

An Empirical Study of Market and Network Corruptions

(Final report)

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Intro: corruption and its effects

Corruption is a popular topic in social sciences

Consensus that corruption is an “evil”:

- harmful for economic development
 - decreases investments and leads to ineffective reallocation of resources and government spending (Mauro, 1995; Mo, 2001)
 - diminishes engagement in entrepreneurship (Anokhin&Shulze,2009)
- sharpens inequality (Gupta et al., 2002)
- supports informal sector/shadow economy (Buehn&Schneider,2012)
- undermines political stability and confidence in state institutions
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- although, in some situations corruption may “grease the wheels” (Dreher&Gassebner, 2013)

Literature on corruption: overview

Originally: sociology and anthropology

Today: political science and economics

Propagate the “*aggregated*” approach:

- vague definition: “(ab)use of public power for private gain”
- aggregated measures of corruption (e.g., CPI or CCI)
- reduce all corruption to bribery (especially, micro-level studies)

It allows quantitative analysis, but has serious drawbacks:

- perceptions vs. actual incidence (Treisman, 2007)
- different understanding of what is corruption and its normative assessment (Western vs. non-Western moral perspective)
- different structure of corruption (e.g., Shleifer & Vishny, 1993)

In our study, we advocate a more *disaggregated* approach towards corruption

MC and NC: definitions

- 2 different types of corruption
- An official uses public power for private gain
- He/she gives some (unofficial or illegal) favor to a certain firm or individual and receives some reward
- The question is who may get those favors?
- MC: **any** person or firm who is able to give a (monetary) reward to the official
- NC: **only** those persons or firms who have some kinship, friendship, or business ties with the official

MC and NC: some examples

MC:

Example 1: unofficial price list for public services

Example 2: bribe to road police

Example 3: auction for public procurement contracts
where the winner is a firm that offers the maximum
bribe/kickback

NC: the winner is a firm which is connected with the
official.

Concepts related to **NC**: *blat, guanxi, cronyism, favoritism, nepotisms, familism, patron-client ties, etc.* They are not completely equated with corruption but usually provoke it.

Previous literature

- MC-NC division was first emphasized by Scott (1969) in the study of corruption in developing nations (South-Eastern Asia)
 - J.Scott used the term “parochial corruption”
 - We prefer “network corruption” (Granovetter, 2007)
- Division has rooted in the corruption literature (e.g., Husted, 1994; Lambsdorff, 2002; Kingston, 2007; Granovetter, 2007).
- Most papers are theoretical or/and provide an analytical description of some manifestations of NC and MC
- No quantitative studies, either at the country level or at the individual level so far

In this project...

- First quantitative comparative study of MC and NC
- Both at individual and country levels
- Country level:
 - document incidence of MC and NC and structure of corruption across countries. What countries are more affected by MC? What countries are more prone to NC? Are high-MC countries the same as high-NC countries?
 - analyze how are MC and NC associated with different characteristics of countries (level of economic development, inequality, democratisation, natural rents, shadow economy, etc.)
- Individual level:
 - who participates in MC, and who in NC?
 - what factors determine this choice?
 - how those people differ from “uncorrupt”?

Why this is useful/important/interesting?

- Test existing theoretical propositions
- Promotes understanding of qualities, antecedents, and effects of corruption as a whole:
 - NC is more stable in time and resistant to anti-corruption policy measures
 - NC is more justifiable (help to relatives and friends)
 - MC “greases the wheels” and follows the logic of the market
 - NC bonds elites and supports political stability
 -
- Should we correct corruption rankings of countries?
- Different accents in anti-corruption policy:
 - MC: against bribery
 - NC: rotation of public officials, prevent conflict of interests, anti-nepotism laws
- Suggests that sociology should play a more important role in studying corruption (at the background of dominating economics and political science)

At the last ISA Congress (Yokohama, 2014) only 4(!) papers that contained “corruption” or “bribery” in the title or in the abstract (total 6,000)

Main source of data

- Life in Transition Survey (LiTS), 2010 by EBRD
- 35 countries:
 - 17 of Central, Eastern and South-Eastern Europe
 - 13 of CIS
 - 5 of Western Europe (France, Germany, Great Britain, Italy, and Sweden)
- Representative national samples
- Total sample \approx 38,000 individuals
- Post-socialist countries are an excellent “laboratory” to study of NC and MC. High corruption which is:
 - rooted in Soviet “blat” (Ledeneva, 1998; Gellbach, 2001; Sandholtz & Taagepera, 2005)
 - provoked by transition to the market

Measurement of NC and MC

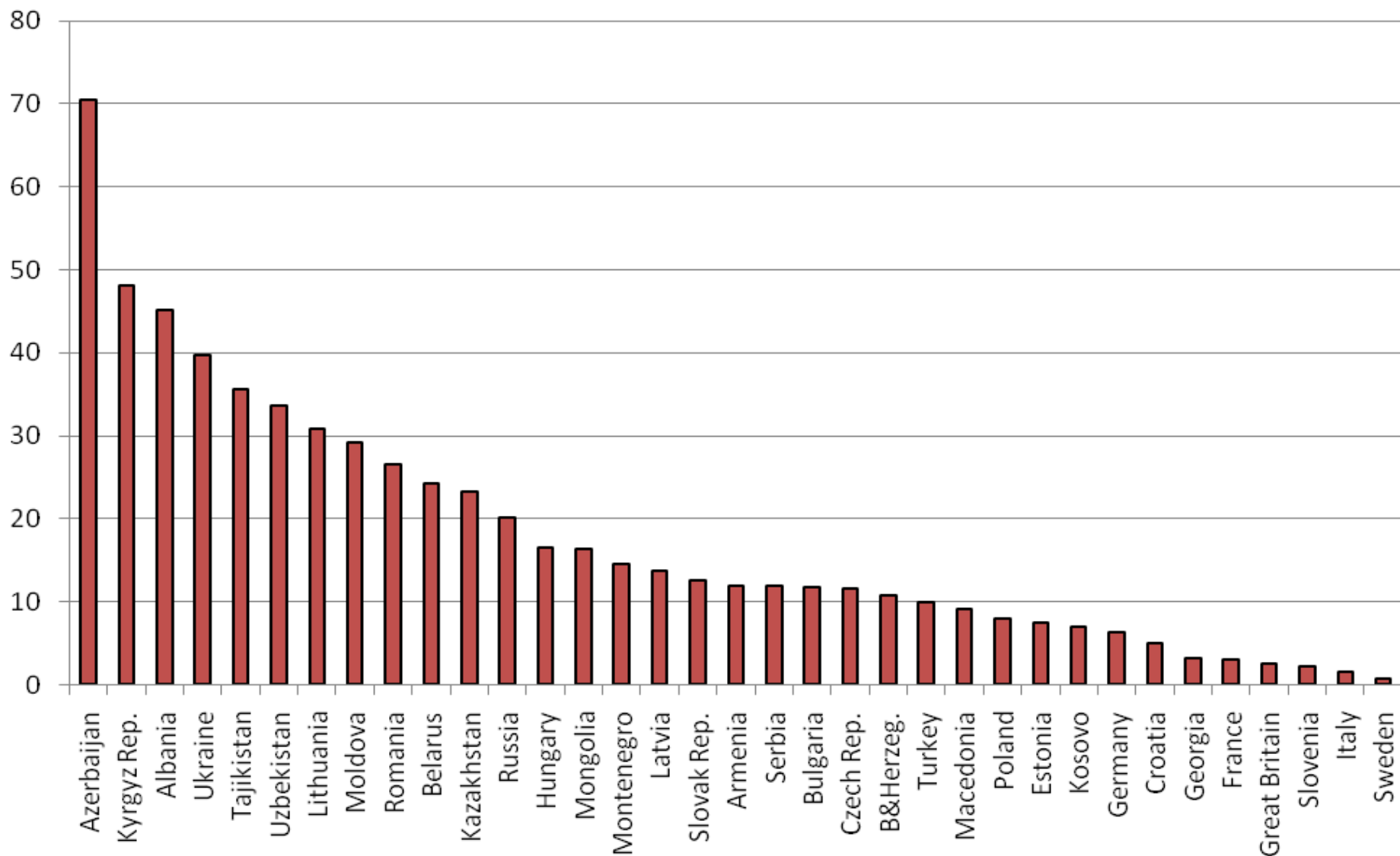
		Did you pay a bribe last year?	
		Yes	No
Would you ask influential people for help?	definite/certain	NC	
	very likely		
	likely	MC	Uncorrupt
	a bit likely		
	not at all likely		

3 MAIN GROUPS:

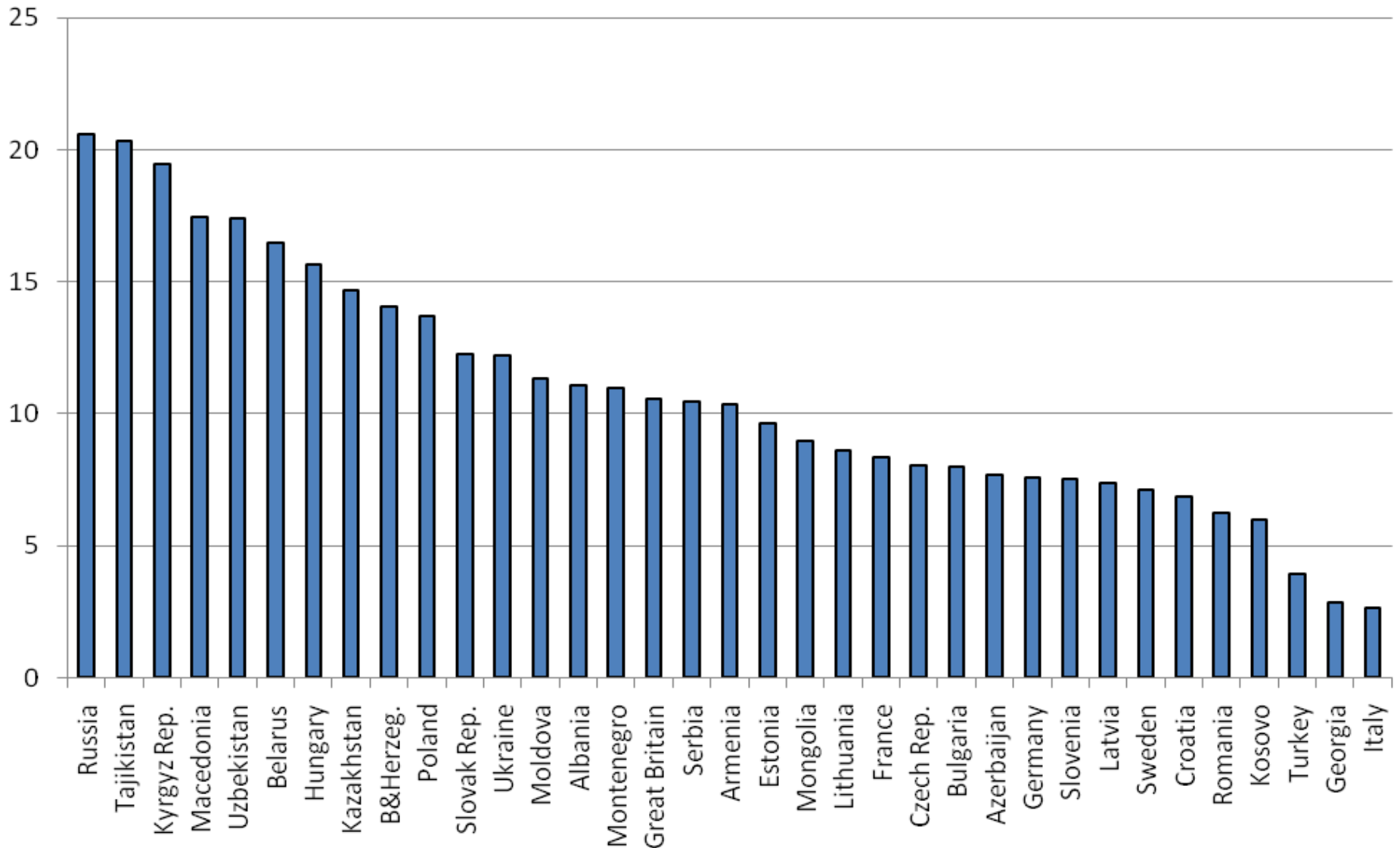
- 1) NC: people who will ask influential people for help certain or very likely
- 2) MC: those who paid a bribe AND are not engaged in NC
- 3) Uncorrupt: neither MC, not NC

At the country level: NC and MC indices are percentages of corresponding groups

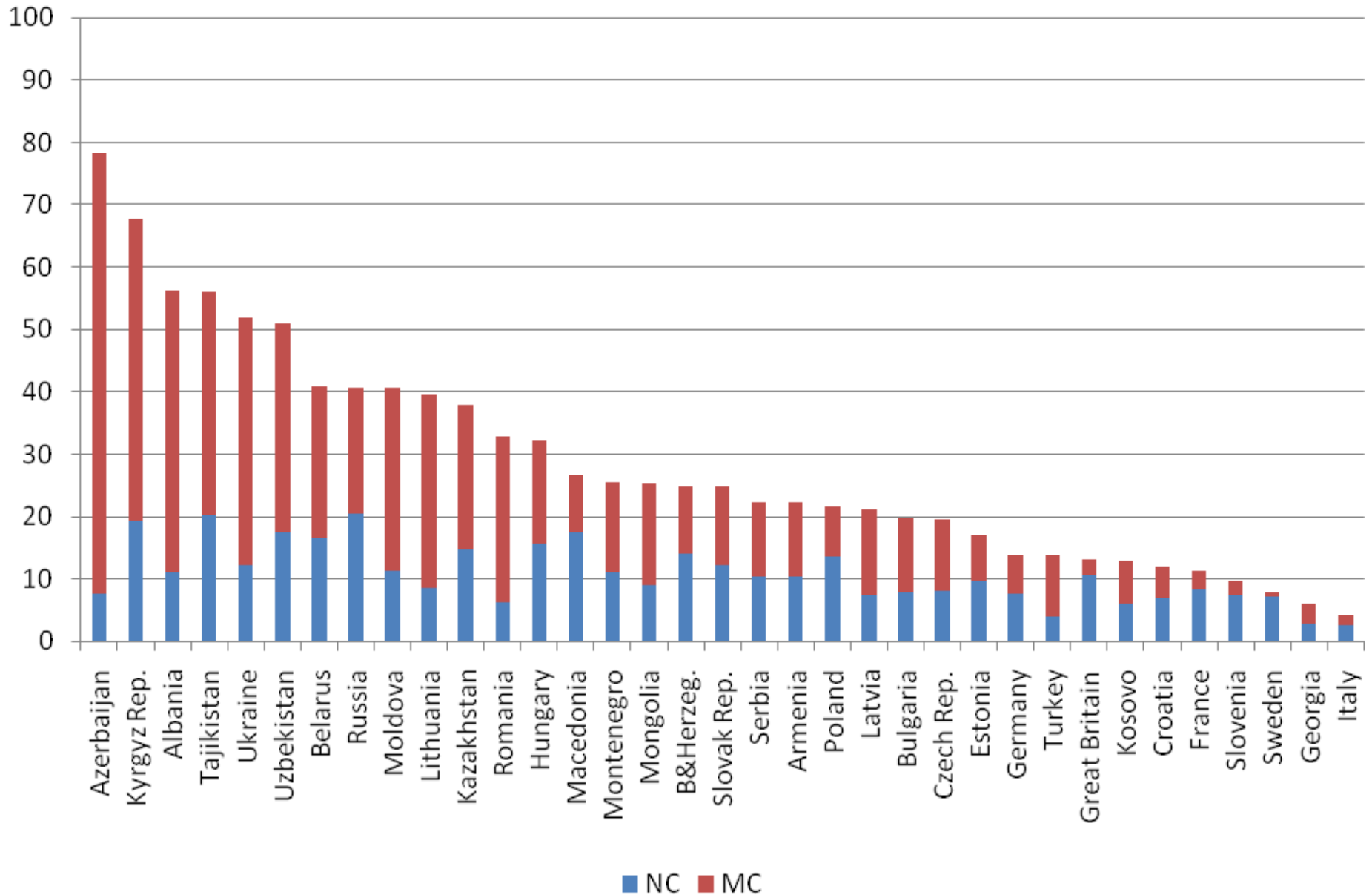
Incidence of MC across countries, (weighted % of all respondents), LiTs data, 2010



Incidence of NC across countries, (weighted % of all respondents), LiTs data, 2010



Structure of overall corruption across countries, LiTs, 2010.



Correlations of MC and NC with some popular corruption measures

	NC	MC	Whole corruption	Bribery	Bribery perception	NC perception
CPI by TI	-0.43	-0.58	-0.61	-0.60	-0.61	-0.52
CCI by WB	-0.43	-0.65	-0.68	-0.67	-0.66	-0.46
% who offered a bribe (EVS, 2004)	0.40	0.88	0.85	0.89	0.67	0.29
% who was asked for a bribe (EVS, 2004)	0.40	0.89	0.86	0.91	0.67	0.29

Correlations across countries

	MC	NC
HDI	-	-
Incidence of self-employment	+	0
Political instability and violence	++	+
% of people finding job in the public sector attractive	0	+
Average household size 100 years ago	0	+
% of households with >5 members 100 years ago	0	+
Average household size in 2000	0	0
Corruption has stayed the same in 2011-2013	0	+
% of natural rents in GDP	0	+

Individual level

- A multinomial logit model
- Dependent variable takes 3 outcomes: MC, NC, Uncorrupt (base).
- Estimate how different individual characteristics affect relative probabilities to participate in MC and NC with respect to the probability of to be “uncorrupt”.
- Coefficients + average marginal effects

	MC		NC	
	coef	se	coef	se
Socio-demographic characteristics				
Males	0.004	0.038	-0.086**	0.043
Age	-0.005***	0.001	-0.009***	0.001
Education				
No education	-0.210	0.141	0.114	0.129
Primary	-0.046	0.075	-0.045	0.084
Lower secondary	-0.077	0.059	-0.024	0.063
(Upper secondary)				
Post-secondary non tertiary education	-0.030	0.057	-0.050	0.064
Bachelor	-0.042	0.059	-0.072	0.067
Master or PhD	0.049	0.085	-0.292***	0.100
Urban location	0.133***	0.040	0.096**	0.044
Married	0.183***	0.039	-0.025	0.043
Employed for wage	-0.114***	0.043	0.080*	0.048
Self-employed	0.118*	0.064	0.137*	0.075

	MC		NC	
	coef	se	coef	se
Income level				
(First quintile)				
Second quintile	0.056	0.063	-0.114*	0.069
Third quintile	0.081	0.065	-0.203***	0.071
Fourth quintile	0.022	0.086	-0.034	0.092
Fifth quintile	0.100	0.221	0.292	0.209
Social capital				
Do not speak official language	-0.121	0.085	0.189**	0.089
Political party member	-0.017	0.076	0.208**	0.081
Voluntary organisation member	0.321***	0.043	0.028	0.048
Trust and risk aversion				
General willingness to take a risk	0.044***	0.008	0.046***	0.009
In-group trust	-0.034***	0.011	-0.008	0.013
Out-group trust	-0.015**	0.008	-0.037***	0.009
Job in state sector is attractive	-0.069*	0.039	0.093**	0.043
Attitudes				
Respect for authorities	-0.038***	0.008	-0.004	0.008
Want more inequality	0.029***	0.006	0.037***	0.007
Competition is harmful	0.005	0.008	0.014*	0.009

Summary and general conclusion

- First paper that exploits divide of corruption into MC and NC
- We document incidence of MC and NC across 30 post-socialist countries as well as in 5 Western European countries
- We confirm a general theoretical view that these corruption types have very different nature. Qualities, antecedents, and effects of corruption in the country may crucially depend on what corruption is there.
- Structure of corruption in the country seems to be important indicator
- NC and MC should be treated separately in corruption research both at country level and at individual level.

Some remarks

- Yes, we measure only petty corruption
- BUT: our NC index correlates with the favoritism index from Global Competiveness Report (executive opinions survey)
- NC: measure intentions to use ties but not actual experience
- BUT: intentions lead to actions+robustness check
- Need for larger N.
- BUT general picture is consistent.
- Analysis for Asia and America's countries would be an interesting extention

Russia: signs of growing NC

- **Literature review** (Fry et al., 2009; Aidis et al., 2008; Ledeneva and Shekshnya, 2011)
- **Depth interviewing with Russian entrepreneurs** (Kravtsova, 2012)
- **Estimations using BEEPS data** (compared with 2002):

	2005	2012
% of firms paying bribes	-11 p.p.	-45 p.p.
% of firms that spend for bribes more than 1% of sales	0.89 p.p.	-27 p.p.
average % of sales spent for bribes	-0.5 p.p.	+6 p.p.

- **Estimations using data of enterprise surveys by IIMS HSE** (2000, 2007, and 2011): since 2007 positive correlation between connections with state and success of the firm. No such correlation in 2000.
- **Some favoring factors:** anti-corruption retorics and policies (against bribery!), stronger state, low rotation of political leaders and elites, improved social status of officials

Thank you for your attention!