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

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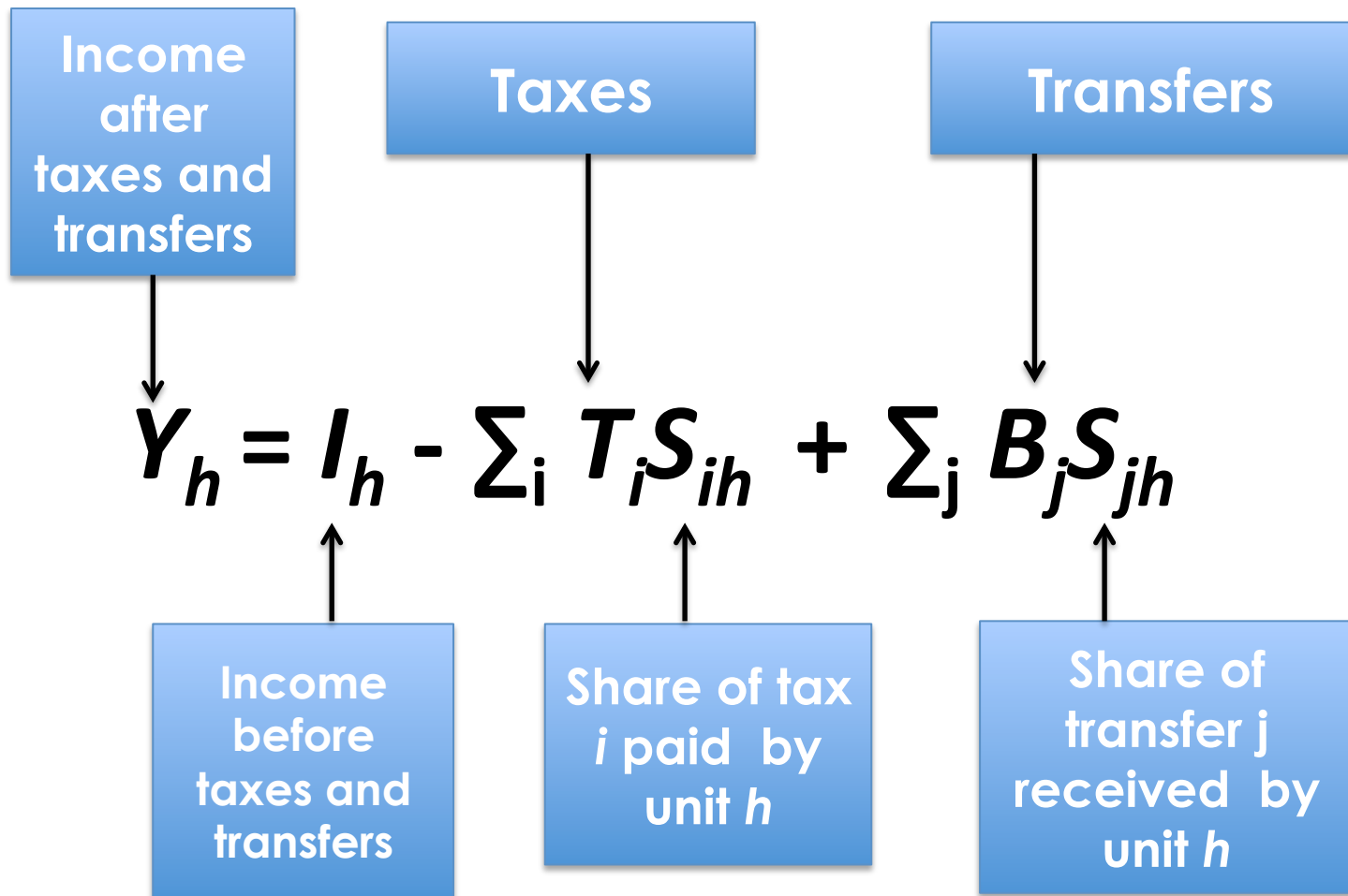
Section A: Background Information

- 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

- Desciption 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

Income after taxes and transfers

Taxes

Transfers

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

Income before taxes and transfers

Share of tax i paid by unit h

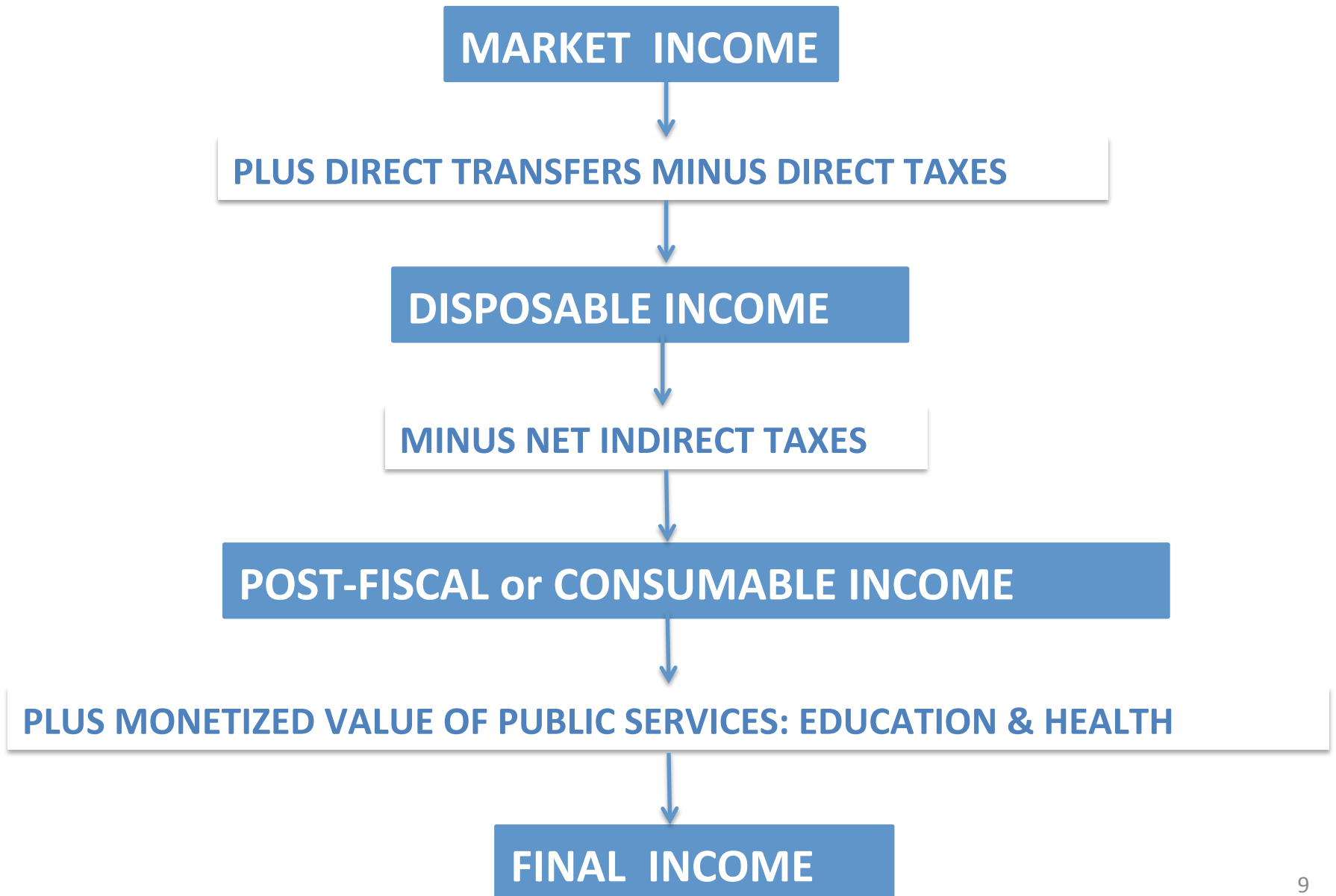**Share of transfer j received by unit h**

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
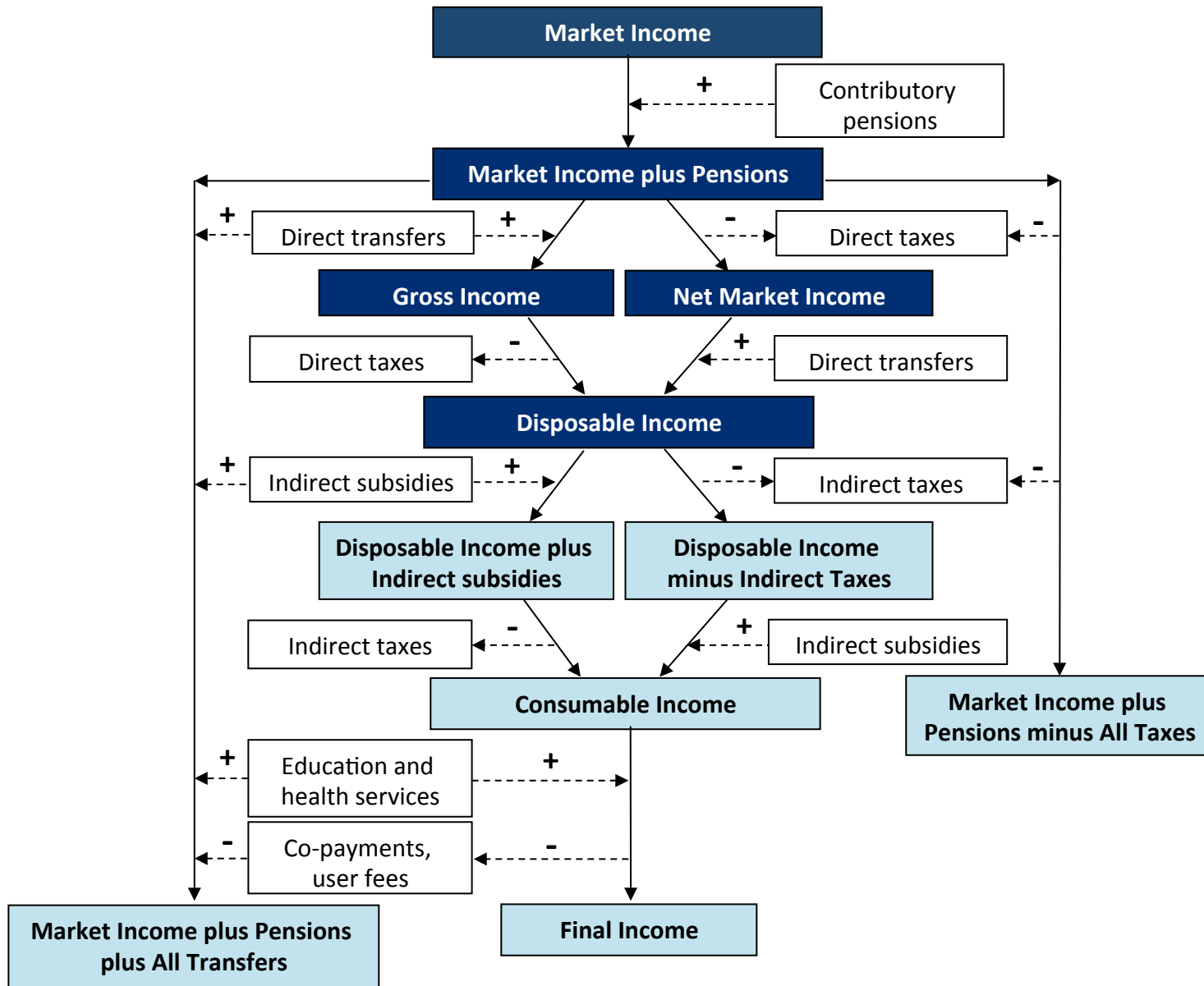
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Section D: Results

- 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!