



Accounts, Indicators and Policy Use with the 2008 SNA Framework

**Seminar for Developing a programme for
the Implementation of 2008 SNA and
supporting Statistics**

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United Nations Statistics Division

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Outline of Presentation

- SNA as a link between theory and practice
- Location of 2008 SNA for policy analysis
- Economic indicators approach to macroeconomic analysis
- Advantages of economic indicators approach to macroeconomic analysis
- Analysis of scope of implementation of Supply and Use Table (SUT)
- Scope of Macro-economic Analysis by Milestones and Minimum Required Data Set (MRDS)

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SNA as a link between theory and practice

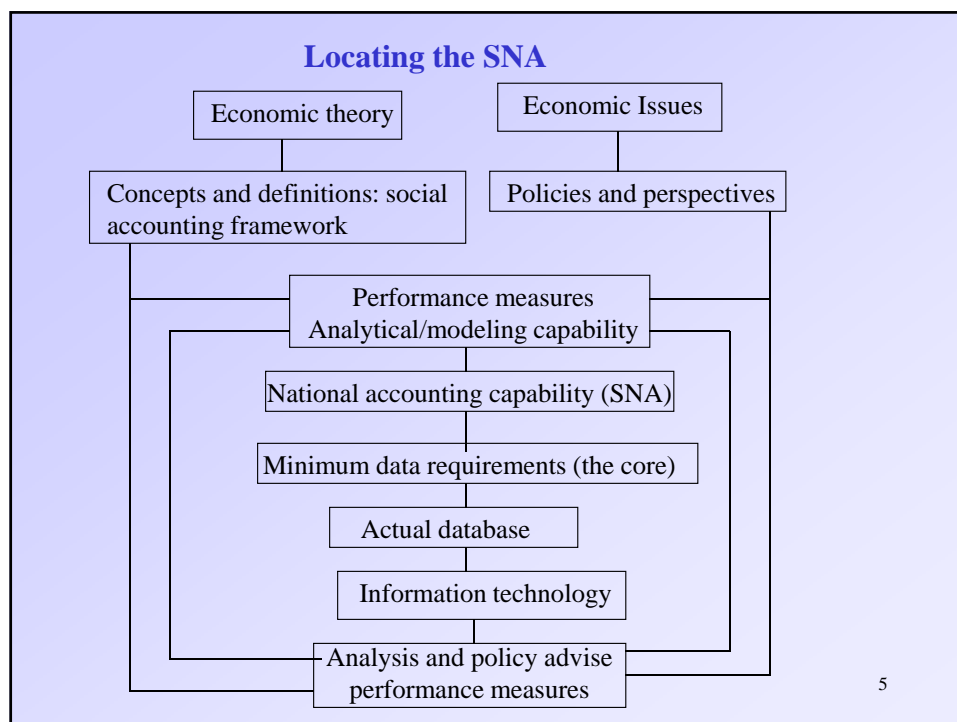
- SNA is central to the process whereby the interplay of theoretical constructs and practical issues together determines the national accounting capability that a country would like to have.
- Through the translation of these ambitions into actual capability,
 - it develops the ability to monitor performance,
 - to provide policy analysis, and
 - hence to advise and comment on contemporary issues

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SNA as demand driven response

- SNA is demand driven in the sense of being a response to real issues.
- The SNA provides a frame of reference for the development of a capacity to analyze macroeconomic challenges and to monitor progress
- Economic theory and SNA interact in the development of concepts and definitions, accounts and tables, classification, etc. to analyze the economy in an integrated framework

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SNA as demand driven response

- The eventual nature of this response is represented at the bottom of the diagram and involves both measures of actual economic performance and the advice that follows from analysis.
- The role of the SNA is not, therefore, simply to define such performance measures as GDP or the rates of saving and investment.
- These are incidental to the main purpose, which is to provide:
 - a frame of reference for the development within each country of a capacity to analyse economic problems and
 - to monitor progress.

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Locating the SNA and Intermediate Accounts for Policy Analysis

- The first step is to translate economic theory into a set of concepts and definitions, which build into an overall conceptual framework (social accounting framework –Hicks 1942)
- The core (Central Framework) of the SNA embodies basic distinctions as required by economic theory such as:
 - Production (aggregate supply) and aggregate demand (use)
 - Production, income, saving and investment
 - Current versus capital
 - Transactions such as income, consumption, investment, exports, imports, financial assets and liabilities ..
 - Balance sheets with positions of assets and liabilities
 - (institutional) sectors such as household sector, corporate sector, monetary sector, government sector, external sector
 - Factors of production such as labor, capital, technology..
 - Prices
 - Domestic versus foreign

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Economic indicators approach to macroeconomic analysis

- A set of national accounts data is generally too large and conceptually too complex for users to handle in analysis.
- Users require that the data set be summarized into a smaller set of indicators that could be used to assess economic conditions and development of a country.
- Indicator analysis – generally indicator ratios are used.
- The reason for using ratios between data rather than the data themselves is that data generally provide little information, unless they are related to other data.

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Economic indicators approach to macroeconomic analysis

Example:

- GDP figure becomes only meaningful
 - if its growth over time is analysed, a per capita figure is derived that makes it possible to compare the data between countries, or a
 - percentage breakdown by expenditures or activities is presented.
- Similarly, data about the level of imports are not very informative unless
 - they are related to exports or
 - to domestic output, or
 - a breakdown by products is shown.

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Indicators to assess economic conditions and developments

- Indicator ratios are roughly grouped by types that describe economic conditions and development of the economy and/or policies aimed at influencing developments
- **First** - describe the total economy and its relations with the ROW
 - aggregates per capita and per worker, prices and BOP
- **Second** - describing production by industries and sectors
 - Production, behaviour and participation of corporations in the economy
- **Third** - elements of fiscal policies and the impact of those on other sectors
 - behaviour and participation of Government in the economy, taxes

Defining Indicators within macro-economic framework

- By linking the indicators to macro-economic framework, it would be possible to identify not only the issues but also the underlying variables that could measure the impact of policies addressing the issues.
- As a macro accounts framework is generally used to address policy issues within a country, the development of indicators based thereon
 - would stimulate the use of those indicators by national Governments in their assessment of national conditions and developments,
 - in addition to the present use of indicators by international agencies.

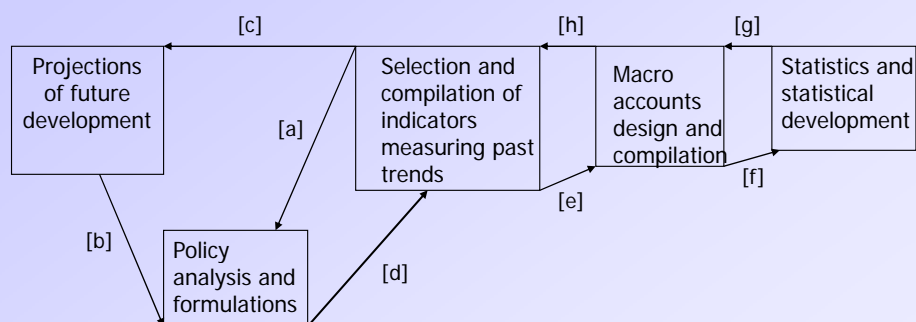
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Advantages of economic indicators approach to macroeconomic analysis

- Simple and understandable economic constructs that summarize the development of the economy and the economic and financial vulnerabilities over time.
- Economic indicators within a balanced system of national accounts are mutually consistent.
- Economic indicators use the real and financial interconnectedness within sectors, between sectors and their counterparties in the rest of the world.
- Economic indicator analysis improve the use of national accounts and its quality and reveal data gaps

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Links between statistics, macro accounts, indicators, projections and policies



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Advantages of economic indicators approach to macroeconomic analysis

- Indicators and macro accounts play a central role in statistical development and policy formulation.
- Policy formulation could be based on the use of indicators measuring past and present trends [a]
- May also take into account future developments that are based on alternative values of the indicators in the future [b].
- The use of indicators in projections is reflected in a direct link with the indicators measuring past trends [c].
- In order to define statistical development that would support policy formulation, links are needed to translate policy formulation
 - into indicators [d].
 - indicators into the design and compilation of macro accounts [e] and
 - macro accounts into statistical development [f].
- The derivation of values of indicators are represented by the reverse links
 - between statistics and the compilation of macro accounts [g], and
 - between the macro accounts data and the derivation of indicator values [h].

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Integration of Industry Data in SUT

	OUTPUT	OUTPUT	OUTPUT	OUTPUT		
	Total economy	Agriculture, hunting, forestry and fishing	Mining, manufacturing, electricity, gas, water, construction	Services industries	Imports	
Agriculture, forestry and fishery products	87	87	0	0	37	
Mineral, manufacturing, electricity, gas, water and construction products	2,153	2	2,112	39	345	
Services products	1,364	0	11	1,353	117	
TOTAL	3,604	89	2,123	1,392	499	

	Intermediate consumption	Intermediate consumption	Intermediate consumption	Intermediate consumption	Exports	Final consumption expenditure			Gross capital formation		
						Government	Households	NPISH	Gross fixed capital formation	Change in inventories	Acquisitions less disposals of valuables
Agriculture, forestry and fishery products	88	3	71	14	7	2	28	0	2	1	
Mineral, manufacturing, electricity, gas, water and construction products	1,251	36	969	246	435	3	608	0	351	27	10
Services products	544	8	218	318	98	363	379	16	23		
TOTAL	1,883	47	1,258	578	540	368	1,015	16	376	28	10

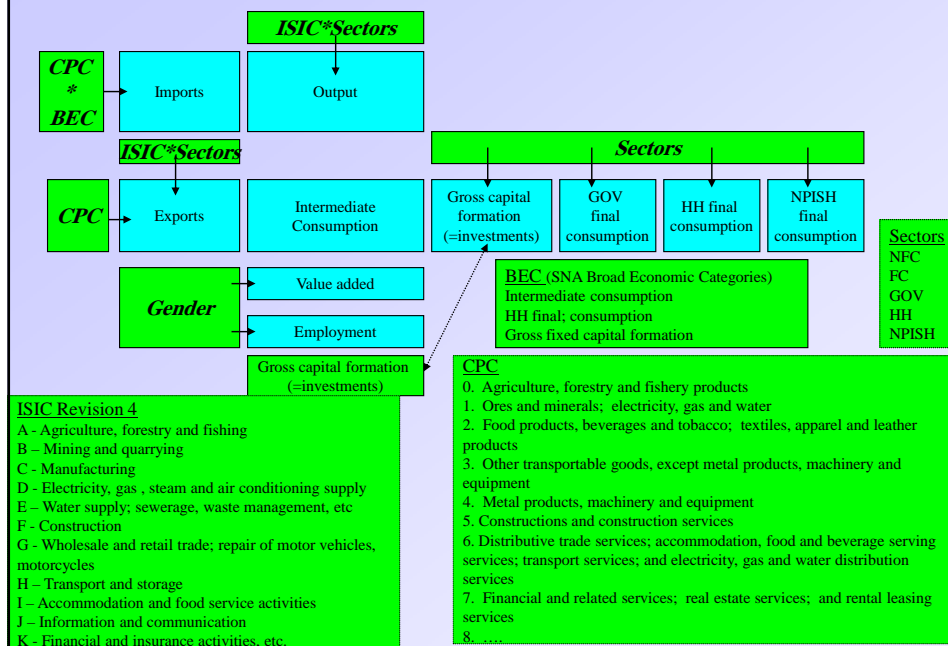
Value added by components	Value added	Value added	Value added	Value added
Compensation of employees	762	9	407	346
Taxes less subsidies on production and imports	58	-2	49	11
Consumption of fixed capital	222	11	92	119
Operating surplus / mixed income, net	679	24	317	338
TOTAL	1,721	42	865	814

*)

The data presentation in the present exercise is based on the assumption of full allocation of FISIM to industries and sectors using those services. If the allocation is to a nominal sector, negative adjustments to GDP are needed in the cells indicated.

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Refining SNA scope through classifications into the SUT



Extending the SUT to Socio-Economic Analysis

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graph TD
    ISIC[ISIC*Sectors] --> Output[Output]
    Output --> GCF[Gross capital formation (=investments)]
    CPC1[CPC] --> Imports[Imports]
    BEC[BEC] --> Imports
    Imports --> Output
    OtherSectors1[Other sectors: NFC, FC, GOV, NPISH] --> GCF
    HH[HH Sub-sectors] --> SD[Social dimensions (social indicators)]
    ClassificationPurpose1[Classification by Purpose (social protection)] --> SD
    SD --> HHA[HH Actual final consumption & capital formation]
    GCF --> FC[Final consumption]
    HHA --> FC
    FC --> OtherSectors2[Other sectors: FC, GOV, NPISH]
    OtherSectors2 --> ClassificationPurpose2[Classification by Purpose (COICOP, COFOP, social protection categories)]
    ClassificationPurpose2 --> VA[Value added]
    ClassificationPurpose2 --> Emp[Employment]
    VA --> ISCO[ISCO/ICSE Gender Nationals/non-Nationals]
    Emp --> ISCO
    ISCO --> CE[Compensation of employees Mixed income Employment]
    ISCO --> WR[Workers Remittances to ROW]
    WR --> OtherSectors2
    OtherSectors2 --> ClassificationPurpose1
  
```

ISIC*Sectors

CPC * **BEC** → Imports → Output

Other sectors: NFC, FC, GOV, NPISH → Gross capital formation (=investments)

HH Sub-sectors → Social dimensions (social indicators)

Classification by Purpose (social protection) → Social dimensions (social indicators)

CPC → Exports → Intermediate Consumption

HH Actual final consumption & capital formation

Final consumption

Other sectors: FC, GOV, NPISH

Classification by Purpose (COICOP, COFOP, social protection categories)

Of which:
Outlays for social protection: education, health, nutrition, housing

Value added ← **ISCO/ICSE Gender Nationals/non-Nationals**

Employment ← **ISCO/ICSE Gender Nationals/non-Nationals**

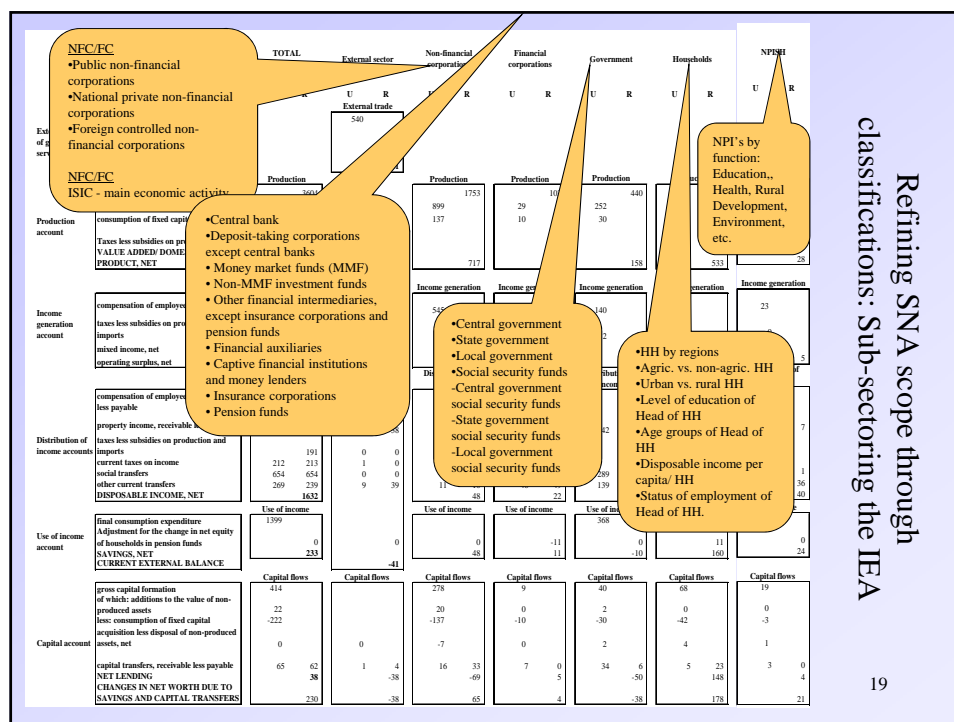
Compensation of employees Mixed income Employment

Workers Remittances to ROW

Other sectors: FC, GOV, NPISH

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Integration of Sector Data in IEA, Current and Capital Accounts



Scope of Macro-economic Analysis by Milestones and Minimum Required Data Set (MRDS)

- **Milestone 1.** GDP by Industry and Expenditure in current and constant –
• Growth analysis
- **Milestone 2.** GNI from Total Economy and Balance of Payments (current, capital and financial accounts) and GFS transaction accounts
• Growth analysis and BOP analysis
- **Milestone 3.** Production and generation of income accounts for institutional sectors and general government (including IIP for BoP and GFS transactions and stock in assets and liabilities)
• Growth analysis, BOP analysis, productivity analysis and fiscal analysis
- **Milestone 4.** Production, generation, distribution, redistribution and use of income accounts and capital accounts for all institutional sectors (upto net lending)
• Growth analysis, BOP analysis, productivity analysis, fiscal and income distribution analysis
- ----- **Minimum required macroeconomic data set, annual institutional sector accounts upto net lending and quarterly GDP and quarterly BoP**
- **Milestone 5.** Production, income and use accounts, capital accounts and financial accounts for institutional sectors
• Growth analysis, BOP analysis, productivity analysis, fiscal, income distribution analysis and investment- financing analysis
- **Milestone 6.** All transaction and flows accounts plus balance sheets
• Growth analysis, BOP analysis, productivity analysis, fiscal income distribution analysis, financing-debt analysis (Flow of funds) and vulnerability analysis (currency mismatches, maturity mismatches (roll-over of debt), capital structure (equity vs debt), solvency (assets over liabilities)

Point for discussion

- Does the present scope, detail and quality of National Accounts for Jordan meet present policy demands in an interconnected economic and financial domestic and global economy?

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