Indices of Social Development

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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

**..... related sources**
- World Values Survey, regional barometers
- barometers / ITU
- Global Civil Society
- Civicus
For example: Civic Activism Scores for Middle East and North Africa

Bahrain
Turkey
Qatar
Egypt, Arab Rep.
Iran, Islamic Rep.
United Arab Emirates
Morocco
Tunisia
Jordan
Pakistan
Saudi Arabia
Algeria
Sudan
Libya
Syrian Arab Republic
Yemen, Rep.
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’

..... related sources

- 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
- Levels ethnic/religious tension
- Group disparities and discrimination
- Proportion people who reject others as neighbours

*..... related sources*

- Databanks, EIU
- 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

..... related sources

- 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
www.IndSocDev.org

how does it work?
Data Access

Select below the Indices and/or the underlying indicators and timepoint(s). Then choose the preferred data format.

Choose country or countries
check all □ uncheck all □

- Taiwan, China
- Tajikistan
- Tanzania
- Thailand

Choose indices and indicators to include in data

Indices
check all □ uncheck all □

- Civic activism
- Intergroup cohesion
- Clubs and Associations
- Interpersonal Safety and Trust
- Gender equality

When selections are made you can download the results in these formats
- .xls
- .odf
- .csv

Download data

Chosen data:

Countries:
- Botswana
- Burundi
- Nigeria
- Tanzania

Indices:

Indicators:

Years:

Select year(s) 1990 1995 2000 2005 2010
### Data Access

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<thead>
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<th>Indices</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Civic activism</td>
<td></td>
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<tr>
<td>Intergroup cohesion</td>
<td></td>
</tr>
<tr>
<td>Clubs and Associations</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Safety and Trust</td>
<td></td>
</tr>
<tr>
<td>Gender equality</td>
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#### Years
- 1990
- 1995
- 2000
- 2005
- 2010

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**Download data**
Indices of Social Development

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Indices

- Africa, % Joined Demonstration
- Africa, % Follow Radio News
- Africa, % Follow TV News
- Africa, % Reads Newspaper
- Civicus Civil Society Rating
- Radios per Capita
- Lat. America, % Demonstrated
- Lat. America, % Signed Petition
- Lat. America, % Signed Petition

Civic activism

- Global, % Joined Boycott
- Global, % Joined Protest
- % Have Signed Petition
- % Read Newspaper Last Wk
- % Saw TV/Radio News Last Wk
- % Read Magazine Last Wk
- % Saw TV Reports Last Wk
- % Read NF Books Last Wk

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% workforce, Nonprofit workers
- Newspapers per capita
- % Have Signed Petition
- Global, % Joined Boycott
- Global, % Joined Protest
- % Read Newspaper Last Wk
- % Saw TV/Radio News Last Wk
- % Read Magazine Last Wk
- % Saw TV Reports Last Wk
- % Read NF Books Last Wk
- % Read Online News Last Wk

International NGO membership relative to pop.

Years:
Data Access

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Choose indices and indicators to include in data

Indices

- Civic activism

- Intergroup cohesion
- Clubs and associations
- Interpersonal Safety and Trust
- Gender equality

Select year(s)


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- Africa, % Follow TV News
- Africa, % Reads Newspaper
- Civics Civil Society Rating
- Radios per Capita
- Lat. America, % Demonstrated
- Lat. America, % Signed Petition
- Lat. America, % Read Radio News
- Lat. America, % Read TV News
- Lat. America, % Read Newspaper
- Lat. America, % TV News Important
- Lat. America, % Newspaper Important
- Lat. America, % Radio News Important
- Lat. America, Days/Week TV News
- Lat. America, Days/Week Newspaper
- Lat. America, Days/Week Radio News
- % workforce, Nonprofit workers
- Newspapers per capita
- % Have Signed Petition
- Global, % Joined Boycott
- Global, % JOINED Protest
- % Read Newspaper Last Wk
- % Saw TV/Radio News Last Wk
- % Read Magazine Last Wk
- % Saw TV Reports Last Wk
- % Read NF Books Last Wk
- % Read Online News Last Wk
- International NGO membership relative to pop.
- International NGOs relative to pop.

Years:

2005
<table>
<thead>
<tr>
<th>country</th>
<th>year</th>
<th>civic_activism</th>
<th>se_civicactivism</th>
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<th>radio</th>
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<td>2005</td>
<td>0.490108</td>
<td>0.0081118</td>
<td>28</td>
<td>79</td>
<td>42.5</td>
<td>50.5</td>
<td></td>
<td></td>
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<tr>
<td>Burundi</td>
<td>2005</td>
<td>0.447529</td>
<td>0.0150729</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congo, Dem. Re</td>
<td>2005</td>
<td>0.4507487</td>
<td>0.0119878</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>2005</td>
<td>0.4772647</td>
<td>0.0211548</td>
<td>2</td>
<td>81</td>
<td>56</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>2005</td>
<td>0.4702644</td>
<td>0.0113484</td>
<td>16</td>
<td>86</td>
<td>25</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Botswana</td>
<td>0.24</td>
</tr>
<tr>
<td>2</td>
<td>Nigeria</td>
<td>0.22</td>
</tr>
<tr>
<td>3</td>
<td>Tanzania</td>
<td>0.08</td>
</tr>
<tr>
<td>4</td>
<td>Burundi</td>
<td>0.05</td>
</tr>
<tr>
<td>5</td>
<td>Congo, DR</td>
<td>0.04</td>
</tr>
</tbody>
</table>

% of people participated in demonstrations (World Values Survey)

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

% respondent participation in demonstrations, petitions, boycotts (WVS)

Respondent has often attended meetings of a local development association (Afrobarometer)

Other countries

Botswana
Nigeria
Tanzania
Burundi
Congo, DR

0.24
0.22
0.08
0.05
0.04

0.24
0.22
0.08
0.05
0.04

Tanzania
Botswana
Nigeria
Burundi
Congo, DR
Step 3: averaging matching scores to obtain index

<table>
<thead>
<tr>
<th>Country</th>
<th>Var1</th>
<th>Var2</th>
<th>Matching Score</th>
<th>Var3</th>
<th>Matching Score</th>
<th>Var4</th>
<th>Matching Score</th>
<th>Index</th>
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</thead>
<tbody>
<tr>
<td>Botswana</td>
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<td>0.4</td>
<td>0.22</td>
<td>0.4</td>
<td>0.05</td>
<td>0.5</td>
<td>0.24</td>
<td>0.170</td>
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<tr>
<td>Nigeria</td>
<td>0.22</td>
<td>0.5</td>
<td>0.24</td>
<td>0.5</td>
<td>0.08</td>
<td>0.4</td>
<td>0.22</td>
<td>0.180</td>
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<tr>
<td>Tanzania</td>
<td>0.08</td>
<td>0.3</td>
<td>0.08</td>
<td>0.6</td>
<td>0.22</td>
<td>0.3</td>
<td>0.08</td>
<td>0.127</td>
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<tr>
<td>Burundi</td>
<td>0.05</td>
<td>0.2</td>
<td>0.05</td>
<td>0.7</td>
<td>0.24</td>
<td>N.A.</td>
<td>N.A.</td>
<td>0.145</td>
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<tr>
<td>Congo, DR</td>
<td>0.04</td>
<td>0.1</td>
<td>0.04</td>
<td>N.A.</td>
<td>N.A</td>
<td>N.A</td>
<td>N.A</td>
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</table>
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)**

<table>
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How do we know we can trust matching percentiles?

robustness
Comparison of Matching Percentiles vs. Imputation Methods

*Civic Activism*

![Graph showing a scatter plot with a linear trend line representing comparison of matching percentiles vs. imputation methods in civic activism.](image-url)
Factor analysis
civic activism
IndSocDev

examples of applications
Trends Over Time

Rising Gender Equality in the Middle East, 1990-2007

![Chart showing trends in gender equality in the Middle East from 1990 to 2007.](image)
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

Gender Equity vs. Log GDP per capita
Interpersonal Safety and Trust – Latin America and Caribbean

Log GDP per capita vs. Personal Safety and Security
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

Chi-square test statistic test of independence

t = 16.0

Chi-square statistic test of independence

p = 0.000***
Partial Correlation (Residual Plot) between Intergroup Cohesion and (log) rate of deaths from natural disasters.
Thank you!

Do let us know what you think

www.IndSocDev.org