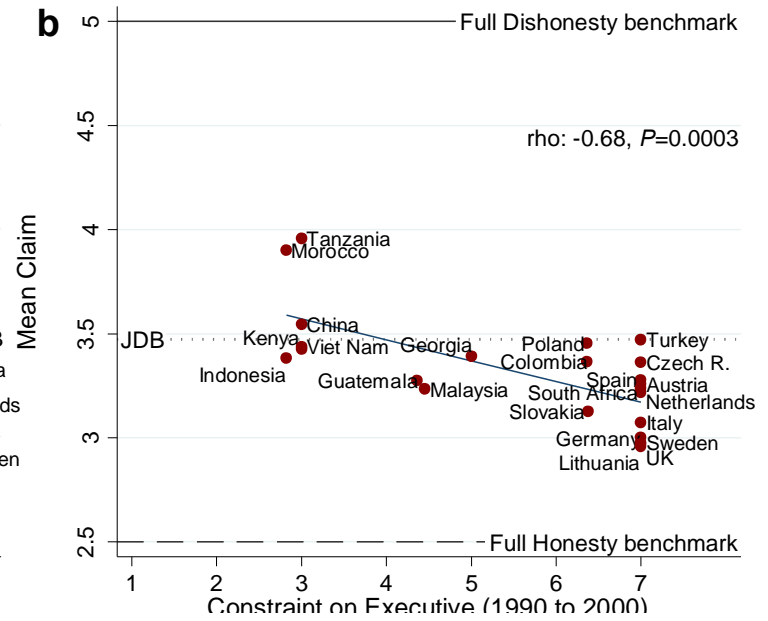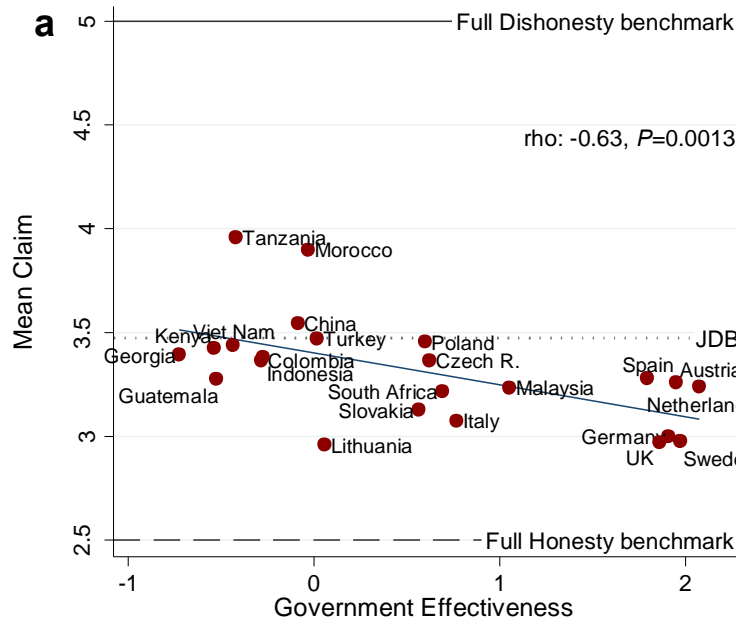
Honesty and Collectivism/Individualism

Mazar & Aggrawal (2011): More corruption in more collectivist societies
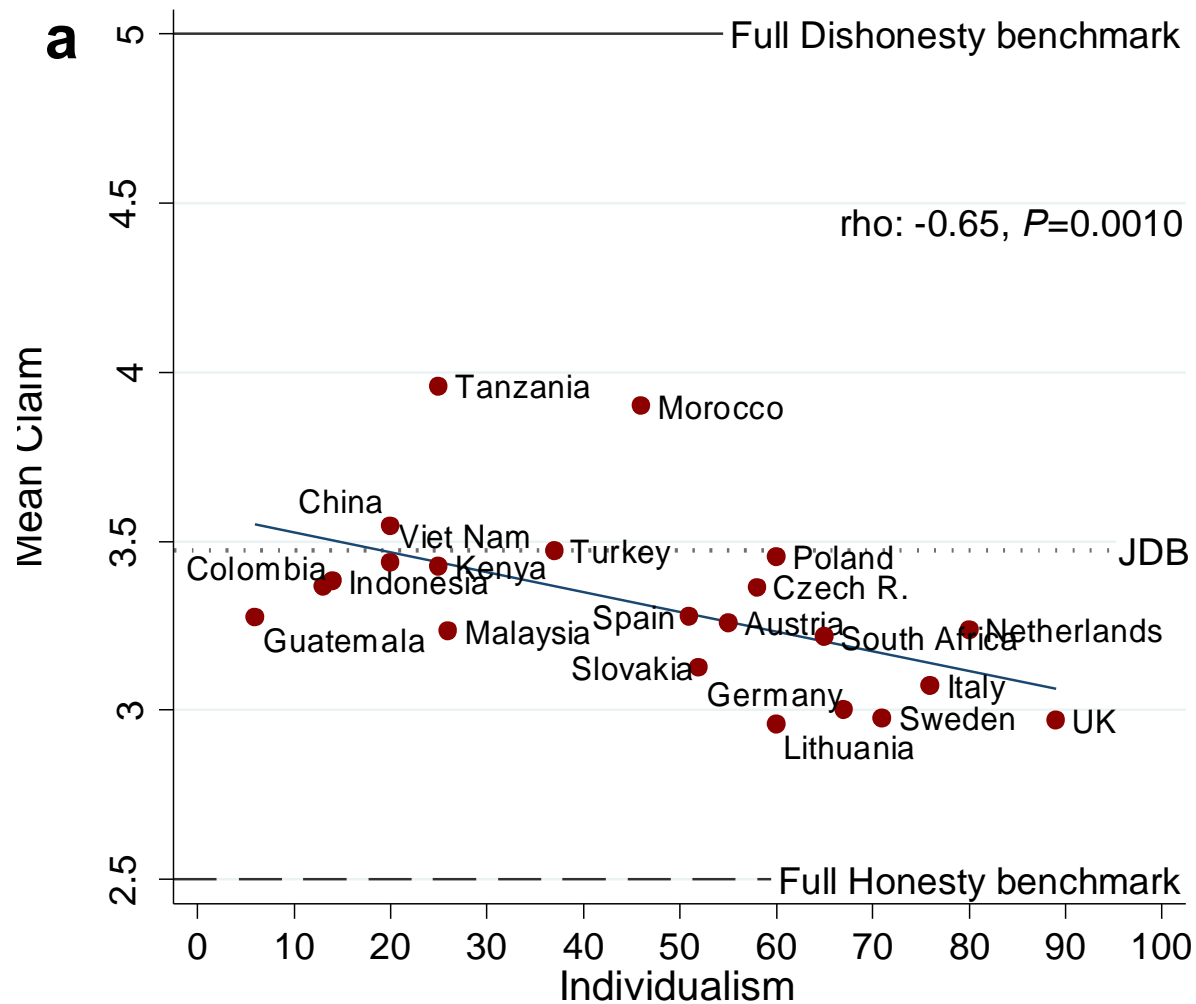
Collectivism/Individualism
(Mazar et al, 2011)

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Prevalence of
Rule Violations

Institutional Quality
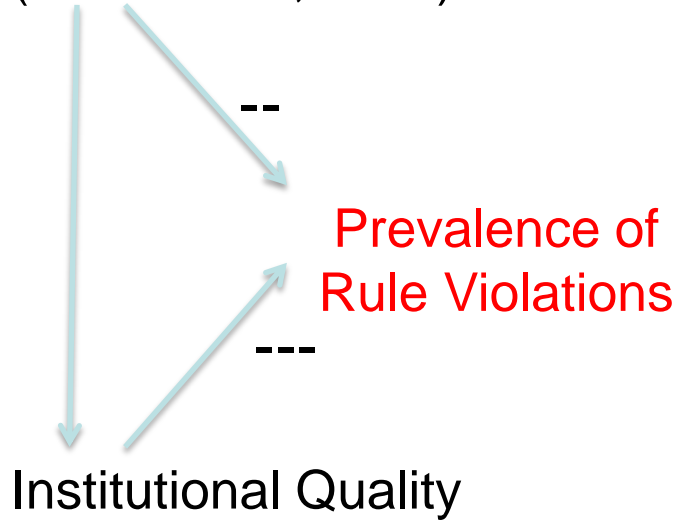
Influence Intrinsic Honesty due to:
- Following descriptive norms (Keizer et al, 2008)
- Institutions shape values (Falk & Szech 2013)
- Cultural Transmission
  - Parents (Hauk & Saez 2008
  - Peers (Fortin et al, 2008)
  - Prominent people (Henrich et al, 2001)

	(1)	(2)	(3)	(4)	(5)	(6)	(7) IV: Sett. Mortality	(8) IV: Gram. Rule	(9) IV: Gen. Dist.	(10) IV: Gen. Dist. + Gram. Rule
Const. on Executive (1990 to 2000)	-0.25*** (0.05)		-0.23*** (0.07)	-0.21*** (0.05)	-0.09*** (0.03)	-0.25*** (0.05)	**-0.72*** (0.12)**	-0.25** (0.11)	-0.23*** (0.08)	-0.25** (0.11)
Individualism	-0.03*** (0.00)	-0.03*** (0.01)	-0.02*** (0.01)	-0.02*** (0.00)	-0.01** (0.00)	-0.03*** (0.00)		**-0.06* (0.03)**	**-0.05** (0.03)**	**-0.06** (0.03)**
Const. on Executive (1890 to 1900)		-0.26*** (0.06)								
Primary Education (1930)			-0.02*** (0.00)					0.01 (0.02)	0.00 (0.02)	0.01 (0.02)
GDP p. capita (PPP in $ 1000)				-0.07*** (0.01)						
Gov. Effective-ness (2000)					-1.10*** (0.07)					
Ethnolinguistic Fractionalization						0.41 (0.38)				
Constant	2.14*** (0.26)	1.67*** (0.17)	2.20*** (0.30)	2.02*** (0.22)	0.59*** (0.19)	1.91*** (0.33)	3.79*** (0.53)	2.69*** (0.56)	2.67*** (0.51)	2.68*** (0.51)
Controls for Legal Origin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	96	44	79	96	96	96	60	59	79	59
R^2	0.681	0.810	0.785	0.824	0.904	0.685	0.131	0.633	0.673	0.652
1st-stage F-stat							12.4***	60.3***	51.7***	68.4***
Overid test p-value										0.907

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Summary

- Large-scale support for psychological theories of honesty.
- Variations in dishonesty are correlated with the Prevalence of Rule Violations in a society.
- Corruption, tax evasion, political fraud etc are not only bad for standard economic reasons, but also because of impaired intrinsic honesty. Quality of institutions and intrinsic honesty are complements.
- Prevalence of Rule Violations affects Justifiable Dishonesty but not categorical dishonesty.
- People seem to benchmark their justifiable dishonesty with the dishonesty they see in their social environment.
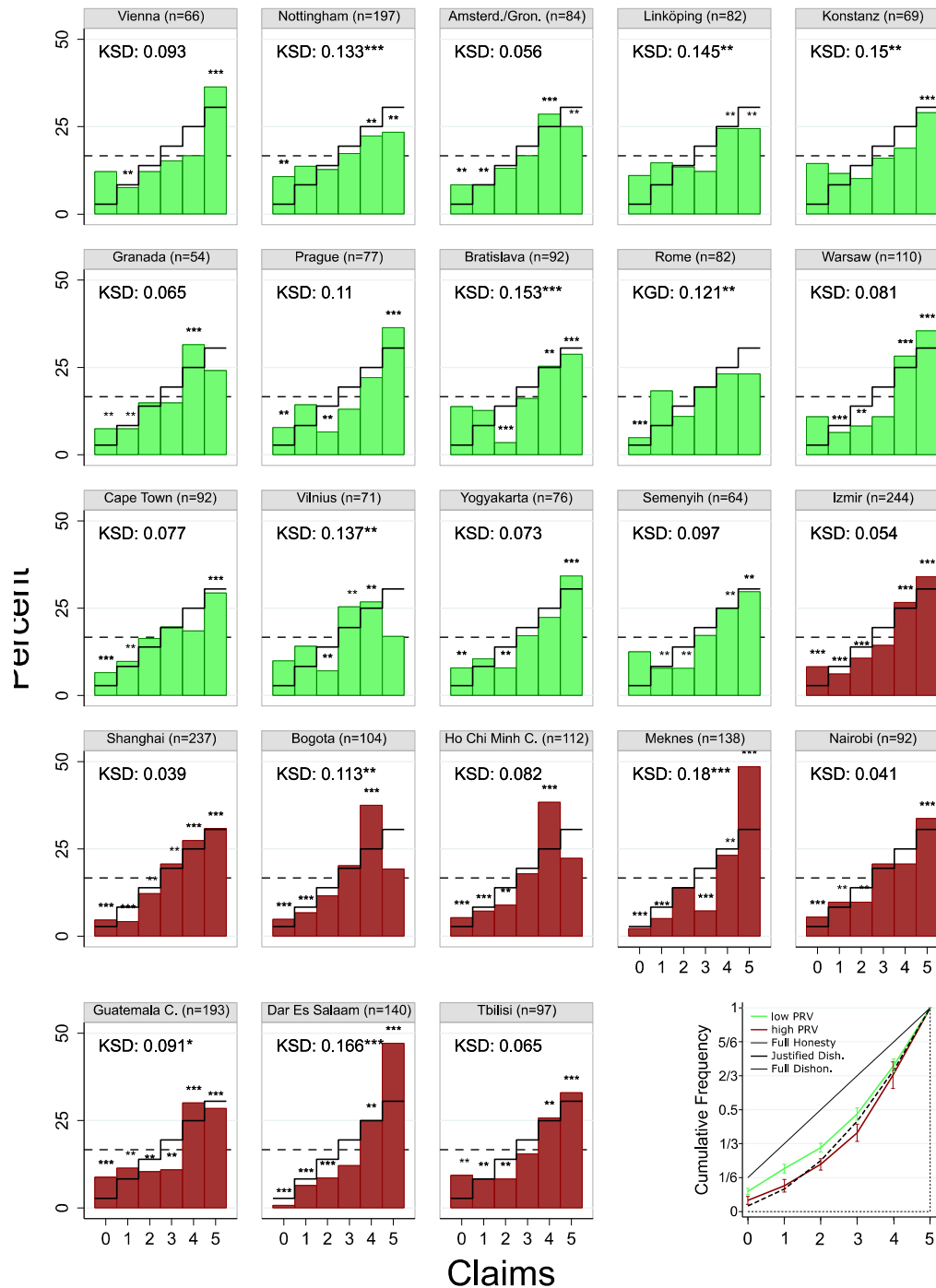
	(1) Claim	(2) High Claim (Numbers 3, 4, 5)	(3) Highest Claim (Number 5)	(4) No Claim (Number 6)
PRV in 2003	0.115***	0.030***	0.012	-0.016***
	(0.033)	(0.007)	(0.010)	(0.005)
Individual norms of honesty	-0.055***	-0.012***	-0.014**	0.002
	(0.018)	(0.004)	(0.006)	(0.002)
Individual beliefs in fairness (of others)	-0.075	-0.012	-0.050**	-0.004
	(0.085)	(0.030)	(0.021)	(0.009)
Age	-0.005	-0.002	0.003	0.002
	(0.011)	(0.003)	(0.004)	(0.001)
Female	-0.108*	-0.020	-0.019	0.014
	(0.058)	(0.016)	(0.020)	(0.012)
Middleclass	-0.064	-0.021	-0.001	0.002
	(0.106)	(0.033)	(0.022)	(0.018)
Urban	-0.052	-0.027	-0.013	-0.006
	(0.055)	(0.016)	(0.014)	(0.013)
Economic Student	0.122	0.042	-0.009	-0.023
	(0.099)	(0.028)	(0.032)	(0.016)
Religious	-0.061	-0.030	0.023	0.018
	(0.090)	(0.022)	(0.023)	(0.014)
% known in session	0.004	0.001	0.002**	0.000
	(0.003)	(0.001)	(0.001)	(0.001)
Constant	4.080***	0.925***	0.376***	-0.006
	(0.315)	(0.073)	(0.112)	(0.044)
Test for joint significance of Socio-demographic controls	$Chi^2(7)=9.18$	$Chi^2(7)=12.37*$	$Chi^2(7)=6.42$	$Chi^2(7)=11.88$
N	2284	2284	2284	2284
R^2	0.022	0.018	0.014	0.010