Toward Closer Cohesion of International Tax Statistics

- Taxation, development and the GRD: Bigger picture
- The *Government Revenue Dataset* (GRD)
  - History // ICTD
  - Motivation
  - Innovations / improvements
  - Limitations of cross-country tax data
    - Existing sources
    - How does the GRD overcome these limitations
- 2017 GRD: What’s new?
Recent focus on domestic revenue mobilization
   – Addis FFD Action Plan
   – SDG 17.1

Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection

Indicators

- 17.1.1: Total Government Revenue as a proportion of GDP
- 17.1.2: Proportion of domestic Budget funded by domestic taxes
Taxation, Development & the GRD

- Developing Countries: Recent attention on Domestic Revenue Mobilization and Data Quality
Government Revenue Dataset at UNU-WIDER

- Partnership with ICTD
- GRD project began 2010; launched 2014.
- Partnership with UNU-WIDER since late 2015
  - March 2016 symposium Tax and Development
- Part of broader program on taxation and development at WIDER
  - SOUTHMOD Tax/ben micro simulation models
  - South African administrative firm-level data // SARS
Government Revenue Dataset: Motivation (1/2)

• For research (mainly)
  • Need for an open, reliable, comprehensive source of revenue data for developing countries
    • Number of previous studies based on *ad hoc* data not publicly available
    • Or based on data from high income / OECD countries

• OECD *Revenue Statistics* good, but limited

• Limited country coverage of GFS
Government Revenue Dataset: Motivation (2/2)

- Neither systematically account for natural resource revenues
- Difference in treatment of social contributions
- Differences in underlying GDP figures
- Developing country coverage poor
  - Recent improvements
Government Revenue Dataset: Motivation

- An example of challenges in underlying data sources
  - Resource taxes unaccounted for
  - Inconsistencies in data
Algeria, Total tax 1995 - 2010, % of GDP
Government Revenue Dataset

- Cross-country dataset on government revenues; 1980 - 2015

- Sources:
  - OECD Revenue Statistics
  - IMF Government Finance Statistics
  - ECLAC CEPALSTAT
  - IMF Article IV Staff Reports, Statistical Appendices
  - National data sources.

- Revenue, Tax (& subcomponents), Nontax, Grants, Social Contributions
  - Follows similar classification to IMF GFSM

- Expressed as % of ‘Common GDP’ figure.
  - Important when merging sources
Government Revenue Dataset

• Four main ‘innovations’ / improvements over existing sources

1. Achieves significant gains in coverage & consistency compared to other sources
2. Presents revenues both inclusive and exclusive of social security contributions
3. Distinguishes natural resource revenue, where possible
4. Interpretations & guidance for users
Government Revenue Dataset: 1. Coverage

• Gains in coverage:

• “Merged” dataset
  – Incorporates data from both Central and General gov’t
    • General preferred
    • Central + others?
    • Budgetary Central

• Central and General files also available

Source: IMF GFSM2014
Government Revenue Dataset: 1. Coverage

- Gains in coverage:
- Article IV Staff Reports, Statistical Appendices

### Table 13. Benin: Central Government Revenue, 2000-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Total revenue</th>
<th>Direct taxes</th>
<th>Taxes on income and profits</th>
<th>Corporate</th>
<th>Other taxes</th>
<th>Taxes on payroll and workforce</th>
<th>Domestic taxes on goods and services</th>
<th>Value-added tax</th>
<th>Domestic production, sales, and excises</th>
<th>Taxes on specific services</th>
<th>Motor vehicle taxes (vignette)</th>
<th>Other</th>
<th>Taxes on international trade and transactions</th>
<th>Customs duties</th>
<th>Value-added tax</th>
<th>Export duties, including re-exportation tax</th>
<th>Other</th>
<th>Nontax revenue</th>
<th>From nonfinancial public enterprises</th>
<th>Contribution to government employees'</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>280,977</td>
<td>63,131</td>
<td>40,407</td>
<td>33,004</td>
<td>2,909</td>
<td>22,964</td>
<td>54,330</td>
<td>31,600</td>
<td>4,416</td>
<td>4,307</td>
<td>0</td>
<td>14,007</td>
<td>133,248</td>
<td>34,387</td>
<td>80,040</td>
<td>2,436</td>
<td>17,158</td>
<td>30,268</td>
<td>5,149</td>
<td>9,269</td>
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<tr>
<td>2002</td>
<td>318,177</td>
<td>61,643</td>
<td>48,015</td>
<td>37,554</td>
<td>3,458</td>
<td>14,828</td>
<td>67,350</td>
<td>41,454</td>
<td>4,277</td>
<td>4,527</td>
<td>0</td>
<td>17,091</td>
<td>145,881</td>
<td>40,124</td>
<td>86,606</td>
<td>1,771</td>
<td>17,381</td>
<td>43,303</td>
<td>5,047</td>
<td>10,791</td>
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<tr>
<td>2003</td>
<td>342,881</td>
<td>76,394</td>
<td>47,809</td>
<td>36,426</td>
<td>4,583</td>
<td>29,583</td>
<td>75,711</td>
<td>40,775</td>
<td>5,866</td>
<td>5,628</td>
<td>0</td>
<td>21,944</td>
<td>159,215</td>
<td>44,673</td>
<td>85,091</td>
<td>1,173</td>
<td>28,279</td>
<td>31,581</td>
<td>5,388</td>
<td>11,165</td>
</tr>
<tr>
<td>2004</td>
<td>351,416</td>
<td>82,289</td>
<td>47,350</td>
<td>34,031</td>
<td>4,764</td>
<td>28,593</td>
<td>79,576</td>
<td>49,738</td>
<td>5,430</td>
<td>5,781</td>
<td>0</td>
<td>18,627</td>
<td>155,903</td>
<td>44,073</td>
<td>98,266</td>
<td>976</td>
<td>28,694</td>
<td>33,648</td>
<td>5,346</td>
<td>13,893</td>
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<tr>
<td>2005</td>
<td>383,446</td>
<td>83,779</td>
<td>53,232</td>
<td>39,880</td>
<td>5,526</td>
<td>30,548</td>
<td>78,126</td>
<td>53,680</td>
<td>4,393</td>
<td>5,072</td>
<td>0</td>
<td>14,451</td>
<td>174,915</td>
<td>45,925</td>
<td>93,926</td>
<td>919</td>
<td>34,146</td>
<td>48,726</td>
<td>6,899</td>
<td>14,380</td>
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</tbody>
</table>
Government Revenue Dataset: 2. Social Contributions

• Inconsistencies in recording of social contributions

  – Across countries
    • Taxes v Social Security Contributions?
    • Private sector contributions?

  – Across sources
    • OECD & IMF
    • Payroll?
    • Level of Government?
DNK & FIN, Taxes excluding social contributions (% of GDP)
DNK & FIN, Taxes including social contributions (% of GDP)
Government Revenue Dataset: 2. Social Contributions

GFS: Sweden, Payroll & Social Contributions

Payroll
Social
Payroll + Social
Government Revenue Dataset: 2. Social Contributions

OECD: Sweden, Payroll & Social Contributions
Government Revenue Dataset: 3. Natural Resource Revenues

- Researchers / policymaker often interested in non resource tax receipts -> SDG context

- Explains volatility / inflated resource revenues

- Sources
  - Article IV Staff Reports
  - Country sources
  - EITI / NRGI data
Nigeria, government revenues, % of GDP

- Total Revenue
- Resource Revenue
- Non-Resource Revenue

Years: 1992 to 2015
Government Revenue Dataset: Natural Resource Revenues

- Not always possible to isolate resource *tax* and *nontax* from total resource revenue figures.

- Scatterplot with EITI / NRGI
  - tendency to underestimate.
Government Revenue Dataset: 4 Interpretation

• Transparency
  – Collaboration

• Notes, comments, flags

• More data != better data
Government Revenue Dataset 2017

• What’s new 2017?
  – Improved coverage
    • Filled in gaps in time series
    • Improved disaggregation
    • New data up to 2015
  – Levels of Government
  – Sales Taxes, VAT collected on imports
  – Property Tax

<table>
<thead>
<tr>
<th></th>
<th>GRD 2015</th>
<th>GRD 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1980-2015</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Revenue</td>
<td>77.37%</td>
<td>77.42%</td>
</tr>
<tr>
<td>Total Tax</td>
<td>79.24%</td>
<td>80.78%</td>
</tr>
<tr>
<td>Income Tax</td>
<td>65.25%</td>
<td>68.77%</td>
</tr>
<tr>
<td>Domestic GST</td>
<td>65.60%</td>
<td>68.76%</td>
</tr>
<tr>
<td>Trade Tax</td>
<td>66.61%</td>
<td>69.96%</td>
</tr>
<tr>
<td>Other Tax</td>
<td>61.75%</td>
<td>65.15%</td>
</tr>
<tr>
<td>Property</td>
<td>53.86%</td>
<td>58.63%</td>
</tr>
</tbody>
</table>
Government Revenue Dataset

• Sales Taxes, VAT collected on imports
  – Often collected by customs authority
  – Where to classify?
  – Now according to GFSM & OECD Interpretive Guide
Government Revenue Dataset

- Property Tax
  - Increasing attention on (research on) property tax in developing countries.
  - IMF change in classification for GFSM2014
  - *Taxes on Financial and Capital Transactions (TFCT)* moved from Property taxes -> General Tax on Goods and Services
    - Not in OECD
    - Property small in absolute terms (~1% of GDP) but fraction of property from TFCT large (1/3rd – ½ of total)
Government Revenue Dataset

• Online at [http://www.wider.unu.edu](http://www.wider.unu.edu)
  – Projects > Government Revenue Dataset

• Looking forward
  – Visualization – interactive tool
  – Annual update cycle
  – Feedback: [kyle@wider.unu.edu](mailto:kyle@wider.unu.edu)
    • Collaborate