

## Social Accounting Matrix A General Equilibrium Data Set

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## Introduction

- An Essential Requirement for Quantitative Analyses is Data
- Usually Data are Recorded in Following Formats:
  1. Time Series
  2. Cross-Section (Survey Based)
  3. Consistency Frameworks
    - Input-Output Matrix
    - Social Accounting Matrix

## STRUCTURE of accounts

| IOT            | ACT       | COM      | Cp                  | Cg         | Exports | INV        | Demand |
|----------------|-----------|----------|---------------------|------------|---------|------------|--------|
| Activity       |           | ACT SS   |                     |            |         |            | ACT DD |
| Commodity      | II Matrix |          | Private Consumption | Public Con | Exports | Investment | COM DD |
| Factor Labour  | Va Lab    |          |                     |            |         |            |        |
| Factor Land    | Va Land   |          |                     |            |         |            |        |
| Factor Capital | Va Cap    |          |                     |            |         |            |        |
| Indirect Tax   |           | Ind Tax  |                     |            |         |            |        |
| Import Duty    |           | Imp Duty |                     |            |         |            |        |
| Imports        |           | Imports  |                     |            |         |            |        |
| Supply         | ACT SS    | COM SS   |                     |            |         |            |        |

- Derivation of SS, Derivation of DD, Equality SS=DD
- Captures Technology Structures/Inter-Industry Transaction

## Institutional Account

| Receipts                              | Outlays                    |         |
|---------------------------------------|----------------------------|---------|
| 1. Income (Factor Returns or Revenue) | 1. Consumption Expenditure |         |
| 2. Transfers Inflow                   | 2. Transfers Outflow       |         |
| 2.1 Domestic                          | 3. Taxes                   |         |
| 2.2 External                          |                            |         |
| Total Receipts                        | Total Outlays              | Savings |

- Linkage with Factors
- Linkages between Sectors, Factors and Institutions
- Interdependence between Institutions

| SAM                     | ACTIVITY            | COMMODITY        | FACTORS                  | HOUSEHOLDS     | GOVERNMENT             | CORPORATION     | R.O.W                        | CONSOLIDATED CAPITAL ACCOUNT |                  |
|-------------------------|---------------------|------------------|--------------------------|----------------|------------------------|-----------------|------------------------------|------------------------------|------------------|
| ACTIVITY (A)            | SUPPLY              |                  |                          |                |                        |                 |                              |                              | ACTIVITY DEMAND  |
| COMMODITY (S)           | INTERMEDIATE        |                  | CONSUMPTION              |                | GOVT EXP.              |                 | EXPORT                       | INVEST STOCK CHANGE          | COM DEM          |
| FACTORS                 | VALUE ADDED         |                  |                          |                |                        |                 |                              |                              | FACTOR INCOME    |
| HOUSEHOLDS              |                     |                  | INCOME FROM FACTOR       | TRANSFER       | TRANSFER TO HOUSEHOLDS | DIVIDEND        | REMITTANCE                   |                              | HOUSEHOLD INCOME |
| GOVERNMENT              | TAX & TARIFF        | IMPORT DUTY      | INCOME FROM CAPITAL      | INCOME TAX     |                        | CORPORATE TAX   |                              |                              | GOVT. INCOME     |
| CORPORATION             |                     |                  | INCOME FROM CAPITAL      |                |                        |                 |                              |                              | CORP INCOME      |
| REST OF THE WORLD       | INTERMEDIATE IMPORT | FINAL IMPORT TAX |                          |                |                        |                 |                              |                              | ROW INCOME       |
| CONSOLIDATED CAPITAL AC |                     |                  |                          |                |                        |                 |                              |                              | NATIONAL SAVINGS |
|                         |                     |                  |                          | <b>SAVINGS</b> |                        |                 |                              |                              |                  |
|                         | ACTIVITY SUPPLY     | COMMODITY SUPPLY | PAYMENT TO LAB PRODUCERS | HH EXPENDITURE | GOV EXPENDITURE        | COR EXPENDITURE | PAYMENT BY ROW TO BANGLADESH | INVESTMENT EXPENDITURE       |                  |

### **SAM Accounts**

1. Production Activity Account (Activity and Commodity)
2. Factor of Production Account.
3. Current Account Transaction between 4 institutional Agents:
  - A. Household Account
  - B. Corporation Account
  - C. Government Account
  - D. Rest of the World account (ROW)
4. One Consolidated Capital Account to Capture the flow of Saving and Investments by Institutions and Sectors Respectively.

### **Data Sets**

1. A Balanced Input-Output Table for the Year Selected for SAM
  - A. Inter-industry Transactions between Activities/Commodities
  - B. Supply by Activities/Commodities (Domestic Output + Imports)
  - C. Activity/Commodity Demand by Components
    - Consumption, Exports, Investment
2. Labour Force Survey
3. Household Income and Expenditure Survey
4. Government Accounts
5. National Accounts

### **Some Conventions**

- Entries in the corresponding columns represents outlays or the expenditure side of the account.
- Entries in the rows are to be read as receipts or revenue for that account.
- Totals of corresponding Rows and Columns are equal and there is no leakage.
- The SAM is a square matrix.
- The matrix presentation allows each transaction to be represented by a single cell in the matrix.

**Thank You**