Fiscal Incidence Analysis in Practice
Filling Out the Master Workbook

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CEQ Master Workbook

- Front matter
- Section A: Background Information
- Section B: Survey Information
- Section C: Methodology
- Section D: Results

Currently still a stand-alone file:
- Disaggregated Tables of Results
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Front matter, matters

- Date and team information
- Information and Assumptions Summary
Section A: Background Information

• Data on inequality and poverty, macroeconomic indicators and the government budget for the year of the survey
  ➢ Sheet A3: Administrative data on fiscal interventions to be analyzed

• Description of tax system, social programs, pension system, subsidy schemes, education system and health system
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Section C: Methodology

• Sheet C1: Construction of Income Concepts

➢ A3 and C1, the most important sheets of all
➢ Both are likely to take the largest portion of the your time in preparing a CEQ Assessment
Fiscal Incidence Equation

\[ Y_h = I_h - \sum_i T_i S_{ih} + \sum_j B_j S_{jh} \]

- Income after taxes and transfers
- Taxes
  - Share of tax \( i \) paid by unit \( h \)
- Transfers
  - Share of transfer \( j \) received by unit \( h \)
Fiscal Interventions

- Taxes
  - Direct taxes: mainly PIT (miss top incomes except in tax-based analysis)
  - Contributions to pensions and social insurance systems
  - Indirect taxes on consumption: VAT, excise taxes, tariffs
Fiscal Interventions

• Transfers
  • Direct cash transfers
  • Non-cash direct transfers such as school uniforms and breakfast
  • Indirect subsidies
  • In-kind transfers such as spending on education and health
Construction of Income Concepts

MARKET INCOME

PLUS DIRECT TRANSFERS MINUS DIRECT TAXES

DISPOSABLE INCOME

MINUS NET INDIRECT TAXES

POST-FISCAL or CONSUMABLE INCOME

PLUS MONETIZED VALUE OF PUBLIC SERVICES: EDUCATION & HEALTH

FINAL INCOME
Allocation Methods

- Direct Identification in microdata
  - However, results must be checked: how realistic are they?

- If information not directly available in microdata, then:
  - Simulation
  - Imputation
  - Inference
  - Prediction
  - Alternate Survey
  - Secondary Sources
Tax Shifting Assumptions

- Economic burden of direct personal income taxes is borne by the recipient of income
- Burden of payroll and social security taxes is assumed to fall entirely on workers
- Consumption taxes are assumed to be shifted forward to consumers.
- These assumptions are strong because they imply that labor supply is perfectly inelastic and that consumers have perfectly inelastic demand
- In practice, they provide a reasonable approximation (with important exceptions such as when examining effect of VAT reforms), and they are commonly used
Tax Evasion Assumptions: Case Specific

- Income taxes and contributions to SS:
  - Individuals who do not participate in the contributory social security system are assumed not to pay them

- Consumption taxes
  - Place of purchase: informal markets are assumed not to charge them
  - Some country teams assumed small towns in rural areas do not to pay them
Monetizing in-kind transfers

- Incidence of public spending on education and health followed so-called “benefit or expenditure incidence” or the “government cost” approach.
- In essence, we use per beneficiary input costs obtained from administrative data as the measure of average benefits.
- This approach amounts to asking the following question:
  - How much would the income of a household have to be increased if it had to pay for the free or subsidized public service at the full cost to the government?
Scenarios and Robustness Checks

- Benchmark scenario

- Sensitivity to:
  
  - Changing the original income by which hh are ranked: e.g., market income plus contributory pensions
Section D: Results

- What is the impact of taxes and transfers on inequality and poverty?
- How effective and efficient is the fiscal system in reducing inequality and poverty?
- Who bears the burden of taxes and receives the benefits?
- What is the coverage of programs among the poor?
- What share of the benefits go to the nonpoor?
- How equitable is the use of education and health services?
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Dissaggregated Tables of Results (stand-alone)

• Is a particular fiscal intervention equalizing or unequalizing?
• What is its marginal contribution?
• Allow us to generate new indicators if access to microdata is no longer feasible
Thank you!