INTERNATIONAL MONETARY FUND | **FISCAL AFFAIRS**

Data and their use in tax policy analysis

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Some key data issues for tax policy analysis

Macro vs. micro data:

- Consensus that there is a need for further developing the later

  - Firms and individuals, prices and volumes—especially in the areas of environmental and health taxes

- Consensus that administrative data are, in most cases, a first choice

  - But information reporting and capturing is weak—how can we observe the unobserved

  - Raises the issue of whether the obligation to report should be linked or de-linked from tax obligations

- Household survey data: often old, not fully exploited by country authorities due to capacity of statistical agencies, and quality issues abound—not very different from those related to tax filing

Data for ex-ante vs. ex-post analyses:

- Focus has been on ex-post analyses—e.g., witness the number of econometric papers in the past decade, using revenue data

- Although that is welcome and a natural development of more data becoming available, what policymaking needs most is ex-ante analysis, that can be done quickly and with high quality

  - Revenue impact analysis

  - Distributional and welfare analysis

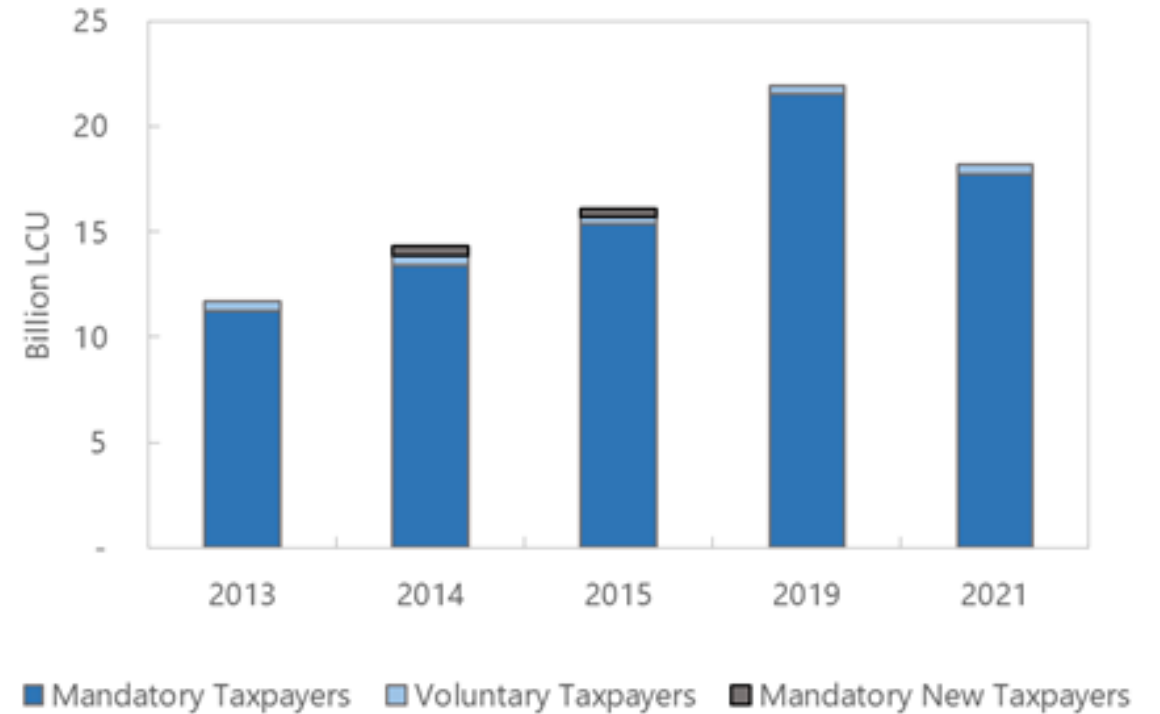 - Behavioral analysis, and elasticities

  - Spillover analysis

- How can this be done—few examples inspired from our own capacity development work at the IMF Fiscal Affairs Department

  - Revenue forecasting models such as the one we developed at the Fiscal Affairs Department (available online), can be tailored to countries' data, with hands-on training provided

  - VAT, CIT and PIT micro-models that can be calibrated to countries' own data, and tested ex-post

  - Mining and oil and gas project-based analysis of income and expenditure flows (using IMF FARI model), has yielded a rethink of fundamental tax design issues, such as the balance between revenue-based vs. profit and rent-based taxes; and revenue implications of policy design

- Institutional and human resource issues: integrated tax policy units vs. fragmented approach

Impact of reducing VAT registration threshold on taxpayers' number and reported turnover
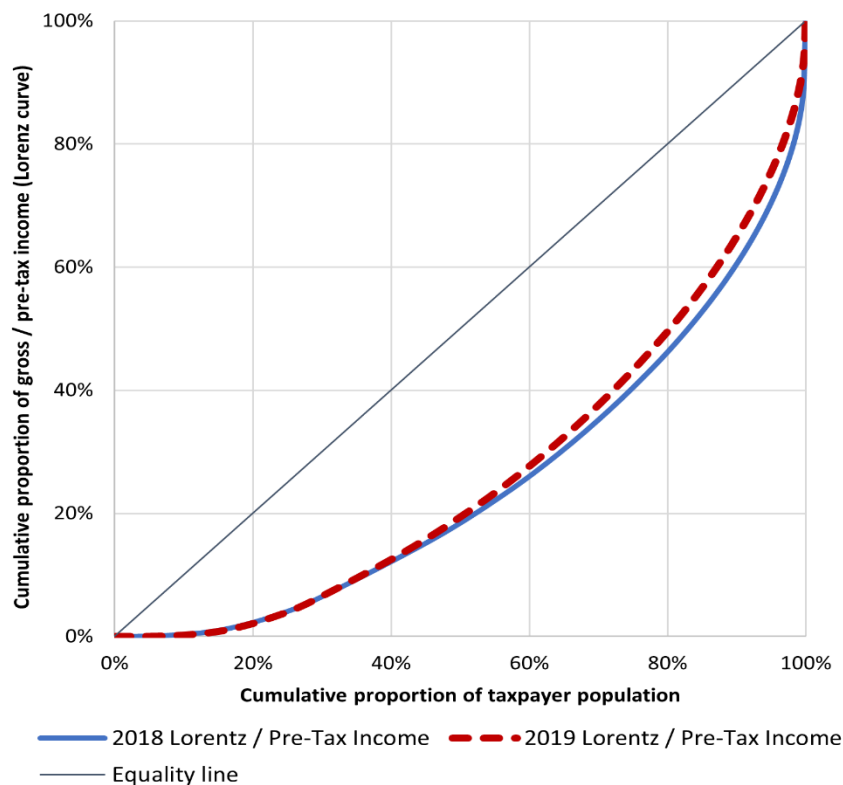

Taxpayer number in selected years

Mandatory Taxpayers · Voluntary Taxpayers · Mandatory New Taxpayers
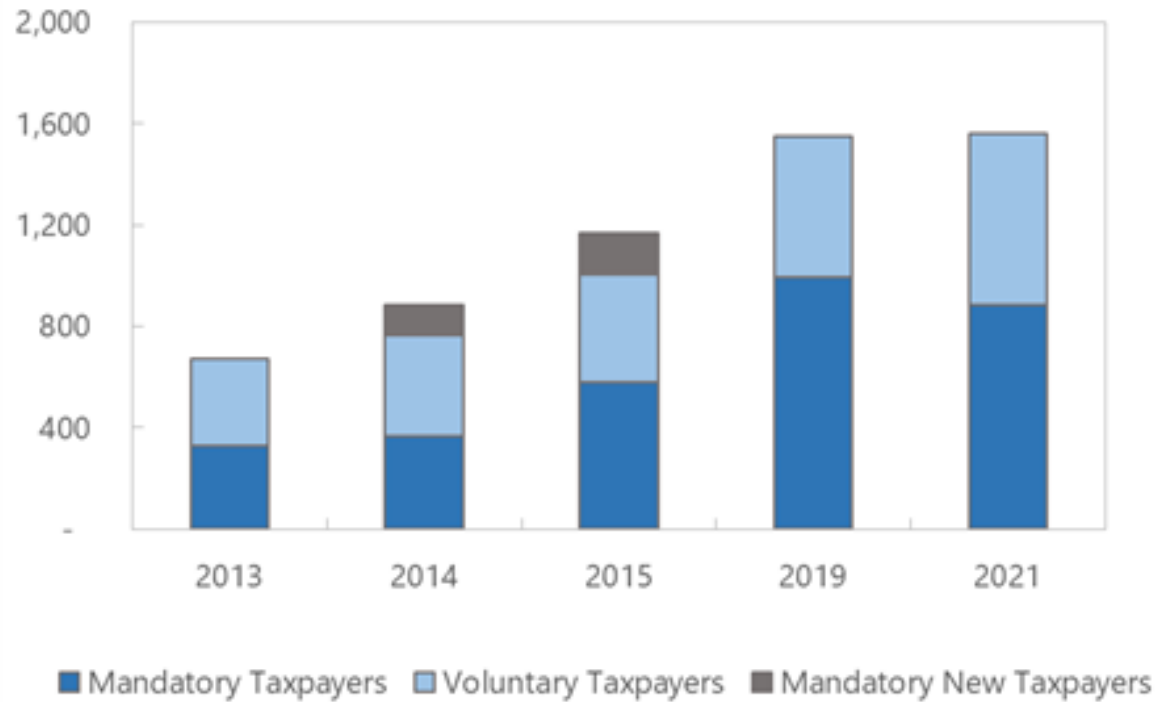
Taxpayer turnover in selected years

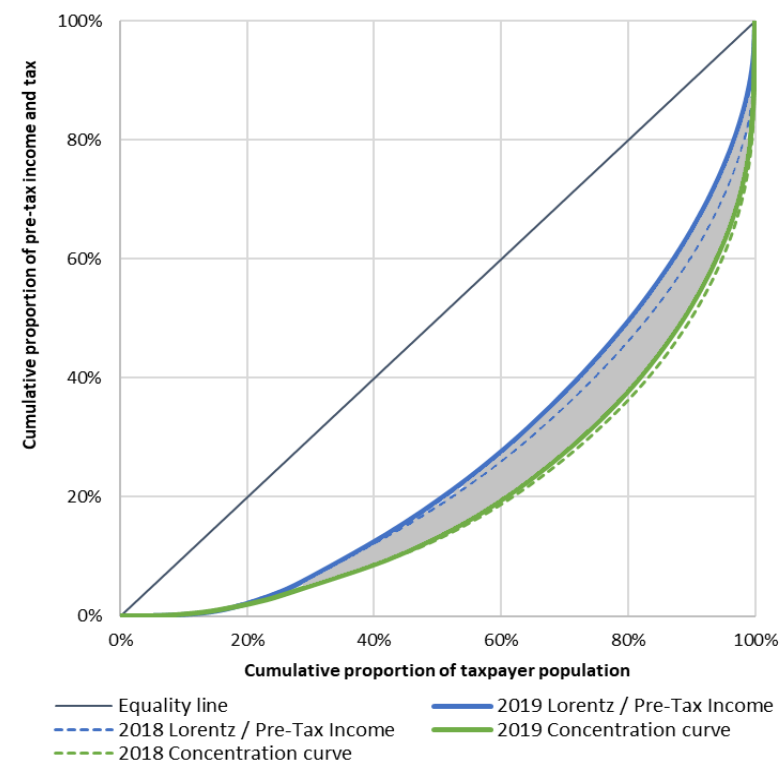Mandatory Taxpayers · Voluntary Taxpayers · Mandatory New Taxpayers

Impact of moving from a flat to a two-rate progressive PIT, on reported pre-tax income

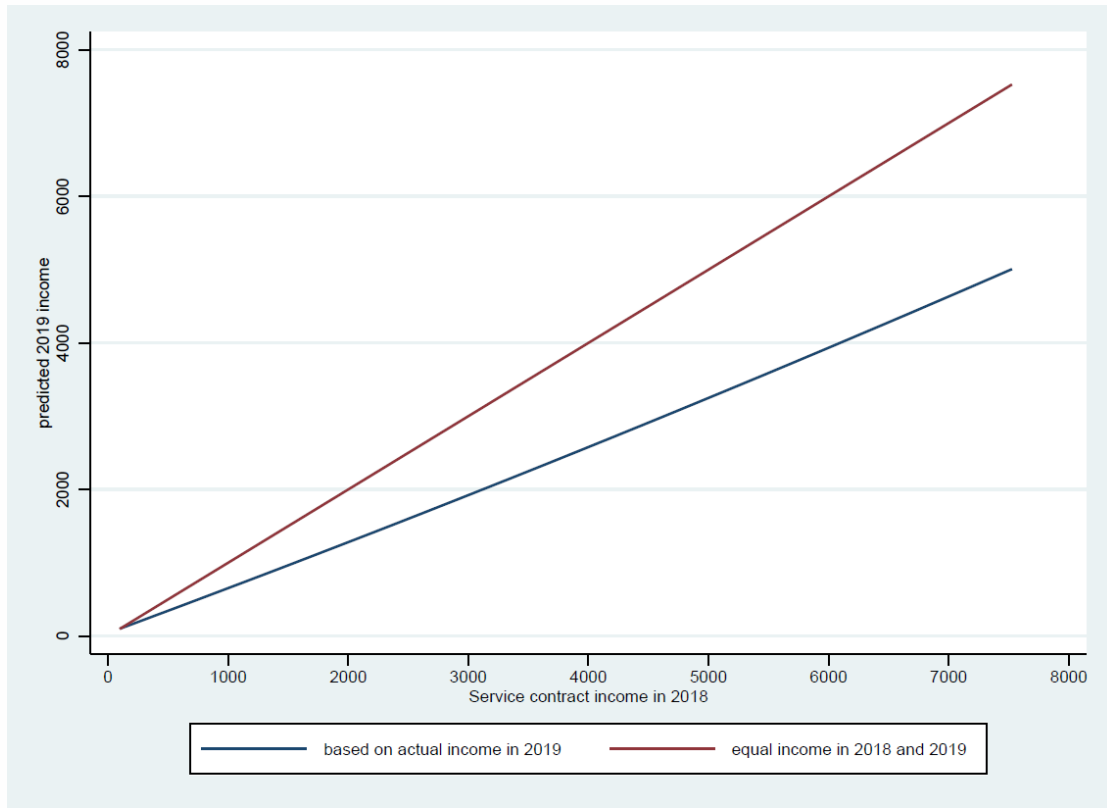## Lorentz curve: 2019 vs. 2018

	2018	2019	Delta
Gini	50.2	46.1	(4.1)

Kakwani: area between Lorentz and tax concentration curve
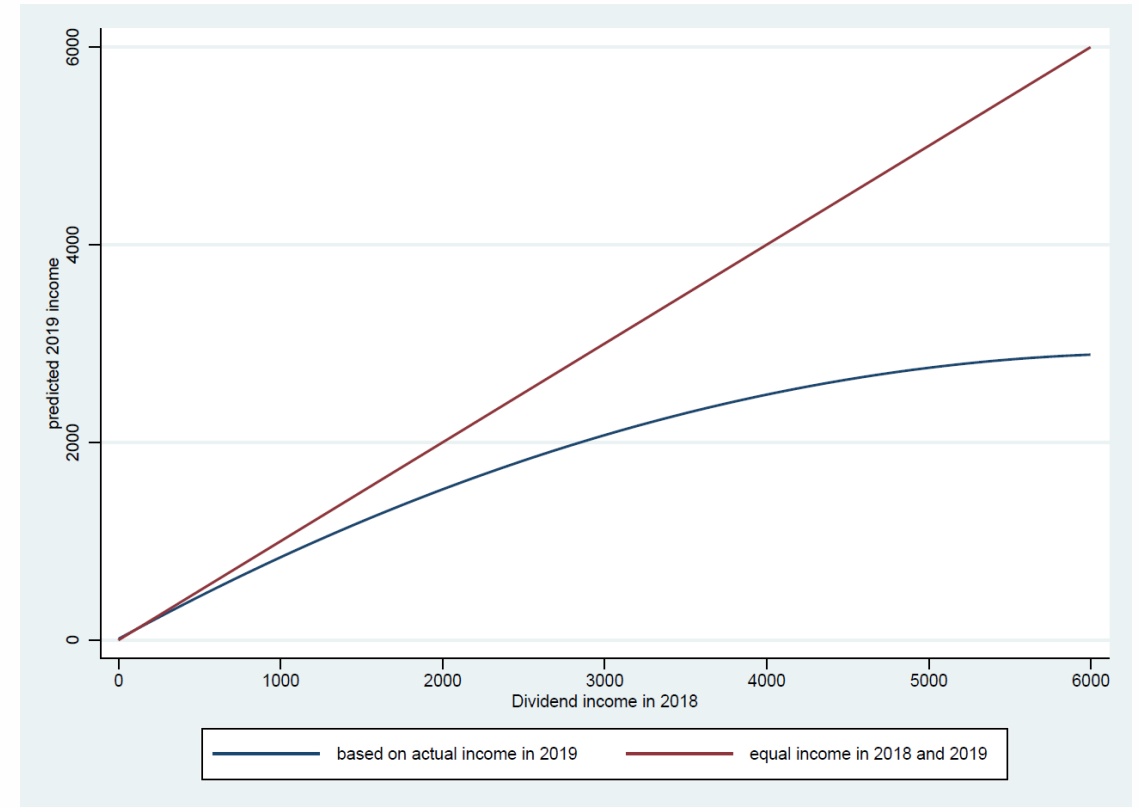

	2018	2019	Delta
Kakwani	10.3	8.6	(1.7)

Behavioral responses are idiosyncratic

Service Contracts: 2019 vs. 2018

Dividends income: 2019 vs. 2018

Thank You!

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