

Public Administration and Competitiveness

Transmission Channels and Issues in Measurement

by

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Disclaimer

- This presentation is a synthesis of results from research carried out for the **European Commission**, Directorate-General Enterprise and Industry under the **Framework Contract ENTR/2009/033**
- In particular
 - Study Excellence in public administration for competitiveness in Member States, 2012
 - Chapter 4 of the European Competitiveness Report 2014
- *The views expressed in these studies are those of the author(s) and do not necessarily represent those of the European Commission or its official position*

I - Motivation

- Firms interact with public administration on many occasions
 - Registering the business
 - Applying for licenses
 - Paying taxes, etc...
 - From a conceptual perspective public administration likely to be key driver of firm growth and competitiveness
- The recent (or ongoing) crisis points to significant heterogeneity in the functioning of public administration
- Reforming public administration ranks high on the political agenda
 - Main lever of policy makers
 - Key dimension in several policy initiatives such as Europe 2020

I - Guiding questions

- Existing evidence lacks clear transmission channels
 - Quality of public administration seems to matter for growth or the attraction of FDI (e.g., Djankov et al., 2006)
 - Usually subsumed as ‘good governance’
 - Micro-channels are not well understood
- From a policy perspective, understanding these links is crucial
- How can the transmission channels be conceptualised through which public administration exerts an impact on firm growth and competitiveness?

I - Guiding questions (cont.)

- Given particular transmission channels
 - Estimating the effects of public administration is still challenging
 - Is public administration performing badly because of dysfunctional regulation, or is it performing badly despite growth-friendly regulation?
- Yet, how can we answer key policy questions such as
 - What dimensions of public administration are the most costly for firms?
 - Which dimensions should have the highest priority for policy makers?
 - What is the relative performance across Member States of the EU?

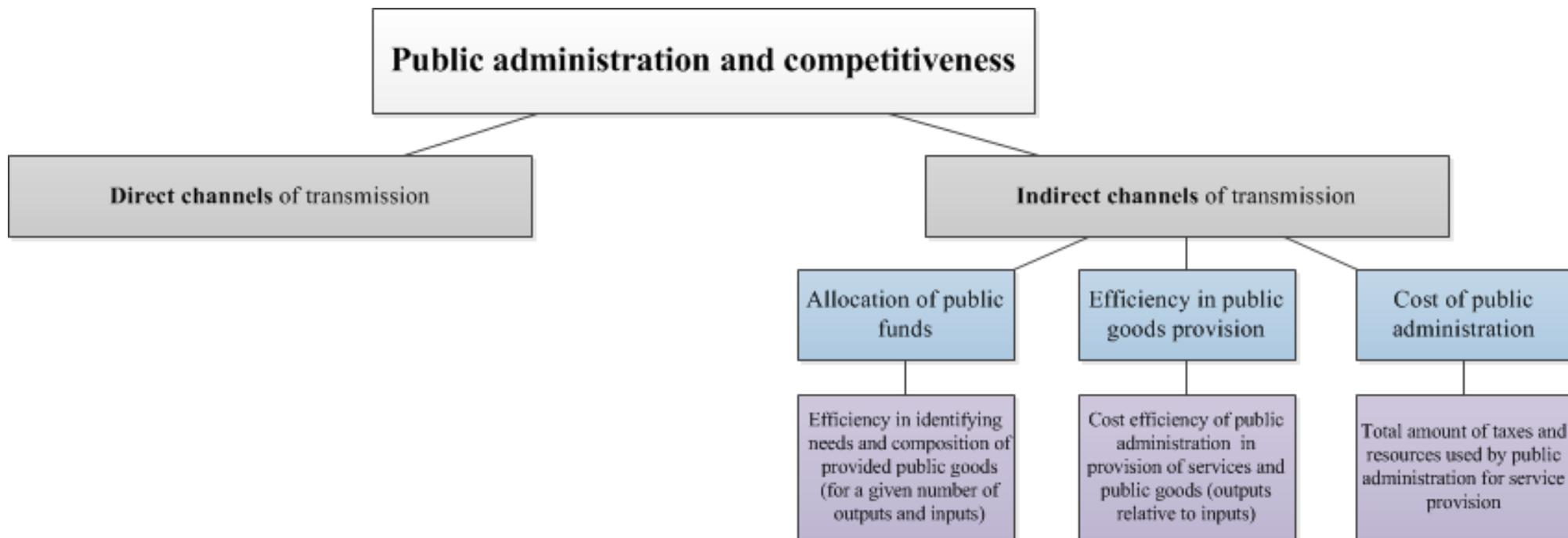
I - Outlook

- Along this set of guiding questions, this presentation will offer
 - A conceptualisation of potential transmission channels through which the quality of public administration may affect firm growth and competitiveness
 - A new approach using business perceptions to measure the degree of obstacles of different dimensions of public administration allowing for within and cross-country comparisons

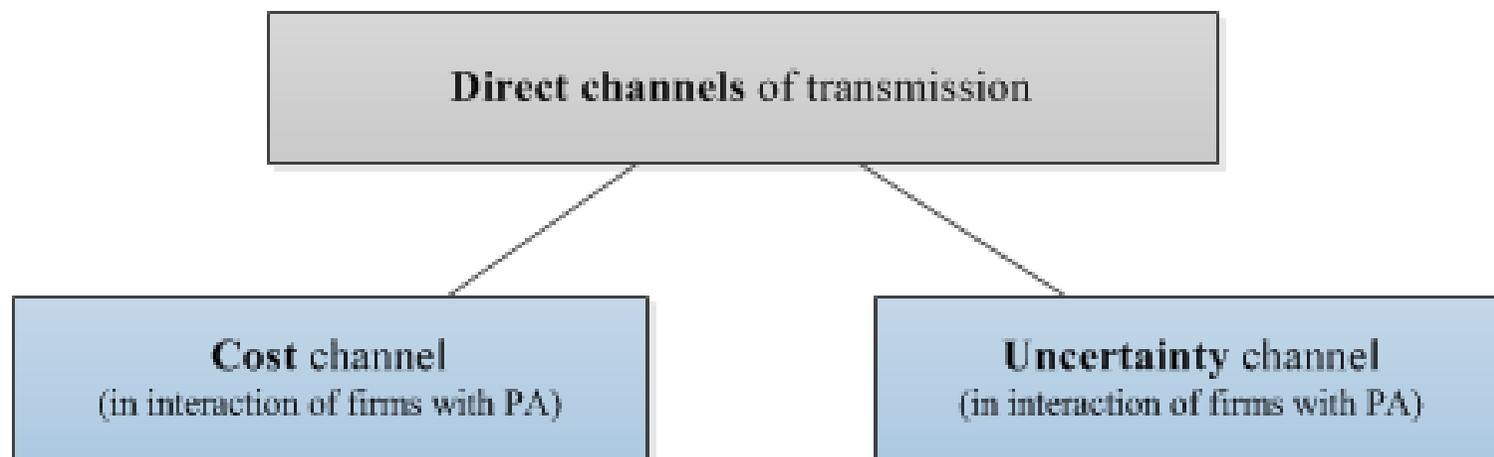
II - Transmission channels

- Costs and risks that firms face are key parameters for private investment decisions
 - Business investments in turn mirror economy-wide competitiveness
- Firms frequently interact with public administration
 - Efficiency and predictability in interactions with public administration are therefore key
- Firms also indirectly depend on public administration
 - Prime beneficiaries of public goods provided by public administration

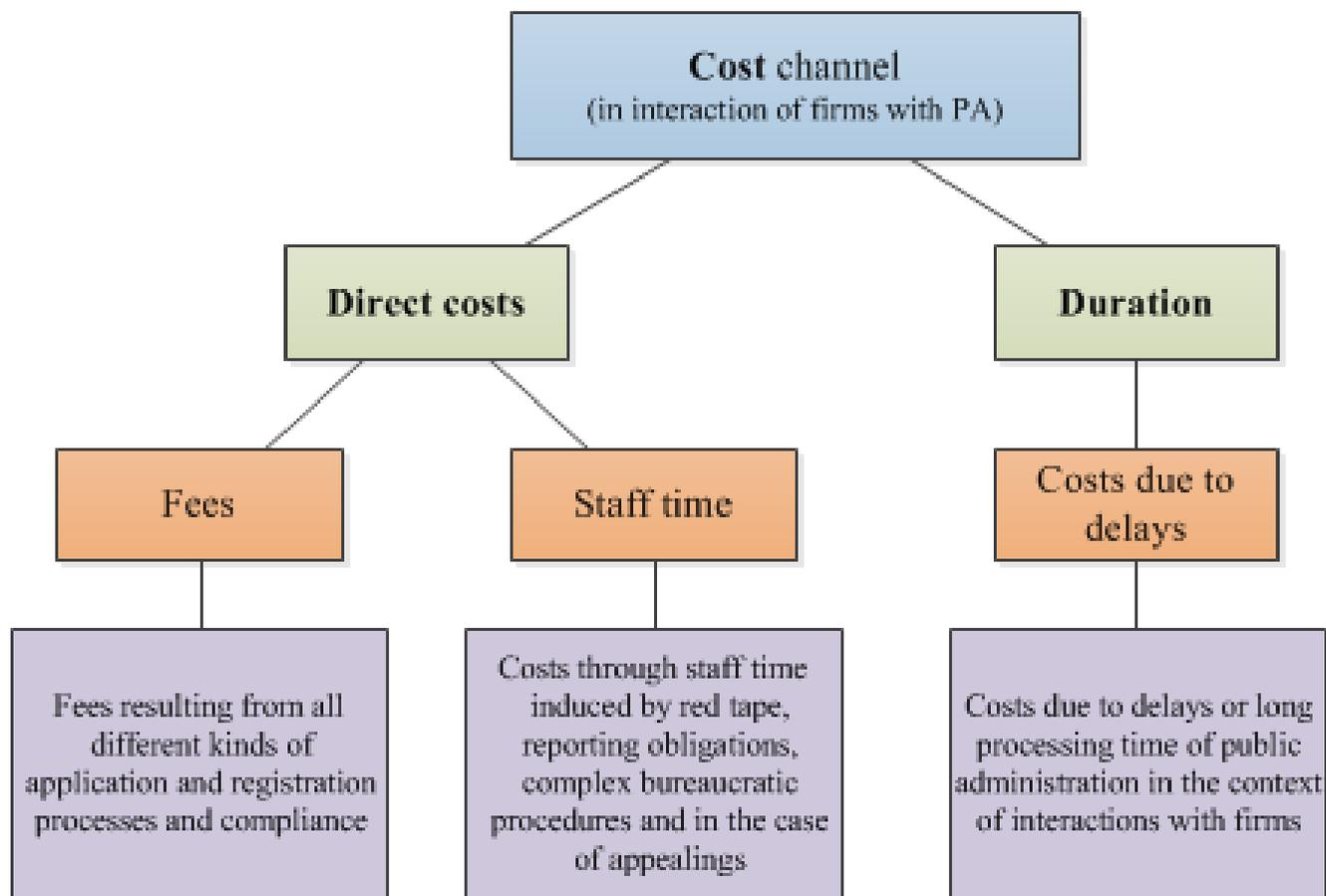
II - Direct & Indirect channel



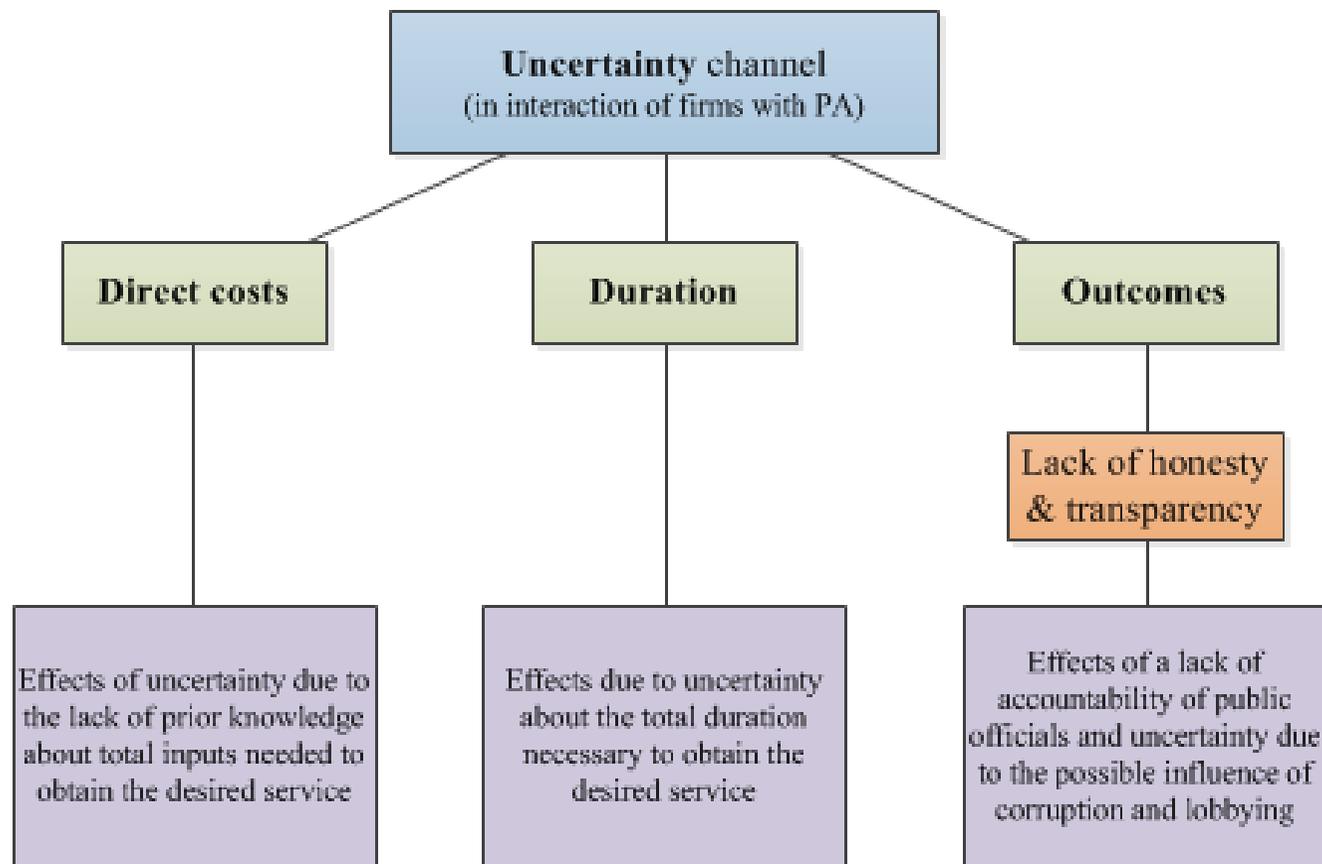
II - Cost & Uncertainty channel



II - Cost channel in detail



II - Uncertainty channel in detail



II - Transmission channels & data

- Given the proposed transmission channels & available data:
 - Which channels are covered by publicly available indicators?
- Indicators mainly capture the cost channel: e.g.,
 - *Costs to start a business*
 - *Time to start a business*
- In many cases, intrinsic (in-)efficiency not distinguished from underlying legal code
 - e.g., *time necessary to file and pay taxes*
- Indicators at the national level usually ignore sub-national variation
 - Applying for construction permits in Bologna takes 164 days compared to 316 days in Palermo

III - Analysis using perceptions data

- Recall the guiding questions
 - What dimensions of public administration are the most costly for firms?
 - Which dimensions should have the highest priority for policy makers?

- Idea here:
 - Using business perceptions to construct measures of relative costs of public administration incurred by firms

- Business perceptions have key advantages over other measures, but their subjectivity imposes challenges for policy advice
 - We apply two innovative mechanisms to 'raw' business perceptions to account for potential biases

III - Terminology

- Subjective assessment by firm managers
 - Various aspects of public administration can be covered
 - Can be interpreted as costs imposed on firms by public administration
 - “Is {dimension of public administration} no obstacle, a minor, a moderate, a major or a very severe obstacle to the current operations of this establishment?”
 - Responses assessed on 5-point scale (0 no obstacle to 4 very severe obstacle)

- What are relative costs?
 - Absolute costs in monetary terms cannot be retrieved
 - But important comparisons of the costs still feasible ('relative costs')

III - Strengths of business perceptions

- Interpretation
 - Difference in profits between ideal state of PA and actual quality
 - Measured in relative units of foregone profits / costs imposed
- First-hand experience of the quality of public administration
 - Complements experts' assessments as in Doing Business
 - Comprises assessments of hundreds of respondents
 - Allows for different methods of aggregation
- Measure costs of different aspects of PA on single scale
 - Quantification independent from a particular unit of measurement
 - Comparisons of importance between different aspects feasible
- Reflect relevance of PA for firms
 - Complements objective indicators which contain no judgement about relevance

III - Weaknesses of business perceptions

- Problems may occur when using perceptions directly
- Example:
 - IT Firm argues that low-quality internet access is a severe obstacle
 - Non-IT firm does not report internet access as an obstacle
 - From this, we cannot infer that the quality of internet access is generally low in this country

III - Weaknesses of business perceptions (cont.)

- Dependence on individual factors
 - Individual assessments driven by idiosyncratic factors
 - Short-sightedness of respondents
- Dependence on firm characteristics
 - Such as size, industry etc.
 - Assessments likely demand-driven
- Problems may occur using 'raw' perceptions
- Adaption of perceptions data necessary
 - Controlling for firm characteristics
 - Controlling for sample composition

III - Empirical approach

- Two alternative methods are used to remove dependence on firm characteristics and sample composition
 - 1) Benchmarking approach
 - Introduced by Carlin et al. (2006, 2010)
 - Generation of conditional mean of business perceptions
 - sophisticated and based on regressions
 - 2) Mean correction approach
 - Very simple, but small limitation in terms of interpretability
 - Perceptions are expressed relative to the mean perception

III - Benchmarking approach

- Perceptions used as dependent variable and are regressed on firm characteristics
- Set of firm-specific dummies defined against a benchmark

$$perc_{jict} = \beta_1 empl_{ict} + \beta_2 sector_{ict} + \beta_3 own_{ict} + \beta_4 foreign_{ict} + \beta_5 exports_{ict} + \eta_{jc} + \epsilon_{jict}$$

- Perception (j) of firm (i) in country (c) in year (t)
- η_{jc} - country-fixed-effects
- Assessments independent from biases are obtained from

$$\hat{r}_{c_{jict}} = \hat{\eta}_{jc} + \hat{\epsilon}_{jict}$$

- Robustness checks
 - Adaption of the definition of the benchmark firm
 - Accounting for firm age & firm productivity

III - Benchmarking approach (cont.)

Control variables	Benchmark firm definition
Size	30 employees (robustness: 26)
Sector	Manufacturing
Main ownership	Privately owned
Share of foreign ownership	Less than 10%
Exporting status	Less than 10% of sales
Age	12 years (sample median)
Productivity	Defined as $\frac{sales}{employees}$ (sample median)

III - Mean correction approach

- Alternative to the benchmarking approach
- Respondents' individual tendency to complain are computed by

$$\bar{t}_{ict} = \frac{1}{J} \sum_{j=1}^J perception_{jict}$$

- Raw perceptions are corrected for the tendency to complain

$$\widetilde{perception}_{jict} = \frac{perception_{jict}}{\bar{t}_{ict}}$$

- Assessments free from biases are then obtained by

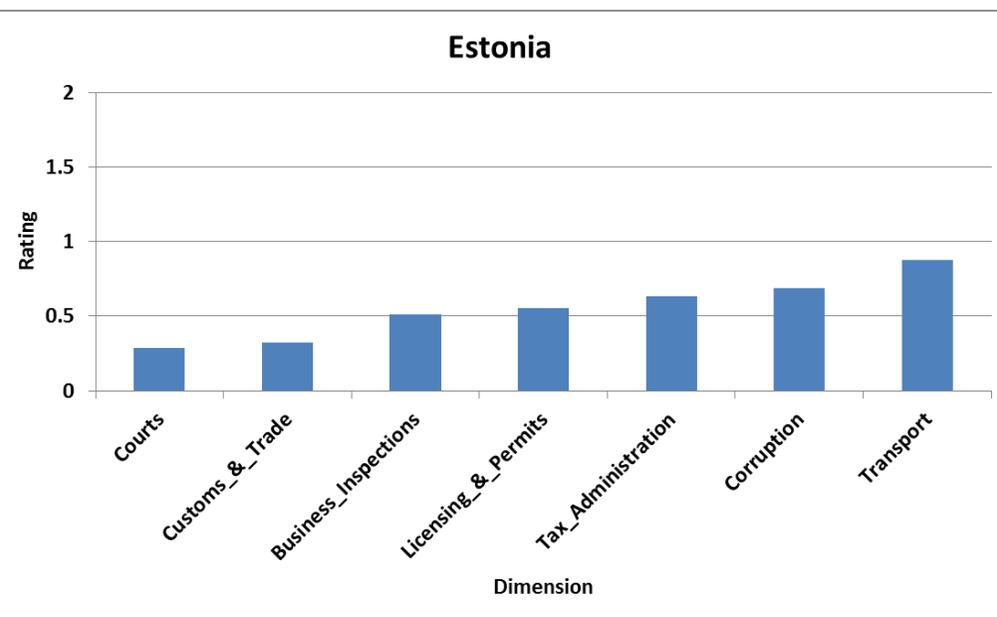
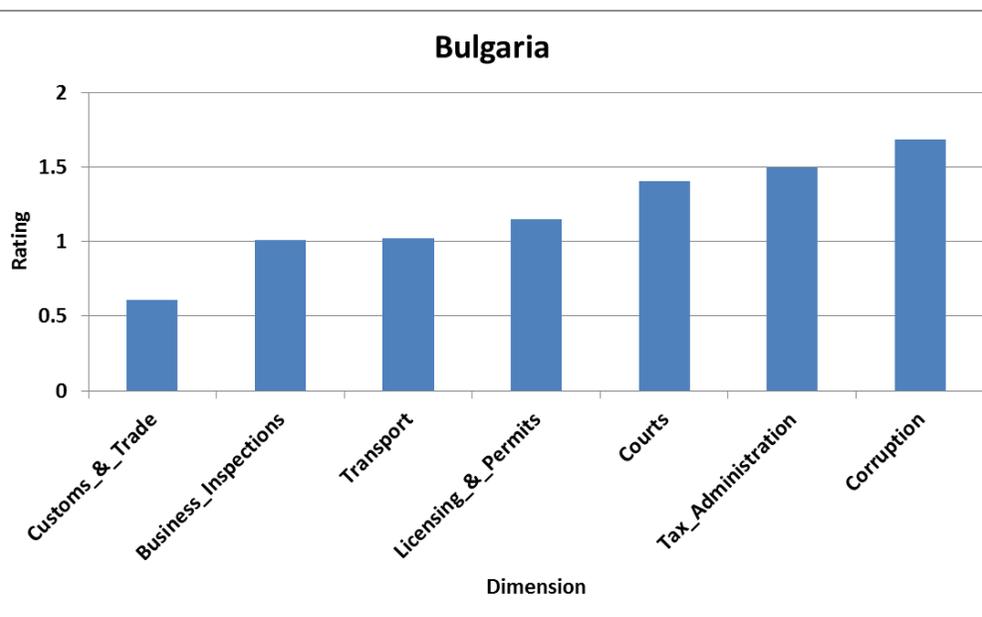
$$\tilde{r}_{jct} = \frac{1}{N} \sum_{i=1}^N \widetilde{perception}_{jict}$$

III - Data

- World Bank Enterprise Surveys
- Sample includes:
 - 11 Member States (Eastern-European)
 - 5 Candidate States
 - 1 Potential Candidate State (Bosnia & Herzegovina)
- Covered time period: 2002 – 2013
- Comprises 7 dimensions of public administration
 - Corruption
 - Customs and trade
 - Tax administration
 - Business inspections
 - Courts
 - Licensing and permits
 - Transport

III - Within-country analysis (benchmarking approach)

- Example: Bulgaria & Estonia in 2008

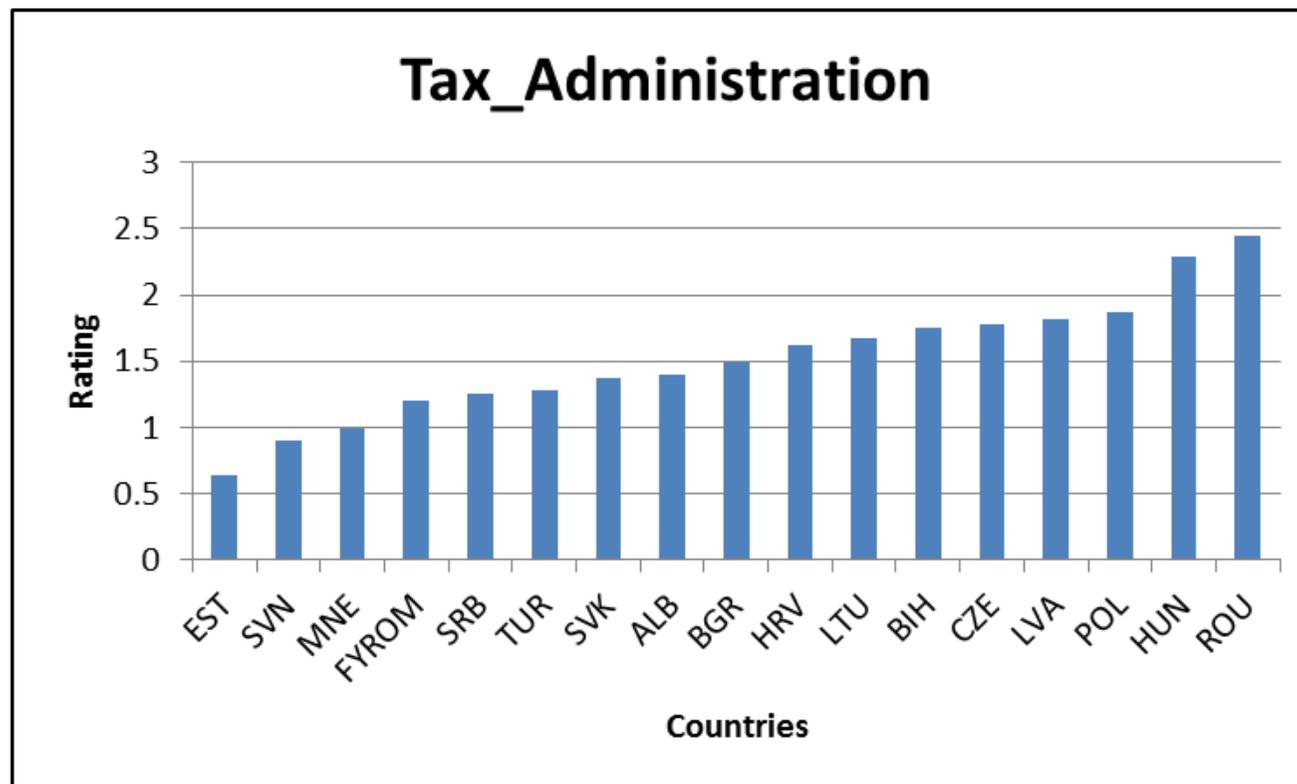


III - Most & least impeding factors for firm growth

	2005		2008		2013	
	least	most	least	most	least	most
ALB	Transport	Corruption	Customs & Trade	Corruption	.	.
BGR	Transport	Corruption	Customs & Trade	Corruption	Customs & Trade	Corruption
BIH	Transport	Tax Administration	Business Inspections	Corruption	Transport	Corruption
CZE	Transport	Corruption	Customs & Trade	Courts	.	.
EST	Transport	Courts	Courts	Transport	.	.
HRV	Transport	Tax Administration	Customs & Trade	Courts	Licensing & Permits	Tax Administration
HUN	Transport	Tax Administration	Customs & Trade	Tax Administration	.	.
LTU	Transport	Tax Administration	Customs & Trade	Corruption	.	.
LVA	Transport	Corruption	Customs & Trade	Tax Administration	.	.
FYROM	Transport	Tax Administration	Business Inspections	Courts	Licensing & Permits	Tax Administration
MNE	Transport	Tax Administration	Courts	Tax Administration	Courts	Tax Administration
POL	Transport	Tax Administration	Customs & Trade	Tax Administration	.	.
ROU	Transport	Courts	Customs & Trade	Tax Administration	.	.
SRB	Customs & Trade	Courts	Business Inspections	Corruption	Transport	Tax Administration
SVK	Transport	Tax Administration	Customs & Trade	Corruption	.	.
SVN	Transport	Tax Administration	Customs & Trade	Transport	Licensing & Permits	Tax Administration
TUR	Transport	Corruption	Business Inspections	Corruption	.	.

III - Between-country analysis (benchmarking approach)

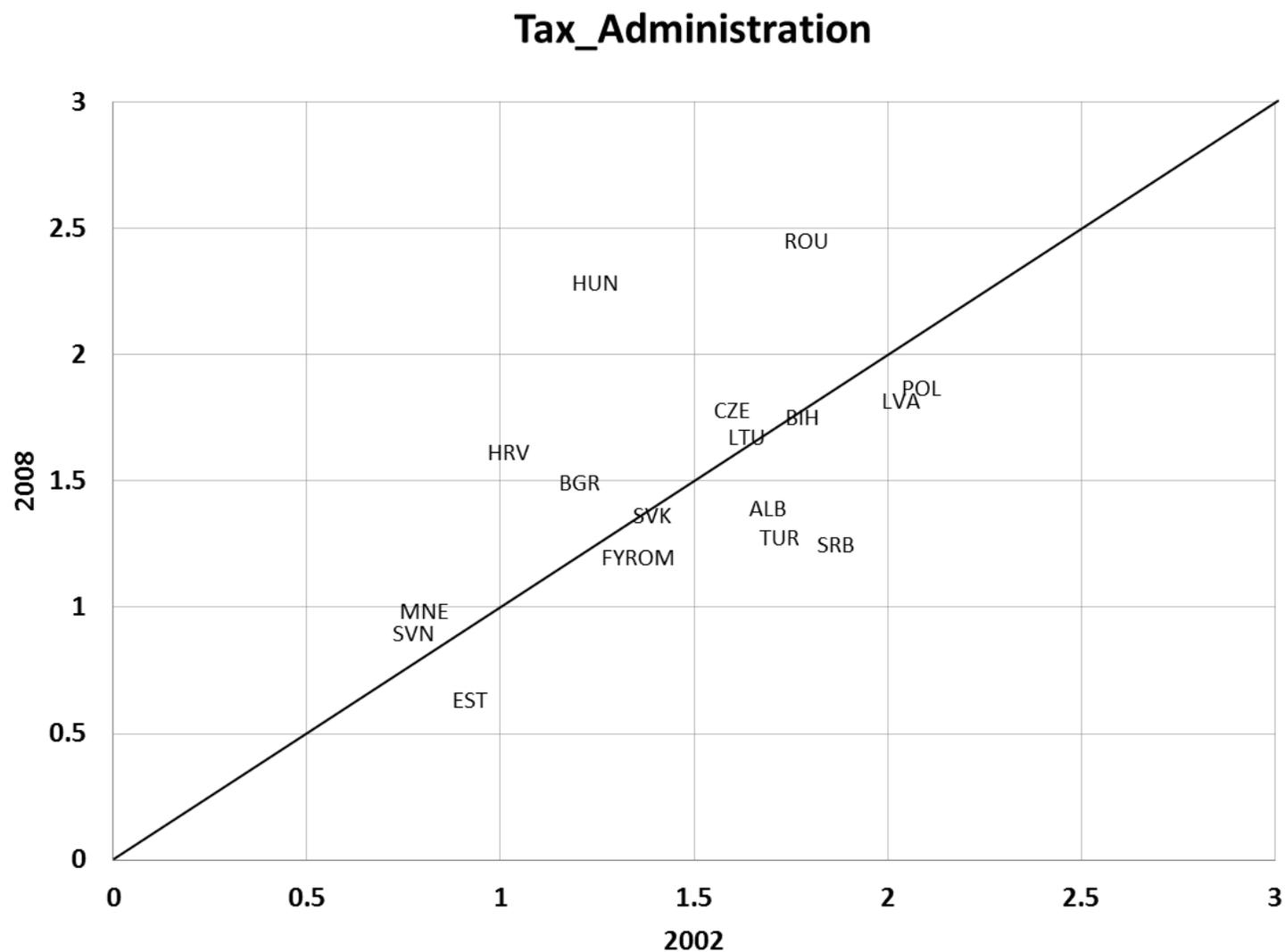
- Example: Tax administration in 2008



III - Worst and best performing Member States

	2002		2005		2008		2013	
	lowest	highest	lowest	highest	lowest	highest	lowest	highest
Corruption	MNE	ALB	SVN	TUR	MNE	ROU	MNE	BIH
Courts	MNE	ALB	EST	TUR	EST	HRV	MNE	SVN
Customs & Trade	SVN	ALB	SVK	ALB	EST	ROU	BGR	BIH
Business Inspections	HUN	POL	.	.
Licensing & Permits	SVN	ROU	SVK	TUR	EST	ROU	MNE	BIH
Tax Administration	SVN	POL	HRV	CZE	EST	ROU	BG	HRV
Transport	SVN	ALB	SVN	TUR	HUN	CZE	BG	BIH

III - Country ratings over time



IV - Conclusions

- Existing indicators mainly focus on the cost channel
 - Indicators capturing the uncertainty channel not available
 - Distinction from underlying legal code still an issue
- Business perceptions can be a powerful tool for policy advice
 - Raw perceptions data indeed seems to exhibit biases (20% of results altered)
 - Both correction mechanisms provide similar results
 - Mean-correction approach interesting alternative asking for lesser computational effort
- Throughout all specifications, tax administration, corruption and courts are assessed to be the most severe obstacles to firm growth