

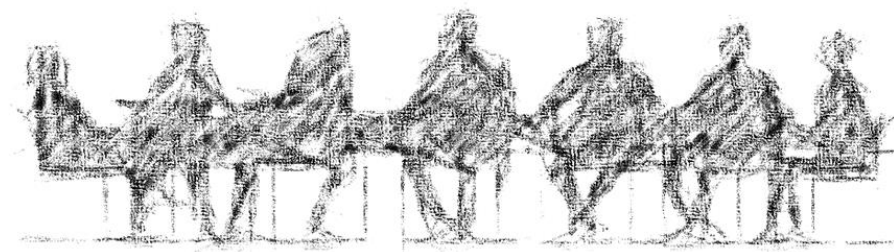
Global Tax Expenditures Transparency Index
Launch Event and Conference
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Tax Expenditures and Development

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- **Two research questions**
- **Research design**
- **Two caveats**
 - **Limits to comparability**
 - **Sampling bias**
- **Preliminary findings**



Two research questions (here: focus on the first one)



1. Which factors determine the extent to which tax expenditures are used by governments?
2. What explains differences in patterns of tax expenditure use?

Differences in extent of tax expenditure use

Dependent variables:

- Revenue forgone in USD
- Revenue forgone as % of tax revenue

Explanatory variables:

- GDP per capita
- Reliance on natural resources
- Trade openness
- Liberal democracy index (V-Dem)
- Control of Corruption
- Tax-to-GDP ratio
- Statutory CIT rates

Research design (cont.)



Data Type: Panel Data from the **GTED** and other sources



Period Covered: 2000-2021



Countries Covered:

105 TE Reporting and 113 TE Non-Reporting



Statistical methods used:

- OLS fixed-effect panel regressions
- Interaction terms with GDPpc to account for country income levels
- Instrumental variable regressions to address reverse causality issues, instrumenting GDPpc with its own lagged values (3y lags)
- Generalized Method of Moments (GMM) with Arellano-Bond estimator as robustness check

Caveat 1: comparing revenue forgone



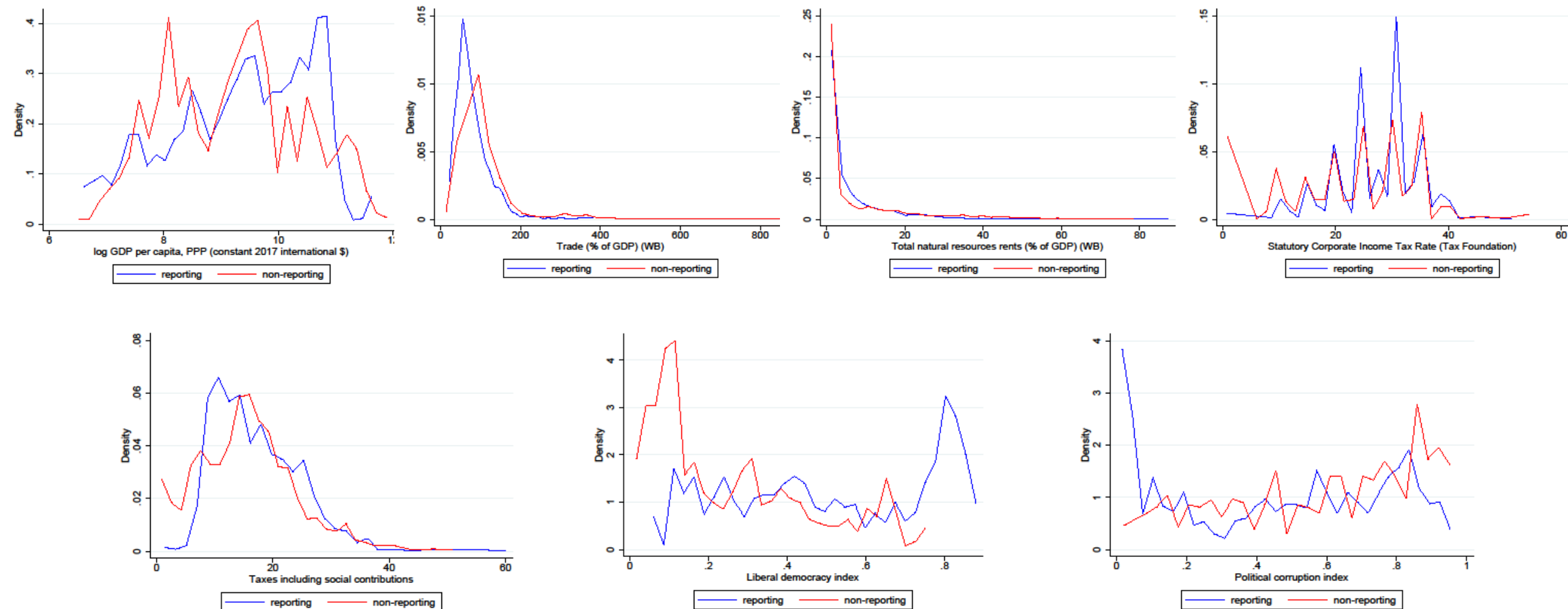
Remember?

Tax expenditures are departures from the normal (or benchmark) tax structure

The benchmark structure is the **national tax system**, and national tax systems differ from each other

→ Comparing revenue forgone figures across countries can be deceiving

Caveat 2: Sample bias from non-reporting



Tax Expenditures and Development

Key findings

GDP per capita is a key driver of the size of revenue forgone

- 1 percent increase in GDP per capita is associated with a 1.78 percent increase of revenue forgone measured in USD
- However, the effect levels off at the upper end of the income distribution and is no longer relevant for HICs

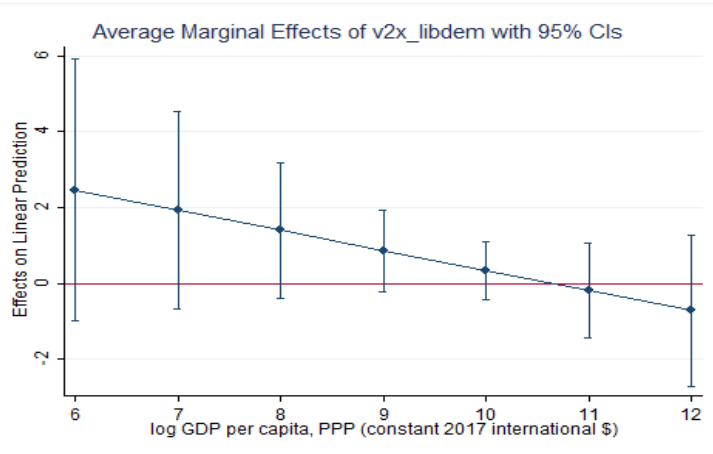
Other factors

- Higher levels of liberal democracy are an important driver of revenue forgone for LICs and LMICs, but not for richer countries and the whole sample
- Natural resource rents are associated with less revenue forgone in poorer countries, but with more revenue forgone in richer countries
- Similar effect of control of corruption: associated with less revenue forgone in poorer, and more revenue forgone in richer countries

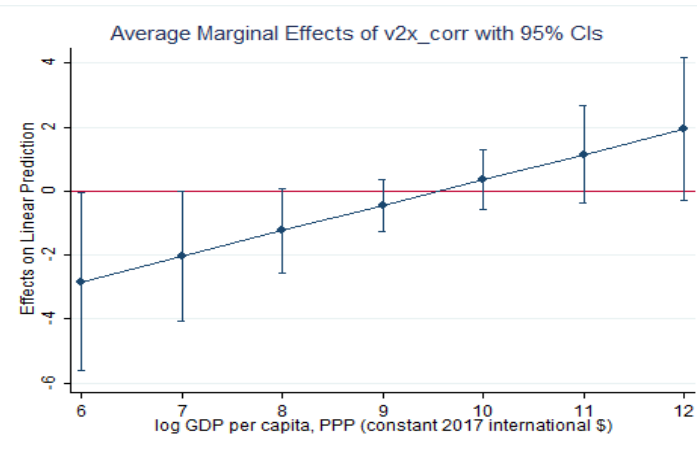
Visualising interaction terms with GDPpc



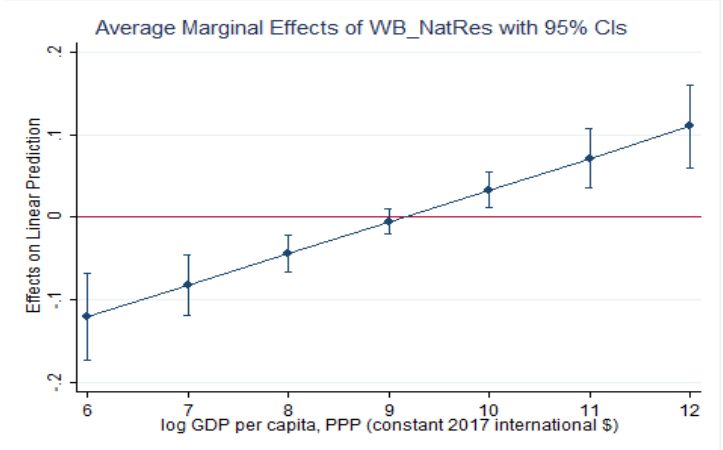
Liberal democracy



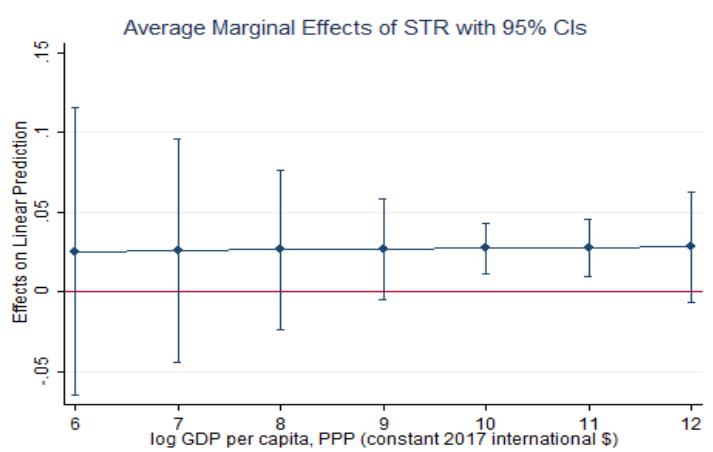
Control of corruption



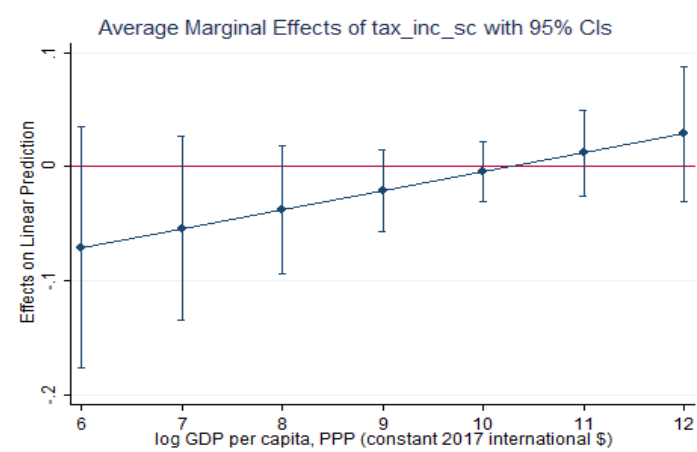
Natural resource rents



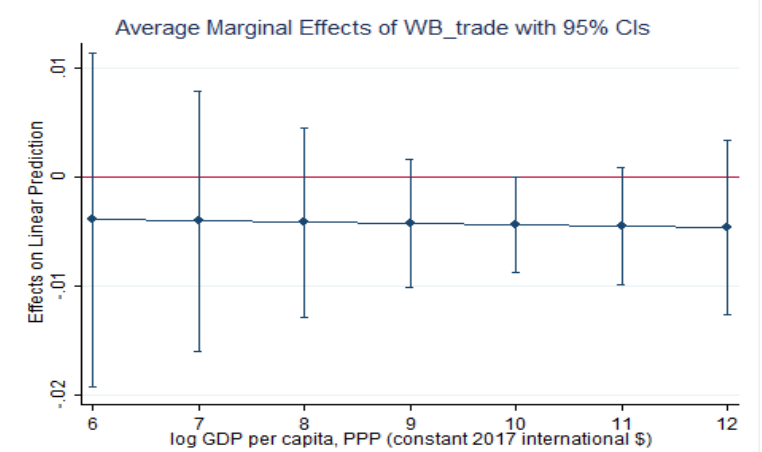
Statutory CIT rates



Tax-to-GDP ratio



Trade openness



Concluding remarks



- Initial evidence that development factors affect the way how governments use tax expenditures and that different patterns can be distinguished
- Results have to be interpreted with caution
 - Sample bias due to non-reporting
 - Endogeneity concerns partly, but not fully addressed by our research design
- Country-specific case studies or small-N comparisons helpful to deepen the analysis