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The ICTD Government Revenue Dataset

Summary of Working Paper 19 by Wilson Prichard, Alex Cobham and Andrew Goodall

This paper explains why existing sources of data on government revenue in developing countries are flawed, and how this undermines the robustness of research on the role of revenue and taxation in development. It presents a new Government Revenue Dataset to improve data accuracy and coverage.

Problems with the data and implications for research

There has been growing interest over the past decade in taxation as a key component of sustainable development, but research has been hampered by incomplete and inconsistent data. Major problems with the existing sources (notably the IMF, OECD, World Bank and CEPAL) include:

- Extensive missing data and gaps in coverage, especially for lower income countries. There is also substantial inconsistency in data available from different sources.
- A major challenge relates to big variations in how natural resource revenue is classified. This makes it hard to isolate non-resource tax revenue and has practical consequences, for example for research aimed at understanding the extent to which governments are able to extract tax revenue from citizens. It also impedes meaningful comparisons of revenue collection across resource rich countries.
- There is a lack of local government data, especially for lower income countries, so researchers have had to rely on central government data. However this significantly understates revenue collection in federal states (for example Brazil, India and Nigeria).
- Problems also arise from differences in GDP series employed to calculate tax ratios. A particular challenge is the infrequent and irregular rebasing of GDP, resulting in its underestimation, and hence in inflated tax to GDP ratios. For example in Ghana, rebasing in 2010 resulted in large upward adjustments to GDP, and a corresponding fall in tax to GDP ratios from 20% to 13%.

There are serious concerns about the robustness of research findings that rely on existing data sources, and also about the proliferation of competing research outputs each relying on their own, often ad hoc, datasets which make comparison and replication difficult. For example, flawed and inconsistent data, and a lack of comparability across studies has resulted in conflicting findings as to whether large flows of foreign aid reduce incentives to collect domestic tax revenue. A lack of good cross-country data about government revenue from natural resources has also impeded research into whether there is a negative causal relationship between reliance on resource revenue and political accountability (the "resource curse"), or a positive relationship between tax reliance and accountability ("fiscal contracts").

> "The new dataset provides a much more reliable foundation for research."

A new ICTD Government Revenue Dataset

The problems with existing data are widely recognised and there are long-term plans to address them, but progress is slow. The ICTD dataset aims to meet the immediate needs of researchers for significant, 'good enough' improvements in data coverage and quality, with a focus on capturing key analytical distinctions (for example between resource and non-resource revenue). The Government Revenue Dataset is based on careful compilation, merging and cleaning of data from multiple existing sources to close the gaps in international datasets. It also reduces discontinuities in data (notably by adopting a common GDP series), and deals systematically with the treatment of natural resource revenue. A major innovation is to divide relevant revenue categories into resource and non-resource components, thus making it possible to present tax revenue figures that exclude natural resource revenue. The ICTD dataset also addresses the problem of underreporting of significant subnational revenue in federal states.

Implications for research and policy

The new dataset provides much more complete, accurate information about levels of tax collection and trends over time, highlighting several key messages:

- Overall there was a strongly upward trend in tax collection in the developing world over the two decades ending 2009/10, with non-resource taxation increasing from an average of 13% of GDP to around 16%. Progress was most rapid among low income countries, notably in Africa; Latin America also saw rapid growth in tax collection while levels in South Asia stagnated.
- However despite recent progress, non-resource taxation is still very limited in many countries (less than 15% of GDP). Stripping out taxes on natural resource wealth reveals much lower levels of tax collection than previously estimated, especially in upper middle income countries.
- There have been gains in both direct and indirect taxes, with each expanding at comparable rates. Increases in indirect taxes (often thought to be more regressive) reflect rapid increases in VAT and sales tax, offset by declining trade taxes. Further research on the impact of such changes is needed.
- During the recent financial crisis, non-resource tax revenue proved much more resilient than non-tax revenue (mainly natural resource based), highlighting the benefit of greater predictability of revenue from reliance on taxation.

Despite the significant improvements offered by the Government Revenue Dataset, policymakers should be aware of the inherent flaws deriving from weak national data collection processes, and questionable GDP figures. This suggests the need for caution, for example in using tax to GDP ratios to compare countries, or in setting universal revenue targets across countries. There is a need for continuing long-term investment, particularly by international organisations, in improving data coverage and quality. In the meantime, however, the new dataset provides a much more reliable foundation for research into issues of very practical importance for development, including whether revenue gains have been associated with higher economic growth, reduced inequality, improvements in governance or broader human development progress.

Further reading

Prichard, Wilson; Cobham, Alex & Goodall, Andrew (2014), *The ICTD Government Revenue Dataset*, ICTD Working Paper 19, Brighton: September

Credits

This paper was written by **Wilson Prichard**, **Alex Cobham** & **Andrew Goodall**. Wilson Prichard is Assistant Professor of Political Science and Global Affairs at the University of Toronto, and Research Co-Director of the International Centre for Tax and Development; Alex Cobham is Director of Research at the Tax Justice Network; and Andrew Goodall is a mathematician, currently Assistant Professor at the Computer Science Institute of Charles University, Prague, Czech Republic.

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