Domestic Resource Mobilization in Partner Countries of Belgian Development Cooperation

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Introduction

• Huge-resource gap required in LICs (DMDF, 2015)
• Focus on domestic taxation
  • enhance state building and strengthen the state-citizen relationships (Tilly 1975)
• relatively more stable
Tax Revenue Across Income Groups
Policy (Research) Objectives at BeFinD

• We analyze...
  • The principles of tax design & State of Domestic Resource Mobilization (DRM)
  • Taxation of multilateral companies
  • The role of Value Added Tax (VAT) for DRM
  • Assessing rooms for improvement in VAT systems
  • The role of institutions for DRM
Research on Taxation at BeFinD

- various (interlinked) studies on DRM capacities of DGD partner countries (+) other developing countries...recent examples
  - Institutional quality, economic development and the performance of VAT, BeFinD Working Paper N°15 (Romain Houssa and Kelbesa Megersa)
  - The Performance of VAT in DGD-partner Countries, BeFinD Working Paper N°16 (Mattéo Godin, Romain Houssa and Kelbesa Megersa)
  - Taxpayer behaviour and institutions in Sub-Saharan Africa, BeFinD Working Paper N°169 (Roukiatou Nikiema and Pam Zahonogo)
  - A Review of critical issues on tax design and tax administration in a global economy and developing countries, BeFinD Working Paper N°7 (Mattéo Godin & Jean Hindriks)
  - Follow you, follow me: public investment under tax competition, BeFinD Policy Brief N° 1 (Jean Hindriks and Yukihiro Nishimura)

...for more, visit http://www.befind.be/publications/taxes
Outline

• I. Impact of VAT on DRM

• II. Role of institutional quality on DRM

• III. Sources of VAT Inefficiencies: Case study in Burkina Faso

• IV. Concluding Remarks
I. Impact of VAT on DRM
Why is VAT important?

• VAT is relatively easy to administer ➔ Less prone to tax evasion

• Suitable for developing countries
  • less sensitive to the informal market
  • If well designed, it can even reduce the size of the informal sector

• Less distortionary among taxes
  • In comparison with income taxes, VAT does not change consumption decisions relative to savings and investment decisions

• No cascading effects
  • Unlike other consumption taxes
  • Tax on a commodity is charged at separate stages of the production process without deductions
  • Sellers or firms paying VAT, can receive credit for the VAT paid on intermediate inputs
VAT adoption across the world
Current state of DRM:
Tax and VAT revenue in partner countries

- Average Total Tax Revenue, % GDP (1990-2013)
- Average VAT Revenue, % GDP (1990-2013)
High degree of correlation between Tax & VAT revenue in DGD partner countries.
VAT, DRM and developing countries:
The overall picture...across the developing world & elsewhere

• We estimate the following tax-effort equation

\[ Tax_{i,t} = \alpha + \beta V A T_{i,t} + \gamma X_{i,t} + \delta \sum_{j=1}^{n} w_{ij} Tax_{j,t} + \epsilon_{i,t}, i = 1, \ldots, n \]

• \( X_{i,t} \) include: the level of development, size of the informal sector, country size, size of dependent population, institutional quality ...
VAT, DRM and developing countries:
The overall picture...across the developing world & elsewhere

• Data from 149 countries over the 1970 - 2013

• Developing countries
  • Sub-Saharan Africa (SSA) and
  • Non-SSA Developing countries

• Developed countries
Marginal effects of VAT adoption (1970-2013)
Marginal effects of VAT adoption (1970-2013)
Performance of VAT in SSA

• Marginal effect of VAT adoption (i.e. relative contribution of VAT to tax revenue) is estimated to be strong for SSA and other developing countries

• The positive effect of VAT on tax collection in SSA is reassuring because some earlier studies were not able to identify an overall positive effect for the region

• We show that analysis of data over the recent period (where VAT has become more contributive) is important to highlight its positive role in SSA’s DRM efforts
II. Role of institutional quality on DRM
Taxation, Institutions & Economic Development

Economic Development

Institutions

Tax collection
Institutional quality & DRM

• A good-institutional environment should improve both the demand as well as the supply factors inherent to the performance of VAT.
• Including: the capacity of the tax administration, government effectiveness in providing public goods, trust in the government, ...
• We provide micro and macro evidences
Institution & Taxes (Micro Evidence)
Institution & Taxes (Micro Evidence)
survey in 29 SSA countries

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Observation</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Not wrong at all</td>
<td>4,566</td>
<td>11.36</td>
</tr>
<tr>
<td>Wrong but understandable</td>
<td>14,362</td>
<td>35.73</td>
</tr>
<tr>
<td>Wrong and punishable</td>
<td>19,193</td>
<td>47.67</td>
</tr>
<tr>
<td>Do not know</td>
<td>2,108</td>
<td>5.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40,199</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

please tell me whether you think the action is not wrong at all, wrong but understandable, or wrong and punishable: Not paying the taxes they owe on their income
### Institution & Taxes (Micro Evidence)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Odds ratio</th>
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</thead>
<tbody>
<tr>
<td>Quality of institutions</td>
<td>1.718***</td>
</tr>
<tr>
<td>Cheat</td>
<td>0.324***</td>
</tr>
<tr>
<td>Health</td>
<td>0.286***</td>
</tr>
<tr>
<td>Education</td>
<td>0.242***</td>
</tr>
<tr>
<td>Electricity</td>
<td>0.188***</td>
</tr>
<tr>
<td>Water</td>
<td>-0.012</td>
</tr>
<tr>
<td>Partial confidence</td>
<td>0.185***</td>
</tr>
<tr>
<td>Total confidence</td>
<td>0.919 ***</td>
</tr>
<tr>
<td>Transparency</td>
<td>0.326***</td>
</tr>
<tr>
<td>Ethnic</td>
<td>0.115***</td>
</tr>
<tr>
<td>Comparison of attitudes</td>
<td>0.388***</td>
</tr>
<tr>
<td>Corruption</td>
<td>-0.147***</td>
</tr>
</tbody>
</table>
Institution & Taxes (Micro Evidence)

• Taxpayer behaviour is affected by quality of institutions
• Individuals’ attitudes towards paying tax are significantly dependent on the quality of institutions
• When the quality of institutions is perceived as good, individuals are more likely to pay taxes
• Indirect effects of quality of institutions:
  • Individual’s perception of difficulty to evade taxes ➔ more likely to pay tax
• Quality of public services offered by the state:
  • Confidence in the tax authorities (partial or total) & transparency ➔ more likely to pay tax
  • perception of corruption, cheating, quality of health, quality of education, quality of electricity, confidence, ethnic discrimination... have a significant effect on tax payment!
Institution & Taxes (Micro Evidence)

• Individuals are more likely to pay taxes if they have:
  • Perception of difficulties to evade taxes;
  • Better confidence in the tax authorities & transparency, (less corruption, ethnic discrimination...);
  • Perception that the quality of public services is good: health, education, electricity ...
Institution & Taxes (Macro Evidence)
III.
Sources of VAT Inefficiencies: Case study in Burkina Faso
VAT efficiency (Selected partner countries)

- Benin
- Bolivia
- Burkina Faso
- South Africa
- Uganda
- Vietnam
Sectoral Sources of VAT gap (1999-2014)

1. INDUSTRIES DU PAPIER, DE L’ÉDITION,....
2. ACTIVITES FINANCIERES
3. FAB. VERRE, POTERIE ET MATERIAUX POUR...
4. HÔTELLERIE ET DE RESTAURATION
5. RAFFINAGE DE PETROLE, FABRICATION DE...
6. FAB. D’OUVRAGES EN BOIS ET EN METAUX
7. AUTRES ACTIVITÉS DE SERVICES MARCHANDS
8. ELEVAGE
9. INDUSTRIES ALIMENTAIRES
10. ACTIVITE D’ADMINISTRATION PUBLIQUE
Top Sectors contributing to VAT gap

![Graph showing the contribution of various sectors to VAT gap from 1999 to 2014](image-url)
Sources of VAT gap

- compliance gap
- policy gap
IV. Concluding remarks
What role can donors (Belgium) play?

• Conduct more (in depth) studies to identify sources of tax gaps and policy experiments
• Contribute to the capacity building of the tax authorities and statistical offices
• Encourage/Support institutional reforms that facilitate good governance and the provision of public goods
Thank you!