

Measuring Governance Worldwide:
*Possibilities, Pitfalls, and Applications of the
Worldwide Governance Indicators (WGI) & others*

Daniel Kaufmann (with Aart Kraay)

The World Bank

www.govindicators.org

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Overview

- **Brief update on Worldwide Governance Indicators (WGI) project**
 - updated indicators for 2005
 - move to annual frequency
 - release of (almost) all underlying data sources
 - limits on CPIA data by WB, AfDB and ADB
- **Principles for users of all types of governance indicators:**
 - measurement error is pervasive
 - there are no silver bullets
 - links from policy actions to outcomes are complex

[Note: WGI, a research product, not used for policy making/resource allocation at the WB]

Worldwide Governance Indicators Project: Defining Governance Broadly

Governance consists of the traditions and institutions by which authority in a country is exercised.

This includes:

- the process by which governments are selected, monitored and replaced,***
- the capacity of the government to effectively formulate and implement sound policies, and***
- the respect of citizens and the state for the institutions that govern economic and social interactions among them.***

Worldwide Governance Indicators Project

- **Six aggregate governance indicators covering 213 countries over past decade**
 - **Voice and Accountability**
 - **Political Stability/Absence of Violence**
 - **Government Effectiveness**
 - **Regulatory Quality**
 - **Rule of Law**
 - **Control of Corruption**
- **Based on 31 data sources from 25 organizations, capturing views of thousands of informed stakeholders**
- **Widely used by analysts, officials, civil society, and researchers to monitor governance and study its causes and consequences**

2006 Update of Worldwide Governance Indicators: Key Features

- **Move to annual data**
 - **complement biannual data 1996-2004 with annual data for 2003, 2005**
 - **continue reporting data annually in future**
- **First-time access to data underlying aggregate indicators**
 - **hundreds of individual indicators over past decade**
 - **one of the largest on-line governance data resources at www.govindicators.org**

Sources of Governance Data

- **Cross-Country Surveys of Firms:** Global Competitiveness Survey, World Business Environment Survey, World Competitiveness Yearbook, BEEPS
- **Cross-Country Surveys of Individuals:** Gallup International Voice of the People, Latinobarometro, Afrobarometer
- **Expert Assessments from Commercial Risk Rating Agencies:** DRI, PRS, EIU, World Markets Online, Merchant International Group, IJET Travel Consultancy, PERC
- **Expert Assessments from NGOs, Think Tanks:** Reporters Without Borders, Heritage Foundation, Freedom House, Amnesty International, Bertelsmann Foundation, Columbia University, International Research and Exchanges Board
- **Expert Assessments from Governments, Multilaterals:** World Bank CPIA, EBRD, AFDB, ADB, State Dept. Human Rights Report, Trafficking in Persons Report

Why Aggregate Indicators?

Basic Premise: *individual data sources provide a noisy “signal” of broader concept of governance, e.g.:*

- trust in police → **RULE OF LAW**
- freedom of press → **VOICE & ACCOUNTABILITY**
- bureaucratic quality → **GOV'T EFFECTIVENESS**

Benefits of Aggregation

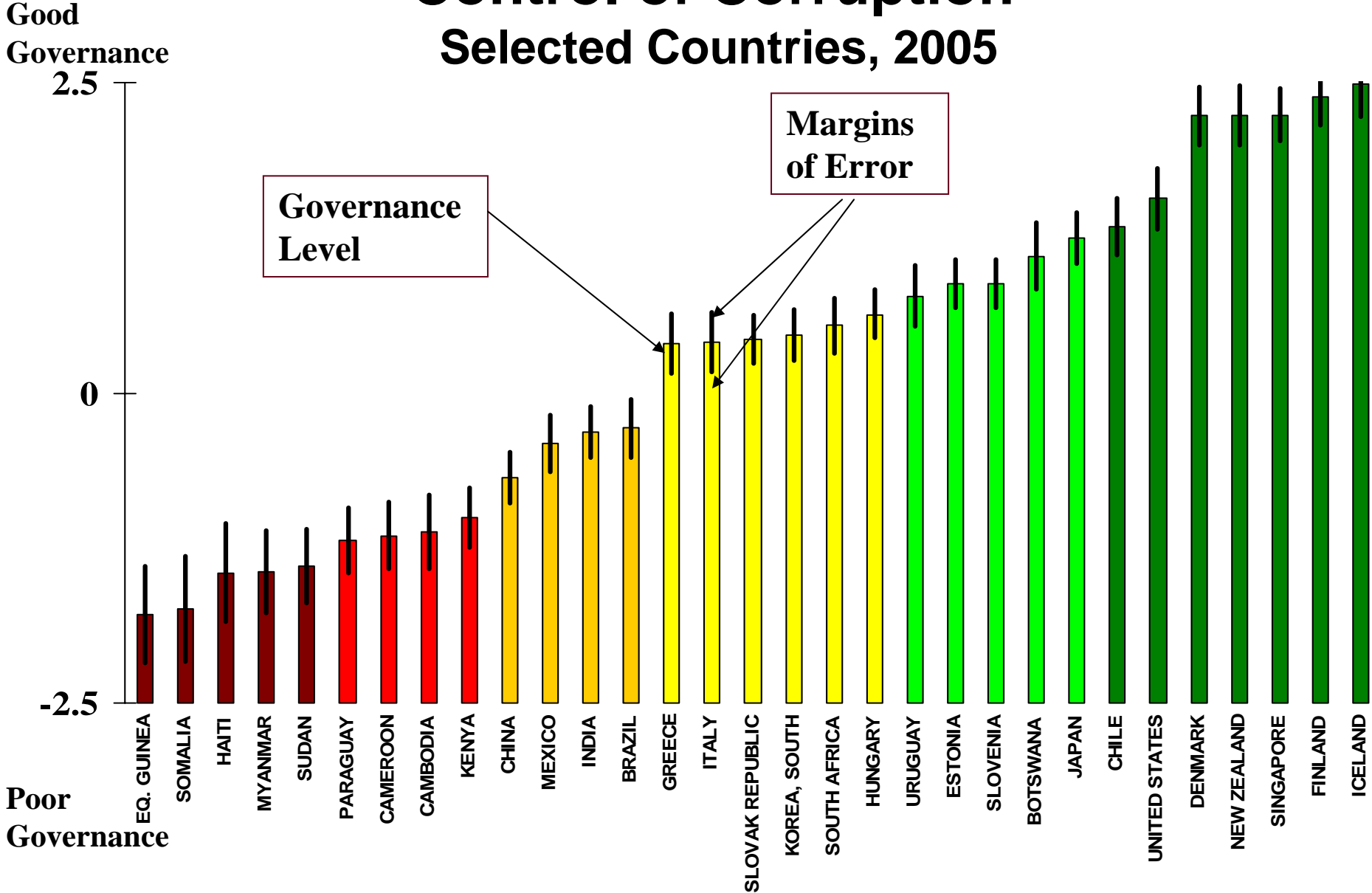
- aggregate indicators are more informative about broad concepts of governance – simple intuition of averaging
- less likely to generate extreme outliers
- generate explicit margins of error for country scores

Levels of Governance Worldwide, 1996-2005

- Estimates of governance for 213 countries
- Standard errors to assess the *precision* of the estimates
 - Rule of thumb: cross-country differences in governance significant if 90% confidence regions don't overlap
 - Many small differences between countries not significant...
 - But many larger differences are statistically significant
 - 70% of all comparisons based on aggregate indicator...
 - but only 30% of all comparisons based on individual indicators
- Precision of governance indicators has improved over time with more, and better, data sources

Control of Corruption

Selected Countries, 2005



Source for data: 'Governance Matters V: Governance Indicators for 1996-2005', D. Kaufmann, A. Kraay and M. Mastruzzi, September 2006.

Note: Colors are assigned according to the following criteria: Dark Red, below 10th percentile rank among all countries in the world; Light Red between 10th and 25th; Orange, between 25th and 50th; Yellow, between 50th and 75th; Light Green between 75th and 90th; Dark Green above 90th.

Three Principles for Using Governance Indicators

1. All indicators have measurement error

- rely on variety of data sources
- reduce noise by aggregation

2. There are no silver bullets

- subjective/perceptions vs. objective/statutory
- aggregate vs. individual indicators
- regular cross-national monitoring/research vs. detailed country diagnostics/country policy advice
- complements vs. substitutes

3. Links from policy actions to outcomes are complex

- “actionable” versus “action-worthy” indicators

1. All Indicators Have Measurement Error

- **Governance is difficult to observe directly, so all available measures are only proxies, e.g.**
 - **Perceptions measures:**
 - **Corruption in procurement?**
 - **Confidence in the courts?**
 - **Onerous regulation of entry for a new firm?**
 - **Objective/Statutory measures**
 - **Do regulations stipulate competitive bidding**
 - **Do materials used match materials paid for?**
 - **How many procedures to fire a worker?**

1. Measurement Error, Cont'd

- Two types of measurement error in any proxy:
 1. *Errors in measuring specific proxies, e.g.*
 - sampling error in survey
 - factual errors in objective measures
 - differences of opinion
 2. *Gaps between proxies and broader concepts, e.g.*
 - corruption in judiciary vs. overall graft
 - business entry regulation vs. overall regime
- WGI (unusually!) reports explicit margins of error
 - Yet margins of error are implicit in 'objective' and in individual subjective indicators – *and they are large too*

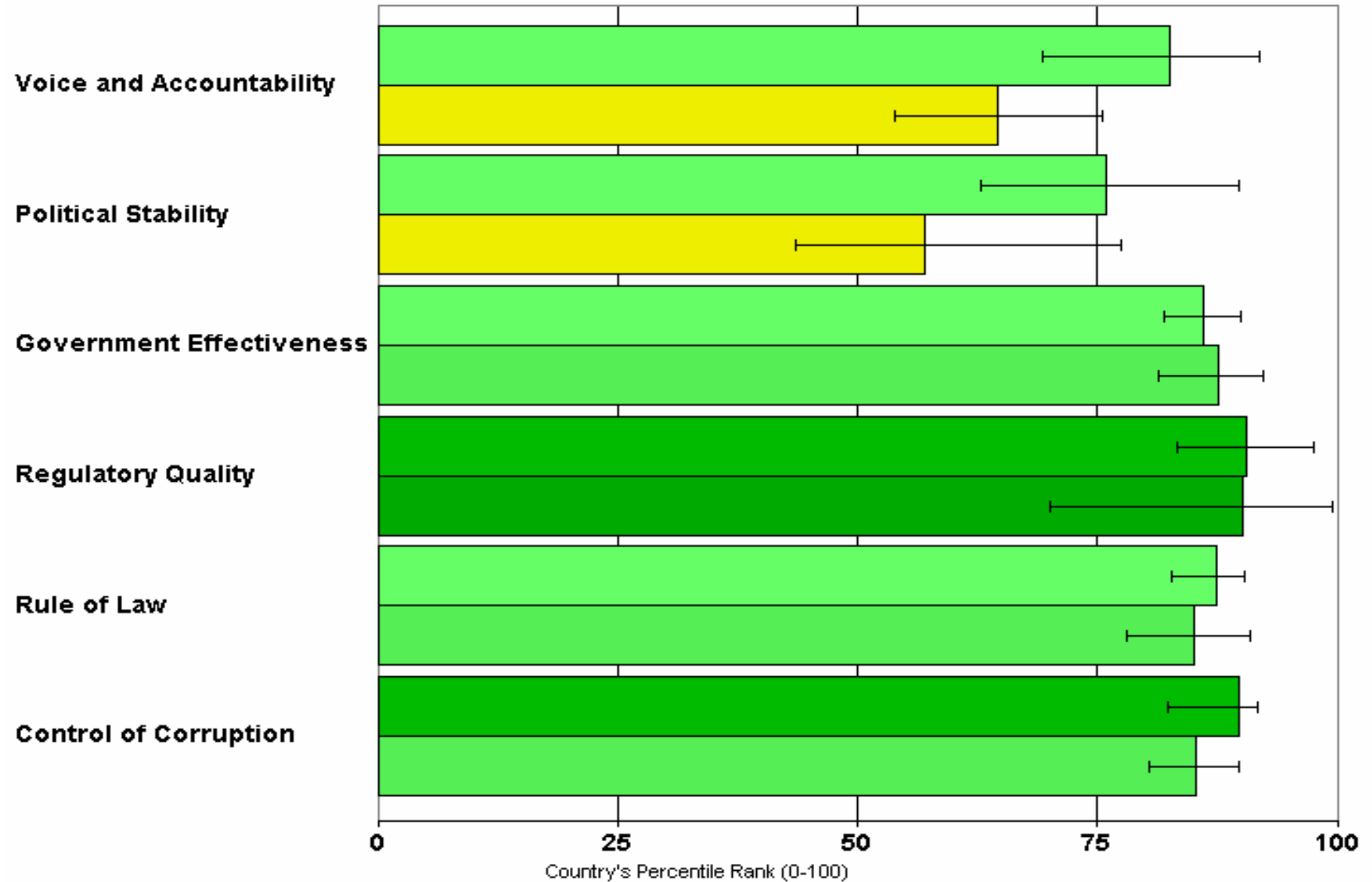
2. No Silver Bullets:

a) Aggregate vs. Individual Indicators

- **Aggregate indicators have:**
 - **broad country coverage (e.g. TI; WGI)**
 - **more information on broad concepts of governance**
 - **(potentially) can exhibit explicit margins of error**
- **Individual indicators are:**
 - **easier to interpret**
 - **(potentially) identify policy interventions**
- **Ideally use aggregate indicators that can be unbundled**
 - **Multi-source: WGI aggregate & individual indicators**
 - **Single-source: World Bank CPIA; and Global Integrity Index (GII)**

Aggregate Governance Indicators for Chile [2005 vs. 1998]

Comparison between 2005, 1998 (top-bottom order)



Unbundling WGI Aggregate Indicators – Chile

Aggregate Indicators for Chile						
Governance Indicator	Year	Percentile Rank (0-100)	Estimate (-2.5 to +2.5)	Standard Error	Number of surveys/polls	Sources
Voice and Accountability	2005	82.6	+1.04	0.14	10	List
	1998	64.7	+0.59	0.23	6	List
Political Stability	2005	75.9	+0.85	0.21	10	List
	1998	57.1	+0.37	0.26	6	List
Government Effectiveness	2005	86.1	+1.26	0.15	12	List
	1998	87.6	+1.31	0.26	7	List
Regulatory Quality	2005	90.6	+1.40	0.17	10	List
	1998	90.1	+1.10	0.27	6	List
Rule of Law	2005	87.4	+1.20	0.13	15	List
	1998	85.1	+1.18	0.18	11	List
Control of Corruption	2005	89.7	+1.33	0.14	12	List
	1998	85.3	+1.13	0.19	10	List

Individual Indicators for Chile Voice and Accountability, 2005 (0 (bad) to 1 (good) scale)		
Source	Publication	CHILE
Bertelsmann Foundation	Bertelsmann Transformation Index	+0.90
Economist Intelligence Unit	Country Risk Service	+0.90
Freedom House	Freedom in the World	+0.92
World Economic Forum	Global Competitiveness Report	+0.59
Cingranelli-Richards (CIRI)	Human Rights Database	+0.75
Latinobarometro	Latinobarometro Surveys	+0.40
Political Risk Services	International Country Risk Guide	+0.79
Reporters Without Borders	Reporters Without Borders	+0.89
Institute for Management and Development	World Competitiveness Yearbook	+0.86
Global Insight	Business Conditions and Risk Indicators	+0.88

Reporters Without Borders

<http://www.rsf.org>

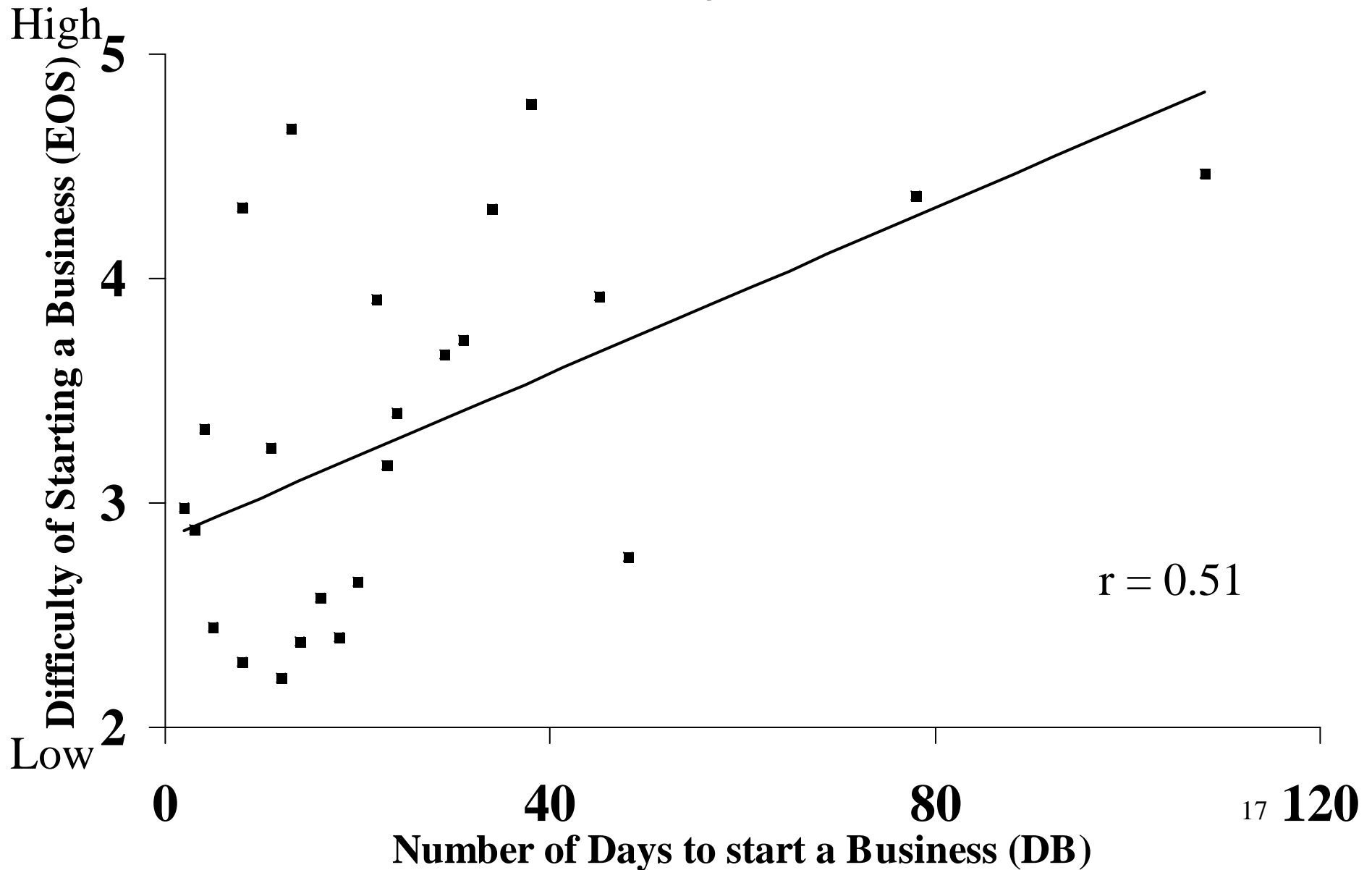
Reporters without Borders, headquartered in Paris, is an international organization dedicated to the protection of reporters and respect of press freedom in the world. In 2002, International Reporters Without Borders published its first worldwide press freedom index, compiled for 139 countries. The index was drawn up by asking journalists, researchers, and legal experts worldwide to answer 50 questions about a whole range of press freedom violations.

2. No Silver Bullets:

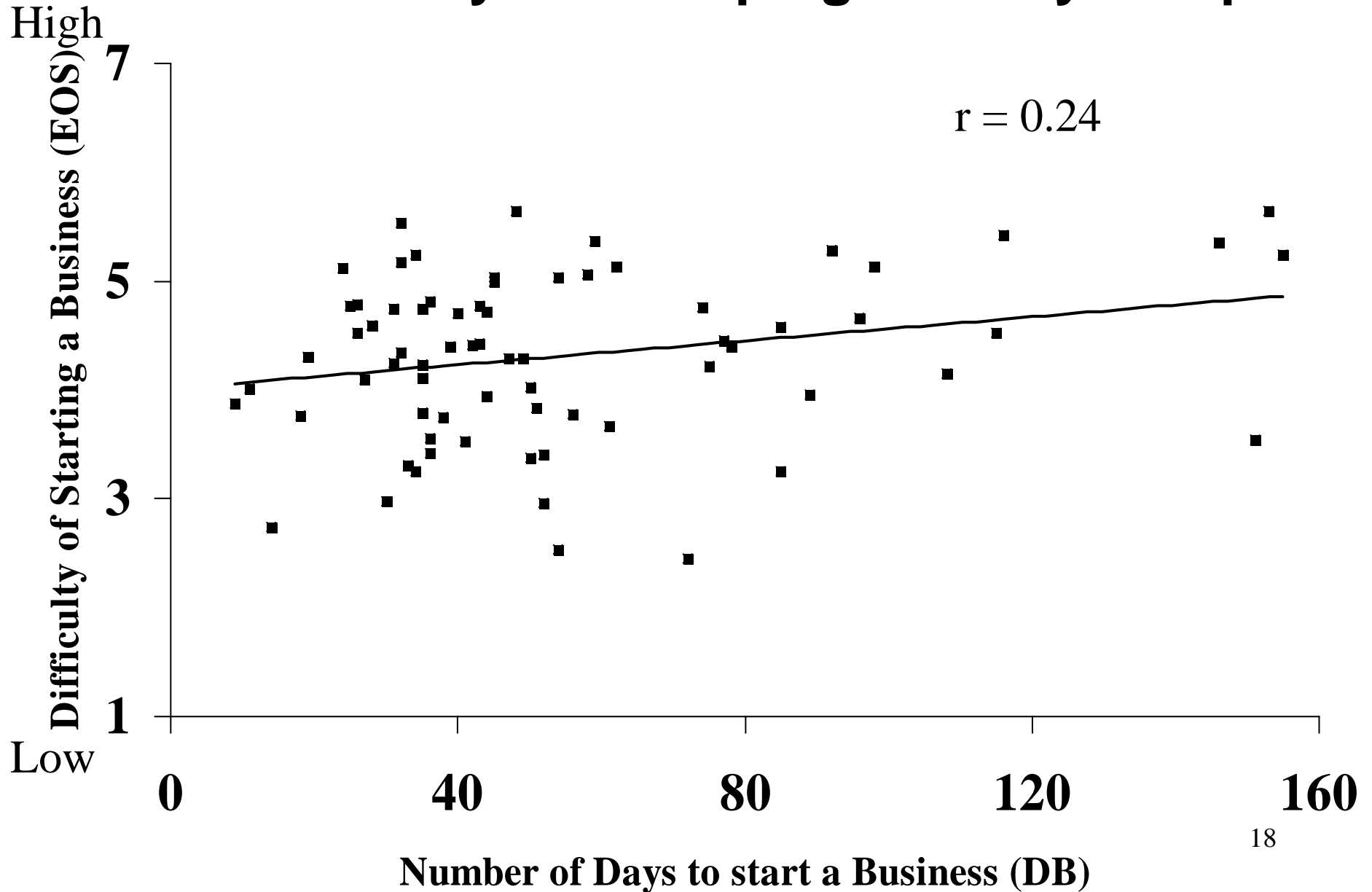
b) Subjective vs. Objective Measures

- Perceptions data are very useful even when objective measures exist
 - But often only type of cross-country data available (e.g. corruption)
- Perceptions matter directly!
- Perceptions data add insight over *de jure* measures when such objective measures exist, e.g. comparison of:
 - statutory number days to start a business from Doing Business database (*de jure*)
 - firms perceptions of ease of business entry from Global Competitiveness Survey (*de facto*)
 - two are weakly correlated in developing countries
 - prevalence of corruption explains much of gap between the two

Subjective and Objective Measures of Ease of Business Entry: OECD/NIC Sample



Subjective and Objective Measures of Ease of Business Entry: Developing Country Sample



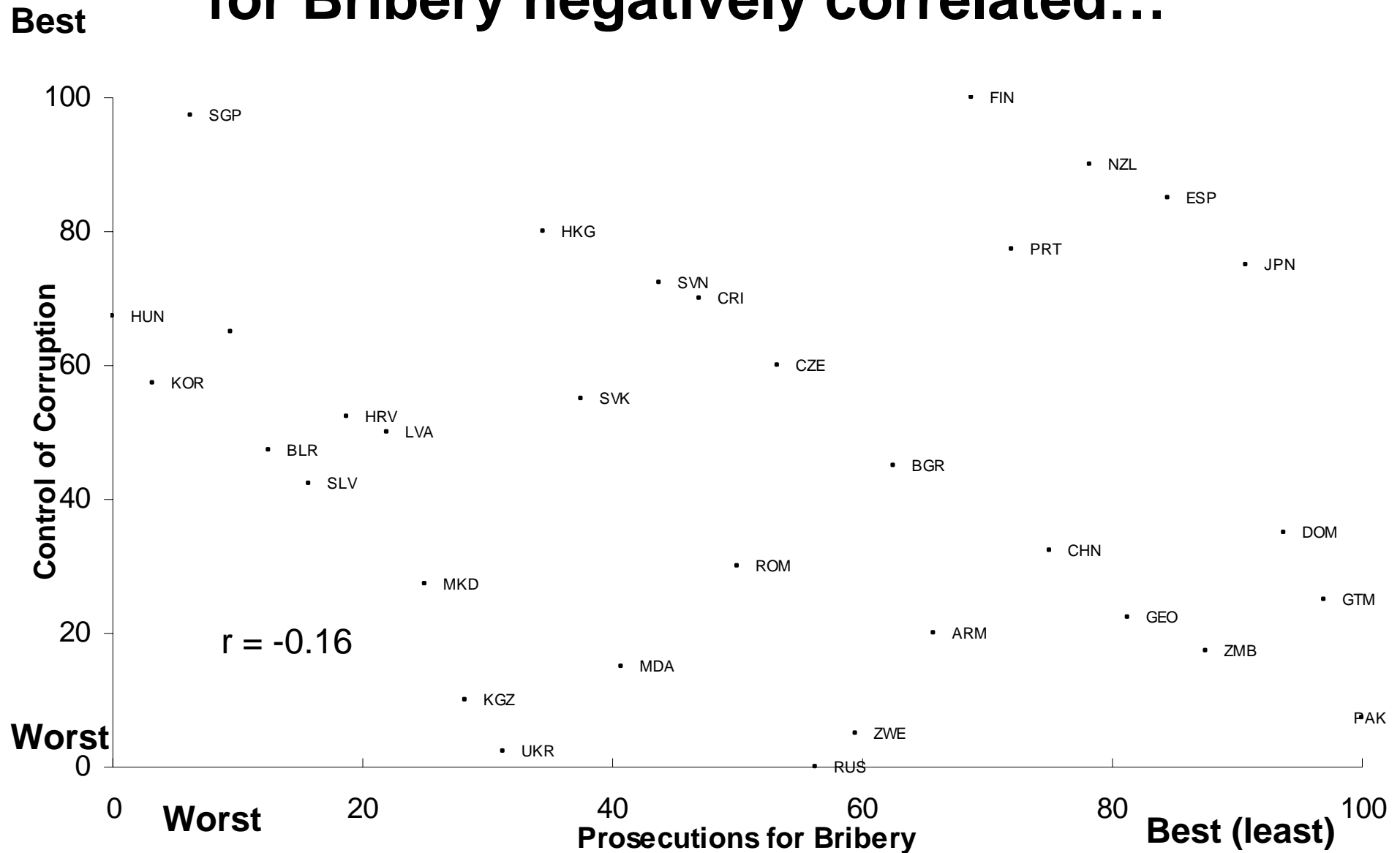
2. No Silver Bullets:

b) Subjective vs. Objective Measures, cont'd

- ‘Objective’ indicators can be very specific, but interpretation can be ambiguous and imprecise
 - parliamentary vs. presidential system may matter for outcomes, but not a “governance indicator” *per se*
 - does an anti-corruption commission exist?
 - prosecutions for bribery?
- ‘Perceptions’ data need not be vague or imprecise
 - “do you think corruption is a problem, yes or no?” vs.
 - “what percent of the total contract value do firms like yours typically have to pay in bribes to secure procurement contracts?”

False dichotomy between subjective and objective measures not helpful

Corruption Control and Prosecutions for Bribery negatively correlated...



Sources: Worldwide Governance Indicators and Seventh United Nations Survey on Crime Trends and the Operations of Criminal Justice Systems, 2000. Axis report percentile ranks ranging from 0 (worst) to 100 (best). See Lambsdorff 2006

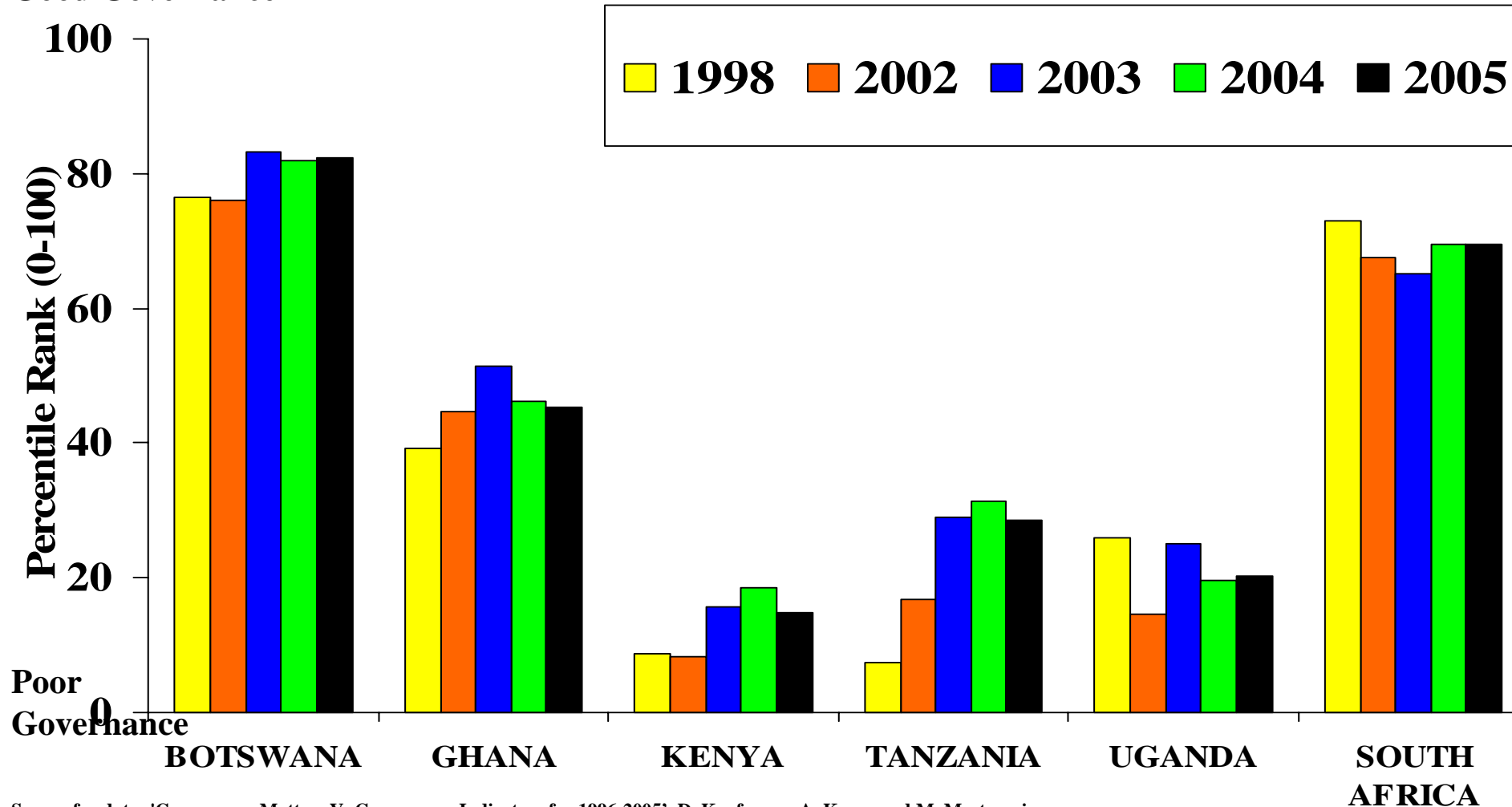
2. No Silver Bullets:

c) Timely Monitoring vs. In-Depth Evaluation

- **Worldwide benchmarking, regular monitoring and cross-country research:**
 - **aggregate (and some individual) governance indicators**
- **In-depth evaluation of particular country based on many potential instruments and techniques, e.g.:**
 - **PEFA, OECD Procurement Indicators**
 - **Country Governance & A-C (GAC) Diagnostics**
 - **comparing “inputs” and “outputs”, e.g. infrastructure in Italy, roads in Indonesia**
- **Complementarity between two types of indicators**
 - **e.g. Kenya governance assessment**

Governance Assessment Illustration: Kenya in Comparative Perspective -- Control of Corruption Over Time, WGI 1998-2005

Good Governance



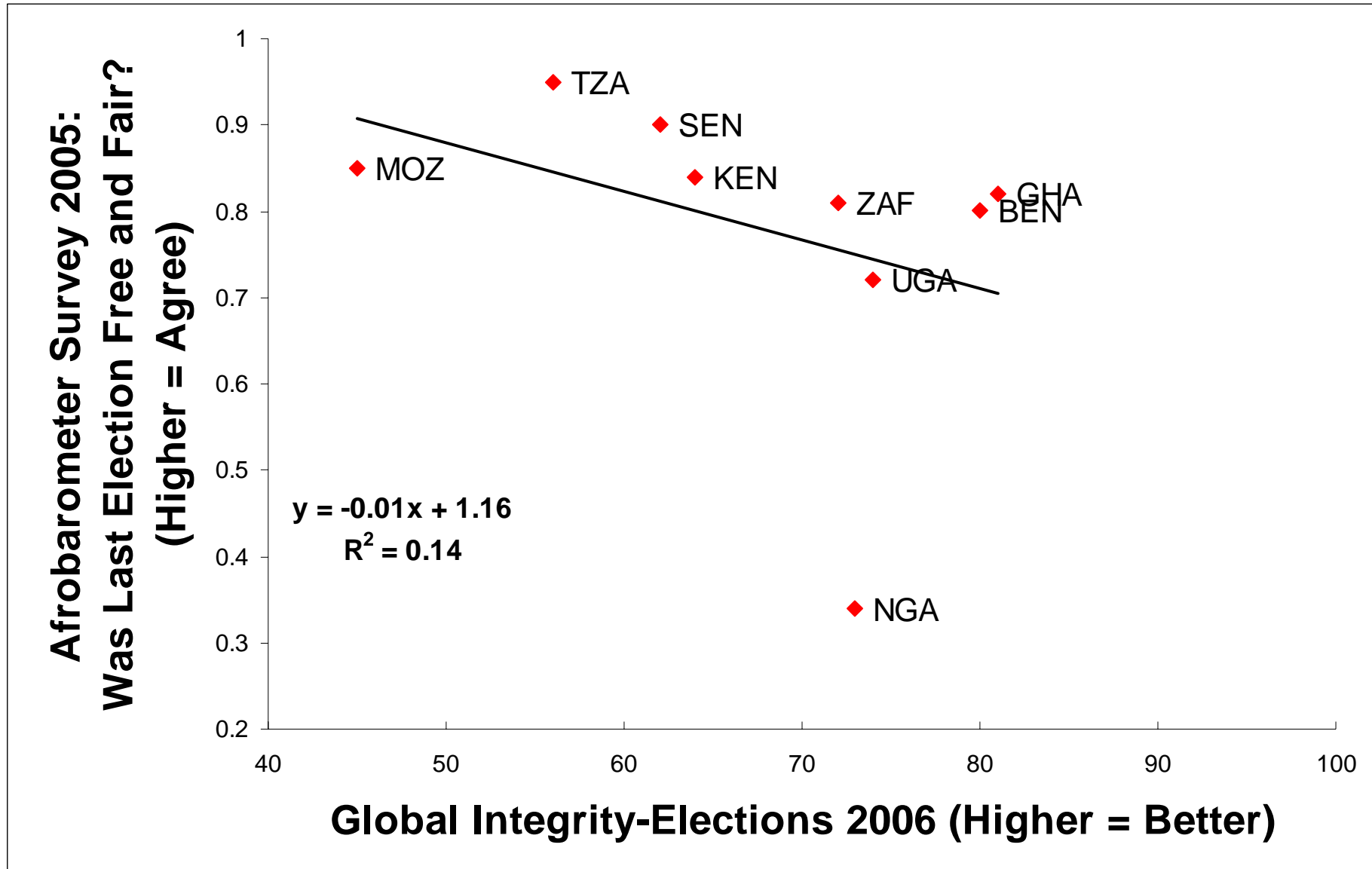
Source for data: 'Governance Matters V: Governance Indicators for 1996-2005', D. Kaufmann, A. Kraay and M. Mastruzzi,

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3. Links from Policy Interventions to Governance Outcomes are Complex

- **‘Objective’ and easy-to-measure indicators may not matter most, e.g.**
 - **existence of anticorruption commission?**
 - **turnover of civil servants?**
 - **proportion of population incarcerated?**
- **Risk of confusing reform reality and reform illusion**
- **Across countries, priority actions and their impact will differ —→ crucial to measure outcomes as well**
- **Thus, measure BOTH: i) “action-worthy” indicators, and, ii) outcome indicators – it means asking firms, citizens and experts**

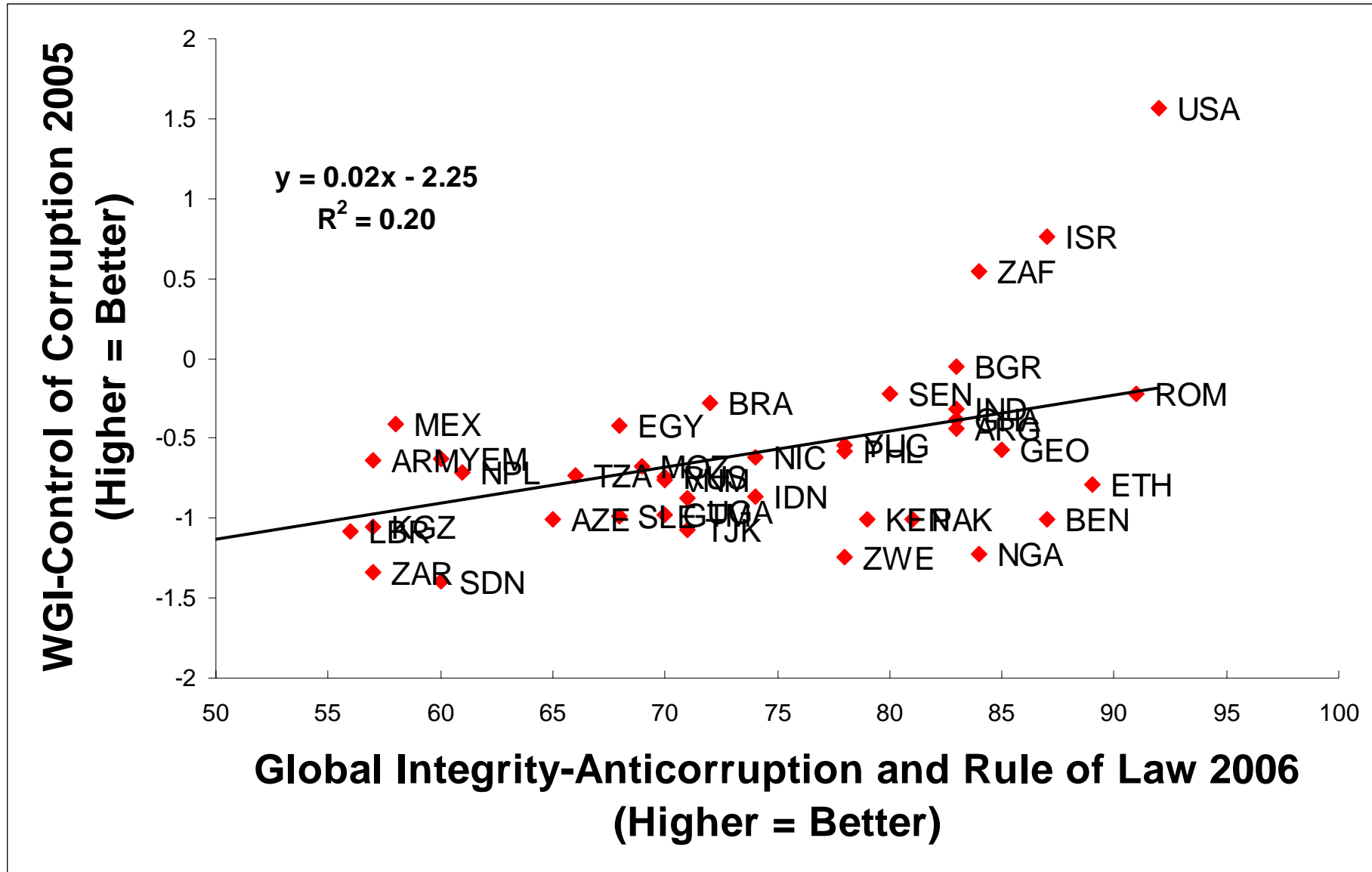
3. Complex Links, Cont'd: Comparing Global Integrity and Afrobarometer



3. Complex Links, Cont'd: Leading GMR “Actionable” Indicators

- **Global Integrity Index 2006**
 - 43 countries (15 with one previous observation)
 - 290 indicators of *existence* and *effectiveness*
- **OECD-DAC Procurement Indicators**
 - very detailed assessment of laws/practices
 - 5 pilots done, public access limited
- **PEFA Indicators**
 - 28 indicators of public financial management
 - 31 countries done, 47 in progress/planning, public access limited
 - very limited panel dimension
- **Open Budget Initiative**
 - 122 indicators of budget transparency
 - 59 countries, single cross-section

3. Complex Links, Cont'd: Comparing Global Integrity and WGI-CC



On Panel Debate on Worldwide Governance Indicators

Areas of Agreement:

- need for care and cautious use of indicators, do not over-interpret
- need multiplicity of indicators, different methods & approaches – yet having a set (or sets) of independent indicators also important, along those built with governments, etc. -- Combine
- a bit of false divide between subjective vs. objective
- Aggregate indicators not specific actionable enough

Example of how reformists in emerging economies are using them, judiciously..., & academics, civil society

Addressing Concerns on the WGI

Addressing critiques and myths (and response to C. Oman remarks:

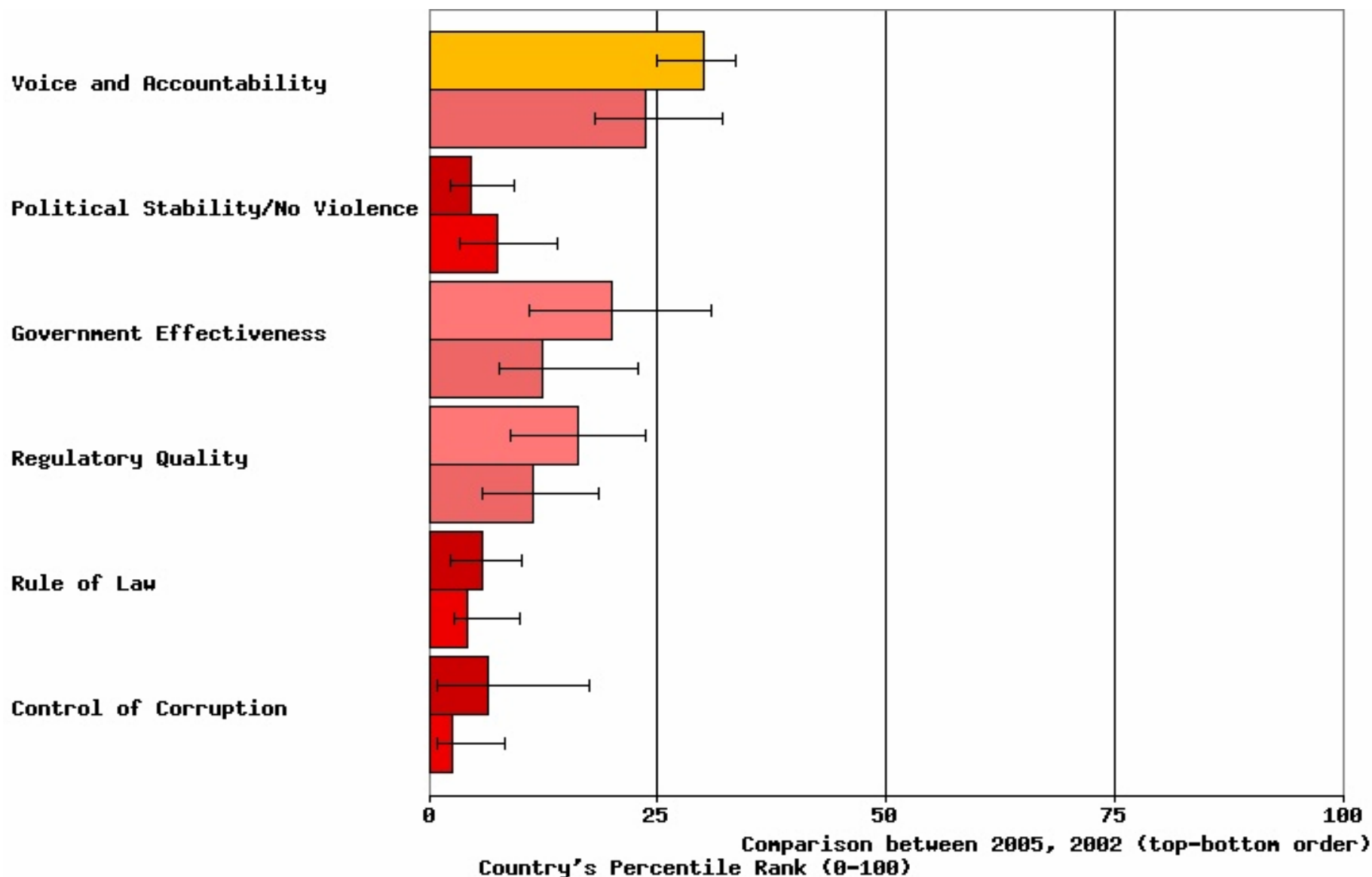
- 1) **Governance Composite?:** No WGI composite indicator of Governance; instead aggregates of 6 dimensions, and all disaggregated data is now available.
- 2) **Use of New sources points to biases?:** Over 210 countries, based on all available information, including new sources – aggregation technique (UCM) allows for this even if new source, margins of error would reflect lack of significance if problem + have done ‘balanced vs. unbalanced’ approaches.
- 3) **Conceptual Framework?:** simple, causality tests with respect to development outcomes are for other research projects – WGI focus is on constructing an indicator
- 4) **WGI indicators cannot be used to track progress over time?** Incorrect in Oman/Arndt OECD booklet. By using margins of error, & one finds that over 6-9 years, many significant changes (1/3rd of cases).

Cont.

Answering the Critics, *cont.*

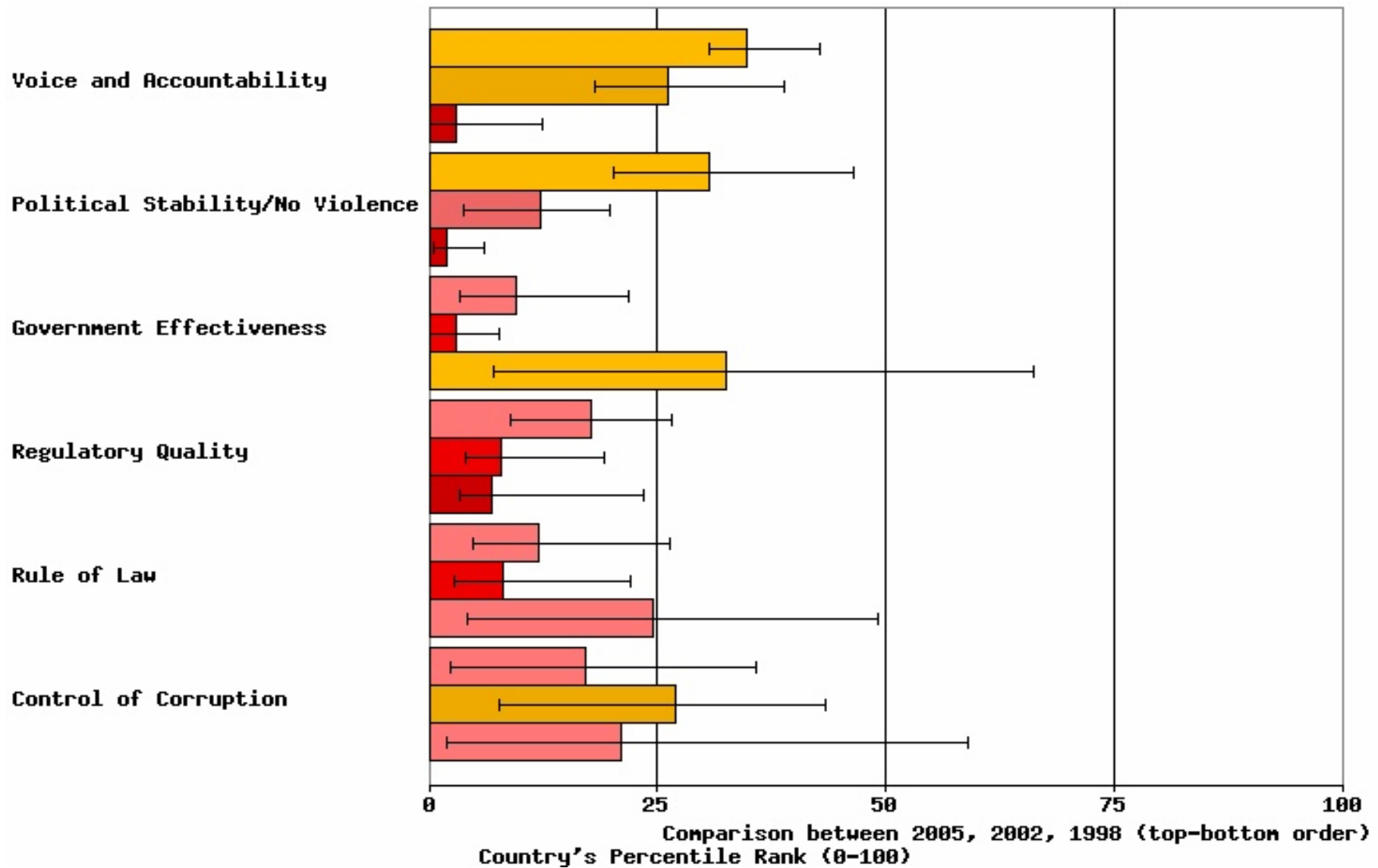
- 5. *WGI non-transparent? Wrong. Access to the individual data***
- 6. *Individual indicators used in WGI, partic from commercial risk rating agencies, make correlated errors, which affects aggregation, due to too much weight to such sources. Not so. On this, and others, see new paper 'Answering the Critics':***
 - a) *Just because sources have access to each other does not mean they are making correlated mistakes.***
 - b) *When making testing identifying assumptions, evidence of correlated errors not compelling-commercial risk rating agencies correlations w/each other as high as correlation with firm surveys.***
 - c) *Even if there are correlated errors affecting WGI weighting scheme is not first order issue: WGI is highly correlated with alternatives based on equally-weighting individual sources.***
 - d) *Correlated errors challenge is much larger in fact in other indices where aggregation is from the same source (cpi²⁹, gii)***

Governance Indicators for Nigeria, 2002 & 2005



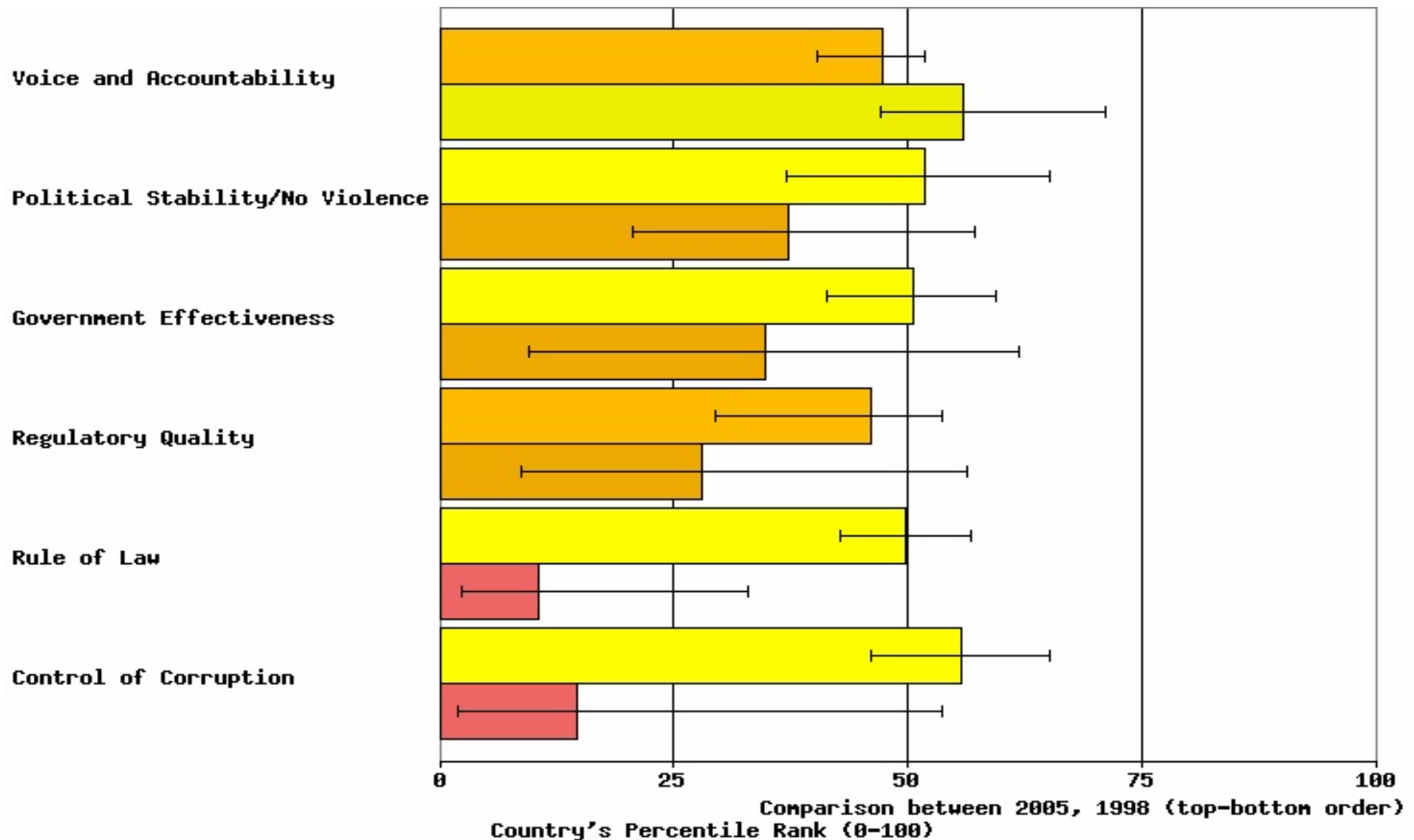
Source for data: : 'Governance Matters V: Governance Indicators for 1996-2005', D. Kaufmann, A. Kraay and M. Mastruzzi, ³⁰
<http://www.worldbank.org/wbi/governance/govdata>); Colors are assigned according to the following criteria: Dark Red, bottom 10th percentile rank; Light Red between 10th and 25th; Orange, between 25th and 50th; Yellow, between 50th and 75th; Light Green between 75th and 90th; Dark Green above 90th.

Governance Indicators for Sierra Leone, 1998, 2002 & 2005



Source for data: : 'Governance Matters V: Governance Indicators for 1996-2005', D. Kaufmann, A. Kraay and M. Mastruzzi, 31
<http://www.worldbank.org/wbi/governance/govdata>); Colors are assigned according to the following criteria: Dark Red, bottom 10th percentile rank; Light Red between 10th and 25th; Orange, between 25th and 50th; Yellow, between 50th and 75th; Light Green between 75th and 90th; Dark Green above 90th.

Governance Indicators for Madagascar, 1998-2005



Source for data: 'Governance Matters V: Governance Indicators for 1996-2005', by D. Kaufmann, A. Kraay and M. Mastruzzi, September 2006 - www.govindicators.org. Colors are assigned according to the following criteria: Dark Red: country is in the bottom 10th percentile rank ('governance crisis'); Light Red: between 10th and 25th percentile rank; Orange: between 25th and 50th percentile rank; Yellow, between 50th and 75th; Light Green between 75th and 90th percentile rank; and Dark Green: between 90th and 100th percentile (exemplary governance). Estimates subject to margins of error.

Some suggestions on ways forward...

1. recognize, disclose, and take seriously margins of error in *all* indicators —————→ *need more transparency, less 'false precision', and less 'elevator economics'.*
2. make effective use of existing indicators and diagnostics, and continue to improve and innovate, managing expectations on new one...
3. avoid exclusive reliance on any *one* indicator or source without checks & balances from others
4. match specific indicator or tool with the desired objective

Cont.

On some suggestions on ways forward, cont.

- 5. exploit complementarity among different types of indicators: *objective & subjective; action-worthy & outcome; aggregate & individual***
- 6. Intellectually Rigorous process (e.g. academic refereed Journal style) of review and vetting – back to a fuller intellectual discourse, rigorous review and refereeing of papers as well.**
- 7. Transparency & Disclosure: w/r to existing data, ref margins of error; & disclose and review new data and methods**
- 8. More focus on in-depth, in-country diagnostics, w/ country stakeholders and donor partners₃₄**

Access to Data and Papers

For access to the Governance Databank and Indicators, to the Country Governance and Anti-Corruption (GAC) Diagnostics, to the Governance Matters paper series and to other papers related to this roundtable event (including the discussion paper), visit:

www.govindicators.org