14th IMF-Japan High-Level Tax Conference for Asian Countries
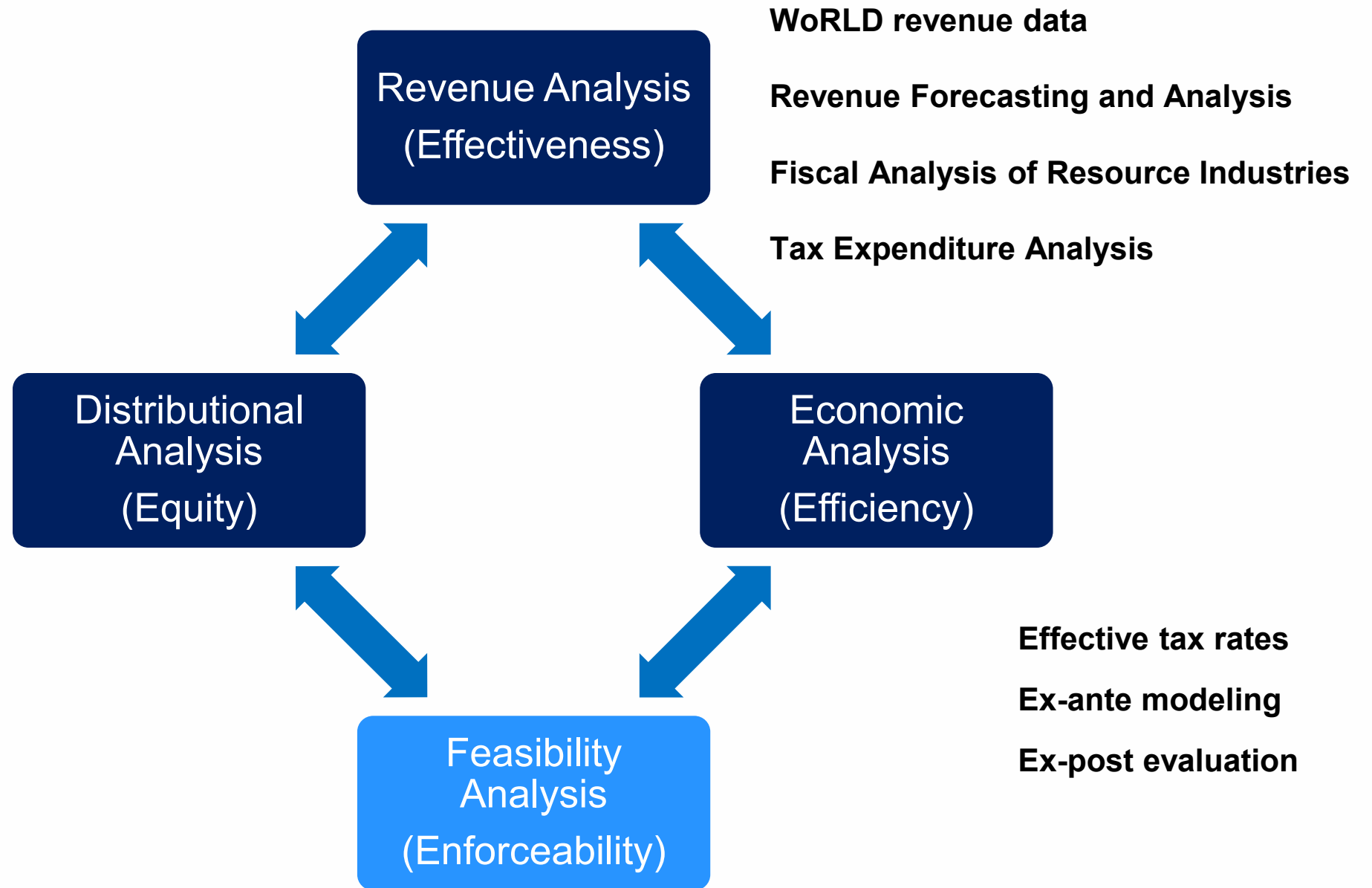
Session VII: Tax Policy Analysis for Policy Makers

September 25, 2025

Ruud de Mooij

Deputy Director, Fiscal Affairs Department

Revenue Analysis
(Effectiveness)

WoRLD revenue data

Revenue Forecasting and Analysis

Fiscal Analysis of Resource Industries

Tax Expenditure Analysis

Demo of PIT Tool

Distributional Analysis
(Equity)

Economic Analysis
(Efficiency)

Effective tax rates

Ex-ante modeling

Ex-post evaluation

Feasibility Analysis
(Enforceability)

WoRLD

■ **Compilation of IMF surveillance data**

- Common methodology based on GFS classification of government budget operations

- 33 years of tax and non-tax revenues for 190 IMF member countries (1990 – 2023)

- No surveys or questionnaires—IMF staff reports

- 14 series, including composition of major taxes (VAT, PIT, CIT, excise, trade tax, property tax)

■ **Publicly available**

- World Revenue Longitudinal Database

- Methodology and Overview of the IMF's World Revenue Longitudinal Database
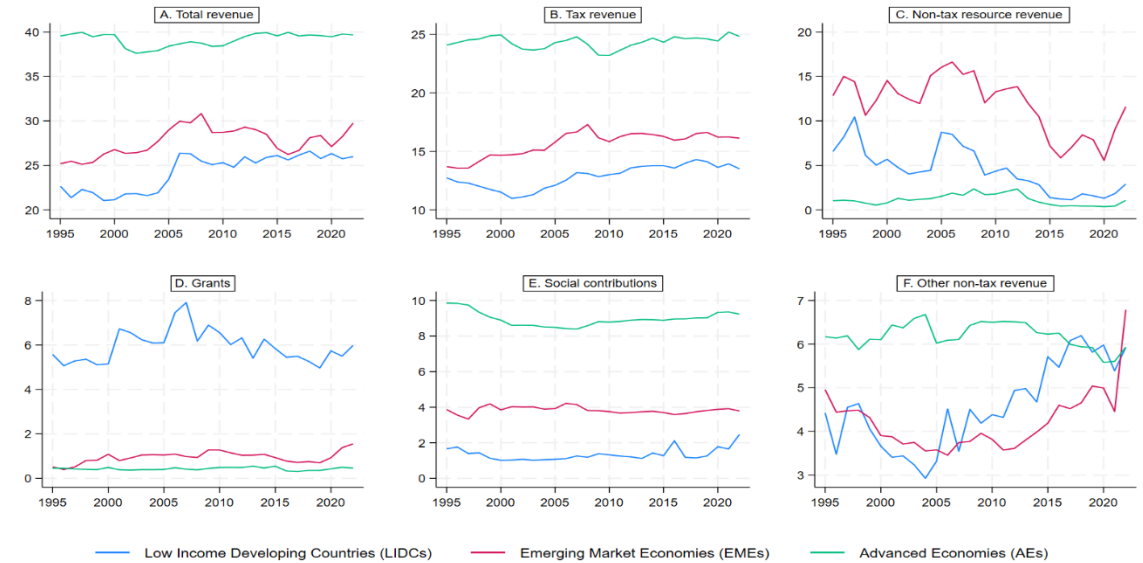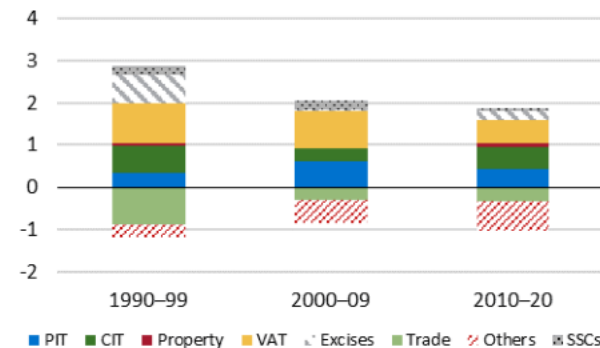

Figure 5. LIDCs: Changes in Main Taxes
(Percent of GDP)

Revenue Forecasting and Analysis

- **Baseline forecasting**
  - Tax buoyancy, tax elasticity, effective tax rates
- **Revenue impact analysis**
  - Micro simulation modelling (PIT, CIT); supply-use tables (VAT)

Revenue Forecasting and Analysis (RFAx)

This online course focuses on the technical and institutional aspects of revenue forecasting and tax policy analysis. It provides an overview of the quantitative methods that are required to forecast and evaluate the revenue implications of changes in major taxes, namely personal income taxes, corporate income taxes, value added taxes, excise taxes, and international trade taxes. The course also emphasizes the necessity of establishing a strong institutional framework to support the revenue forecasting process.

The course builds on both conceptual and practical approaches and employs hands-on activities to support learning, which includes quizzes and quantitative exercises with real fiscal data.
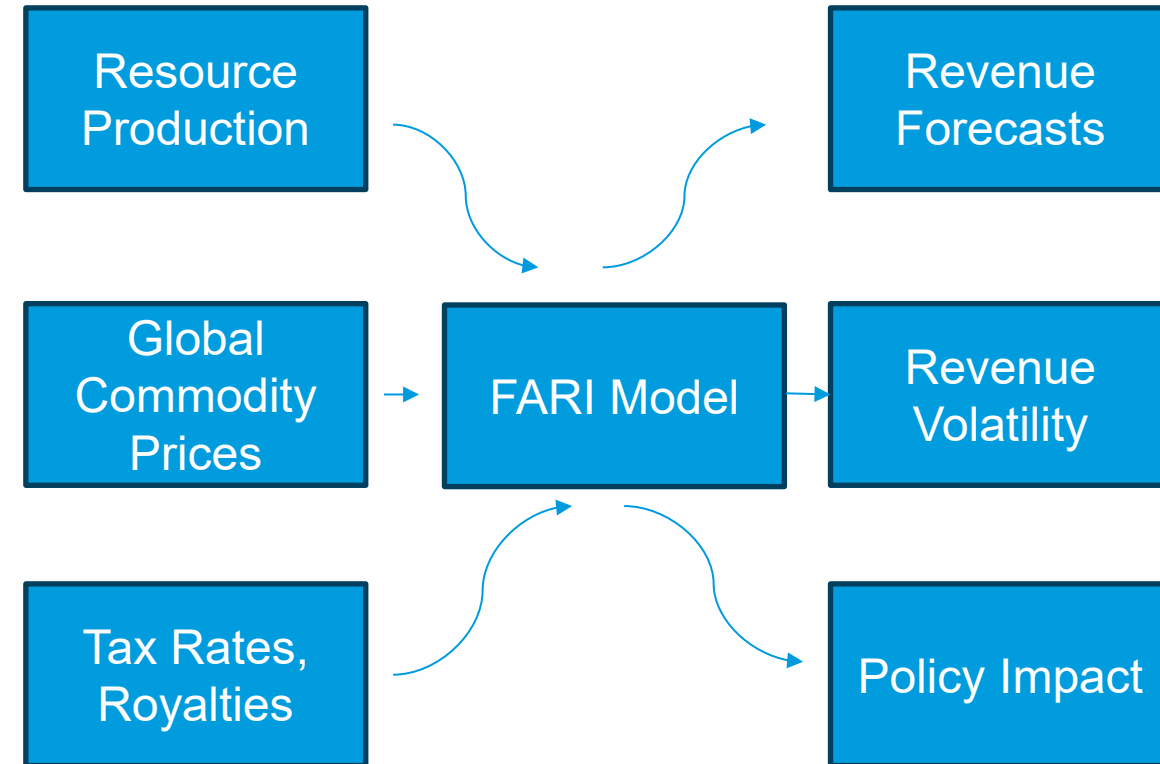
Revenue Forecasting and Analysis

Fiscal Analysis of Resource Industries (FARI)

- **Purpose**
  - ➤ Analyze fiscal regimes and revenue potential in resource-rich countries
  - ➤ Assess how fiscal policies impact revenues from extractive industries (oil, gas, minerals)

- **Key features**
  - ➤ Evaluates tax and royalty structures
  - ➤ Captures volatility and uncertainty in resource revenues
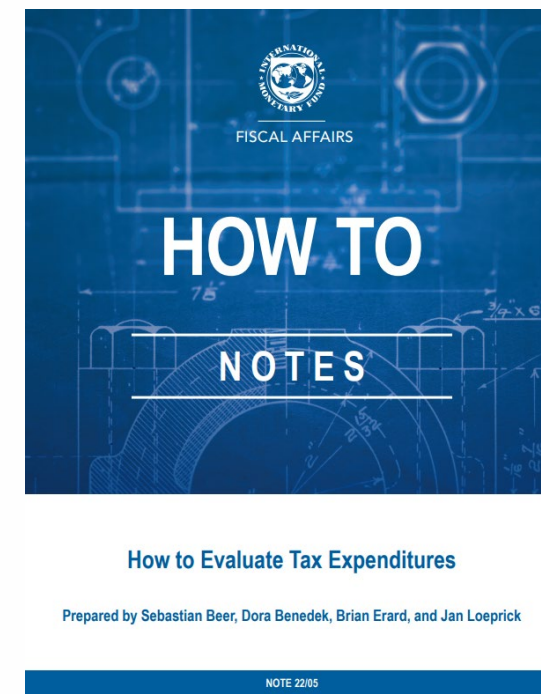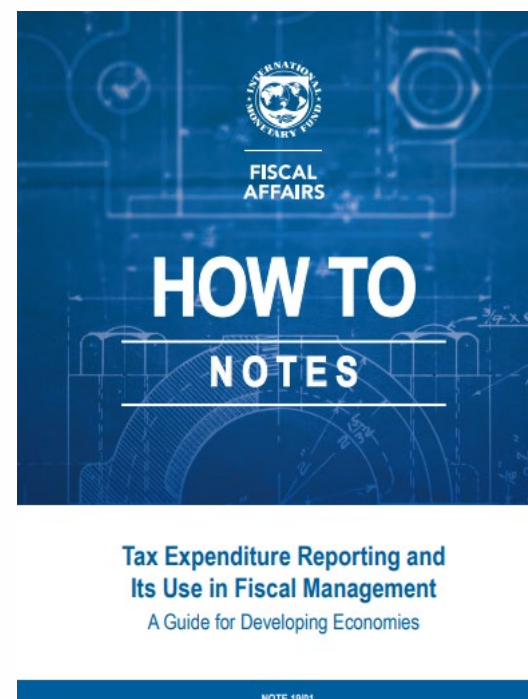 - ➤ Simulates fiscal outcomes under different policy scenarios.

Resource Production		Revenue Forecasts
Global Commodity Prices	FARI Model	Revenue Volatility
Tax Rates, Royalties		Policy Impact

Tax Expenditure Analysis (TEA)

- **Calculating and reporting TE**
  - Define a benchmark system
  - List provisions deviating from the benchmark
  - Assess revenue foregone through modelling
    - From simple approximation to microsimulation

- **Evaluation of TE**
  - Effective in achieving objective
  - Efficiency – revenue foregone, as well as economic impact
  - Equity – distributional impact
  - Enforcement

FISCAL AFFAIRS

HOW TO
NOTES

Tax Expenditure Reporting and Its Use in Fiscal Management
A Guide for Developing Economies

NOTE 19/01

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HOW TO
NOTES

How to Evaluate Tax Expenditures
Prepared by Sebastian Beer, Dora Benedek, Brian Erard, and Jan Loeprick

NOTE 22/05

Economic Impact Analysis

- **Effective tax rates**
  - ▶ Forward looking (simulation) – marginal and average
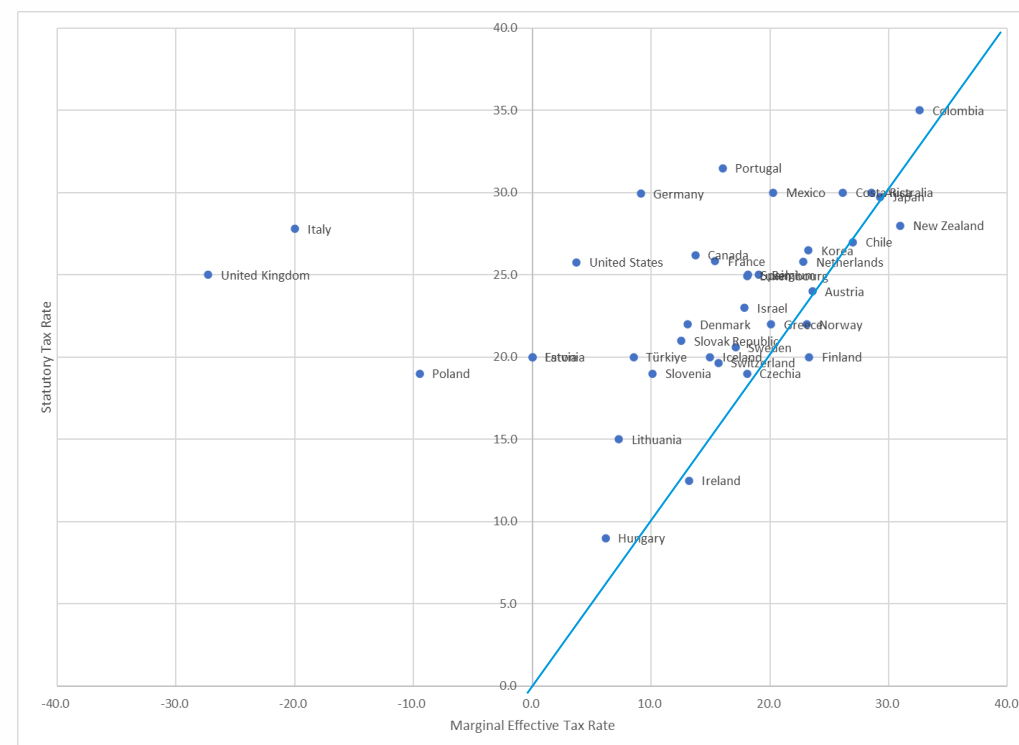 - ▶ Backward looking (data) – macro and micro
- **Ex-ante modeling**
  - ▶ Micro simulation with behavioral response (PIT, CIT)
  - ▶ Partial equilibrium (excise, environmental tax)
  - ▶ General equilibrium (major taxes – calibrated or estimated)
- **Ex-post evaluation**
  - ▶ Macro data – include indirect effects, but imprecisely measured (large confidence intervals)
  - ▶ Micro data – partial impact, yet precisely measured with (quasi-)experimental methodology

METR's usually < Statutory Rates