

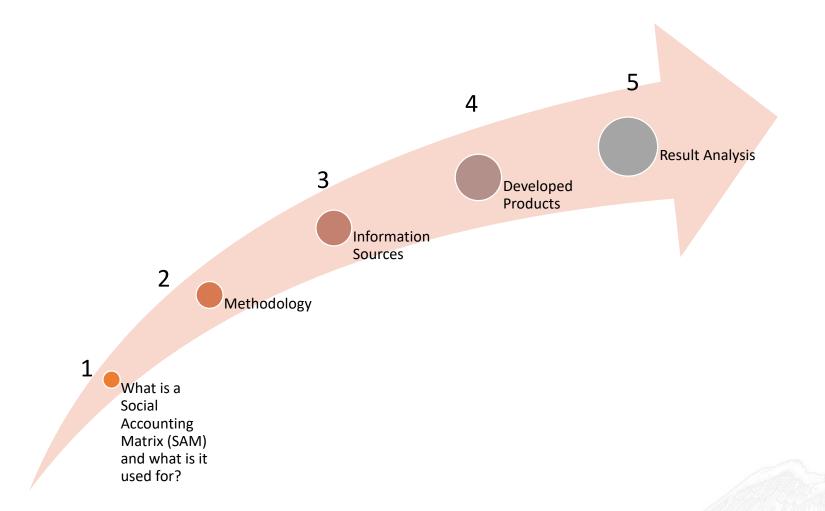
### Social Accounting Matrix for Ecuador, an income distribution outlook

CENTRAL BANK OF ECUADOR

Seminar on National Accounts for Latin America and the Caribbean: The future of Economic Statistics

#### **PRESENTATION CONTENT**









# 1: What is a Social Accounting Matrix (SAM) and what is it used for ?





### 1: What is a SAM and what is it used for ?



- It is a matrix that represents the circular flow of income for a particular economy and a specific year (particular time period)
- It links the productive sector with the functional distribution of income regarding economic actors and the use that the latter give to income.
- The SAM addresses issues of personal income distribution and household spending patterns.

### **Definition**

### **Applications**

- Distributive analysis of total income and expenditure structure
- Industrial interrelationships with economic agents
- SAM is an input for static simulations (fixed coefficient models).
- Input for the elaboration of computed general equilibrium models



### 1: What is a SAM and what is it used for ?



### **Types of matrices**

**Traditional SAM** 

Table Supply and Demand (TSD) without transformation +

Integrated Economy
Table (IET)

SAM Input
Output Matrix
(IOM)

TSD transformed in (IOM)

**IOM Industry** 

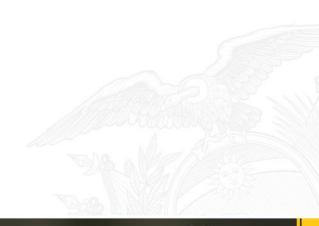
SAM System Of National Accounting(SNA)

A perspective of resources and uses





# 2: Methodology





### 2: Methodology: Deductive Method



Development of a Macro SAM

- It shows the macroeconomic aggregates that must be divided
- It allows a verification of the macroeconomic balances in National Accounts

Development of a Micro
SAM

- Industries, products and agents are disaggregated
- TSD at level 1 and IET for 5 institutional sectors including the Rest of the World
- IOT I\*I is also used

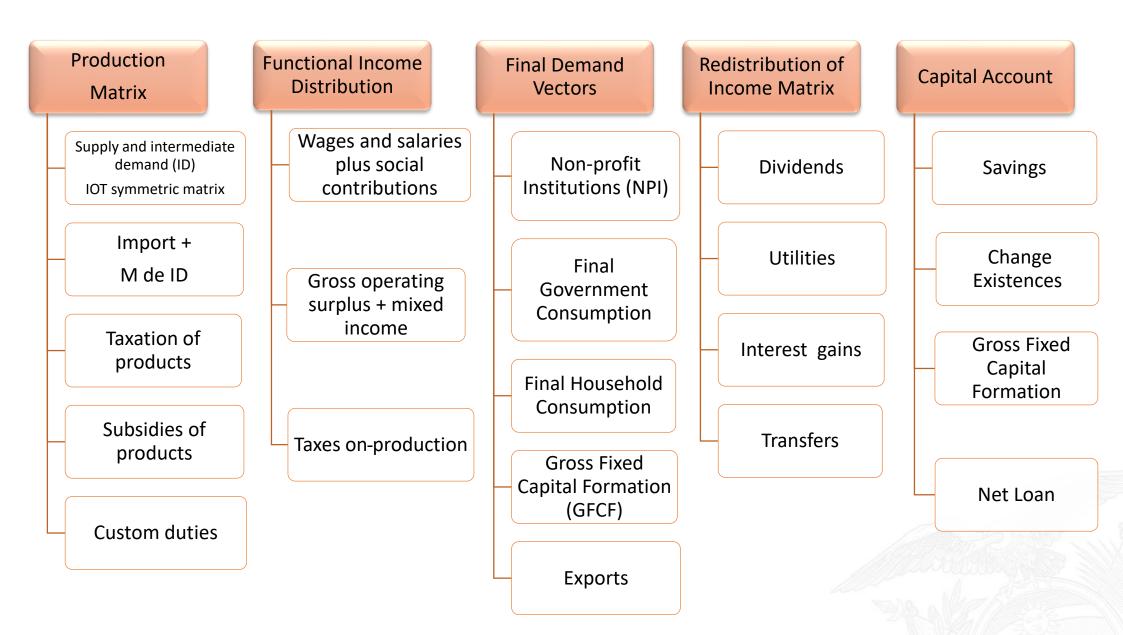
Opening households

- In order to obtain deciles of consumption and income, household surveys are carried out: there are 10 different households
- Determination of variable structures are needed including: income, expenditure, transfers and salaries
- An econometric model is applied to correct compensation for under-declaration and reach the level of the Macroeconomic National Accounts
- An econometric model is applied for the structure of the Capital Account



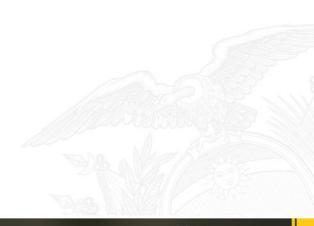
### 2: Methodology: MICRO-SAM Opening







### 3: Information Sources





#### 3: Information Sources



Supply – Demand Table (SDT)

- Generation and use of production in current values
- 72 products and 69 activities

Imput and Output Matriz (IOM)

• It uses the symmetric matrix of 71 x 71 industries in current values

Integrated Economic Table (IET)

• It offers a global vision of the economy through institutional sectors: Societies, Households, Government, NPISH, Rest of the world)

Conditions of Life Survey (ECV)

- Disaggregation through household deciles of income
- Functional and personal distribution of the income
- 5th and 6th ECV surveys were used (2006-2007) and 2014).

Income and Expenditure Household Survey (ENIGHUR)

• Disaggregation of deciles of consumption specific products

Employment and Unemployment Survey (Enemdu) + National Economic Census (CENEC)

National • Disaggregation of deciles of income for Gross Fixed Capital Formation





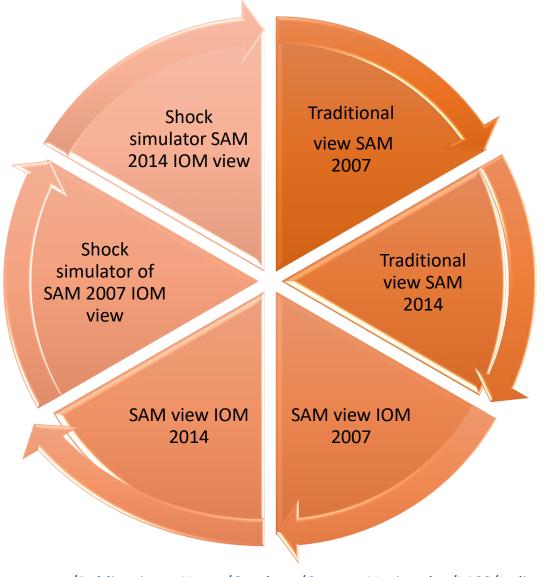
# 4: Developed Products





### 4: Developed and Published





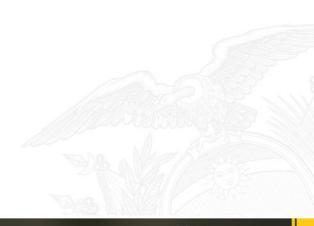
https://contenido.bce.fin.ec/documentos/PublicacionesNotas/Catalogo/CuentasNacionales/MCS/Indice.htm

- Matrix at macro and micro level
- Simulators
- Methodological Notebooks
- Distributive Analysis





## 5: Results Analysis





### **5: Results Analysis**





**Distributive Statistics** 

1: Personal Hosehold Income Structure





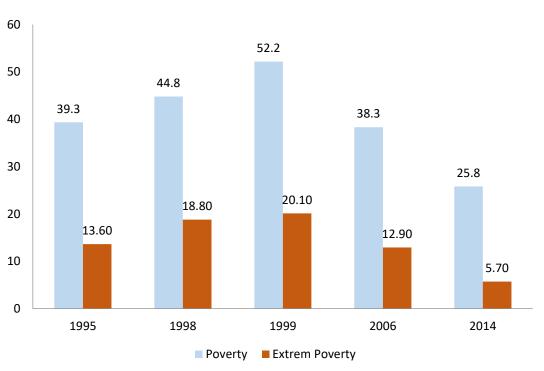


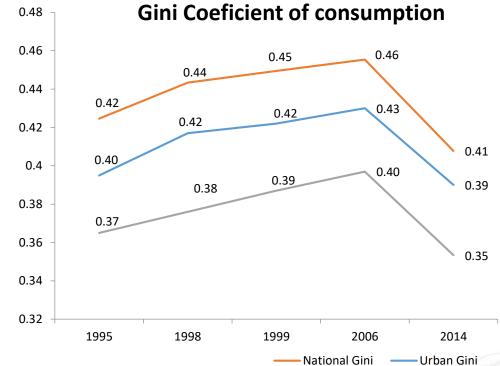
### 5: Results Analysis, Distributive Statistics



There is a distributive change in income between Ecuadorian households through the years 2006 and 2014

# Poverty and Extreme Poverty Consumption National (urban y rural)





Sorce: INEC, ECV

Developed by: Central Bank of Ecuador

Sorce : INEC, ECV

Developed by: Central Bank of Ecuador

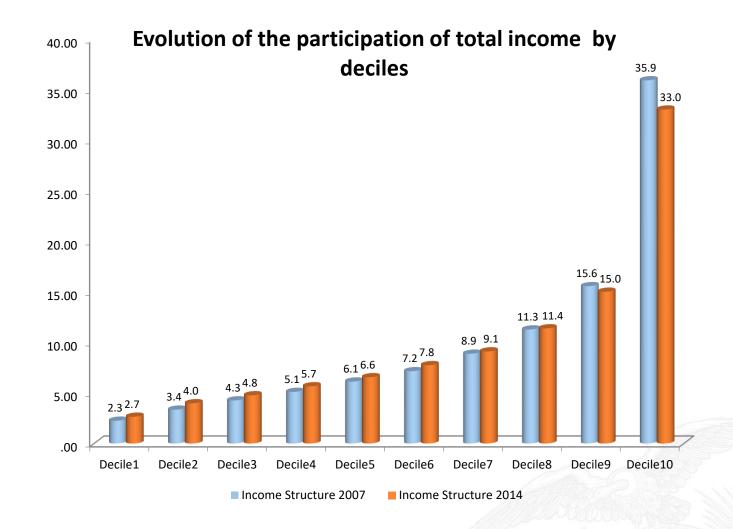




### 5: Results Analysis, Personal Household's Income

At a microeconomic, the total income between households is analyzed:

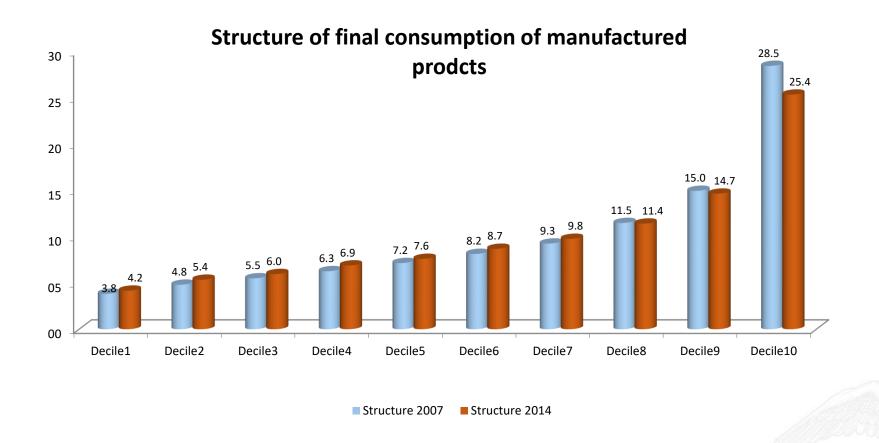
The richest decile (tenth) represented 15.6 times higher than the total income of the poorest decile in 2007, however for 2014 this relationship is 12.2 times richer



### 5: Results Analysis, Household Expenditure Structure



The growth in income is reflected in the final consumption expenditure of households.









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