

Indices of Social Development

Indices of Social Development

Launch 16 March 2011

Roberto Foa Arjan de Haan Irene van Staveren Ellen Webbink Herman Hardenbol

Contents

- Why social development indices ? Arjan de Haan
- IndSocDev.org a demonstration
 Ellen Webbink
- How the indices are composed Irene van Staveren
- Examples of applications
 Irene van Staveren
- Questions and comments



Why does social development matter?

 Social development is *about* putting people at the centre of development

1995 Copenhagen Summit

- Social development much more than health, education child welfare -> glue that keeps society together
- "behaviours, norms, conventions that pattern human interaction"

(thus also: structures markets and governance)

Why should we measure it ?

- Social development usually terrain of more qualitative methods and disciplines
- Measurements of development have been broadening: steel, GDP, HDI, Governance, happiness
- IndSocDev = last mile in this sequence
- The promise:
 - systematise and compare different aspects of social development
 - relate those to other development outcomes
 - trends over time



What did we decide to measure

- Design on basis of iterative process of expert discussions + comparison with available data
- IndSocDev focus on five aspects (indices) of social development, based on:
- 200 indicators
- from 25 reputable and independent data sources, aggregated into Indices
- using 'matching percentiles'

Matching percentiles & how we cover 200 countries

- Combining sources more reliable than single source (minimum 3 sources)
- Many indicators limited coverage between 15 and 200
- Aggregating and comparing allows to enhance coverage – details explained later
- Progressively more reliable



1) Civic activism: social norms, organisations, practices which facilitate citizen involvement in public policies and decisions

Examples of questions

- % people participated in demonstration, petition, boycott
- % people with access to radio, TV, newspaper
- Density international organisations
- Civicus civil society rating

- World Values Survey, regional barometers
- barometers / ITU
- Global Civil Society
- Civicus

For example: Civic Activism Scores for Middle East and North Africa



2) Clubs and associations: strength of ties to neighbourhood and associational life (voluntary groups, time with clubs, community meets, development associations)

Examples of questions

- % people using free time for groups and associations
- % people members of clubs
- Spent time socialising
- % people state people'generally help one another'

- Latinobarometer, WVS
- barometers, WVS,
- World Values Survey
- ICVS

3) Inter-group cohesion: relations of cooperation and respect between predominant identity groups in a society

Examples of questions

- Incidences of riots, terrorist acts **Databanks**, EIU
- Levels ethnic/religious tension
- Group disparities and discrimination
- Proportion people who reject others as neighbours

- ICRG
- Minorities at Risk, Fund for Peace
- World Values Survey



4) Interpersonal safety and trust: extent that individuals feel they can rely on people they have not met before

Examples of questions

- % people experienced theft, robbery etc.
- % people that feel safe
- Perception people can be trusted, are fair
- Crime as business constraint

- Afrobarometer, ICVS, Interpol
- ICVS
- Barometers, World Value Survey
- World Development Indicators



5) Gender equality: extent to which women face the same opportunities and constraints with family, work, society

Examples of questions

- Perceptions equality of rights and opportunities
- Rating economic rights
- Ratio of women in education, labour force
- Wage rates

..... related sources

- barometers, WVS
- CIRI
- WDI

ILO





Indices of Social Development

www.IndSocDev.org

how does it work ?











0	O O □ ISD_data (1).xls									
2	11 III E		là 🔓 🍝	8 10 • @	• <u>Σ</u> • <u>\$</u>	* (Q.*	Search in St	neet) >>
1	Home L	ayout Ta	ubles Cha	irts Smar	tArt Form	nulas Da	ta Reviev	v	~	\$-
E	dit :	Font	Alig	nment N	umber :	Format	Cells	Themes	4	
Pz	Arial	• 1 <u>U</u> 3		Genera	al - [nditional Style	* Actions	Aa ·]• a•	
G8 : C C fx										
22	A	В	C	D	F	F	G	Н	1	
1	country	year	civic activism	se civicactivisr	pardem	radionews	televisionnews	newspapernews	civicus	radio
2	Botswana	2005	0.490108	0.0081118	28	79	42.5	50.5		
3	Burundi	2005	0.447529	0.0150729						
4	Congo, Dem. Re	2005	0.4507487	0.0119878						<u> </u>
5	Nigeria	2005	0.4772647	0.0211548	2	81	56	26		
5	Tanzania	2005	0.4702644	0.0113484	16	86	25	34		-
						1				<u> </u>
9										
10										<u> </u>
11										
12										
13										
14	-									
15										
16										<u> </u>
1/										_
10										<u> </u>
20					-		-			
21										
22	-									
23										
24										
25										
26	-									<u> </u>
21					-					
28										-
30					-					<u> </u>
31										-
32	-									-
33				-						
34	-									
35										
36										
-	ISD data selection +									
(areas)										1



Indices of Social Development

IndSocDev

matching percentiles

Methodology

- ISD combines over 200 indicators from 25 independent and reputable sources
- Uses 'matching percentiles' method used for Corruptions Perceptions Index
 - Lambsdorff 1999

www.transparency.org/policy_research/surveys_indices/cpi/2010/in_detail#4

- Rationale for matching percentiles
 - Combination of sources measuring same phenomenon more reliable than each source separately
 - Indices broaden the coverage compared to single source
- Minimum 3 independent sources to develop index
- Note: 2010 data reported but is still incomplete

Matching percentiles – Step 1

- If multiple questions in one source, average is calculated
 e.g., access to radio, TV, newspapers
- ISD uses rankings not all sources use these, most use regular scores
 - e.g., % people responding
- Produce a rank from the scores: 0 1 (standardization)

For example, 1st indicator Civic Activism: participation in demonstrations

Step 1: Standardising

participation in demonstrations, petitions, boycotts - Rank



% of people participated in demonstrations (World Values Survey)

- Botswana 28 %
- Nigeria 25 %
- Tanzania 10%
- Burundi 3 %
- Congo 2 %



2nd source: scores from second indicator (from different source) matched to first ('master') indicator based on *ranking* of shared countries in the master indicator

 Each additional indicator adjusts the ranking in order to reduce the uncertainty of the earlier rankings: with more indicators you simply broaden the basis of measurement of the index

For example, an additional indicator could be: "attending meetings"

Matching Equally Ranked Values



Step 3: averaging matching scores to obtain index

		Matching		Matching		Matching		
	Var1	Var2	Score	Var3	Score	Var4	Score	Index
Botswana	0.24	0.4	0.22	0.4	0.05	0.5	0.24	0.170
Nigeria	0.22	0.5	0.24	0.5	0.08	0.4	0.22	0.180
Tanzania	0.08	0.3	0.08	0.6	0.22	0.3	0.08	0.127
Burundi	0.05	0.2	0.05	0.7	0.24	N.A		0.145
Congo, DR	0.04	0.1	0.04	N.A.		N.A		N.A

Etcetera

- We repeat the same procedure with different choice of master variable (*random* score 0 – 1) 1,000 times ("bootstrapping")
- Reducing random error with each iteration
- To arrive at a final score for the index with a standard error obtained from the reiterations
- Index score for a country is only produced if at least 3 independent sources for that country are available

Which in example produces:

2005 data (real data)

country	year	civic_activism	se_civicactivisr
Botswana	2005	0.490108	0.0081118
Burundi	2005	0.447529	0.0150729
Congo, Dem. Rep.	2005	0.4507487	0.0119878
Nigeria	2005	0.4772647	0.0211548
Tanzania	2005	0.4702644	0.0113484



Indices of Social Development

How do we know we can trust matching percentiles ?

robustness

Comparison of Matching Percentiles vs. Imputation Methods

Civic Activism



Factor analysis civic activism





Indices of Social Development

IndSocDev

examples of applications

Trends Over Time

Rising Gender Equality in the Middle East, 1990-2007



Mapping gender equality in Africa

Levels of gender equality in **Southern** and **Eastern** Africa are higher than their GDP would lead us to expect.



Gender Equality in Africa



Log GDP per capita

Interpersonal Safety and Trust – Latin America and Caribbean



Log GDP per capita

Gender Equality and Infant Mortality

Residual Scatter Plot between gender equity and infant mortality, after controlling for: log GDP/capita, log GDP/capita², female progression to secondary school (%), civic engagement, governance (Voice and Accountability), HIV-AIDS infection rate



Partial Correlation (Residual Plot) between Intergroup Cohesion and (log) rate of deaths from natural disasters.





Indices of Social Development

Thank you !

Do let us know what you think

www.IndSocDev.org